

Chasing the Collaborative

Critical Studies of Performer Agency in Modern Flute Music

Bjørnar Habbestad



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Abstract

How are developments in musical materiality connected to changes in the way composers and performers collaborate? This thesis is a search for traces of collaborative practice within the creation and performance of modern flute music from three perspectives: historical musicology, interview-based research and artistic research. From the perspective of historical musicology I trace the history of one of the first novel instrumental techniques for flute. My understanding of these developments is then deepened through the analysis of extensive research interviews with flutist Roberto Fabbriciani. Finally, the findings from these two processes are operationalized in a sequence of performance-based research, in which I explore, experiment with and extend the different practices connected to the flute part of Luigi Nono's *Das atmende Klarsein*.

In a complementary fashion, these elements exemplify how the advent of experimental methods and collaborative practice have influenced and changed the role played by performers in the creation of music, necessitating a rethinking of the notion of performer agency in music. These changes are traced in historical sources, verbalized in interviews, and investigated through artistic research.

Part I, which traces the history of the key click, illuminates changes in both materiality and practice, a gradual reconfiguration of the manner in which the flute is played. Part II, in which interviews and dialogues with the flutist Roberto Fabbriciani are analysed, shows how this reconfiguration of instrumental conventions has manifested itself in the practice of a significant performer. Then, in Part III, the analyses of these specialist narratives are used to inform performance and creation processes in and around Luigi Nono's composition *Das atmende Klarsein*, using the flute part of this composition as a prism for viewing changes in performer agency.

This thick description of the gradual establishment of a new way of playing the flute offers a verbalization of skill sets, aesthetics, roles and tasks within contemporary music performance, casting new light on the origin of the sonic material found in different compositions. The uncovering of the complexities around intentional and unintentional erasure of performers is a byproduct of this process.

Bringing into relationship sound, collaboration, newness and agency, the thesis represents a concerted effort to calibrate our understanding of what performers do as music is made, recorded, performed and experienced. The joining together of studies of musical materiality, performer competency and collaboration in compositional practice using a synthesis of historical, social and artistic research methods, is a methodological consequence, and it forms a central feature of the thesis' contribution to research.

Samandrag

Kva betydning har skifte i samarbeidspraksis mellom utøvarar og komponistar hatt for utvikling av musikalsk materialitet? Denne avhandlinga søkjer å kartlegga endringar i den musikalske skapingsprosessen innan moderne instrumentalmusikk for fløyte gjennom studiar av musikalsk materialitet, utøvarkompetanse, og kompositoriske samarbeidsprosessar. Avhandlinga teiknar opp eit komplekst bilete av samanhengen mellom klang, samarbeid og nyskaping, og utgjer eit målretta forsøk på å finstilla korleis ein best kan forstå kva utøvarar gjer når musikk blir laga, spelt og framført.

Tre ulike perspektiv og metodar støt dette søket: den historiske musikkvitskapen, intervjubasert forskning og kunstnarleg forskning. Med utgangspunkt i det musikkvitskaplege perspektivet skriv eg historia til ein av dei fyrste nye instrumentalknikkane for fløyte, *the key click*. Mi lesing av denne utviklinga blir dernest utdjupa gjennom analysar av eit omfattande intervjumateriale med fløytisten Roberto Fabbriciani. Funna frå begge desse prosessane blir til slutt sett i spel gjennom praksisbasert forskning. Her blir ulike komponentar bak utviklinga av fløyttestemma i *Das atmende Klarsein* av Luigi Nono undersøkt, eksperimentert med og utvida.

Avhandlinga viser korleis den aukande bruken av eksperimentelle metodar og workshop-prosessar har påverka og endra utøvarrolla i musikalske komposisjonsprosessar. Historia til *key click* (Del I) syner ei endring i musikalsk materialitet og praksis, ei gradvis omforming av måtar fløyta kan bli spelt på. Intervjuanalysen (del II) skildrar korleis slike endringar har manifestert seg i praksisen til ein sentral utøvar. Analysane av framleggingane til utøveren og blikket han har omkring eige arbeid blir deretter teke med inn i, og nytta som grunnlag for, nye musikalske framførings- og utviklingsprosessar. Fabbriciani og Nono sitt arbeid med å utvikle fløyttestemma i *Das atmende Klarsein* blir her nytta som eit prisme for å sjå nærare på korleis utøvarar sitt musikalske handlingsrom har endra seg i perioden (del III).

Skildringa av denne gradvise endringa kombinerer ulike kjelder for å verbalisere roller og oppgåver innan samtidsmusikalsk oppføringspraksis. Eit produkt av denne syntesen er ei avdekking av tilsikta og utilsikta tilsløring av utøvarar si rolle i skapande prosessar. Dette blir tydeleggjort gjennom avhandlinga sitt fleirspektra forskingsdesign, som også utgjer ein sentral komponent i prosjektet sitt vitskaplege bidrag.

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Preamble

Studying this score for the first time feels like entering a labyrinth. Turning pages, sorting copies, reading introductions, technical instructions, what is actually the flute part? What is my role as the soloist? Where is the music among all this information? Do I really need to know all this – about placements of choir members, panning of loudspeaker signals? What will this music sound like? Why are there more symbols in the introductory notation table than I can find in the score?

The questions and reflections in the above fragment, drawn from my private rehearsal notes from a working period leading up to the Norwegian première of Luigi Nono's *Das atemde Klarsein* in April 2007,¹ will likely be recognized by many performers of contemporary music. Translating notational abstractions into sound is a core activity in the field and a central part of the skill set for performers of new compositions. But in 2007, as a novice Nono-performer with little detailed knowledge of either the original flutist or the composer, I encountered a paradox: the score appeared to be both over- and under-defined, providing both too much and too little information, simultaneously.

This notation is so sparse, ascetic and schematic that I wonder if this at all could be – THE MUSIC? Is there something more hidden here, which I cannot find, comprehend or reach? And why does the recordings of the Venice première not match the facsimile, the authorized version or the instructional DVD? Is the soloist playing wrong notes, as I hear different pitches in the recordings than the ones I can find in my part and on my instrument?

These notes also bear witness to the fragility of the process of learning and preparing a composition such as *Das atemde Klarsein*. Today, I recall the task of studying the piece almost as putting together a puzzle, where small but significant differences between similar pieces convoluted the process of completing the whole picture. As such, learning how to play it bore more kinship to philology than the traditional interpretation of a musical score: cross-checking sources, searching definitions, tables, references, listening to recordings and studiously testing multiphonics. Even by new music standards, this undertaking exceeded the norm.

¹ Concert presented as part of the BOREALIS festival, 12 March 2007, by Bjørnar Habbestad, Alvis Vidolin and Danish Radio Vocal Ensemble conducted by Fredrik Malmberg. See www.borealisfestival.no/2007/blogg/dansk_radiokor_i_johanneskirken/.

This music-making is not interpretation – it is creation. I am re-composing a piece, in my sonic image, with my instrument and my skill. I must go further than what I can see in the score. I must listen to how I think or imagine this should sound.

The complex process suggested by the above fragments from my notes, and the experience of being guided through the last stages of preparation by Alvis Vidolin,² a close Nono-collaborator, reinforced my impression that I needed to rethink how I approach the role of new instrumental sound resources in new music. As a performer embedded in an artistic practice where instrumental innovation and experimentation are considered commonplace, I came to realize that my knowledge of the context for this practice was surprisingly limited. When, where and how did the extension of the traditional notion of instrumental sound take place? What kind of liberty do I have to fill the apparent void I encountered in the score of *Das atmende Klarsein*? How is the extension of instrumental sound in new music connected to new kinds of musicianship?

The roots of these questions in my performance of *Das atmende Klarsein* and the accompanying interest in the sonic orientation found in post-war flute music, provides the point of departure for this thesis, the research process behind it and the artistic processes embedded within.

² Vidolin worked as Nono's sound engineer for most productions in the 1980s and has been a key person in the recent digital translation of the originally analogue processing systems (Zattra, 2018).

Introduction

This thesis is a search for traces of collaborative practice within the creation and performance of modern flute from three perspectives: historical musicology, interview-based research and artistic research. From the perspective of historical musicology I trace the history of one of the first novel instrumental techniques for flute. My understanding of these developments is deepened through the analysis of extensive research interviews with flutist Roberto Fabbriani. Finally, the findings from these two processes are operationalized in a sequence of performance-based research, in which I explore, experiment and extend the different practices connected to the flute part of *Das atmende Klarsein* by Luigi Nono. The musical scope for the study is thus limited to modern flute music, understood primarily as music for solo flute in the second half of the twentieth century, with some references to earlier compositions. In particular, this study focuses on the development of new sonic resources for flute found within the period, with an emphasis given to *Das atmende Klarsein*.³

The analysis of these cases reveals how the advent of experimental methods and collaborative practices have influenced and changed the role of performers in the creation of music, necessitating a rethinking of the notion of performer agency. This concept used to specify the kinds, or degree, of independent influence a performer has on a musical situation is informed by a Latourian reading of the term, which emphasizes the connection between agency and the production of difference (Latour, 2007, pp. 52–53). The conditions for such changes are traced in historical sources, verbalized in interviews and investigated through artistic research.

The project is organized in three parts: Part I is an account of the history of the *key click*, the first and perhaps most iconic of twentieth-century instrumental innovations for flute, between 1936 and 1975. The contour drawn from reviewing this history, spanning from Varèse to Ferneyhough, illustrates the discovery, application, extension and integration of novel instrumental practice into musical modernism, thus connecting a microhistory with longer temporal perspectives and significance. In practice, these alterations touch upon both the codification of musical sound and the fundamental aspects of the skill set needed for musical development.

Part II is an in-depth analysis of research interviews conducted with renowned flutist and contemporary music specialist Roberto Fabbriani, mapping the ways changes in performer's roles and skill sets have manifested themselves in the language of sound, aesthetics and technique within modern flute playing. The analysis of the interview material offers perspectives on the value systems embedded in these narratives, articulated through their thematic

3 For a practical definition of 'modern flute music', see the introduction to Part I.

distinction, coherence and performance. The resulting analysis moves from the identification of qualities in musical performance towards a synthesis of Fabbriani's narratives on performance and creation.

Part III investigates performer agency through work with Luigi Nono's *Das atemde Klarsein*, connecting archival studies with studio experiments and new creative practice. This study identifies different transformations of agency: in the extension of the performer's role from executive to creative; in the composerly transformation of performer skills and knowledge into musical material; and in the transformation of the performer-researcher's goals and methods from the investigative to the creative. The result is a rethinking of 'the workshop' as an arena for instrumental innovation and an investigation of its practices as examples of expansions of performer agency. My own artistic activity as a flutist is the focal frame of reference for this case.

To summarize the connection between the Parts: The history of the key click outlines a change in both materiality and practice, an demonstrates the gradual reconfiguration of how the flute is played. The interview analysis describes how this reconfiguration of instrumental conventions has manifested itself in the practice of a central performer. The analyses of these specialist narratives are then used to inform performance and creation processes in and around Luigi Nono's composition *Das atemde Klarsein*, using the flute part of this composition as a prism for viewing changes in performer agency.

Outlining the field of interest

The advent of novel instrumental practices, understood as the development, performance and notation of new instrumental sound resources for compositional use, was a key element in post-war music, actively extending the scope of musical material at the outer margin of the traditional domains of pitch and duration.⁴ This extension of musical sound is easily observable in concerts, recordings and scores of the time (Utz, 2013, pp. 32–33), a tendency matched by a growth in performance manuals referencing such techniques.⁵ This understanding of new music's aesthetic mandate, as a continuous search for new sonic experiences, remains central to its artistic practitioners. However, research on novel instrumental practice's constitutive role within this quest for newness is given relatively little attention in the scholarly literature,

4 Novel instrumental technique and practice is used as synonyms for extended techniques in this thesis. The concept is expanded upon in the interview analysis of Part II.

5 See Chapter 6.1 for an extensive list.

where considerations of the development of sound within *neue Musik*⁶ are primarily described as compositional achievements.

This omission requires consideration: Can we consider iconic sounds such as the raw scratching of a cello *crush tone*, the quiet shimmering of violin tremoli played *sul ponticello* or a violent saxophone *slap tongue*, to be emblematic of specifically *compositional* creativity? Is a default connection of sounds to composers in the form of attributions of authorship necessarily correct? If Bartok did not create the ‘bartok-pizzicato’, or Sciarrino the ‘sciarrino-trill’, who did? Or, framed in a more generic way, who has contributed to ‘the sound of the new’? How can one consider a history of music’s materiality outside of, or parallel to, the traditional history of canonical masterworks?

Recent performance-oriented scholarship touches upon issues such as these, but the actual work conducted behind the ‘work’ is a part of musical life that is sparsely documented at best (Fitch & Heyde, 2007, p. 72). While a number of important performance-sensitive studies have been undertaken (Kanno, 2001; Vaes, 2009; Lüneburg, 2013; Orning, 2014; Førisdal, 2017; De Assis, 2018), the rupture between the notation and performance of musical material identified by Charles Seeger in 1958 (Seeger, 1958, p. 184), continues to pose challenges for scholars and artist-researchers today.

This research project addresses this problem by drawing attention to the relationship between musical materiality and instrumental practice through an investigation of collaborative methods found in development and creation processes. The aim is that the historical investigation, the interview analysis and the artistic experimentation found in this thesis all contribute perspectives towards an expanded understanding of performer agency in modern music. For matters of both scope and interest, the project focuses on such processes as they appear in central compositions found within the modern flute repertoire.

6 The term ‘neue Musik’ designates contemporary music, but its use and meaning emanates from a specific discourse, perhaps starting with Paul Bekker’s 1919 publication where he laments the lack of contemporary ideas within musical arts: ‘Nur in der Musik merkt man wenig oder fast gar nichts von diesem unmittelbaren Miterleben der Gegenwart’ (Bekker, 2014, p.88). (But in music one notices little or almost nothing of this immediate coexistence of the contemporary; my translation). The term was institutionalized from 1922 with the establishment of Internationale Gesellschaft für Neue Musik IGNM – later ISCM – International Society of Contemporary Music. (Anton Haefeli, 1982), and later used by Ernst Krenek and Theodor Adorno amongst others. Today, *neue Musik*/new music is under re-evaluation, especially by US musicologists, who endeavour to distinguish European from American dialects of modernism (Robin, 2016). These delineations are also debated within the European discourse on new music (Rebhahn, 2013; 2014).

Reviewing 'the new' of the past

Today, the flutist's repertoire of instrumental sounds and techniques is easily taken for granted. But the gradual inclusion of breath sounds, percussive techniques, multiphonics and other timbral alterations were contested from the very start:

One wonders if a slide-whistle might not do better [than a flute], and why, in so many little ventures, of younger Italian composers especially, there is such a compulsion to air private concerns. This is beginning to assume the look of an obsession (Goldman, 1963, pp. 258–259).

Such debasement reduced novel instrumental practices to an airing of 'private concerns' of the performer, a euphemism for imperfections in performance or inadequate skill. These sounds were thought to belong to the practice room, and as such they were deemed to be misguided attention to non-musical resources or 'new areas of what the instruments are not supposed to do' (Goldman, 1963, p. 259). However, even in the traditionally conservative American didactic literature of the early 1970s, we find that:

No longer can the flutist expect that a traditional flute tone is the only attractive, or acceptable sound structure. Sound phenomenon must be valued as significant structure which the aspiring performer must embrace in order to add to the variety of musical expression in contemporary music (Pellerite, 1972).

The contrast between Goldman's stale rejection and Pellerite's imperative of inclusion testifies to the dynamic between *established* and *novel* instrumental practice, a distinction that surfaces at several points in this thesis. The dissonance between these two perspectives also indicates the intensity of the early twentieth-century discourse on the division of musical labour, fuelled by the many performer-hostile positions articulated by central twentieth-century composers such as Schönberg, Stravinsky, Varèse and Stockhausen (Newlin & Schönberg, 1980, p. 166; Stravinsky, 1947, p. 127; Chou, 2004, p. 19; Austin, 2011, p. 42). That central composers such as Bartok, Hindemith, Boulez and Messiaen were also performers seems not to influence the establishment of the dualism Nicholas Cook later refers to as 'Plato's curse' (Cook, 2014, p. 13).

The development and exploration of novel instrumental practice pose a challenge to such binary thinking. Questions concerning the origins of novel instrumental practices undermine the habitual association of music's materiality solely to composers. This challenges our most fundamental assumptions about authorship in music. The study of the development of the key click in Part I thus serves multiple functions in the thesis: first, as an exemplary case of

performer contributions to the development of musical materiality; second as an indication of and argument for the existence of multiple other microhistories within the developments of the materiality of twentieth-century instrumental music; and third as an immanent historiographical critique of the erasure of performer contributions to musical creativity.

This thesis argues the need for a broader understanding of musical practice, not in order to question composers as the rightful owners of their artistic production, nor to routinely re-iterate musicology's long-established biases, but rather in order to suggest that by starkly separating the creative and performative elements of music, we run the risk of obscuring a thorough understanding of both.

Establishing a platform for research

This thesis combines perspectives on musical performance and research in a tripartite construction. Historical, social and artistic sources are scrutinized in order to cast light first, on the production process behind what we now perceive as musical sound, second on the language used to value and describe the skill sets present in these activities, and third, on how performer agency can be expanded in collaborative and experimental musical practice.

Behind these choices one can find the following conception of musical performance: Performing music means connecting sound, people and history in a compacted, continuous, ephemeral and always contemporary, *now*. The sonic, social and historical dimension of these elements needs to be present in a viable account of an activity as transient and dynamic as musical performance. In order to avoid fixing the notion of performance as a static object, anchored to one specific time or stylistic history, research *into* musical performance should attempt to articulate the particular ability of music to simultaneously reflect the time of its composition *and* performance, what I call the double historicity of music. Research *through* musical performance thus requires a form of double historical self-consciousness from the performer, a negotiation of conceptions of self, subjectivity and objectivity that brings the experience of the performativity of music onto the doorstep of the researcher.

Integration of artistic practice into the research process and thesis production initiates a pendular movement equally informing and creating rapport with informants, performance tactics, analytic perspectives on sound recordings, technical development and contextualization of scores, notes or sketches. At the same time, separating out how processes acts on the artist-researcher from how he or she responds to them is deeply challenging. In reaching for these ambitious goals, the artist-researcher is forced to establish and articulate connections

between musical practice and analysis in a manner that influences both. Hopefully, these connections can be identified by readers interested in either activity.

Mapping the research process

At the outset of this research process, two preliminary questions were asked:

1. What is the origin of sonic materials found in modern compositions?
2. How do performers contribute to the creation of contemporary music?

These questions informed different elements of the research process; instrumental lessons with Fabbricciani, interviews, concert observations, archival work, studio experiments, recording analysis and artistic collaborations. The different activities were then organized in three separate parts, each with its own set of source material, references and theoretical frame.

From the initial questions and the processes mentioned above, three research questions developed:

- How was the key click introduced into the vocabulary of twentieth-century flute playing?
- How can one explain the role and skill set of flutist Roberto Fabbricciani in the creation processes of Luigi Nono in the years 1980–1990?
- How can historical knowledge about the above processes inform an extension of performer agency, exemplified in the performance of *Das atmende Klarsein*?

These questions address concerns specific to each of the three Parts, connected by an interest in the relationship between sound, collaboration, newness and agency.

Constructing a method

Attention to the act of listening runs throughout the parts and chapters of this thesis: listening to the history of the key click, the narratives of Fabbricciani and the recordings, experiments, and performances in and around *Das atmende Klarsein*. From this listening, a novel approach to studying musical practice appears, diffusing the methods of musicology, practice studies and artistic research alike, while gently critiquing all three.

How is this method constructed? What are its merits and possibilities? Fundamentally, the method of the thesis is its structure, and vice versa. This simple statement celebrates the transparency of the research design, following the charge to connect the sonic, social and historic dimensions of musical performance articulated above. This is achieved by drawing on perspectives found in the methodologies of microhistory, thematic analysis, and artistic research.

Microhistory is based on the reduction of the scale of observation, microscopic analysis and intensive studies of the documentary material (Levi, 2001). Its dominant principle is that microscopic observation reveals factors previously unobserved by scholarship, as elaborated by István M. Szióártó:

Microhistorians hold a microscope and not a telescope in their hands. Focusing on certain cases, persons and circumstances, microhistory allows an intensive historical study of the subject, giving a completely different picture of the past from the investigations about nations, states, or social groupings, stretching over decades, centuries, or whatever *longue durée*. (Magnússon & Szióártó, 2013, pp. 4–5)

Although centred around a limited aspect of music's materiality, as opposed to a social unit or entity, the selection of the key click for the subject of Part I resonates strongly with the ethos of microhistory.⁷ Following traces of the introduction, practice, documentation and proliferation of the key click allows for a novel perspective on a larger development in music history, namely the extension of musical sound found in post-war music. This model of deduction is particular to microhistory. While initial observations are made within relatively narrow dimensions and as experiments rather than examples, the analysis of the results are used to draw wider generalizations. As Levi (2001, p. 110) puts it: 'how we gain access to the knowledge of the past by means of various clues, signs and symptoms ... is a procedure which takes the particular as its starting point ... and proceeds to identify its meaning in the light of its own specific context'.

In the current study, the key click is used as an emblem for larger questions on authorship, collaborativity, and historiographical representation, effectively summoning the practice of performers within a time of great change in instrumental practice. The starting point of this narrative is a perceived problem, something which is not understood. In this case it is the peculiar circumstance of the key click's 1936 introduction in *Density 21.5* by Edgard Varèse, which was followed by 22 years of non-use. From this observation, questions, hypothesis

⁷ The connection to materiality also mirror developments in cultural history, where such questions have been prominent over the last decades.

and documents are revisited in order to describe not only the sound of the key click or its aesthetic function, but its gradually evolving practice.

Part Two continues to probe the relationship between materiality and practice through a series of research interviews conducted with flutist Roberto Fabbriciani. This process maps parts of Fabbriciani's professional experiences through active interviews, a form of collaborative verbalization. The resulting material was published (Habbestad & Fabbriciani 2019) before subsequently being subject to a thematic analysis.⁸ The processes of articulating and analysing these narratives are described in detail in Part II, alongside methodological questions connected to this side of the project (see Chapter 11).

Part Three focuses on workshop practices described in Parts One and Two. Here, the process of studying, emulating, experimenting, and extending elements of the practice found in the development of *Das atmende Klarsein* has been accounted for over three chapters. Under the umbrella of *re-searching*, *re-doing* and *re-sounding*, these are set up as an operationalization of critical perspectives from the earlier findings, where methods from musicology are transformed into those of artistic research. The findings from the historical study of Part I and the interview analysis of Part Two thus form a 'state of affairs' that is used as the starting point for practice-based investigations. See Appendix 2 for an overview of the sources in use from Fondazione Archivio Luigi Nono.

Any potential originality of this method might lie in its attention to the combining of 'listening' and 'doing'. Starting from the auditive analysis of workshop recordings, the practical tactics and actions of the workshop are described and analysed from the perspective of a flute player. This relocalization of interest, from work to workshop, represents the crux of the argumentative line of Part Three. The renewal of the role of the performer is at the core of this focus on workshop processes. The three transformations of Part III act as exemplifications of expansions of performer agency. The methods of Part III – *re-searching*, *re-doing*, and *re-sounding* thus echo the thesis's overall structure, embedding the global trajectory of the project into its third and final section (see Figure 1).

8 The published interview is enclosed in Appendix 5

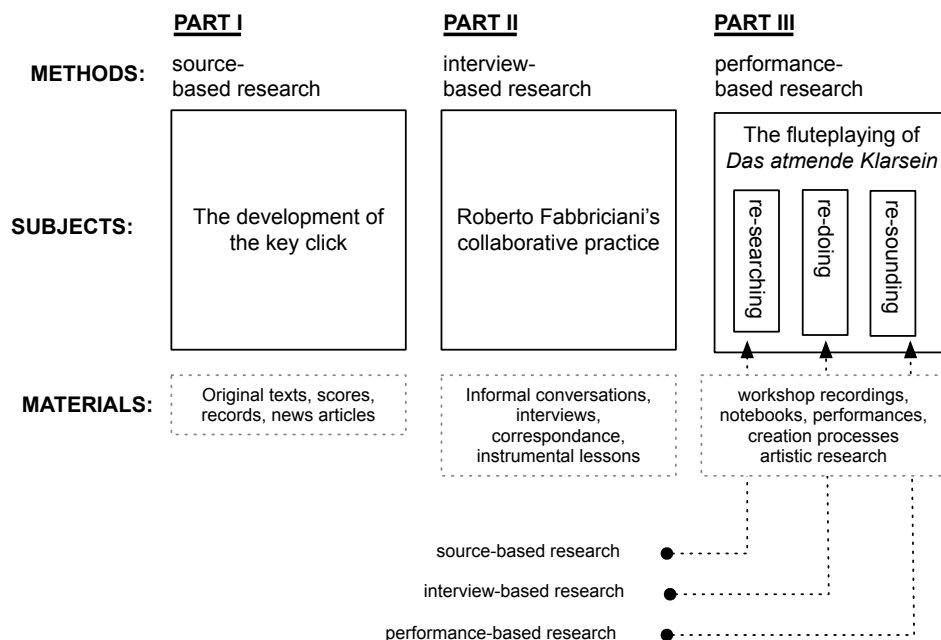


Figure 1: Thesis structure

This structure fully activates the tri-partite research architecture of the thesis. The re-articulation of both the structure and propositions of the thesis through practice completes this doctoral project as a critical system of studies on performer agency. The joining of studies of musical materiality, performer competency and collaborativity in compositional practice using a synthesis of historical, social and artistic research methods, is a central feature of this thesis' contribution to research.

Negotiating researcher positions

How does the tripartite structure of the research affect the situating of the researcher? The impetus for the current research process was found inside a musical, rather than an academic, practice. The questions and methods developed to shed light on these questions are therefore the result of different forms of constructive friction between my professional roles as artist and researcher.

The old assumption that practitioners, as insiders, are blind, and that scientific observers are neutral and all-seeing has been met with considerable resistance within a range of different fields of scientific inquiry (Kuhn, 1970; Haraway, 1988; Rheinberger, 1997; Denzin, 2001;

Cetina, Schatzki and Savigny, 2005; Latour, 2005). However, the situating of the topos of the artist-researcher need not be reduced to such a binary either/or. A growing body of artistic research argues for the development of a knowledge culture placed between that of either 'pure' science or art (Coessens, Crispin & Douglas, 2009; Dogantan-Dack, 2015; Impett, 2017; Schwab, 2018).

Reflecting on the need for demarcation in the early phases of establishing and defining this field, Frisk and Østersjø (2013) argue that 'the potential for novel contributions from the artistic researcher lies in the meeting between artistic research and other disciplines. Following this transdisciplinary ideal, the three parts of this thesis, and their accompanying research questions, indicate different methods and researcher positions.

In Part I I analyse historical sources (texts, scores and recordings), allowing for a relatively detached process of joining facts and findings into a narrative account. In Part Two I interview a fellow flutist with whom I share professional experiences and artistic interests. This implies a more involved position, motivating the choice of a formal approach to the analysis of the interview material. In Part Three the object – the playing of the flute part in *Das atmende Klarsein* – is fixed throughout, but my own role and practice is subject to a transformation in order to investigate different conceptions of performer agency. This transformation is echoed in a change of language and style, as the researcher's 'I' gradually comes to the fore of the text.

Such a combination of distancing and embeddedness places the artist-researcher in a position reminiscent of Richard Schechner's description of 'Brechtian distance' (Schechner, 2013) as a position allowing 'criticism, irony and personal commentary as well as sympathetic participation'.

As the verbalization of musical practices is at the core of the project, each part and its material require adaptations in method and language. This plurality ensures an ongoing negotiation of positioning throughout the thesis. A fragment from one of Donna Haraway's epistemological discursions offers a simple frame for this complexity. Advocating radical multiplicity of local knowledge, of heterogenous multiplicities in the epistemologies of scientific knowledge, Haraway's ideal is a science that 'sees together' with others:

The knowing self is partial in all its guises, never finished, whole, simply there and original; it is always constructed and stitched together imperfectly, and therefore able to join with another, to see together without claiming to be another. (Haraway, 1988, p. 586)

For the current context, this means seeing, as a flutist, with the perspectives of musicology, interview-based and artistic research, without claims of being or becoming either.

Bias in performance research and artistic research

How does this research design affect questions of bias? Scholarship on new music has been described as lacking in critical perspective (Heile, 2020, p. 164; Pace, 2015, p. 100), carrying a tendency to take on the shape of advocacy (Cook, 2003, 2010). The close connections between living composers and researchers of contemporary music are typically cited as support for such claims. In approaching creative collaboration from the perspective of a performer rather than a composer, I have in no way escaped this problem. Several steps have however been taken to avoid replacing one form of idolatry with another.

The first step is the variety in the material being processed in the three parts of the thesis. The use of textual sources, interviews, archive studies, studio experiments and artistic research ensure a solid foundation. The second step concerns the tripartite methodology. By drawing on different traditions, the risk of method bias is reduced. The third step involves reflecting on, acknowledging and accounting for how the 'performer point of view' influences the different methods employed.

Recent research

Several scholars have produced work that casts light upon the music studied in this thesis. Carla Nielinger-Vakil's monograph *Luigi Nono: a composer in context* (2015) is a thorough and deep documentation of Nono's composition process that makes extensive use of sketch studies. Jonathan Impett's recent *Routledge handbook to Luigi Nono and musical thought* (2019) offers a wealth of biographical detail from the composer's life and production combined with perspectives on Nono's rich field of intellectual and artistic inspiration. Of equal importance is Angela Ide de Benedictis and Veniero Rizzardi's *Nostalgia for the future* (2018), which offers the first English translation of Luigi Nono's selected writings and interviews. Christina Dollinger's dissertation on *Das atmende Klarsein und 1° Caminantes ... Ayacucho*, titled *Unendlicher Raum, zeitloser Augenblick*, also contributes to the formal description of the music and its composition process (Dollinger, 2012). Furthermore, Nancy Toff's biography of Georges Barrère, *Monarch of the flute* (2005), Gian-Luca Petrucci's biography of Severino Gazzelloni, *Il Flauto protagonista* (2018) and Susanne Farwick's extensive charting of the twentieth-century flute repertoire *Studien zur zeitgenössischen Musik für Flöte solo in der zweiten Hälfte des 20. Jahrhunderts* (2009) have all been vital in the process of mapping the history of flute pieces and their instrumental techniques.

Research ethics

The gathering of information for Part II was based on interview guides and repeated informant feedback, securing informed consent (Brinkmann & Kvale, 2015). The signed consent form and interview guides are available in Appendix 3 and 4. The resulting interview material was published separately, also with the informant's explicit consent (Habbestad & Fabbriciani, 2019). Source anonymity was not considered relevant in this research process, as the informant was motivated to contribute in public with information on his particular experiences. Possible consequences of his identification have been discussed but not found harmful. A change in the research design in 2018 to extend the role of the interview material prompted a dialogue with NDS, the Norwegian Centre for Research Data, leading to a formal application and registration of data handling, privacy and other security measures. The informant has given explicit permission to continued storing the original interview data, which will be handled by NDS after the publication of the thesis. The collaborators involved in Part III have been named and allowed feedback on the relevant material.

Collaborative artistic activity

A series of artistic projects have been conducted alongside the development of the thesis, all of which have been relevant to the topics of collaborativity, authorship in new music, the expansion of musical materiality and extension of performer agency. These have informed the research process, but will remain unarticulated in the thesis:

Critical Bands, a modular, site-specific work for ensemble, collectively composed by LEMUR: Bjørnar Habbestad, Hild Sofie Tafjord, Lene Grenager and Michael Duch. The project comprised the recording of seven different ensembles in seven different locations, edited, mixed and mastered by Thorolf Thuestad, Lene Grenager, Christian Obermeier and Bjørnar Habbestad.⁹

The Circle Flute, a collaborative venture where four flutist joined efforts to develop a new instrumental practice for a new instrument, the circle flute. Conceived by the artist Icelandic-Austrian duo Studio Brynjar & Veronica, commissioned by Lafayette Anticipations and constructed by French flutemaker Jean-Yves Rosen, the instrument was the focal point of a series of workshops, concerts and exhibitions in 2016. The quartet included Michael Schmidt, Bettina Berger, Marieke Franssen and Bjørnar Habbestad.¹⁰

⁹ The album will be released in 2022 on +3dB Records.

¹⁰ See <http://www.emilebarret.com/index.php?/commissions/the-circle-flute/>

Per Zanussi Ensemble, a flexible ensemble of 8 to 14 musicians established as an integral part of Per Zanussi's artistic research project *Natural Patterns – Music Making With an Ensemble of Improvisers*, conducted at the University of Stavanger, between 2012 and 2017.¹¹ I participated as one of the performers in workshops, recordings and concerts during the project period.¹²

Transversing a small town at Night, for flute and spatial electronics, composed by Natasha Barrett through a series of workshops and recording sessions. The piece was composed in 2015 and premiered by me with revisions in 2018. An online recording is available.¹³

On Playing the Flute, an album of solo pieces developed and performed by me, recorded and edited in collaboration with Lene Grenager. Each track is titled with twisted references to the chapters of Johann Joachim Quantz's treatise *On Playing the Flute* from 1752. The album is released on +3dB records.¹⁴

11 See <http://www.naturalpatterns.no>

12 Final presentation available online. See <https://www.youtube.com/watch?v=SNydnPyEcU>

13 See https://www.youtube.com/watch?v=8_EW7R-AWAE

14 See <https://soundcloud.com/bjornarhabbestad/sets/on-playing-the-flute>

PART I:

**TOWARDS A NOVEL
INSTRUMENTAL PRACTICE**

'If modern music had a beginning, it must have been the opening bars of Debussy's *Prélude à l'après midi d'un Faune*' writes Paul Griffiths in *Modern Music*, one of his earlier accounts of the evolution of twentieth-century music (Griffiths, 1994, p. 7). The lush harmony, fluid melodic chromaticism and transparent instrumentation is vividly portrayed, in a form later poetically repeated by Pierre Boulez in his *Stocktakings from an apprenticeship*: 'The flute of the Faune brought a new breath to the art of music' (Boulez & Thévenin, 1991, pp. 255–277). Both accounts are fundamental examples of the understanding that the flute embodied sonic qualities specific to the rise of twentieth-century musical modernism.

This understanding has its echo in the establishment of a canon of solo flute pieces, a chain consisting of Debussy's *Syrinx* (1913), Varèse's *Density 21.5* (1936) and Berio's *Sequenza I* (1958), firmly positioning composition for solo flute as an arena for both innovation and historical signification (Gumbel, 1974, p. 2; Meyer, 2006, p.247; Priore, 2007 p.191). Varèse's composition has a pivotal role in this development, connecting the timbral refinement of Debussy to the wide scope of sonic resources employed by Berio. At the apex of this arch lies the introduction of the *key click*, a percussive technique for an instrument previously and primarily thought of as lyrical. As one of the first noise-based sounds for a wind instrument, it is often understood in relation to the rise of non-pitched sound material found in twentieth-century music (Borio, 2006 p. 361), as well as to the general percussive focus seen in Edgard Varèse's compositional project.¹⁵

According to semiologist and Boulez-specialist Jean-Jacques Nattiez, the five bars of *Density 21.5* featuring the key click 'sufficed to inscribe the piece in music history' (Nattiez & Barry, 1982 p. 273). This evaluation is a good example of the way instrumental innovation is characterized within the music-historical narrative. Implicit in such statements lies the attribution of innovative agency to the composer. In Nattiez's case, this attribution is particularly clear: 'it is really since then that purely technical properties of instruments have been used to musical ends'. Nattiez here credits Varèse for the revolution of complex sound seen after the Second World War (Murail, 2005). This thesis critically assesses the assumption that authorship of sonic resources belongs to whomever first exploits its notation, questioning whether innovation in instrumental sound is necessarily emblematic for a specifically compositional creativity.

Behind the surface of the canonic arch of Debussy–Varèse–Berio lies a radical transformation of the musical skill set needed for adequate performance on the flute. Flutter-tonguing, multiphonics, key percussion, air sounds, voice-based techniques and microtonal intonation are but some of the novelties introduced in the time that separates Louis Fleury's première

15 'Notre temps est percutant, oui. Notre temps est celui de la vitesse.' ('Our time is indeed percussive. Our time is that of speed') (Charbonnier, 1970, p. 44).

of *Syrinx* from Severino Gazzelloni's first rendering of *Sequenza I*. Both the instrumental, technical labour conducted by musicians and its corresponding sounding results were altered across this brief 45 years. A complete sonic genealogy of this expansion of the musical landscape would be difficult if not impossible to produce, even if reduced to a single instrument such as the flute. Consequently, one sound and technique – the key click – has been selected as indicative or representative of the extensive role given to novel instrumental techniques in the twentieth century.

Although the timbral nuancing of flutter-tonguing or the harmonic implications of multiphonics would no doubt have proven fruitful and exciting lines to follow, the key click holds a special position, as the first among many novel instrumental techniques developed outside of the context of orchestral playing. This makes the history of the key click a manageably narrow case study – a microhistory of a very specific part of musical materiality. The challenges found in its early use, the resistance to its introduction, and its subsequent transformation are important sources for understanding the role change performers in post-war music. A study of the history of the key click is thus a prism through which conditions outside the limited scope of flute-playing may also be observed.

The starting point for this history is the simple observation that the key click's 1936 introduction in *Density 21.5* was followed by 22 years of silent non-use. It first resurfaced in John Cage's *Solo for flute, alto flute and piccolo*, Luciano Berio's *Sequenza I*, Franco Evangelisti's *Proporzioni*, and Bruno Maderna's *Musica su due dimensioni*, all composed in 1958. This interval seems excessively long for such a distinct invention to gain influence, and the coordinated use in these pieces of 1958 appears striking. Could Varèse really have developed a percussive technique on a wind instrument at such an early date? Why did the key click surface in these particular pieces by these particular composers? These questions guide the following investigation of both the attribution of this sound to Varèse and its role as a precursor to the post-war emphasis on novel instrumental techniques.

The history of the key click, as recounted here, traces the development, introduction, application and reception of a particular element of novel musical material. After providing a definition and some preliminary context (Chapter 1), a chronological account is given of the four decades spanning the première of *Density 21.5* in 1936 and the release of Robert Dick's manual *The Other Flute* in 1975 (Chapters 2–6). The conflicts surrounding the introduction of the key click is reviewed in Chapter 7, before Chapter 8 investigates jazz and entertainment music as possible sources of influence. Chapter 9 presents workshop situations as arenas for development of novel instrumental techniques and Chapter 10, *Listening through the click of a key*, summarizes the thinking developed through the writing of this history.

1 Presenting a sound

Before embarking on a chronological account of the key click, some defining characteristics should be addressed. What is the key click? How was it first used? How is it executed? The following sections offer the reader an introduction to the rudiments of a novel instrumental technique and draw up some initial obstacles for its description and analysis.

1.1 What is a key click

The key click is an instrumental technique found in use on several wind instruments, whereby a forceful depressing or hammering of a key onto its tone hole produces a percussive sound with a pitched resonance equal to the current length and disposition of the instrumental tube.¹⁶ Key click, key slap and key clap are used synonymously in Anglo-American contexts (Heiss, 1972, p. 153; Dick, 1975, p. 129), mirrored in their German equivalents *klappengeräusche* and *klappenschlag* (Gumbel, 1974, p. 20) while the French term *percussion des clefs* has been customary at least since the late 1960s (Artaud & Geay, 1980, p. 112).¹⁷ The appearance of key clicks in Edgard Varèse's *Density 21.5* (1936) is frequently cited as being the first of its kind (Heiss, 1972, p. 153; Dick, 1975; De Wetter-Smith, 1978, p. 13; Artaud & Dale, 1994, p. 146; Maclagan, 2009, p. 99; Farwick, 2009, p. 307).

There are multiple ways of notating key clicks (Dimpker, 2013, pp. 95–97). Different publishing houses approached the notation of new instrumental techniques in different ways, leading to several parallel practices. In the case of the key click, Edizioni Suvini Zerboni used floating crosses, either above or below a conventional note head, while Universal Editions would replace the traditional note head with an x (see Figure 2).



Figure 2: Differences in key click notation – Universal Editions vs. Edizioni Suvini Zerboni

16 On a standard c-flute shading or covering of the embouchure hole will alter the pitch of the resonance up to a minor 7th.

17 An unpublished version of the 1972 manuscript of this book was circulated before the book was published in 1980.

1.2 A first sighting

The context of the first known notated use of the key click is Varèse's short and concise section of five bars (bars 24–28) located just before the middle of *Density 21.5*. In clear contrast to the proceeding and remaining sections of the piece (bars 1–23 and 29–61), this section, known as 'the percussive section' marks a sudden break from a continuous and meticulously constructed melodic flow, but appears to be disconnected to the formal construction of the piece (see Figure 3).

The short, articulated points and intervallic leaps of the five bars function as a fragmentation of the established melodic periodicity. The asymmetrical rhythmic emphasis of accents and staccatos creates a sensation of a constantly shifting metre or a series of abruptly inserted silences (see Example 1)

This sensation of unrest is further intensified by what appears as an irreconcilable timbral mixture: the soft and subdued timbre of a flute's lower first-octave register (c1–g1) is combined with the high frequency and sharp transients of a percussive sound.¹⁸ This paradoxical result is unobtainable through older articulation techniques.

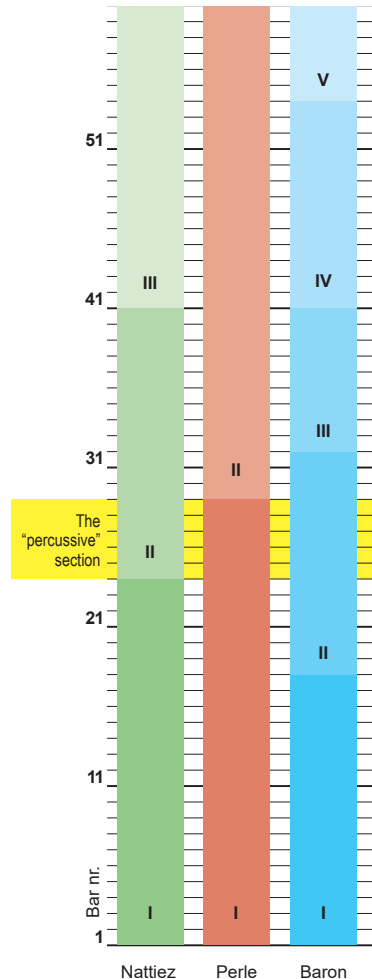


Figure 3: Formal disposition of *Density 21.5* after Nattiez, Perle and Baron

¹⁸ In acoustics, transients refer to the immediate part of a waveform. They are typically very short with a largely aperiodic or non-harmonic content.



Example 1: Varèse, *Density 21.5*, bars 24–28 (Varèse, 1936/1946).

1.3 The execution of a click

What were the technical problems posed by this novelty? Varèse's notation presents a performer with some immediate challenges. The key to understanding these difficulties lie within the simple mechanical difference between the opening and closing of a tone hole. The flute mechanism requires a depressing of both keys and levers, the latter being 'substitutes' for the more remote keys in the shape of mechanical arms that aid the opening rather than the closing of certain tone holes (See Figure 4).¹⁹

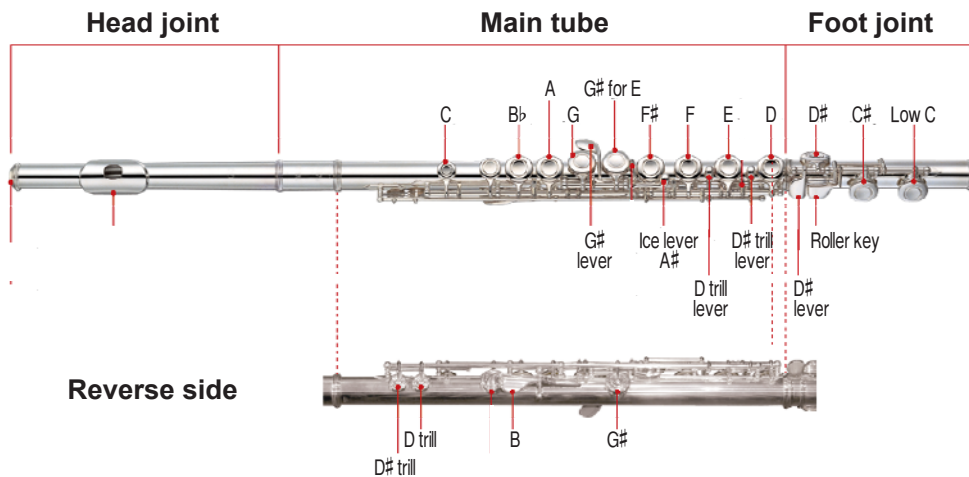


Figure 4: Overview of keys and levers of the flute mechanism.

As one of the flute's four levers, the g-sharp key is opened rather than closed. Although adorned by Varèse with the percussive '+' signifier in the two last bars of 'the percussive section', very little to no sound will be produced regardless of the force applied to this opening: The sound

¹⁹ The two trill keys, the g-sharp and the d-sharp keys are examples of levers. This is duly accounted for in Robert Dick's 'The Other Flute' (1975).

of a key lifted from a tone hole is not the same as the sound of a key being forcefully hit against it.²⁰ This knowledge, and the fact that the ‘lever clicks’ need a technically different solution than their key click counterparts is not reflected in Varèse’s score (see Figure 5).

Lever clicks marked in red



Figure 5: Lever clicks notated as key clicks.

The solution is to use a striker key located elsewhere on the tube in order to incite the percussive effect while the desired pitch is fingered. Several solutions will be usable, using either hand, the best depending on the individual strength of the fingers of the performer. This discrepancy between notation and execution can at first seem minute. Note however, that this void will be given ample attention in the following, as an early example of performer agency.

Another lever causes further difficulties in the realization of these bars. In the e1-c-sharp1 motif that is repeated three times in bars 24–25, the release of the d-sharp key, which is necessary for the transition between the two notes, causes an auxiliary noise, almost as an *appoggiatura* leading into the c-sharp. The usual way of solving this is by omitting the use of the d-sharp key while sounding the e1, as it only causes a minor lowering of the pitch in question.

1.4 Analysing the click

How is this minute idiomatic knowledge aesthetically or analytically significant? What makes the introduction of the key click a meaningful or even significant event in music history?

The technical realization of the key click represented not just a simple addition of a new sound to music’s vocabulary, but a challenge to central elements of the practice of flutists, disciplined over years through several generations of practitioners. Traditional virtuosity, understood as speed and clarity with sonority, relied firmly on synchronized evenness between fingering, tongued articulation and diaphragm support. This synchronization again depends on the lightness of touch between finger and key, whereas the production of the key click requires

20 Salvatore Sciarrino uses ‘forceful releases’ of the low C-sharp key to emulate the sound of a mechanical clock in his trio ‘Omaggio a Burri’ from 1995. The result is very quiet.

determined force. Such force, and any noise from the mechanism of the flute derived from it, would have been musically undesirable by the standards of 1930s performers and listeners alike.²¹ The awkwardness of the execution most probably did not represent a major obstacle for realization, meaning that a motivated flute player would find a way to realize the effect on her own. However, the sheer clumsiness of the notation supports the notion that the inclusion of the key click was done on a composer's desk rather than with a flute in hand.

This dismantling of conventional practice, a substantial change in flutist's motor skills, conflicted with the norms preserved by the performance community. Hence, the key click was likely not seen as an extension of the vernacular of the flutist at the time of its introduction. Rather, the introduction of the key click should be understood as a deliberate reconfiguration of established performance norms. In the excerpts quoted earlier, Griffiths and Boulez draws attention to the lush and harmonious sonorous qualities of the flute, as harbingers for a musical modernism. These are qualities to which neither the key click nor the subsequent wave of novel instrumental techniques conform. While the sonorous elements of impressionist orchestration technique could be seen as important to proto-modernism, I argue that the post-war rise of new sonic resources was a far more poignant indicator of modernism in music. The introduction of the key click should thus be treated as indicative of a larger and more substantial change in the manner that musical instruments were treated in the long century of musical modernism.

21 Note that keys were introduced relatively late in flute design (mid 19th century), whereas treatises that describe different articulation techniques goes back to the 16th century. A detailed overview of flute methods is compiled by Ardall Powell at <http://www.flutehistory.com/Resources/Lists/Flute.methods.php3>

2 1936–1946: A slow introduction

Who were the active parties around the introduction of this novel instrumental technique? Who were the advocates of the key click, where and how was it put to use, and how was it perceived at its time of introduction?

2.1 Restrained advocacy

Any change in practice requires a strong advocate, and in the case of musical innovation, première performers often fill such roles of ambassadors for a larger community of musicians. However, in the case of the key click, the commissioner and first performer of *Density 21.5* – Georges Barrère (1876–1944) – is an improbable candidate. While Barrère met Varèse twice before the 1936 première,²² Susan Nelson (Nelson, 1993) questions his commitment to new music in a review of his recorded legacy. Drawing on the work of Nancy Toff (1979), and quoting a 1939 interview with Barrère²³, Nelson writes:

Barrère's interest in the new and innovative apparently was limited almost entirely to repertory, for he showed little sign of experimenting with the nature of the instrument itself. He frequently expressed his opinion that the flute was an instrument of great flexibility, capable of achieving a variety of moods and effects, yet he once remarked that, '... the flute has a certain character, and it is a mistake to go out of that character.' (Nelson, 1993 p.7)²⁴

Barrère's statement quoted above was made only a few years after the première of *Density 21.5*, and it is tempting to assume that he is referring to experiences with Varèse. While this is impossible to confirm, Barrère's reservations bear strong similarities to statements made by prominent flute soloists of the time, stressing the need to respect the 'peculiar limits' of the instrument (Fleury, 1922, p. 383). This advocacy of restraint might explain why Barrère hardly performed the piece after its première,²⁵ and he subsequently largely refrained from teaching it to his students (Toff, 2005), contrary to what one would expect had he given it notable value or importance. That Varèse scorned his countryman's playing years later, claiming that

22 According to Varèse's appointment book, the two met on 29 January and 4 February 1936. Their work is confirmed by Varèse in a letter to his wife: 'The little piece is pretty and Barrère plays it well', from Edgard Varèse Collection, PSS, February 5, 1936, and substantiated in a letter from Louise Varèse to Pierre-Yves Artaud, quoted in Artaud & Dale, 1994, p. 142

23 Sabin, 1939.

24 The quotation is from Sabin, 1939, p. 31.

25 According to Toff (2005), Barrère performed it three times in the months following the New York première .

‘Barrère played it like a pig’²⁶ is not conclusive to either side of the case, but might indicate that composer and performer had different aesthetic outlooks, or indeed different ideas for the commission in the first place.

To conclude: as an esteemed figure of the cultural society of New York, the leading orchestral flutist of America and a soloist at the height of his career, Barrère’s participation in experimental development at the fringes of established instrumental practice seems less than likely.²⁷

2.2 Reviewing the compositional genesis of *Density 21.5*

Barrère’s hesitant engagement with the piece, as well as the lack of focus on novel instrumental techniques in Varèse’s early production, bolster the doubts about the existence of a key click in 1936. There is also no sign of the key click in the fair copies relating to the 1936 version of *Density 21.5* now held at the Paul Sacher Stiftung in Basel.²⁸ The corresponding pitch and rhythmic material from the ‘percussive section’ is also absent from these versions of the score. The available sources thus clearly establish that the key click was not a part of the *Density 21.5*, as of 1936.

A thorough review of the available sources made by Felix Meyer²⁹ accounts for the complex genesis of *Density 21.5* and dates the addition of the key clicks specifically in May 1946 (Meyer, 2006, p. 251), a decade after its New York première and five years after Barrère stopped giving concerts due a stroke paralyzing his right arm (Toff, 2005, p. 309). As the ‘original’ 1936 version is only 32 bars and the 1946 version is nearly twice as long at 61 bars, it is uncontroversial to claim that the piece performed by Barrère greatly differed from the one that gained notoriety in the 1950s. Varèse replaced 16 bars of material and added 24 new bars in 1946.

26 Composer and flutist Harvey Sollberger, in interview with the author, 11 June 2019.

27 Barrère moved from Paris to become the principal flutist of the New York Philharmonic by invitation of its conductor Walter Damrosch (Nelson, 1993, p. 4), providing a link between the French flute traditions and American flute players. His standard of playing was considered superior to his American colleagues, and he was able to sustain a substantial career as a soloist and leader of chamber music ensembles in the US. His influence was further emphasized by extensive teaching and a very active role in music organizations. The continuous negotiation of ‘European’ and ‘American’ identities in the cultural spheres of New York of the time might further have complicated Barrère’s opportunity or desire to engage in radical innovation.

28 PSS has the following sources relating to *Density 21.5*:

- Fair copy (photocopy with manuscript additions) of the final version [1 p. + 1 envelope]
- Fair copy of the final version [2 p.]
- Fair copy (photocopy with manuscript corrections) of the final version [2 p.]
- score (music print (Ricordi, cop. 1956) with manuscript entries by Chou Wen-chung)

29 Dr Meyer is the Director of the Paul Sacher Stiftung.

This substantial change is not reflected in most historical accounts, which simply refer to the piece as being composed in 1936 or 1936/1946, leading to the assumption that the key click is older than it is.³⁰

As Meyer's article makes clear, the 1946 version of *Density 21.5* is essentially a new work, though it draws on the last two thirds of the 1936 version.³¹ Although the rhythmic construction remains largely consistent, the phrase structure, tessitura and pitch material are different. However, without drawing attention or significance to this, Meyer's chronology reduces the window between Varèse's introduction of the key click and other composers' subsequent use to 12 years, as opposed to the previously-assumed 22 (June 1946–April 1958). This substantially weakens Nattiez's claim of originality and innovation in Varèse's early use of this technique.³²

2.3 The addition of a click

What prompted the addition of the key clicks just weeks before the publishing of the piece in 1946? Who or what could have made Varèse change exactly these five bars, and only them, at this very late stage?

Ruth Freeman (1915–2003), a student of Barrère, performed the first concert of the revised version of *Density 21.5*, on 18 November 1946, at the Town Hall, New York, and she visited the composer several times that year. Meyer acknowledges that she may have introduced the technique, but he holds it most likely that the key clicks were the product of René le Roy (1898–1985), a French flutist who visited Varèse during spring 1946 (Meyer, 2006,

30 Martin Iddon's otherwise precise account of the Darmstadt history, cites *Density 21.5* as being composed in 1936 (Iddon, 2013, p.168) and the same mistake is made by Carol K. Baron (1982, p. 121), (Heiss, 1972, p. 153), (Dick, 1975), (De Wetter-Smith, 1978, p. 13), (Artaud & Dale, 1994, p. 146), (Maclagan, 2009, p. 99) and (Farwick, 2009, p. 307). As the 1936 version was never published, it is likely that most analysts and historians simply refer to the oldest date given in the later published versions.

31 Several elements separate the 1936 version from those related to the 1946 revisions, of which three have survived (April, May and June). The 1946 versions modifies the first 16 bars of 1936, but after that, the remainder of the 1946 version is essentially new, though it draws on material from the last two thirds of 1936. Most obvious is the transposition of all the pitch material (a minor third lower than in the 1936 version) but also several smaller rhythmical alterations or adjustments has been made. The music of the 1936 version also contains several elements that are alien to the 1946 one: chromatic glissandi (in bars 12 and 18), quintuplet and sextuplet rising runs (bars 28 and 30) and the use of a sustained low B. Note also that the top note is C4, whereas the 1946-revisions goes up to D4.

32 'Because this was a new use of the instrument, these five bars have attracted most comment and sufficed to inscribe the piece in music history; it is really since then that certain purely technical properties of instruments have been used to musical ends' (Nattiez & Barry, 1982, p. 273).

p.254).³³ Le Roy is favourably discussed in the Varèse correspondence, but little evidence indicates direct collaboration between the two.³⁴

However suggestive Le Roy's visits were, in the midst of Varèse's revision process, the absence of any key clicks in either of his recordings of the piece undermines his candidacy for the source of the percussive technique.³⁵ The first recording, for New Music Quarterly Recordings, managed by Henry Cowell, was the result of a collaboration between Varèse and composer Frank Wigglesworth (Hall, 1984). *Density 21.5* filled one side of a 2-disc set of 10-inch records, documenting a set of flute pieces performed by Le Roy at a New York concert organized by Varèse and Wigglesworth in 1948. The other sides contained works by Otto Luening, Arthur Lorie and Frank Wigglesworth. According to Wigglesworth, Le Roy was chosen as 'he was the one who was going to be able to play the high D well (Duffie, 1987), a peculiar statement taking into account that Le Roy clearly makes use of a piccolo in the bars containing the piercing D4–B3 intervals.

Compromises in the first recording could very well explain Varèse's desire to re-record the piece only a year later for an EMS production of an album showcasing his music. But even though this second recording was supervised and approved by the composer, it contains but one very faint key click, most certainly a performance error occurring on the tenuto d2 of bar 25. The difference between notated and executed key clicks in this passage is shown in Figure 6. The d2 is not marked by the key click symbol in the score. Neither are any of the scored key clicks performed. Le Roy's recording exemplifies the fragile nature of the technique: depressing of keys is integral to flute performance, it is always there. Although it is normally conducted with medium-to-low finger pressure, anxiety or sight reading could lead to stress-induced performance errors causing finger jolts, resulting in involuntary pops or clicks.



Figure 6: Performed vs. Notated key clicks in Varèse, *Density 21.5*, bars 25–26, as performed by René le Roy, EMS Recordings LP EMS401, 1950.

33 4 April and 31 May.

34 Philippe Lalitte claims with certainty that Freeman and Roy demonstrated the key click to Varèse, but does not contribute any concrete evidence towards this (Lalitte, 2008).

35 New Music Quarterly Recordings 1000A-B (1949); Elaine Music Shop EMS 401 (1950)

It seems highly unlikely that Le Roy would have proposed this technique to Varèse and then refrained from recording it. The absence of key clicks in both the 1949 and 1950 recordings also suggests that they were not considered crucial by Varèse in compiling an album of authoritative versions of his music. Did Varèse not care whether the clicks were included? Can this lack of interest reflect a lack of engagement with, or ownership of, the idea?

As there is no mention of the key clicks in the *New York Times* review of Freeman's premiere of *Density 21.5* in November 1946, her candidacy as an originator of the key click is also weakened. Noel Straus applauds the flutist for her 'liquid, mellow and firm [sound]' described as 'singularly free of breathiness without the usual disturbance of changes in timbre'. The clicks would assuredly have been noticeable among the remaining programme of compositions by Gluck, Quantz, Hindemith, Kennan, Ferroud, Franco, Debussy, Hues, Casella and Paganini.

If the key click was not Varèse's own invention, a possible candidate could be fellow composer Otto Luening, who was also a flutist. Luening received a copy of *Density 21.5* from Varèse in May 1946 and thus had the opportunity to discuss the revision prior to its publication in July the same year.³⁶ Luening, who would later be among the founders of the Columbia-Princeton Electronic Music Centre, also worked as a flutist in the 1920s in a Chicago Vaudeville orchestra where he would have met a wide range of woodwind effects applied to musical slapstick humour.³⁷ His combination of competencies, including flute playing, composing and music technology, make him a credible candidate.

Regardless of the question of the origins of the inclusion of the key clicks, Varèse's revision had three precise outcomes: the inclusion of a yet unnamed sound into musical vocabulary, the development of its notation (+), and a concisely written description of its execution: 'Notes marked + to be played softly, hitting the keys at same time to produce a percussive effect'. However, the last-minute inclusion of the key clicks, their highly specific notation and explanation and subsequent absence in the first two recordings are a paradox. This state of affairs could be the fault of either composer, performer or both. If the technique was not a topic of discussion or experimentation during the dialogue with Freeman, Le Roy or Luening, it could also be Varèse's own, personal and final touch to a piece that had become a symbol for his farewell to a long period of artistic indecisiveness and drought. Already extended in length and scope, the piece gains a hint of radical inventiveness from

36 Luening archives held at New York Public Library: <http://archives.nypl.org/mus/18617>.

37 The Stratford Theatre in Chicago was a 2,600 seat theatre, built in 1919, which functioned as a Vaudeville theatre until it was demolished in 1952 (Schiecke, 2011, p. 177). For context, see chapter 8.

the inclusion of the key click that was not present in its 1936 predecessor. Either way, as a pure idea or a product of embodied knowledge derived from flute playing itself, the paradoxical ‘percussive section’ would later attract attention as a prime feature of the revised and revitalized *Density 21.5*.

2.4 Evaluating timbral integration

Unfortunately the revision process of 1946 remains largely un- or under-documented.³⁸ The first surviving output is in the form of a photocopy of a revised score mailed by Varèse to his own address on 16 April 1946, as a step in the securing of his common-law copyright (Meyer, 2006, p. 251). This 56-bar version approaches the printed version published in *New Music Quarterly*’s July edition of the same year, but with a shorter ending and still without key clicks and their accompanying explanation. The inclusion of the key clicks must therefore have taken place within the two months between April and July 1946.

As far as it has been possible to ascertain, drawing on the available manuscripts at the PSS and Meyer’s analysis, the revisions conducted by Varèse in this time frame were mainly concerned with the extension of the final bars and an adjustment of bar 14 (Meyer, 2006, p. 251). Thus, the pitch and rhythmic structure of the bars later adorned with key clicks were not conceived of as a ‘percussive section’ at all. The structural irrelevance of the key clicks thus renders their use incidental rather than integral, as implied by Varèse’s own terminology from 1966:

The role of color or timbre would be completely changed from being *incidental*, anecdotal, sensual or picturesque; it would become an agent of delineation like the different colors on a map separating different areas, and an *integral* part of form. (Varèse & Chou, 1966 p.12; emphasis added)

Varèse’s desired integration of timbre and form is not realized with the key clicks, and their first appearance should therefore be considered a type of timbral nuancing applied to an already existing musical structure rather than an invention of an autonomous material type. Varèse himself seems to have been largely unaware of their latent significance. The paradoxical situation of the key clicks late inclusion, and the fact that they are ignored in the first

³⁸ Three versions of the piece related to the 1946 revisions are preserved at the PSS. ‘Reinschrift endgültiger fassung’, ‘Korrektur endgültiger Fassung’ and ‘Reinschrift (Fotokopie mit hss. Ergänzungen) der endgültigen Fassung [1.S+1 Briefumschlag][Mappe 1][3]’. None of these are dated, but carry the same inscription ‘revised April 1946’. Microfilms inspected at PSS March 19–21, 2018.

recordings, emphasize this. Taking these elements into account, the depiction of *Density 21.5*'s novelty and radicality appears to be overstated. While this does not in itself reduce the aesthetic value or historical importance of the piece, it questions the reasoning used in advocating its excellence.

3 1947–1957: Density discovered

The reception of *Density 21.5* underwent a remarkable transformation, from its arguably insignificant place as an interlude performed between the pots and plants of a New York society gig,³⁹ to a revered cornerstone of twentieth-century music.⁴⁰ The period between 1947 and 1957 sees the discovery and presentation of both the key click technique and Varèse's flute solo.

3.1 American densities

Barrère's first performances of *Density 21.5* in 1936 were followed by a period of relative silence, understandably so, perhaps, given the lack of a published version, the relative brevity of the piece (32 bars) and its mild incompatibility with Barrère's repertoire. The slow response following the 1946 revision is, on the other hand, less explicable. Despite Varèse's efforts, the revision, recording and publication worked slowly, and it was not until the piece was introduced in Darmstadt in the mid-1950s that its impact was truly felt outside the scope of the New York arts scene (Toff, 2005, p.279; Beal, 2006, p. 44).

Contrary to the precise dating of the notation, explanation and publication of the key click in 1946, the starting point for actual use in performance is highly uncertain. While Le Roy refrained from performing them in his recordings,⁴¹ it is unknown whether or not Ruth Freeman performed the clicks in her recital later the same year.⁴² That they were avoided is nonetheless the most plausible scenario.

Table 1 maps performances, recordings and publications of *Density 21.5* between 1936 and 1975, an overview that further solidifies the notion of a gradual rather than immediate interest in the piece.

39 A benefit concert for Lycee Francais de New York. Commented in an unsigned notice in *New York Times* February 17, 1936. See <https://nyti.ms/364S6B3>

40 In 1974 *Density 21.5* was included in a three-LP box set titled *Die neue Musik und ihre historischen Voraussetzungen*, released on Opus Musicum (OM 113/115). The repertoire on the discs spanned from Brahms to Varèse, via Wagner, Schönberg, Webern, Stravinsky and others.

41 1949 and 1950 respectively.

42 Town Hall, November 8, 1946. See the *New York Times* review (Straus, 1946).

Dissemination of Density 21.5

YEAR	COUNTRY	PERFORMANCE	BROADCAST	RECORDING	PUBLISHING
1936	US	Barrère, New York, 16 Feb. Barrère, Mexico City, unknown date Barrère, Woodstock NY, unknown date Barrère, Philadelphia, unknown date			
1939	US		Barrère, Radio broadcast, WQXR, June 11		
1946	US	Ruth Freeman, New York Town Hall, 8 Nov.			New Music Quarterly, v. 19, no. 4B (orig.)
1948	US	René le Roy, Greenwich House Music School, NYC		René le Roy (New Music Recordings, N.M.E. Corp. No. 1000)	
1949	US			René le Roy (EMS Recordings EMS 401)	American Music Centre (edited by Chou Weng-Chou)
1950	US	Frances Blaisdell, Composers Alliance Concert, 19 Feb.			
1951					
1952					
1953	US	Harvey Sollberger, Greenwich House Music School, NYC (unknown date)			
1953	GER	Kurt Redel, Darmstadt, 19 July			
1954	GER	Severino Gazzelloni, Darmstadt (unknown date)			
1955	US			René le Roy (BAM LD 024, licensed reissue of EMS 401)	Ricordi, NYC (definitive)
1956		Gazzelloni, Le Domaine Musical		Gazzelloni	
1957	GER	Gazzelloni, Darmstadt, 18 July		Gazzelloni (Vega C 37 S 173)	Franco Colombo, NYC (later Colfranc.) Transferal of publishing rights
1958	FR				
1959	GER	Gazzelloni, Darmstadt, 25 Aug.			
		Achilles, Martin, Nagora, Schuelain (All final candidates for Kranichsteiner Musikpreis at Darmstadt Summer Courses)			
	US				
1960	US	Gazzelloni, New School, NYC, 13 May		Unknown (Columbia Masterworks MS 6146), Unknown (Phillips A 01494 L, licensed reissue of MS 6146) Pellerite (Coronet 850C-3753)	

YEAR	COUNTRY	PERFORMANCE	BROADCAST	RECORDING	PUBLISHING
1961	US	John Perras, Carnegie Recital Hall, 10 Jan.			
1963	US	Samuel Baron, Coolidge Auditorium of the Library of Congress, Washington, DC, 8 Feb.	King's Crown Concert: All Varèse program; 12 Nov. Flutist unknown		
1964	US / NO	Harvey Solberger, Judson Hall, NYC, 2 Sept.		Alf Andersen (Philips 63 053 NL)	
1965	US	Sebastian Caratelli, Carnegie Recital Hall, 6 April	Samuel Baron, National Educational Television Channel 13/WINDT, New York, Feb 07+ Dec. 28 (World of Music, Ep.6)		National Educational Television and Radio Center, WINDT: Varèse: Pioneer of the New Sound. http://americanarchive.org/catalog/cpb-aacip_512-0k26970p2b
1966	US / GER	Robert Willoughby, Dartmouth College, 28 June Gazzelloni, Darmstadt, 26 Aug. Solberger, McMillin Academic Theater, NYC, 15 Dec.	Unknown, Broadcast WNYC, Feb 17		
1967	US	Samuel Baron, Carnegie Recital Hall, 6 Jan John Heiss (unknown date and location)	Unknown, WNYC (American Music Festival, 20 Feb.)	Gazzelloni (WER 60029)	
1968	US	New York Baroque Ensemble, New School Auditorium, 26 Feb. Sue Ann Kahn, Carnegie Recital Hall, 1 Dec			
1969	FR			Roger Bourdin (Atron 30A071), Michel Debost (Voix de son matre C063-10875)	
1970	GER			Karlheinz Zoller (EMI Electrola 1C 063-28 950), Peter-Lukas Graf, Claves LP 30-235	
1971	US / FR	Unknown student, Third Street Music School Settlement, Alice Tully Hall, NYC, 29 April		Robert Willoughby (Coronet LPS 3006) [197-] Helmut Reissberger (Vox STGBY 643) Jacques Castagner (Disques Adès 16.005)	
1974	GER			Beate-Gabriela Schmidt (OM 113 /115)	
1975	US	Michel Debost, Coolidge Auditorium of the Library of Congress, Washington, DC, 17 Jan.		Solberger (Nonesuch - HB-73028)	

Table 1: Chronological dissemination of Varèse, Density 21.5

Either reluctance or inability may have accounted for the general avoidance of the key click after 1946. But the 12 years between its appearance in Varèse's score and its recording by Severino Gazzelloni in 1958 clearly demonstrate that the first US-based performers did not easily adapt to this new technique.⁴³

3.2 European densities

The interval between Varèse's invitation to the Darmstadt Ferienkurse in 1950 and Gazzelloni's recording of *Density 21.5* in 1958 saw a fundamental change in the role of the key click. From being a sonic idea largely without a performative context, it became not only realized but varied, extended and nuanced. Varèse's visit to Darmstadt⁴⁴ and the work's subsequent publication by Ricordi, in 1951, both contributed to establishing a European context for the piece. Although Varèse only taught at the Ferienkurse this one summer (Beal, 2006, p. 44), his music was performed regularly in subsequent years.⁴⁵

Density 21.5 was first performed at the Ferienkurse in 1953 by Kurt Redel (1918–2013), who taught the flute class at the time (Grassl & Kapp, 1996, p. 299). Severino Gazzelloni (1919–1992) would perform the piece in 1954, 1957 and 1958.⁴⁶ As of 1959, it became *Pflichtnummer*, a compulsory piece to be played by flutists in the competition for the Kranichsteiner Musikpreis,⁴⁷ leading to multiple student performances over the following years.⁴⁸ By establishing an actual performance culture, the summer courses increasingly contributed to bridging the gap between the notation of ideas and their musical execution. One might argue that Darmstadt's influence as a didactic arena was as important as its later notoriety as a canonizing authority.

Gazzelloni's 1958 performance released on Vega renders the 'percussive section' of *Density 21.5* with the utmost clarity.⁴⁹ Gazzelloni's archive and personal papers were lost after his death,

43 Despite several performances in New York in the decade following Ruth Freeman's New York première in 1946, key clicks are first explicitly commented upon in Eric Salzmann's review of Gazzelloni's New York debut in 1960. See Salzman, 1960.

44 Steinecke invited Varèse in a letter dated March 3, 1950. See IMD Archive: <https://www.imd-archiv.de> – reference number IMD-A100054–201118–17.

45 At least in 1950, 1953, 1954, 1957, 1958, 1959, 1960, 1962 and 1966, according to the recording database of the IMD archive.

46 At least the first performance took place without Gazzelloni meeting Varèse personally. Recordings are available at the Darmstadt archives: Signatur IMD-M-10738 and Signatur IMD-M-14800. See also Grassl & Kapp, 1996.

47 An annual prize awarded to the best instrumentalists of the course.

48 Gazzelloni's presence and status at Darmstadt attracted many students, and a number of flutists received the Kranichsteiner during his tenure.

49 Vega C36 S173

leaving notes, reflections or annotated scores and sketches from this and similar processes largely lacking. It is not unreasonable to assume, however, that he taught these techniques to his students in Darmstadt in the years before recording the piece. Some scores, letters, photos and concert recordings are available in Darmstadt, but a more complete collection of Gazzelloni's work might have provided important information about vital changes in instrumental practice of the 1950s and 60s.⁵⁰

One of the few surviving sources documenting the interaction between Gazzelloni and Varèse is a copy of *Density 21.5* with an inscription dated 1957. The occasion and context of this exchange is unknown, as there is no trace of correspondence between Varèse and Gazzelloni in the Paul Sacher Stiftung archives⁵¹ or in the published correspondence. The unmarked score is a pre-publication version, most likely made at some point between 1946 and 1951.⁵² While seemingly not used for performance, it may have been kept for the sake of the inscription: 'To Mr. Severino Gazzelloni. With thanks and cordial greetings. Edgard Varèse. New York IV/57'. Could this expression of gratitude refer to information on the key click, back in 1946? It is of course impossible to draw any conclusion based on this alone, and no available information confirms a meeting or even correspondence prior to 1957.

50 Parts of his correspondence with Berio is preserved in the PSS.

51 See Samlung Edgar Varèse – Korresponenz, Samlung Edgar Varèse – Louse Varèse Korrespondenz, Samlung Edgar Varèse – Lebensdokumente, Samlung Edgar Varèse – Musikmanuskripte. All published December 2017, available online at www.paul-sacher-stiftung.ch/de/sammlungen/u-z/edgard-varese.html

52 Documents held at the New York Public Library indicates that publications rights were transferred back to Varèse after the initial publication of the piece in 1946.

4 The four pieces of 1958

Outside of the infrequent performances of *Density 21.5* listed in Table 1, there is no known use of the key click between 1946 and 1958, at which point it is incorporated into no fewer than four compositions for flute solo, by John Cage, Luciano Berio, Franco Evangelisti and Bruno Maderna. Even a cursory comparison of these 1958 works show that they also share a larger repertoire of novel instrumental techniques. In the following, the compositions are presented and dealt with in their apparent order of creation.⁵³

4.1 John Cage: Solo for Flute, Alto Flute and Piccolo

Cage's Solo for Flute, Alto Flute and Piccolo was composed as a part of the orchestral 'accompaniment' from *Concert for Piano and Orchestra*, a modular composition where the individual parts can function side by side in a number of different combinations, and also as solo pieces. This convoluted construction probably contributed to its rather anonymous role in the flute repertoire.⁵⁴ While the vast piano part was finalized in late January 1958, the composition of each of the smaller 'orchestral' parts took place over the following months leading up to the Town Hall première in New York on May 15.⁵⁵

Key clicks occur 36 times over the course of the relatively sparse 11 pages, used both as a timbral effect on pitched material and as an independent sound (see Example 2). The introductory explanation reads: 'SLAP means slap keys during the attack of tone', a description that aligns Cage's use with that of Varèse.

53 An extensive literature search has unearthed no reference to the use of key clicks in works composed between Varèse's 1946 *Density* and 1958. See, for example, Farwick, 2009, De Wetter-Smith, 1978, Toff, 2012, Brokaw, 1980, Dick, 1975, Artaud & Geay, 1980, Bartolozzi, 1967, Pellerite, 1972a, Gumbel, 1974, Howell, 1974, Heiss, 1966; 1968; 1972 and the online blog of flutist Helen Bledsoe.

54 The work has been recorded only twice, in 1992 by Eberhart Blum, on Hat hut and in 2015 by Katrin Zenz, on Naxos.

55 Although it was available in manuscript from 1960, Henmar Press only published the piece in 1968.

Example 2: Cage, *Solo for flute, alto flute and piccolo*, page 137

Later in the piece, 'slapping of keys without producing a tone' is proposed as one of several ways to add noise elements to notes/note-heads placed below the staff or connected to the staff via lines.

Alongside the key clicks, novel instrumental techniques used by Cage included flutter-tonguing, harmonics, microtonal inflections, whistle, and a sound that Cage refers to as 'warble'.⁵⁶ Combinations of two and three of these novel instrumental techniques occur frequently.

⁵⁶ Most likely timbre trills, later known as 'bisbigliando'.

Perhaps the most radical element of the notation of the piece is Cage's personal take on space–time notation, where the size of the note either indicates dynamic range, duration, or both, all to be chosen at the discretion of the performers, throughout the piece. This wide range of possible realizations no doubt contributed to the difficulties surrounding both the US and European premières in 1958 (Beal, 2006, p. 100; Iddon, 2013a, p. 81).

Cage explicitly cites 'hot jazz' as a source of inspiration for the wind parts of the Concerto.⁵⁷ While many of the selected players for the première of the Concert for Piano and Orchestra were recruited from New York's jazz, Broadway or session scenes, the flutist Andrew Lolya⁵⁸ was primarily an orchestral player and freelancer who served in the New York City Ballet Orchestra.⁵⁹ Information on the key click could have reached Cage through him,⁶⁰ but Cage could also simply have been aware of *Density 21.5* and its key clicks from any of the scores published in 1946, 1951 or 1956.⁶¹ Another channel would be Gazzelloni's collaboration with pianist David Tudor from the 1956 première of Pierre Boulez's *Sonatina in Darmstadt* July 15 (Iddon, 2013b, p. xviii).⁶² As Cage was present in Darmstadt in 1958, he could have seen Gazzelloni in action, and heard one or several of the other pieces.

4.2 Luciano Berio: *Sequenza I*

Sequenza I, per flauto solo was written at Gazzelloni's request in the summer months of 1958 (Halfyard, 2007 p. 194), but the collaboration between Berio and Gazzelloni went back several years and included, most recently, the *Serenata I* for flute and 14 instruments of 1957, première at the Domaine Musical in Paris by Gazzelloni and Pierre Boulez. Based on the amicable tone of the correspondence between Gazzelloni and Berio, Cibele Palopoli describes their relation as one of 'close friendship' (Palopoli, 2014, p. 666). *Sequenza I* soon become Gazzelloni's signature piece in solo and chamber music programmes and continued to be among his most performed pieces for more than a decade. Its success appears to have

57 Surprisingly so, taking Cage's complex relation to both improvisation and jazz into account.

58 See his New York Times obituary: <https://www.nytimes.com/1999/04/29/arts/andrew-j-loyla-69-city-ballet-flutist.html>.

59 I am indebted to Prof. Phillip Thomas of Huddersfield University for his information on this process.

60 A connection strengthening the case in Lolya's favour is his participation in the 1956 recording of Henry Brant's *Angels and Devils*, for flute and flute orchestra [Composers Recordings Inc. – CRI SRD 106]. Here he participated alongside performers such as Samuel Baron and Frances Blaisdell, both performers with extensive contact with Varèse and *Density 21.5*. Lolya would later replace Blaisdell as the solo flutist of the New York City Ballet. See list published by John Wion at <http://www.johnwion.com/orchestra.html>.

61 *Density 21.5* was published by New Music Quarterly (1946), Ricordi (1951) and Franco Colombo (1956).

62 Tudor could easily have reported on Gazzelloni's key click technique after having heard it first hand at the summer courses and in their subsequent recording sessions.

been much more immediate than the slow response to *Density 21.5*, no doubt contributing to Berio's continued interest in the solo format in his two series *Sequenza* and *Chemins*, where elements of the first series is extended in a concerto-like setting in the other.

While *Serenata* is written in a rather stringent style, full of the characteristic pointillist phrases of the time, *Sequenza I* achieves a polyphonic experience from a monophonic instrument. Both the density of events and the thematic and sonic richness are used to create this sensation.

The passage found on the seventh line of page five is of particular interest (see Example 3).

The image shows a musical score for two staves. The upper staff begins with a trill marked *pp* and *mf*. Above it, a box contains the instruction *dim. molto col fiato*. A wedge-shaped dynamic marking indicates a crescendo from *pp* to *mf*, with the instruction *cresc. con le chiavi* below it. The trill continues with a *+* sign. The upper staff then transitions to a single note marked *sf* (il possibile) with the instruction *sparire* above it. The lower staff starts with a *dim.* marking and a wedge-shaped dynamic marking leading to *ppppp*. It then features a single note marked *p* and *mf*, followed by a final note marked *pp*.

Example 3: Berio, *Sequenza I*, p. 5 Lines 7–8

The score calls for a crescendo ‘con le chiavi’ (for the keys) and a diminuendo molto ‘col fiato’ (for the air). The superimposition of these two instructions results in a smooth crossfade of two distinct sound types sharing the rapidly alternating morphology of the trill. This gradually shifting sound is the result of a complex combination of fingering speed and pressure, air pressure and air stream angle. The speed of the tremolo (f1–g-flat1) is held constant by the right hand, while its percussive quality is increasing. Gradually higher pressure is therefore applied to each iteration of the right-hand trill. This increase in muscular tension is counterbalanced by the gradual decrease in air pressure and slight lift of the air stream angle. The execution of these parallel actions requires a deep reconfiguration of established instrumental practice, and it is only superficially accounted for in the notation. The click is used to transform the trill, an archetype in the flute vernacular, into a completely new sound, a soft rattling of keys and fingers, vaguely reminding the listener of the fullness and brilliance of the preceding fluctuation. This decoupling of fingering and breath predates Berio's later decorrelation of fingering and articulation heard in the recorder piece *Gesti* (1966).

4.3 Franco Evangelisti: *Proporzioni* – Strutture per flauto solo

Photos in the Darmstadt archives suggest that *Proporzioni* was the topic of a session with Gazzelloni in the summer of 1958.⁶³ While the exact period of composition has been difficult to ascertain, one can assume that at least a preliminary version was completed that summer. Performed for the first time for Radio Bremen in 1959 by Gazzelloni, the piece would receive its Italian première in 1960, at the first Settimana Internazionale di Musica Nuova di Palermo (Romeo, 2013), and its Darmstadt première in 1961.⁶⁴

Proporzioni consists of 12 blocks of four fragments placed symmetrically within a four by six grid. The resulting chequered distribution of 12 open and 12 notated material blocks form a connected field of possibilities that the performer can navigate according to some simple rules. Tempi, order of fragments and total length of the piece are all selected by the flutist. While the order of events is open, to a certain degree, each fragment is meticulously notated, with a combination of time signatures and tuplet notation (see Example 4).⁶⁵

Example 4: Evangelisti, *Proporzioni*, excerpts

A dry key click on a c-sharp2 starts the piece – a single impulse that triggers the following flow of sound. Subsequently, it is used relatively sparsely, occurring in 11 of the 48 fragments of the piece. Mainly they appear in conjunction with normal tone production, in the additive manner of Varèse. The exception is the use of ‘Triller durch Klappenschläge’, which strictly interpreted should be understood as keyed sounds only, without any emission of air, and the stepwise chain of single clicks, notated as a glissando. The execution of a ‘key click glissando’ (Example 4, line

63 See IMD Archive nr. IMD-B3000528, entitled: ‘Im Park von Schloss Heiligenberg: Franco Evangelisti erklärt sein 1958 entstandenes Werk *Proporzioni*, *Strutture per flauto solo*’.

64 On August 31, 1960, see IMD-M-6975

65 Tuplets used include 7:8, 9:8, 10:8, 11:12 and 5:4, applied to crotchets, quavers, semi-quavers and demisemi-quavers.

4) is not specified in the score but is left to the discretion of the performer. A realization of the notated sound requires a non-linear or non-diatonic keyed sequence, employing different striker keys. These aspects are dealt with neither in the notation nor in the instructions given in the score.

4.4 Bruno Maderna: *Musica su due dimensioni*

One final work from the Darmstadt summer of 1958 makes use of the key click. Following the 1952 version⁶⁶ (for flute, cymbal and electronics), the 1958 version of *Musica su due dimensioni* (for flute and electronics alone) was performed by Gazzelloni on September 5,⁶⁷ and was later published by Edizioni Suvini Zerboni in 1960.⁶⁸ A handful of single uses of the key click is found in movement II (lines 1, 2 and 4) and IV (lines 3 and 8). In none of these occurrences is the key click given a prominent role, and its use is consistently additive. It is also worth noting that flutist Bruno Marinetti's recording from 1967⁶⁹ does not include any key clicks. The non-importance of the key click is countered by the radical formal construction of the piece, which includes a loosely timed electronic echo in the form of a pre-recorded tape with flute sounds. The tape part intervenes with the performed flute part at several points, creating in a sense a free counterpoint. The vocal, lyrical style of melodic writing is commented on by Roberto Fabbriciani:

For Bruno Maderna the flute, in its monodic simplicity, embodied the essence of pure melody, a song derived from the extreme development of the resources of a single instrument. The qualities and the instrumental possibilities excite the composer's imagination, and what is born achieves results of authentic poetry, an absolute lyricism that always distinguishes the Madernian language. The musical thought of Bruno Maderna rejected the idea of the year zero of music, dear to the avant-garde, and replaced the idea of a completely new music, irreverent and disconnected with the past, with a musical language that had its roots in the sign of continuity. Luciano Berio said that Maderna was perhaps the only one in Darmstadt who possessed a sense of history. (Fabbriciani, 2011)⁷⁰

66 There are no key clicks occurrences in the 1952 version. Both PSS originals and Zerboni edition has been consulted.

67 See IMD-M-6520.

68 S. 5573 Z. Suvini Zerboni

69 A compilation album of music produced at the Studio Fonologia in Milano released on Suger Music (ESZ 3), titled *Elektron3*.

70 My translation. Original version: Per Bruno Maderna il flauto, nella sua semplicità monodica, incarnava l'essenza della melodia pura, canto dedotto dall'estremo potenziamento delle risorse di uno strumento solo. Le qualità e le possibilità strumentali eccitano la fantasia del compositore e ciò che nasce raggiunge risultati di autentica poesia, assoluto lirismo che sempre contraddistingue il linguaggio maderniano. Il pensiero musicale di Bruno Maderna respingeva l'idea dell'anno zero della musica, caro alle avanguardie, e sostituiva all'idea di una musica completamente nuova, irriverente e di rottura nei confronti del passato, un linguaggio musicale che affondava le radici nel segno della continuità. Luciano Berio disse che Maderna era forse l'unico a Darmstadt che possedesse il senso della storia.

4.5 Mapping shared sounds

None of the techniques used in the above four pieces was described in relevant manuals, articles or other solo pieces in 1958 (see Table 2). The development of the key click, 12 years earlier, could thus be interpreted as indicative of a shift in materiality in compositions for flute. This shift could be regarded as a change in instrumental practice, moving from performer to performer as much as via the hands of composers.

Novel instrumental technique	Cage	Berio	Evangelisti	Maderna
Key clicks	x	x	x	x
Multiphonics (harmonic and inharmonic)	x	x	x	
Extreme dynamics	x	x	x	x
Extreme register	x	x	x	x
Flatterzunge	x	x	x	x
Double/Triple/Quadruple tongue	x	x	x	
Double trill/pedal key	x	x		x
Key click trill		x	x	
Space–time notation	x	x		
Indeterminate elements	x		x	
Open-form			x	
Microtones	x			
Vocalization	x			
Timbral trill/Bisbigliando/key vibrato	x			
Whistle/Whisper tones/weak tones	x			

Table 2: Material matrix for flute compositions by Cage, Berio, Evangelisti and Maderna

The large degree of overlap in the present sound material points to a common denominator outside intertextual references to Varèse and *Density 21.5*.⁷¹ Gazzelloni's role in the dissemination of *Density 21.5*, through teaching, recording and performing, coincides with direct participation in the realization of Berio's, Evangelisti's and Maderna's works. The commonalities between these pieces are too many to be coincidental, and I argue that it indicates Gazzelloni's influence at least on material selection and notation.

71 Selection criteria for these elements have been extended from novel instrumental techniques (key clicks, multiphonics/harmonics, flutter-tonguing, key click trill, microtones, vocalisation, warble/bisbigliando/timbral trills, whistle tones, pedal key, glissandi) to include notational conventions (space–time notation, double-tongue, triple-tongue) and formal devices (indeterminate elements, open form, extreme registers). The rationale behind this inclusion of what are arguably established material types (such as double- and triple-tonging) is that they are employed using extreme tempi, to the extent that a traditional articulation technique becomes a novel colouristic device.

While it is difficult to directly contest Varèse's use of the key click in 1946, Gazzelloni's influence on mid-century flute technique holds far greater impact and has received much less credit. His advocacy in these years were crucial in both the canonizing of *Density 21.5* and the promotion of the new pieces of 1958. Without claiming authorship of said pieces on Gazzelloni's behalf, it seems clear that his command of the apparatus of novel instrumental practice was paramount: these five compositions contain the basics of a core repertoire of novel instrumental techniques for avant-garde flute music, a body of sound resources that to a large extent was Gazzelloni's language. This contradicts the influence attributed to Varèse by Nattiez.⁷²

The potential lack of validity of Nattiez's claim is not important in itself, but it exemplifies the construction of a problematic historical narrative that clouds the later influence of Gazzelloni. The idea that the key click alone secures *Density 21.5* a place in history is given weight by its function as a pivoting work in the trope of canonized modernist compositions for solo flute.⁷³ This implies that Varèse's composition somehow triggers the later explosion of sonic advancement in flute music, represented by *Sequenza*.

Such thinking, however, appear as a classic case of mythologizing, of reading the conditions located in the Varèse reception of the 1970s into the actual making of the composition in 1946. That Varèse's growing reputation in the decade around his death resonated with the musical *zeitgeist* must have further cemented this narrative. While Varèse's thoughts, lectures, and orchestral works clearly testify to his ambitions for sonic advancement, I argue that *Density 21.5* play a minor, and more symbolic role in the development of the radical sound world found in the pieces of 1958. This, and similar composer-oriented narratives, conceals the influence of performers such as Severino Gazzelloni.

Whether Varèse or the four younger composers benefitted more from the connection that Gazzelloni established between *Density 21.5* and the four pieces of 1958 is hard to tell. Perhaps the new pieces added prestige to Varèse's role as sonic inventor just as much as the young composers gained credibility through being understood in conjunction with an established 'older master'. The key clicks' function as 'emblem of modernity' seems however to be sustained. Despite *Density 21.5* having been performed in New York City no less than four times over the previous decade, its first mention in the press is found in Eric Salzman's review of Gazzelloni's debut concert in New York, May 13, 1960, (Figure 7) where 'the special percussive clicking of

72 'Because this was a new use of the instrument, these five bars have attracted most comment and sufficed to inscribe the piece in music history; it is really since then that certain purely technical properties of instruments have been used to musical ends' (Nattiez & Barry, 1982, p. 273).

73 Debussy, *Syrinx* (1913) – Varèse, *Density 21*(1936/46) – Berio, *Sequenza per flauto solo* (1958).

the keys' is singled out for the first time.⁷⁴ It is also referenced explicitly as a novelty in further concert and record reviews in the U.S. (Stone, 1964, p. 264; Peyser, 1976).

Severino Gazzelloni Triumphs In Flute Program at Debut Here

It may sound curious to describe an instrumentalist as the world's best avant-garde flute player, but the distinction is no mean one.

Apart from David Tudor, there is probably no instrumentalist of any kind with the reputation of Severino Gazzelloni for breezing his way through intricacies of difficult contemporary scores of the ultra variety. But the Italian flutist, who made his local debut last night at the New School, is more than that: he is a first-rate flute player judged by any standards.

The most remarkable thing that he coaxes out of his instrument is variety. The flute is a notoriously monochrome instrument, but he has the entire pitch and dynamic gamut under control and he can as soon make an ugly, biting sound as a smooth, sensuous one.

He had beautiful breath control to make long, long phrases and a technical command, not only of the usual apparatus of flute-playing but also of all the extras that the moderns demand.

There were plenty of extras, too, for the pieces performed needed all kinds of unusual tone colors, special percussive clickings of the keys, extreme registers and, even in one spot, a double stop! Sometimes the flutist played by himself, sometimes with a tape recorder and sometimes just with a plain, old piano.

The work that came closest to covering the full gamut of

solo possibilities was the "Sequenza" by Luciano Berio, a young Italian composer. In spite of a forbidding array of composing and performing techniques, it is actually a work full of fun and fantasy in which all the strange things the flutist has to do are actually part and parcel of genuine musical impulse and invention.

There were three other pieces for flute solo: Debussy's "Syrinx" and Varese's "Density 21.5," the two "classics" of the medium, and Frank Wigglesworth's "Lake Music," a pleasant, legato piece.

Roman Haubenstock-Ramati's "Interpolations" for flute and tape are nothing more than a glorified trio for Mr. Gazzelloni, himself and himself. For a few minutes there is nothing but a rather uninteresting solo; then on goes the machine and out comes Mr. Gazzelloni's flute two more times, all pre-recorded on tape and making a stunning effect.

Bruno Maderna's "Musica su due dimensioni" is accompanied by just ordinary old Milan studio tape sounds. One has no clear impression of the actual content of the piece, but Mr. Gazzelloni made it sound effective anyhow. With Frederic Rzewski as his excellent piano partner, he gave rousing performances of Messiaen's "Le Merle Noir" and, at the end, Boulez' rich, heady, driving, crazy-modern-music Sonata. It was a knock-out finish.

ERIC SALZMAN.

The New York Times

Published: May 14, 1960

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Figure 7: Eric Salzman's review in the New York Times, May 14, 1960

74 Salzman visited Darmstadt as a Fulbright scholar, between 1956 and 58, where he would have gained first-hand knowledge of the developments of the European avant-garde. It is also highly likely that he heard other performances of Varese's piece here, as it was featured in the final round for the Kranichsteiner Musikpreis that year.

5 1959–1969: The transportation of novel instrumental techniques

As personal contact or collaboration with specialized instrumentalists was the prime manner in which novel experimental techniques were disseminated in the 1950s and '60s, a chain of connections is observable if one follows Gazzelloni's tour schedule, teaching, radio and festival appearances. Wherever he travelled, the use of novel instrumental techniques in general, and a core repertoire of sounds, gestures and techniques in particular, would soon follow.⁷⁵ His travels created a growing network, derived notably from Gazzelloni's position at Darmstadt, which connected composers, performers, ensembles, conductors and repertoire across the Atlantic but also across the barriers of Western and Eastern Europe.

For a time, the Darmstadt Ferienkurse, Venice Biennale, Warsaw Autumn and Donaueschinger Musiktage functioned as an interconnected infrastructure, sharing repertoire, composers and performers in a continuous fashion from August (Darmstadt) through September (Venice) and October (Warsaw and Donaueschingen). This exchange brought both new impulses, knowledge and compositions from the concert halls of Kraków to Venice, and also composers, soloists and ensembles from Rome to Warsaw and Kraków.⁷⁶

This section follows the use of the key click from Darmstadt to Poland, tracing it as an example of the general dissemination of novel instrumental techniques. Selected pieces by Bogusław Schaeffer are used as examples of the way novel instrumental techniques would travel along this cultural infrastructure, linking the circulation of competency with the creation of new repertoire.

5.1 Distributing competency

Gazzelloni's first programme for the 1959 edition of the Warsaw Autumn International Festival of Contemporary Music (WAIFCM) included Berio *Sequenza I* (1958), Boulez and Henze Sonatinas (1949 and 1947), Messiaen *Le Merle Noir* and Varèse *Density 21.5*, all alongside a tape piece by Henri Posseur.⁷⁷ The Polish scene was thus quickly acquainted with the recent advances in flute literature of the time.

⁷⁵ According to Petrucci, Gazzelloni taught in regularly in Darmstadt, Rome and Siena, but also in Freiburg, Köln, Dartington and Helsinki (Petrucci, 2018).

⁷⁶ There is a substantial overlap of artists between these three events, many of which were both involved as artists and organizers.

⁷⁷ 14 September 1959, in the Chamber Hall of the National Philharmonic. A concert recording is preserved by The Polish Radio Archive in Warszawa.

A string of Polish flute pieces was created for or influenced by this concert: Henryk Górecki's *Trzy diagramy op. 15 na flet solo* (1959), Witold Szalonek's *Concertino for flute and orchestra* (1960–62), Krzysztof Penderecki's *Fonogrammi* (1961), and Bolesław Szabelski's *Koncert na flet i orkiestrę* (1964) being important examples. The archive of Polish Radio in Warsaw has preserved recordings of five concerts with Gazzelloni in the period between 1959 and 1966,⁷⁸ with a combination of Polish and international compositions in formats ranging from solo flute to concertos with orchestra.

The 'Polish School' must have proved a natural habitat for Gazzelloni. Perceived as a dynamic and visceral contrast to the more sober and form-oriented version of post-war modernism found in the West, this label was at the time a signifier for an abstract, particularly sound-oriented form of composition (Bylander, 2004). Polish composers and critics preferred the term 'sonorism' and questioned the pigeonholing of a whole nation of composers. Granat explicates this concept as a style within Polish music of the 1960s that explored contrasts of instrumentation, texture, timbre, articulation, dynamics, movement, and expression as primary form-building elements (Granat, 2008; 2009).⁷⁹ The compatibility between these characteristics and Gazzelloni's skill set and interests is easily perceived.

5.2 Sonic appropriation

Bogusław Schaeffer's *Zwei Stücke für Flöte solo* (1953) and his subsequent composition *Negative für Querflöte* (1960) provide an interesting exemplification of the transportation of novel instrumental techniques. The alleged year of composition of *Zwei Stücke* is 1953, the very same year that Schaeffer graduated from the Music Academy of Kraków.⁸⁰ Traces of a performance history in the 1950s have been surprisingly difficult to find,⁸¹ and some sources indicate that the piece was published only in 1974 by Moeck Editions, and was not premiered until 1981.⁸² This is supported by Thomas, who claims that Schaeffer 'had his debut as a composer' only in 1960 (Thomas, 2008, p.102). While it does not exclude the possibility that the piece was composed in 1953, such a prolonged genesis allows for the possibility that the piece had several revision processes or a prolonged process of creation. Schaeffer's use of

78 14 September 1959, 21 September 1961, 22 September 1963, 24 September 1963 and 26 September 1965.

79 Although not functioning as an organized group or collective, composers associated with this style included Penderecki, Górecki, Kilar, Szalonek, Baird, Serocki, Kotoński, Dobrowolski, Schaeffer and others.

80 See <http://db.musicaustria.at/en/node/131465> and <http://aureaporta4schaeffer.pl/kompozycja/264>

81 No scores or sketches are currently available in the archives of Aurea Porta, the foundation tasked with the vast legacy of Schaeffer's production.

82 Salzburg, August 19 1981, according to Music Austria and Aureaporta work lists.

the key click could therefore be a case of what Adrian Thomas calls *sonoristic appropriation* (Thomas, 2008, p.208).⁸³

Schaeffer's participation at the Darmstadt Ferienkurse in 1959,⁸⁴ and his subsequent composition of *Negative für Querflöte* in 1960, provides further reason for scepticism about the dating of *Zwei Stücke*. Although the IMD archives offers no concrete evidence of interaction between Schaeffer and Gazzelloni, Varèse's *Density 21.5*, Berio's *Sequenza I* and Maderna's *Musica su due dimensioni* were all performed by Gazzelloni during the concerts of the courses.⁸⁵ Although Stockhausen's lecture series *Musik und Graphik* was hugely popular that year (Iddon, 2013b, pp. 236–252), Schaeffer's writing in *Negative* (1960) emulates that of Berio and the techniques of Gazzelloni, rather than the notational experiments of Busotti, Cardew, Kagel or others.⁸⁶ Almost all of the techniques demonstrated by Gazzelloni are used by Schaeffer in *Negative*: multiphonics, key clicks with and without pitched tone, harmonics, microtonal intonation, graphic notation and more (see Examples 5 and 6).



Example 5: Schaeffer, *Negative für Querflöte*, p.18, line 1

A clear example of this influence is found in the use of a c-harmonic used by Berio (bars 215–217), obtained by balancing lip tension and air stream angle so that the first partials (p8 and p12) are brought out from the sound of the fingered fundamental. The same technique is used by Schaeffer to obtain a stepwise sequence of bi-chords (Example 5).



Example 6: Schaeffer, *Negative für Querflöte*, p. 19, line 1

83 The key click is also featured in works from several of Schaeffer's Polish colleagues between 1959 and 1964.

84 The IMD Archives show that Schaeffer's name come up in the correspondance between Luigi Nono and Wolfgang Steinecke from October 1958, in letters between Steinecke, Kontonski and Serocki. He also shows up in liasons between the IMD library and the journal *Ruch Muzyczny* which he edited for several years. See IMD-A100038–200788–15
85 On Aug 25th 1959 (see IMD-M-6690) and Sept 5th respectively (see IMD-M-6511).

86 Much of the Darmstadt discourse of 1959 was dominated by Stockhausen's lecture series *Musik und Graphik*, centred around different approaches to employ indeterminate or spontaneous strategies in music (Iddon, 2013 p. 236–252).

Example 6 shows new articulation techniques, with and without pitch. The quotation marks around the dynamic indication ('f') form another clear sign of Gazzelloni's influence. The key clicks must be executed 'f', but will only sound 'mp' or 'p'. The inscribed dynamic indicates the intensity of the execution of the sound, not its sound effect. This notational nuance was not present in Varèse.

Stepwise microtonal chromaticism is also employed several places in *Negative*. The special fingerings supplied for high register microtones is again a kind of notation that necessitates the idiomatic knowledge and experience of a specialist performer (see Example 7):

The image displays two staves of musical notation for a flute. The top staff begins with a tempo marking of quarter note = 57. It features a series of notes with complex articulation, including slurs and accents. Above the staff, there are vertical markings and symbols, possibly indicating fingerings or microtonal adjustments. The bottom staff starts with a tempo marking of quarter note = 72. It shows a sequence of notes with various articulations, including slurs and accents, and some notes with microtonal adjustments indicated by small symbols above them.

Example 7: Schaeffer, *Negative für Querflöte*, p. 21, lines 6–7

While composer workshops and masterclasses, with their sharing, discussing and analysis of scores, were undoubtedly important for such appropriation, the transportation of novel instrumental techniques through touring is hard to overestimate. With the presentation of novel sounds and skills, 'the sound of the new' became an artistic currency, and performer knowledge became a critical asset for composers. The similarities found in material used by the sonorists and the international Avant-garde of the 1960s, could therefore in some cases be said to have their root in the skill set of performers as much as in intertextual references to existing compositions or compositional styles.

6 1970–1975: Saturation and formalization

Scores for flute and piano sprout up like mushrooms from the ground, pieces in which the composer allow nothing more to happen than more or less subtle methods of notation, in order to conjure improvisation from the virtuoso Gazzelloni and the virtuoso Tudor, from the quality of whose performance they hope to gain their own prestige.

Luigi Nono (in Iddon, 2013b, p. 269).⁸⁷

Novel instrumental techniques, among them the use of key clicks, insinuated their way into most soloistic writing for flute in the decade leading up to 1970. This gradual transformation from anomaly into a *lingua franca* of contemporary music is shown clearly in Susanne Farwick's comprehensive catalogue of twentieth-century solo literature for flute (Farwick, 2009). Luigi Nono's acerbic critique quoted above, first articulated in a lecture titled 'Geschichte und Gegenwart in der Musik von heute' at Darmstadt on 1 September 1959 and later reiterated in print form (Steinecke, 1960), warns of the effect of such over-use.⁸⁸ His clear criticism must have contributed to the introduction of the term Gazzelloni-Musik, a reoccurring designation within the Darmstadt scene, not necessarily used favourably (Mila, 1976, p. 55).

The list of compositions dedicated to Gazzelloni admittedly contains examples of both excellence and mediocrity, which one could say is natural, considering his long support of contemporary creation. While the late 1960s and early 1970s in many ways represented a peak in his activities, Gazzelloni's contributions to new repertoire and to novel instrumental techniques appear less substantial in this period than in the preceding decades. At the same time, a new generation of performers would extend and continue working with instrumental innovation in the flute repertoire, among them Pierre-Yves Artaud, Robert Aitken, Robert Dick, Peter-Lukas Graf and Roberto Fabbricciani.

Three broad tendencies are observable within this expanding repertoire. The first is the continuation of an additive use of novel instrumental techniques as a colouristic extension of pitch and time structures. The second is an exploitation of the orientalist or exotic aspects of novel instrumental techniques, and the third, a slower, more empirical or phenomenological exploration of the flute's instrumental sound, referencing Pierre Schaeffer's ideas of *musique concrète* through instrumental means. This growing repertoire gives rise to a substantial increase in publications.

⁸⁷ Also referenced in Cook & Pople, 2004, p. 359.

⁸⁸ Delivered within the context of a more general critique of the reception of New York school aesthetics in Darmstadt, Nono's argument was primarily aimed at the use of performer virtuosity and eminence as a compositional short-cut, and not these performers in themselves.

6.1 Formalizing novel instrumental techniques

The earliest writings on the novel instrumental techniques originate in the US, followed shortly by Italian, German and French publications. An overview of texts on novel instrumental techniques between 1963 and 1980 shows a gradually increasing interest in the topic, peaking around 1974/75 (See Appendix 1 for a chronological list of publications). Of particular interest is that the key click is not referenced in such publications until 1972 (Pellerite, 1972). Although smaller articles were published in the preceding years,⁸⁹ the seminal text of the period is Bruno Bartolozzi's 1967 *New Sounds for Woodwinds* (Bartolozzi, 1967). Immediately translated to English by composer, scholar and Italophile Reginald Smith-Brindle, the book focused on timbral nuancing through novel instrumental techniques such as multiphonics,⁹⁰ quarter-tone fingerings and 'special effects'. Despite initial errors and criticism that certain techniques did not translate well on all instrument types, *New Sounds for Woodwinds* became a cornerstone for woodwind musicians for decades, aided by its translation into German in 1971 and Polish in 1977. Note that the translation from Italian to English, Polish and German correspond to the centres of activity highlighted in Chapter 5.

Year	Articles	Manuals	Books/Theses
1962/63	Cantrick (US)		
1964			
1966	Heiss (US)		
1967		Bartolozzi (IT)	
1968	Heiss (US)		
1970		Stokes & Condon (US)	
1972	Heiss (US)	Pellerite (US)	
1974		Gümbel (GER) Howell (US) Nicolet (FR)	
1975		Dick (US) Mencarelli & Bartolozzi (IT)	
1978			De Wetter-Smith (US)
1979			Toff (US)
1980		Artaud & Geay (FR)	Brokaw (US)

Table 3: Publication of articles, manuals and books/theses on novel instrumental techniques

89 Such as the two articles by Cantrick in 1962 and 1963.

90 Or 'polyphonic sounds', as was Bartolozzi's preferred term.

The manuals served a tripartite role in the transformation of the flutist's skill set: first as a channel for prominent practitioners to formalize their knowledge and strengthen their influence second as an indispensable tool for performers wanting to master contemporary music, and third as a reference for composers without access to skilled performers during composition processes. While such formalization of knowledge into publications might have evolved in a different tempo and in other intervals than in actual practice,⁹¹ these documents provide a precise dating of when given techniques were entered into the common domain (see Table 4).

The precision of descriptions of the novel instrumental techniques varies in these publications. While the early publications take on the shape of reports from tests and trials, or of introductions to ongoing investigations, a fundamental change takes place in 1974–75 as more thorough work is done on a larger scope of techniques.⁹² The manual offered by Martin Gumbel (1974) is extensive in its scope (including 78 examples of the 12 categories of novel instrumental techniques listed below) but limited in depth. Howell (1974) and Dick (1975) go further, covering 14 and 15 categories respectively, many of them with an exhaustive range of examples. Dick makes an important contribution in his analysis of the physiological pre-conditions of flute timbre, defined as the relationship between 'airstream angle, lip opening, lip position and breath pressure' (1975, p. 46). While his approach is complementary to that of Bartolozzi, his breakdown of the composite factors that influence tone colour is far more complex.

91 The key click's dissemination in the 1950s was not mentioned in publications until 1972.

92 Note that while Pellerite's and Nicolet's books are solid, they only present techniques already covered by previous publications.

Novel instrumental technique	Cantrick (1962/63)	Bartolozzi (1967)	Heiss (1966)	Stokes & Condon (1970)	Heiss (1972)	Pellerite (1972)	Gümbel (1974)	Howell (1974)	Nicolet (1974)	Dick (1975)	Mencarelli (1975)
Trumpet tone / Trumpet lip/ Lip buzz	x				x		x		x		
Natural harmonics		x		x		x		x		x	x
Artificial harmonics		x			x			x			x
Microtonal scales		x					x	x	x	x	x
Microtonal oscillation		x						x	x		x
Pedal key		x									x
Vibrato		x					x		x		x
Smorzato		x									x
Diatonic/chromatic trills or arpeggios		x						x		x	x
Double/multiple trills/shakes		x	x					x			x
Alternate timbre by fingering		x	x							x	x
Multiphonics/Multiple Sonorities		x	x	x	x	x	x	x	x	x	x
Timbral trill/Bisbigliando/key vibrato			x	x				x			x
Whistle/Whisper tones/weak tones				x				x	x		
Vocalization				x		x	x		x	x	
Air sounds/Hollow tones				x			x				
Sub-tones				x							
Mute				x							
Jet whistle					x				x	x	
Key click/strong fingerings					x		x	x	x	x	
Flatterzunge						x	x		x	x	
Glissandi							x		x	x	x
Lip vibrato							x				
Flatterlippe							x				
Slap tongue / tongue click /pauken effekte							x		x	x	
Extended register								x		x	
Lip pizz.								x	x		
Tongue ram/tongue stop								x	x	x	
Electronic modification								x		x	
Alternate timbre by embouchure										x	x

Table 4: Matrix of novel instrumental techniques described in publications

A chronological ordering of the introduction of the different novel instrumental techniques provides a timeline for this formalization process (see Table 5). The majority of novel instrumental techniques were introduced by Bartolozzi in 1967, followed by additions from Stokes & Condon (1970), Gümbel (1974) and Howell (1974).

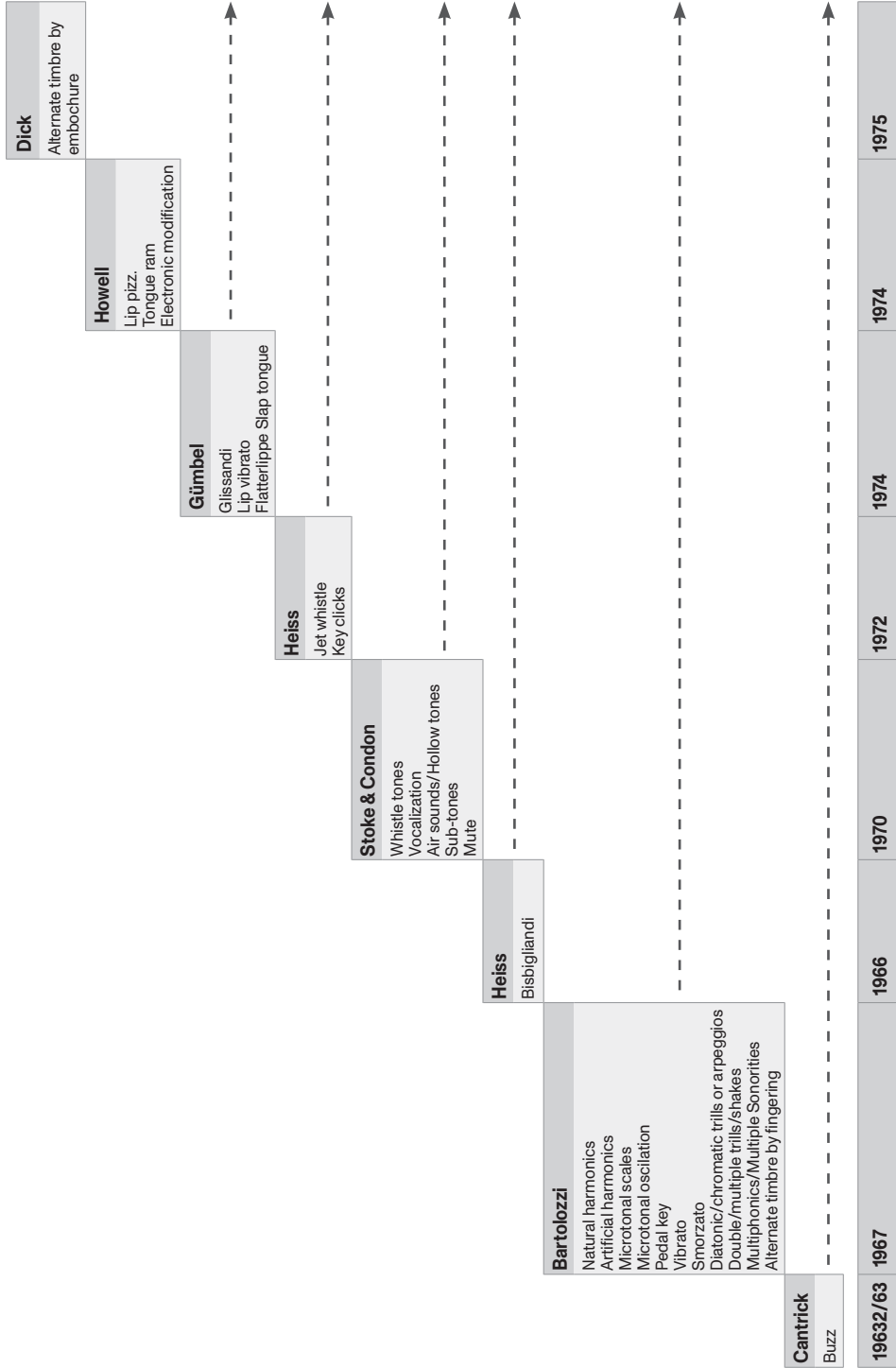


Table 5: Introduction of novel instrumental techniques by year and author

While the bulk of novel techniques were presented by Bartolozzi in 1967, the availability of new sources grew radically from 1970 onwards. This corresponds to the growing use of these techniques in compositions for flute seen in the same time period.⁹³ Archive studies show that Nono and Fabbriani both were familiar with the publications of Howell and Bartolozzi at the start of their collaboration in 1981. Sciarrino's notes and sketches from the early 1980s contain references to Howell and Dick.

The development of novel instrumental techniques is also reflected in the frequent revisions of the more traditional manuals. Pellerite explains his second edition of *A modern Guide to Fingering for the Flute* by claiming:

No longer can the flutist expect that a traditional flute tone is the only attractive, or acceptable sound structure. Sound phenomenon must be valued as significant structure which the aspiring performer must embrace in order to add to the variety of musical expression in contemporary music. In the various periods of music, the goal of each generation's performers has been to enrich and augment the sometimes restrictive character of the sound of the flute. Hence, with this standard of excellence in flute playing, the evolution of compositional techniques has paralleled the instrumentalist's development. Accordingly, more and more is expected of the flutist's technical skills and resources. (Pellerite, 1972, p. 51)

Whereas Bartolozzi uses Schönberg's concept of *Klangfarbenmelodie* as a historical qualifier for the pressing need to extend instrumental colour (Bartolozzi, 1967, p. 50), Pellerite places the need for novel instrumental techniques in the contemporary situation itself: traditional instrumental sound is no longer 'the only attractive, or acceptable sound structure' (Bartolozzi, 1967, p.50). This statement points towards an evolving practice, more than towards its formalization. The problems and limits of this newfound access to tables, lists, names and descriptions is perhaps most clearly problematized by Gumbel in his introduction:

Eine didaktische Behandlung neuer Spieltechniken ist in sich problematisch. Der im Bereich der Instrumentalunterweisung bisher fast ausschliesslich beschrittene Weg, solche Übungen zu erfinden und zu erarbeiten, deinen bestimmten Bereich technischer Schwierigkeiten in der Literatur abdecken, ist nach dem Zerfall einer allgemein verbindlichen musikalischen Syntax kaum mehr gangbar. ... Der Versuch, die hier dargestellte neue Klangwelt vorwiegend unter dem Aspekt der technischen

93 The notable omission of Pierre-Yves Artaud and Gérard Geay's publication *Flûtes au présent* (1980), is due to its late publication date. According to the authors, the manuscript was finished already in 1971 (Artaud & Geay, 1980, p. 3), but it was not published until nine years later. Artaud's influence on French flute music in that decade is worth a study of its own.

Verfügbarmachung möglichst umfassend zu behandeln, birgt die Gefahr eines bösen Missverständnisses: Praktisches Üben bestimmter Klangerzeugungstechniken schafft nicht notwendigerweise Zugang zum Sinn der Musik, die sich solcher neuer Klänge bedient.⁹⁴ (Gumbel, 1974, p. 2)

Gumbel's assertion that mastering a technique is not the same as understanding the nature of this new music points to an important distinction between the concept of novel instrumental technique and that of novel instrumental practice. While descriptions of individual techniques are easily realizable, accounting for their musical application is more challenging. Following Gumbel's thinking, a novel instrumental practice must include the competency to question and enlarge itself.

6.2 The closing of a notational rupture

The juxtaposition of slap-tongue and key clicks in the opening bars of *Cassandra's Dream Song*, written by Brian Ferneyhough in 1970, represent a new stage of maturity in the employment of novel instrumental techniques. Here, the key click is removed from its usual additive state, and immediately launched into an autonomous percussive context. While the percussive section of Varèse's *Density 21.5* used the click as 'verfremdung', and in Berio's *Sequenza I* it is more as a colouristic shadow of the established gestural trope of the trill, the score of *Cassandra's Dream Song* deploys the key click in a game of sonic recoil, where the softer and thinner key click bounces off the more full and aggressive sound of the slap tongue. Each configuration of this material pair shows a different aggregation of the two sound types (see Figure 8).

94 A didactic treatment of new instrumental techniques is problematic in itself. To invent and develop exercises which cover a certain range of technical difficulties found in the literature has been the way almost exclusively trodden in the area of instrumental education. This is scarcely possible after the dissolution of a generally binding musical syntax. ... The attempt to treat this new world of sound presented here as comprehensively as possible, predominantly from the point of view of making technical solutions available, poses the danger of a terrible misunderstanding: practical practice of certain sound production techniques does not necessarily provide access to the meaning of music that uses such new sounds. My translation.



Figure 8: Slap tongue vs. key click notation in Brian Ferneyhough's *Cassandra's Dream Song*

This opening statement represents an articulation of the concrete use of fingers and keys, as much as their idealized sonic consequence.⁹⁵ Ferneyhough's tablature clearly indicates which key should be hit for the correct sound and pitch of the clicks, revealing a choreography of specific finger movements, of which the sonic results subsequently have been transcribed and approximated using 'standard' notation.

Ferneyhough's use of the key click is detailed at a hitherto unprecedented level and the general employment of novel instrumental techniques have little resemblance to the additive use found in many 'catalogue pieces' of the same decade (see Example 8).



Example 8: Ferneyhough, *Cassandra's Dream Song*

The tablature also reveals an idiomatic and pragmatic separation between left and right hand actions, which are not encoded in the traditional notation: the left hand is largely used to finger

95 The first of the two opening phrases could also be understood as a reference to the Density-motif. While the tessitura is reduced from m3 in *Density 21.5* (e1-c-sharp1) to m2 in *Cassandra's Dream Song*, using quarter-tone inflections around the central pitch a1, the fragmentation and the alteration of articulated double and triple entries is kept, in a compressed form. The quoted rhythmic motive is gradually extended, adapted for the utmost dexterity of finger movement by increasing the number of striker keys used.

the correct pitch for the slap tongue and the weaker single key clicks. The right hand is mainly used to alter the resonant pitch of the tube and to operate striker keys for faster sequences. This allocation of tasks across the two hands allows the performer to operate the tube with very different tension levels: a soft, relaxed and open left hand in combination with a much firmer and faster movement in the right. Each sequence of fingering actions are carefully grouped as aggregations of the rudimentary actions: ‘closing’, ‘opening’ and ‘holding’ (see Figure 9).

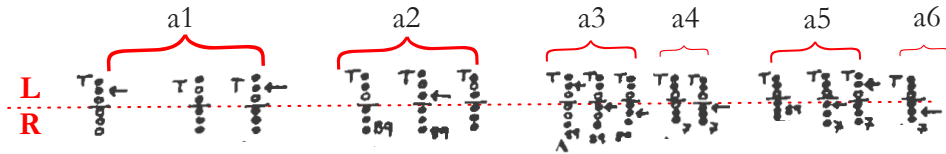


Figure 9: Tablature of bars 1–4, Brian Ferneyhough's *Cassandra's Dream Song*

The first groups of actions can be decoded as follows:

a1:

Left Hand, finger 2: [close-open-close] +
Right Hand, finger 2/3/4: [open-close+hold],

a2:

Left Hand, finger 3 [open-close-hold] +
Right Hand [close-hold-hold],

a3:

Left Hand [close-hold-hold] + Right Hand [hold-close-close]

etc.

These permutations of left-hand and right-hand movements creates hocketing patterns that could not be specified using traditional notation. And they cannot be executed as colouristic effects applied to a pitch structure, they require the performer to separate and re-combine fingering and tongue technique outside of the conditioned context of pitch and scale-based performance. This early inclusion of descriptive and prescriptive elements in a score heralds a shift towards parametric polyphony found in later compositions by Ferneyhough (Fitch, 2013, p. 66).

Ferneyhough's combination of tablature and traditional notation in many ways closes the notational rupture earlier observed in *Density 21.5*.⁹⁶ His compositional exploitation of the fundamentals of instrumental playing activates the performative element of music as compositional material in itself, allowing for a music that draws heavily on specialist performers. *Cassandra's Dream Song* thus not only relies on novel instrumental techniques, but requires a performer dedicated to experimentation in instrumental practice.

⁹⁶ The referenced rupture relates to Varèse's failure to clearly account for the execution of the key clicks. See chapter 1.3, The execution of a click -1.4, Analysing the click.

7 The key click as conflict

The historical outline in the previous chapters reveals the emergence of a subset of musical materiality and its relation to the practice of flute playing. The outline indicates a development from additive to integral use of the key click, a tendency informed by a gradual increase in performer agency and influence on composition, as well as an increasing level of formalization in both notation and text. From this perspective, the development of the key click is the road to a novel instrumental practice, where the role of performers' skills and mindsets is recast by extending established practices, including unheard sounds and a reconfiguring of instrumentalists' bodily habitus.

Such smooth linearity seldom paints a complete picture. To what extent is resistance to this development relevant for understanding its history? Chapters 2 and 3 indicate that the key click was largely unrealized from its appearance in 1946 until its recording in the late 1950s. Whether Varèse's sonic idea went unrealized due to lack of will or capability in players or to his own disinterest is difficult to assess. It seems clear, however, that Varèse himself did not consider the key click to be of vital importance. Does this mean that the key click was not understood as a musical sound?

This chapter attempts to account for the background of some of the resistance to novel instrumental techniques by combining idiomatic knowledge and historical sources that document sound ideals in flute performance. The analysis is based on critical reviews of texts and descriptions from central figures within the dominant performance tradition of the period, particularly descriptions of *son naturel*, the prevailing sound ideal. This situates the key click in opposition to the general ideals of the French flute school, which dominated both European and American musical life in the decades before and after the war. This conflict of ideals is used to exemplify the distinction between established and novel instrumental practices.

7.1 Restraint versus extension

Conflict between the professional performance ideals of the time and Varèse's sonic idealism may offer one explanation for the reluctant reception of the key click from its early performers. An early point of reference for this proposed conflict is found in a *Music and Letters* article written by French flutist and professor Louis Fleury in 1922:

[The flute's proper business] is, first and foremost, [as] an instrument of expression, and it achieves expression by remaining within its peculiar limits. (Fleury, 1922, p. 383)

Fleury's demarcation of the flute's limits is followed by exemplifications of its character through terms such as 'melancholy sweetness' (Fleury, 1922, p. 386), 'pathos' (p. 389) and 'wit and gaiety' (p. 390). None of these qualities are fit well with Varèse's writing in *Density 21.5*, which after the 1946 revision was bereft of most stylistic references to earlier solo literature for the flute. The necessity of staying within the limits of the instrument's character is recurring within Fleury's text, cautioning the flutist that 'any attempt to enlarge his boundaries will lead to disaster' (p. 383). The importance put on the virtue of restraint is thus repeatedly emphasized. Fleury's image of the flute is largely consistent with the accounts found in Berlioz's instrumentation treatise of 70 years earlier, where elegance, flexibility and sensitivity are terms used to describe qualities of the best flute playing of the time.⁹⁷ These qualifiers are compatible both with the restraint that Fleury advocates, and the nineteenth-century French sense of *charme*, as laid out by Deruchie in an interpretation of quotes from Saint-Saëns:

In period writing, 'charm' often appears as coterminous with descriptors such as 'grace' and 'elegance', implying understatement, refinement and restraint. (Deruchie, 2014, p. 51)

Ljungar-Chapelon describes these ideals of restraint as a form of classicist aesthetic connected to the French flute school (Ljungar-Chapelon, 2008, p. 116). This in stark opposition to dramatic expression, which was considered inappropriate as it meant that the flutist would exceed the possibilities considered natural for the instrument. Fleury's careful use of historical references in order to explain the newfound contemporary success of the flute at the beginning of the twentieth century supports this notion:

The rational employment of the flute by the XXth century is due, no doubt, to the example of the XVIIIth. Who can say that the opening phrase of *L'Après-midi d'un Faune* is not an echo of a performance of Bach or Glück? At any rate Debussy has this in common with the old masters, that he never asks of our sweet-toned instrument what it cannot give. (Fleury, 1922)

To a present-day reader, the connecting of Debussy to Bach and Glück can seem quaint or even misplaced. But both the sanctioning of Debussy as a 'rational' composer, and Fleury's referral to music more than a century old, could be understood as tactical propositions for

97 These are also the precise words later used by Fleury to describe the performance style of Taffanell.

connecting the then-contemporary to the classic. This form of historicism could be understood as a process ‘working on the new and different in order to diminish newness and mitigate difference, in order to install a sense of familiarity in the new, based on its presentation as a gradual evolution of the known past’ (Krauss, 1979, p. 30). However, further nuances could be invested in Fleury’s position: In his lifetime, Debussy’s music was connected to notions of both classicism and modernism (Whittall, 2003, pp. 278–287), an ambiguity that continued in the decades after his passing (Kelly, 2013, pp. 22–36). Only later was his position as a national emblem secured (Wheeldon, 2018, p. 98), strengthened by the post-war conception of his role as a proto-modernist (Dunsby, 1996, p. 150), largely through the establishment of a narrative tying the evolution of sonority to a distinctly French strand of musical modernism (Kelly, 2013, p. 9). This historical evolution in the perception of both aesthetic terms and positions provides important context for Fleury’s view of Debussy.

The ideals of understatement, refinement and restraint of the French flute school remained largely incompatible with the demands of sonic extension presented by musical modernism. Hence, flute-playing was not only a site of radical change, but also one of trenchant conservatism, epitomized by the many statements from Fleury cited above. A growing schism concerning timbral ideals in flute performance was therefore inevitable.

7.2 Regulating ideals across the Atlantic

The combination of difficulty of execution with the conflicting ideals accounted for above represented an initial hindrance to the effective dissemination of the key click. But what forces preserved or maintained earlier ideals such as those articulated by Fleury? After all, Fleury’s article predates the first appearance of *Density 21.5* by 14 years and its second by 24. It is difficult to overestimate the formal and informal influence asserted by the French flute school (Dorgeuille, 1986; Blakeman, 2005). While indicating no single institution, the term refers to the style of teaching and playing originating with Claude-Paul Taffanel (1844–1908) at the Paris Conservatory in the 1890s. Ardall Powell lists the main attributes of this style:

the use of the French-style silver flute, a preoccupation with tone, a standard repertoire, and a set of teaching materials in which the Taffanel-Gaubert method and the tone development exercises of Marcel Moyse ... hold a central place (Powell, 2002).⁹⁸

⁹⁸ The term usually includes not only Taffanel and his close circle, but extends through his students who spread around the world at least through the 1950s. Some argue that the ideals of the French flute school still influence flute players today.

In all but certain exceptions, the French flute school taught their students in groups, a practice that allowed for a thorough distribution of technical, aesthetic and pedagogical priorities throughout the student body (Ljungar-Chapelon, 2008, p. 126). Apart from learning how to play the flute, the group sessions also provided a model for how to teach the flute according to the prevailing ideals. Furthermore, the teachers functioned as sounding examples of the benefits of a certain technical and musical approach. This would form the basis for the students' imitation and assimilation of style. The social form of the teaching situation also made it clear for all students which of their fellow students were succeeding in assimilating the ideals.⁹⁹

The influence of the French flute school on American flute players through the teaching of Georges Barrère, Georges Laurent and Marcel Moyse is thoroughly described (Giroux, 1953, p. 72; Dorgeuille, 1986; Gearheart, 2011) and a recent study shows that as many as 91 per cent of professional American flute players in 2003 were taught by students of these three men or students of those students (Fair, 2003, p. 8). While an American flute school is identified as emanating from William Kincaid (1895–1967), but this only confirms the connection, as Kincaid himself was a Barrère student. That a degree of normativity arose from this 'family tree of flutists' should not be surprising.

7.3 With nature, the voice and the instrument

The transfer of sound ideals from teacher to student is a natural consequence of a culture shared through teaching, technical methods, curricula and performances. The 'natural and unrestrained' sonic ideal of the French flute school owed much of its status to Taffanel's approach to maximizing the resonance of the newly developed French silver flutes (Blakeman, 2005, p. 181). The combination of Theobald Böhm's new design, the high quality of Louis Lot's manufacturing and Taffanel's embouchure technique laid the ground for a richer and fuller sound that would become the trademark of French flute players.

The followers of Böhm claimed that the old flute 'in itself, as an instrument, is out of tune, and requires reformation' (Clinton, 1844, p. 4), a problem that Böhm identified as a consequence of the pragmatic approach of placing the flutes tone holes:

⁹⁹ While group teaching can be viewed as a positive pedagogical ideal, a potential unintended consequence can be suppression of individuality through the dynamics of the crowd.

Allein alle meine Bemühungen, Gleichheit der Töne und Reinheit der Stimmung herzustellen, waren erfolglos, so lange die Spannweite der Finger zur Einbohrung der Tonlöcher massgebend blieb.¹⁰⁰ (Böhm, 1871, p. 1)

These problems are confirmed in Berlioz's treatise on instrumentation, published in its first version in 1843, where he praises Böhm's efforts in solving them:

This instrument, which for a long time remained imperfect according to so many reports, is today, thanks to the skill of certain makers, and to the system of fabrication pursued by Böhm (...) [is] as complete, as accurate, and of as equal a sonorousness, as he could have desired (Berlioz, 1882, p. 227).¹⁰¹

Advances in instrument design, composition and professional musical education all reinforced the position given to the flute in French musical culture at the end of the nineteenth century.¹⁰² The term *son naturel* is used in conjunction with *bel canto* (McCutchan, 1994, p. 107), a sound ideal from the early nineteenth-century still very much valued at the end of the century. In *fin-de-siècle* France the term described a light and elegant style of singing, as distinct from the German influenced, heavier vocal ideal. Rossini, one of the original exponents of the *bel canto* style, identifies the style's cornerstone as a naturally beautiful voice, with even and homogenous sound across the registers (Ljungar-Chapelon, 2008, p. 113), an ideal which was transported to the stylistics of *son naturel*. The influence of *son naturel* was particularly strengthened by Taffanel's students, who continued and formalized his teaching. After Taffanel's death, Phillippe Gaubert (1879–1941) completed his flute method (Taffanel & Gaubert, 1923), which was published as a complete educational system over four volumes, the first of its kind to include sections devoted to style and orchestra excerpts.

The connection between vocal ideals and instrumental performance in French orchestral playing is stressed already by Richard Wagner in his description of a 1839 rehearsal of Beethoven's ninth symphony:

100 'But all my efforts to create equality in tone and purity of intonation were unsuccessful, as long as the span of the fingers remained authoritative for the drilling of the tone holes.' My translation.

101 'Cet instrument, qui pendant fort long-temps resta si imparfait sons une fuite de rapports, est actuellement, grâce à l'habileté de quelques facteurs et au procédé de fabrication mis en usage par Boëhm d'après la découverte de Gordon, aussi complet, aussi juste et d'une sonorité aussi égale qu'on puisse le des irer.' (Berlioz, 1844, p. 152)

102 As symphonic music became increasingly chromatic during the early romantic era, the reputation of the flute as an orchestral 'problem instrument' became widespread. The development of solid intonation and timbral equality through the innovations of Böhm without doubt propelled the role of the flute as an orchestral instrument in French romantic music, as players and makers there quickly implemented his principles.

Der französische Musiker ist von der italienischen Schule, welcher er zunächst wesentlich angehört, insoweit vortrefflich beeinflusst, als die Musik für ihn nur durch den Gesang faßlich ist: ein Instrument gut spielen, heißt für ihn, auf demselben gut singen können. Und (wie ich dieses gleich voranstellte) jenes herrliche Orchester sang eben diese Symphonie. Um sie richtig »singen« zu können, mußte aber auch überall das rechte Zeitmaaß gefunden worden sein: und das war das Zweite, was sich mir bei dieser Gelegenheit einprägte. Der alte Habeneck hatte hierfür gewiß keine ästhetische Inspiration, er war ohne alle »Genialität«: aber er fand das richtige Tempo, indem er durch anhaltenden Fleiß sein Orchester darauf hinleitete, das Melos der Symphonie zu erfassen.¹⁰³ (Wagner, 1914, p. 19)

Grasping *das Melos*, the singable element of the symphony, is put forward as a key element in Habeneck's approach to conducting and playing with the Orchestre de la Société des Concerts du Conservatoire. This approach resounds in the ethos of the French flute school. While Taffanel's flute method was modelled after the technical system of the influential *L'Art du Violon* published in 1834 by Pierre Baillot (1777–1842), Marcel Moysé's publications such as *De la Sonorité* (Moysé, 1934) and *Tone Development through Interpretation* (Moysé, 1962) focused solely on timbral development. Arias and vocal ideals were here used as studies, firmly linking the sound of the French operatic stages to the orchestral flute playing. The sum of these influences outlines the impact of the sonic discourse of the French flute school, where notions of the natural, the unrestrained human voice and national excellence converge.

7.4 Established vs Novel Instrumental Practice

Against the ideal of *son naturel*, with its roots in the French perception of *bel canto*, the key click, as well as later novel instrumental techniques, must have represented a synthetic rather than an organic proposition. The controlled, elaborate training of flutists and the dynastic aspect of teacher–student relationships contributed to the construction of an ideology around sound quality. New techniques like the key click thus represented a challenge to these ideals,

103 The French musician is excellently influenced by the Italian school, to which he belongs in the first place, insofar as the music is comprehensible to him only through song: For him to play well means to sing it well. And (as I put it before you) that splendid orchestra sang this symphony. In order to be able to 'sing' them properly, however, the right measure of time had to have been found everywhere: and that was the second thing that impressed me on this occasion. The old Habeneck certainly had no abstract-aesthetic inspiration for this; he was without any 'genius'; but he found the right tempo, by persuading his orchestra to grasp the melos of the symphony. My translation.

and ‘the natural order of things.’¹⁰⁴ The composite whole of the elements of the practice of flute playing – instrument makers, composers, treatises, performers, educators and audiences – all contributed to the construction of what we could call ‘established instrumental practice’.

Even if novel instrumental techniques were not developed in direct opposition or contrast to older practices, but thought of as an extension of what prevailed, the dualism of the established and the novel continued to play an important function in how this music and its performers were understood.

Claims of radicality and breaches with tradition are found in many descriptions of *Density 21.5* among its early performers:⁷

Density 21.5 introduced flutists to the music of pure sound. (Baron, 1962, p.44)

Density cries out, Density makes the instrument explode with a degree of intensity never before attained. Varèse does not write for the flute, he wrestles with it. Out of this fierce struggle emerge unsuspected sonorities; little by little the walls seem to tumble down leaving a hitherto undiscovered flute to flourish. (Artaud & Dale, 1994, p. 144–149)

Explaining modernism through tropes like ‘the shock of the new’ (Hughes, 1980) is an established approach. But while the extensive instrumental range, use of large intervallic leaps and extreme dynamics certainly must have been technically challenging compared to Debussy’s *Syrinx*,¹⁰⁵ the technical demands of *Density 21.5* are not without precedence. Already in 1953, Gardner Read identified more than 30 known occasions of D4 in the orchestral literature (Read, 1953, p. 44), starting with Mahler’s *Symphony No. 2*, first performed in 1895. Prokofiev also repeatedly utilized this range in his writing, first in his *Classical Symphony* of 1915, a habit later employed with emphasis in the *Flute Sonata* (Prokofiev, 1943).¹⁰⁶ The flute writing of French composer André Jolivet, a repertoire with which Varèse was well acquainted through their extensive correspondence (Varèse, Jolivet & Jolivet-Erlh, 2002), also exceeds the technical demands placed on the flutist by Varèse.¹⁰⁷

104 These ideals were dominant also in the 1950s and 60s, in line with Bruno Bartolozzi’s statement that ‘maximum timbric homogeneity throughout the range of instruments’ was the prime aim of both players and makers of his time (Bartolozzi, 1967, p. 3).

105 And other solo French pieces for flute following in its wake (by Ibert, Honneger, Faure, Bozza and many others.).

106 Its trademark sequence of three fast arpeggios peaking at D4 from the opening movement has become a known technical challenge in the flute repertoire.

107 The most striking example is the technical demands seen in Jolivet’s collection of solo-pieces called *Cinq Incantation*, written in 1936 and published in 1939.

As neither the pitch structure, instrumental range, technical difficulty nor general notational complexity of *Density 21.5* are particularly radical for its time,¹⁰⁸ the absence of traditional ornamental melodic embellishment becomes the most radical feature of the version of 1946. The filtering out of the arpeggiated runs and trills found in the 1936 version, tropes that were emblematic for so much of the romantic flute literature, must have given the piece a sense of relentlessness, a striking combination of insistence, power and simplicity.

The resistance from performance communities to the inclusion of novel instrumental techniques such as the key click form another important component in the connection made between the piece and notions of newness and radicality. The salient difference between the 1946-version of *Density 21.5* and much of the contemporary repertoire for flute is the most likely source of the hyperbole seen among performers and musicologists alike. Its role as a cornerstone in modern writing for flute grew consistently in the decades following 1958. While its justification as an example of revolutionary musical innovation in flute writing might be questioned, its role and significance as a symbol of *the new* is unquestionable. As such, *Density 21.5* is an undeniable container of a novel instrumental technique, but less a result of a novel instrumental practice.

108 Carol K. Baron shows how the symmetric tonal structure of *Density 21.5* can be seen as linked to an analysis of Debussy's *Syrinx* (Baron, 1982).

8 The key click as jazz influence

Tracing the development of novel instrumental techniques through published scores alone is problematic, as the lack of documentation around its introduction by Varèse and the 12 years of silence following the 1946 publication pose severe challenges for the writing of its history. Was Varèse's key click simply a conceptual invention? If so, where did he find the inspiration or motivation for this? How can one understand his paradoxical disinterest in the key click at the time of the first recordings? Was the community of flutists to blame for the delayed inclusion of the key click into musical practice? The lack of traces in the period between 1946 and 1958 seem almost conspicuous, as if it indicates an existence of the key click outside of the domain of printed sources. The following investigates alternative sources of influence on the development of the key click, particularly those found in popular musics.

8.1 The instrumental practice of the saxophone in America

In the search for a source or a model for Varèse's conception of the key click, the saxophone is an intriguing candidate. Adaptations, extensions and reconfigurations of saxophone technique were prominent in the US, particularly within early jazz and its related genres. The brevity of the history of the instrument itself, its relatively inexpensive price tag and the lack of an established performance tradition all contributed to this pliability. After finding a place in American army bands it became an important tool in the musical slapstick humour of vaudeville theatre (Slide, 1994, p. 380). The musical side of vaudeville required a wide range of sound effects or musical onomatopoeia, many of which were documented by saxophonist Henri Weber in his 1926 publication *Sax acrobatix* (Weber, 1926). This publication included exercises and detailed descriptions of 'the laugh, the bark, the klack, the caw, the moan, the meow, the cry, the yelp, the sneeze' and so forth, all sounds and techniques that entered a shared pool of sounds available to theatre and jazz musicians.¹⁰⁹ These imitative sounds had their primary function within a framework of musical humour, and their techniques were to small extent included into the established practice of traditional orchestral playing.

¹⁰⁹ Weber writes in his introduction that practice and patience are needed for mastering these techniques, and that 'when attempting to produce any of the tricks ... you must try to articulate the sound imitated, as nearly as it is possible to do so, into the instrument, just as you would imitate the "meow" of a cat, the "bark" of a dog, or the "caw" of a chicken, without an instrument.'

A gradual rise in the inclusion of novel instrumental techniques into concert music is nevertheless observable, both in jazz and classical music of the interwar years.¹¹⁰ An early example is the slap-tongue, where the tone is articulated by closing the reed with the tongue and quickly releasing it downwards, producing a click-like attack. Much used by Coleman Hawkins (Martin & Waters, 2014, p. 175), the technique has roots at least as early as in the Chicago-based King Oliver's Creole Jazz Band of the early 1920s, where Paul 'Stump' Evans is thought to be one of its first proponents (Rye, 2003). Although largely unused in traditional classical music performance, the sound was incorporated by composers such as William Walton, George Gershwin and Aaron Copland as a jazz-reference when writing for saxophone, bassoon and oboe in ensemble contexts.¹¹¹

In the decades before and after World War II, these instrumental techniques were primarily employed as an expressive extension or colouration of melodic elements. The use of novel instrumental techniques in jazz did, however, become more prominent in the early 1960s.¹¹² The growled and bent saxophone tones of Ornette Coleman's free jazz, using different breath pressures and false fingerings to apply non-tempered intonation to certain tones dependent of their context is an obvious example. This kind of instrumental techniques soon became integral to 'energy playing', 'energy-sound' or 'energy music', a style that 'tended towards high textural density, freely improvised structure, lengthy performances, avoidance of consonance or a steady pulse, timbral exploration via extended Instrumental techniques, and extreme volumes (both high and low)'. (Heller, 2017, p. 89). By the end of the decade, novel instrumental techniques would be integrated to the extent that entire improvisational practices would be based on such sounds, rather than on rhythmic, melodic or harmonic conventions.

110 The use of novel instrumental techniques is rare, but not unheard of within the classical tradition of this period. The first notated multiphonic in the flute literature is most likely Leonardo De Lorenzo's 'Sogno futuristico no.17' from Eighteen Caprices op. 34 (1923), a work that ends with two harmonics, notated as fingered multiphonics. While little scholarly work has been done on the history of multiphonics, anecdotal evidence suggests that a select few woodwind and brass virtuosos of the 1800s mastered multiphonic techniques, including the Viennese flutist Georg Bayr (1773–1833) (Fitzgibbon, 1914, p. 96; Lorenzo, 1951, p. 96; Artaud, 1995). The first well-documented use in the classical repertoire is found in Carl Maria von Weber's tour de force Concertino for Horn and Orchestra (1815), where a tonal cadence is realized through vocalizing a counterpart to the fingered melody.

111 Walton's *Facade Suite Nr. 2* (1922), Gershwin's *Rhapsody in Blue* (1924) and Copland's *Music for Radio* (1937) are some examples.

112 Apparently, John Coltrane learned about multiphonics from Thelonious Monk in 1957 (Solis, 2014, p. 36), only a year before its use in Berio's *Sequenza I*. Four years later he incorporated the technique in his own composition *Harmoniques* (1961), which would feature a chain of them in its 'head', or main theme.

8.2 Sonic mobility

How might this development have been of interest or relevance to Varèse? Could the practices of non-classical musics have informed or aided the introduction of the key click into modern composition? Are the percussive qualities of the saxophone slap-tongue and the musical onomatopoeia of Vaudeville a more plausible context for the key click than Varèse's two visits from orchestral flutists Freeman and Roi?

Points of contact between jazz and classical music are rarely stressed in musical histories, most probably because they are easily overlooked and difficult to prove. Carol Oja charts such connections with exceptional detail. (Oja, 1994; 2000). Following this example, a present-day account of the musical context in which Varèse operated must carefully revisit the role played by multi-cultural life in American society.

While racial segregation was heavily enforced throughout the period in question, some of these divisions were 'informally and ideologically ... in the process of breaking down' (Oja, 2002, p. 127). To what degree might musical elements, sounds, techniques or rhythms, have 'travelled' across the culturally divided areas of American society? I would argue that approaching the American avant-garde as a junction between historical, contemporary, American and European artistic practice, could prove particularly fruitful as one attempts to understand the extension of instrumental sound in modernist music.¹¹³ The mobility of sounds, influences, musicians and arenas in the inter-war years and the early post-war period must therefore be included in any sound discussion of avant-garde composition.

8.3 Exchanges of competency

One example of the value of this perspective is found in the background and competences of the players involved in Gunther Schuller's now somewhat discredited attempt at bridging influences from composed and improvised music (Lewis, 2007, p. 360). Bass clarinetist, saxophonist and flutist Eric Dolphy was one of those involved in what became known as *Third Stream*.¹¹⁴ While

113 As a resident of Greenwich Village and a regular at the New York bohemian hang-out of Romany Marie's café, Varèse would have encountered both jazz music and its performers long before it became mainstream culture in the 1970s. Several sources indicate connections to African-American musicians, from his student in the early 1920s William Grant Still (Price, Kernodle, & Maxile, 2011, p. 921; Sewell & Dwight, 2012, p. 289; Spencer, 1997, pp. 72–106), to encounters with Charlie Parker and Charles Mingus (Santoro, 2001, p. 128).

114 Schuller described *Third Stream* as an attempt towards 'the best possible equalised amalgamation of these two traditions, not leaning one way or the other, and the more it's really deeply fused, the better it is *Third Stream*' (Iverson, 2013).

perhaps most noted for the radical writing and performance style on sax and bass clarinet on the album *Out to Lunch* (1964), Dolphy's flute playing is particularly relevant for this context.¹¹⁵

The Eric Dolphy Collection held at the Library of Congress¹¹⁶ contains scores, sketches and manuscripts of Dolphy's own compositions, but also music by Babbitt, Ibert and Bach, confirming Schuller's description of Dolphy as a musician of a particularly wide scope of interest ranging from 'jazz to the classical avant-garde' (Iverson, 2013). His estate also includes a collection of the most-used flute methods of the French flute school, such as *Gammes et arpeges* by Marcel Moyse, *Grandes exercices pour flute* by Guiseppe Gariboldi (1833–1905) and the comprehensive *L'indispensable* by Leonardo de Lorenzo (Lorenzo, 1911). The latter is a vast collection of technical studies, that includes exercises in natural harmonics (pp. 266–267), an overblowing technique much in use in Dolphy's flute solo's. The formal, methodical approach of the French flute school could therefore be said to influence Dolphy's musicianship, although his musical practice was firmly based outside its repertoire.

This contact between traditions is mirrored in Dolphy's engagements with both improvised and composed music at the time.¹¹⁷ His collaborations in the early 1960s include Schuller's Orchestra U.S.A. and pianist-theorist George Russel, but also composers Stefan Wolpe and Hale Smith (Lange, 2014). According to Lange, Dolphy was also introduced to Edgard Varèse by Smith, for coaching his study of *Density 21.5*. While Lange's anecdote is difficult to confirm, it is known that Dolphy performed *Density 21.5* several times, at Schuller's request, from a score signed by Varèse.¹¹⁸ His knowledge and admiration of the flute-playing of Gazzelloni also reflect this double engagement.¹¹⁹

Dolphy's adaption and development of novel instrumental flute techniques is considerable in his solos known as *Inner Flight no.1* and *Inner Flight no.2*, but it is perhaps best heard in *You Don't Know What Love Is* from the *Last date* live album from 1964. Combinations of vocalizations, harmonic trills, harmonics, multiphonics, flutter-tonguing, extreme registers and articulations makes this his most fluent and expressive flute performance, in which the fullness of tone and continuity in projection, already known from his bass clarinet playing, is transferred to the flute.

115 Perhaps as notorious as he was famous, Dolphy was criticized, alongside John Coltrane, as a performer of 'non-jazz' or 'anti-jazz' by conservative jazz critics at the time (Brown, 2010, p. 12).

116 See rs5.loc.gov/service/music/eadxmlmusic/eadpdfmusic/2014/mu014006.pdf

117 See Simosko and Tepperman (1996, p. 69–70) for a description of Dolphy's engagements across jazz and art music.

118 The score is held in the Eric Dolphy Collection at the Library of Congress, Box Folder 1/21, <https://lccn.loc.gov/2014565637>

119 Dolphy titled one of his compositions on *Out to Lunch* (1964) after the Italian flutist.

8.4 Situating the key click

The key click's status as a technical anomaly in flute language of classical music represents a historiographical challenge. At first glance, the introduction of key clicks to classical flute players appears as the modulation of a traditionally percussive sound object into a melodic domain of an orchestral instrument. Its lack of realization in the early years of *Density 21.5* suggests a more complicated origin. While the sources discussed above do not make out a conclusive case establishing that Varèse modelled the key click after hearing jazz musicians play, the anecdotal evidence of the cultural climate of New York at the time, Varèse's sustained contact with black musicians and composers, combined with his expressed dissatisfaction with classical flute players, suggests the possibility and likelihood that the sounds and practices of jazz played a part in the conception of the key click.

A clear example to support claims of exchanges of both sound and competency is found in a series of workshops initiated by Varèse in 1957. Varèse's interest in jazz musicianship is described by bassist Bill Crow:

Composer Edgar Varèse had someone assemble a group of jazz musicians at Greenwich House one day to experiment with a new form of composition he had devised. There was one of each instrument: me on bass, Ed Shaughnessy on drums, Don Butterfield on tuba, Teddy Charles on vibes, Art Farmer on trumpet, Eddie Bert on trombone, Teo Macero on tenor sax and one or two others that I can't remember. Varèse explained that as the composer, his only control of the music would be choosing who was to play when, and for how long. He wanted us to improvise freely within the time parameters he would give us. He said he had chosen jazz musicians because he felt that classically trained musicians weren't 'free enough'. (Crow, 1993, p. 204)

According to Crow, Varèse instructed a set of different durations and combinations of players based on a graphic score that included duos, trios, then ensemble, specifying: 'I want you to play whatever you like, but be free. Let your imaginations run wild'. Crow emphasizes that Varèse was not convinced by their first attempts, claiming that they were too careful: 'Take more chances. Play wilder. Play high, low, loud, soft. Use the entire capability of your instrument.' Crow's account makes it clear that the composer and the musicians were approaching this session from radically different perspectives.

Brigid Cohen triangulates Bill Crow's account with those of Earle Brown and Teo Macero, who were both involved in the process of selecting players for sessions, due to their roles as

recording engineers and A&R representatives (Cohen, 2018, p. 167).¹²⁰ In her review, she analyses the cultural complexities around this meeting, arguing that the lack of scholarly attention to this encounter, and specifically its influence on the participating jazz musicians ‘speaks to a wider, racialized rift in the historiography of post-war American music’ (Cohen, 2018, p. 156).¹²¹ Here, Cohen draws on the work of George Lewis, referencing his observation of the development of a musical historiography that tends to narrate jazz history on a separate track from the downtown New York concert avant-garde, despite evidence of mutual awareness and interaction between the two.

Lewis extends this importance of mobility in several different contexts:

a future Americanist musicology might more profitably begin from a global perspective – not so much a comparative, border-drawing methodology, but an integrative one that implicitly recognizes the permanence of permeability, the transience of borders, and a *mestizaje* that draws its power from dialogue with an American trope of mobility. (Lewis, in Garrett et al., 2011)

His advocacy of integrative methodologies could be seen as an attempt to enrich the perspectives of music histories, which fail to explain what he calls ‘mobility of practice and method’ within the musical avant-garde:

To the extent that ‘world of jazz’ discourses cordon off musicians from interpenetration with other musical art worlds, they cannot account for either the breakdown of genre definitions or the mobility of practice and method that informs the present-day musical landscape. Moreover, accounts of the development of black musical forms most often draw upon the trope of the singular heroic figure, leaving out the dynamics of networks in articulating notions of cultural and aesthetic formation. (Lewis, 2008, p. X)

Situating Varèse’s workshop, and the history of the key click within a context of sonic mobility allows us to think of the origins of novel instrumental practice outside of the separation of ‘classical’ or ‘popular’ musics. Drawing attention to the radical nature of these exchanges of sounds and competencies is key to establishing a strong counter-perspective to linear and

120 Artist and Repertoire Representatives were responsible for finding promising new artists for record labels or music publishers.

121 Cohen indicate a total of 10 musicians from the New York jazz scene as participants: Art Farmer (trumpet), Teo Macero (tenor saxophone), Ed Shaughnessy (drums), Hal McKusick (clarinet/alto saxophone), Hall Overton (piano), Frank Rehak (trombone), Don Butterfield (tuba), Eddie Bert (trombone), Charles Mingus (bass) and Teddy Charles (vibraphone).

evolutionary explanations of the extension of musical sound. While the workshops of 'Varèse and the jazz-men' do not prove that the key click was a product of jazz music, they provide context for the likelihood of such a claim. Also, and perhaps more importantly so, they provide context for the understanding the growth in composer-performer collaboration in this period.

9 Hybridizing the role of the performer

‘Composers are again involved in performance’, wrote Lukas Foss in 1963, as if to signal that the sometimes performer-hostile discourse of the great composers of the early twentieth century now had come to an end.¹²² He continues:

More – they work with handpicked performers toward a common goal. Among the new composer–performer teams: Cage and Tudor, Boulez and the Südwestfunk, Berio and Cathy Berberian, Babbitt and Bethany Beardslee, Pousseur and a group of seven, my own Improvisation Chamber Ensemble. Each of the teams mentioned is involved in a search, what we might call a joint enterprise in new music. Characteristic here is the composer’s fascination with the possibility of new tasks for his new-found partner and confidant. The new tasks demand new ideas of coordination. In fact, the creation of a new vocabulary requires that the composer give constant attention to all performance problems in connection with his score. (Foss, 1963, p. 46).

American musical modernism was long described as being preoccupied only with formalization. Foss’s description of ‘build[ing] performance ... “into” composition’ (Foss, 1963, p. 45) counters this notion by articulating a desire to address human intervention in creation: a ‘joint enterprise’ in order to create a ‘new vocabulary’. The development of novel instrumental techniques such as the key click may be seen as one product of such consorted efforts.

Varying degrees of transferral of responsibility from composer to performer are also seen in the flute pieces of Cage, Berio, Evangelisti and Maderna of 1958. In the case of Cage, it was through allowing an indeterminate interpretation of a combination of space–time and graphic notation; for Berio it was through the use of space–time notation to secure flexibility in micro-phrasing; Evangelisti used a fragmented open-form structure that leaves the formal disposition of the piece to the performer; and Maderna made use of the open juxtaposition of recorded and performed sound. These different strategies afford different degrees of agency to the performer, no doubt reflecting different motivations for this partial deregulation of the traditional composer–performer hierarchy.

As we saw in the problems of introduction and execution of the key click, the flute pieces of 1958 clearly reflect the need for collaboration between composers and performers.¹²³ The

122 Schenker, Schönberg and Stravinsky are used to exemplify a scriptographic view of music, in what Nicholas Cook calls ‘Plato’s curse’ (Cook, 2013, p. 8)

123 It also heralds the advent of composer-performers such as Maggy Payne, and sound artists such as Christina Kubisch, both of whom started their creative development as flutists (Rodgers, 2010). Kubisch created a series of performances in the late 1970s, now released on record for the first time: *Italienisches Stücke 1974–1984* (Tochnit Aleph TA 158CD).

desire to extend sound and instrumental practice, the troublesome relationship between notation and realization, and the time needed to fully integrate new sonic resources into compositional practice are integral to the expansion of musical material seen within musical modernism. This chapter provides examples of change in the traditional composer–performer roles, which are described and analysed as a form of hybridization.

9.1 Gazzelloni's workshop

Gazzelloni's influence, through his teaching of flute players in Darmstadt, has already been noted (see Chapters 3–5). However, his interaction with young composers is equally relevant. In an interview with Gian Luca Petrucci, he describes the workshop environment at Darmstadt, expressing the urgent necessity of 'the new' felt at the time:

They discovered new possibilities, about me and a completely peculiar sound that was not based on a school. ... We crossed a river, as they say. We passed Schönberg, Berg, Stravinsky, we left all those schools behind and began to create something, to discuss every night what could be written, what we could do different, because a war had passed, it was necessary to redo a new world, because out came a new generation which we had to give something to build a new world with, in the field of music (Petrucci, 2018, p. 27).

In his continuation, Gazzelloni becomes more concrete about how these processes were conducted:

What I did with them: we were together, and I demonstrated techniques during the lesson. But the first pieces were born as improvisations. How did they write the music? They wrote almost nothing: some small comments, some notes on the space and then you began to improvise, paying attention only to the series, so that octaves did not come out, and these things that we know very well from the field of serial music. And this interpretation would commence with a beautiful sound, with rough sound, with a particular technique, with double notes, and I would say 'look, you can do this too' (Petrucci, 2018, p.27).

This candid description reveals an empirical method, a practice of trial and error, explanations and sharing of possibilities – an interaction between performer and composer before either sound or notation reached the level of 'a composition'.

This was the start of ‘Gazzelloni Musik’, because I gave something, some ideas for writing, which they changed. This was the important thing of that time: the interpreter who suggested to the composer, who gave him the possibility of being able to broaden a musical phrase with his suggestions, and then perhaps the phrase continued with an indication of ‘improvisation’ (Petrucci, 2018, p.27).

The ability to improvise, extemporize, develop on the fly, is repeatedly referenced in Gazzelloni’s account, making this a crucial part of a performer’s skill set:

The ‘improvisations’ could also be like those of Earle Brown, who was then with us, and who wrote only small or large dots, squares, where the notes could be detached, less detached, vibrated, along a long space, a long line and maybe with a ‘V’ above, to indicate that a vibrato began. ... The new guys who were coming, started to write because of [the availability of] an interpreter who could overcome the difficulties, who helped the young composers to develop some ideas. With us there was John Cage, sitting with the tam-tam, and I played together with him: there was so much concentration of ideas that we started off together with notes that appeared as the oscillations of the tam-tam. From this situation, periods of really high-level compositions were born. Then, after all this material was collected, the composers began to write on the staff.¹²⁴ (Petrucci, 2018, p. 27)

124 Original excerpt: Loro scoprirono delle possibilità nuove su di me e un suono completamente particolare che non era quello di una scuola. Un suono che avevo creato io stesso sul vibrato del violino, del violoncello, non sulla vecchia scuola francese. Io ammetto che sia stata una bella scuola, ma era la “vieuille manière” di suonare il flauto e per me non andava bene e non rappresentava il mio ideale. Noi saltammo il fosso, come si dice. Superammo Schönberg, Berg, Strawinsky, tutte quelle scuole noi le superammo e cominciammo a creare qualche cosa, a discutere ogni sera su che cosa si poteva scrivere, che cosa si poteva fare di nuovo, perché era passata una guerra, bisognava rifare un mondo nuovo, perché veniva fuori una generazione nuova alla quale noi dovevamo dare qualche cosa per un mondo nuovo nel campo della musica. Cosa facevo io con loro: stavamo insieme e mostravo la tecnica durante la lezione. Ma i primi pezzi nacquero come delle improvvisazioni. Come scrivevano la musica? Non si scriveva quasi niente: delle piccole note, degli appunti sugli spazi e quindi si incominciava a improvvisare, stando attenti solo alla serie, che non venissero fuori le ottave, e quelle cose che sappiamo benissimo nel campo della musica seriale. E comincia questa interpretazione con bel suono, con suono rude, con tecnica particolare, con doppie note, e io dicevo “guardate si può fare anche questo”. Ci fermavamo durante gli esperimenti che facevamo in pubblico e il pubblico erano i giovani compositori, tutti interessati al sistema di poter creare qualcosa di nuovo e quindi ecco che comincia un po’ la “Gazzelloni Musik”, perché io davo qualche cosa, qualche idea per scrivere, e allora loro cambiavano. Questa era la cosa importante di allora: l’interprete che suggeriva al compositore, che gli dava la possibilità di poter ampliare una frase con i suoi suggerimenti, e poi magari nella frase procedeva con l’indicazione “improvvisazione”. Le “improvvisazioni” potevano essere anche come quelle di Earle Brown, che era con noi allora e che scriveva soltanto dei puntini piccoli, o più grandi, quadratini, dove le note potevano essere staccate, meno staccate, vibrare, lungo uno spazio lungo, una lunga riga e magari con una “V” sopra per indicare. che cominciava un vibrato. ... I ragazzi nuovi che venivano, cominciavano a scrivere perché c’era anche questo interprete che poteva superare le difficoltà, che aiutava i ragazzi anche a stendere delle idee. Con noi c’era John Cage, che si metteva lì col tam-tam, e io suonavo insieme a lui: c’era talmente una concentrazione di idee che partivamo insieme con delle note che sembravano l’oscillazione del tam-tam. Da questo poi nascevano periodi di composizioni veramente di altissimo livello. Poi si raccoglieva tutto questo materiale, si cominciava a stendere sul pentagramma. (My translation).

According to this description, not only did composers become involved with performance, as reported by Foss, but performers also became involved with composition. Gazzelloni's account draws a picture of a substantial creative phase which is conducted before, and outside, the process of actually 'writing' music. The fixation of notation on staff paper, what is normally thought of as 'composition proper', commences only after the development and collection of instrumental material. The creative potential of this exchange of ideas, sounds and skills, and the reciprocal relation between performers and composers is relatively under-described in scholarship on modern music. This development nevertheless represents an important change in the requirement for the performers of musical modernism, as the skill set to participate in this kind of creative process was not yet commonplace among classically trained musicians.

The manuals and articles on novel instrumental techniques of the time are also sources for the expression of ideologies. Bruno Bartolozzi, the author of the first manual of contemporary wind techniques, commented on the role of collaboration within musical practice:

The evolution of instrumental music has always been brought about by reciprocal collaboration between composers and performers, so the statement that composers should avoid working in a vacuum is neither new nor unusual. It has always been an essential condition for every real evolution of instrumental music. That composers and performers have sometimes in the past been one and the same person does not alter the problem in the least. Indeed, it would be more to the point if we asked ourselves just how much certain limitations in the development of woodwind technique do not depend directly on the fact that no composer-performer has ever done for woodwind what Paganini, Liszt, and Busoni did for their own instruments. The fact remains that true instrumental conquests have never been the fruit of abstract conceptions, but of toilsome direct experience. (Bartolozzi, 1967 p. 60).

This work – the toilsome direct experience – is a part of compositional development that is ephemeral and undocumented by nature. As a personal exchange, its products are seldom shared with others and its informal nature makes it prone to misunderstandings or mythology. Attempts to map such work easily becomes indirect or based on assumptions.

One exemplary case is discussed in Chapter 4, where a comparison shows large overlap in flute techniques used by Cage, Berio, Evangelisti and Maderna in 1958. The shared sound material signals that the degree of influence provided by Gazzelloni's command of the new techniques, and the value given to his input by these composers was extensive. Another case is found in his influence on the Polish sonorists (See Chapter 5). The combination of Gazzelloni's access

to the creative environment of Darmstadt, his teaching and interaction with young composers, and his extensive touring as a soloist, provided an almost unique insight into this new sonic repertoire, which repeatedly was capitalized upon by interested composers.

9.2 Ensemble experimentation

While Foss described close collaborations and a transformation of composer/performer roles, the American avant-garde began to amalgamate the previously separate activities of creation and performance of music, as thoroughly documented by Lewis in his account of the history of the Association for the Advancement of Creative Musicians (AACM) (Lewis, 2007). In parallel, informed by, or as an answer to this development in American music, musician-led practices rooted in experimentation were developed across Europe. Concerted efforts were made at the intersection of improvised and experimental musics, exemplified by AMM in London (Piekut, 2014, p. 770), Globe Unity Orchestra in Berlin (Jenkins, 2004, p. 160; Hurley, 2011, p. 110), Gruppo di Improvvisazione Nuova Consonanza (Pustijanac, 2014 p. 65) and Musica Elettronica Viva (Beal, 2009, p. 99) in Rome, as well as the Instant Composer's Pool of Amsterdam (Schuling, 2014). While producing quite different results, these collectives shared the use of sounds and methods from both new music and jazz, while defining themselves at different points along the axes of such established genres.¹²⁵

In many cases, the workshop was less a stepping-stone or test ground for the creation of compositions per se, than simultaneously the tool and arena for the investigation of and experimentation with the sonic possibilities of instruments. Unlike their score-oriented counterparts, these musicians conducted their investigations in real time, in front of an audience.¹²⁶

Although the music of the improvisational and compositional avant-garde of the 1970s appears to situate itself on opposite sides of the aesthetic schism created by Cage (Bernstein & Hatch, 2001, pp. 175–178), a common ground is to be found in the shared investigation of the fringes of instrumental possibility. An example of the interconnectedness of these traditions, and perhaps also an instance of Lewis's so-called 'American trope of mobility' is the 1971 performance of *Actions for free-jazz orchestra* by Penderecki at Donaueschingen.¹²⁷

125 George Lewis analyses these developments using the key terms *afrological* and *eurollogical* perspectives on improvisation (Lewis, 1996) in order to describe how the European groups distanced their development of an abstract freely improvised music from the heritage of the African-American jazz tradition. This critique is not necessarily aimed at the music itself, but rather the discourse around it.

126 AACM might be an exception here, in its focus on a compositional as much as improvisational practice (Lewis, 2002, p.127).

127 Recorded on Phillips Records 6305 153, LP

As a European echo of *Third Stream*, the event connected Polish sonorism with the fluent improvisations and sound experiments of the free-jazz movement in both its American and European versions.¹²⁸

Conducted by the composer, a hand-picked group of American and European improvisors developed a piece from a focus on novel instrumental techniques using a combination of semi-notated instructions, scores and graphics, not unlike the way Varèse conducted his experiment in New York 13 years earlier (Storb, 2000, p. 20).

While this example is a composition for improvisers, and thus reproduces the traditional composer–performer hierarchy, a range of musicians also actively contributed across this apparent divide of musical modernism. Two central cases are found in the Italian ensembles Musica Elettronica Viva (MEV) and Gruppo di Improvvisazione Nuova Consonanza (GINC), which comprised a network of performers and composers active in Italy in the 1960s. Americans Richard Teitelbaum,¹²⁹ Alvin Curran (1938) and Fredric Rzewski created MEV in 1966 while studying music in Italy on Fulbright scholarships. Soon they connected with Franco Evangelisti and GINC, his group of ‘performing composers’. Other musicians related to this circle were the soprano Carol Plantamura, who performed Berio, Nono, Busotti and others while in Italy, saxophonist Ivan Vandor and trombonist and tuba player Giancarlo Schiaffini. The latter would go on to become a central member of the ensemble of soloists connected to Luigi Nono in the 1980s. Clarinetist William O. Smith, cellist Frances-Marie Uitti, and bassist Stefano Scodanibbio are other examples of performers engaged in both composed and improvised projects in this period. Schiaffini, Smith, Uitti and Scodanibbio would all collaborate with Nono at different times, drawing on their hybrid competency as performers and creators. To summarize, the period between 1960 and 1970 sees increasing use of novel instrumental techniques in compositions for flute, a growing formalization through the publication of manuals, and an increase in experimentation through workshop and ensemble practice.

128 The New Eternal Rhythm Orchestra consisted of Don Cherry trumpet, Loes MacGillycutty vocal, Mocqui Cherry tambura, Manfred Schoof, trumpet, cornet, Kenny Wheeler trumpet, cornet, Tomasz Stanko trumpet, cornet, Paul Rutherford trombone, Albert Mangelsdorff trombone, Gerd Dudek tenor sax, soprano sax, Peter Brötzmann tenor sax, baritone sax, Willem Breuker tenor sax, clarinet, Gunter Hampel blueet, bass clarinet, Fred Van Hove organ, piano, Terje Rypdal guitar, Buschi Niebergall bass, Peter Warren bass, Han Bennink drums and percussion. The piece was recorded and released on Recorded on PHILIPS RECORDS, 6305 153, LP. A recreation was recently realized by saxophonist, composer and ensemble leader Mats Gustavsson, presented at the festival Sacrum Profanum in Kraków, 2018. See <https://polifonia.blog.polityka.pl/2018/09/12/i-tworca-i-tworzywo>.

129 American composer on a Fulbright to Italy to study composition with Petrassi (in 1964) and Luigi Nono (in 1965). This is confirmed by the catalogue of the Luigi Nono Fondazione, where two Teitelbaum scores (*Intersections* and *String trio*) dated 1963 suggests an exchange, confirmed by correspondence from 1965 where Teitelbaum thanks for their meeting in Venice and asks for a recommendation letter for a renewal of his scholarship.

Chapters 8 and 9 disrupt the chronological clarity of the history of the key click begun in Chapters 2–6. This disruption is crucial for a comprehensive understanding of the development of the key click as materiality, as much as an aesthetic achievement. The movement described here is pendular: an influence, or a form of friction, moving back and forth between popular musics and modernism, between established and novel instrumental practices, between the inside and outside of the orchestral institutions and the music conservatories. Decades later, the ‘double competency’ of performers developed during the 1970s, the ability to both negotiate complex scores and perform using improvisational tactics, would become the norm rather than exception among new music performers, mirroring a growing need for a hybridization of the performer role both within workshop and concert situations. This is the present-day musical situation that Lewis describes as the combination of a ‘breakdown of genre definitions [and] (...) a mobility of practice and method’ (Lewis, 2007, p. X).

10 Listening through the click of a key

How is it that, until today, possibilities which have always existed, have been so long ignored? How is it that instrumental techniques have become fixed in a pattern which does not allow any result except those actually in conventional use? The complex issues behind these questions are such that straightforward, irrefutable answers cannot be given. (Bartolozzi, 1967, p. 2)

The story of forcefully closing the gap between the key and the tone hole of a flute, is one of the more obscure in musical scholarship. What can be learned from 'listening' to the key click? What can be read from its tables, notations and terminologies or heard from its recording?

First, the history of the key click offers a glimpse into the radical changes that modernism brought to the character, function and quality in the playing of traditional instruments. From Berlioz's appreciation of the flute's 'accent of desolation' imbued also with 'humility and resignation' (Berlioz, 1882, p. 117), to Ferneyhough's interest in the instrument and its performer as tools for investigating the 'problems and possibilities of the notation-realisation-complex' (Ferneyhough, 1990), alterations take place – not only in the codification of musical sound, but in fundamental aspects of the skill set needed to take part in musical development. The history of the introduction of the key click is therefore also the history of the beginning of novel instrumental practice.

While there is as yet no definitive answer to the question of who actually introduced the key click and formulated its description and notation, ample context has been provided here to suggest that the development of novel instrumental techniques took place across different musical arenas and genres.

More important than the question of the key click's origin and authorship is the insight its history provides into the gradual nature of the development of novel instrumental practices in general. The incremental tuning of motor skills and the honing of new-found sonic precision is central to the ethos of a novel instrumental practice, thus extending, breaking and contradicting the perceived limitations of instrumental expression.

The consequences of the reconfiguration of what Fleury refers to as 'the flute's proper business' (Fleury, 1922, p. 383) unfold over the history of the key click, and the contour drawn from Varèse to Ferneyhough illustrates the discovery, application, extension and integration of novel instrumental practice into musical modernism. Although the decades after World War II saw a growth in performer-influenced innovation in classical music, African American music, jazz and

European free improvised music developed more advanced skill sets based on improvisational and/or experimental strategies. The key click is but one element in this transformation, and it is best understood as a symptom of a gradual change. Closely interwoven with other novel instrumental techniques of the 1950s, the key click is one row in a matrix of cross-influences that work on the perception, application and development of modern instrumental practice.

The extent of the changes catalysed by these influences is expressed in the conflict between ideals of restraint, inherited from the French flute school, and the growing demand for novel sound production in the music of the twentieth century (Chapter 3.2). The resistance to this change, and perhaps also to modernity, is the third insight provided by the key click. The transformation of that which is beloved of the past lies at the heart of modernism, a process that is relevant for post-war music's sonic surface as well as instrumental practice. That novel instrumental techniques require a degree of reassembly of performer habitus was identified by Bartolozzi (1967; quoted above). His own publication might be integral to answering the question of how convention fixes tradition in a manner that prohibits the discovery of new instrumental possibilities.

The lack of formalization of experimental performance culture in both the education and publishing sectors contributed to reducing the impact of novel instrumental techniques. To a large degree, the highly organized and institutionalized established practice rendered the 'novel' as 'exceptional', and therefore made it possible to exclude, simply through the order in which instrumentalists were taught new skills. While Bartolozzi is right in assuming that the complexity of this issue defies irrefutable answers to his question, his problematization articulates the dialectical relationship between the novel and the established. By perceiving convention as the fixation of habitual patterns rather than historical necessity, he takes a critical stand that touches the roots of the concept of novel instrumental practice: possibilities 'which always have existed' surfaced through a change in practice, not in the instrument or in 'music itself'. Elements of the practice previously considered as non-musical were not only incorporated, but aestheticized, employing the fundamental actions of the instrumentalist such as breathing, fingering, singing or speaking in order to alter traditional tone production.

The fourth insight relates to the complexity of authorship in music, and more specifically to the way that the origin of new sound resources has been understood as an emblem of originality, translated into compositional and aesthetic value and relevance. While the authorship of the pieces themselves is not contested in any of the cases discussed in this chapter, the ambiguity of the origins of the key click and the role played by Gazzelloni in its development, dissemination and use, should be amply demonstrated. Judging by this case, performer contributions to the creative process of composition utilizing novel instrumental techniques has been under-reported.

The transformation of the key click also illustrates the difficulties of the notions of ownership of sounds and/or techniques, and aligns with a gradual questioning of the hierarchical structure of musical creation from the early 1960s. As ideas of a ‘joint enterprise in New Music’ gradually allowed for more direct collaboration between performers and composers (Foss, 1963), the development of workshop methods and didactical arenas such as the Darmstadt Ferienkurse grew in importance. Formalization subsequently opened up access to this body of idiomatic knowledge to a wider range of performers and composers. While published methods represented a substantial democratization (Chapter 3.3 and 3.5), it also brought homogenization of use and a loss of novelty, leading to the creation of cliché.

Viewed from a present-day perspective, the rise of new sound resources in the 1950s and 60s appears to have challenged the identity of authorship in a very subtle fashion, gently moving it from composer towards performer. Despite the strong personal identification between performer, instrument and sound in this period, exemplified by Gazzelloni, Tudor, or Holliger, the authorial stamp of composers was routinely re-established through different kinds of notation. The economy of this notation, the value of composerly *écriture*, becomes clear in light of the ‘mushrooming’ of novel instrumental techniques, to paraphrase Nono. In this perspective, Ferneyhough could be thought to re-establish compositional ‘dominance’ over novel instrumental practice, as he saturates it through a subversive notational tactic that produces new sonic results through motoric and cognitive overload, combination of effects and density of events.

Just as the history of the key click oversimplified if it is attributed to one single composer or a single composition, it should not be attributed to the excellence of one performer. Thus, the history of the key click is that of neither Varèse nor Gazzelloni alone, but of a field of agents, gradually turning the immanent parts of music-making into music itself.

The lack of thorough documentation of performer perspectives on this process has been consistent throughout this research.¹³⁰ The non-existence of a Gazzelloni-archive is perhaps the most blatant example of this disregard for what we could call performer knowledge. The partial silencing of performer contributions to creative processes that follows from this produces a distinct blind spot in the writing of music history. The entire complex – including the resistance, the utopian sonic ideas, the instrumental reconfiguration, the transportation, saturation and later integration – is needed in order to convey a rich account of this history. The plurality of ways to address and understand the key click is precisely what made, and makes, its aesthetic relevance and its place as a central component in the development of novel instrumental practice.

130 Critical scholarship on the work of Barrère, Le Roy, Dolphy, Gazzelloni and many others is severely limited.

PART II:

**VERBALIZING VALUES IN
THE PRACTICE OF
NEW MUSIC**

Part I outlined a transformation in the materiality of twentieth-century music, exemplified in the flute repertoire, and highlighted its connection to changes in the role and influence of performers. Part II follows a similar trajectory in the musical practice of one specialist performer, flutist Roberto Fabbriciani.

The following chapters form an interview-based performance study of his artistic practice as a soloist embedded within the field of ‘new music’ since the mid-1970s. The process behind these chapters include extensive and detailed interviews, followed by transcription, translation, processing and analysis.

The knowledge and understanding afforded by the dialogic process with Fabbriciani has resulted in a verbalization of new skill sets, aesthetics, roles and tasks within contemporary music performance, casting new light on the origin of the sonic material found in different compositions. The outcome is a detailed analysis of a coherent value system for performance in, and performers of, new music.

11 Collaborative verbalization

Roberto Fabbriciani is an internationally renowned flutist, improviser, composer and instrument inventor. He has been a performer of the music of a cross-section of musical modernists ranging from Berio, Boulez and Ferneyhough through Maderna, Nono and Sciarrino, and he continues to be active with his own and other peoples' music. As a soloist he has given recitals and performed with major orchestras and conductors around the world, recorded more than 80 albums, and taught at several conservatories. He is also the inventor of the hyperbass flute, for which he has composed and recorded several compositions.

It became clear early in the research process that Fabbriciani's experiences and information warranted an extensive process, beyond the scope of a single interview. After introductory work on the instrumental performance of music by Nono and Sciarrino, a process unfolded in which several strata of language were added, both oral and written. The material was thus created in several steps, through repeated contact. This process of verbalization, conducted over time with repeated use of informant feedback,¹³² was by necessity practice-based, grounded on the meeting between two musicians who largely shared an overlapping practical competence and knowledge.

The outcome of this undertaking, the interview-as-text, was published in the peer-reviewed online journal *Music and Practice* (Habbestad and Fabbriciani, 2019). Afterwards, this material was subject to a thematic analysis, as reported over the following chapters. This analytical work has focussed on descriptions of a specific kind of performer competency, contributing to the development of performance-sensitive knowledge (Conquergood, 1998 p. 26).¹³³

11.1 The status of the interview

In musical life, the interview has been an important source for contextualizing compositional aesthetics, as a meeting place between academic and artistic thought. But as a scholarly method, the interview has been more contested, as strong connections between interviewer and interviewee have frequently led to claims of hagiography, mythologizing or anecdotal biographical

132 Fabbriciani has been given access to and approved all transcriptions, translations and synthesis of statements resulting in the published interview.

133 Conquergood's critique of the scriptocentrism of academia leads to his imperative to address 'the whole realm of complex, finely nuanced meaning that is embodied, tacit, intoned, gestured, improvised, coexperienced, covert – and all the more deeply meaningful because of its refusal to be spelled out. Dominant epistemologies that link knowing with seeing are not attuned to meanings that are masked, camouflaged, indirect, embedded or hidden in context' (Conquergood, 2002, p. 146).

historizing (Heile, 2020, p.1; Pace, 2015, p. 100).¹³⁴ In the social sciences, on the contrary, the interview is seen as a prime source of information. Here, it plays an important role in highly contrasting research methods, ranging from the quantitative collection of data found in large-scale surveys to the qualitative personal inscription of experience found in auto-ethnography. Within music studies, ethnographic or anthropological approaches are typically interview-based. Born's seminal work on the cultural complexities of IRCAM is a much-used example (Born, 1995).

In this case, the interview is integral to both process and product. The information was obtained in a variety of situations that included formal and informal interviews, traditional instrumental lessons as well as discussions about original scores, photos and sketches. The interview-as-text, therefore, has its roots in question/answer exchanges and conversations conducted both in person and by email. This combination of communication and knowledge types – verbal/non-verbal, tacit/explicit – necessitated a critical assessment of how best to preserve and present the ideas that were generated. How could the meanings, positions and claims presented through these encounters be considered? And finally, how should my own role in the process be acknowledged? An active approach to interviewing was selected, drawing upon Holstein and Gubrium's conception of interviewing as a two-part, meaning-making practice, aimed at connecting personal experiences to cultural explanation and analysis (Gubrium & Holstein 1995; 1998; 2016; Denzin, 2001). The active interview is seen as a dialect of the qualitative research interview that draws on several other interview methods, while emphasizing 'the reflexive, dialogic, or performative' (Denzin, 2001 p.24).¹³⁵

11.2 Gathering information

The material was collected during a series of meetings between me and Roberto Fabbriani in the years 2015 and 2017. A total of seven sessions took place, across disparate arenas, occasions and media. While interview guides were used on two occasions,¹³⁶ the information treated in this thesis as 'the interview' should not be considered a single statement, but rather the distillation of a conglomerate of interview situations conducted over time (See Figure 10). Ideas and concepts, questions and answers have therefore crystallized through the different iterations of the interview process.

134 According to Heile, much research is conducted "on the basis of work that does little more than trace the stated intentions of the composer in question in their work" (Heile, 2020, p.1) <http://talks.cam.ac.uk/talk/index/58092>

135 Storytelling is here perceived as both actively constructive and locally constrained, fusing thinking from ethnography and sociology. Simultaneously, the active interview acknowledges the need for awareness towards '[h]ow interviews differ as occasions for knowledge production' (Denzin, 2001 p.7).

136 See Appendix 4.

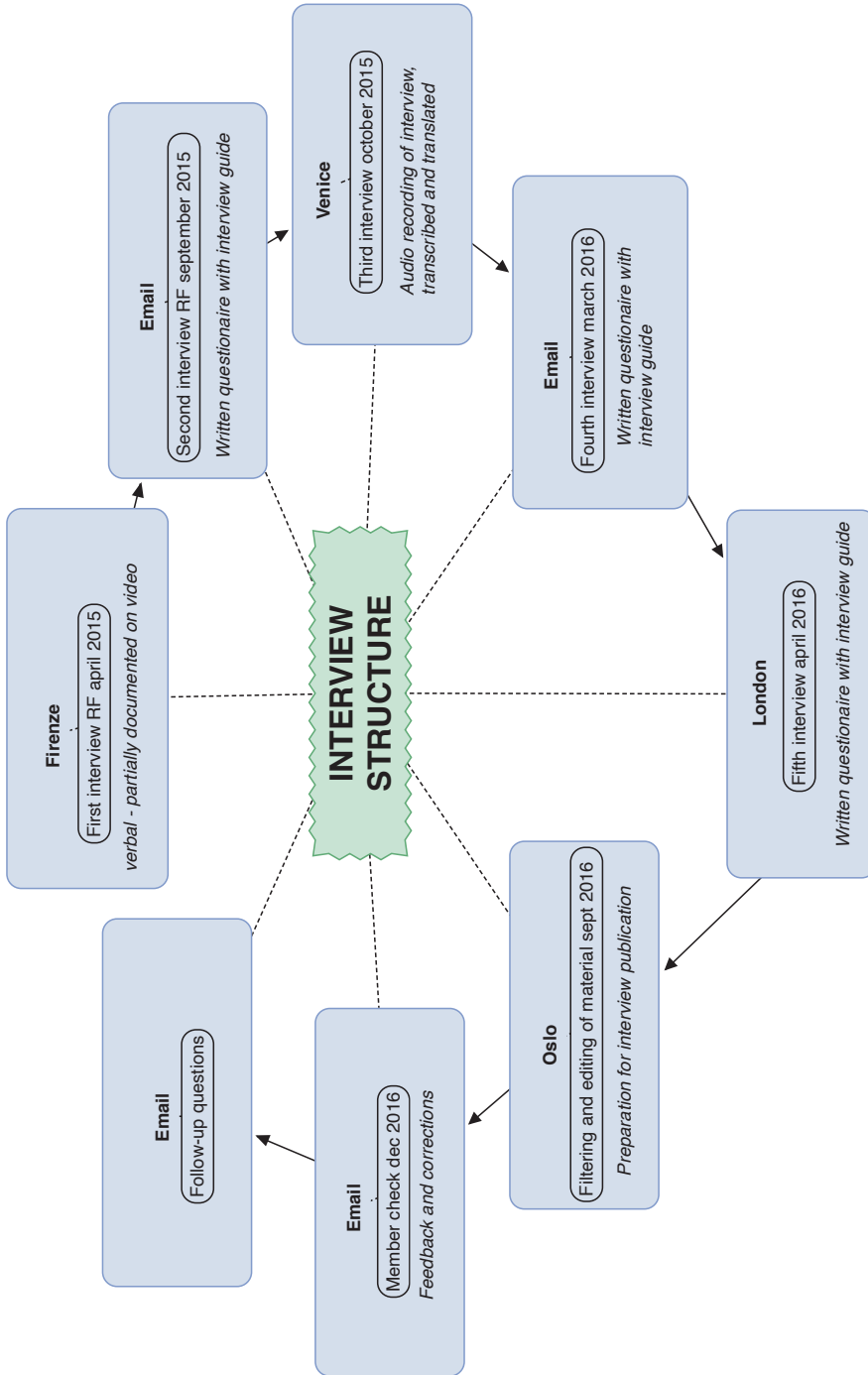


Figure 10: Interview structure

11.3 Securing accuracy

The language barrier between researcher and subject has necessitated different translation processes.¹³⁷ All oral communication has therefore been recorded, transcribed and translated professionally, in order to secure as high a level of reliability as possible. The inherent risk of loss of meaning or accuracy in this process has been countered by frequent use of informed consent or member check (Birt et al., 2016), thus securing the quality of the written accounts of our interactions on several points in the process. A signed document of approval for the collection and use of information is attached in Appendix 3 and the initial interview guide used is available in Appendix 4.¹³⁸

11.4 Situating researcher and research object

Joint production of narratives is a central aspect of active interviewing, where the interview is understood as a construct, as ‘coherent ensembles of personal experience constructed under the auspices of increasingly diverse storytelling occasions’ (Gubrium & Holstein, 1998, p. 181). Aided by a shared professional identity between interviewer and interviewee, this collaborative or co-constructive process places the researcher on a level ground with the subject. However, while interviewer/interviewee sameness¹³⁹ is considered an ideal in interview-based research practices such as oral history, it can also leave research prone to insider–outsider argumentation or critique (Merton, 1972, p. 11). Typically, outsiders claim that insider perspectives are easily corrupted, while insiders claim access to specific sources of knowledge, unobtainable for others. This schism underlines the importance of critically evaluating the situating of the researcher in practice-based research.

While a shared professional identity contributes to securing accuracy and nuance in understanding, the achievements of Fabbriciani create an artistic hierarchy that is enacted throughout our interaction. A master–apprentice relation is created in our lessons, where the productivity of the interaction relies on an acceptance of authority. Questioning, critique or disagreement can still find a place, but the underlying structure is hierarchical. How can I best assure that I am not biased, for example in the form of unknowingly acknowledging his authority?

137 Fabbriciani’s main language in the dialogue have been Italian, while Habbestad has used English.

138 In accordance with Fabbriciani, the recorded sound files and video have been preserved on local hard drives pending possible publication in the future.

139 Sameness and its opposite term difference are the two prime elements of identity, within anthropological thought. See (Meijl, 2010) for a discussion of its conceptual context.

The analysis has been conducted without the input or participation of the interviewee, gradually transforming our interactional relation from one of practice, into one of text, from action into object. This transformation across the research process, a form of distancing or objectification, is prone to both inside or outside criticism: the first accusing the analyst of being too removed and the second of being close to his research object.

As a flutist specializing in contemporary music, I consider myself an insider of this field. But I also have an outsider position, as a gatekeeper providing possible professional rewards for the interviewee through academic channels such as research journals, theses, conferences etc. The negotiation of these positions is present throughout my work with this thesis, but this balancing is perhaps particularly tangible in this chapter. Without making claims for epistemic privilege, it seems reasonable to assert that the dialogue with the informant was strengthened by access to and sharing of experience-based insights and practice-related knowledge. In light of this, one could say that I have had an insider position in the process of gathering the information. In order to balance out potential bias from this position, I have chosen a formalized and empirical approach to the analysis process, gradually building up a body of reduced narratives on distinctions of value, performer contributions to musical creation processes, novel instrumental practice and contradicting notions of newness and authenticity. Acknowledging the need for a reflexive approach, normative biographical or historical truth claims have been filtered out before the analysis. My own field notes from the meetings with Fabbriani are available in Appendix 6. These have been valuable as partial documenting of the interview situations. An analysis of the narrative performance of the interviewee has also been incorporated as a countermeasure for confirmation bias.

11.5 Analytical process

Moving from observation to generalization, the thematic analysis follows inductive strategies. Its central methodological gesture lies in the reduction of statements or formulations into codes, later to be organized and analysed by the researcher (Boyatzis, 1998, p. 45). Codes in this context refer to terms, concepts or descriptions assigned by the analyst in response to the material, preferably on a sentence level.¹⁴⁰ The coding is in itself an act of interpretation, a way of seeing something. The general trajectory of the analysis process encompasses coding, transformation of codes into themes, thematic organizing and finally thematic (re) interpretation or analysis.

¹⁴⁰ Saldana describes a code as ‘a word or a short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data (Saldana, 2009, p. 3).

The transformation of the concepts drawn from the interview into analytical categories is a considered effort, carefully repositioning the narrative surface provided by the informant with a more general discourse on music performance. As it is impossible to completely bracket out my authorial contribution to the creation of Fabbriani's narrative, a formal separation between a constructive and an analytic stage of the project has been chosen.

Although thematic analysis is a well-established and documented tool for narrative analysis (Patton, 1990; Riessman, 2008; Guest, MacQueen & Namey, 2011), the specifics of this case warranted some adaption. Groups of themes have been identified as 'thematic complexes' and 'thematic distinctions', through tracing narrative coherence and difference respectively. A third approach has been introduced by tracing elements of narrative performance. Together these three approaches project a multi-dimensional account of the material, where distinctions are played out as tokens of a value system, thematic complexes are formed into main thematic areas and dialogic performance is allowed to influence the interpretation of the material. The results of this process are presented in three steps: first, through analysing distinctions in meaning and values in the interview material (see Chapter 12); second, through a discussion of the three main thematic areas of the interview (see Chapter 13); and third, through investigating performativity in selected statement types (see Chapter 14). In Chapter 15, the findings of the three previous chapters are synthesized, using Fabbriani's concept 'la creation' as an icon for his core narrative.

12 Distinctions of meaning and value

Statements about what is good or bad, right or wrong, provide an introduction to the narratives of the interview material. Together, these distinctions create an outline of a value system. By examining statements connected to both positive and negative descriptors within these pairs, a reduced view of the narrative is created, forming a grid of preferences. At the centre of these views on contemporary music performance stands the dualism between the perception of what is old and new respectively. An operationalization of this dichotomy can be structured in a two-field model (Table 6).

Old	New
Control	Freedom
Safety	Risk
Academia	Utopia
Negative change	Positive change
Normality	Extraordinariness
Virtuosity of velocity	Virtuosity of sound

Table 6: Two-field presentation of thematic distinctions

This model was produced by tracing 15 different types of distinctions, each of which was expressed as a direct or indirect clarification of a term, position or value. A selection of 10 distinctions were grouped in binary pairs and ordered in thematic sequence, using versus coding (Saldana, 2009, p. 93).

The emphasis put on the growth in sonic resources as evolutionary and dynamic, recurs in different shapes and forms throughout the interview. Freedom, Risk and Utopia are the most important of these idealistic values, while Safety, Academia and Normality are qualities connected to Fabbriciani's notions of the old. The elements on the positive side of the model are interlinked. That the connotations of these concepts overlap suggests that the intrinsic quality of 'newness' is a normative belief held by the interviewee.

Few negative descriptions are used in general, and relatively few paragraphs are used to describe traditional performance practice. Nevertheless, the understanding of traditional flute performance as a partly fixated or static enterprise is implied indirectly.

The details underpinning this set of narrative distinctions are investigated in sequence over the following subsections (Chapter 12.1–12.6). All quoted material is identified in squared brackets, with reference to the appropriate code and number.¹⁴¹

12.1 Distinction 1: Freedom – Control

The distinction between Freedom and Control is a principal element in Fabbriani's narrative. 'Freedom', 'free' and related concepts such as 'liberty' are used in connection with positive terms such as 'inspiration', 'love' and 'expression'. Most frequently, notions of freedom are employed in connection to performer agency, understood as a performer's ability and opportunity to influence his or her musical context. Outside the immediacy of positive connotations connected to freedom, these narratives address the possibility of the subjective influence of performers on the music they perform. Terms such as 'interpretative freedom', 'imagination' and 'spontaneous improvisation' are operationalized versions of Fabbriani's conception of freedom.

[RF]: It promotes interpretative freedom, a crucial feature of the aesthetics that inspires *Sequenza I*.

[RF]: Gazzelloni loved the time–space writing as it allows more freedom and imagination

[RF]: And spontaneous improvisation is a very important way to express oneself, because all the knowledge you have inside can be expressed in a liberating way.

[RF]: It can set you free, and produce exceptional results.

Though there are multiple antonyms for freedom, the most relevant for this situation would be dependence or restriction. In this analysis however, the term 'control' has been used as the opposite binary of freedom, as it is native to Fabbriani's vocabulary. It is also applicable to both external factors or influences (such as scores, conventions, contracts) and internal factors (such as instrumental discipline, work ethic, aesthetic position). Control is used by Fabbriani to imply the opposite of freedom, but also as a more general descriptor for discipline or instrumental technical command.

141 [Control-Freedom, ref.no 1] refers to the first occurrence of text units coded with either of the themes control or freedom.

The distinction between control and freedom is more complex than one of binary inclusion or exclusion. While ‘control’ is not being an explicitly negative descriptor, its relative absence compared to that of ‘freedom’ (2 vs 9 references) is analytically significant. The frequency of ‘freedom’ in Fabbriciani’s narrative, and the weight and value attributed to it, appears to take place at the cost of ‘control’.¹⁴²

12.2 Distinction 2: Utopia – academia

A central distinction in Fabbriciani’s narrative is the attribution of positive value to ‘the utopian’ and negative value to ‘the academic’. These opposing concepts support Distinction 1, freedom-control.

[RF]: I often hear performances of Nono’s later works which do not take into account his idea of sound and experimentation, that are addressed by performers with traditional academic performance practices.

In this context, ‘academic’ does not mean ‘scientific’, or even ‘learned’, ‘thorough’ or ‘systematic’. An academic practice for Fabbriciani, is a practice without questioning, without the ambition or potential for newness. In a heated exchange, he equates the work of a professor with that of an accountant or an engineer, in opposition to an artist who has ‘utopian’ ideals and ambitions. This division between the ‘academic’ and ‘utopian’ seems to be rooted in Fabbriciani’s dialogue with Nono:

[RF]: He was a utopian, unconventional, very deep, but a visionary man.

[RF]: This is not only a question about the technique, but there must be a sense of total instability while playing, a sense of utopia.

[RF]: With Nono, we would have different, sometimes even impossible, idealistic solutions, related to live electronics; slowly, with time, they became possible.

The tradition and position of Italian music academies provides a crucial backdrop for understanding this distinction. A conservative repertoire policy in instrumental teaching and a canon-centred approach to teaching composition contributes to charging the term ‘academic’ with elements of inherent traditionalism or orthodoxy. Academia is henceforth considered a

¹⁴² Further research into the semantic nuances of the Italian versions of these concepts could be promising.

detour from the path to achieve newness. For Fabbriciani, this position puts a great responsibility on the performer:

[RF]: I think that the soloist, the creative performer should stand out from the crowd, out from an academic performance tradition.

[RF]: And here is the difference – performers can be very good, professional, fantastic – but this is beyond academia, over academia, this is the difference between performers.

These statements, and this difference, draws Fabbriciani's use of the concept towards describing 'academia' as a national social group to which he sees himself as external. It is worth noting that examples of similar usage of 'academic' is found also in interviews with Sciarrino and Nono, giving the impression that this schism is an established trope in Italian musical life.¹⁴³ References made by Fabbriciani to 'academia', 'academic', 'the academy' etc. is in the following understood and treated as expressions for the same position.

12.3 Distinction 3: Risk – Safety

The distinction between risk and safety is a vital element to Fabbriciani's narrative, and an important marker of value. 'Risks' are perceived as positive and necessary, while 'safety' is understood as an escape from facing the challenges inherent to such values.

[RF]: When I played the last piece for Nono, the *Baab-Aar*, in Berlin, I didn't have the score, no, I had nothing. This takes artistic courage, but also knowing how to manage risks, knowing how to take chances. This was a very important subject with Nono but also with other composers. Composers who love risks, adventure, and the chance to have a miracle – if it turns out well, it's great, – but it can also be a disaster.

Within Fabbriciani's value system, a performer can thus be judged on his or her potential risk-ability and risk-willingness.

[RF]: And this [risk-ability], this is a special talent that not all musicians have; not all musicians have this skill

143 Sciarrino used the term in an interview with the author conducted at the Paul Sacher Stiftung in 2016. Nono employed it at several occasions, one being the text 'Error as a Necessity' from 1983 (Nono, 2018, p. 367).

[RF]: But it's also more difficult because you need not only the professional talent for playing, but also the ability to be creative and imaginative, with all its risks.

Not playing safe is not merely a question of adventurous or machismo stand-off, but has an aesthetic justification in its inherent searching for the unknown. 'Safe' and 'sedate' are presented as antithetical to what this music is about, but also antithetical to a particular part of Fabbriani's skill set, knowledge and experience, which favour empirical discovery rather than calculated, pre-designed efforts.

[RF]: These parts are not safe, there are many risks that I'm not hearing.

[RF]: It should not be safe and sedate.

In Fabbriani's perspective, taking risks and potentially making errors can have a constructive influence on the moment of performance. This is not about legitimizing mistakes. Rather, this position articulates the primacy of immediacy, and a performer's ability to fine tune and influence the sounding moment, as it is taking place.

[RF]: The error becomes a positive fact, generating new, right ways.

Similar positions are known from within improvised music, expressed as an 'aesthetics of imperfection' (Hamilton, 2000, p. 169; 2007, p. 193). The immediacy of real-time decision-making concerning the music under performance is paramount to Fabbriani, both as a part of a skill set and a musical aesthetics.

12.4 Distinction 4: Virtuosity of Sound – Virtuosity of velocity

Defining what virtuosity means within a new sonic paradigm is key to the operationalization of Fabbriani's narrative. This axis combines notions of skill and aesthetics, and a clear preference is given to virtuosity of sound. The virtuosity of earlier music, traditionally connected to velocity, is in Fabbriani's view extended in certain parts of musical modernism:

[RF]: The virtuosity in the works of Berio is very different and is derived from the idea of the romantic virtuoso interpreter, an idea that was expanded during the twentieth century. Or the virtuosity of great technique, high velocity or difficulties with reading.

While these ideals certainly are upheld within parts of Fabbriani's practice, he repeatedly draws attention to the other branch of virtuosity, which he holds in higher esteem:

[RF]: Nono's virtuoso also works on just one sound that is constantly changing, on a single note. A virtuoso of quality and not quantity.

[RF]: and not by what we commonly call the complex: a myriad of notes that on one side highlights the acrobatics of the interpreter and on the other allow the composer to present (familiar) techniques

This distinction is clearly connected to the one observed in Distinction 3: Utopian–Academic. The utopian element is compatible with a virtuosity of sound. By extension, traditional, velocity-based virtuosity is connected to the academic. This logic is supported by Fabbriani as he states that

[RF]: (t)he opposite [of academic] is to work on the colour, the tone, the individual sound and not on the difficulty presented by the velocity of a piece.

12.5 Distinction 5: Extraordinariness – Normality

A last distinction is between 'extraordinariness' and 'normality', a distinction at the very heart of Fabbriani's narrative. These terms are used relatively sparingly, and while the former is frequently used as a nondescript superlative, it reveals a richer meaning when compared to the use of the latter:

[RF]: However, this makes me reflect because sometimes I went very far, a long way, and I got extraordinary results.

[RF]: If you take the great poetry and deep philosophy of the text and music away from the music, it becomes a normal act. It is no longer a special one.

Extraordinary acts are aesthetic achievements that rise above what one can expect; they achieve newness. A normal act fails to produce these qualities. Normality is connected to the academic, to safety and control, elements non-related to Fabbriani's core values.

[RF]: And the Amsterdam Prometeo, the CD Prometeo, unfortunately, is a normal Prometeo.

[RF]: Today it's needed as a novelty, but I think that there has always been an academic division between normal and extraordinary performers who are creators of new sounds.

12.6 Distinctions summarized

The primary value derived from constructing and comparing the above thematic distinctions lies in the clarification of difference produced within the narrative connected to Fabbriani's practice. How is the musicianship he describes thought as 'being other' to a more traditional form of musicianship? What are the core values that is proposed?

The following narrative reduction is offered:

A musicianship founded on a sense of freedom, at the expense of control, values risk-taking more highly than safety measures. Freedom and risk-taking are seen as prerequisites for utopian sonic ideals and ambitions. The transgression inherent in the valuing a sense of utopia excludes academic tendencies, understood as maintenance of a purely traditional practice. Change, understood as positive transformation of the practice of music making, takes place as a consequence of these prior concepts. The results produced by these priorities and values are considered extraordinary. They achieve newness through a virtuosity of sound.

By implication, this distinction produces a social group, an 'other', in the form of traditionalists, from which he distances himself:

A musicianship founded on the notion of control, at the expense of freedom, values academic qualities and safety higher than utopian ambitions and ideals. Such values lead to avoidance of risk and impose limitation and negative change. A focus on velocity rather than sonic qualities produces musical normality, artistic mediocrity and ultimately absence of actual musical newness.

It is important to note that this projection of otherness onto traditional musicianship is not argued explicitly, but rather implied indirectly. However, all the concepts used in this

part of the analysis are extracted from the text itself, meaning that they are actively used by Fabbriciani. Distinctions 1, 3, 4 and 5 are also used organically in the text, as opposites.¹⁴⁴ Seen together, these distinctions function as expressions of difference, a value set that can constitute a platform from which to understand the forthcoming thematic areas.

144 Distinction 2 – Utopia – Academia is the only concept pair that has been analytically constructed on the basis of its frequent use.

13 Tracing thematic coherence

The tracing of distinctions produced a value system in which different conceptions of ‘the old’ and ‘the new’ became concrete, and notions of ‘freedom’ and ‘control’ were used to describe values in musicianship. This chapter moves from distinction towards coherence, tracing the recurring topics in the interview process. The material developed during the interview process represents an opportunity to map central elements of an informed discourse on contemporary music performance.

What constitutes the main themes of the material, and how do they function in relation to each other? Thematic analysis (TA) offers tools to create, sort and organize thematic hierarchies. In order to achieve this, TA moves through different phases of inquiry: recognizing an important statement in a text, encoding it, organizing the codes and subsequently analysing its connections and context (Saldana, 2009, p.45). The text corpus of around 12,000 words has therefore undergone several levels of reduction. First, from spoken word to recorded sound, then from transcribed and edited sentences to codes, from codes to themes, from themes to thematic complexes and from thematic complexes to thematic areas.

Some 80 different codes were applied initially. The most frequently used were Collaboration, Active performer role, Knowledge, Experiment, Experiences, Sonic, Skill and Novel Instrumental Techniques. The distribution of these references is expressed in Figure 11.

From these codes, 49 themes were created, grouped in a set of 11 thematic complexes. Note that the thematic complexes are constructed not only from code frequency, but also from a careful consideration of related but less occurring themes. Moreover, infrequent themes considered to be of vital importance have been used to create thematic complexes. These complexes are not single narratives, but clusters of adjacent formulations which highlight certain thematic units.¹⁴⁵ Together, these grouped themes comprise a web through which to understand Fabbriani’s view of his own professional activities, contributions and experiences (see Table 7).¹⁴⁶

145 While thematic complexes are constructed primarily to show thematic coherence, the occurrence of seemingly contradictory themes (such as Friendship and Provocation) within the same complex, testify to the heterogenic nature of the matters discussed in the interviews.

146 Note that while the codes and themes were developed using almost exclusively Fabbriani’s own words and phrases, the wording of the thematic complexes in themselves represent an analytical step away from the source. These concepts are derived by the analyst as responses or summaries of each grouping.

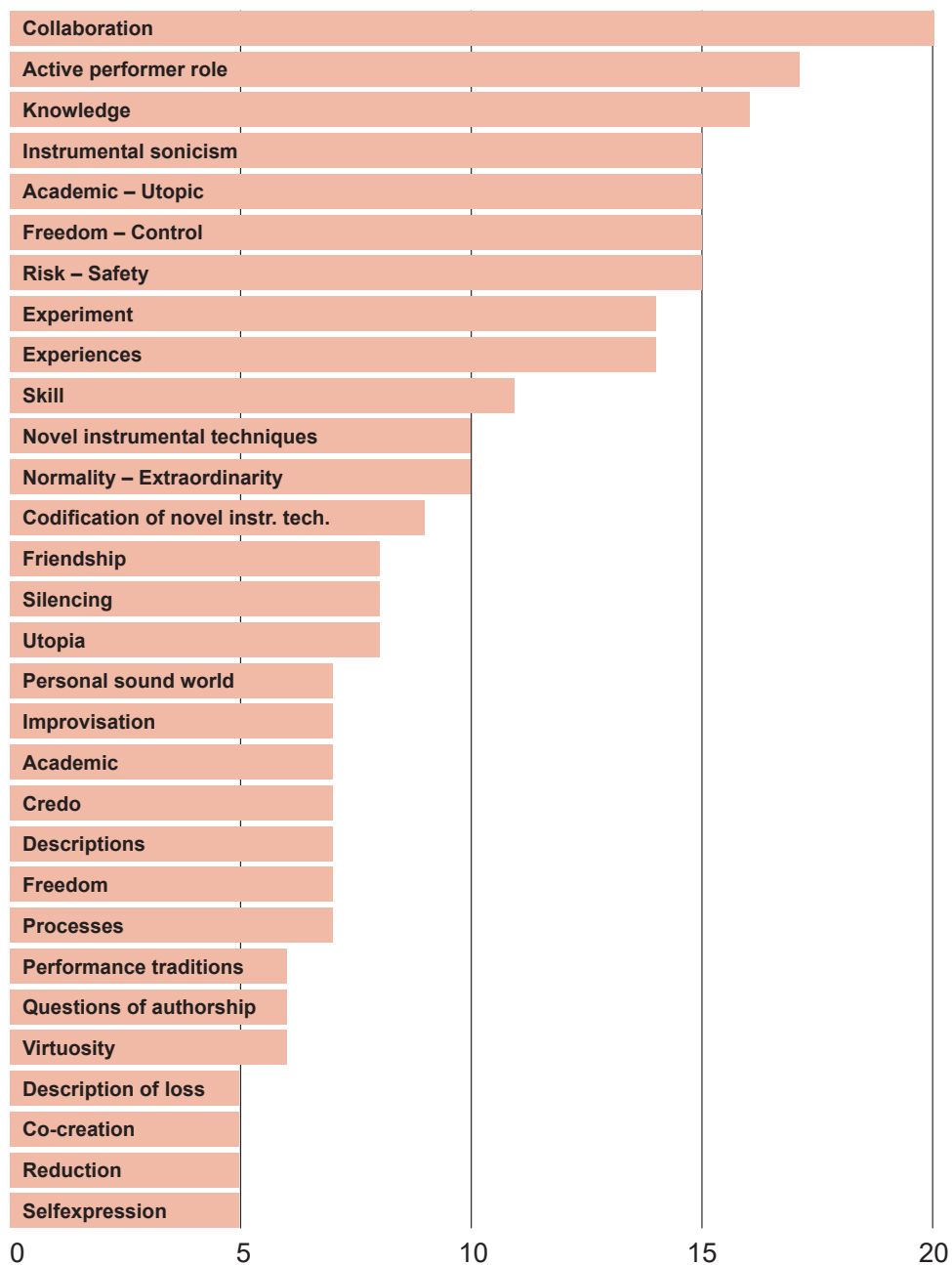


Figure 11: Codes arranged by number of references

Thematic complexes:	1. Historical narratives	2. Creation narratives	3. Epistemology of performance	4. Performer roles	5. Instrumental newness
Themes:	Descriptions	Co-creation	Culture	Active role	Agency
	Experiences	Collaboration	Instability of music	Passive role	Newness
	Processes	Common intentions	Knowledge	Performer vs Interpreter	Novel instrumental practice
		Experiment	Self expression		Novel instrumental technique
		Friendship	Skill		Personal sound-world
		Provocation	Vision		
		Trust			
		Workshop			

Thematic complexes:	6. Extension of musical sound	7. Degrees of reativity	8. Ethics of performance	9. Descriptions of loss	10. Conser- vation or conservatism	11. Composites of composition
Themes:	Aesthetics of imperfection	Ephemerality of improvisation	Dedication	Codification of instrumental techniques	Arguments for authenticity	Listening
	Extension of musical sound	Problems of publication	Humility	Descriptions of loss	Conservatism	Notation
	Improvisation	Questions of authorship	Open-mindedness	Homogenization	Education	Revision
	Sonic	Silencing		Impoverishment	Performance tradition	
		The continuity of history		Reduction		

Table 7: Grouping of themes into thematic complexes

13.1 Area A: Performer contributions to musical creation processes

‘Performer contributions to musical creation’ forms a rich thematic area in which collaboration is at the centre. In thematic complexes such as “Creation narratives’ and ‘Degrees of creativity’, collaboration is said to be an imperative: ‘the relationship between composer and performer becomes absolutely and necessarily complementary and interactive’.

13.1.1 From collaboration to creation

Fabbriciani presents his professional life as a gradually evolving process, starting from his first collaboration with Bartolozzi, continuing with Busotti and then leading up to his later ‘reinventing [of] the flute’ for, or through, his work with Nono and Sciarrino. His account could thus be understood as a linear history, a journey towards something increasingly modern and complex; perhaps also a journey towards a more advanced type of creative collaboration.

[RF]: You know, 10 years before I started working with Sciarrino, I collaborated with Bruno Bartolozzi, who wrote the well-known manual *New Sounds for Woodwinds* (Bartolozzi, 1967). For me this was the first experience with a composer.

[RF]: After Luigi Nono and I visited Studio di fonologia musicale di Radio Milano in 1978, we went to the Experimental studio of the SWF Heinrich-Strobel-Foundation in Freiburg-Bresgau at the end of 1979. Thus, the long collaboration with the Freiburg Studio began.

[RF]: My cooperation with Sciarrino started in the 1970s. I worked on all the pieces for solo flute belonging to the cycle *Fabbrica degli incantesimi*.

At the surface, technical aspects of the development of instrumental sounds are the most frequently detailed.

[RF]: Typically, the first thing would be that I’d improvise and play for him. For example, I’d hear a sound, e.g. with a special opening in the throat, then I’d notate an example and play again. Later this example would get developed in a score by Sciarrino. Again, it was a process. Following this, it was very easy for him to write this piece following this example. I wrote such-and-such fingering position will result in so-and-so pitch, for example.

What role does Fabbriciani see for himself in the history of these flute pieces? Specifically, in the case of working with Nono, the collaborative aspect of the composition process is further emphasized:

[RF]: Very often, Nono only had the pillars, and I had the windows, the balconies. What I mean is that the building is something we made together, and the score is only later completed with all the material. Because the compositional process is like ‘Roberto, I don’t like this, that one’s okay, no, play again’ and this is the compositional process.

These narratives advocate the primacy of direct collaboration between composer and performer. This creative intimacy is valued above the exchange that takes place between a score and its ‘executor’, which for Fabbriciani represents a more indirect relation. The implication of such a primacy is the understanding that composer and performer engage in the co-creation of musical compositions. Co-creation in this context means to propose sounds, notations or techniques that enables the composition process.

In Fabbriciani’s narratives, such co-creation takes place within ‘the workshop’, a framework with both historical and contemporary connotations:

[RF]: Learning, working together, knowledge. This is necessary, and composers today know what prestige is but have no concept of the workshop. That is the historical workshop, the Renaissance workshop, like Michelangelo’s. Today we have a similar problem. This is necessary for the future; workshops and direct collaboration, absolutely.

The prime activity within the workshop is referred to as *experimentation*. For Fabbriciani this activity is a fundamentally social undertaking, a shared seeking of knowledge and experience.

[RF]: It is always necessary to work together, to learn to understand; this is the same issue for all composers; for Nono, Berio, for all composers of direct experimental music.

[RF]: Our experimentations were long, sometimes lasted for many days, when we recorded, catalogued and took notes about the results of our experimentations, in order to use them organically in the writing process. The gestation of the score was long and represented a radical turning point for Nono.

The quality of this process is its potential for discovering something new, something unheard or something unplayed:

[RF]: I think improvisation in experimentation is something more adventurous and you can really discover new worlds by doing so.

Implicit within experimentation is the potential for failure. The aestheticization of error is a concept quite alien to the performance of classical music, which favours the skilled, and more recently also the 'perfected' performance.

[RF]: In the moment of losing the fear, you explore, and can also take wrong paths. But this is not bad art, because the wrong road led you to new knowledge that the right way would not have given you.

While experimentation could be understood as a highly directed effort, Fabbriani holds the possibility of failure as a potentially constructive outcome. This connection between experimentation, error and new knowledge holds potential for further investigation.

13.1.2 The workshop as a site for the production of newness

Newness is the overarching quality of the five narratives of distinction (see Chapter 12), and the optimal output of the workshop. Friendship, Trust and Provocation are narratives that support the concept of risk within this context, first, through establishing personal relationships, gradually through the development of trust, and ultimately through provocation. While friendship and provocation seemingly contradict each other, they are in fact points on the same line in Fabbriani's narrative: Friendship is a prerequisite for trust, a trust that, in the end, allows space for provocation, for reaching after the unheard (of) or unthinkable sound. The product of the workshop is newness, explicitly generated through the interaction of composer and performer.

There is no reference to any economy behind these exchanges, which appears to be driven by idealism. This complicates questions of authorship of its products. Statements on authorship are multi-faceted in Fabbriani's account. At one point he is genuinely altruistic, seemingly discarding the notion that sounds can belong to anyone:

[RF]: I really hope to give this sound to composers, and that everyone can use these new sounds in their music. They're really new avenues.

At another point he states that ‘Well, unfortunately the role of the performer-interpreter, often a co-author, is not recognized’. This ambiguity in the narrative could be the result of an attempt to avoid a difficult topic. However, his stance is very clear and non-confrontational:

[BH] In my experience, the relationship between my own and a composer’s contribution in workshop situations is often unclear and unregulated. And in some cases, my role, as co-creator or contributor becomes highly downplayed.

[RF] Yes, yes, this is a problem. It happens to me too. But for me this is not so important, for me it’s history continuing. It was the same problem with Sciarrino. I think what matters, what’s important is the time of the story. For example, ‘All’aure in una lontananza’, the first piece with Sciarrino ... in 1976 ... it revolutionized flute literature. At the time, I didn’t have a ‘Fabbriciani’s method’, I didn’t have anything to publish, but it wasn’t necessary because of the time of the piece, the history. And yes, I could or should have published a book sooner, but today I think it wasn’t necessary for history, because the piece is history itself.

Fabbriciani here implies a connection between authoring technical manuals and gaining musical influence or historical importance, perhaps looking to contemporaries like Robert Dick and Pierre-Yves Artaud. While acknowledging that he never produced such a publication, he seems content that his efforts are preserved in the pieces themselves: ‘the piece is history itself’. Whether his role in this piece is acknowledged or not is apparently secondary, according to this account.

13.1.3 Silencing of performer contributions

An important turning point in the discussions on authorship came about through revisiting formulations from Sciarrino’s web site. In the paragraph below Fabbriciani refuses to accept a simple reduction of the nature of collaboration to a question of personal ownership. In his perspective, the outcome is neither of the parties alone, but their shared product. This view is hardly reflected in Sciarrino’s own writing, which avoids Fabbriciani’s potential contribution. Still, Fabbriciani abstains from directly critiquing Sciarrino’s statement:

[BH] Do you agree with this description?

[RF] Yes, I do agree. Extraordinary compositions have been created with ‘some recent sounds provided by Fabbriciani’.

[BH] But this differs from what you told me earlier, that you ‘reinvented the flute’? Is there not a conflict of opinion here?

[RF] I have already expressed here what I mean. That Sciarrino was the first to use these new techniques for the flute is evident, as is the fact that I have provided, proposed and played them to him. There is no contradiction on these grounds.

Despite this denial of a conflict of opinion between Fabbriani and Sciarrino, a certain increase in the level of tension around the discussion of authorship is evident from the exchange.¹⁴⁷

[RF] In the text you showed me, Sciarrino wrote ‘some recent sounds’, but ‘some’ is not specified. Is ‘some’ 3 or 300? The term is relative. This ‘some’ turned out to be whole works for flute. Sciarrino doesn’t specify which ones, but ‘some’ include tongue rams, whistle tones, hissing sounds, harmonics ... everything that now is in the pieces.

While refusing to problematize the exchange of competency and knowledge taking place in the workshop in terms of authorship, Fabbriani clearly connects Sciarrino’s crediting him for the contribution of ‘some sounds’ to ‘whole works for flute.’ This connection is not made by Sciarrino.

Another example of silencing of performer contributions is referenced within Fabbriani’s narrative. This excerpt describes a conflict of interest, where forces outside of the privileged performer–composer relation are allowed to override the trust established between Nono and Fabbriani.

[RF] When Nono was ill, he called me: ‘Roberto, go to Berlin, play *Baab-Aar* again.’ I played it for the second time in Berlin and Nono was very happy ... he called me: ‘How was the performance?’ Fantastic, a huge success, I’m happy, I’m very happy ... then when Nono died, his family and Ricordi talked to me, and this piece was no longer there. The reason was that they claimed they had no score for this piece. Well, Ricordi had no score for many pieces. This piece was there, it existed but it was ‘impossible to play’, perhaps because of the issues with the Freiburg Studio, perhaps because Nono at the last minute chose not to use the electronic technique, but only instruments.

147 This and other elements of avoidance of narrative tension is analysed in chapter 14.4.

[RF] The following year, 1989, I performed the piece again, alone this time, on Nono's request. But as early as in 1992, only two years after Nono's death, the Committee for the Edition of Luigi Nono's Works decided to forbid any new executions. They claimed that 'a transcription derived from a registration would be an abuse, because it would not be reworked by Nono himself in the final draft. It follows therefore an impossibility to authorize new executions'

Set up against the complex of friendship–trust–provocation, the Committee's labelling of Fabbriani's performance as 'an abuse' (Habbestad & Fabbriani, 2019), is strictly incompatible with Fabbriani's narratives on collaboration.

The refusal to allow continued performances of a piece developed in collaboration with Nono and later sanctioned by him, is clearly unreasonable to Fabbriani, who questions whether the lack of a 'finalized' score is substantially different to other, still performable compositions.

[RF] But this was the same for other pieces, all pieces at the time had an incomplete score. Very often, Nono only had the pillars, and I had the windows, the balconies. What I mean is that the building is something we made together, and the score is only later completed with all the material. Because the compositional process is like ... 'Roberto, I don't like this, that one's okay, no, play again' and this is the compositional process. At the end the work is acceptable – how could I call it 'final'? But in this kind of music, the word 'final' is very difficult to conceive of because every time you perform, change is inevitable. The space changes, everything change.

The way that 'finality' is made a criterion for the license to perform the compositions comes across as illogical, according to these narratives. Within the musical context Fabbriani sees himself as a part of, these compositions never reach a 'final' state because of their inherent performative sensitivity. They never reach a state of fixed objecthood, and in his opinion, is embedded as much in the practice of the original performers as in the scored fragments and sketches of Nono.

Despite admitting to knowledge of problems connected with silencing, Fabbriani refuses to take on the role of victim. The phrase 'history continues' recurs in these narratives: 'But for me this is not so important, for me it's history continuing'. Although this statement could be understood as an attitude of *laissez faire*, it is more aptly interpreted with the implication that actions speak louder than words. The work has been done, let history treat that as it may, so to speak.

13.2 Area B: A Novel Instrumental Practice

The thematic complexes ‘Instrumental newness’, ‘Performer roles’ and ‘Performer philosophy’ form a multipartite field within the interview material, where aesthetics, pragmatics, notions of epistemology and ethics convene. This field may be read aesthetically, in terms of the value attributed to newness; pragmatically, through the changes in performer roles; or philosophically, through the outlining of a body of knowledge and understanding needed for this particular practice.

13.2.1 Instrumental newness

Within the thematic complex ‘Instrumental Newness’, a performer’s ability and competence ‘to conceive and to create new sounds’ is identified as the most important and necessary artistic capital.¹⁴⁸ Fundamental to this perspective lies the qualitative preference for the unheard or unplayed. Fabbriani writes that his collaborators were ‘open to new ways of listening and new qualities of sound, in their effort to change the musical language through different instrumental approaches’. This description turns the traditional top-down hierarchy of composer–performer around: the composers are identified as listeners to what Fabbriani calls a personal ‘sound world’:

[RF]: By a new technique, yet untested, you can discover unexplored sound worlds.

[RF]: I think improvisation in experimentation is something more adventurous and you can really discover new worlds by doing so.

[RF]: However, owning your sound own sound world is something quite different.

The difference between discovering and owning your sound world is significant here. While discovery is an important tactic in Fabbriani’s practice, ‘owning your sound world’ is a more complex concept that was attempted, clarified or operationalized at several points of the interview process. To ‘own’ in this context does not mean exclusive authorship or ownership, but refers to the combination of knowledge and skill needed to traverse a growing array of available novel instrumental techniques. In this perspective ‘owning your sound world’ means being in command of every possible transition, combination or reconfiguration of known instrumental techniques: to embody not only techniques, but the know-how to extend techniques into a full-blown practice. This concept clearly has a utopian aspect, but a successful

148 Artistic capital could here be understood as an embodied form of cultural capital (Bourdieu, 1986) that enables the beholder to realize artistic endeavors for himself and with others.

interpretation would emphasize the value attributed to personal investment, rather than the ambition of universal control of sonic resources. This personal investment reflects the level of agency implied in Fabbriani's narratives on performance.

[RF]: there are many sounds which require a performer's creative intervention,

[RF]: but it is important to have a personality and a creative aspect in approaching their sound, to engage in works as complex as those by Nono, where virtuosity is given from the emission of the same sound, colour or timbre

[RF]: they were the product of my fancy, imagination and poetry.

Creativity, intervention, personality, imagination, fancy – such concepts become the defining qualities of a performer in Fabbriani's narrative. Although elusive compared to the many concrete references to the theme 'Novel Instrumental Techniques', these qualities are thought to be of high importance, more so than the ability to master individual techniques required for any single composition. Performer agency is therefore a quality integral to 'Novel Instrumental Practice'. Note that Fabbriani understands this agency as a freedom recovered from historical practices:

[RF]: But I think that contemporary music is similar to baroque in certain ways. Certain techniques – in the flute, for example ... there is the art of articulation of the tongue; there were many ways of attacking the sound, not just one system, like today's tucutucutucu--but rather lerelerelere, deredere, buruburu or duruduru ... an infinite number of variations. And this is a freedom that today's music, contemporary music has recovered.

13.2.2 Performer roles

The value and notion of freedom attributed to instrumental newness is reflected in the many references to change in performer roles given by Fabbriani.

[RF]: Performers began to have a different and a more active role, not only as they tried to cater to more sophisticated sound expectations, but also by proposing solutions and innovations.

Three codes have been used to track this thematic complex (Performer roles): Active and passive roles, and the code Interpreter vs Performer. The large majority of codes reference active performer roles (16 of 17 references):

[RF]: I think new music needs performers to play an active role.

[RF]: They may not only be performers, but also co-creators, as they now have many more opportunities to create sounds than in the past.

[RF]: The performer's ability and imagination to conceive and to create new sounds becomes very important to develop and innovate the musical language.

[RF]: I think that because of the direct contact, certain performers can consider themselves as collaborators of the composer, that they take part in the creation of new music.

[RF]: Today, the role of the interpreter is more creative, as there are many sounds which require a performer's creative intervention, such as extended techniques.

The only reference to passive performer roles found in the analysis is made in the following clarification:

[RF]: The fact that some flutists are interested in playing contemporary music is quite another matter. This does not necessarily mean working in close contact with the composer and taking part in the creation of music.

This is in line with the previously articulated 'primacy of direct collaboration' (See analysis of Area A, Chapter 13.1), where Fabbriciani distinguishes between being interested or capable of performing modern compositions, and actively being involved in the creation of new music. This distinction is further explained in the theme Interpreter vs. Performer.

[RF]: And here is the difference – performers can be very good, professional, fantastic – but this is beyond academia, over academia, this is the difference between performers.

[RF]: For me, this is the vital difference: To be an Interpreter or a Performer. An interpreter is, as Cacciari says, one who accentuates the text, a *cantore del testo*, that's the crucial role of the interpreter.

[RF]: The others are performers, the orchestra are performers, but the soloists can't be performers, they have to be interpreters.

Fabbriciani's separation of performers and interpreters relies on a specific understanding of the 'interpreter' as one who not only mediates, but accentuates 'a text'. Being a singer-of-the-text (*cantore del testo*) thus implies an active transformation of that which is being performed. This distinction of performance is further explicated in several of the subsections of Chapter 12.

13.2.3 Performer philosophy

The thematic complex 'performer philosophy' is constructed on the basis of a set of five themes: knowledge, skill, instability of music, self-expression and ethics. It is important to underline that these narratives are not presented by Fabbriciani as an attempt at any coherent, philosophical or theoretical whole. Rather, they occur as fragments, perspectives and positions, which have presented themselves as fruitful candidates for combination within the analysis process. When seen together, they outline certain perspectives on performance that are specific to Fabbriciani's work. Within the context of this thesis it is relevant also to think of them as exemplary of novel instrumental practice.

Knowledge is among the top three themes traced in the analysis, and a central reference in many of Fabbriciani's narratives on musical practice. Common for most of these references is that knowledge is understood as a broad category. To illustrate, in many of Fabbriciani's accounts, 'thinking', 'understanding' and 'knowledge' are all strongly related to 'skill'.

[RF]: But even earlier – the late 1960s ... during this time the way of thinking changed, the way of thinking about music and playing it. I think it was a very important transition time.

[RF]: This experience was very interesting for me. I learned a lot, it is a good cultural baggage. And it's not just casual, I mean, it's solid knowledge. (RF on developing quarter tone scales for Bruno Bartolozzi)

[RF]: Essentially, in creative exploration it is worth also to make mistakes as in the error you can find new knowledge.

[RF]: Without knowledge it is impossible to explore the unknown, and therefore risk itself.

From these rather disparate uses of the term knowledge it becomes clear that no philosophical perspective on performance drawn from these sources would be a conceptual construction; we find instead an amalgamation of knowing, doing and thinking, where different elements are highlighted according to context.

[RF]: Learning, working together, knowledge. This is necessary, and composers today know what prestige is but have no concept of the workshop. That is the historical workshop, the Renaissance workshop, like Michelangelo's. Today we have a similar problem. This is necessary for the future; workshops and direct collaboration, absolutely.

'Knowledge' and 'skill' are connected in a reciprocal manner within these narratives. The need to develop 'a solid cultural background', 'look[ing] for a philological interpretation' or engaging in 'continuous exchange[s] of knowledge and ideas' all share elements of practice, creating a highly complex term.

'Skill' is similarly complex:

[RF]: But it's also more difficult because you need not only the professional talent for playing, but also the ability to be creative and imaginative, with all its risks.

[RF]: The performer's ability and imagination to conceive and to create new sounds becomes very important to develop and innovate the musical language.

Although Fabbriani separates 'professional talent', understood as traditional command over the instrument, from creative and imaginative abilities, this is an explanation, not a demarcation. This separation does not serve to discredit the one from the other, but to demonstrate the scope of skill implicit within this musical practice. Similar conceptions of skill return, as he describes the growing number of soloists connected with Nono in the 1980s:

[RF]: As the idea of a group was born, we thought about personalities, we were looking for the right people and the right type of performer for this situation. We needed people who were very close, psychologically and instrumentally, someone who could express this thinking.

In this context, being 'psychologically and instrumentally close' can be understood as a way to express similarities in skill sets. The embeddedness of knowledge and skill is further emphasized: a particular skill set was needed to 'express this thinking'. Within this skill set, risk-ability is addressed as a separate asset:

[RF]: The ability to risk something. [is] a special talent that not all musicians have; not all musicians have this skill.

The inclusion of risk-willingness into the skill set of contemporary music performers could also be understood in connection with the notion of self-expression. Although referenced relatively sparsely (3 times), this theme overlaps with knowledge and skill, as a subjective component in Fabbriani's narratives on his own practice:

[RF]: And spontaneous improvisation is a very important way to express oneself, because all the knowledge you have inside can be expressed in a liberating way.

[RF]: Whereas when you improvise for yourself, on your own, it's a much freer way to do it, it's liberating, *frei*, you do it because you need it, as a need.

[RF]: It's what I need to do for myself.

Another theme that modifies the traditional conception of musical skill and knowledge is that of the Instability of Music. At several points during the interview, not only performance but music itself is described as being in constant flux:

[RF]: New performers will have to apply themselves to this performance practice, thinking of music as constantly transforming due to the risks in performing it and its interaction with live electronics and space.

[RF]: This is not only a question about the technique, but there must be a sense of total instability while playing, a sense of utopia.

[RF]: This is like baroque music – it was normal to improvise, to always change.

[RF]: At the end the work is acceptable – how could I call it 'final'? But in this kind of music, the word 'final' is very difficult to conceive of because every time you perform, change is inevitable. The space changes, everything changes.

Descriptors such as 'constantly transforming', 'a sense of total instability' and 'continuous change' underline the radicality of the performer role within Fabbriani's narratives. This radicality is nevertheless balanced by certain ethical considerations, that seemingly intervene in the previous references to self-expression:

[RF]: Rather than prejudice you need an open mind, especially for new music

[RF]: It's important to say that I don't speak for personal interest here. What is important is Nono's music.

[RF]: And therefore it is more important that one piece is dedicated to a great composer, because the work – the work is even more important than us. Art is above us as individuals.

The ethical space implied in this material is not uniform. On one hand, risk is regarded as a virtue, while self-censorship exists as an expression of adherence to external authority ('this is verboten to me'). The final declaration quoted above articulates an overarching ethical dimension in this philosophy. The loyalty of the performer lies with 'Art', a clear ethical imperative that implies an authority external to both 'work', 'score' and 'composer'. This gesture resembles the work ethic of a specialist, a professional standard in the shape of an altruistic performative modernist ideal, where Art itself, and not its agents will be the arbiter.

13.3 Area C: Contradicting notions of newness and authenticity

The title of Area C indicates two opposite directions within Fabbriani's narratives. The positive description of the extension of musical sound through instrumental experimentation and improvisation runs through many sections of the interview. In parallel, the thematic complex 'Descriptions of loss' identifies how crucial elements of this practice fade away or crumble over time. The three thematic complexes in Area C, 'Extension of musical sound', 'Descriptions of loss' and 'Conservation', all testify to this dualism, in which extension, development and flux are advocated alongside arguments for a return to an 'authentic' practice.

13.3.1 Extending musical sound

The transformation of the sound of the flute is at the heart of this narrative:

[RF]: The flute, a monodic and cantabile instrument, has now become full of sonic resources, something that also has changed the point of view of composers

For Fabbriani, this transformation has a value in itself, as a development from something old and primitive towards something modern and complex. This echoes a well-rehearsed modernist trope equating historical development with quality. According to Fabbriani, this transformation is connected to the introduction of electronic technologies into the field of music:

[RF]: All electronic music has influenced the way of conceiving the sound of acoustic instruments (like in some of the symphonic music by Ligeti, i.e.).

[RF]: It has made us rethink acoustic instruments in terms of their sounds and dynamics. Also, electronic instruments for sound analysis have created new knowledge about listening, about sound awareness.

[RF]: For me personally, electronic music led to new ways of listening to sound timbres and dynamics.

This links the development of flute playing to a larger stream of influence in twentieth-century music history. The connection is explicated more thoroughly in his description of working with the Sonoscope, a visual sound analyser:

[RF]: As the name suggests, the Sonoscope makes us 'see' the sound. The emitted sound is captured by the microphone and showed on the screen, in real time. By reproducing the sound image, the Sonoscope shows the transformation of the timbres and dynamics, and the emission control. It is a kind of ear training through sight.

The analytic translation of sound into visual representations of frequencies and amplitudes has a more empirical counterpart in the employment of instrumental emulations of concrete sounds:

[RF]: I'd make him [Sciarrino] listen to acoustic sounds, to materialized effects. I remember that we heard an owl while we were writing *Hermes* we find it in the middle of the piece, and the hand of an alarm clock in *Fra i testi dedicati alle nubi*.

Between these two positions, analytic precision and empiric emulation, a vast terrain of instrumental opportunities is explored through improvisation and experimentation. At several points, an aesthetic of imperfection is implied:

[RF]: In the moment of losing the fear, you explore, and can also take wrong paths. But this is not bad art, because the wrong road led you to new knowledge that the right way would not have given you. Essentially, in creative exploration it is worth also to make mistakes as in the error you can find new knowledge. The error becomes a positive fact, generating new, right ways.

[RF]: With Nono there wasn't so much rehearsing, like many others do. Because a lot of rehearsals would take away the pathos of music.

This aestheticization of imperfection, and the use of strategies to keep music from becoming over-rehearsed, should be understood as ways to generate and preserve performative tension. The apparent paradox of searching for utopian qualities in imperfection rather than in perfection is striking at first, but by forcing the performer to be responsive to sudden changes, of both sounds and plans, a musicianship of immediacy is created. Improvisation is a central component in this musicianship.

[RF]: [T]he levels of improvisation are endless, there are infinite possibilities. That is, you improvise in a traditional way, you can improvise historically, you can improvise in jazz and then you can improvise while experimenting. I think improvisation in experimentation is something more adventurous and you can really discover new worlds by doing so.

Improvisation is here used instrumentally, as a tactic to arrive at 'new worlds' of sound, rather than an end goal in itself. Still, improvisation, seen as a musical tool, reoccurs as an element of both creation and performance:

[RF]: I would improvise for Nono without electronic music, then I'd repeat with it.

[RF]: The tape is a kind of 'guided' improvisation where the flutist interacts with the magnetic tape; sometimes following it and sometimes going against it, reinventing him- or herself each time.

[RF]: This is like baroque music – it was normal to improvise, to always change.

Fabbriciani reports problems with codification of such informal practice:

[RF]: Before Sciarrino, with Bussotti, we experimented – very interesting and important experimentations – but we didn't write them down.

[RF]: In those years, with Sylvano Bussotti, I experimented a lot, but we didn't detail these on paper so much.

[RF]: But I still have handwritten notes from our sessions. (RF on collaboration with Bartolozzi)

[RF]: But I've never thought to record or to write it down. (RF on improvising for himself)

The informality of these sessions represents a risk for the performer. Survival of practice over time is dependent on continuous use and/or very strong documentation. The function of the score is therefore not only to codify or preserve certain musical cues or ideas, but also to act as a symbolic document that validates a collaboration. A published score is one of few channels that clearly identifies composer–performer relationships. This is reflected in the importance given to dedications in contemporary music, as a formalization of friendship expressed in public.

13.3.2 Descriptions of loss

Contrary to the optimistic views of the future connected to the concepts of utopia, instrumental newness and the extension of musical sound, pessimistic statements and positions are found in discussions of how history – or more precisely how musicianship today – has treated the developments made in the early 1980s. Fabbriani describes how elements, nuances and knowledge of a practice fades over time:

[RF]: But yes, in general, I think you lose something –not always, but in general. Because history becomes myth and then crumbles, it fades. In real time, a minute is 60 seconds, but one minute after 20 years is something different. Everything is reduced as time goes by, it is resized, there's a reduction of everything. There could certainly be future performance where something gets better, but this we don't know. But one thing is certain: something gets lost.

At several instances in the interview material, Fabbriani implies that the conditions under which the compositions of Nono were developed no longer influence current performance.

[RF]: Why? Because after Nono's death in 1990, the score changed, as it wasn't complete. Now it's not complete either, many things are still missing ... both performance-wise and sound-wise.

This loss is connected to the shared experience between the soloists and the composer, and specifically the trust and artistic freedom that this relationship provided. While a certain melancholy connected to the loss of a professional and personal relationship would be most natural, Fabbriani's description of loss is more substantial. As he states that 'the desire to limit and polish at any cost in order to create something is very unimaginative', he critiques not the skill of the performers themselves, but the lack of understanding and agency in the moment of performance. Understanding, or knowledge, is for Fabbriani reflected not only in skill, but also in the will and ability of a performer to influence his/her own musical context.

[RF]: It will take a long time for the 'Nonoesque' performance practice to become truly known and applied.

This tendency is described as an impoverishment, not a personal loss of opportunity, but a reduction of quality in Nono's music. This reduction, according to Fabbriani, is connected with an 'academic' approach, a rule- and convention-bound style of performance (See Chapter 12.2).

[RF]: The risk of this music becoming academic, like we discussed, is prominent. In Italian we say *impoverimento*, impoverishment. I think *Prometeo* is impoverished, precisely because the creative part is missing [in the performance]. Creativity can't be constrained.

[RF]: It's terrible for Nono, because ... it's like cutting down this table here, taking away a natural evolution of his music.

This tendency of reduction that Fabbriani sees in performances of Nono's music since his death in 1990 is of a different category than the reduction he describes in his report on development processes with Nono. Changes in performance culture are experienced as being especially problematic for the rendering of the solo parts.

[RF]: And the problem is especially clear for the soloists. That the orchestra plays very close to the way it's written is a tradition, just as the for the specialist choir. But for the soloists – flute, clarinet, tuba, and the euphonium – it is very important that it's done in a certain way. It should not be safe and sedate. Today it's very sparse, bare, and that's not the way it's supposed to be.

13.3.3 Conserving radicality

Against the backdrop of a described loss of the ‘Nonesque’ performance culture, Fabbriani advocates for a countermovement, a re-establishment of what he sees as the tradition proper. This paradoxical position is at once conservative and radical, as if seeking a tradition of non-traditional practice, a conservation, not necessarily of a specific sound or style, but of radicality. First Fabbriani argues for the necessity of a performance tradition, given the openness and partial incompleteness of some of the Nono scores:

[RF]: Some of Nono’s scores are not exhaustive, and so a performance tradition is necessary

[RF]: I think it is necessary to create a performing tradition for these works.

While this could be understood as an argument for authenticity, a return to an original style guided by exemplary resources such as reference recordings, this ‘conservative’ move is less focused on obtaining similarity in result, and more on maintaining the inherent agency in performance.

[RF]: I think this is difficult, if not impossible, for performers who have not experienced a collaboration with the composer or with the original performers and technicians.

[RF]: New performers will have to apply themselves to this performance practice, thinking of music as constantly transforming due to the risks in performing it and its interaction with live electronics and space.

The distance between what is considered ‘traditional performance’ and that needed for adequate renderings of Nono’s music is emphasized:

[RF]: I often hear performances of Nono’s later works which do not take into account his idea of sound and experimentation, that are addressed by performers with traditional academic performance practices. This will affect not only the idea but also the characteristics of sound found in the pieces composed by Gigi.

The proposed tactic to meet this challenge is integral to the way that these compositions were developed:

[RF]: It's important to work together to explain, as a whole thought tradition, a tradition of execution, is partly missing, and this requires a lot of time to restore.

This proposition should be seen in relation to an implicit critique of the music education system.

[RF]: Maybe this way of thinking should find its way into the curriculum.

[RF]: There are some departments where contemporary music is studied, but rarely specifically instrumental and for flute.

As noted in Chapter 12.2, this critique should be understood primarily within the context of Italian music academies, who arguably maintain a conservative approach to teaching methods and curriculum. In Fabbriani's view, the traditionalism of Italian music academies is a challenge for the training of young musicians and flutists engaged in contemporary music. This institutional scepticism or critique could also be understood in relation to the Fabbriani's conceptions of both Risk and Extraordinariness (see Chapters 12.3 and 12.5).

13.4 Reviewing coherence

The three thematic areas are constructed upon a hierarchy of thematic complexes and themes. These are presented as tables in this section, alongside the reduced narrative of each area. The eight themes of Area A – Performer contributions to musical creation processes – is grouped in two the thematic complexes: Creation narratives and Degrees of creativity. Each of these complexes contribute to the following reduced narrative:

Performer contributions to musical creation enables the formalization of new sounds and techniques in composition. These contributions are at their best co-creative acts that take place within the framework of the workshop. The experimentation conducted in the workshop is essentially social, its collaboration builds on friendship and trust. Authorship of its products is unregulated. This lack of formalization places the performer in a volatile situation should the composer die or the nature of their relationship change. Silencing of performer contribution to musical creation is known to occur.

This narrative firmly establishes a new role for the performer as a close partner in the development of new music. The thematic hierarchy underpinning this reduction is expressed in Table 8.

AREA A		Performer contributions to musical creation processes
Reduced narrative	Performer contributions to musical creation enable the formalization of new sounds and techniques in composition. These contributions are, at their best, co-creative acts that take place within the framework of the workshop. The experimentation conducted in the workshop is essentially social, its collaboration builds on friendship and trust.	The attribution of authorship to the products of the workshop is unregulated. This lack of formalization places the performer in a volatile situation, in the case of the composer's death or a change in the nature of their relationship. Silencing of the performer's contribution to musical creation is known to occur.
Thematic complexes	Creation narratives	Degrees of creativity
Themes	Collaboration	Authority
	Co-creation	Silencing
	Workshop	Continuity of history
	Experiment	
	Friendship - Trust - Provocation	

Table 8: Thematic hierarchy of Area A

Three thematic complexes form the pillars of Area B: 'Instrumental newness', 'Performer roles' and 'Performer philosophy'. These complexes are built up of thirteen different themes. The reduced narrative reads:

A novel instrumental practice is centred around an active performer role, where agency in the moment of performance and the ability to develop a personal sound world are considered crucial. Instrumental newness is therefore itself a quality criterion. A radical conception of music as being in a continuous state of flux requires a new performer philosophy to guide this practice. The centre of this philosophy is an amalgamation of concepts of knowledge and skill through different kinds of 'thinking', 'understanding' and 'doing'.

This narrative extends the notion of a new role for performers into more specific skills and knowledge types. Table 9 expresses the thematic hierarchy of Area B.

AREA B	A Novel Instrumental Practice		
Reduced narrative	A novel instrumental practice is centred around an active performer role, in which agency in the moment of performance and the ability to develop a personal sound-world is crucial. Instrumental newness is therefore a quality criterion in itself. A radical conception of music as being in a continuous state of flux requires a new performer philosophy to guide this practice. The centre of this philosophy is an amalgamation of concepts of knowledge and skill through different kinds of 'thinking', 'understanding' and 'doing'.		
Thematic complexes	Instrumental newness	Performer roles	Performer philosophy
Themes	Newness	Active performer role	Knowledge
	Personal sound-world	Passive performer role	Skill
	Agency	Performer vs Interpreter	Self-expression
	Novel instrumental techniques		Instability of music
	Novel instrumental practices		Ethics

Table 9: Thematic hierarchy of Area B

The third area, Area C, focuses on the apparent contradiction between three thematic complexes: 'Extension of musical sound', 'Descriptions of loss and 'Conservation'. Thirteen themes are organized under these complexes; they are summarized in the following reduction:

The 'Nonoesque' performance culture was strongly connected to the extension of musical sound and its transformation of instrumental skill and aesthetics. A wide range of sonic resources and references, among them improvisation, electronic music and sound analysis tools were important in this process. The corpus of competency developed through the creation and performance of Nono's music is fading as second and third generation performers take over as soloists. This reductive tendency should be met with information and workshops in order to reclaim the necessary agency in performance.

The specific critique articulated is not necessarily diminished by the conceptual contradiction. Rather, a local understanding of the notion of newness is uncovered, where the conceptual imperative of continuous change and development is embedded. According to Fabbriani's narrative, this conceptual authenticity must be upheld, also at the cost of sonic authenticity. The thematic hierarchy behind this reduction can be expressed in Table 10.

AREA C	Extension and retraction. Contradicting notions of newness and authenticity		
Reduced narrative	The 'Nonoesque' performance culture was strongly connected to the extension of musical sound and its transformation of instrumental skill and aesthetics. A wide range of sonic resources and references, among them improvisation, electronic music and sound analysis tools were important in this process. The corpus of competency developed through the creation and performance of Nono's music is fading, as second- and third-generation performers take over as soloists. This reductive tendency should be met with information and workshops in order to reclaim the necessary agency in performance.		
Thematic complexes	Extension of musical sound	Descriptions of Loss	Conservation
Themes	Instrumental sonicism	Descriptions of loss	Performance tradition
	Aesthetics of imperfection	Homogenization	Arguments for authenticity
	Extensions of musical sound	Impoverishment	Eduational conservatism
	Improvisation	Reduction	Codification of novel instrumental techniques

Table 10: Thematic hierarchy of Area C

The core narrative developed in the dialogue with Fabbriciani describes performer contributions to musical creation processes, outline skills, roles and knowledges needed in novel instrumental practice and reveals complementary positions on newness and authenticity. This narrative outlines the field of performance within novel instrumental practice. The thematic hierarchy of these areas is summarized in Figure 12.

	AREA	COMPLEX	THEMES
A:	Performer contributions to musical creation processes	2 - Creative Narratives	Collaboration Co-creation Workshop Experiment Friendship/Trust/Provocation
		7 - Degrees of Narrativity	Authority Silencing Continuity of history
B:	A Novel Instrumental Practice	5 - Instrumental newness	Instrumental Newness Personal Sound world Agency Novel Instrumental Practice
		4 - Performer roles	Active performer role Passive performer role Performer vs Interpreter
		3 - Performer philosophy	Knowledge Skill Self Expression Instability of Music Ethics
C:	Extension and retraction. Contradicting notions of newness and authenticity	6 - Extension of musical sound	Instrumental sonicism Aesthetics of Imperfection Extension of Musical Sound Improvisation
		8 - Descriptions of loss	Descriptions of loss Homogenization Impoverishment Reduction Codification of Novel Instrumental Techniques
		9 - Conservation	Performance tradition Arguments for authenticity Educational conservatism

Figure 12: Overview of thematic areas, complexes and themes

14 Investigating dialogic performance

The analysis of Chapter 13 revealed three thematic areas: performer contributions to musical creation processes (Area A), Novel instrumental practice (Area B) and Contradicting notions of newness and authenticity (Area C). Together with the value system implied by the tracing of distinctions in Chapter 12, these form the backbone of the narrative found in the interview material. However, interview analysis asks not only what is said, but also how and why. In this case, elements of the dialogic performativity of the interview process have been analysed in order to contextualize the value system expressed by the thematic distinctions and the coherence of the three thematic areas. The assertion is that a critical view of dialogic performativity can inform the understanding of the findings in the two previous approaches, and thus both solidify the outcome of the analysis and function as a tool for countering confirmation bias.

All statements can reveal values, beliefs and judgements appropriate for analysis. The entire text material has therefore been reviewed with a focus on narratives understood as acts of self-representation. A review of 13 different codes drawn from the text in an initial coding process resulted in five statement types that were considered analytically relevant: Acclaiming, critiquing, claiming influence, avoiding narrative tension and developing rapport.¹⁴⁹

Acclaim and rapport are examples of statement types where positive association is used as indirect self-representation (Benoit, 1997, p. 10). These statements serve both to credit external qualities, experiences or persons, and to reflect values and priorities important to the acclaimer. Critique and claims of influence represent direct forms of self-representation, identifying groups or practices as other(s) or promoting self-worth. Avoidance of narrative tension traces discord between interviewer and interviewee, allowing for identification of contested or problematic areas in the narrative.

The different statement types are analysed in the order following their relative occurrence in the material.

¹⁴⁹ Exclusion criteria for this filtering have been frequency (<10%) and degree of overlapping with other statement types.

14.1 Acclaim as performed value(s)

(...) when an individual appears in the presence of others, there will usually be some reason for him to mobilize his activity so that it will convey an impression to others which it is in his interests to convey (Goffman, 1959, p. 3).

Acclaim is by far the most frequent statement type of the interview, covering 37 per cent of coded and 27 per cent of filtered references.¹⁵⁰ These diverse expressions of acclaim can be understood in four different categories of values: Status, Agency, Newness and Equality.

Performances of Status are an explicit form of situating of self, where linking of historical practices to those of today are conducted. This could be understood as an attempt at legitimizing or validating contemporary ideals through attaching them to history.

[RF] There have always been utopian musicians, opening up the path of music. Extraordinary people, virtuosos, of *romantische Virtuosität*, like Ciardi, Briccialdi. They were outside of the norm, because the orchestra would only play their Brahms and Schumann. So, when De Lorenzo appears, he'll grow to have a pupil who'll play Varèse. This is evolution.

Core values of the Fabbriciani narrative, such as utopia, extraordinariness and evolution (a placeholder for change or extension), are put in dialogue with historical figures of the earlier times, both flutists and composers. This romanticizing of the outsider, a qualitative appraisal of non-normality expressed as evolution-through-individual-achievement, assists in a relocating of creativity to the site of performance. Directly and indirectly this is an effort to strengthen the status of performance in contemporary music.

The second set of values, Agency, is centred around Fabbriciani's idealizing of risk-willingness. These performances are also direct, or explicit.

[RF] You always need a lot of courage, and I always take chances, even during public performances, without problems.

150 'Coded references' here refers to the totality of codes used in this part of the analysis, while 'filtered references' is the selection of codes used after a filtering process.

[RF] But I'm a musician who takes risks, I take my chances, I love the risks and they are necessary. Yesterday [at a performance] I took a chance, a small one, but a risk nonetheless.

[RF] For me, this is the vital difference: To be an Interpreter or a Performer. An interpreter is, as Cacciari says, one who accentuates the text, a *cantore del testo*, that's the crucial role of the interpreter.

Again, a level of romanticizing is observable. The imperative of risk-taking returns in different shapes and forms, such as 'I always take chances' or 'they [risks] are necessary'. The value attributed to the 'lost experiments' and the distinction between utopia and normality testifies to the artistic ambition and ideal connected to Fabbriciani's self-presentation.

The reverence for the ability to imagine novel sounds is the third value identified. It is repeatedly exercised, mainly in indirect form, through statements such as 'the qualitative splendour of new dawns'. Such expressions of newness take on the shape of a materialized idealism, where the projected qualitative excellence of newness is combined with idealized notions of a utopian future. The ability to predict the future ('look ahead') and identify what is new (in music) is usually attributed to composers: 'Great composers have always looked ahead, thanks to the way they imagined sound.' The diverse performances of this value could be understood as a deification of 'the new'.

A more abstract form of idealism serves as the fourth value performed by Fabbriciani: 'Good collaborations arise from a common intent between performer and composer.' This belief is not only a description of quality in a relationship, but a performance of sameness between composers and performers. If the collaboration is good, performers and composers have the same intent. Sameness in this respect could also be understood as an expression of equality, a levelling of the traditional composer-performer hierarchy.

The presentation of self, indicated through the above expressions of acclaim, combines status, self, newness and idealism as interchangeable values. This suggests that they are expressed and enacted across each other, rather than as discrete categories.

14.2 Performing critique

The overall impression of Fabbriciani's narrative is one of emphasizing the value of his practice through own examples, rather than through disclaiming others. The balance between coded acclaim and critique in the thematic analysis is also clearly in favour of the former (33 vs 21 references). Still, at certain points Fabbriciani's critique is direct. This is particularly precise in the thematic distinction Risk/Safety, as well as in the thematic complexes Descriptions of loss and Conservation or conservatism. Here, critique ranges from the general ('there is a lack of attention to contemporary music in music academies') to the specific ('the Amsterdam performance of *Prometeo* was lacking in its execution of the solo parts'). Two reduced narratives have been constructed as core examples of Fabbriciani's critique, the first of which is accounted for below:

[RF] There has been a negative change in Nono performance practice. An academic manner of playing the solo parts of *Prometeo* has developed. There is both a psychological and material reduction taking place within current performances of *Prometeo*, meaning that the necessary extraordinary qualities are often lacking. The loss of performer agency in the Nono performance tradition is a substantial loss of both sounding music and compositional thinking. The result is that there is no functioning performance tradition for this music today.

This reduction is a compressed part of Fabbriciani's narrative, a clarification which hides much of the personal investment behind the statement he makes. His critique can also be understood as an explication of the work conducted by performers in the development and performance of Nono's music. Fabbriciani here enacts the role of an authority that is not rooted in the values of the academy, but is supported by the detailed accounts of his approach to novel instrumental practice. As an expression of performance aesthetic and performer ethics, it represents a schism.

In order to preserve the authenticity of the account, the exchange is referred below in its entirety.

[RF] I think the quality of *Prometeo – Tragedia dell'ascolto* and the thinking of Nono as it comes through today is something very different from the original. Why? Because after Nono's death in 1990, the score changed, as it wasn't complete. Now it's not complete either, many things are still missing ... both performance-wise and sound-wise. There has been an adjustment, they have formalized an academic manner of playing this piece. This becomes a problem especially in the execution of the solo parts, because they are so much more complex than the way most performers

today play: so safe, nice and sedate. These parts are not safe, there are many risks that I'm not hearing. But, again, this is *verboten* to me, I can't talk about it.

[BH] Why is this so?

[RF] Because they'd say it's because I want to perform it myself. Well, I don't. For me, playing is not necessary. I used to perform this piece, and it's okay that it's over. But the execution ... there is no functioning performance tradition for this music. It's been cancelled, now it's all academic, safe. There's no fiction, there's no philosophy, there's no thought that goes into playing these solo parts. And the problem is especially clear for the soloists. That the orchestra plays very close to the way it's written is a tradition, just as the for the specialist choir. But for the soloists – flute, clarinet, tuba, and the euphonium – it is very important that it's done in a certain way. It should not be safe and sedate. Today it's very sparse, bare, and that's not the way it's supposed to be. There is a great tension in the Hölderlin part for example.¹⁵¹ This is not only a question about the technique, but there must be a sense of total instability while playing, a sense of utopia.

And this I don't hear today. It's something undefined that puts you in a special mood, something that only a certain way of playing can give you. Not something an accountant, an engineer, a professor can do. This is pure utopia, just like Nono. He was a utopian, unconventional, very deep, but a visionary man. And you, as a performer, you have to have a fair bit of vision too, you have to be a *visionnaire* too. For me, this is the vital difference: To be an Interpreter or a Performer. An interpreter is, as Cacciari says, one who accentuates the text, a *cantore del testo*, that's the crucial role of the interpreter. The others are performers, the orchestra are performers, but the soloists can't be performers, they have to be interpreters. Why? Because even the idea of *Prometeo* wandering among the islands, his adventures, they are pure utopia. He can't just be someone who says, 'Ah, yes, I've got a boat, I'll go here, now I'll go there.' This is a psychological and material reduction of *Prometeo*. If you take the great poetry and deep philosophy of the text and music away from the music, it becomes a normal act. It is no longer a special one. And the Amsterdam *Prometeo*, the CD *Prometeo*, unfortunately, is a normal *Prometeo*. (Habbestad & Fabbriani, 2019)

This excerpt is one of the longest unabridged sections in the text material, and the sincerity and directness of the statements are strong examples of the articulation of Fabbriani's

151 'Hölderlin' refers to a particular section in one of the movements of *Prometeo*.

integration of skill, knowledge and aesthetics. The intensity of the delivery across a Venice restaurant table contribute to the analytic weight attributed to this story. The very same table was used as a concrete metaphor, as Fabbriciani concluded the discussion on the impoverishment of this practice:

[RF] I agree, and it's terrible for Nono, because ... it's like cutting down this table here ... taking away a natural evolution of his music.

At this point Fabbriciani puts down his right arm across the table, as if splitting it in two in along an awkwardly crossing line, leaving no doubt that he sees the 'impoverishment' of *Promoteo* as a substantial loss both for Nono's thinking and music. It is as if this particular composition holds an iconic or symbolic quality.

14.3 Claims of influence

Ranging from general observations on the influence of performers to specific claims relating to Fabbriciani's own activities, claims of influence are among the more direct statement types within the interview material. These claims have been grouped in the categories: Affecting, Documenting, Creating and Reinventing. The two latter categories relate directly to the research questions and are subject to closer attention in the following.¹⁵²

Creating or reinventing?

Claims of influence on creation processes occur at several points in the interview. The 'building' metaphor is a very precise account of Fabbriciani's view on collaborating with Nono:

[RF]: But this was the same for other pieces, all pieces at the time had an incomplete score. Very often, Nono only had the pillars, and I had the windows, the balconies. What I mean is that the building is something we made together, and the score is only later completed with all the material. Because the compositional process is like ... 'Roberto, I don't like this, that one's okay, no, play again' and this is the compositional process.

152 The two first categories show contact between Fabbriciani and different persons of historical importance within music (Bruno Bartolozzi, Bruno Maderna, Luciano Berio, John Cage, etc.). These have been considered less analytically important to the topics of this thesis and have therefore been filtered out.

Here, structures and guidelines are presented as implied by the composer ('the pillars'), leaving decisions on content ('the windows, the balconies') to the performer. Fabbriciani also quotes Nono in order to emphasize this dynamic:

[RF]: Nono spoke of my sound as 'surprising innovations' and wrote that 'he [Fabbriciani] was ... immersed in the Freiburg studio, and I [Nono] was immersed in his mastery.'

This statement implies a mutual benefit in the process, where both performer and composer are actively engaged in two complementary sides of the developmental work.

Also, in relation to his work with Sciarrino, claims of influence on creation processes occur:

[RF]: Typically, the first thing would be that I'd improvise and play for him. For example, I'd hear a sound, e.g., with a special opening in the throat, then I'd notate an example and play again. Later this example would get developed in a score by Sciarrino. Again, it was a process. Following this, it was very easy for him to write this piece following this example. I wrote such-and-such fingering position will result in so-and-so pitch, e.g. In the text you showed me, Sciarrino wrote some recent sounds, but 'some' is not specified. Is some 3 or 300? The term is relative. This some turned out to be whole works for flute. Sciarrino doesn't specify which ones, but 'some' include tongue rams, whistle tones, hissing sounds, harmonics ... everything that now is in the pieces.

This description outlines a very typical development process for many performers, but linked to specific pieces and specific techniques. The precision of the details in Fabbriciani's account warrants further investigation to clarify the nature of their collaboration. Early in the interview process, Fabbriciani referred to his experience as a 'reinvention' of the flute:

[RF]: In the 1960s I started to develop multiphonics, cooperating with Bruno Bartolozzi amongst others. My teacher Severino Gazzelloni and the composers I was in touch with, such as Bruno Maderna, influenced this research, which led me to reinventing the flute.

This understanding is not echoed in Sciarrino's own description of their collaboration, but Fabbriciani does not see this as a contested area:

[RF]: That Sciarrino was the first to use these new techniques for the flute is evident, as is the fact that I provided, proposed and played them to him.

14.4 Avoiding narrative tension

Conflicting narratives, avoidance or rejection create narrative tension, which potentially undermines rapport between researcher and interviewee. In general, questioning which do not comply with the preferred narratives presented by a subject, is simply avoided. Tracing this avoidance is a method that can indicate pressure points in the narrative; points where stories or statements potentially contradict each other where narrative is weakened.

References to silencing of Fabbriani's role in his work with Sciarrino is met by avoidance, on several occasions:

[RF]: But for me this is not so important, for me it's history continuing. It was the same problem with Sciarrino. I think what matters, what's important is the time of the story.

[RF]: But today I think it wasn't necessary for history, because the piece is history itself.

This avoidance could signal unwillingness to discuss the issue in general, but is in Chapter 13.1 interpreted as a refusal to accept any sort of 'victimization' on account of how these collaborations have turned out. Potential loss of personal prestige, in the form of credit for this work, is considered less important than 'history itself'.

When faced with further questions on this topic, several types of avoidance are observable:

[BH] Do you agree with this description?

[RF] Yes, I do agree. Extraordinary compositions have been created with 'some recent sounds provided by Fabbriani'.

By 'agreeing' to the statement, using irony to indicate that Sciarrino's description is an understatement, Fabbriani avoids an explicit critique of the composer. This tactic is used to avoid narrative tension.

The same could be said for a later rejection of implied conflict:

[RF] That Sciarrino was the first to use these new techniques for the flute is evident, as is the fact that I have provided, proposed and played them to him. There is no contradiction on these grounds.

This blunt refusal ends the current line of inquiry. A similar change of direction occurs as Fabbriciani is asked why he stopped working with Sciarrino:

[BH] Why did you stop working together?

[RF] I would not know; I remember during our collaboration to have performed several works: *Fabbrica degli incantesimi (L'Opera per flauto, 1977–1989)*, *La perfezione di uno spirito sottile, D'un faune per flauto e pianoforte, Addio case del vento per flauto solo (1993)*, *La Divina Commedia di Dante Alighieri (1987)*, *Musiche per il Paradiso di Dante, Frammento e adagio per flauto e orchestra (1986–1992)* and others until *Il cerchio tagliato dei suoni (1997)*.

At this point he clearly avoids answering the question, and instead continues with details on the work done together with Sciarrino. This list, however, makes a strong, if unspoken, point about how central he was to Sciarrino's work over a number of years. How do we interpret this avoidance? While it could be that he simply is not aware of why, the chances are that Fabbriciani is not comfortable with discussing the topic. Throughout the interview process, he makes multiple references to friendship, trust and dedication as personal values. The professional intimacy between performer and composer, as it appears in the narrative, is valued to the extent that any critical evaluation or statement would break this bond. Whether this is a personal or a professional ethical standard is hard to tell and probably difficult to separate from each other. Nevertheless, it becomes clear that Fabbriciani does not want to launch a direct attack against Sciarrino.

He presents their work and relation as stable:

[RF] The recordings and notations that we did together clearly respect the sonic and compositional idea[s].

[BH] Did your collaboration change over the course of this time?

[RF] Absolutely no.

That a collaboration does not change over the course of ten years before it abruptly ends, speaks to nature of the conclusion. Nevertheless, pursuing this line of questioning would necessarily need perspectives from both sides in this collaboration. It is however worth noting that none of these exchanges around the collaboration with Sciarrino found in the interview material articulate performer agency in the same way that the narratives on Nono-collaboration do.

This could suggest that Fabbriani's influence was most present during the initial phases of the making of the Sciarrino pieces, and that the subsequent process was less open to performative intervention. Further research is however warranted in order to compare these two processes.

14.5 The reflexivity of rapport

Accounting for the rapport between researcher and informant is seen as a way of giving context to the generation of the text material in the interview, thus contributing to clarification of the position and influence of the researcher.

Acknowledgement, recognition and approval are shared between interviewer and interviewee across most of the thematic complexes. This substantial degree of rapport extends to and includes role changes, where Fabbriani shares observations and subsequently follow up with questions to the interviewer:

[RF] This is necessary for the future; Workshops and direct collaboration, absolutely. What do you think?

[BH] In my experience, the relationship between my own and a composer's contribution in workshop situations is often unclear and unregulated. And in some cases my role as co-creator or contributor become highly downplayed.

[RF] Yes, yes, this is a problem. It happens to me too.

The experience of erasure of the co-creative work of performers is here shared and found to be problematic, for both researcher and subject. A summary of the most coherent cases of rapport in the text material is expressed in the following:

[RF+BH] Performer-interpreters are often not recognized as co-authors and their roles in creation are often downplayed. This can be connected to the fact that it is difficult to document and explain this role in detail. The mid 1970s represents a turn in instrumental practice for the flute. Following this turn, a questioning of the performer's ethical obligation towards 'the work' has led to the development of an 'ethics of the performer'. However, scores are still a functioning symbol that represents and/or validates these collaborations.

Rapport is a more complex and nuanced concept than agreement, however. Information and opinions are exchanged through the use of a diverse range of confirmations. In addition, small performances or tests arise, aimed at clarifying potential limits to shared understanding. Where does sameness start or end? This and similar questions are investigated and answered as practice and in practice, in moments like those in Table 11.

BH	it really looks to me like the sound of the flute is changing, something new is happening at this time.	how do you think about creating something new? What kind of process is this? What takes place?	I think your descriptions can tell us something about how we can play this music today. [It is] relevant for how to continue to approach this music [today]	In your experience, to what extent is this acknowledged by composers, publishers and the musical world in general?
RF	Yes, at the time, it changed; it definitely was a turn.	It's a very interesting question. I have never thought of this in this way, but I think I to a certain extent have followed the norm.	This, this is very important. The risk of this music becoming academic, like we discussed, is prominent.	Well, unfortunately the role of the performer-interpretor, often a co-author, is not recognized.

Table 11: Examples of confirmatives

The presence of sameness or shared understanding does not produce passive dialogic interaction by default, however. A review of meta-statements reveals examples of different response types such as confirmation, avoidance and rejection.

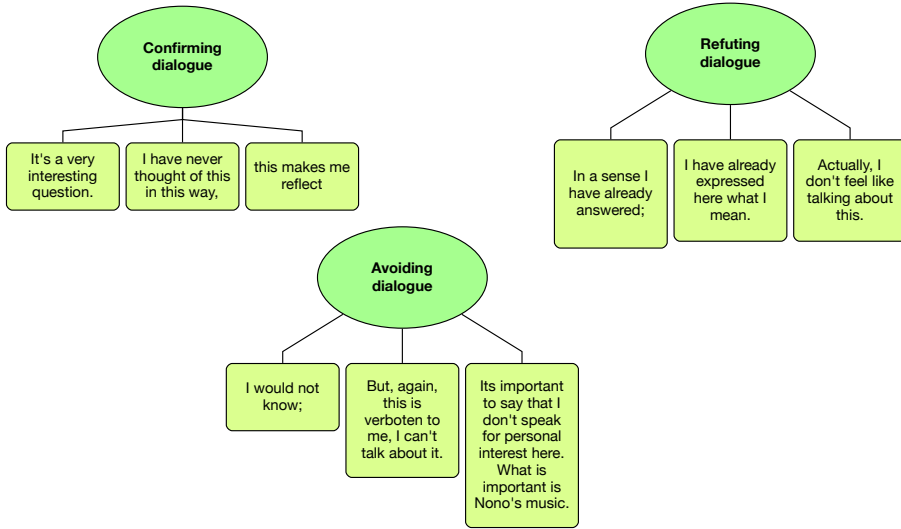


Figure 13: Examples of dialogic performance

The examples given in Figure 13 demonstrate the different dialogical functions of different response types: comments on the information or question from the interviewer are typically used as entry points for a chain of statements. Confirming dialogue is therefore often reflexive, it opens verbal negotiations about nuances in meaning, experiences or knowledge. Avoidance is an attempted or indirect cancellation of such interaction. Either the exchange is not understood, or the topic is of a kind that the interviewee for some reason does not wish to discuss. Rejection is the direct equivalent of avoidance, where it is clearly stated that the interviewee does not wish to proceed the line of inquiry. Both avoidance and rejections at times indicates an ethical space or a personal boundary.

14.6 Reviewing performativity

The task of this chapter has been to investigate the dialogic performativity of the interview process in order to contextualize the value system expressed in the conceptual distinctions (Chapter 12) and the now established thematic coherence (Chapter 13). By focusing on performances of acclaim, critique, claims of influence, avoidance of narrative tension and rapport, a critical view of the interview process has been established, thus informing the previous findings.

The discourse of acclaim established by Fabbriani is employed as a narrative tactic to strengthen the status of performance in contemporary music. Themes such as Utopia, Extraordinariness and Evolution are put in dialogue with historical figures in the world of flute playing, contributing to a locating of creativity to the site of performance. Alongside this historicizing, values of self-representation such as Status, Agency, Newness and Equality are repeatedly performed. Different types of romanticization of outsider positions and the establishment of Risk as an aesthetic and/or ethical virtue are central here.

While performer contributions to the notion of newness are implicit in large parts of the narrative, the ability to predict the future ('look ahead') and identify what is new is still explicitly attributed to composers at several points. Yet, interaction is frequently referenced as the most desirable and necessary model for achieving newness. The many normative expressions of newness can be understood as a deification of 'the new'.

Notions of 'fiction', 'philosophy' and 'thought' are embedded in the critique of the 'cancellation' or phasing out of the particular qualities of early Nono performance practice. These are all exemplary components of Fabbriani's practice that indicate that performance is not about the literal truth of music, but about something more, something unidentified and unreachable to be striven for. Perhaps this struggle is itself the best representation of Utopia.

Fabbriani's claims of influence are performed with different kinds of intensity, from stating outright that he has 'reinvented' the flute to understating the importance of a common 'intent' between composer and performer. In between these lies a series of narratives on creating, influencing, explaining and documenting. His role in the creation process of Sciarrino's early solo pieces for flute is clearly stated. This claim, however, is difficult to verify through an interview-based process, especially on a per-technique basis. If one considers the evolution of novel instrumental techniques as a distributed affair taking place more or less in parallel in different places around the world, the important element of this claim lies in its local relevance, for this particular collaboration, and not in a claim of the originality of being 'the first' to utilize a given sound.

A review of the rapport between interviewer and interviewee shows that it is nuanced and reciprocal. The interaction includes confirmation, avoidance and rejection. A central example of confirmation is the shared experience that performer contributions to creative processes often are underreported. However, when rejections and avoidance are traced independently, there is a resistance to formulations of specific occasions of silencing. This discrepancy is interpreted as representing a potential breach of the professional intimacy between composer and performer.

15 Thematic distinction, coherence and performance in dialogue with Roberto Fabbriciani

At several points in the interview, as well as in its preceding informal talks, Fabbriciani uses the concept '*la création*'. This concept functions as a strong icon for his core narrative, where creativity is seen as a component of both performance and composition. '*La création*' is rooted both in contemporary and historical practice, as Fabbriciani envisions a richer, more creative performer role, geared towards developing new musical possibilities. This search for new and different possibilities aims to change the language of music through different instrumental approaches.

The notion of '*la création*' rests on a value system derived from the distinction of five concepts: Freedom, Utopia, Risk, Virtuosity of Sound and Extraordinariness. At the centre of these views on contemporary music performance stands the dualism between the perception of what is old and new respectively.¹⁵³

'*La création*' is exemplified and extended in Fabbriciani's notion of newness, expressed through the use of the above distinctions. This implied expression of difference is a platform from which to understand the coherence found in the three thematic areas: 'Performer contributions to musical creation', 'A novel instrumental practice' and 'Contradicting notions of newness and authenticity'. These three thematic areas surround, complement and underpin the concept of '*la création*'.

Collaboration is a key concept in this study and its inherently social nature runs through many of the narratives analysed. Although never explicitly stated, the verbalization of this sociality in musical creation appears to be at odds with typical composition narratives, which emphasize individual authorship, originality and personal independence.

Collaboration is also identified as integral to the creation of instrumental newness. The site of production in novel instrumental practice is the workshop, an unregulated workspace. The experiments undertaken here both support and negate the traditional composer-performer hierarchy, resulting in a complex practice that at times is silenced. The lack of formalization

153 This operationalization of the dichotomy old/new as presented by the analysis of Fabbriciani's narratives could easily be interpreted in light of general theories on post-war modernity, for example those offer by Jean-François Lyotard (1984).

places the performer in a volatile situation, should the composer die or the nature of their relationship change.

Instrumental newness is the primary artistic capital within novel instrumental practice. This quality is produced interactively with composers, but it relies on performer agency. This agency represents a change from more traditional practice and is supported with changes in performer philosophy. The centre of this philosophy is an amalgamation of concepts of knowledge and skill through different kinds of 'thinking', 'understanding' and 'doing'. The fusing of these elements outline an ethical space where the performer is responsible to an external ideal outside of both composer, work and music.

Two contradicting notions supply a third area complementing '*la création*'. While 'newness' is an expressed quality of the extension of musical sound, a degree of 'authenticity' in performance aesthetic is presented as ideal. This paradox is supported by a critique of the developments in the performance practice of the music of Luigi Nono. The 'Nonoesque' performance culture was strongly connected to the extension of musical sound and its transformation of instrumental skill and aesthetic. The corpus of competency developed through the creation and performance of Nono's music is fading as second and third generation performers take over as soloists. This reductive tendency should be met with information and workshops in order to reclaim the necessary agency in performance. An altruistic ethical position informs this critique, which is strengthened by evaluating its dialogical performance.

PART III:

**TRANSFORMING
PERFORMER AGENCY**

The history of the key click described in Part I outlined a change in practice, interpreting of some of the conflicts and consequences connected to the gradual reconfiguration of the conventional way to play an instrument. The interview analysis of Part II offered a deeper look at the practice of Roberto Fabbriciani, whose value system – rooted in a skill- and mindset developed through the innovative reconfiguration of instrumental conventions – gave context to critical views of current practice in the performance of solo parts within Nono’s later compositions. Part III takes this critique as its starting point for developing a comprehensive and practical understanding of the performer agency that is central in this musical practice. The performance-based methodology is used to investigate a particular set of workshop practices and their creative potential through the prism of Luigi Nono’s composition *Das atmende Klarsein*.

As the title of Part III indicates, a range of transformations are revealed throughout this part of the dissertation.

- the transformation of performer-researcher outlook, from the objectively investigative to the subjectively creative.
- the transformation of recorded sound into performable actions.
- the transformation of performer activities, from ‘performance-as-execution’ to ‘performance-as-creation.’

What is the connection between these layers of transformation, and how are they represented in the following chapters? In Chapter 16 the collaborative development of this composition is described and analysed, producing insights into the workshop process. In the chapter that follows the workshop process is reactivated, through experimentation and emulation, to extract and embody elements of the musical material and its generative processes. These experiments suggest one possible path towards an activation of the utopian ideals voiced by Nono and Fabbriciani, thus providing a response to Fabbriciani’s critique formulated in Chapter 12.2. In Chapter 18 I demonstrate how historical knowledge of the development of *Das atmende Klarsein* can be used not only to reinvigorate its current practice but also to act as the starting point for new creative work. By extrapolating elements of the role of the performer and recontextualizing functions found in the workshop practice, Nono’s and Fabbriciani’s artistic processes are released from their umbilical connection to *Das atmende Klarsein* and used as elements in an independent artistic project.

16 Re-searching the ‘doing’ of *Das atmende Klarsein*

The flute part of Luigi Nono’s score for *Das atmende Klarsein* combines abundance and scarcity of information, and could easily be understood as somewhat enigmatic for performers. The notation appears fixed and open at the same time. Is this paradoxical state a desired design by the composer? The gap between the rich sound and its ascetic notation seems to indicate the existence of a rich practice around the early days of this music. What kind of agency are performers of today afforded by the relative openness of the score? How can one best understand and explain the acts and opportunities involved in a fluteplayer’s performance of *Das atmende Klarsein*?

To answer these questions, I have turned to my own experiences of performing the solo part of *Das atmende Klarsein* in 2007, to published research literature, to writings by Luigi Nono and my own interviews with Roberto Fabbriciani, and to the archives at the Fondazione Luigi Nono (FLN).¹⁵⁴ Drawing on all of these resources, this chapter aims to demonstrate and clarify the performer’s role in the development and performance of *Das atmende Klarsein*.

The actions, tactics, and processes in the work are described from a performer’s point of view, forming an outline of the Fabbriciani–Nono collaboration that reveals an original approach to organizing instrumental sound. The chapter closes by providing a view of this practice as directed emergence: a collaborative aggregation of new sonic resources through divergent ways of engaging with sonic and musical material (see Chapter 16.9).

16.1 Doing what one always does?

Fa tu quello che vuoi e di’ sempre quello che fai – Do what you want and what you always do. This seemingly innocent instruction, spoken by Luigi Nono from inside a control room to Roberto Fabbriciani in a recording booth, encapsulates the dynamics of a composer–performer relationship. The statement is captured on a recording made on 1 December 1980, as Fabbriciani, Nono and sound engineer Marino Zuccheri worked together in the Studio Fonologia di RAI in Milano, developing, and documenting the sounds of Fabbriciani’s bass flute for use in compositions as yet to be made. Their process of demonstrating, naming, combining, recording, and sequencing flute sounds into varying types of building blocks of musical material provided the starting point for the collaboration between Fabbriciani and

154 Research trips to the archive were undertaken in 2016 and 2018.

Nono. This relationship spanned the development and performance of more than eleven compositions between 1980 and Nono's death in 1990.

How one chooses to interpret Nono's invitation quoted above can reveal a key to understanding this collaboration and the practice following in its wake: is the comment a friendly gesture to ease the impersonal atmosphere of a radio studio, or an indication of the contributing role and creative freedom given to a performer? What is this instrumental 'doing,' and what kind of collaboration took place? An overview of the composition in question will preface a detailed account of the research into this workshop practice.

16.2 Introducing the sound worlds of *Das atmende Klarsein*

Das atmende Klarsein is scored for bass flute soloist, an eight-piece mixed chamber choir, live electronics and tape, and consists of eight movements, alternating between choir and soloist. The dualism of soloist and choir is amplified by the contrasting character of the musical material. The choir parts are made up of various textual sources, selected by philosopher Massimo Cacciari (1944–), which have been decomposed, arranged, and set to music by Nono in a slow, sustained melodic layering. None of the choir parts (1, 3, 5 and 7) use any extended vocal techniques. The flute movements (2, 4, 6 and 8) counter this serenity of expression with a highly varied range of sound types, often escaping the idea of fixed pitch altogether. This contrasting material creates a paradoxical blend of sonic modernity and archaism. The opening bars of the second movement are exemplary for this difference. As the choir fades out the last syllable of the title on a perfect fifth, at a painstakingly soft volume, the sound of breathing, key percussion and sputtering articulations erupt in waves after a slow, almost imperceptible introduction. This transition is documented in Sound example 1.



Sound example 1: Das atmende Klarsein (excerpt), transition between movement I–II.

As one can hear, the two musical worlds, ‘the old’ and ‘the new’ (Dollinger, 2012), briefly cross paths before they affirm their distinct juxtaposition. The final movement of the piece cements this contrast with a live improvisation by the flute soloist, performed as a duet with a recording of Fabbriani’s ‘original’ bass flute improvisation.

Das atmende Klarsein was created and revised over the years 1980 to 1987. Starting in Milan and continuing in Freiburg and later Venice in 1980, its *prima versione* had its première in May 1981. There were seven or eight concerts presented up to 1986, all featuring Roberto Fabbriani as the bass flute soloist. Each of these performances resulted in edits and alterations of the flute part.¹⁵⁵ Although the official list promoted by the Luigi Nono Foundation gives 1981 as the year of composition, the three different versions of the score testify to a more prolonged process.¹⁵⁶ This is supported by sketches and annotations of the manuscripts in use by the performers and Nono himself. Information from audiotapes from different workshops, notes from rehearsals, concert programmes and other material found in the collections of the FLN in Venice provide a timeline for this process. The introduction, adaption and removal of electronic processing, and the addition and exclusion of material, including the removal and reinstatement of taped elements, are examples of the changes introduced in this process (Figure 14).

The relationship between *Das atmende Klarsein* and *Prometeo* has been thoroughly described (Dollinger, 2012; Nielinger-Vakil, 2015) and it is widely agreed by Nono scholars that ‘at least four preliminary works [were] designated as “studies” [for *Prometeo*]: *Io, frammento dal Prometeo*, *Das atmende Klarsein*, *Quando stanno morendo*, *Diario polacco n. 2*, and *Guai ai gelidi nostri*’ (Benedictis, 2013). This conception implies a linear development moving towards *Prometeo*, learning from one composition to the other. However, looking at this period from a bird’s-eye perspective provides an alternative view. Rather than forming a crescendo towards a peak, the workshops, rehearsals and concerts of *Das atmende Klarsein* and its sister-studies are scattered irregularly, creating a web of complementary components. Parallel activities such as workshops, rehearsals and concerts related to other compositions from the same period further suggests that the development period for *Das atmende Klarsein* was embedded within that of several other pieces.

155 *Versione definitiva* is the phrase used by Fondazione Archivio Luigi Nono to indicate the final version of a work, as opposed to *prima*, *seconda* or *terza versione*. However, it is also used by the publisher Ricordi to designate editions published after the composer’s death. Angela Ide de Benedictis (2017, p.210–213) discusses the concept of authority in regard to this performative practice.

156 Ricordi published editions of *Das atmende Klarsein* in 1983, 1987 and 2005.

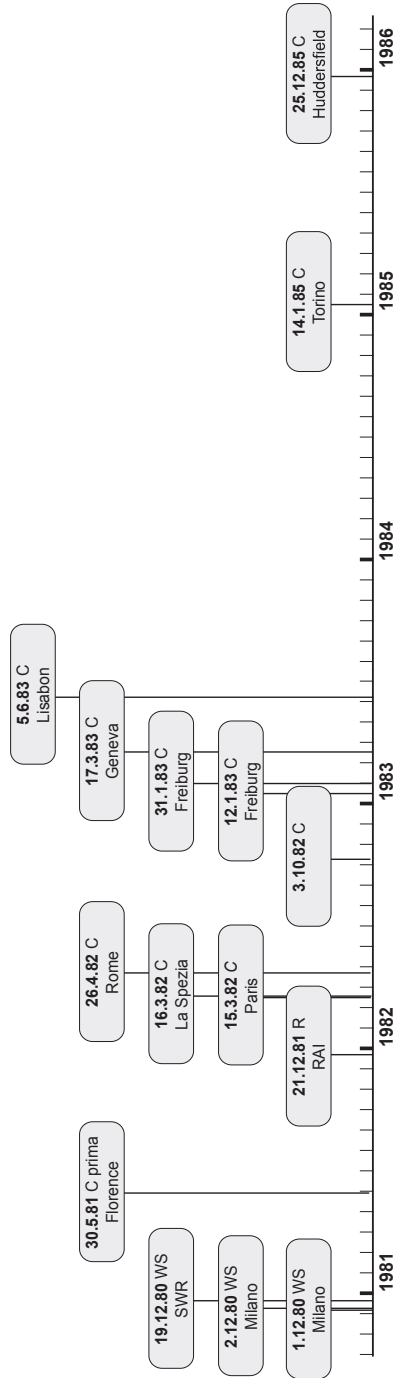


Figure 14: Workshops, rehearsals, and performances of *Das atmetende Klarsein*, 1980–1986

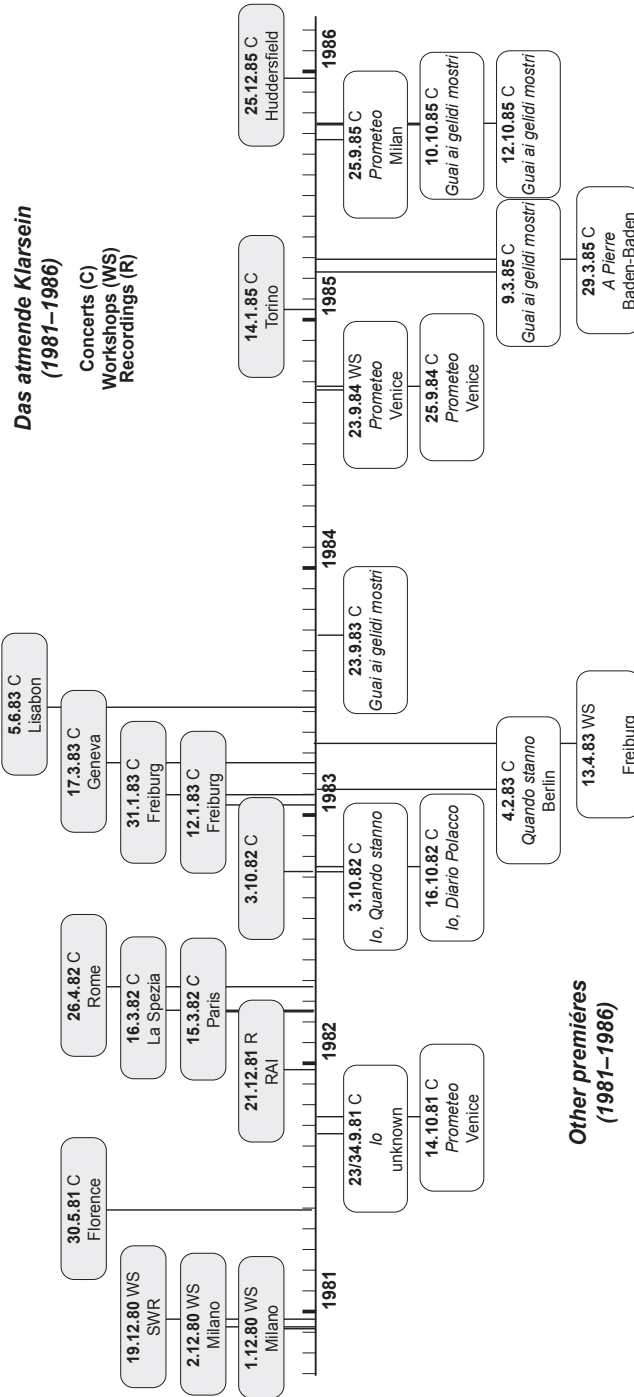


Figure 15: Workshops, rehearsals, and performances of *Das atmende Klarsein*, including other *Nono* premières, 1980–1986

The above illustration shows how multiple compositions were rehearsed, revised, or performed within the same periods:

- 1981 *Das atmende Klarsein, Io, Prometeo*
- 1982 *Das atmende Klarsein, Io, Quando stanno morendo*
- 1983 *Das atmende Klarsein, Quando stanno morendo, Guai ai gelidi mostri*
- 1984 *Prometeo*
- 1985 *Das atmende Klarsein, Guai ai gelidi mostri, A Pierre, Prometeo*

Except for 1984, devoted entirely to the first version *Prometeo*, every year includes work related to *Das atmende Klarsein*.¹⁵⁷ Further research of activities pertinent to *IO, Prometeo, Diario Polacco* and *Quando Stanno Morendo* could very likely lead to an more complex picture of this intermingling of compositions and workshops.¹⁵⁸ While this interconnection make the pieces in question no less 'works' than any others, the argument presented is that they benefit from being understood not only as autonomous units but as repeated, variable articulations – as reiterated elements of a manifold process. To reveal the plasticity of this practice – the dynamic influences between parallel development processes – one needs to examine not only its products, be they texts, scores or recordings, but also 'the doing' leading to their existence.

16.3 Examining 'the doing' of the *Das atmende Klarsein* workshops

What takes place in these workshop situations? What form did the collaboration take? The workshop practice of Fabbriani and Nono consisted of different types of doing, comprising different 'tactics' and yielding different kinds of output or 'products'. The following four sections detail elements of each of these doings, with a special emphasis on the different tactics employed in the first two.

157 Note that *Prometeo* at first also included large portions of *Das atmende Klarsein* and *IO*.

158 Hans-Peter Haller describes the development of *Prometeo* in 1984 as stretching over a month, leading up to the première on 25 September 1984 (Haller, 1995). Roberto Fabbriani states that they worked on flute parts for as long as 14 days (see Part II).

The archived recordings of the workshops leading up to *Das atmende Klarsein* suggests that the workshops were not highly structured. However, they do display a form of serial or sequential logic: they begin with an initial creation of a sonic, motoric, and notational repository through recorded and annotated ‘sound catalogues.’ Then follows expansion and development of new musical material through improvisations based on selected catalogue entries. The third step is refinement through repetition, listening and adjustment over time. These steps are repeated, leading to a fourth and final selection stage, before new refinement takes place through performing, listening, and notating.

On the basis of this overview, four activities have been extracted as core examples of ‘the doing’ of these workshops: cataloguing, improvising, listening, and reiterating (See Table 12).¹⁵⁹

Cataloguing	Improvising	Listening	Reiterating
Creating a sonic, motoric and notational repository.	Expanding, improving and creating musical material.	Repeated, layered, documented and performed evaluation.	Inclusion and exclusion of workshop material into ‘the work’ through repetition and refinement.

Table 12: Four types of doing in the Fabbriani–Nono workshops

16.4 Creating a sonic, motoric, and notational repository

The first recordings preserved from the two workshop days in Milan, in December 1980, largely contain cataloguing and explanations. A substantial number of techniques are recorded in different variations and combinations; these likely functioned as a point of reference, a laying out of possibilities, and the starting point for later testing, evaluation and prioritizing. My initial listening notes from hearing the first recording gives an impression of the kind of activity which takes place:

[BH 2017]: Fabbriani presents sounds and techniques in an orderly fashion, explaining their names and execution as he moves through his approach to flute playing. He names an area of techniques, ‘Aria intonata un po’ aerofona molto diffusa dallo Strumento’, and continues to demonstrate different pitched air sounds, played into the instrument. He follows by naming a series of different pizzicato types,

¹⁵⁹ This reduction is based on my analysis of selected recordings of workshops and rehearsals as well as their associated notebooks, sketches and other documents stored at the archives of FLN (see Appendix 8 for an overview of the sources consulted). It goes without saying that these elements do not form an exhaustive account of the workshop process; they are rather a selection of tactics identifiable in the available material.

“pizzicato di lingua”, “pizzicato di lingua e di chiave insieme”, “pizzicato di labbra”, “percussioni sole”, and performs the different sounds in a sequence to demonstrate their individual qualities.

The use of such sound catalogues affords a didactic or systematic clarity, but perhaps little artfulness. Typically, Fabbriciani uses mundane chromatic or diatonic scales as a core material, subsequently altering its sound character dramatically with different ‘emission techniques’. In between established instrumental techniques such as combinations of played and sung sounds, more personal ones arise. An example is ‘frullato di labbra’, a flutter technique where the tongue is circulated around the edges of the opening between the lips. Perhaps due to their didactic presentation, the catalogues appear with some musical *naïveté*, as wanderings in and around sounds, some artistically charged, others not.

‘Cosa vuol dire sole, scusa’ (Pardon me, what does it mean [that the percussion is] alone)? This question reflects the precision pertinent to workshop processes. Here, Nono asks Fabbriciani to specify what it means that a percussive technique is performed *solo*. As mentioned in Part I, key clicks can be executed with or without emitting breath or tone, an element of the technique that is frequently unspecified in notation. What Fabbriciani is relaying is that the technique can be performed articulated with air, pitched tone, or using fingers alone. These kinds of clarification are crucial to develop a shared understanding of both the motoric and sonic components of the fundamental techniques, their variation possibilities and possible notation demands.

Who is the cataloguer in such a process? While Fabbriciani presents his own choice of materials, shaping them as he sees fit, Nono listens, questions and cautiously guides the process. Occasionally, Fabbriciani also provides systematic accounts of different material types. One clear example is his personal selection of bass flute multiphonics, based on Thomas Howell’s manual *The Avant-Garde Flute* from 1974.¹⁶⁰ This selection is penned by hand and commented by Fabbriciani (see Example 9). Another sign of influence is a handwritten material notation table provided by Fabbriciani to Nono, detailing names of novel instrumental techniques, notation suggestions and instrumental ranges of the different techniques.

160 Referenced in Part I, see chapter 6.1

FLAUTO BASSO

no. 2 i numeri in riferimento al libro di Thomas Howell: "The Avant-Garde Flute".

I SVONI RISULTANO OTTAVA BASSA

i numeri impostati approssimativamente: 5, 12, 17, 20, 22, 24, 30, 36, 44, 48, 168, 169, 190, 191, 218, 219, 255, 272, 325, 329, 344, 368, 389, 391, 546, 665, 811, 815, 821, 822, 832, 844, 855, 888, 1167, 1168, 1184, 1202, 1205, 1259, 1263, 1396, 1405, 1428, 1444 =

BROWN

33 36 39 42 45 48 51 54 57 60 63 66 69 72 75 78 81 84 87 90 93 96 99 102 105 108 111 114 117 120 123 126 129 132 135 138 141 144 147 150 153 156 159 162 165 168 171 174 177 180 183 186 189 192 195 198 201 204 207 210 213 216 219 222 225 228 231 234 237 240 243 246 249 252 255 258 261 264 267 270 273 276 279 282 285 288 291 294 297 300 303 306 309 312 315 318 321 324 327 330 333 336 339 342 345 348 351 354 357 360 363 366 369 372 375 378 381 384 387 390 393 396 399 402 405 408 411 414 417 420 423 426 429 432 435 438 441 444 447 450 453 456 459 462 465 468 471 474 477 480 483 486 489 492 495 498 501 504 507 510 513 516 519 522 525 528 531 534 537 540 543 546 549 552 555 558 561 564 567 570 573 576 579 582 585 588 591 594 597 600 603 606 609 612 615 618 621 624 627 630 633 636 639 642 645 648 651 654 657 660 663 666 669 672 675 678 681 684 687 690 693 696 699 702 705 708 711 714 717 720 723 726 729 732 735 738 741 744 747 750 753 756 759 762 765 768 771 774 777 780 783 786 789 792 795 798 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The image shows five staves of handwritten musical notation on aged, yellowed paper. The notation includes various musical symbols such as notes, rests, and dynamic markings. The first staff has a treble clef and includes the instruction 'Pizzicato' and 'arco'. The second staff has a bass clef and includes 'Tutti' and 'pizzicato'. The third staff has a bass clef and includes 'Subito Forte' and 'Tremolo'. The fourth staff has a bass clef and includes 'Vivace' and 'Allegro'. The fifth staff has a bass clef and includes 'T.R.' and 'Cresc.'.

Example 10: Notated examples of recorded material: ranges, dynamics, possibilities, handwritten by Roberto Fabbriani. Courtesy of FNL

16.5 Expanding, improvising, and creating musical material

Following the cataloguing phase, different types of improvisational techniques become increasingly central to the workshop recordings. Now Fabbriani stops the systematic naming and exemplification, favouring small embellishments on chosen material types. Gradually, catalogue entries become ornamented with alterations or impromptu combinations and phrases. While the development of the sound catalogues has a didactic function, this phase sees a gradual change towards artistic experiments. In my listening notes, I reflect on how these recordings differ in style and quality:

[BH 2017]: Fabbriani's playing in these recordings vary in character, style, and quality: at sometimes extrovert, at others, more nondescript. While the output at times seems seeking, it largely comes across as confident and assertive. The difference in improvisational quality could reflect a growing confidence with improvisational tactics, or simply relay consequences of different mindsets at play during demonstration and investigation.

How can one best understand this practice? Performance theorist Richard Schechner describes the workshop as one of three stages of the performance process: workshop, rehearsal and public performance, where the workshop is considered the ‘active research phase’, while the rehearsal is ‘the process of building up specific blocks of proto-performance materials into larger and larger sequences of actions that are assembled into a whole, finished performance’. These two stages lead to a ‘performance’, the presentation of the outcome of the process (Schechner, 2013 p. 233–45). Schechner further elaborates his view on the distinction between workshop and rehearsal:

Workshops are a way of breaking down, digging deep, and opening up. Resources are identified and explored. During the workshop phase, possibilities abound. Rehearsals are a building-up process, the phase where the materials found in workshops are organized in such a way that a performance (often a public performance) follows. Rehearsals build on, and fill in, the foundations laid down in training and the new materials uncovered and explored in workshops. During rehearsals, actions are separated into what can be used to make a performance and what must be discarded or put aside for another project (Schechner, 2013 p. 236).

This segmentation offers a simple way to analytically delimit different activities in a process. However, when these activities are separated sharply – considering the products of the workshop simply as ‘proto-performance materials’ – the gradual transformation of the Fabbriani–Nono workshop performances, moving from cataloguing via experimentation to scripted performance, is lost from the analytical vocabulary. I therefore propose to see all stages of the workshop practice as different kinds of performed tactics: performative exposition, performative exploration, improvised performance, and scripted performance. Seen together, this typology of performative tactics comprises an essential strategy for an emergent organization of sonic material (See Table 13).

Tactic no. 1 Performative exposition	Tactic no. 2 Performative exploration	Tactic no. 3 Improvised performance	Tactic no. 4 Scripted performance
free demonstration	focused on singular defined technique	sequences of defined techniques	repeated performances of the same scripted section

Table 13: A typology of improvisational tactics as found in Das atmende Klarsein workshop recording

Each of the four are described below from a synthesis of listening notes made at the FLN and a review of their corresponding notebooks.

Tactic no.1 Performative exposition

[BH 2017]: At times, the impromptu embellishment of a material example develops into shorter, open improvisations in the form of small pieces of one to three minutes. They are capricious and gestural; at times, they appear humorous or even joking. I refer to these episodes or happenstances as *performed expositions*, meaning that they appear to come into existence without much premeditation outside the display of an instrumental technique. These are products of the performer's imagination, drawn from his skills, experiences and ideas, triggered by the act of cataloguing, the studio experience and the collaborative climate between composer and performer.

Tactic no. 2: Performative exploration

[BH 2017]: The second block of materials from Milan is a selection of shorter improvisations based on distinct instrumental techniques. I refer to these as *Performative explorations*. Although being generally brief in length, they are more consciously developed and focused compared to the exposition. As sections, they appear with a defined agenda, both in terms of musical material and behaviours.

Tactic no.3: Improvised performance

[BH 2017]: Gradually the focused improvisations move into more extended stretches. Nono's notebook suggests a higher level of planning for these takes. Material types are defined by name accompanied by time frames that indicate lengths for different parts of the improvisation. I refer to this kind of scheduling as *Improvised performance*.

Tactic no.4: Scripted performance

[BH 2017]: The final part of these stretches appears as repeated takes of similar sequences. A refining of the selected sound material takes place, a form of crystallization through performance. Now, Fabbriciani's improvisation might here not be a goal in itself, but a tool to realize a specific form of musical behaviour within a certain material area. These performances seem more balanced; I hear, or imagine that I hear, both a compositional and performative authority being expressed.

Neither of these tactics represent 'public' performances, in Schechners sense, but the trajectory formed by their outline relays a form of structuring of both material and behaviour. Gradually, the material of what will become *Das atmende Klarsein* is developed, and the

kinds of musical behaviour associated with its solo-part are nurtured. This process includes a subtle role change for the performer: from assertively guiding the composer into the terrain of one's own technique towards real-time testing of artistic hypothesis developed in dialogue with the composer. Its combined effect should be considered as a stepwise form of conditioning, an approach to guide or influence the performing body into specific ways of acting and sounding.

16.6 Repeated, layered, documented, and performed evaluation

I do not believe in immediate listening, immediate vision or reading. I believe in the necessity of slowly penetrating phenomena. We sometimes think we have understood everything, but we have only grasped the most external elements (Luigi Nono, in Albèra, 1987, authors translation).

The third doing of the workshop connects to the act of recording and its potential for repeated live and mediated listening. Considering Nono's comment quoted above, listening, in the context of analysing this workshop practice, should be understood not as an instantaneous act but as chain of actions: recording – listening – taking notes – listening again – annotating – performing – recording – re-listening etc. A contour of this layering of listening emerges if one combines the evaluation of the workshop recordings with Nono's notebooks from the same sessions, where differently coloured pens have been used to differentiate the time of inscription (see Example 11).

Following the premise that the notes were produced at different times, each colour represents a 'generation' of listening and listening notes.¹⁶¹

- (a) First-generation notes (blue) typically contain contextual information like mic placements, dates, names of sound types, ranges, and dynamics. These are likely made 'as they happened', scribbled during the studio conversations as mnemonic aids for later use.
- (b) Second-generation notes (black) appear mainly as signs, arrows or markings that imply selections, priorities, sequences, or transitions between sound typologies described in first-generation notes. These can be trials of improvised sections of combinations of materials or coarse transcriptions of Fabbriani's improvisations conducted by Nono after the recording sessions. This second layer of listening may have taken place either in the studio, playing back the recording in pauses, or at later points when the material was revisited or re-evaluated.
- (c) Third generation notes (red) contain clear priorities of elements or fragments of musical notation or text-scores. Likely added at the end of the workshop period, or during review of materials for later rehearsals.

The layers of listening found in these three generations of notes, could be thought of as representing an increasing degree of formalization of practice. But Fabbriani's performing and re-performing could also be thought of as having an increasingly structuring effect. The act of sharing these parallel situations, of working together to develop a shared aesthetic through trial, error and evaluation, could be seen as being the formalizing process of the workshop. This is emphasized by the collaborative possibility that lies in recording technology: the 'live' listening of the three participants, Fabbriani, Nono and Zuccheri, was pre-conditioned by their different roles and functions in the studio. The performer is occupied with playing, the technician minds the technology and the composers is preoccupied with documentation. However, they all engage in a form of critical listening. But the 'mediated' listening allows all three to review the recording from a detached perspective, sharing opinions and ideas for how to improve or continue the work.

161 The different layers of this page are inscribed by the same hand but with different pens (blue, red, and black). Most of the text is written in blue, whereas comments, crosses and underlined sections are black. Additional underlined parts, square boxes, brackets, and single and double arrows are marked in red. The use of colour appears functional, as designating selections and combinations that would be very difficult to articulate during a first listening. Most likely, the different colours represent edits made at different times. Considering that the blue pen represents the actual notes made on 1 December 1980, the markings in red and black may be comments, priorities and selections made at two later points in time. The double and triple brackets in red could then identify Nono's priorities for areas for future work, whereas arrows could identify possible connections or transitions between material types.

If the ongoing moulding of sound through adjustments and priorities made in the moment through dialogue were only partially documented in the notation, one could imagine that the quality of the composer–performer interaction allowed Nono to refrain from encoding a complete rendering of this practice into the score. This could explain the paradox between the rich sound world of *Das atmende Klarsein* and its ascetic notation.

The different types of performances embedded in the workshop, is thus the prime product of the workshop; the notes and notations thereof are rudimentary representations of different activities, necessary for being able to easily return to a material at a later point.

16.7 Inclusion and exclusion of material

Nono and Fabbriani continued their work in Freiburg shortly after their Milan session. However, these recordings differ greatly from the Milan tapes, as synthetic electronic sounds such as ring modulation, delay, filters and a harmonizer now accompany the bass flute.¹⁶² Perhaps spurred by the possibilities of new technology, the level of activity in Fabbriani's playing is higher, the sonic fabric is denser and more exploratory than we find in the Milan tapes. It is reasonable to assume that Fabbriani responded to the impetus provided by electronic technology with new improvisational tactics and material choices. Impett describes this process as a form of capturing 'the intimate physicality of performance' (Impett, 2019, p. 369).

After the première of *Das atmende Klarsein*, Nono, Fabbriani and Haller would all refer to the developments in this workshop as a side-track. Taking the distinct differences of material into account, this distancing is understandable. As one listens to the extroverted and somewhat noisy performances of the first Freiburg session, they make a clear contrast to the concentrated playing and subtle use of electronics found later. While the output of these experiments was gradually filtered out in the process of creation of *Das atmende Klarsein*, they illustrate an essential feature of this kind of compositional development. Through trial, an electronic extension of the instrumental sound was tested. After repeated attempts, it was found to be too coarse for the aesthetic under development, effectively delimitating a whole category of instrumental playing styles and electronic sounds. These paths were considered, but not chosen. This is not to say that these experiments were failures. Within an empirical compositional form such as this one, delimitation through trial-and-error is an important tactic for defining both material and form.

162 The computer controlled analogue electronics of the Strobel Institute are well documented (Haller, 1995; Biro, Stratz and Heusinger, 2019).

The original manuscript of the solo bass flute part of *Das atmende Klarsein* also testifies to a prolonged development period. While the notation of the flute part was largely finished by the première in 1981, the manuscript continued to be edited throughout its many performances, with erased sections marked in red and black, respectively (see Example 12).

[RF]: *Das atmende Klarsein* is the first of Nono's compositions of the 1980s which bring us to *Prometeo*. The bass flute part underwent several changes and cuts with the various executions, and the handwritten flute part testifies to this transformation.¹⁶³

Almost every bar of the part has one or more such changes or cuts, a transformation that Fabbriani claims stems from the concert performances rather than the workshop process. Considering that the piece was featured in concerts at least seven times between 1981 and 1986 before a 'stable' version was established, this seems a plausible claim. On this basis, the development process of *Das atmende Klarsein* could be considered as having one cumulative and one subtractive phase, where materials and decisions are revisited in a reiterative manner, exposing the same material for repeated articulation and refinement.

163 All extracts marked [RF] from Habbestad and Fabbriani (2019).

Fabbriciani elaborates:

[RF]: The first draft of *Das atmende Klarsein* was full of sound events. Even the succession of flute and choir movements was different. Materials became thinner and thinner with each time and execution.

[RF]: I remember that in the first draft of *Prometeo* certain parts of *Das atmende Klarsein* were included in the score. The score would be reduced after the executions, and many parts would be eliminated.

These descriptions confirm concerts as sites for compositional listening, as vehicles for continued material refinement and reduction. Thus, the concert performance become part of a distillation process, where increasing sparsity of material corresponds to an intensifying of its significance.

16.8 Revisiting the doing of *Das atmende Klarsein*

Together, the four kinds of doing described over the previous sections make out a loop of input, reflection, revision and new trials of refined input, up until the point of the existence of a score. This systematic aggregation and refining of material continued after the manifestation of a performable version of the composition, a fact that corresponds with several reports that indicate Nono being increasingly dissatisfied with the process of scoring sound. As Fabbriciani describes, several of his later pieces were premiered with provisional parts, executed by the performers following the composer's cues and directions in concert. Only later would a score be devised, based on the recorded performance and available notes.

Fabbriciani explicitly claims a degree of influence on these processes:

[RF]: But this was the same for other pieces, all pieces at the time had an incomplete score. Very often, Nono only had the pillars, and I had the windows, the balconies. What I mean is that the building is something we made together, and the score is only later completed with all the material. Because the compositional process is like ... 'Roberto, I don't like this, that one's okay, no, play again' and *this* is the compositional process (Habbestad & Fabbriciani, 2019).

This form of collaborative deformatizing of the compositional act is significant, particularly within the context of 1980s musical modernism. Nono's conception of 'work-in-progress' appears to be geared towards extending or opening the act of composition itself, more than any form of return to compositional re-formulation.¹⁶⁴ His refusal to stop listening – engaging, experiencing and evaluating – produces a continuation of the act of composition, extending the site of composition far beyond the composer's desk: first into the workshop, then into rehearsals and concerts, before returning to new workshops and rehearsals and further concerts in a cyclic movement broken only by pragmatics. This dialectic movement between different modes of performance and composition resist the categorization offered by Schechner's performance theory. Instead, a nuanced understanding of the different performative tactics is needed, emphasizing the plasticity of this practice.

16.9 Composition as directed emergence

The aggregation of sound materials from the workshops described here combines a systematic search with open-ended experiments followed by evaluation, revision, and selection. The coexistence of different tactics for engaging with musical material is a central feature of this search for sonic possibilities, where improvisational, experimental, scripted and notational modes are subsumed in one practice of composition. The collaborative nature of this process, and its variable degree of structuring, evolves into an aesthetic in which Fabbriani's 'doing' – what Nono referred to as 'what you always do' – constitutes a central component. These habits, preferences, skills and insights into flute playing were subject to a process of modification, an intended but unscripted transformation of Fabbriani's agency into a conditioned behaviour and sound. I propose to describe this complex loop of interaction between composer and performer as a form of directed emergence.

The four kinds of performative tactics extracted from the workshop documentation are analysed separately, but their interaction should be emphasized. All the different kinds of doing, as well as their different tactics, influence the others. Furthermore, they indicate how different roles are being negotiated by the composer and performer. In the case of the cataloguing, the instrumentalist initially functions as 'the expert', guiding the composer through possibilities, their motoric and musical contexts as well as their naming and notation. The composer documents, connects and suggests potential connections or dispositions that are revisited and refined through repeated listening and criticism. The flutist suggests, responds, transcribes,

164 As in the version of the concept repeatedly brought to the surface of the new music vernacular of the 1970s by Pierre Boulez.

transforms or reacts. A certain balancing of active and passive roles therefore takes place, a gradual shifting of performer and composer agencies. The exertion of compositional authority from Nono's side is nevertheless explicitly acknowledged by Fabbriani.

Thus alongside the emergence of a gradually more defined musical material, a set of stylistic preferences, sound sensibilities and ideals come to light. This modification process could be seen as an emergence not only of a piece of music, but of a way of talking, thinking and acting with instrumental and electronic sounds. This dual process was not necessarily linear or organic, as experimentation and elements of unpredictability or instability were seen as essential qualities. Sequences, movements or versions were therefore tested and put under pressure in concerts, placing the sounding composition and not its formal abstraction at the centre. The primacy of listening in this complex composition model arguably draws composition and performance closer together, as integral parts of the same activity. In this perspective, the question of authorship to the different types of material produced in the workshop is highly problematic. But in light of the material discussed in this chapter it is difficult to imagine the development of the flute part of *Das atmende Klarsein* without the active participation of Roberto Fabbriani.

17 Re-doing a workshop process for *Das atmende Klarsein*

The previous chapter draws on the combination of extensive archival study and multiple concert performances of *Das atmende Klarsein* and *Io, frammento di Prometeo* by Luigi Nono.¹⁶⁵ The experience of performing these solo parts is key to the process of analysing the workshop recordings and underpins the identification of the four types of doing. But my own experiences as performer remain by and large unarticulated in the text.

As the current chapter turns towards questions of how contemporary performers can make use of knowledge from Chapter 16, the previously tacit role of the researcher-subject gradually surfaces. The direct experiences of practising, workshopping, performing or experimenting with these musical materials is given a more evident presence.

Starting from Fabbriani's concerns about a reductive tendency in the way Nono solo parts are realized (see Chapter 13.3.2), the experimental workshop process reported in this chapter takes as its premise that the compositional and editorial genesis of the score of *Das atmende Klarsein* has led to a degree of loss in performer agency. With increasing distance from the original artistic context, a certain smoothing out of the richness found in the practices originally embedded in the piece is not surprising. But however understandable, this homogenization is problematic both from an aesthetic point of view and an ethical one. First, it can be seen as detrimental to an attempted continuation of Nono's aesthetic ideals, in which the performer's ability to negotiate the conditions of the score in the moment of performance is considered crucial. Secondly, it arguably contributes to an erasure of performer contributions to music history. Both aspects motivate my choice to creatively revisit elements of the original workshop process.

Over the following chapter, I argue and exemplify the ways in which performer realization of *Das atmende Klarsein* can benefit from partially bypassing its score, in favour of engaging with its recorded tape part. A comprehensive approach has been developed to integrate both materials and development tactics from *Das atmende Klarsein* into the improvisational practice and general performance of a contemporary flutist. This process affords a way to increase familiarity with both the score and sound materials of *Das atmende Klarsein*, while providing the possibility of gradually increasing the agency of the instrumentalist. This imperative of practice, a call to directly engage with the doing of Fabbriani–Nono, is the

165 *Das atmende Klarsein*: Borealis festival, Johanneskirken, 12 March, 2007, Bergen.

Das atmende Klarsein: Ultima festival of contemporary music, 17 September 2010, Oslo.

Io, Frammento de Prometeo: Håkonshallen, Festspillene i Bergen, 31 May, 2011, Oslo.

Io, Frammento de Prometeo, Trefoldighetskirken, 6 September, 2013, Oslo.

argumentative hinge that connects the source-based analysis of Chapter 16 with the artistic research methods of Chapter 18.

The chapter starts by clarifying the role of a particular tape recording from the Milan workshop (17.1). This consideration of the status of the Nono–Fabbriciani workshop recordings is necessary to proceed with a review of strategies for exploring and re-doing elements of this very process (Chapter 17.2). Chapter 17.3 presents and discusses different strategies for a reworked version of the final movement of *Das atmende Klarsein*, whereas 17.4 presents perspectives on this creative engagement with the composition. Finally, in 17.5 these ideas are enriched with perspectives from a last session of archival work, leading to a proposition for future performance tactics. The workshop experiences are summarized and reviewed in 17.6, the concluding section of the chapter.

17.1 Elevating a recorded performance

The introduction of a tape part in the final movement of *Das atmende Klarsein* came about at a relatively late point in the development of the piece. Comprising an unedited recording of an improvisation by Fabbriciani from the Milan workshops in 1981, its purpose was to act as a sonic counterpoint to the performing soloist's live improvisation. What warrants the central status afforded this particular recorded performance, both in the historical context of the making of *Das atmende Klarsein*, and in the contemporary context of re-doing its workshop process?

Particularly for *Das atmende Klarsein*, the embodied knowledge of the improvising performer is woven into the composition both implicitly (through the workshop process of generating material) and explicitly (through the inclusion of Fabbriciani's recorded improvisation into movement 8. This double integration of performance into the compositional structure of the work reinforces the rationale for re-doing elements of the workshop process today.

Compositionally speaking, this 'return to Milan'¹⁶⁶ could be seen as an effort on Nono's part to anchor a previously open improvisation in the last movement to a defined material and style. Thus, the expansive sound world of the flute part is given a degree of uniformity from concert to concert as opposed to a more open-ended solution. Of equal value to this structuring consequence, however, is the metaphorical capacity of this inclusion. The use of the tape represents a mediated folding of the initial sounds, as played, heard, and listened to by Fabbriciani and Nono, into the very fabric of the piece. This reintroduction of elements from

166 See Chapter 14.

the starting point of Nono's and Fabbriani's collaboration becomes a poetic reflection of the working process – a reflection that also exposes the final movement of *Das atmende Klarsein* as the raw centrepiece from which the compositional whole was later cut.

The logic of this construction is under-communicated in the score published by Ricordi. Here, movement 8 is labelled as an improvisation over the material found in movement 2.¹⁶⁷ This makes sense in a simplified and pragmatic way: the performer is asked to study movement 2 and then improvise on that material. However, taking the chronological development of the composition into account, movement 8 represents the material foundation of the entire development process, not its end point. As we shall see, the composed movements (2, 4 and 6) have inherited the material found in the taped part of movement 8, *not* the other way around.

Turning to the tape as a primary source in the context of a re-doing therefore makes sense on several levels. Fundamentally, the tape provides an instant overview of the relevant material. Practically, engaging with the sound of the workshop practice directly rather than through its diverse notated outputs allows the performer to be assimilated into this sound world.¹⁶⁸ Aesthetically, it also observes the attention given to the listening, adapting and refining of instrumental sound in a workshop situation. More than a tool to provide access to claims of authenticity, this approach allows for both emulation and experimentation with processes that contributed to the development of the performer agency described by Fabbriani.

17.2 Four strategies for exploring the sound world of *Das atmende Klarsein*

In order to explore different approaches to engaging the elements of the solo part of *Das atmende Klarsein*, I set up a workshop with Dutch composer and sound spatialization specialist Wouter Snoei.¹⁶⁹ Two main goals persisted throughout these sessions, both rooted in performative concerns.

The first goal was for me to develop a closer relationship with the *Das atmende Klarsein* sound material through improvising and experimenting with relevant instrumental techniques. The second was to develop and record material for the realization of a new tape for *Das atmende Klarsein*, based on the work of Nono and Fabbriani in 1980 and 1981.

167 See Nono, L. (1991/2005). *Das atmende Klarsein*. Milan: Ricordi

168 Arguably the score is a secondary expression of the sounds developed in the workshops.

169 Held at NMH, the Norwegian Academy of Music and NOTAM, Norwegian Centre for Technology, Art, and Music, both in Oslo, October 2015.



Figure 16: Oslo workshop photo

Both these goals were attempts at solving what I saw as challenges to present-day performers' ability to engage with the composition in a way that respected the different types of doing of the Fabbriciani–Nono workshops. Not only did I wish to become fluent in their sound world, I also wanted to attempt to embody elements of their working process to see how that could inform or condition the degree or kind of agency in my performance.

The workshop developed in a step-by-step manner favouring exploration rather than fixed structure. An approach would be discussed, tried, evaluated, and then adjusted, before moving forward. A review of the logs, notes and recordings from this workshop reveal four distinct tactics that make out a comprehensive approach for integrating *Das atmende Klarsein's* materials into the improvisational practice of a contemporary performer. This process can be of value to other performers of *Das atmende Klarsein*, but it also functions as a model for use with other compositions of similar construction.¹⁷⁰ In hindsight, the narrative account of these events appears schematic and reductive compared to the experience of part-taking in them.

170 Since the 1980s, composers and improvising soloists have created a vast corpus of compositions together, far too extensive to include in this context. A non-exhaustive list includes Aaron Cassidy/Peter Evans; Richard Barrett/Tim O'Dwyer; Christopher Fox/Thomas Lehn/Alex Dörner/John Butcher/Paul Lovens; Pascale Criton/Silvia Tarozzi; Annea Lockwood/Nate Wooley; Øyvind Torvund/Øystein Moen/Kjetil Møster and Lars Petter Hagen/Gjermund Larsen.



This has served as a valuable reminder that practice and its documentation make out two very different entities. The following accounts for the different tactics employed in the workshop.

Tactic no.1, *Improvisation based on audio score*, used the original tape from the last movement of *Das atmende Klarsein* as an auditive frame of reference. Monitoring Fabbriani's tape on headphones, I followed, copied and phrased together with the original recording. Shadowing, ghosting or parroting are colloquial terms in use within free improvisation communities that describe the application of this tactic in real time (Linson, 2014, pp. 110–11). Although this approach closely respected the original practice, this tactic tended to produce material of limited quality and interest. The defined relationship between taped and real-time performers naturally ties the type of interaction down, with regard to timing, dynamics, material and density. The real-time flutist easily becomes a passive responder to the flutist-on-tape, which results in an unsatisfactory interaction between the two. Three responses to address this problem were implemented: adaptation, negation and open choice. The first approach indicated a very strict following of the audio score, the second asked for a continuous negation and the third allowed for changing approaches at will. The two first approaches were both found to produce results that were too rigid and inflexible, but the last was found interesting.

By alternating the way I related to the audio-score at irregular intervals, a sense of independence was created between the live 'me' and the mediated sound of Fabbriani.

Tactic no. 2, *Improvisation based on sonogram score*, was developed in response to the evaluation of tactic no.1. Replacing the playback of the tape with a real-time sonogram led to a different dynamic between me and the tape. The sonogram allowed me to predict time and intensity features of the recorded sound events visually, information that enabled synchronizing or even anticipating events between the playback and my own sounds. Adapting, negating and open-choice responses to the sonogram were tested, reinforcing the impression from Tactic no.1 that varying the response types was the most musically interesting approach. Compared to the audio score of Tactic no.1, this approach came across as less obstructive, allowing for a freer and more creative response to the time and intensity structure of the tape.

Tactic no. 3, *Improvisation based on Das atmende Klarsein instrumental technique table*, represented a switch from an auditive to a notational approach. Having experimented with diverse ways of following the structure of the tape, we now aimed to focus specifically on the selected techniques used in the score. By employing the notational table of the score as a guide to the sound world of *Das atmende Klarsein*, a new cataloguing process was started.

A single technique at a time was slowly investigated and extended into phrases, gestures and improvised sections. By working from the table rather than the score, material types were isolated instead of occurring within their compositional context. This left me vast room for creative treatment and variation, but demanded restraint and discipline, as it proved very easy to ‘stray’ from the chosen material limitation. Examples are found in Sound example 2.



Sound example 2: Excerpt from material catalogue developed by Habbestad/Snoei

Tactic no. 4, *Improvisation based on Das atmende Klarsein fragments (mvt 2)* was developed as a response to perceived problems with its preceding tactic. The previous ‘cataloguing’ of sounds brought with it a level of detachment from a musical context, which led, at times, to excursions into non-related material. A certain dryness, possibly emanating also from the recording situation itself, became audible in the form of a gradually less engaging and interesting result.

Rather than continuing to expand the catalogue, a solution to this problem was found using short phrases from the score of movement 2 as the starting point for improvised sections. Utilizing the notated excerpt as an impetus for free improvisation preserved more of the compositional context and allowed me to maintain a more restrained phrasing. Having worked rather freely with isolated materials in tactic no.3, a certain level of formal constraint allowed the pacing of materials indicated by the score to be observed much more closely.

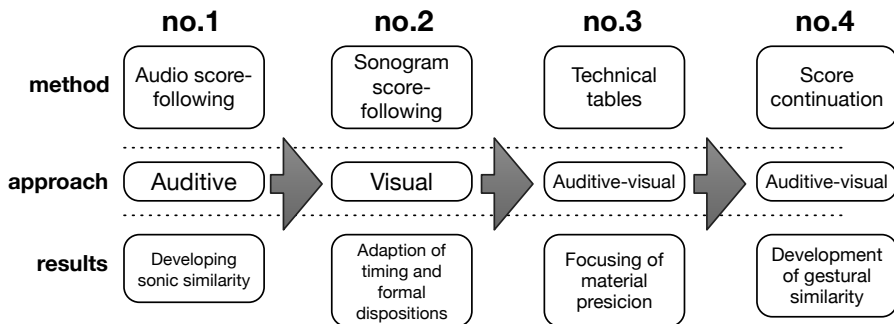


Figure 17: Overview Oslo workshop process, strategies 1–4

These four initial sessions provided very different solutions to what one could call the ‘rehearsal problem’ of the tape part of *Das atmende Klarsein*.¹⁷¹ In the context of improvising with the tape part of the last movement, getting to know the sound world of this recorded element is paramount. However, if one studies it excessively, responding intuitively or spontaneously becomes increasingly difficult. This potential fatigue might produce a performance which is studied or fixed, as opposed to carrying the sensation of risk that Fabbriani identifies as crucial in Chapter 14.3:

[RF]: These parts are not safe, there are many risks that I’m not hearing.

[RF]: And this [risk-ability], this is a special talent that not all musicians have; not all musicians have this skill

[RF]: But it’s also more difficult because you need not only the professional talent for playing, but also the ability to be creative and imaginative, with all its risks.

By choosing approaches that focused on a limited number of musical parameters or behaviours at a time, the potential for fatigue was reduced. Gradually, different aspects of my playing became altered or calibrated. Through listening, imitating and responding to the tape (no. 1), investigating timing and gestural structure of the material (no. 2), the isolation of single instrumental techniques (no. 3) and then applying Das atmende Klarsein’s phrase logic (no. 4), my relation to and sense of ownership of this material grew stronger. Seen together, these strategies comprised a comprehensive approach to embodying the material found in *Das atmende Klarsein*, an approach that easily can be adapted and repeated by others. A sequence of excerpts from these four strategies is available in Sound example 3.4.



Sound example 3: Workshop excerpts – strategies 1–4

171 A similar paradox is articulated by free jazz pioneer Lee Konitz, as he talks about how he ‘prepares to be unprepared’ (Hamilton & Konitz, 2007, p.102).

17.3 Approaching a new tape for movement 8 of *Das atmende Klarsein*

Where the first four strategies had a clear focus on engaging the sounding and notated material of the published version of *Das atmende Klarsein*, two strategies were aimed at experimenting and conceptualizing different approaches to replacing the tape of movement 8.

Two different solutions were considered that would challenge or extend the dynamicity of the composition:

Tactic no. 5, *Fixed media recomposition of Das atmende Klarsein tape*, was an obvious first approach. A classic tape composition realized in a DAW (digital audio workstation), using the most inspired takes from Tactics no. 1 and no. 2 as a core, supported with elements from the catalogue developed in Tactic no. 3. This process, although conducted with digital tools, is quite analogous to tape-based composition work conducted in the radio studios of the 1960s and 70s. While this lent the tactic a certain authentic flair, its conceptual and technical limitations were difficult to accept.

These doubts had their roots in the experiences of performing the piece, where we both found the fixed situation of the tape limiting. How could the compositional need for structure and consistency be combined with a level of risk, immediacy and surprise that could generate more interesting interactions between the live improvisation and the tape? Could the ethos outlined by Fabbriani in Part II be brought to life through using modern technologies?

Tactic no. 6, *Algorithmic recomposition of Das atmende Klarsein tape*, provided one such contemporary solution. Unlike 40 years ago, real-time algorithmic composition is now realizable using a standard laptop. This technology allows the creation of computer programs to select and combine phrases and sounds for playback in real-time, thus creating a new version of the tape for every concert according to predefined rules and preferences. This solved many of the difficulties with lack of interaction between live and fixed media, as I would not be able to anticipate which elements would be chosen from time to time.¹⁷² A level of alertness to the musical now would thus be assured, and staleness in the improvisatorial response to the tape prevented.

Materials for both Tactics no. 5 and no. 6 were recorded during the last day of the workshop, but the necessary software programming was not completed due to time constraints. Different

172 The selection criteria for such an algorithm would have to be based on an analysis of the tape and tested empirically until it would provide a reasonable balance between predictability and renewal.

solutions were discussed by email after the workshop, and we concluded that the design concept of Tactic no. 6 was satisfying, but in need of further attention to balance compositional fidelity and improvisational spontaneity. The Oslo workshop clearly revealed options and possibilities that triggered a reconsideration of the best approach to concerts with *Das atmende Klarsein*, regarding both its preservation of its historical context and potential for future renewal. This open-ended result underlined that this process needed continued development.

17.4 Dialogues with futures past and present

If one takes the introductory claim that performing music means ‘connecting sound, people and history in a compacted, continuous, ephemeral and always contemporary now’ into account, *Das atmende Klarsein* represents a clear reminder of the complexity of the double historicity of music.¹⁷³ How can this duality be expressed within future performances of this composition? Equating Nono’s utopian ambitions with a generic idea of ‘the future’, is a poor response to this challenge. Nevertheless, a performer and researcher of this music faces a temporal dilemma: Which ‘time’ is to be given preference when performing *Das atmende Klarsein*: the time of today or the time of its creation? Should a performer reach for a ‘utopia’ of 1981 or that of 2021? Is authenticity or regeneration the most relevant ideal for this kind of performance?

During archival work at FLN conducted shortly after the Oslo workshop, I found a script from the early rehearsal period of *Das atmende Klarsein*, which provided important clues for continuing the work started at the Oslo workshop. This overview of the final movement also confirms the origin and transformation of the sound catalogues into musical sections, as the material types noted in the script correspond to Fabbriani’s naming convention in the Milan tapes, as well as Nono’s references in notes and sketches.

Fabbriani describes the script as a compressed text-score used by Nono as he executed the live electronics, a mnemonic device where time, structure, materials type and dynamics, as well as speed and direction specifications for the spatialization are given schematically (see Example 14).

In email correspondence (26 April 2018) Fabbriani noted that this also functions as

173 See thesis Introduction

a sort of score of my improvisation because, the interpreter that will play on my improvisation, [needs] a guide that allows him to improvise by supporting or contrasting the recorded flute musically.

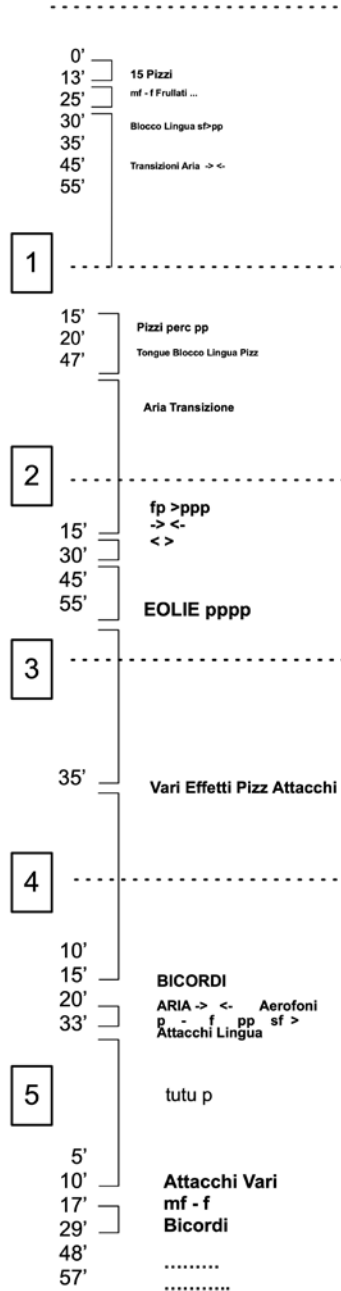
This analysis of the tape is a direct product of the practice of *Das atmende Klarsein*, penned by composer, providing sections, times and cues to its arguably most important elements.¹⁷⁴

The introduction of this single page of information into the research process could be considered a turning point. Not only did it provide a formal expression of an element of *Das atmende Klarsein* that up to this point had been diffusely considered ‘the tape’ or ‘the improvisation’, but it allowed me to revisit one of the unanswered questions of the Oslo workshop: what happens to the perceived temporality of the piece when one replaces the Fabbriani recordings? How is the piece affected by a focus on regeneration as opposed to authenticity?

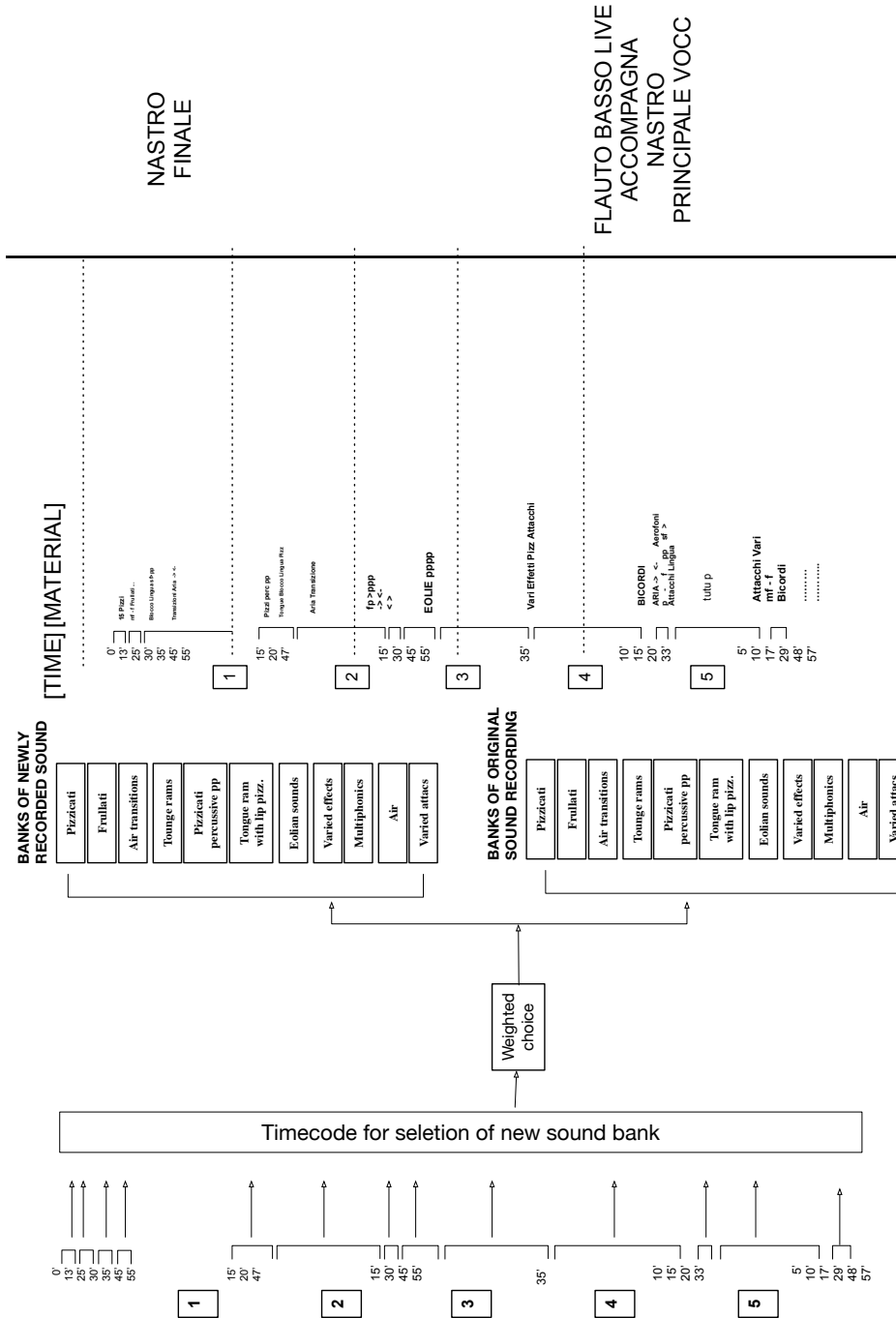
The analysis of this script allowed for conceptualizing a *road not travelled*, resulting in a proposal for the creation of a seventh tactic, devised at the researcher’s desk rather than inside a recording studio.

¹⁷⁴ While it could serve as a very useful performance aid, this script is not included in the revised score published by Ricordi, either for the flute soloist nor the processing engineer. Any future revision of the score of *Das atmende Klarsein* by would wisely include a reworked version of this script.

[TIME] [MATERIAL]



Example 15: Transcribed excerpt from ALN 45.06_007



Example 16: Habbestad, score for realization of algorithmic tape part of Das atmende Klarsein, movement 8 (Tactic no. 7)

A sound bank is recorded for each of the material types indicated in Nono's script:

- Pizzicati
- Frullati
- Air transitions -> <-
- Tongue rams sf>pp
- Pizzicati percussive pp
- Tongue rams with lip pizz.
- Eolian sounds
- Varied effects, pizz. Attacs
- Multiphonics
- Air
- Varied attacs

Using the process from strategies 1–4, a catalogue of possible sounds, gestures and phrases is built up, containing more samples and variants than needed for an execution.

An algorithm is constructed observing the formal scheme of Nono's script. The program gives priority to the corresponding sound banks for the duration of the scheduled intervals, honouring the regional form and general material of Fabbriani's improvisation. The selection and sequence of phrases is, however, determined by the algorithm in real time. The sound, shape, energy and style of each sound or phrase 'on tape' will therefore surprise the performer, who is now faced with the task of responding and improvising in the moment of performance.

To make up for the lack of nuance provided in Nono's rough script, the algorithm randomly includes material from the 'historic' and 'mixed' sound banks. The weighting of possibility for inclusion of this unstructured or chaotic material is controllable in the program with a simple fader, allowing for continuous empirical evaluation of how much historic or unstructured material is desirable. The selection of elements from these banks takes place in real-time, conforming to dynamic indications and spatialization notes given by Nono, while the algorithm will ensure that the resulting tape part will be comprised of new selections and sequences of phrases at every concert.

17.5 Works, workshops and fidelities

The omission and replacement of the authorized tape in Tactics 5–7 represent an intervention into the structure of the composition. Does this direct engagement with the doing of Fabbriani–Nono constitute an ethical or ontological challenge? Considering a ‘strong work concept’ (Nono and Stenzl, 1975; Stenzl, 1995, 2016; Sallis, 2015, p. 178–185) a transformation of the original tape could be considered problematic. A re-arrangement or re-organization of scored elements would be considered inappropriate in most circumstances. However, the particularity and hybridity of this compositional process open a different line of thinking. De Benedictis notes that

composers such as Nono, Berio and Stockhausen not infrequently viewed a performance as a step in the ‘exploration’ (Nono), ‘perfectioning’ (Berio) or ‘normative systematisation’ (Stockhausen) of a text (that is, a work) still in search of its definitive form and codification. (de Benedictis, 2018, p. 198)

She counters this description with the paradoxical observation that

The dialectic of authorship and freedom leads in this way to a paradox that becomes still more pronounced in the case of Nono: in these works, the ‘freedom of interpretation’ of the performer seems indeed to become diminished after the death of their author. (de Benedictis, 2018, p. 209).

Arguably, the role of notation in Nono’s late compositional practice is not fully compatible with the notion of a score as a final and universal expression of a composition. The extensive editing process behind today’s published score, conducted after Nono’s death, is in itself a witness to his reluctance to pinning music down to distinct and unchangeable procedures.

Then, could not an argument be made that fidelity is owed in equal amounts to ‘the practice of *Das atmende Klarsein*’ and its notated counterpart? Nono comments on this original musico-ontological position:

[PA] The day you are gone, what will happen?

[LN] Other musicians will make other music! We still try to fix things graphically, but I said several times that I do not care about the concept of writing! It’s like Gabrieli’s music: he writes ‘a sonar e cantar’ [‘to play and to sing’]. The dynamics, the

tempo, the distribution between voices and instruments are not fixed. The practice that made it real has disappeared.

[PA] But these are secondary parameters in the composition of the time, which differs from your own approach. In reality, you do not attach any importance to the durability of your works.

[LN] Exactly¹⁷⁵

(Albèra, 1987).

If music's durability is of secondary importance to the composer, any concept of *werktreue*, of fidelity to an 'authorized' version, arguably becomes a problematic proposition. Following this line of thinking, the notion of *versione definitiva* – the arrival of a finalized state of a composition – is anathema to Nono's practice, which instead indicates a state of constant renewal. The development of new workshop processes as described in Chapter 17 becomes a logical extension of this position, and an approach to articulate practices immanent to the composition itself.

Over the 40 years that have passed since the start of the Fabbriciani–Nono collaboration, performer influence in the compositional process has become more commonplace, and the conditions for the performer community to continue such development has improved.¹⁷⁶ From this perspective, a renewed version of the *Das atmende Klarsein* tape provides a robust way of continuing the search for Nono's utopia. The strongest and perhaps final argument for interfering with Nono's work in this way is, however, the claim that it allows a present-day performer to do a better job, that is to engage more concretely with the sounds and ideas of both Fabbriciani and Nono.

175 – Le jour où vous n'êtes plus là, que se passe-t-il? D'autres musiciens feront d'autres musiques ! On essaie tout de même de fixer graphiquement les choses, mais j'ai dit plusieurs fois que je ne tiens pas au concept de l'écriture! C'est comme la musique de Gabrieli: il écrit « a sonar e cantar ». La dynamique, le tempo, la répartition entre voix et instruments ne sont pas fixés. La pratique qui en faisait la réalisation a disparu.

– Mais ce sont là des paramètres secondaires dans la composition de l'époque, ce qui diffère de votre propre démarche. En réalité, vous n'attachez aucune importance à la pérennité de vos œuvres.

–Exactement.

176 Note however, that this change is hardly reflected in the curricula of present-day conservatories and music academies, where a more mainstream or traditional understanding of musical composition and development prevail.

17.6 Reviewing re-doing

Turning towards the workshop of *Das atmende Klarsein* as a source for improving and developing my own artistic practice was a natural extension of the archival work, and a decision made to further familiarize myself with the creative process of the piece. It also provided a way to reconcile two important strands in my artistic practice: performing scored, composed music as well as free improvisation. Through experimenting with and emulating elements of the Fabricciani–Nono process, the musical material became accessible in a visceral way, articulated through a dialogical and collaborative approach. It is difficult to see that this level of embeddedness into the sound world of *Das atmende Klarsein* could be achieved through working with notated sections of the piece alone.

The research behind the Oslo workshop culminated in the proposed re-doing of the tape part of movement 8 based on Tactic no. 7, which I argue is a continued articulation of central questions raised in and by this composition. By activating different performance tactics embedded in archived material, rather than the material itself, a new way of thinking and engaging with experimental or empirical musical practices is proposed, a model which could be transferable to other artistic contexts. This model shows references to recent advances within musical forms of artistic research, exemplified in the activities of the research cluster MusicExperiment21 (de Assis, 2015). Here, a Rheinbergian notion of *Experimental Systems* is in use:

Methodologically this new mode [of exposing musical objects] is organised by different but interrelated approaches: identifying and scrutinizing musical ‘things’ that define a given musical work (in the sense of an ‘archeology’); studying their epistemic complexity; extracting them out of their traditional *Umwelt* and inserting them within the confines of experimental systems; and finally, ‘exposing’ them anew, in previously unheard reconfigurations of materials. (De Assis, 2013, p. 152)

In this thesis, the workshop is presented and analysed as a complex sum of actions, a doing that connects language, sound, instrumental skill and listening practice in a way that fundamentally influences and conditions both the making and performing of music, situating the composition of music in a practice that draws heavily on the realm of experimental theatre and performance as articulated by Richard Schechner:

Workshops are ways to destroy ignorance; rehearsals are ways to creatively relate to others not by submerging or ignoring differences but by exploring differences as the group devises a generous common way forward; performances can hold up to public view the outcome of such active research (Schechner, 2015, p.6).

From this understanding of the workshop and its function within the performance process, the idea of using the knowledge developed in Chapter 16 to pinpoint a location where Fabbriani's agency ends and Nono's begins – as if to settle a final score over the influence on the composition of *Das atmende Klarsein* – is beside the point. The collaborative making of this music necessarily obscures the notion of singular authorship.

Again, Schechner's descriptions are helpful aids: 'The workshop is a way of playing around with reality, a means of examining behaviour by reordering, exaggerating, fragmenting, recombining, and adumbrating it' (Schechner, 1988, p. 101). Conceiving of the Fabbriani–Nono workshops as ways to develop and structure not only sound material but also musical behaviour removes the traditional need to single-mindedly chase authorship of objects. This position was also developed by Bruno Latour in his Tanner lecture at Yale in 2014:

(...) the older philosophical tools of object and subject are wholly inadequate to follow the many descriptions, the many accounts that are pouring out of our scriptoria – be they laboratories, offices, studios or libraries. Here, something else is at work, has always been at work, something that does modify the shapes of whichever ingredient you throw inside, much like a fiercely boiling sorcerer's cauldron. (Latour, 2014, p. 100)

To perform or research *Das atmende Klarsein* today without addressing 'the boiling cauldron' of Fabbriani and Nono is to overlook some of its most far-reaching potential, which is why documenting, reflecting, and continuing the kinds of doing found within this musical practice is strongest way forward to both maintain and renew it. The process of re-doing – of emulating and experimenting with the performative tactics of the Milan workshop – provides a novel approach to develop the agency of performers of this music.

18 Re-sounding *Das atmende Klarsein*

This chapter completes the global trajectory of the thesis, which has moved from a source-based to an interview-based and, now arrives at a performance-based methodology. Here the prism of *Das atmende Klarsein* is used in an increasingly fragmented and re-contextualized manner. This final effort to investigate the practice of 'the workshop' also represents the most explicit departure from a traditionally objective researcher position.

How does this modulation of the researcher's position manifest in the text? The first-hand experience of performing *Das atmende Klarsein* was integral to studying, emulating, and experimenting with the Fabbriani–Nono workshop tactics (see Chapters 16 and 17). It was also vital for both the writing of the history of the key click and the analysis of the Fabbriani interviews in Part I and Part II respectively. This chapter, however, turns away from *Das atmende Klarsein* as the output of an artistic practice, to explore the process preceding *Das atmende Klarsein* as input for artistic research and experimentation. With this move, my background in performing the piece, my knowledge from having studied its developmental stages and my experience emulating and experimenting with the tactics of its workshop process, is released into a new artistic venture: a collaboration with visual artist Ellen Røed culminating in *Unarchivings*.

Røed and I launched a sequence of artistic experiments in and around the Fondazione Luigi Nono (FLN), under the auspices of the Nordic Research Pavilion in Venice, in June 2017 (in the following these are referred to as the Venice experiments). Aiming to develop new ways to engage with archival material, the sound of a selected recording from FNL was used as a starting point for a sequence of performative actions or procedures that gradually altered, filtered and finally redefined it. The methodical process tested in this situation became the core of *Unarchivings*.

How, then, is 'the doing' of Fabbriani–Nono and the experimentation of the Oslo workshops reflected in the development of this collaboration? What is the connection between the workshop practices of Fabbriani–Nono, Habbestad–Snoei and Habbestad–Røed? The sequential display of these collaborations and their diverse outcomes is not an attempt to claim sameness, nor to attract either artistic value or canonical relevance. Rather, this accumulation is meant to articulate the potential in the study of a wider range of musical practices, a re-thinking or re-locating of performer agency from the space between a 'work' and its possible 'interpretations' to the fundamental making of musical sound and material. This re-sounding of historic workshop practices connects a creative reuse of archival material with an experimental form of artistic research.

Chapter 18.1 recounts the development, context and execution of the project. The role of the body is discussed in 18.2, and 18.3 discusses the duality of the practice of the archived recording, while 18.4 reviews the site-specific qualities of the project. The integration of documenting and performing is the theme of 18.5, before Chapter 18.6 provides a contextualizing account over different applications of archival interest in artistic practices. 18.7 recounts a critical moment in the execution of the project, and 18.8 summarizes the project, its process and its outcomes.¹⁷⁷

These sections reveal a series of potentially contradictory notions of the archival and its relation to artistic practice. It should be noted that a reconciliation or evaluation of these positions is not the aim of this chapter. Instead, it draws attention to the way workshop practices are extracted, stored and released from both their original and archival context, exposing a rich and complementary range of conceptual resonance. The translation of aural impressions into playing, thinking, filming and finally also writing, contributes to an exemplification of how the skill, memory and body of performers partake in musical creation. The cross-influence between the physically recorded, the aurally perceived and the bodily performed, is thus at the very centre of both this chapter and its ambition ‘to refresh the practice it seeks to understand’ (Crispin, 2016, p. 70).

18.1 Development, context, and execution

This venture started from an invitation to propose a project for re:Site:

“re:Site” is a contribution of the Norwegian Artistic Research Program by six artists and research fellows, curated by Serge von Arx and Ellen Røed. It endeavours to create an open space across the city, consisting of various distinct locations where specific artistic research practices engage with the Venice Biennale. The respective projects inquire and question relationships between art and power as primordial agents in Venice. By subverting the notion of the biennale as an exposition and rather enhancing it as a context of and site for research, the artists and researchers aim to raise awareness of local and temporal environments where art and finance meet and collide.¹⁷⁸

How could the archives of Fondazione Luigi Nono, the historical work by Nono and Fabbriani and the context of the city of Venice function as a frame for artistic research? My prior

177 Excerpts from the dialogue between Røed and Habbestad are available in Appendix 7.

178 ¹ See <https://sites.uniarts.fi/web/research-pavilion-2017/camino-events>

affinity with the archives and the aspects of collaboration that I found embedded in Nono's compositional practice became the starting point for a reiterative audio-visual method for investigating the relationship between memory, performance, recording and site.

The initial trigger for this process was a recording found on the archive's disc 79, track 5, labelled *Prova 2 FREIBURG 1983 (flauto? transposizioni)*. This excerpt is from one of the 'abandoned' early sessions in Freiburg. Two elements were set into play from this recording, namely the workshop tactics of Fabbriano–Nono and notions of space or site found in Nono's later production. These were broken up into concrete actions, forming a loop of site-specific performances, spiralling out from the archival item. This peculiar process of 'studying' was then reiterated three times: first based on the item stored in the archive, then on its subsequently memorized, recorded and performed versions.

I have earlier described Nono's reliance on the workshop situation as an extension of the site of composition, a movement away from the composer's desk towards an amalgamation of the workshop, rehearsal and concert situations (see Chapter 16.7). Elaborating on this notion, we decided to let each cycle of the process be executed in a new site. For each cycle, I would listen and memorize a recording before immediately recording a version of it. For every reiteration, and relocalization, the preceding recording was replaced with the latest version.

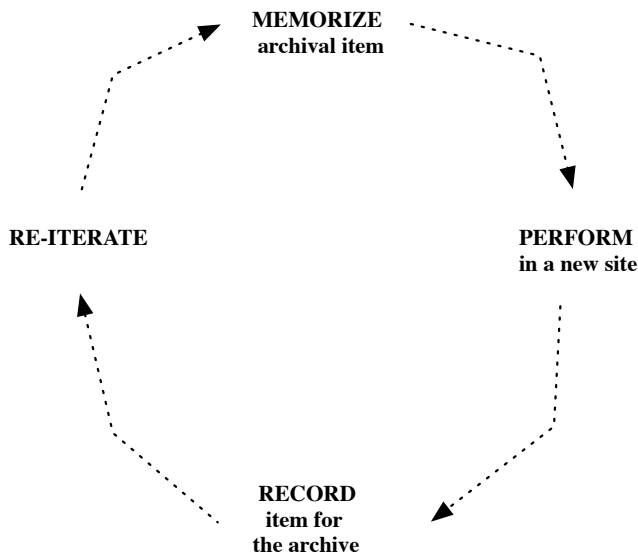


Figure 18: Cycle of performance methods, *Unarchivings*

Each of the four cycles of the experiment thus included elements extrapolated from the doing of Fabbriani–Nono: memorizing, performing, recording, refining. Although my performances in these experiments were conducted from a position of confidence and assertiveness with the sound world and skill set used in the production of the original recording, my memory of the complex sound events of the archived sound file could not be described as absolute. For each cycle, I had to recall the listening while simultaneously activating my skills as a flutist, a repeated process of encoding sound as memory and decoding it as a creative coordination of lungs, lips and fingers. Each attempt would naturally change the conditions for the next, as I gradually became more familiar with the sound and the ritual of performing under these conditions. Simultaneously, for each iteration, I would become further removed from the sound of the original recording.

18.2 Unpacking the archive

The starting point of this experiment is a fragment from a workshop session, the authorship of which is unclear, or at least not signed or scored in a traditional manner. In the absence of a composer, what is the role of the body in a process such as this? Or, more precisely, what is the role of *my* body, and what kind of practical and ontological status does this form of artistic research claim for it?

The notion of the body as both container and generator of elements of artworks is commonplace within the dance field. Here, the challenge of inscribing, storing and recalling choreography with one's body is central to the practice of contemporary dance professionals, and its economy a subject of artistic and academic research (Lepecki, 2010; Schuh, 2019). Comparably, this integration of performance and creation is discussed less frequently in music, although the practice of composers such as Annea Lockwood,¹⁷⁹ Eliane Radigue¹⁸⁰ and Pascale Criton¹⁸¹ are examples of transparent forms of collaboration or co-authorship (Criton, 2017). Within dance, the making of the *body-archive* and use of the *body-as-an-archive* is often one integrated process, spread over months of focused development and

179 New Zealand composer Annea Lockwood studied in London, Darmstadt, Cologne and Holland in the 1960s. Active in the US since 1973, she is Professor Emerita at Vassar College. Her work *Becoming Air* (2018) for trumpeter Nate Wooley is an example of such transparent co-authoring.

180 Eliane Radigue studied electroacoustic music techniques with Pierre Schaeffer at Radiodiffusion-Télévision Française (RTF), later working as Pierre Henry's assistant at Studio Apsome. After focusing solely on electronic music, her compositional output from 2012 and onwards is built upon different forms of co-authorship of acoustic works.

181 Pascale Criton studied composition with Ivan Wyschnegradsky, Gérard Grisey and Jean-Etienne Marie, receiving electro-acoustic training at CIRM (International Centre for Musical Research, Nice) and IRCAM. Through close collaborations with dedicated performers, Criton has developed a highly personal but also flexible composition method.

rehearsal. Although such extended rehearsal situations are less common in music, the workshop processes surrounding Nono's output in the 1980s arguably has parallels to those of contemporary dance practices. The recordings from the FLN analysed in Chapter 16 furthermore indicate that not only the tapes themselves but also performers such as Roberto Fabbriciani could be seen as 'archives' for elements of a composition process; a subjective storage of preferences, behaviour, ways of tuning in, listening and adapting to musical sound and so forth.

Following this thinking, one could conceive of the site-specific performances in the Venice experiments as a form of personal or subjective archiving, as sediments of practice, stored in the performing body. If so, this was an archive rigged for failure. Like Nono's listening and re-listening, manifested in differently coloured pens in his notebooks (see Chapter 16.6), the layered listening conducted amid these experiments was neither linear nor transparent. The combination of the changing conditions of the sites and more traditional experience of pressure known from concert situations, created new variables which continuously accumulated into small but new results and insights, highlighting different aspects of what was heard. By identifying and accumulating sequences of sounds and techniques, their intensity and density, and combining them with my stylistic and instrumental knowledge, elements of the original archived recording were transferred from iteration to iteration. But alterations were also introduced in small steps, gradually changing the materiality of the sound through each iteration. More abrupt changes would also insert themselves, following mishaps in execution or momentary lapse of concentration due to disturbances. Furthermore, the accumulative structure of the process would cause the memory of the sound and its recalling to occasionally come out of sync. The conscious meta-management of handling these mishaps generated its own new material, as immediate responses or solutions to disturbances or transformations deemed necessary in the moment. The storing of these aural impressions, the physical act of recreating them, and the processual generation of new material gradually became inseparable. As such, the role of the performing body in the project became that of a generator of new practice, rooted in historical study and critique of previous processes and archives. Following this, *unpacking* is a stronger metaphor for the activities of the performer in these experiments than either *storing* or *archiving*, a re-introduction or re-insertion of the archival item into a new artistic context and practice.

18.3 Querying the item, querying the body

The above conceptions of a subjective, bodily form of archiving contrast or contradict those found in institutional or critical theory. Archives, according to Derrida, are domiciled, tied to both a localization and their guardians, entitled with hermeneutic privilege and power (Derrida & Prenowitz, 1995, p.10). At first, *Unarchivings* might seem to be aimed squarely at challenging such privilege. The apparent transformation of control over the archival item from the archival institution to the artist-researcher, is emphasized if one chooses such a Derridean reading of the project: gradually, from one iteration to the next, the artists establish a new archive, metaphorically and literally branching off of the FLN.

However, such an interpretation risks ignoring the connection between the elements at play. The entanglement of the agents involved in this process: the artists, tools, archive, sites and tactics – even the ritual aspect of the event – could be conceived of as having a form of agency in the process. Using a Latourian perspective drawn from Actor-Network Theory (Mol, 2010; Latour, 2014; Piekut, 2014), this complexity points away from any form of monophonic conceptual critique, towards a heterophony of voices that influences the artistic experiments set into motion. *Unarchivings*, seen from the perspective of one of its creators, is less conceptual art and more corporeal cognitive practice, to paraphrase Donna Haraway (Haraway, 2016, p. 277).

Within this complex of actions, elements and contexts, can one separate the archived item from the experimental practice? The short answer is no. The archived item is never heard in its original form by any other person than the project's flute player. Nevertheless, it connects the contemporary acts of Habbestad–Røed to the historical practice of Fabbriciani, Nono and Haller, if only in a ephemeral manner. The transportation of the archived object from a digital to a performed medium is a metamorphosis that entails a synthesis of two gestures: with the one hand, the revelatory act of exposing the 'hidden' archival item, and with the other its immediate and successive transformation into 'a new artwork'. These seemingly contradictory movements re-enforce the conceptual connection between past and present, between the 'quotation' of previous tactics and the 'generation' of novel sounds. The process is thus a material generative mechanism, the aim of which is a re-sounding of the function and scope of performer agency found within a historical practice, not the reanimation of a specific work, nor a specific sound file.

18.4 Implicating space

So far, the project involves the unpacking of an archived practice, the transporting of the sound of a historic workshop practice as filtered through the body of a performer, conditioned by studying, performing and analysing the workshop processes behind *Das atmende Klarsein*, a work composed by Luigi Nono. Accepting that this experiment as a staging of a musical ‘conflict’ between notions of practice, archiving and performing, why is the project located in the streets and canals of Venice and not in a controlled studio environment?

Venice’s ambience was an essential source of influence for Nono: the particular acoustics of canal life, the proximity to ship traffic, and the very topography of the Venetian lagoon and its archipelago form a sonic undercurrent that is referenced in many letters and interviews (Nono & Stenzl, 1975; Nono, Benedictis, & Rizzardi, 2001).¹⁸² The gradual relocation of our experiment was derived from a wish to extend the role played by these hitherto implied sites; not as historical backdrops or a reference to the creative myth of the composer, but as structuring environments that would act, filter, shape and influence our research process in a substantial way. How and why could this co-exist with the notions of archiving and performing presented until now?



Figure 19: Map over performance sites 1–4, Habbestad and Røed, *Unarchivings*

182 These references also resurface in the Fabbriciani interviews of Part II and in his own article ‘Walking with Gigi’ (Fabbriciani, 1999).

On the one hand, the stepwise transferral and transformation of an item into the public sphere could be read as a theatrical gesture, as an effort to ‘liberate’ the sound of an archived recording, echoing the Derridean reading proposed earlier. While the act of removing an item by means of a musical experiment – a staged ‘escape’ through aural transmission – hardly could be considered a rebellious act, it does represent a breach of academic norms and conventions (Muxeneder, 2004, p. 32). The symbolic implication of a performer instigating unauthorized engagement with archived material could also be considered subversive to an archiving institution. On the other hand, as no misuse of materials took place and no copyrights were infringed, can one even conceive of an ‘escape’ when only a memorized impression was taken out of the building?

Despite the absence of a smoking gun, legally or morally, there is a dynamic at play between ‘the institutional’ and the ‘subjective’ in the project. Theatre and performance scholar Nick Kaye presents an understanding of site-specific art practices as ‘articulate[ing] exchanges between the work of art and the places in which its meanings are defined’ (Kaye, 2008, p. 1). Kaye’s descriptions of transactions between the different elements of an artwork and the places they inhabit, is a powerful metaphor to explain this dynamic. In our case, reciprocal exchanges of meaning and influence could be seen on several levels: explicitly, between the sound of each generation of the action and the sites in use, implicitly, between the practice of Røed–Habbestad and Nono–Fabbriciani, and conceptually between the notions of ‘the archive’ and ‘the public’, between ‘art’ and ‘research’ and also between ‘the historic’ and ‘the contemporary’. One might also add one last transactional axis, between ‘contemporary art’ and ‘new music’.

This sets up a tri-part relationship between objects, events and positions. Paraphrasing Kaye’s position cited above, one could say that the Venice experiment unfolded through the properties, qualities and meanings produced in specific relationships between:

- 1) an ‘object’, in our case, the original recording of Fabbriciani, stored in the FLN;
- 2) an ‘event’, in our case the listening-performing-recording repeated by Habbestad and Røed;
- 3) the ‘positions’, the FLN and the range of sites used across Giudecca and Zattere.

These relationships span a focused listening session at a researcher’s desk in the FLN; the immediate recording session in a makeshift studio set up in the kitchen in the Research

Pavilion one floor up; listening-recalling-recording outdoor in the back-alleys of Calle Lunga dell'Accademia dei Nobili while chatting adults, shouting school children and the clatter of rolling suitcases made random contributions; playing and listening in the sun and breeze from the waterfront off Campo Junghans; and a surprising meeting between sound, audience and stored gondolas in the garage at Magazzini del Sale, converted, or perhaps 'activated' as Kaye would say, into something new, through sound.

Understood either as staged 'escape' or as conceptually charged animation of selected sites from Luigi Nono's home turf, these actions were repeated, premeditated experiments of the same sequence, tried and tested against different places: Listen – recall – perform – record. Working in tandem with the fissures in my ability to completely recall the memory of the archived sound, each of these transactions contributed to the original recording's accelerating erosion, and the gradual emergence of a new and independent artwork.



Sound example 4: Excerpt from Unarchiving, the Venice version

18.5 Capturing agency?

What is heard in the previous excerpt? What is the role and status of these sound files in these experiments and in this thesis? The use of recording technology appears to both enable and inhibit the process of erosion identified above. This offers the opportunity to reflect on how and why the distinction between doing and capturing might influence the meaning of musical performance.

The ontological status of art music is only occasionally challenged by transferal to recorded media, as many composers find that the ultimate rendering of their music is presented in a recorded format, typically void of the flaws and misdoings of live performance. Luigi Nono's disregard of the ability of recording technology to capture the essence of concert performances is a relatively rare exception (Albèra, 1987). Nonetheless, the relationship between liveness and documentation is an area of much dispute in other areas of the performing arts, particularly

so within performance art where documentation in the form of photography or videography is thought to represent a breach of the very foundation of the practice.

Performance's only life is in the present. Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representations of representations: once it does so, it becomes something other than performance.

...

To the degree that performance attempts to enter the economy of reproduction, it betrays and lessens the promise of its own ontology. Performance's being, like the ontology of subjectivity proposed here, becomes itself through disappearance. (Phelan, 1993, p. 146)

Note that the fleeting and ephemeral nature of performance art, its ability to disappear, are made into central qualifiers. The irrefutability of the present tense, the absolute value of now, is made an imperative value for the art form. Together with the indistinguishability of artist and material, this quality makes out the foundations of what Fischer-Lichte calls the 'performative generation of materiality' (2008, p. 75).

What is achieved by viewing the use of recording technology in *Unarchivings* through the lenses of performance art theory? First, it offers an approach to valuing, rather than fearing or containing, the ephemerality of musical performance. Understanding music as essentially ephemeral is relatively rare in most philosophies of music, which tend to rely on either scores or recordings as tokens of musical essence. However, Anthony Gritten attempts to situate a specifically musical performance philosophy which could support such thinking:

the performativity of musical sound is to be found in its transitory phenomenology, in its temporary presence, in its paradoxical failure to hang around and perform, in its permanent exiting from the stage of performance, its relationship to the public agora (Gritten, 2020, p.103).

This positioning draws a musical performance philosophy, if not music itself, towards the ethos of performance art, embracing the transience of the art form – its promise of disappearance. How is this transience reflected in the use of recording technology? In the case of the Venice experiments, each site-specific performance was thought of as an intermediary stage in a process, and not an end in itself. Therefore, the recordings were not conducted to enter these performances into an external 'economy of reproduction' but to temporarily suspend

the moment of performance for the performer, allowing for a re-localization to the following listening-, performing- and recording-site. Arguably, this locates the function of reproduction in these experiments in performance itself, and not in the act of recording. From this argument, it is questionable if these recordings can capture the agency at play in these situations.

A second perspective drawn from performance art theory is an understanding of the creation of musical materiality as internal to the moment of performance. From this position, the flute performances in the Venice experiments becomes a form of situated practice, generating new aspects, qualities and layers in a particular sound material or performance type through a very specific procedure. In this perspective, *Unarchivings* could be seen as a proposition to radicalize the role of performance and performers in the hierarchies of new music.

18.6 Making, using, and thinking the archive

How can one understand the relationship between concept and content in this collaboration? How does *Unarchivings* resonate with other artists that venture into notions of archival practice? Archival presentation forms and materials are spread across the artistic practices of the twentieth century. Early examples include Duchamp's experiments with the standard metre in *3 Stoppages Etalon* (1913–16), the literary archives of Walter Benjamin's *Arcade project* (1927–40), Marcel Broodthaers' fictional objects from *Museum of Modern Art, Department of Eagles* (1968), Bernd Alois Zimmerman's use of broadcasting archives in *Requiem for einen Jungen Dichter* (1969), and Mauricio Kagel's *Exotica* (1972), where non-European instruments in a museum collection of are re-used within an experimental music paradigm.

The writings of Foucault and Derrida (Foucault & Miskowiec, 1986; Derrida & Prenowitz, 1995) spurred a second wave of artistic interest in the archival. Since art critic Hal Foster identified an 'archival impulse' within visual arts in an essay in *October*, landmark exhibitions and biennales have confirmed his description of archival art as a genre that 'make[s] historical information, often lost or displaced, physically present' (Foster, 2004, p.4). Enwezor's *Archive fever* from 2008, Christov-Bakargiev's *dOCUMENTA (13)* from 2012 and Massimiliano Gioni's two biennales in Gwanju, 2010 and Venice, 2013, all exemplify curated exhibitions organized around notions of archives and archival artefacts.¹⁸³

183 Exemplary artworks from this period include Ilya Kabakov's *The Garbage Man* (1988), Tacita Dean's *Floh* (2008), Atlas Group/Walid Raad's *We Can Make the Rain But No One Came To Ask* (2008), Christian Marclay's *The Clock* (2010) and Thomas Hirschorn's *Gramsci Monument* (2013).

Artist and writer Uriel Orlow offers an approach to mapping and sorting such interest in the archival, establishing three categories of artists: ‘archive makers’, ‘archive users’ and ‘archive thinkers’ (Orlow, 2006, pp. 34–35). This distinction is made primarily with references to the areas of film and video art, but its simplicity makes it a pragmatic tool for reviewing the interest in the archival within musical arts.¹⁸⁴

Musical archive *users*¹⁸⁵ form a large group, as quotations, anniversaries and homages are embedded within the cultural fabric of the music. A recent example is the series of workshops, lectures and commissions drawing on the archives of The Internationale Musikinstitut Darmstadt (IMD), realized in conjunction with their seventieth anniversary.¹⁸⁶ Mauro Lanza and Andrea Valle’s *Systemae Naturae* (2013–18) for instrumental ensemble and computer-controlled mechanical household objects is one of many examples of archival *makers*.¹⁸⁷ Organized as a systematic report of an unknown environment, each entry makes out an extensive catalogue of fixed-length pieces dedicated to imaginary animals, minerals and plants. Orlow’s last category is archival *thinkers*. These are artists engaged in deconstructing the notion of the archival itself, ‘reflecting on the archive as something which is never fixed in meaning or material but is nevertheless here, largely invisible yet at the same time monumental, constantly about to appear or disappear; latent’ (Orlow, 2006, p. 35). Examples here are perhaps less frequent than in the other two categories, but Arnold Dreyblatt’s biographical series *Who’s Who in Central & East Europe 1933*, Jennifer Walshe’s fictional archive of Irish experimental music, *Aisteach* and Tarek Atoui’s use and re-use of musical instruments in an ethnographic museum, *The reverse sessions/The reverse Collection* (2014–16), are among the many projects that answer to Orlow’s category.¹⁸⁸

184 Note that neither Orlow’s categories nor the following examples are meant to be exhaustive or mutually exclusive. Rather, these groups serve as headlines for practices not separated by rigid borders. An in-depth analysis of musical interest in the archival would necessitate further consideration of the translation of this taxonomy, in which the influences of quotation, memory and performance in musical practice would need to be addressed.

185 Orlow refers to *archive users* as artists who produce works reflect the ‘real’ archive, making use of documentary sources or found footage, be it to address historical themes or to subvert given interpretations of events.

186 *historage – 7 places, 7 readings* (2016), curated by Michael Rehbhan, included works by Ashley Fure (New York/Boston), Hanno Leichtmann (Berlin), Philip Miller (Kapstadt), Alexej Shmurak (Kyiv), Nicolás Varchausky (Buenos Aires) and Samson Young (Hong Kong), all based on material from the IMD archives. Lars Petter Hagens *Archive fever* (2016), drawing its title from Derrida’s text, was also commissioned within this frame. Composer/Sound artist Kirsten Reese’s own artistic work on archival material of Hermann Scherchen later formed a basis for the workshop *Composing with the Archive* in 2018; one of Reese’s students, Martin Hirsti-Kvam, would receive a Kranichsteiner Preis for a composition developed from this workshop.

187 Orlow describes archive makers as artists producing works simulating memory processes, creating fictional archives, collecting or classifying things or narratives.

188 Other examples include Karmenlara Ely’s artistic research project *Infinte record*, see www.hiof.no/nta/english/research/projects/infinite-record/?fbclid=IwAR1qAGr1mD_ggJLJ8U1PLCfSPW-ge0TTd3RHAZwZFefKUJvgOIe-4H7xqcMU

Attempting to place *Unarchivings* squarely within any one of these categories is challenging. Clearly, a dimension of archival *use* is present, situated as the project is, materially, conceptually and physically, in relation to FLN. It also exemplifies archival *making*, in both an embodied and mediated manner, although of a very limited scale and format. Finally, it also represents a way to problematize the archival act itself, by highlighting the challenges connected to documenting practices. Expressed in a more condensed way: the project *uses* archival material in order to *make* a new archive, and by doing so, critically *reflects* on the relationship between artistic practice and its preservation.

18.7 Resisting the work

Venice, steeped as it is in compositional history and mythologies of art and commerce, is not a neutral test environment. Nor is there neutrality in the hosting by a national organization for artistic research, the inclusion of an archival institution and the backdrop of one of the largest art biennales of the world. This became particularly clear midway into the recording process, as the opportunity arose to conduct the last cycle of the experiment with an audience. The institutional frame of our host organization, the Norwegian Artistic Research Program (NARP), made no demands for a public spectacle, but each of the participants of Re:Site was asked to contribute an element of their working process to be shared with the group for later discussion. Serge von Arx, one of the NARP curators, had procured a venue that he found potentially interesting for our presentation, which also could fit an interested audience. So how could the collaboration be presented without compromising its process?

A first concern was that the introduction of an audience would imply a linearity, a conceptual crescendo from start to beginning, culminating in the presentation of 'a work'. Any presentation of the four stages as evolutionary steps towards a form of final performance seemed highly counterintuitive to the process we found ourselves in. A verbal introduction or contextualization of our method also seemed out of place. Almost unnoticeably, the geographical, historical and institutional context of the experiment began to put pressure on the process.

The solution was to conduct the experiment in a transparent way: to share the playback of the third recording with the audience, who would watch me listen and then see me perform the last version of the cycle. In concordance with the methodical construction of the experiments, the cycle would be recorded with both sound and video. This choice preserved consistency throughout the four iterations, transferring the element of risk from the street to the boat house.

If this event, bearing many similarities to a concert, was not the realization of *Unarchivings*, what became the output of this artistic research? Why was it deemed so important to resist producing a 'proper' performance?

It became clear from the process of realizing these experiments that their output was never 'works', and that they needed to maintain this status to function within the experimental context. While the doing of Fabbriciani–Nono resulted in the composition known as *Das atmende Klarsein*, and the Oslo workshop produced competencies and frameworks to renew present-day performances of *Das atmende Klarsein*, the Venice experiments leading up to *Unarchivings* represented a new format, a way to use tactics, skills and competencies from these processes to generate a new artwork. It follows that the artwork is the method, not the material, either in its original or generated form. The artwork is the reactivating of the archived workshop methods in a new artistic context.

Unarchivings

*for instrumentalist, video artist, recording equipment and
(un)assembled audience*

by Bjørnar Habbestad & Ellen Røed - 2017

Part 1

Listen to a two-minute recording from an archive. Leave the archive in order to record a new version immediately, replicating the original excerpt as closely as possible. This is the first generation recording.

Part 2

Listen to the first generation recording in a new site. Record a new version immediately, replicating the first generation as closely as possible. This is the second generation recording.

Part 3

Listen to the second generation recording in a new site. Record a new version immediately, replicating the second generation as closely as possible. This is the third generation recording.

Part 4

Listen to the third generation recording in a new site, together with an audience. Record a new version immediately replicating the third generation as closely as possible. This is the fourth generation recording.

Example 17: Habbestad and Røed, Unarchivings

18.8 Aestheticizing the Workshop

This chapter has charted an artistic response to questions of how music is made and how its practices are stored, a response that represents a radical exposition of performance as a constitutive force in music. This turn, away from ‘the work’ as an aesthetic object, towards ‘the workshop’ as an arena of practices, makes a case for the musical equivalent of the ‘performative generation of materiality’ (Fischer-Lichte, 2008, p. 75). This reorientation clearly influences the role of the performer. How can one understand the flute playing of *Unarchivings* in this context?

Performing, in this context, is both a musical utterance on its own and a way to pose questions about and in music. Addressing the different types of performances found within compositional processes shifts both the analytical and artistic attention from work to workshop. This deconstruction of the performer–composer relationship leads to a hybridization and radicalization of the role of performance and performers in the hierarchies of new music.

In this perspective, the research of Chapters 16 and 17 could be seen as a continued articulation of the central questions raised in and by *Das atmende Klarsein*. The activation of performance tactics, scripts and ideas embedded in the archived material from the transformation of *Das atmende Klarsein* into *Unarchivings* has provided ways of thinking and engaging with experimental or empirical musical practices that operationalized the role and relevance of performer agency in my own artistic practice.

The analysis of the Fabbriani–Nono workshops, the experimentation and emulation of the Milan workshop process as well as the interview analysis based on Fabbriani’s narratives provided the foundation for aestheticizing not an artwork, but its workshop, its doing, technology and tactics. The foundation of a conceptualization of performance-as-creation.

Seen as a whole, *Unarchivings* make out a complementary set of elements that activates a form of institutional critique, where the acute presence of performance becomes a material-generative process: an attempt at achieving the near-impossible goal of embodying the archived recording while consecutively remedying its gradual disappearance and transformation into something new.

As a final token of the creative potential in these studies, the recording made in the last stage of *Unarchivings* – at Magazzini del Sale – was brought into a completely different set of circumstances six months later. Røed and I enacted the same ritual, now within the communal area of Plankan, a large residential complex in central Stockholm often referred to as

a token of the archetypical social-democratic housing system of Sweden. This intervention documented the peculiar acoustics of a vanishing environment,¹⁸⁹ as articulated by the sonic output of these experiments. This is, for the time being, the last stage of the development of *Unarchivings* that can be listened to (see Sound example 5).



Sound example 5: Unarchivings – the Stockholm version

189 The large, shared backyard of Plankan would be sold to a property developer for office construction soon after our intervention.

CODA

The three parts of this thesis describe different kinds of movement within music: from established instrumental practices towards novel ones; from pitch-centred conceptions of musical sound to extended ones; towards new value systems in performance; and towards the expansion of the role of the musician in the creation and development of music. The weaving of performer agencies, small and large, into the very fabric of compositions is integral to all of these. This is amply demonstrated in the history of the key click, in the analysis of the Fabbriani interviews and in the transformation of performer agency investigated through the prism of *Das atemde Klarsein*.

First, the introduction of the key click is shown as representative of a larger change in musical practice, where the connecting, developing, extending, and breaking of perceived limitations of instrumental expression have become a defining feature. The history of the key click unfolds along this reconfiguration of instrumental convention, causing conflicts between older performer ideals and the growing demand for novel sound production in the music of the twentieth century. The outcome of this friction is a hybridization of the performer role and an increase in performer agency.

Following this, the thematic analysis of Roberto Fabbriani's narratives has articulated qualities and values central to such novel instrumental practice, in which an active performer role, expanded agency and the ability to develop a personal sound-world is key. The analysis suggests a reorientation in the form of a value system for performance, promoting a musicianship founded on a sense of freedom and risk-taking, as prerequisites for utopian sonic ideals and ambitions. Three thematic areas dominate Fabbriani's narratives: collaboration, newness, and critique. These are referenced in his use of the concept '*la création*', the direct collaboration between composer and performer in a form of creative intimacy that is placed above the exchange taking place between an 'executor' and a 'score'.

How are these findings connected? Part One outlines a transformation in the materiality of twentieth century music exemplified in the flute repertoire, while highlighting its connection to changes in the role and influence of performers. This connection is substantiated in Part II, where a narrative analysis of the practice of Roberto Fabbriani provides a rich description of novel instrumental performance, leading to a distinct system of beliefs and values. Part III demonstrates how performer agency can be studied and transformed as artistic research, working with and acting on the historical context of Part I and the performance study of Part II.

Situating the concept of performer agency

The re-searching of *Das atmende Klarsein* established four types of doing as central components in the Fabbriciani–Nono workshops: cataloguing, improvising, listening and re-iterating. These workshops included the creation of a sonic, motor and notational repository, later expanded and developed through evaluation, refinement and adjustment in a reiterative manner. The practice of these workshops is described as fundamentally collaborative, leading to a perspective on this form of composition as ‘directed emergence’, an essential strategy for a novel organization of sonic material. Through re-doing elements of *Das atmende Klarsein*’s creation process, both the musical material and the understanding of the doings of the workshops behind it became accessible in a practical and visceral way. Experimenting with and emulating elements of the Fabbriciani–Nono process allowed for a calibration of how a performer can act and behave musically within these materials. This process also revealed important connections between the improvising practice of Fabbriciani and the tape used in the performance of the piece. Although the Re-sounding of *Das atmende Klarsein* arguably is the most conceptual and speculative of the transformations in Part III, the creation of *Unarchivings*, utilized elements of the Fabbriciani–Nono workshop process that produced important perspectives on workshop processes. In particular, the reiterative form of the Venice experiments emphasized how repetition conditions the body, both in terms of memory and physical doing of sound-making.

Newness expanded from micro to macro

Innovation in instrumental practice, whether coined as ‘novel instrumental techniques’, ‘instrumental newness’ or ‘extensions in musical sounds’ permeate the chapters of the thesis. How does the micro-historical perspective of the key click, and its claim for change in musical sound and practice relate to larger historical accounts of twentieth-century modernism in music? How can one relate the reorientation in musical performance described by Fabbriciani to the writing of music histories?

Leigh Landy describes ‘the emancipation of sound’ as the last in a series of twentieth-century liberations from traditional practices and their restrictions (Landy, 2007). Following suit, as the climax in a ‘list of developments that includes the earlier freeing of dissonance, pitch ... dynamics, structure, timbre, and space’ (p. vii), he situates the newfound role of *sound liberated* not only in art music, but in contemporary audio culture across all media: within sound design and Foley work found in the cinema theatre, in the modulation of the human voice in pop music, in the development of sound art in galleries and museums and in the role given to sound in modern scholarship in cultural studies. This connects the findings of the history

of the key click to a larger cultural tendency, namely the gradual extension of musical sound seen in the twentieth century.

The French spectralist composer Tristan Murail articulates a similar position in an article from 2005:

The most sudden and important revolution to affect the musical world during the recent past was based not on some type of reflection upon musical grammar (serial or other), but rather—more deeply—upon the world of sounds themselves: in other words, in the sonic universe that summons the composer. For any composer reflecting upon his place in music's evolution, this unprecedented opening of the world of sounds that we now recognize cannot fail to make itself felt in the compositional technique itself. More precisely: any attempt to integrate these new sounds that are above all, as we shall see, sounds of a 'complex' character, necessitates a profound revision of traditional compositional techniques ... and of our very conception of the compositional act. (Murail, 2005, p. 121)

By portraying the 'revolution of complex sounds' as an unprecedented opening, Murail places himself in a long tradition of liberation rhetoric, featured in many composer poetics: Schönberg's struggle for 'Vollständige Befreiung von Allen Formen'¹⁹⁰ Varèse's 'liberation of sound' (Varèse & Chou, 1966), Lennie Tristano's 'free form' (Shim, 2007, p. 55), Helmut Lachenmann's ambition for a 'liberated perception' (Lachenmann, 1996, p. 33), or Raphaël Cendo's 'free[ing] of origin of saturation through ... [multiplication of sound events]' (Cendo, 2010, p. 1) are all examples of such positions.

However, even if Murail is right in assuming that pitch syntax has given way to sound morphology as a focal point of composition, catering for the composite role and constitutive function of contemporary music performers within musical creation, the primacy of pitch was not easily overcome. Despite Varèse's early advocacy of timbre as a structuring parameter of music (Varèse & Chou, 1966, p.12) and Cage's identification of the productive antagonism between noise and musical sound (Cage, 1961, p.4), substantial efforts for a sound-based music first occurred after World War II, with the so-called sonorists: composers such as Bogusław Schaeffer, Krzysztof Penderecki, Henryk Górecki and others who were active in creating what became known to be a distinctly Polish sound (Mirka, 2000; 1997). The dawning experimentalism of the radio-work from Italians Maderna, Berio and Evangelisti, the disjuncture of media

190 Quoted in a letter to Busoni, August 18, 1909. See facsimile <https://busoni-nachlass.org/de/Korrespondenz/E010001/D0100012.html#12%20%20Quelle:%20https://beruhmte-zitate.de/zitate/129819-arnold-schonberg-ich-strebe-an-vollstaendige-befreiung-von-allen-fo/>.

in Kagel's instrumental theatre of the 1950s (Heile, 2006, pp. 33–69) or the modularity of Haubenstock-Ramati's particular score-constructions inspired by the mobiles of Alexander Calder (Kostelanetz, 2013, p. 274) are other relevant examples from the same period. Despite their distinct and at times provocative expression, these efforts did not dominate musical discourse. Even as late as 1971 Pierre Boulez published his claim that 'pitch and duration seem to me to form the basis of a compositional dialectic, while intensity and timbre belong to secondary categories.' (Boulez, Bradshaw & Bennett, 1971 p. 37).

Landy's conception of the emancipation of sound as an organizing narrative for twentieth-century music history is substantiated in the research of Christian Utz (2013). Aside from the early impact of composers such as Debussy, Schönberg, Varèse and Cage, he cites 'the advent of electronic and electroacoustic music, eventually leading to the multiple forms of contemporary "sound art," the application of sound-based studio techniques to the orchestra, the exploration of timbres in free improvisation [and] the impact of computer-based sound analysis' as contributing factors to the extension of musical sound. In a critique of musicology's lack of interest in the transformations of musical sound, Utz blames music theory, which he claims

was and in part still is guided by a rationalization of pitch relations and a hierarchical 'surface-depth metaphor' dating back to the mid-nineteenth century – prominently shaped by the theories of Riemann, Schenker, Lerdahl/Jackendoff, and others. The surface-depth metaphor places (sub-)structural (mostly harmonic and voice-leading) pitch relationships above 'surface events', often abstracting from their rhythmic and timbral appearance. (Utz, 2013, p. 32–33).

The relative simplicity of conducting structural analysis on pitch and durational parameters, provides a plausible explanation for musicology's lack of interest and ability to deal with complex aspects of sound. It might also explain why musicology still sustains a distinction between musical tone and noise, despite the dismantling of this cultural separation over the last 100 years.

Musicologist and music theorist Judy Lochhead suggests a third approach: rather than understanding the emphasis on sound as an element in a liberation process or a development in musical materiality, she proposes that it is the result of different cultural construals of 'chaotics' (Lochhead, 2001, p. 211). This approaches the question of sonic orientation from a conceptual rather than a material level, maintaining that 'the avoidance of ... traditional modes of organization [of pitch, rhythm and texture] was a strategy utilized by performers/creators as a way of embodying ideas of liberation from various types of cultural and social constraints through noisy sound and performance displays' (p. 218). Lochhead's analysis

is not necessarily based on how the music sounds per se but systematizes the motivation behind composers and musicians who elect to refrain from a traditional ordering of musical parameters. However, neither Landy, Utz nor Lochhead appear to connect the extension of musical sound to perspectives specific to performance or performers.

Revisiting performer agency

This brings the argument back to the situating of performer agency in the context of new music. Through each of its three Parts, the thesis has demonstrated connections between the extension of musical sound, the expansion of performer agency in music and collaborative practices in composition. This is emphasized by the value system embedded in Fabbriciani's narratives, which indicates a non-transparent view on performance – an understanding of the performer's role as contributing, adding, colouring or otherwise acting on, and with, that which is being performed. This represents a reorientation of a conventional view on performance, where the 'invisibility' of the performer is thought to reveal the raw intentions of the composer.

Why is this a controversial position? Why are performers expected to perform and composers to compose? Hierarchy, economy, convention and law all provide potential explanations for such expectations. Festivals, curators, orchestras and other forces of influence benefit from identifying individual talent rather than group efforts, simply because it is easier to produce, market and contextualize. In this way, hierarchies of power reproduce the symbolic influence of composers at the cost of performers or composing collectives.

Established economic systems in the world of music such as the separation of funding sources for commission fees and performance fees provides another mechanism, rigged to serve, or preserve, this particular division of labour. This is also referenced in the mundane fact that composers and musicians rarely are unionized in the same organizations. The legal system protecting authorship, with its different contracts regarding performance, publishing and other kinds of rights, is yet another mechanism that serves to separate these areas. And across all of these, the power of convention, the conserving habit of doing things as usual, is a strong, regulating social force.

Towards a Politics of Performance

How is this political dimension articulated in the thesis? The historical resistance against and ridicule of novel instrumental techniques seen from certain performer communities and music critics is indicative of a general disregard of the effects of modernity. The habitual

silencing of performer contributions to musical materiality, exemplified in the homogenization of practice identified by Roberto Fabbriciani, is alarming, and there is little reason to think that this is a unique case. Further research on the work of Severino Gazzelloni may help us to further break this silence.

If one accepts that an expansion of performer agency represents a potential threat to the authority and influence of the composer, where does that place the conscious and extensive reliance on collaborative practices that one finds in the activities of a composer such as Nono?

Nono's titles, texts, and themes of the 1960s and 70s could easily lead one to describe him as being explicitly political, if not concretely activist. His affinity to the Italian Communist Party was public knowledge, and his political views mirrored in compositions such as *Il canto sospeso* (1955–56) and *Intolleranza 1960* (1961). Explicit references of this kind are by and large gone in his later period (1980–1990), a choice often interpreted as relating to a series of disappointments with the political development of the international and Italian socialist movements. Instead, broad themes, Greek myths, romantic poetry and philosophy dominate the literary references in use.¹⁹¹

This study suggests that the composer's gradual loss of interest in notation during the 1980s was followed by an increasingly empirical and experimental approach to composition and collaboration, a process that culminates in 1988 with the composition of *Baab-aar*, premiered by Roberto Fabbriciani. Developments towards a scoreless form of composition must have represented a challenge to both musicology and the music publishing industry at the time. This direction could have been perceived as a decentring of the compositional act. While Nono's precise intentions here are unavailable, the structured performativity of his compositional process suggests a relocation of his politically explicit position, from topicality to materiality.

A similar transformation is described in the 1970 article *What is to be done?* by the French filmmaker Jean-Luc Godard. Here, Godard uses the exclamatory and polemic style of the political manifesto to articulate the distinction between 'making political films' and 'making films politically'. Establishing the dichotomy of 'the old' vs 'the new', much like Jean-François Lyotard in *The Postmodern Condition* (Lyotard, 1979), he stresses the need for making art in a political way rather making art with political subject matter. Used as a lens for understanding Nono's prolongation and opening of the compositional process, Godard's manifesto provides several clues as to how one can approach this development as a politics of performance.

191 Paulo de Assis locates this change in the development of the piano composition*sofferte one serene*.... from 1975: 'Luigi Nono's music after 1975 is an example of such politics of the artwork: an aesthetic and a politics of the smallest differences, of the finest details, of the barely audible; an invitation to question one's identity and a call for courageous change' (de Assis, 2014).

Making films politically, according to Godard, means taking up a proletarian class position. Interpreted in a musical sense rather than in the context and jargon of political theory, this statement could be read as a call to build music from within its actual labour rather than from its notated abstractions. This is a statement that clearly resonates with Nono's approach to composition, rendering the workshop into a way to make composition more political or more attuned to practice.

Godard's final remark is a call 'to dare to know where one is, and where one has come from, to know one's place in the process of production in order then to change it'. This form of immanent self-reflection and critique of one's own practice seems a particularly fitting analogy for the reorientation in Nono's compositional practice and an ample context for claiming that the expansion of performer agency has a political dimension.

Relevance, application, and future work

The knowledge derived from the research process behind this thesis is neither confined to the historiography of flute playing nor aimed at universal truths applicable to all forms of collaborative musical creation. Rather, I have argued that awareness of collaborative processes can enrich our understanding of composition. Although the project is deeply rooted in the particularities of flute playing, I hope that the research undertaken has revealed questions and problems relevant to many types of creative musical collaboration. By supplying a thick description of the gradual establishment of a new skill set, I also hope to have contributed to the articulation of the new role and constitutive function of contemporary music performers within musical creation. The uncovering of the complexities around intentional and unintentional erasure of performers is a by-product of this process.

It might also go without saying that the thesis represents an ambition for research on performance practice to integrate rather than separate its methods. The multi-faceted approach of the thesis, drawing on elements from musicology, performance studies, interview-based research and artistic research, is an argument for extending the ways in which performers relate to compositions: attuning to music in order to study, practise, analyse and play, but also to experiment, develop, extract and create. The interpretation of musical works – of completed musical wholes – is but one of the performative modes which the musician of the future needs to master. Future studies of the artistic processes of today will reveal a need for a calibration of how we understand and develop knowledge about what performers do as music is made, recorded, performed and experienced.

At the very end of the thesis, it is worth noting that the fostering of skills and understanding that enables engagement with and development of music-in-the-making needs to form a larger part of the educational curricula of music academies and conservatories. The fostering of compositional processes that are open to this kind of input, and the development of instrumental skills, interest and responsibility for their success, should both be obvious components in the musical academy of the 2020s. This thesis is intended as a contribution to the realization of such a scenario.

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Appendixes

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- Appendix 2: Archive resources consulted at Fondazione Luigi Nono.
- Appendix 3: Documents of approval for the collection and use of interview information.
- Appendix 4: Interview Guides.
- Appendix 5: Published interview, Habbestad and Fabbriciani (2019).
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- Appendix 7: Fragments from a dialogue, Ellen Røed and Bjørnar Habbestad.

Appendix 1:

Chronological overview of publications on novel instrumental techniques, 1962–1980

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Appendix 2:

Archive resources consulted at Fondazione Luigi Nono

AUDIO TAPES

ID		TIP.	SEGN.	DATA	ID di LN
80	04	Bob.	179	01.12.1980	1° NASTRO F-BASSO FABBRICIANI (1) LUNI 1-12-80
80	05	Bob.	179	01.12.1980	1° NASTRO F-BASSO FABBRICIANI (1) LUNI 1-12-80
80	06	Bob.	179	01.12.1980	1° NASTRO F-BASSO FABBRICIANI (1) LUNI 1-12-80
80	07	Bob.	180	01.12.1980	2° NASTRO F. BASSO FABBRICIANI (2) LUNI 1-12-80
80	08	Bob.	180	01.12.1980	2° NASTRO F. BASSO FABBRICIANI (2) LUNI 1-12-80
81	01	Bob.		02.12.1980	
74	07	Bob.	172	19.12.1980	Roberto 1° NASTRO 1980 Nastro di studio Haller Freiburg
74	08	Bob.	172	19.12.1980	Roberto 1° NASTRO 1980 Nastro di studio Haller Freiburg
75	01	Bob.	172	19.12.1980	Roberto 1° NASTRO 1980 Nastro di studio Haller Freiburg
78	03-08	Bob.	176	13.04.1983	Prove 2 – FREIBURG 1983
79	01-05	Bob.	176	13.04.1983	Prove 2 – FREIBURG 1983
77	02-06	Bob.	175	?.?.83	Prove 2 – FREIBURG 1983
78	01-02	Bob.	175	?.?.83	Prove 2 – FREIBURG 1983
66	02	Bob.	159	?	<i>Das atmende Klarsein</i> TUTTO
67	01	Bob.	160	?	<i>DAS ATMENDE KLARSEIN</i> NASTRO BASE ROBERTO FINALE

NOTEBOOKS

Reference number

45.05_03v

45.05_06

45.05_07v

45.06_007

46.05_009

Appendix 3:

Documents of approval for the collection and use of interview information

Roberto Fabbriciani

Sted: Oslo
Dato: 01.05.2015
Vår referanse: BH

Interview Guide 1

This interview is a part of a phd research project at the Norwegian Academy of Music. When documenting music history, the performer perspectives is often set aside as less important than those of composers and music theorists. It is hoped that this research can voice some of the experiences, knowledge and understanding that is specific to performers. Your contribution is most appreciated.

The questions are divided in nine different topics with four to six questions in each. Each topic has an open question at the end for adding any comments.

- SOUND
- PERFORMING CONTEMPORARY MUSIC
- COLLABORATION
- CREATION vs. INTERPRETATION
- PERFORMING IMPROVISED vs. COMPOSED
- MUSIC
- PERFORMING DAS ATMENDE KLARSEIN
- WORKING WITH ELECTRONICS
- SPACE
- STUDIES AND INFLUENCES

Material from this interview is intended for publication in the online journal Music+Practice, in the form of writing, sound and/or video. Standard quotation check will be given. Information given in the interview can also appear in the interviewer's phd-thesis. If any information given requires anonymity, this will be given upon request. All questions are provided in English. Please provide answers in Italian if that is more comfortable and precise. These will be professionally translated. If needed, and if time permits, additional info can be given via email or on Skype.

I confirm that the information given in this interview can be used in publications relating to Bjørnar Habbestad's research project at the Norwegian Academy of Music.

Roberto Fabbriciani



Roberto Fabbriciani

Sted: Oslo
Dato: 01.09.2015
Vår referanse: BH

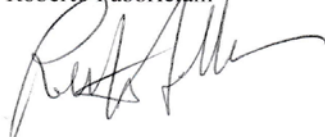
Interview Guide 2

This interview is a part of a phd research project at the Norwegian Academy of Music. Based on the interview from may, a set of follow-up questions are being posed, as well as some additional topics. Material from this interview is intended for publication in the online journal Music+Practice, in the form of writing, sound and/or video. Standard quotation check will be given. Information given in the interview can also appear in the interviewers phd-thesis.

All questions are provided in english. Feel free to provide answers in italian as earlier. These will be professionally translated. If needed, and if time permits, additional info can be given via email or on Skype. Note that the translation of your previous answers are temporary and will be replaced by a professional translator before publishing.

I confirm that the information given in this interview can be used in publications relating to Bjørnar Habbestad's research project at the Norwegian Academy of Music.

Roberto Fabbriciani



Roberto Fabbriani

Sted: Oslo
Dato: 01.010.2015
Vår referanse: BH

Interview Guide 3

This interview is a part of a phd research project at the Norwegian Academy of Music. Material from this interview is intended for publication in the online journal Music+Practice, in the form of writing, sound and/or video. Information given in the interview can also appear in the interviewers phd-thesis. The interview is based on discussions of the topics raised in the two previous interviews.

Interview is conducted verbally and will be recorded. These will be professionally translated.

I confirm that the information given in this interview can be used in publications relating to Bjørnar Habbestad's research project at the Norwegian Academy of Music.

Roberto Fabbriani



Roberto Fabbriciani

Sted: Oslo
Dato: 01.01.2016
Vår referanse: BH


Interview Guide 4

This interview is a part of a phd research project at the Norwegian Academy of Music. Material from this interview is intended for publication in the online journal Music+Practice, in the form of writing, sound and/or video. Information given in the interview can also appear in the interviewers phd-thesis. The interview is based on discussions of the topics raised in the three previous interviews.

All questions are provided in english. Feel free to provide answers in italian as earlier. These will be professionally translated. If needed, and if time permits, additional info can be given via email or on Skype.

I confirm that the information given in this interview can be used in publications relating to Bjørnar Habbestad's research project at the Norwegian Academy of Music.

Roberto Fabbriciani



Appendix 4:

Interview Guides

#

SOUND

1. Looking back at your many collaborations with composers, how would you describe the changes in the *sound* of contemporary music?
2. And more specifically when it comes to flute music: How has the sound of the flute changed over the last 40 years?
3. You have personally contributed to advancing the sonic repertoire of the instrument. What techniques from your research and experimentations do you find most important or influential for music today?
4. Do you find that these developments in instrumental technique has found their way into conservatories and music academies?
5. In certain musics, the organization of sound and sound qualities, seems to be of higher importance than the organization of pitch. As a performer, can you identify with such developments? If so - does this change the "job" of the performer? How?
6. Other comment:

#

PERFORMING CONTEMPORARY MUSIC

1. National and personal styles of music, or compositional schools and aesthetics, has gone in and out of fashion since the 1960's. In your experience, how has the role of the performer of contemporary music changed in this period?

2. Italian flutists seems to connect more strongly to contemporary music, thinking of Gazzelloni, yourself and nowadays of Mario Caroli. Is this a coincidence? Are there any reasons for this, or are you all "exceptions to the rule"?

3. Is there "an italian sound" that has developed, or is this sonic development outside the national trends?

4. What skills do you find to be most important as a flutist, when performing contemporary music?

5. There also seems to be a strong connection between italian composers and the flute, as so many composers here have contributed to the solo literature: Berio, Sciarrino, Nono, Franscesconi, Fedele etc etc. Why do you think it is so?

6. Luciano Berio described 'a different virtuosity' when discussing the Sequenza - a virtuosity of *sound*. Did you discuss this with him? Can you elaborate on how you understood this?

7. Is there a difference between being a good flutist and a good musician? Or to rephrase: Are there situations when being a "good musician" is not the same as being a "good flutist"?

8. Other comment:

#

COLLABORATION

1. How would you describe the creation process of a work by Nono? What would be your role in this process?
2. The process of developing new material and sound has been described as one of empiric experimentation: trying, evaluating, retrying with small changes, evaluating until new results emerge. How would you describe the difference in yours and Nono's ideas and preferences on sounds?
3. The generosity and closeness that you describe in the relationship between Nono and yourself in the article "Walking with Gigi" points to a great deal of respect and trust between you, something that is reinforced by how you participated as a soloist in most of his later works. What skills do you think was most important for you collaboration?
4. How would you describe working with Nono in the Studio? Both in Milano and Freiburg.
5. Other comment:

CREATION vs. INTERPRETATION

1. How would you describe the creation process of the first Sciarrino pieces?
2. How did this differ from your work with Nono?
3. What would you say is the biggest difference between the "sciarrino sounds" and the "noon sounds"?
4. Wich pieces in particular did you work with Sciarrino on?
5. Sciarrino has been considered to have changed the way that the flute is perceived in contemporary music. How do you see your own role in this process?
6. Other comment:

#

PERFORMING IMPROVISED vs. COMPOSED MUSIC

1. You have become active both as an performer of composed and improvised music. Could you tell me about how your involvement with improv started?
2. What attracted you to start improvising?
3. What do you find to be the strengths and weaknesses of these different methods of making music?
4. You have also combined these methods, in works by Nono but also in your own work. Could you elaborate on this?
5. What skills do you find to be most important as a flutist, when performing improvised music?
6. Other comment:

#

WORKING WITH ELECTRONICS

1. How did recording technology influence your perception of the flute's sonic possibilities, and your personal instrumental sound?
2. How would you describe working with different microphones and placements of these?
3. How do you perceive the difference between amplification in live and studio settings?
4. How has electronic music influenced your ideas on flute sounds? Is there any electronic music that has inspired you?
5. Certain composers use technology in order to define music or sound more closely than they can using performers. How would you describe Nono's approach to working with technology and people?
6. Other comment:

#

PERFORMING DAK

1. Can you describe how DaK changed from the premiere till Nono's death?

2. The different editions of the piece suggests that the performance almost could be seen as part of the creation process: that the work came into being not only from being composed but also from being performed. How did you experience being a part of this "slow" development?

3. How do you see future interpretations of DaK? Should the final version from Ricordi be thought of as the "end" of the development, and future performances adhere to the recordings?

4. How do you perceive the role of the tape in the final movement of DaK?

5. What skills do you find to be most important as a flutist, when performing DaK?

6. Other comment:

SPACE

1. In DaK, the sound of the soloist is transformed by the amplification, but also the musicians relation to the space changes with the movement of the sound through the different speakers. How important have you found the different rooms that you have performed in?

2. Which rooms has been most inspiring or rewarding?

3. How do you consider the idea of space in Sciarrino's solo works?

4. Sciarrino speaks of a "sound ecology" - of his interest in creating or re-creating ideas of natural sounds or soundscapes. Has this been useful for your work as a performer of his works?

5. Other comment:

#

STUDIES AND INFLUENCES

1. Where, and with which flutists did you study?
2. What repertoire was important for you at this time?
3. Which skills did you *not* learn while studying, that has been important for your later work?
4. How do you as a performer see the relationship between historic and contemporary music today?
5. **Other comment:**

INTERVIEW GUIDE

Oslo september 2015

This interview is a part of a phd research project at the Norwegian Academy of Music. Based on the interview from may, a set of follow-up questions are being posed, as well as some additional topics. Material from this interview is intended for publication in the online journal Music+Practice, in the form of writing, sound and/or video. Standard quotation check will be given. Information given in the interview can also appear in the interviewers phd-thesis.

All questions are provided in english. Feel free to provide answers in italian as earlier. These will be professionally translated. If needed, and if time permits, additional info can be given via email or on Skype. Note that the translation of your previous answers are temporary and will be replaced by a professional translator before publishing.

Bjørnar Habbestad

ALL AURE UNA LONTANANZA

BH: You told me in may about the first performance you gave of this piece in Carnegie Hall. Could you describe this concert?

- Was this the premiere of the piece?
- Which year and date (if possible)
- What was the program?
- Who organized the concert?
- How was the concert received by the audience?
- Do you know if there were reviews - if so, in which newspapers or magazines?
- Do you have program notes or posters or similar documentation?
- Did it lead to other collaborations?
- How was this concert important for your career?
- What was the response from other composers?
- Did you work with Sciarrino in the creation process of this piece? When/Where/How?

SOUND

RF: The great composers have always looked forward with their imagination of sound.

BH: How do you see the role of performers in this developments? What role does the performers imagination of sound play in the development of new music?

RF: I started in the sixties, developing sounds multiphonics collaborating with Bruno Bartolozzi. The influences of my teacher Severino Gazzelloni and composers with whom I was in contact as Bruno Maderna, I was directed to the research that has reinvented the flute. The techniques most influential music of today think they are those of Sciarrino for acoustic sounds and Nono for new openings with the use of amplification and live electronics.

BH: Could you tell me more about the early work with Bartolozzi?

- Wich techniques did you work on?
- Could you describe a typical session with Bartolozzi?
- How often did you meet?
- Did he work with other flutists at this time?
- Are you quoted as a source in any of his publications?
- Which publications did you contribute to?
- Do you have notes, recordings or other documentation from these sessions?

BH: Sciarrino writes this about his sounds for flutes:

«Vorrei riflettere invece su ciò che significhi aver composto, nell'arco di pochi anni, qualcosa che non è più un semplice seguito di opere più o meno riuscite. Si tratta di un vero e proprio corpus, e questo vuol dire innanzitutto che da adesso il flauto non è più lo stesso. E non tanto pretendo di averlo messo a soqquadro, bensì attirato in un angolo sconosciuto del mondo.

La maggior parte sono suoni di mia invenzione di oltre vent'anni; alcuni, recenti, forniti da Fabbriciani; uno, assai ricorrente dal 1971, di Giancarlo Graverini. Ma gli stessi suoni che appartenevano al patrimonio comune dei compositori, pure giustamente oggi mi vengono attribuiti perché sembrano finalmente conquistati alla musica. Già di per sé ogni mia composizione è anche una legittimazione di tali suoni. Su una struttura vecchia, i suoni nuovi equivarrebbero a un ricercato vestirsi. Una volta si parlava di "effetti". Qui struttura ed evento sonoro sorgono dalle medesime esigenze e crescono o tendono a una prospettiva comune, a una nuova immagine. Non si tratta di scegliere suoni più o meno appropriati, di abbellirsi la casa, quanto "coi suoni nuovi costruire nuovi universi". Questa dovrebbe essere mira dei compositori non indegni di tal nome.» (from www.salvatoresciarrino.eu)

BH: Do you agree with this description?

BH: Could you describe the development of the «Sound of Sciarrino's flute»?

BH: The performers role as co-creator is important in many musics. In your experience, to what extent is this acknowledged by composers, publishers and the musical world in general?

BH: Sciarrino speaks of a "sound ecology" - of his interest in creating or re-creating ideas of natural sounds or soundscapes. Has this been useful for your work as a performer of his works?

RF: Surely!

BH: Can you elaborate? Did he ask for specific acoustic sounds for you to imitate or recreate or similar? Did you discuss sound landscapes, nature scenes or other?

PERFORMING CONTEMPORARY MUSIC

RF : As mentioned, the perpetrator began to have a different more active role not only in trying to meet increasingly sophisticated sounds but also to propose solutions and innovations.

BH: Could you give an example of how a collaboration with a composer would take place? Please choose a specific piece that you have contributed directly to.

RF: Well Gazzelloni about this is absolutely true. He was my teacher and introduced me in close contact with the major composers of the last decades. In this way, with direct contact, flutist can be considered a collaborator of the composer and can be said to participate in the creation of new music. The fact that they play with other flutists interest in contemporary music is another matter. This does not mean work closely and participate in the creation.

BH: How does the knowledge and understanding from being a creative partner influence your later performances of a piece?

BH: Does this process stop after the score is finished or are there ideas or sounds that keep developing «after» the composition ?

BH: How true to the score should a performer be? Are there situations where the performer should take precedence over the score?

RF: The most important thing is to not be limited to reading a passage but penetrate deep into researching the sound and mood that the composer wanted to describe.

BH: Could you elaborate on this? Specially in relation to Nono´s scores. They hold little information about the *sound* of the music - a lot is required from the performers sonic imagination (As you mention in Laura Zattras interview).

BH: How do you look upon future performances of these work - when the original performers and technicians are no longer active - should the goal of performing the late Nono-works be a faithful recreation of the sound of the performances of the 1980's or should performances keep developing towards something new?

COLLABORATION

RF: A globally unique experience working together at the Experimental Studio of the Heinrich Strobel Foundation of Freiburg paving streets and experiencing new and unusual music. I remember as a wonderful work of the unexplored research with risks and utopias: Das atmende Klarsein (1980-81), When They're dying. Diario Polish No. 2 (1982), A Pierre. Of blue silence, inquietum (1985), Caminantes ... Ayacucho (1986-87), until the experience of Baab-arr (1988).

BH: Could you tell me more about Baab-arr? How was that work developed? Why, in your opinion, is this no longer available from Ricordi?

BH: The composition and performance practice of the later Nono-works points towards a very open and empiric conception of the musical work, of listening as well as sounding. This hybrid practice can be challenging to document for the future, and also difficult to explain to historians or theorists who tend to focus on published scores and official works lists. How would you suggest that the last work of Nono could be entered into music history and not forgotten?

PERFORMING IMPROVISED vs. COMPOSED MUSIC

BH: What skills do you find to be most important as a flutist, when performing improvised music?

RF: Knowledge. Without this banality it is around the corner.

BH: Is it possible to describe parts of this knowledge? What types of knowledge do you rely on when you improvise?

WORKING WITH ELECTRONICS

RF: The whole electronic music has influenced the way we think the sounds of acoustic instruments (as in some symphonic music of Ligeti and others). The electronics has made us rethink the tools in terms of sounds and dynamics.

BH: Can you elaborate on this?

RF: Electronics opened me to new plays of timbres and dynamics of the sound. Experiencing the sound and "view", not only listen, through tools such as the Sonoscop allowed me to explore and control all aspects of the issue. I remember the experiment on sounds so-called "pure" sine issued to dynamic limits of hearing with its electronics Nono.

BH: How did you use the Sonoscope - and how did this help you searching for new sounds?

BH: How did you use sine tones?

PERFORMING DAK

BH: Can you describe how DaK changed from the premiere till Nono's death?

RF: Das atmende Klarsein" is the first composition of the 80 that will lead us to "Prometheus". The part of the bass flute has had several changes and reductions in various material executions and this path of transformation can be seen in the manuscript of the flute.

New performers will have to apply to this performance practice thinking about music that is constantly renewed by its executive risks, interaction with live electronics and space.

BH: This is a radical conception of a work or a composition - that it holds the potential for continuous change and development. Did you discuss this or similar ideas with Nono? Was this something that he was conscious about?

BH: Could you describe how you developed the tape part? You have stated elsewhere that it was improvised. Do you remember the impulse for this improvisation? Was there a starting point like a concept, a direction, mood, text?

BH: The introductory part of the tape - the descending scale of tounge rams in the first octave of the instrument - is very characteristic and returns several times in the tape. This material is not to be found elsewhere in the piece. Is there a story or an idea behind the role of these sounds?

FLUTE DIDACTICS

BH: A «Virtuosity of sound» - we all know the methods, lists and tables of didactic instruction for new sounds. Still - it seems to me that «knowing a technique» and «owning a sound-world» are two different things. What is your opinion about the idea of «extended techniques» and the use of instruction manuals?

Appendix 5:

**Published interview, Habbestad
& Fabbriciani (2019)**

WORKING TOGETHER

– AN INTERVIEW WITH ROBERTO FABBRICIANI

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- [The first collaboration – tracing *Das atmende Klarsein*](#)
- [At the outskirts of the work](#)
- [A second round – the sound of *Salvatore Sciarrino*](#)
- [Endnotes](#)

Bjørnar Habbestad

Flutist, curator and researcher educated in Bergen, London and Amsterdam. Habbestad has performed across Norway and Europe with a repertoire ranging from contemporary classics such as Ferneyhough and Sciarrino through electroacoustics, improv and noise. His research at NMH targets composer-performer collaborations. Habbestad is the current Artistic Director for nyMusikk.



Roberto Fabbriciani

Flutist, improviser, composer and instrument inventor. Collaborator and performer of the music of a cross-section of musical modernists from Berio, Boulez and Ferneyhough through Maderna, Nono and Sciarrino. As a soloist he has given recitals and performed with major orchestras and conductors around the world, recorded more than 80 albums, and taught at several conservatories. Fabbriciani is also the inventor of the hyperbass flute, for which he has composed and recorded several works.



by Bjørnar Habbestad Music & Practice, Volume 4

Exploratory

Introduction

The list of flutist Roberto Fabbriciani's premieres and collaborations is too long to itemize here.^[1] His sound and technique have inspired a host of the most prominent post-war composers, ranging from first-generation modernists like Berio, Boulez, Ligeti, Cage and Stockhausen, through Asian composers like Hosokawa, Takemitsu and Yun to the second-generation or post-modernists like Ferneyhough and Rihm. Despite this broad scope and more than 80 recordings to his name, his most important is probably his close collaborations with his countrymen Salvatore Sciarrino (1947–) and Luigi Nono (1925–1990). The relationships between the three, and their interaction in the development of a body of works that can be said to have redefined the sound of the flute as a musical instrument, sets the frame for our talks and discussions.

This interview took place over several months,^[2] starting in Fabbriciani's study in Florence, surrounded by books, scores and posters. Over four intense hours we played through Sciarrino's *Opere per flauto vol. 1*. Talks, espresso and a meal followed, and I returned the next day to work on *Das atmende Klarsein* by Nono. After the meeting in Florence, we corresponded by email until I returned to Italy five months later to hear Fabbriciani premiere a new work by Nicola Sani at the Venice Biennale. These meetings – with or without flutes, in person or in writing – were complicated by our language barrier. A street café at the piazza in front of my hotel was host to our lengthy talk on the second occasion, when I was armed only with a Dictaphone. We communicated in two or three languages and none of them are thoroughly shared between the two of us. Still, as I left Venice after our long espresso-fuelled talk, I made a note to myself stressing the paradox of understanding so much from so little.

The following is a synthesis of transcriptions and translations from our diverse meetings, organized thematically for the sake of clarity.^[3] Some keywords keep resurfacing as we get to know our shared

interests in different notions of sound, of creative processes and of performing composed as well as improvised music for flute: the sonic orientation in contemporary music, the act of listening, the importance of experimentation and the necessity of risk-taking. But first and foremost we talk about the creative and musical potential in collaboration.

The sound of the twentieth-century flute

Bjørnar Habbestad *It's a common notion that the flute repertoire of the twentieth century emanates from Debussy's solo piece Syrinx, and the lush sonority found in his orchestral flute solos of Prélude à l'après-midi d'un faune. But today, timbral transformation takes place not as an exotic embellishment of certain pitches, but as compositional matter in its own right. Looking back at your many collaborations, how would you describe this change in the sound of contemporary music?*

Roberto Fabbriani I think each era has changed the sound of music. In our time, it changed when it was affected by atonality and the development of instrumental techniques and effects. Great composers have always looked ahead, thanks to the way they imagined sound. The flute, a monodic and cantabile instrument, has now become full of sonic resources, something that also has changed the point of view of composers.

How do you think this has changed the role of the performer?

After 1960, music became more standardized, because composers were looking for a common, ideal language that was no longer personal or even national. Although each one tried to use personal techniques, this does not mean that they did not adhere to certain common instances. Performers began to have a different and a more active role, not only as they tried to cater to more sophisticated sound expectations, but also by proposing solutions and innovations.

You have personally contributed to advancing the sonic repertoire of the instrument. Which techniques do you find most important or influential for music today?

I think the most influential techniques in today's music are Sciarrino's acoustic sounds and Nono's innovative use of amplification and live electronics. In the 1960's I started to develop multiphonics, cooperating with Bruno Bartolozzi [4] amongst others. My teacher Severino Gazzelloni and the composers I was in touch with, such as Bruno Maderna, [5] influenced this research, which led me to reinventing the flute.

Do you find that these developments in instrumental technique have found their way into conservatories and music academies?

Not yet! As far as I can see, students in conservatories study mainly historical music literature. There are some departments where contemporary music is studied, but rarely specifically instrumental and for flute. I think new music needs performers to play an active role. They may not only be performers, but also co-creators, as they now have many more opportunities to create sounds than in the past. Here, the

relationship between composer and performer becomes absolutely and necessarily complementary and interactive. The fantastic and boundless ideas of the composer arouse the performer's creativity and push him/her to the extreme and unusual boundaries of his/her art using the instrument.[6] The performer's ability and imagination to conceive and to create new sounds becomes very important in the development of and innovation in the musical language.[7] Nono spoke of my sound as 'surprising innovations' and wrote that 'he [Fabbriciani] was ... immersed in the Freiburg studio, and I [Nono] was immersed in his mastery'. Maybe this way of thinking should find its way into the curriculum.

This makes me think about a statement from Luciano Berio, talking about 'a different virtuosity' – a virtuosity of sound[8]. Did you discuss this with him?

Berio's concept is definitely well placed. I had the pleasure to play *Sequenza I* for him countless times. His writing stimulates the imagination and inventiveness of the interpreter. It promotes interpretative freedom, a crucial feature of the aesthetics that inspires *Sequenza I*. It addresses the problems of a form of polyphony based on the multiplicity of the action. Berio used the flute to its full potential. He was interested in the phonic quality of the sound material, both acoustic and linguistic – i.e., its evocative meaning, resulting in the rhetoric of pastoral metaphysics. With respect to the interpretation of *Sequenza I*, Luciano Berio told me that beyond the accurate research of the technique and the phrasing, it would be necessary to listen to Severino Gazzelloni.[9]

Did you also discuss with him the background for the revised version of the Sequenza (1992) where he reconstructed the rhythmic structure, from a space-time notation to a traditional metric notation?

At the occasion of one of our concerts, Luciano Berio expressed some dissatisfaction with the manner in which many flutists would perform the *Sequenza I*. In our discussion, I mentioned to him the idea of a version with traditional notation to facilitate the preparation of the piece for younger performers.

Do you know if Berio discussed this with Gazzelloni? Do you know what he thought about this change?

Absolutely no. Gazzelloni loved the time-space writing as it allows more freedom and imagination. Also, the original and amicable dedication 'a Severi' is a sign of great friendship.

Speaking of Gazzelloni, Italian flautists seem to connect more strongly to contemporary music, is this a coincidence? Are there any reasons for this?

Well, this is absolutely true regarding Gazzelloni. He was my teacher and he introduced me to the major composers of the time. I think that because of the direct contact, certain performers can consider themselves as collaborators of the composer, that they take part in the creation of new music. The fact that some flautists are interested in playing contemporary music is quite another matter. This does not necessarily mean working in close contact with the composer and taking part in the creation of music.

Is there 'an Italian sound' that has developed, or is this sonic development outside of the national trends?

I think Bruno Maderna gave the best answer when he declared the need to return to melody because we are Italian and that this is our essence; a message that has been quite ignored. However, Italian music does show an inherent taste for lyricism. It is an atonal, special, avant-garde lyricism, but still something that distinguishes our music from the others.

There also seems to be a strong connection between Italian composers and the flute, as so many composers here have contributed to the solo literature: Berio, Sciarrino, Nono, Franchesconi, Fedele, etc.

No doubt about it. I think I have contributed to the diffusion of music for flute thanks to a relationship of mutual respect and trust with the composers. Good collaborations arise from a common intent between performer and composer. I could mention the collaboration with Luigi Nono during the writing of *Das atmende Klarsein*. First we tried at home, without using electronic techniques, and we improvised with acoustic sounds in search of sound solutions. Then, after choosing some of those acoustically performed materials, we experimented with them using electronics. Some were interesting and some were not. Therefore, a further choice was necessary to draft some kind of provisional score. We produced the piece only after some performances.

So the process of collaboration continues after the score is finished ?

In some cases, certainly.

Collaboration

Performers are thought to be 'true to the work' – that they have an ethical obligation to put the identity of the work before their identity as artists. This means that there is an ideal where we aim at meeting the new work or the collaboration without bias, trying to understand and relate to it without prejudice. Still, to what extent do you find that you bring something into all musical situations – a sound, an attitude, a material?

Directly, such musical material suggests new ways of expression. By a new technique, yet untested, you can discover unexplored sound worlds.

Do you think that such an artistic bias can be useful in collaborations with composers?

Rather than prejudice you need an open mind, especially for new music. This important feature allows the collaboration not only among composers but also between author and interpreter.

In improvised music the ethic-of-the-work is exchanged with an ethic-of-the-performer. Could you envision this ethic within the framework of contemporary music?

Certainly. In contemporary music there is a certain randomness, controlled or free. But beyond this technique, today, the role of the interpreter is more creative, as there are many sounds which require a performer's creative intervention, such as extended techniques. It is true that this exists in all historic

repertoire, as a true interpreter is not a mere executor of notes and symbols, but contemporary aesthetics also refers to the uncertainties and details of sound emission that are not always provided by the composers, on which you can greatly diversify the interpretation of a piece.

How do you feel about ownership to your sounds when collaborating with composers?

I really hope to give this sound to composers, and that everyone can use these new sounds in their music. They're really new avenues.

But in the contemporary music scene, both the economic and cultural capital often follow the composer, not the performer. In your experience, to what extent is the role of the performer acknowledged by composers, publishers and the musical world in general?

Well, the role of the performer-interpreter, who is a co-author, is often not recognized. This is also a matter of knowledge. It is always necessary to work together, to learn to understand; this is the same issue for all composers: for Nono, for Berio, for all composers of direct experimental music. Learning, working together, knowledge. This is necessary, and composers today know what prestige is but have no concept of the workshop. That is the historical workshop, the Renaissance workshop, like Michelangelo's. Today we have a similar problem. This is necessary for the future: workshops and direct collaboration, absolutely. What do you think?

In my experience, the relationship between my own and a composer's contribution in workshop situations are often unclear and unregulated. And in some cases my role, as co-creator or contributor, become highly downplayed.

Yes, yes, this is a problem. It happens to me too. But for me this is not so important, for me it's history continuing. It was the same problem with Sciarrino. I think what matters, what's important is the time of the story. For example, *All'aure in una lontananza*, the first piece with Sciarrino ... in 1976 ... it revolutionized flute literature. At the time, I didn't have a 'Fabbricani's method', I didn't have anything to publish, but it wasn't necessary because of the time of the piece, the history. And yes, I could or should have published a book sooner, but today I think it wasn't necessary for history, because the piece is history itself.

That's a very generous approach.

Well, thanks. Today I think like this, at a different moment perhaps? But today it's not necessary - today everything's clear. That's the way it is, and perhaps we'll have the same problem with my hyperbass^[10] sounds because that was the first instrument and everything that'll be new in the future for that music builds on this. But that's the way it is, isn't it?

If I look at the repertoire from this period that you mention, from 1974–1978, it really looks to me like the sound of the flute is changing, something new is happening at this time.

Yes, at the time, it changed; it definitely was a turn. These were very important years because history was changing, the sound was changing. Experiments, research, casual meetings, it was incredible, although many composers couldn't write, they didn't formulate this music perfectly. But even earlier – the late 1960s – 1968, 1969 – during this time the way of thinking changed, the way of thinking about music and playing it. I think it was a very important transition time. At the time I was collaborating with Sylvano Bussotti. [11] A great composer of the time, he was one of the most experimental, but his writing wasn't very detailed – it was more about the beautiful sign: in painting, in writing. Very elegant, but not detailed like Brian Ferneyhough, for example, not analytical. Before Sciarrino, with Bussotti, we experimented – very interesting and important experimentations – but we didn't write them down.

So you think the score becomes important as an historical document then, a documentation of what actually took place?

Yes, exactly. In those years, with Sylvano Bussotti, I experimented a lot, but we didn't detail these on paper so much.



Figure 1 Excerpt from manuscript, Sylvano Bussotti: *Autotono* (1980). From the private collection of Roberto Fabbriani

You know, ten years before I started working with Sciarrino, I collaborated with Bruno Bartolozzi, who wrote the well-known manual *New Sounds for Woodwinds*.^[12] For me this was the first experience with a composer. He was perhaps not a great composer, but he was a great musician. And his book was a very important achievement at the time. We met when I started playing in the orchestra Maggio Musicale Fiorentino in 1964, I was very young, only 15, and the average age of the musicians was perhaps 64 (!). But there he was, Bartolozzi, as a violinist. He would invite me to his house and say 'Roberto, play'. At the time I played many, many multiphonic pieces – I had a large catalogue of repertoire then, and we worked together. He was an enthusiastic man, and I wrote for him the quarter-tone scale, not only for open-hole, but also for closed-hole flute. This experience was very interesting for me. I learned a lot, it is a good cultural baggage. And it's not just casual, I mean, it's solid knowledge.

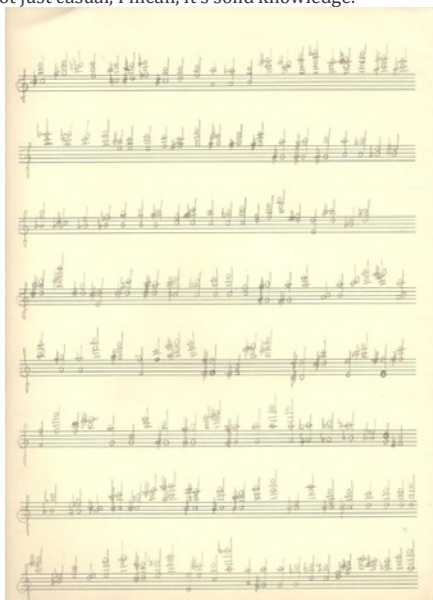


Figure 2 Multiphonic notation from collaboration with Bruno Bartolozzi. From the private collection of Roberto Fabbriani

Actually, we played only by ear, we didn't have any electronic instruments at the time. For the multiphonics we had to listen; one pitch at the time. We would experiment carefully and with an attentive ear, trying the same position but changing the air and embouchure pressure, and the position of the lips on the mouthpiece. The result would change, and it was difficult to determine precisely the pitches. A mad work, extraordinary, but Bartolozzi ... he had an *orecchio assoluto*, do you understand? Perfect pitch. *Are you quoted as a source in any of his publications?*

Yes, as a performer of his pieces for flute, e.g. *Cantilena* for alto flute, *Per Olga* for solo flute and *Sinaudolodia* for four flutes, which he all wrote for me. But not for the publications. I soon left Florence to move to Milan to the La Scala Orchestra and I did not have the opportunity to go any deeper in my work with Bartolozzi, who continued with my fellow flautist Pier Luigi Mencarelli. But I still have handwritten notes from our sessions (Figures 2 and 3).

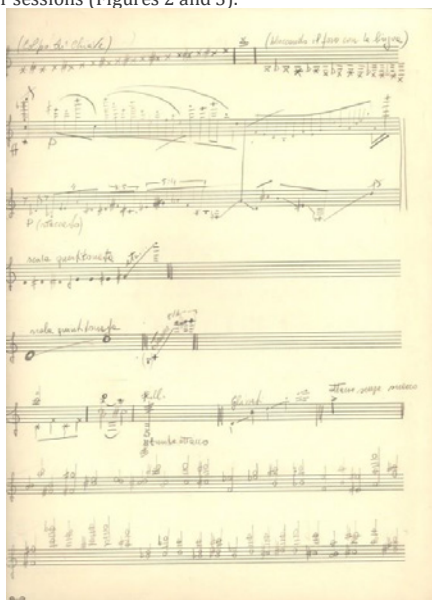


Figure 3 Sketch from collaboration with Bartolozzi. From the private collection of Roberto Fabbriani

Improvisation and risk-taking

The experiments that don't manifest themselves in scores, but remain important for how composers and performers alike think and listen intrigue me. I find there is too little value given to these types of processes. If we narrow this down even more, to the moment when you experiment with the instrument, how do you think about creating something new? What kind of process is this? What takes place?

It's a very interesting question. I have never thought of this in this way, but I think I to a certain extent have followed the norm. However, this makes me reflect because sometimes I went very far, a long way, and I got extraordinary results. But I've never thought to record or to write it down. And spontaneous improvisation is a very important way to express oneself, because all the knowledge you have inside can be expressed in a liberating way. It can set you free and produce exceptional results. Especially when I play for myself. Of course I have improvised a lot for and with composers, for others, but that's more constrained, you know? Your control is more constrained when you improvise for others.

So the improvisation becomes a way to condition your future behaviour?

Well, when you improvise with composers it's more restricted. When I used to improvise for Nono I wasn't thinking about him, I improvised freely, but there was still some constraint. Whereas when you improvise for yourself, on your own, it's a much freer way to do it, it's liberating, *frei*, you do it because you need it, as a *need*. It's what I need to do for myself.

Nono must have been preoccupied with the relationship between thinking, listening and doing, between imagining and changing sound, and to me this seems to rely on improvisation. It seems natural that as a performer you have to develop that skill?

Exactly, and the levels of improvisation are endless, there are infinite possibilities. That is, you improvise in a traditional way, you can improvise historically, you can improvise in jazz and then you can improvise while experimenting. I think improvisation in experimentation is something more adventurous and you can really discover new worlds by doing so. But it's also more difficult because you need not only the professional talent for playing, but also the ability to be creative and imaginative, with all its risks.

To me this is really of essence, the ability to risk something.

And this, this is a special talent that not all musicians have; not all musicians have this skill. You always need a lot of courage, and I always take chances, even during public performances, without problems.

When I played the last piece for Nono, the *Baab-Aar*, [13] in Berlin, I didn't have the score, no, I had nothing. This takes artistic courage, but also knowing how to manage risks, knowing how to take chances. This was a very important subject with Nono but also with other composers. Composers who love risks, adventure, and the chance to have a miracle – if it turns out well, it's great, – but it can also be a disaster. But I'm a musician who takes risks, I take my chances, I love the risks and they are necessary. Yesterday (at a performance) I took a chance, a small one, but a risk nonetheless. And here is the difference – performers can be very good, professional, fantastic – but this is beyond academia, over academia, this is the difference between performers.

In your article 'Walking with Gigi' you write 'Losing the fear of taking a wrong path allows error to become a further stimulus in the search for new horizons'. Could you expand a bit on how this process was for you?

Have you always been fearless in this respect, or was there a development, a transition?

In the moment of losing the fear, you explore, and can also take wrong paths. But this is not bad art, because the wrong road led you to new knowledge that the right way would not have given you. Essentially, in creative exploration it is worth also to make mistakes as in the error you can find new knowledge. The error becomes a positive fact, generating new, right ways.

Earlier you wrote to me about how knowledge – of languages and technique – and creative imagination were the two most important types of skill when improvising. Do you not find that knowledge and risk-taking are opposites in this context?

I believe that knowledge provides the opportunity to arrive at 'risk'. Without knowledge it is impossible to explore the unknown, and therefore risk itself.

Virtuosity of sound

Coming back to the role of experimentation, and its relation to the development of new sounds, how do you look upon the role of technical manuals in contemporary music? I have always felt there to be a contrast between the dry, seemingly objective way that this knowledge is categorized and presented and the creative and sonic potential or even freedom that lies within the sounds that are described.

Technique manuals are useful, they let you mature and grow from the instrument's point of view.

However, owning your sound own sound world is something quite different.

Could you elaborate on this? What does it mean to 'own your sound world'? And how does that relate to the idea of 'sonic virtuosity' mentioned by Berio?

The new texts are useful for understanding, to indicate the paths of the new, but it is important to have a personality and a creative aspect in approaching their sound, to engage in works as complex as those by Nono, where virtuosity is given from the emission of the same sound, colour or timbre. The virtuosity in the works of Berio is very different and is derived from the idea of the romantic virtuoso interpreter, an idea that was expanded during the twentieth century. Or the virtuosity of great technique, high velocity or difficulties with reading. Nono's virtuoso also works on just one sound that is constantly changing, on a single note. A virtuoso of quality and not quantity.

Do you think there is a relation between the development of electronic music and the instrumental sound of the contemporary flute?

All electronic music has influenced the way of conceiving the sound of acoustic instruments (like in some of the symphonic music by Ligeti, i.a.). It has made us rethink acoustic instruments in terms of their sounds and dynamics. Also, electronic instruments for sound analysis have created new knowledge about listening, about sound awareness.

For me personally, electronic music led to new ways of listening to sound timbres and dynamics.

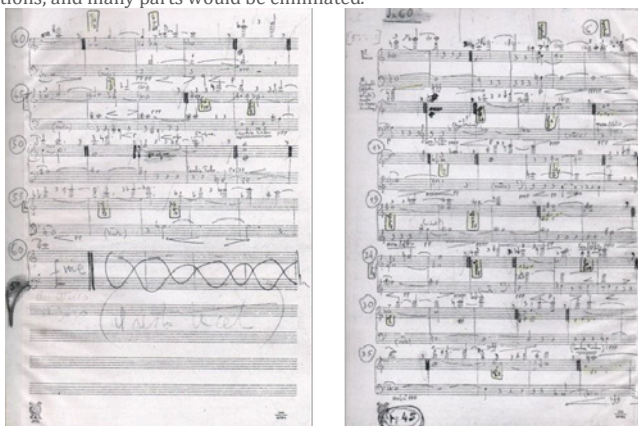
Experimenting with sound and 'seeing it', not only listening to it, with instruments such as the Sonoscope^[14] allowed me to explore and control all aspects of its emission.

As the name suggests, the Sonoscope makes us 'see' the sound. The emitted sound is captured by the microphone and 'showed' on the screen, in real time. By reproducing the sound image, the Sonoscope shows the transformation of the timbres and dynamics, and the emission control. It is a kind of ear training through sight.

The first collaboration – tracing *Das atmende Klarsein*

Your work with Nono seems to me to be a very good case study for investigating different types of interaction between performers and composers, and more specifically, the process of creating and performing Das atmende Klarsein in the period between 1980 and 1990 is a fascinating window into the methods and ideas of 'the late' Nono. Could you tell us something about the developments of this piece?

Das atmende Klarsein is the first of Nono's compositions of the 1980s which lead to *Prometeo*.^[15] The bass flute part underwent several changes and cuts with the various executions, and the handwritten flute part testifies to this transformation. After Luigi Nono and I visited *Studio di fonologia musicale di Radio Milano* in 1978, we went to the Experimental studio of the SWF Heinrich-Strobel-Foundation in Freiburg-Bresgau at the end of 1979.^[16] Thus, the long collaboration with the Freiburg Studio began. I would improvise for Nono without electronic music, then I'd repeat with it. The first draft of *Das atmende Klarsein* was full of sound events. Even the succession of flute and choir moments was different. Materials became thinner and thinner with time and executions. I remember that in the first draft of *Prometeo* certain parts of *Das atmende Klarsein* were included in the score. The score would be reduced after the executions, and many parts would be eliminated.



Figures 4 and 5 Excerpts from unpublished version of a duet from *Prometeo* (1981 version). From the private collection of Roberto Fabbriani

Looking at it from the outside, it's almost as the performances could be seen as part of the creation process, as if the work originated not only from being composed but also from being performed.

Well, Nono's reflective process was deep and slow. This is a good thing, although he could sometimes have second thoughts. Our experimentations were long, sometimes lasted for many days, when we recorded, catalogued and took notes about the results of our experimentations, in order to use them organically in the writing process. The gestation of the score was long and represented a radical turning point for Nono.

This is a radical conception of a work or a composition, that it holds the potential for continuous change and development. Did you discuss this idea with him in relation to the metaphor of the wanderer from Hay que Caminar, and his knowledge that traveling itself, and not the arrival, is the goal?[17]

Well I think that the metaphor of the wanderer is an assumption established by Nono looking back to this creative process.

How do you see future interpretations of Das atmende Klarsein? Should the last version from Ricordi be thought of as the 'end' of the development process, and should future performances adhere to this definitive edition and that recording?

The reference recordings of *Das atmende Klarsein* are certainly very useful as a study in performance practice. Some of Nono's scores are not exhaustive, and so a performance tradition is necessary. Nono's scores from the 1980s have often been changed since their first executions [18] until a level of conviction was reached. New performers will have to apply themselves to this performance practice, thinking of music as constantly transforming due to the risks in performing it and its interaction with live electronics and space. In Nono's scores, performers are required to use their sound imagination, creativity and fancy. I think this is difficult, if not impossible, for performers who have not experienced a collaboration with the composer or with the original performers and technicians.

So how do you look upon future performances of these works, when the original performers and technicians are no longer active? Should the performance of Nono's later works be a faithful recreation of the sound of the 1980s performances or should performances keep developing into something new?

I think it is necessary to create a performing tradition for these works. It is important that the interpreters have a solid cultural background and look for a philological interpretation. In this way music, with its parameters, its interaction with live electronics and space, is turning into something new.

How does the role of the tape relate to this issue?

The tape is a kind of 'guided' improvisation where the flautist interacts with the magnetic tape; sometimes following it and sometimes going against it, reinventing him- or herself each time. In that way you could say that it is similar.

This focus on the potential of change in the music, did it also affect how you would rehearse?

With Nono there wasn't so much rehearsing, like many others do. Because a lot of rehearsals would take away the pathos of music. He worked a lot, but in different moments, in different moods and with great potential. The complexity was created mainly due to the diversity of the group of musicians and technicians used. We were very close-knit, in tune with each other so to speak, and this is very important, because we could express the thought of the composer more univocally, in a more cohesive way. I find this quite important, the relationship between the thought of the composer and that of the performers.^[19]
What kind of complexity are you referring to here?

In a sense I have already answered; the complexity is given by the unusual, by the sound, the temporality suspended from the dynamics and not by what we commonly call the complex: a myriad of notes that on one side highlights the acrobatics of the interpreter and on the other allow the composer to present (familiar) techniques. This is far from Nono's ideas.

I started alone with Nono, working together with him for three to four years. As the idea of a group was born, we thought about personalities, we were looking for the right people and the right type of performer for this situation. We needed people who were very close, psychologically and instrumentally, someone who could express this thinking. Later, after we wrote *Das atmende Klarsein* as a solo, the next piece, *Io, fragment dal Prometeo* was for two instruments. First I proposed my friend *Ciro Scarponi*,^[20] then more and more musicians – [*Giancarlo*] *Schiaffini*^[21] as the tuba player, and *Susanne Otto* as the singer – and we became almost a small ensemble. An 'Ensemble of Trust'. And this is very important, trust is fundamental for this kind of work. Nono as a composer could be expressed more strongly because we all trusted each other. This is the compositional process, and then it all becomes easier, you know? Because it comes from provocation, from provocation to provocation: me, him, everyone.

An ensemble of trust

This 'Ensemble of Trust' proved vital for Nono's entire output over his last ten years as a composer, and already in Prometeo I think you can see that there is a new performance practice approaching. The writing for orchestra, choirs, singers and instrumental soloists respectively is very different, also at the notation level. I like to talk about this as a layering of different musical practices. This quality, this richness is something I think partly lacks in current performances. Why do you think this is the case?

Now we face a very big problem, because *Prometeo* has completely changed. Actually, I don't feel like talking about this. It's important to say that I don't speak for personal interest here. What is important is Nono's music.

I think the quality of *Prometeo. Tragedia dell'ascolto* and the thinking of Nono as it comes through today is something very different from the original. Why? Because after Nono's death in 1990, the score changed, as it wasn't complete. Now it's not complete either, many things are still missing ... both performance-wise and sound-wise. There has been an adjustment, they have formalized an academic manner of playing this

piece. This becomes a problem especially in the execution of the solo parts, because they are so much more complex than the way most performers today play: so safe, nice and sedate. These parts are not safe, there are many risks that I'm not hearing. But, again, this is *verboten* to me, I can't talk about it.

Why?

Because they'd say it's because I want to perform it myself. Well, I don't. For me, playing is not necessary. I used to perform this piece, and it's okay that it's over. But the execution ... there is no functioning performance tradition for this music. It has been cancelled, now it's all academic, safe. There's no fiction, there's no philosophy, there's no thought that goes into playing these solo parts. And the problem is especially clear for the soloists. That the orchestra plays very close to the way it's written is a tradition, just as the for the specialist choir. But for the soloists – flute, clarinet, tuba, and the euphonium – it is very important that it's done in a certain way. It should not be safe and sedate. Today it's very sparse, bare, and that's not the way it's supposed to be. There is a great tension in Hölderlin's part for example. This is not only a question about the technique, but there must be a sense of total instability while playing, a sense of utopia. And this I don't hear today. It's something undefined that puts you in a special mood, something that only a certain way of playing can give you. Not something an accountant, an engineer, a professor can do. This is pure utopia, just like Nono.

He was a utopian, unconventional, very deep, but a visionary man. And you, as a performer, you have to have a fair bit of vision too, you have to be a *visionnaire* too. For me, this is the vital difference: to be an Interpreter or a Performer. An interpreter is, as Cacciari says, one who accentuates the text, a *cantore del testo*, that's the crucial role of the interpreter. The others are performers, the orchestra are performers, but the soloists can't be performers, they have to be interpreters. Why? Because even the idea of *Prometeo* wandering among the islands, his adventures, they are pure utopia. He can't just be someone who says, 'Ah, yes, I've got a boat, I'll go here, now I'll go there'.

This is a psychological and material reduction of *Prometeo*. If you take the great poetry and deep philosophy of the text and music away from the music, it becomes a normal act. It is no longer a special one. And the Amsterdam *Prometeo*, the CD *Prometeo*, unfortunately, is a normal *Prometeo*.

I've even spoken about this for quite a while with Ingo Metzmacher, who is quite clever. When he performed *Prometeo* in Hamburg and later, after the CD, he called me and said: 'Can you come to Hamburg to teach, to work ... together with the soloist ensemble?' I went there and the *Prometeo* in Hamburg was already better, but it's difficult. It's important to work together to explain, as a whole thought tradition, a tradition of execution, is partly missing, and this requires a lot of time to restore. It will take a long time for the 'Nonoesque' performance practice to become truly known and applied. Facing certain scores without owning these notions means that in the end, the music is not adhering to Nono's thinking.

You keep coming back to this phrase, 'working together', with Bartolozzi, with Nono, Sciarrino, your fellow Nono-soloists and others. This interests me because I think your descriptions of this can tell us something about how we can play this music today. I find it not only interesting for documenting a historical practice, but relevant for how to continue to approach this music.

This, this is very important. The risk of this music becoming academic, like we discussed, is prominent. In Italian we say *impoverimento*, impoverishment. I think *Prometeo* is impoverished, precisely because the creative part is missing. Creativity can't be constrained. The desire to limit and polish at any cost in order to create something is very unimaginative.

Do you think this kind of reduction is a general problem of contemporary music? Is the knowledge from the original interpreter(s) lost in the second generation of performances?

Well, the fear of losing something could be relevant in certain situations. But then again, perhaps in a different situation something changes and can become even better. But yes, in general, I think you lose something – not always, but in general. Because history becomes myth and then crumbles, it fades. In real time, a minute is 60 seconds, but one minute after 20 years is something different. Everything is reduced as time goes by, it is resized, there's a reduction of everything. There could certainly be future performance where something gets better, but this we don't know. But one thing is certain: something gets lost.

This is like baroque music – it was normal to improvise, to always change. Playing only what is written is a Romantic concept, and I think that the idea of freedom of expression was stronger in the past. It is a reduction of time. But I think that contemporary music is similar to baroque in certain ways. Certain techniques – in the flute, for example ... there is the art of articulation of the tongue; there were many ways of attacking the sound, not just one system, like today's tucutucutucu—but rather lerelerelere, deredere, buruburu or duruduru ... an infinite number of variations. And this is a freedom that today's music, contemporary music has recovered.

Also, there were performers who created more personal positions. The creation, *la création* of the ancient performer is like Paganini for example. He had secrets, he used to break, to tear the strings, he'd play with just one string to show the possibilities. Paganini had a disease, a deformation, and nevertheless his hand did things that others normally couldn't do, you know. So, in short, each performer would invent their system. Flutists like Briccialdi^[22] was at odds with Boehm, because the latter used his system, the Briccialdi system. So everybody changed [it]. In the nineteenth century, there were thousands and thousands of system flutes, almost one system per maker. And Ziegler,^[23] Briccialdi, then everybody would customise them with different materials, glass, metal, wood, ebony, all, many syst[ems], bone, ivory, all different with large holes, more or fewer keys, in other words different systems, especially in 1800,

before the Boehm system was definitively adopted. So everybody created ... that's what I mean, a creativity of performers in order to gain new and different possibilities.

Do you think that the uniform sound ideal will become less influential?

Well, this works by assimilation – the French school, the German school, the Italian school etc. And especially for groups, to create orchestras, to create compact and homogenous groups. I think that the soloist, the creative performer should stand out from the crowd, out from an academic performance tradition. Today it's needed as a novelty, but I think that there has always been an academic division, between normal and extraordinary performers who are creators of new sounds. There have always been utopian musicians, opening up the path of music. Extraordinary people, virtuosos, of *romantische Virtuosität*, like Ciardi [24] and Briccialdi. They were outside of the norm, because the orchestra would only play their Brahms and Schumann. So when De Lorenzo [25] appears, he'll grow to have a pupil who'll play Varèse. This is evolution. In any case, I think there has always been an element of provocation. And today it's as necessary as ever. Who are the provocateurs today? Who are they? Where are the provocateurs?



Figure 6 Luigi Nono and Roberto Fabbriciani, 1981. From the private collection of Roberto Fabbriciani

Nono described you through three different types of interpretations of the idea of provocation.

First, provocation through changing knowledge,
second, through continual comparison and
lastly through 'the qualitative splendour of new dawns'.

(Fabbriciani, 'Walking with Gigi')

These are strong descriptions, strong characteristics. Have they been of equal use for you, outside the close relation with Nono and his compositional project?

In fact, our relationship, beyond a deep understanding and friendship, was based on the idea of the infinite possibilities that thinking and art allow humans. An idea that has in its articulated premise a revolutionary attitude not merely limited to the aspects of composition.

Can these qualities be perceived as a problem or a challenge in any collaborations?

I do not think that they represent a problem, rather a 'challenge' to achieve ever higher and unknown goals.

Earlier, when we discussed different strategies for the performance of Nono's late works, you described certain tendencies as being representatives of an akademische Mentalität – could you explain what you mean by this?

I often hear performances of Nono's later works that do not take into account his idea of sound and experimentation, that are addressed by performers with traditional academic performance practices. This will affect not only the idea but also the characteristics of sound found in the pieces composed by Gigi.

What would the opposite of akademische Mentalität be?

The opposite is to work on the colour, the tone, the individual sound and not on the difficulty presented by the velocity of a piece. Nono did not write special effects to make people hear a collection of techniques. He selected with great care; few sounds, but many worlds.

In the article 'Walking with Gigi' you write:

He himself maintained that he did not wish to write definitive laws, which would lead to prescribed methods. He preferred a provocative approach with an openness towards an infinity of potential meanings, ignoring universally codified traditional techniques. The executant's difficulty is clearly seen here, with the interpretation of his own aesthetics, by the extrapolation of a complex and heterogeneous meaning, from a simple and essential sign, which in turn must not result in a superficial or inaccurate interpretation, after all the executant is both singer and interpreter. This provocative approach was not so much a destabilising doctrine, but rather one to encourage introspection and deep thought. (Fabbriciani, 'Walking with Gigi')

This is a very interesting formulation. Could you expand on Nono's use of provocation in his collaborations. How would he challenge you? Can you give an example where this provocative approach produced unexpected results (for both of you, perhaps)

Nono never presented you a score written in the solitude of an ivory tower, he wrote step by step, while the exchanges took place amongst us. It helped us collaborators to understand if what he had theorized could be viable, and where it might lead. It was a continuous exchange between us of knowledge and ideas.

At the outskirts of the work

Talking about provocations – Could you tell me more about Baab-Aar? We briefly talked about this earlier.

How was that work developed? And why, in your opinion, is this no longer available from Ricordi?

Well *Baab-Aar* is a kind of special story. When Nono was ill, he called me: 'Roberto, go to Berlin, play *Baab-Aar* again'. I played it for the second time in Berlin and Nono was very happy ... he called me: 'How was the performance?' Fantastic, a huge success, I'm happy, I'm very happy ... then when Nono died, his family and Ricordi talked to me, and this piece was no longer there.



Figure 7 From the score of *Baab-Aar*. Published by Ricordi. Now withdrawn.

The reason was that they claimed they had no score for this piece. Well, Ricordi had no score for many pieces. This piece was there, it existed but it was 'impossible to play', perhaps because of the issues with the Freiburg Studio, perhaps because Nono at the last minute chose not to use the electronic technique,

but only instruments. Actually, Nono told me: 'From now on, without electronic music, pause, p a u s e'. This was something new, we were to start working on a new project, the *Manfred* project. 'Speak only with me for this project', he said, and *Baab-Aar* was to be the first piece of this project.

The piece is structured around the movement of the performer throughout the concert hall, playing a single note, a b-flat. The intention was to achieve an ever-increasing rarefaction of writing, corresponding to an increased richness of meaning.

The premiere in Berlin in 1988 explored the spectrum of a single sound with its possible universes. The sound was 'spatialized' but without live electronics, using the large available range of emission techniques and the movements of the performer in the space. One of Nono's goals was a more heightened and aware way of listening, aimed at savouring every little meaningful change, against any academic form. It was a beautiful experiment, wonderful.

Which emission techniques in specific are you referring to?

These are the new sound emission techniques which allow the spatialization of sound independent of live electronics.

Haller writes that the Berlin premiere of Baab-Aar included electronics. Was this the case? If so, was it only the second version of the piece (1989) that was done without electronics?

To produce the sound we had in mind the use of electronics was not necessary, and as it had been previously used for other purposes [A Eduardo Jabés], it did not help to create new sounds, they already existed acoustically.

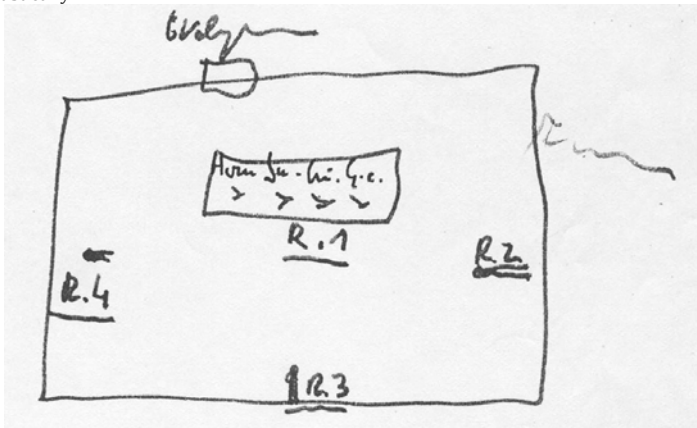


Figure 8 sketch for the diagram of the electronics used in A Eduard Jabés. Unpublished. From the private collection of

Roberto Fabbriani

Haller is quite categoric in refusing the idea of a publication of this piece. Why do think so?

This probably derives from the fact that the score remained on the level of a provisional draft. Between us, we had worked hard on the piece, it was sufficient, but for a publication you need to put some order to it.

You know, *Baab-Aar* is an old, old name, an old word, not a name, a personal name; it's a word, a verb, a Venetian verb that means *sciacolar*, *sciacolare*. Not Italian, but Venetian: *sciacolare* means chatting, chattering, talking too much. But for Nono *sciacolar* is not to speak really fast, but very slowly. Gigi would speak every time very, very slowly, reflecting, thoughtfully, like Kurtág[26] – slowly, very slowly. Interesting, isn't it? Gigi was like Kurtág when he spoke and *Omaggio a Kurtág*[27] originated as an imitation ... with very few notes. It was a slow piece, rarefied, with pauses ... like his personality. And so *Baab-Aar* is to speak, but a thoughtful way of speaking, very slowly—a note in all directions, but always different. Always focused on a single pitch. And this means also many, many possibilities for the music. Other composers have written for a single note, Scelsi of course, it's nothing new, the single note. But for him ... one note is its endless possibilities, a universe ...

The following year, 1989, I performed the piece again, alone this time, on Nono's request. But as early as in 1992, only two years after Nono's death, the Committee for the Edition of Luigi Nono's Works decided to forbid any new executions. The claimed that 'a transcription derived from a registration would be an abuse, because it would not be reworked by Nono himself in the final draft. It follows therefore an impossibility to authorize new executions.' [28]

But this was the same for other pieces, all pieces at the time had an incomplete score. Very often, Nono only had the pillars, and I had the windows, the balconies. What I mean is that the building is something we made together, and the score is only later completed with all the material. Because the compositional process is like ... 'Roberto, I don't like this, that one's okay, no, play again' and this is the compositional process. At the end the work is acceptable – how could I call it 'final'? But in this kind of music, the word 'final' is very difficult to conceive of because every time you perform, change is inevitable. The space changes, everything changes.

So the composition and performance practice of Nono's later works points towards a very open and empiric conception of musical work, of the listening act as well as the materialized sound. This hybrid practice can be challenging to document for the future, and also difficult to explain to historians or theorists who tend to focus on published scores and official work lists.

I agree, and it's terrible for Nono, because ... it's like cutting down this table here, taking away a natural evolution of his music. I think a documented publication of the different materials would be necessary to preserve this part of his musical output.

A second round – the sound of Salvatore Sciarrino

Let's move back to your experiences with Sciarrino. How would you describe the creation process of the first solo flute pieces, and how would this differ from your work with Nono?

My cooperation with Sciarrino started in the 1970s. I worked on all the pieces for solo flute belonging to the cycle *Fabbrica degli incantesimi*.^[29] I'd make him listen to acoustic sounds, to materialized effects. I remember that we heard an owl while we were writing *Hermes* we find it in the middle of the piece, and the 'hand' of an alarm clock in *Fra i testi dedicati alle nubi*. With Nono, we would have different, sometimes even impossible, idealistic solutions, related to live electronics; slowly, with time, they became possible. This was a different approach. Both Sciarrino and Nono were open to new ways of listening and new qualities of sound, in their effort to change the musical language through different instrumental approaches. In Sciarrino's music, the flute changes and renews itself through the acoustic sounds of everyday life, which are beyond our auditory attention. With Nono, the sonic change was more related to the use of amplification and live electronics.

My first Sciarrino premiere was *All'aure in una lontananza*^[30] at Carnegie Hall in 1977,^[31] at a concert dedicated to new music for solo flute.^[32] Later I also premiered the version for solo bass flute. I remember that *All'aure in una lontananza* aroused great interest and curiosity from the beginning because it presented new ways of playing the flute. New possibilities such as harmonic trill, harmonic glissandos, whistle-tones, etc., were performed with three different kinds of flutes: in C, in G (contralto) and bass. The dynamics of the flute is such that it returns from nothing to nothing, reaching a *pppp* sound and in other cases air-only *sforzato* sounds. The harmonic trills create a surreal situation, a dimension where nothing seems defined. I think this piece has been very important for the flute and obviously for me.

Sciarrino is considered to have changed the way the flute is perceived in contemporary music. How do you see your own role in this process?

It was the result of a close cooperation. Sciarrino would use flute techniques and materials that I created – they were the product of my fancy, imagination and poetry. In the case of *All'aure* we met in Milano, where Sciarrino lived at the time, and also in Tuscany.

The performer's role as co-creator is important in this music. In your experience, to what extent is this acknowledged by composers, publishers and the musical world in general?

Well, unfortunately the role of the performer-interpreter, often a co-author, is not recognized.

On his website, Sciarrino writes this about his sounds for flutes:

I would like to reflect on the meaning of having composed, in a few years, something that is no longer just a sequence of more or less successful works. It is a real corpus, and it means, first of all, that from now on the flute is no longer the same. And I do not expect to have disrupted it, but to have attracted it to an

unknown corner of the world. I had invented most sounds more than twenty years ago; some recent ones have been provided by Fabbriani; one, which had often recurred since 1971, belongs to Giancarlo Graverini. However, the same sounds that belonged to the common heritage of composers, today are also attributed to me with reason, because they finally seem conquered by the music. Each of my compositions is already in itself a legitimization of these sounds. The new sounds would be equivalent to a sophisticated cover on an old structure.

Once, we used to talk about 'effects'. Here, structure and sound event arise from the same needs and grow or tend to a common vision, a new image. It is not a question of choosing more or less appropriate sounds, to embellish your home, but of 'using new sounds to build new worlds'. This should be the aim of composers worthy of their name.

Do you agree with this description?

Yes, I do agree. Extraordinary compositions have been created with 'some recent sounds provided by Fabbriani'.

But this differs from what you told me earlier, that you 'reinvented the flute'? Is there not a conflict of opinion here?

I have already expressed here what I mean. That Sciarrino was the first to use these new techniques for the flute is evident, as is the fact that I have provided, proposed and played them to him. There is no contradiction on these grounds.

When did your collaboration with Sciarrino end?

Our collaboration ended in 2000. After the first performance of *Cerchio tagliato dei suoni*.[\[33\]](#)

Why did you stop working together?

I would not know; I remember during our collaboration to have performed several works: *Fabbrica degli incantesimi* (L'Opera per flauto 1977–1989), *La perfezione di uno spirito sottile, D'un faune per flauto e pianoforte, Addio case del vento per flauto solo* (1993), *La Divina Commedia di Dante Alighieri* (1987), *Musiche per il Paradiso di Dante, Frammento e adagio per flauto e orchestra* (1986–1992) and others until *Il cerchio tagliato dei suoni* (1997).

Did your collaboration change over the course of this time? How?

Absolutely no.

Do you think the pieces you developed changed? Do you find that the 'sonic project' started with All'aure was completed? Were the whole line of pieces all true to the initial idea, in your opinion?

The recordings and notations that we did together clearly respect the sonic and compositional idea. Our work was very open – in Italian it's *gestazione* – a process to develop something. *All'aure in una lontanza* was the first piece, it was not written in a week, but ... a much longer process over several months. Typically, the first thing would be that I'd improvise and play for him. For example, I'd hear a sound, e.g. with a special opening in the throat, then I'd notate an example and play again. Later this example would get developed in a score by Sciarrino. Again, it was a process. Following this, it was very easy for him to write this piece following this example. I wrote such-and-such fingering position will result in so-and-so pitch, e.g. In the text you showed me, Sciarrino wrote some recent sounds, but some is not specified. Is some 3 or 300? The term is relative. This some turned out to be whole works for flute. Sciarrino doesn't specify which ones, but 'some' include tongue rams, whistle tones, hissing sounds, harmonics ... everything that now is in the pieces.

You know, all these seven pieces are dedicated to me, except *Canzone di ringraziamento* which is dedicated to Petrassi, on my request. He was an important composer in Italy, and I performed it the first time in his presence. I thought it would be a good gesture, because I wanted him to continue working. I didn't ask Sciarrino to dedicate the other pieces to me, our collaboration was more natural. I think his dedication was an act of friendship, for a friend. This is what working together means. And therefore, it is more important that one piece is dedicated to a great composer, because the work – the work is even more important than us. Art is above us as individuals.

Endnotes

[1] For an exhaustive list, see www.robtofabbriciani.it/ing.htm.

[2] May 2015 through April 2016.

[3] Fabbriciani has approved all quotations and translations, but any lack of clarity, errors of translation or other faults are the full responsibility of the author.

[4] Bruno Bartolozzi (1911–1980) was an Italian violinist and the author of several books on contemporary woodwind techniques.

[5] Bruno Maderna (1920–1973) was an Italian composer and conductor.

[6] This passage is close to formulations found in Roberto Fabbriciani, 'Walking with Gigi' *Contemporary Music Review*, 18/1 (1999), 7–15. <http://doi.org/10.1080/07494469900640031>.

[7] The transition of Nono's compositional method towards an empiric approach is also described by Nono scholar Jürg Stenz, in his liner notes to Luigi Nono, *A Pierre. Dell'azzurro silenzio, inquietum – ...sofferte onde serene... Omaggio a György Kurtág – Con Luigi Dallapiccola*. NEOS 11122, 2010.

[8] 'These are virtuosos not only of the fingers but of the mind, not like a 19th-century idiot playing a narrow repertory.' Quoted in Will Crutchfield, 'Luciano Berio Speaks of Virtuosos and Strings' *New York Times*, 13/1 (1989), 3.

- [9] Severino Gazzeloni (1919–1992) was an Italian flutist.
- [10] The hyperbass flute – or flauto iperbasso – is an instrument of Fabbriani's invention reaching four octaves below the concert flute, to a mere 16 Hz.
- [11] Sylvano Bussotti (1931–) is an Italian composer.
- [12] Bruno Bartolozzi, *New Sounds for Woodwind* (London: Oxford University Press, 1967).
- [13] Luigi Nono: *Post-prae-ludium n. 3 'BAAB-ARR'* for solo piccolo solo and live electronics (withdrawn).
- [14] An analytical tool that visualized frequency and amplitude information of a realtime sound signal.
- [15] *Prometeo: Tragedia dell'ascolto* (1984).
- [16] Sources at the Nono archive indicate that the period referenced is 1980/1981.
- [17] The quotation 'Caminantes, no hay caminos, hay que caminar' (Wanderer, there is no road, only walking) is referenced in several of Nono's later works.
- [18] This concerns not only *Das atemde Klarsein* but also works such as *Quando Stanno Morendo*, *Diario Polacco N. 2*, *Omaggio a György Kurtág* and *Risonanze erranti a Massimo Cacciari*.
- [19] This observation is supported by Michael Gorodecki, 'Strands in 20th-Century Italian Music: 1. Luigi Nono: A History of Belief', *The Musical Times*, 133, no. 1787 (Jan. 1992), 10–17, and Laura Zattra, Ian Burleigh and Friedemann Sallis, 'Studying Luigi Nono's *A Pierre. Dell'azzurro silenzio, inquietum* (1985) as a Performance Event', *Contemporary Music Review*, 30/5 (2011), 411–39.
- [20] Ciro Scarponi (1950–2006) was an Italian clarinetist and composer.
- [21] Giancarlo Schiaffini (1942–) is an Italian trombonist, tuba player and composer.
- [22] Giulio Briccialdi (1818–1881) was an Italian composer and flutist.
- [23] Johann Joseph Ziegler (1795–1858) was a Viennese flute maker.
- [24] Cecare Ciardi (1818–1877) was an Italian flutist and composer.
- [25] Leonardo de Lorenzo (1875–1962) was an Italian flutist who emigrated to the USA.
- [26] György Kurtág (1926–) is a Hungarian composer and pianist.
- [27] Luigi Nono, *Omaggio a György Kurtág*, for contralto, flute, clarinet, bass tuba and live electronics, 1986.
- [28] Quoted from the website of the Luigi Nono Foundation, www.luiginono.it.
- [29] The cycle consists of a series of works for flute solo: *All'aure in una lontananza*; *Hermes*; *Come vengono prodotti gli incantesimi?*; *Canzona di ringraziamento*; *Venere che le grazie la fioriscono*; *L'orizzonte luminoso di Aton* and *Fra i testi dedicati alle nubi*.
- [30] Version in C for solo flute.
- [31] 21 July 1977.
- [32] Works by Camillo Togni and Sylvano Bussotti.

[33] This is a work for four flute soloists and 100 mobile flutists, composed by Sciarrino in 1997, premiered on 26 July 1997 at Cividale del Friuli with Fabbriciani, Luisa Sello, Manuel Zurria and Mario Caroli as soloists.

Appendix 6:

**Excerpts from notes, interviews,
lessons and meetings RF/BH**

Leaving/Arriving

[BH] I have travelled from Oslo, arriving in Florence a day early to get to know the area. My questions are emailed in advance, just before leaving. On the plane, I revisit my categorizations, made for the interview guide:

SOUND – PERFORMING CONTEMPORARY MUSIC -COLLABORATION – CREATION
vs. INTERPRETATION – PERFORMING IMPROVISED vs. COMPOSED MUSIC –
PERFORMING *DAS ATMENDE KLARSEIN* – WORKING WITH ELECTRONICS – SPACE
– STUDIES AND INFLUENCES

It strikes me as important that we have a frame from which to talk. I worry that I will spend too much time explaining my own ideas. I wonder how we will understand each other.

Preparing

[BH]I spend the evening before I meet Roberto practicing in a small garden flat I have rented. My backpack is brim-full with scores and I have brought at least three instruments to cover both the Nono and Sciarrino repertoire as planned. I make my way through the Sciarrino pieces and try to get back to my sound ideas for *Das atemde Klarsein*. The tiny brick wall room make out an odd context for the amorph sound waves of the opening phrases of the first flute movement of the Nono piece.

A first lesson

[BH] A warm welcome, an espresso, a glass of water and then we start, positioned among piles of books, scores, photos and concert programs from a rich life in music. As any lesson, a master-apprentice relation is enacted. I play, Fabbriani comments, I repeat, change, we discuss techniques. Smaller and larger adjustments are made as he explains and demonstrates differences in sound. An enthusiastic ‘Yes!’ or a chain of ‘Si, si, si, si, si.’ when the exact nuance is achieved, and a more sustained, doubtful sound when there is something which needs correction.

At dinner

[BH] Fabbriani invites me to stay for dinner after our lesson. We have just finished working on *Canzona di Ringraziamento* by Sciarrino, and I am quite happy because he has complemented the rapidity and evenness of my right hand double trills, which is a fundamental feature of the

piece. I blush modestly as Fabbriani tells his wife that I am ‘very good’ while she prepares pasta and a salad. We have red wine and talk about random things. I manage to direct the conversation through some of the pre-planned topics, but making notes or recording would be very rude. I try to remember bits and pieces for later. Fabbriani’s wife is a musicologist and shows interest in how I frame my research. She translates parts of the exchange, and I make a mental note that she probably assists Roberto with his correspondence.

A second lesson

[BH] Nono is the topic for day two with emphasis on *Das atmende Klarsein*. I am not convinced by my own playing, my muscle memory, the notation and my ears are not agreeing. Roberto’s coaching calms me down, the sound is getting right. We play partly from my score, partly from Roberto’s, which is the original handwritten by Nono, in multiple colours, ridden with strike-outs, comments, marks and notes. Gradually the phrasing, the techniques, the breathing not only corresponds but supports each other. We spend most of our time playing, talking, explaining, listening. Roberto promises to answer all the questions via mail.

Pre-concert Venice

[BH]Arriving Venice for the first time, navigating to Arsenale a couple of hours before Roberto’s concert. Reflection on concert situation – ‘old school’ new music, auditorium, stage-hall distinction. Traditional programming and audience. Where is the young people? I greet Nuria Nono, who I met some years back when I did the Norwegian premiere of *Das atmende Klarsein*. She laughs about the weather, there and makes a remark about festival logistics. I get to hear Fabbriani hyperbass flute for the first time. ‘I must get back to my island’. Nuria Nono’s words stick with me as she leaves.

A café meeting

[BH] We have agreed to meet at 10 in the Piazza by my hotel in Venice, the day after the Biennale di Musica concert. Fabbriani is not in a rush, there are plenty of trains leaving for Florence. I have four hours before I have to get a Vaporetto, a public transport boat ride which will take me to the Aeroporte. The city-life of Venice ebbs and flows around us; although the piazza is slightly hidden away and not on any of the busy routes, parties of cruise tourists and guided groups pop up at irregular intervals, congesting the little square and interfering with our café table world. It is getting colder, so we switch to the inside of a restaurant across the street. After the meal is concluded, I ask Roberto about something that he mentioned in passing in Florence. His views on the ‘impoverishment’ of Nono’s practice are shared here.

Post-concert in London

[BH] I have travelled to London to see Roberto play *Das atmende Klarsein* – fragmente, the solo version of DaK that only he is allowed to perform. It is part of a contemporary music festival in London, and the electronics are handled by a colleague and friend of mine. I am pleased to see that him and Roberto seem to work well together, the result is strong. At the same time I am curious and uncertain how much of the material which is fixed and how much is open. After the concert I meet up with Roberto, who takes me upstairs to a small backstage room after the reception. He has brought a drive with photos, scores and sound files, and we look through them while he explains their background, identifies people and places.

Correspondence

[BH] The answers provided by Fabbriani is noticeably shorter in our email exchange than in real life. The formal setting of written language, interview guides and the precise formulation all contribute to a different kind of performance. The co-construction is less explicit somehow, our rapport more indirect. Still, the tone between us is amicable, the material and the translations help us clarify matters.

Sharing sounds

[BH] We exchanged CDs as we met for the first time in Florence, and Fabbriani later comments on an album by my quartet Lemur in our email correspondence. He finds the sounds and textures interesting. Some months later I record a solo album, and after we have completed the session, just as we are about to start packing down I change my mind and ask the producer for a last take, with the bass flute. I warm up briefly and record a 12 minute improvisation straight away. The next day I break out the stereo files and publish the piece on soundcloud, with the title A Roberto Fabbriani. Conceptually, the piece references not only Fabbriani, but the tradition of dedications in contemporary music, both for use in titles (for example by Nono or Feldman) or by dedicating pieces to someone close to the composer (as in many of Sciarrino's pieces). Musically, the piece starts by quoting fragments from Feldman's chamber music for flute, gradually breaking this motivic clarity up with a wide range of the techniques employed by Fabbriani. I share it with Roberto, and other people. The piece gets referenced on somebody's blog in the U.S.

Appendix 7:

**Fragments from a dialogue,
Ellen Røed and Bjørnar Habbestad**

[BH, Venice, 2017, prior to the intervention]: What will the consequence of these studies be, what will happen to this material? Change, yes, but what kind of change? Uncertainty, yes, but what effect will this uncertainty produce? What difference is inflicted upon my memory of the original recording by the sites and the potential for human error? What will the musical cost or gain be?

[ER, Stockholm, 2018, in discussion about the project]: I can picture you, deeply concentrated, with headphones, listening as if intensified by me filming it, by the people passing and the sounds from the surrounding world that we were visitors in. What took place as you put down the headset and started playing?

[BH, Venice, 2017, after day 1]: I realized that I would fail to remember everything using my mind only, I had to follow up with my hands, execute the fingerings that would follow the sound, mimic the gestures and speeds in use. I was in the library, inhaling and exhaling in order to connect the notion of finger movements to breathing, remembering and thinking as a flutist. That is – with my whole body, not only my brain.

[ER, Stockholm, 2018, in discussion about the project]: I don't remember with the memory of a musician, nor that of a composer. More than anything I remember the musical expression I encounter at each intervention. But this memory is also accumulated, each intervention adding a new layer. What I see and hear is in other words also defined through the accumulated experiences stored as memories. The contrast between this embodied memory and the digital memory stored in the SD cards of my video cameras, is very interesting for my practice as a visual artist and artistic researcher.

[ER, Venice, 2017, project summary]: How did the presence of a camera change each study? The image itself never seemed to be of vital importance, but it nevertheless must have activated or charged a timespan, it must have activated the moment of performance.

[BH, Venice, 2017, day 2]: Performing outdoors, that is busking, no? This notion lingers in the back of my mind, but the stringency of what we are doing and the recording situation keeps me on track, the focus on the sound and my ability to recreate it as precisely as possible.

[ER:] on understanding performance because of AS

[BH]: Gradually, from one iteration to the next, an embodied archive was established, metaphorically and literally branching off of the FLN.

How are developments in musical materiality connected to changes in the way composers and performers collaborate? Bjørnar Habbestad's thesis searches traces of collaborative practice within the creation and performance of modern flute music, drawing on methods from historical musicology, interview-based research, and artistic research. Through three distinct cases the thesis exemplifies how the advent of experimental methods and collaborative practice have influenced and changed the role played by performers in the creation of music.

Part I tracks the history of one of the first novel instrumental techniques for flute, the key click. In Part II, this focus on materiality is deepened through the analysis of extensive research interviews with the renowned contemporary music flutist Roberto Fabbriciani. In Part III, the findings from these two processes are operationalized in a sequence of performance-based research, in which the different practices connected to the flute part of Luigi Nono's *Das atemde Klarsein* is explored, experimented with, and extended.

Habbestad argues that the gradual establishment of a new way of playing the flute necessitates a rethinking of skill sets and tasks within contemporary music performance. Bringing into relationship sound, collaboration, newness and agency, the thesis represents a concerted effort to calibrate our understanding of what performers do as music is made, recorded, performed, and experienced. By emphasizing the creative dimension of the performer and its future-oriented perspective on music making, the thesis offers a valuable example of combining perspectives from performance practice studies and the emergent field of artistic research.

Bjørnar Habbestad (b. 1976) is a Norwegian flutist specializing in contemporary music, educated in Bergen, London, and Amsterdam. Since 2017, he serves as the Artistic Director of nyMusikk.

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