THE MUSEUM AND THE LABORATORY:

CLASSICAL MUSIC AS STIMULI FOR THE DESIGN OF

PEDAGOGICAL STRATEGIES FOR IMPROVISATION


by


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Date _____ 20 May 2020 _____


Submitted in partial fulfillment of the
requirements for the Degree of Doctor of Education in
Teachers College, Columbia University


2020

ABSTRACT


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The purpose of this collaborative inquiry (CI) dissertation study was to examine pedagogical strategies designed to open Western classical music to improvisation. Piano teacher-participants formed a collaborative inquiry cohort as co-researchers to design and implement pedagogical strategies for use with their piano students, ages 8 to 10. Improvisation appears to occupy a limited role in practices commonly associated with Western classical music. Since the body of evidence found in Western music history and performance practice reveals traditions that encompassed improvisation, this study was designed to challenge existing pedagogical models associated with Western classical music through experimentation and improvisation.

The prior attitudes and practices of the three participants were assessed through introductory interviews, as well as the collection of videos of teaching practices and preliminary survey data. Three two-hour in-person sessions of the cohort took place, interspersed with interviews and the sharing of video excerpts and co-researcher memos and blogs in an online forum on Canvas. During in-person sessions of the cohort, pedagogical strategies were designed and revisited through reflection following participants' teaching experiences in their piano studios. Participants explored musical improvisation within a creative community by investigating the processes and experiences of treating Western classical music as an impetus to creative thought and improvisatory realization by their students. Findings illuminate patterns of interaction that illustrate the function of strategies for musical creativity and the applicability to pedagogical practices.

Several overarching themes, addressing the purpose of the study, emerged through my analysis of data, pertaining to the dynamic nature of music, call and response as formative, and knowledge and novelty as means and ends. Participants demonstrated distinct operational definitions of improvisation, each of which appeared to connect to a model of awareness and responsiveness through the expression of interrelated themes. Whether spontaneously generated or chosen intentionally, limitations promoted improvisation as the exploration of novelty, advancing and emanating from a knowledge base. By revealing pedagogical practices that demonstrate heuristic models for experimentation through variability practices, this study illuminates patterns of interaction that open works of musical art to the sociocultural activity of improvisation, through which a multiplicity of meanings can take form.

DEDICATION

S. D. G.

To my mother, my first teacher:
From my earliest recollection, learning with you has been great fun.
Every day spent with you is a new and exciting discovery, with the assurance of your love.
As I remember the formative experiences of childhood, I reflect on the many parts we've played together: pretend roles of settlers on the prairie, piano duets, improvised recitative to accompany our chores. We made mud pies and examined the mulberry worm, made hula skirts from *bois d'arc* leaves. Mother and daughter, our bond is eternal.

To my father, "builder of dreams:"
As we built my childhood playhouse in the backyard from the scraps of leftover building materials from your projects, little did I realize that our plan for construction would become a model and metaphor affirming my life's calling: To seek promise and new purpose for materials that may be forgotten.

To my grandmother:
You taught me to hold my head up high under trial, no matter what.
To inhabit not only my own thoughts, but to imagine the perspectives of others.
Though parting ways is inevitable and unalterable,
trying to keep our connection alive reminds me of making music from notation.
Because I want to remember your voice, your stories,
the way your hand felt in mine and the glimmer in your eyes,
my attachment compels me to try to notate the sensation of my love for you.
Yet, a piece of paper cannot capture your essence.

And to the participants of this study: Thank you for your time, your intellectual

vitality, and for inventing new ways to interact with old, familiar tunes.

<div align="right">J.M.W.</div>

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Chapter I

INTRODUCTION

 "The product of art, temple, painting, statue, poem – is not the work of art. The work takes place when a human being cooperates with the product so that the outcome is an experience that is enjoyed because of its liberating and ordering properties." (Dewey, 1934, p. 222)

"…as for the immortal Soul, what would it be like to lie awake for all eternity, without anything ever changing?" (Koethe, 2016, p. 53)

In reading Dewey and Koethe, I am struck by the imagery representing objects of art. In contradistinction to Dewey's conception of art, Western art music is often treated as if it were a static object or product, subjected to processes of preservation, rather than creative interaction. One can imagine the immortal soul as the spirit of creativity, held subject to certain conditions as if interred in a museum, "awake for all eternity, without anything ever changing." Sawyer (2003a) has observed that certain myths, which venerate and objectify works of art, "arise from our tendency to focus on the products of creativity - the finished paintings, sculptures, and musical scores that critics review that are left for future generations to analyze and interpret" (p. 98). If a work of art exists as a mere artifact, preserved in a finished state through static cultural reproduction, then the tradition of transformative creativity that generated the work ceases to animate the, "living present" (Dewey, 1938, p. 23). As essential to continued regeneration, the vital importance of improvisatory impulse is to be preserved as much as the finished, original art form it produced.

A function of the here and now, the act of improvising positions an individual within the bounds of present conditions, within which memories, experiences, and knowledge may be transmuted into a new form. According to Nachmanovitch (1990), during the act of improvising, "Memory and intention (which postulate past and future) and intuition (which indicates the eternal present) are fused" (p. 18). Improvisers are thought to experience time differently, as a result of a temporal shift that accompanies the processes of creativity unfolding in real time (Sarath, 1996). Time is both the operative constraint through which improvisation takes place spontaneously and the condition through which works of art are conscientiously preserved.

Under what conditions can a reconstruction of music of the past, from one time to another, promote fluency, freedom, spontaneity and understanding? How might it be possible to bridge the divide that exists between the practices of improvisation and the performance of classical music? What practices might serve to open a dialogic encounter for engagement with Western European art music?

While musical notation facilitates reenactment of a musical idea beyond the immediacy of time and physical space, in many instances, notation diminishes the true nature of the source and robs it of its vitality. In the process of learning repertoire and conventional approaches to instruments and music, the spark of creative impulse in the child musician is sometimes impeded.

Creative activity is positioned at the intersection and site of tension between a vast cultural inheritance and consciousness of the past, and one's own agency and innovative impulse. The idea that the artist responds to the past both has historical precedence and currently generates interest and activity in the larger sphere of art. Perloff

(2010) advances a bold concept of modern art as, "unoriginal genius" (p. 1), the combining and recombining, recycling and reassembling of pre-existing ideas. It would seem that the prospect of conceptualizing and applying, "unoriginal genius" to music education offers the exhilarating potential to explore possibilities and capacities in interaction with works of art, in contact with ever-unfolding stimuli present in any given moment, with sources present and past, and realizing connectedness with others through the work of art.

## Narrative

As researcher, facets of my identity and background shape my inferences of knowledge and meaning with regard to the subject matter of improvisation in interaction with classical music. As a child, I learned to play classical music repertoire on the piano by associating the visual cues represented in notation with required fingerings until my performance of a piece felt automatic, so committed to my practice that I felt confident in my ability to perform based upon muscle memory. While I do remember my urge to change various features, to reimagine aspects of repertoire through improvisation, my piano teacher at that time in my childhood strongly discouraged creative interaction with classical repertoire. Instead, the role of the performer was considered as upholding a careful approximation of the composer's intentions for the canonized work of art.

Consistent with my experience in childhood, a widespread treatment of classical music generally employs a mimetic approach, whereby students commit new information to memory for the purpose of mimicking. According to Schleuter (1997), this process can resemble, "typewriting series of words without understanding the language" (p. 38). Schleuter's description applies to my own performance of classical piano repertoire in

childhood, an activity that resembled a display of fine motor skills, performed as if I was pushing buttons.

Upon studying historical performance practices as a means of experiencing creative music-making traditions of the past, I had the distinct feeling that I was attempting to revive a spirit of creativity I felt I had lost in childhood. In performing as a continuo player, I learned to vary my performance through improvisation on the structure provided in the figured bass, enabling multiple realizations of any given score. Under the guidance of professors of early music, historical performance practice had a liberating effect on my musical creativity.

Throughout the history of Western European art music, composers and performers improvised upon existing frameworks, reimagining preconceived forms and preexisting conventions. Yet, in a modern conception and practice, a divide often exists between practices of improvisation and the performance of great masterworks as if they were static museum pieces. A paradox emerges, since faithfulness to music of the past necessarily involves improvisation in order to be true to the spirit of the music.

**Background**

Every entity known as a particular style in the historical course of Western music was, in its time and place, fed by particular practices of improvisation. The origins of polyphony in the 9th century can be traced to improvisational experiments in interaction with plainchant. Treatises of the 16th – 18th centuries served as practical instruction manuals in the art of improvised melodic ornamentation. The mysterious art of *partimenti* involved improvisation on an isolated fragment of music, a practice through which pre-

composed musical material could be transformed into a current style (Gjerdingen, 2007; Guido, 2017). Absent from a modern conception of music education as well as surveys of Western music history, this practice was of great interest to 18th-century composers of Western art music, as it functioned as a regimen for the enhancement of improvisational mastery.

Historical anecdotes relate tales of the improvisational flourish and acuity of great classical composers. One such example is of J.S. Bach, who famously requested that King Frederick the Great provide a theme, on which Bach spontaneously improvised a sequence of complex counterpoint that became, "A Musical Offering" (David, Mendel, & Wolff, 1998). Yet another anecdote gives an account of Beethoven, who upon attending a concert as a member of the audience, was urged to extemporize by the assembled crowds. According to historical record, he responded by haphazardly turning to a random page of printed score, a second violin part from a Pleyel quartet and proceeded to improvise, "the most daring melodies and harmonies in the most brilliant concerto style" (Thayer, 1967, p. 377), weaving the *cantus firmus* of the second violin source material throughout the entirety of his own improvisation and responding with a, "ringing peal of amused laughter" (p. 377). Beethoven is a prime example of a canonic composer whose work seems to demand a literal, textual interpretation as a prescription for performance practice; yet, a spirit of improvisation activated his mode of creativity. Innumerable anecdotes of canonic composers reveal involvement with improvisation as a mode of performance integrally connected to music making. According to Ferand (1961),

> There is scarcely a single field in music that has remained unaffected by improvisation, scarcely a musical technique or form of composition that did not originate in improvisatory performance or was not essentially influenced by it.

> The whole history of the development of [Western classical] music is accompanied by manifestations of the drive to improvise. (p. 5)

As an edited record of improvised moments, every work of classical music exists as a result of composers altering and reimagining preexisting conventions.

In contrast, the body of research on the subject of improvisation reveals a widespread view of practices associated with Western classical music as involving limited improvisatory processes (Kanellopoulos, 2011; Nooshin, 2003; Sawyer 1999a). Referencing the prevalence of improvisational practices in music traditions worldwide, Sawyer (1999a) alludes to, "European art music" as, "one of only a few rare historical instances of a strict compositional conception of musical performance" (p. 192). Nooshin (2003) likewise observes that improvisation is relegated to a less significant position in Western art music. Drawing on Bahktinian theory, Kanellopoulos (2011) critiques the, "monological voice of authority" (p. 114), as preserved through classicization, whereby the composer's work becomes a monument to be adored and admired in a finished form. Allsup (2013) captures the approach to the classical canon that is ingrained in common practice, immediately recognizable to all who have experienced it: "a mono-directional process whose telos aims at a closed musical work with internally consistent laws" (p. 58).

In Dewey's (1938) conception, works of the past do not exist for the mere purpose of conservation, but as a distillation toward action. Dewey poses the question, "How shall the young become acquainted with the past in such a way that the acquaintance is a potent agent in appreciation of the living present?" (p. 23). As Stravinsky (1970) stated, "A real tradition is not the relic of a past that is irretrievably gone; it is a living force that animates and informs the present" (p. 75). These seminal

thoughts challenge the music educator to provide a framework within which students can explore the conditions of the museum and the freedom of the laboratory, allowing the creative capacity of students to emerge and develop.

## Problem Statement

Improvisation occupies a limited role in practices commonly associated with Western European art music. However, the body of evidence found in Western music history and performance practice reveals traditions that encompassed open forms and improvisation (Brown, 2015; Campbell, 1991; Ferand, 1961; Moore, 1992), furthering the idea that any, "closed form" education based on the classical canon is incomplete. Therefore, research is needed to investigate strategies that open a dialogic encounter with music of the past, reconciling experimentation and improvisation within practices associated with classical music.

## Purpose Statement

The purpose of this study was to examine pedagogical strategies designed to further improvisation in interaction with Western classical music. A collaborative inquiry cohort of piano-teacher participants was formed for the purpose of developing and sharing strategies and modes of creative interaction, negotiated and transformed through collaborative exchange. Teacher-participants gathered as co-researchers and active co-constructors of knowledge and meaning through three cycles of design, implementation, and reflection upon strategies that were used to open Western European art music to improvisation by piano students ages 8 through 10. Such an environment of collaborative inquiry was designed to activate instinctive processes of social learning, in which

participants would demonstrate a, "complex social system characterized by a division of labor, rules of engagement, and the fundamental role of mediating artifacts to build on prior knowledge, scaffold experience, and construct knowledge" (St. John, 2010, p. 79). Conducive to the exploratory nature and purpose of this study, collaborative inquiry research methods made use of a democratic methodology, enabling critical inquiry and collaboration, while honoring multiple perspectives and the contributions of teachers and students.

## Conceptual Framework

The present study uses a conceptual framework of, "closed" and, "open" musical forms for the purpose of exploring the creative tension between fixed structure and fluid elements of creative transformation. A closed musical form is one in which the formal compositional features of the musical work are treated as fixed, pre-established, and pre-defined by the composer. In relation to a closed form, the role of the performer is to realize the score in a precise manner corresponding with the composer's intentions. In contrast, "open forms" may be defined as musical structures that invite creative interaction to be realized by the performer.

Allsup (2016) offers the view that canonized, conventionally closed musical forms can be treated as open texts, as, "layerings of discourse into which a coexistence of meanings can be drawn and are continuously drawn" (p. 52). According to this perspective, any composition may be treated as an open-source model, a design scheme that invites creative response and improvisation upon musical features, with meanings that are negotiated in the present, in interaction with the past.

Since classical music instruction tends to focus upon the preservation of works in a, "closed form," the transformative possibilities that could be realized in interaction with historical source material are not typically encouraged, or even permitted. Most often in the context of teaching and learning classical music repertoire, "the new and personally meaningful insight of a youngster who is learning how to combine 'riffs'" (Beghetto, 2010, p. 455) is not allowed. Instead, the, "closed form" model of classical music learning involves, "deliberate practice" (Ericcson, 1996, p. 21; Stokes, 2006, p. 124) in the search for a, "convergent" (Beghetto, 2010) solution to a, "well-defined problem" (Stokes, 2006, p. 124; Weisberg, 2006, p. 138). As defined by Allsup (2016),

> Closed forms […] exist in proximity to the authoritative, the certain, and the canonic.Closed forms represent culturally structured and norm-driven literacies, where valuations of excellence preexist an aesthetic encounter. (p. 48)

In a modern conception, the common defining ideological framework governing the practice of classical music performance is the, "work-concept" (Goehr, 2007, p. 4), which dictates a regulative mechanism, through which the processes of music making are codified. This *Werktreue* model reduces the creative potential of the individual in favor of transmitting an ideal representation of a work in a finished state, which is, "closed" to improvisation. Arguments for excluding improvisation in interaction with classical music are often made on the basis that doing so would not be in keeping with the composer's intentions. Yet, historically, performers and composers of classic works operated upon existing conventions, altering, transforming, and reimagining what had come before, in realization of an, "open" source treatment of musical material. The *Werktreue* model of classical music education has furthered a false dichotomy that appears often in modern practice: Classical music and improvisatory practices are treated as if they are mutually

exclusive, despite historical evidence revealing the involvement of both composers and performers with improvisation throughout the history of Western classical music.

How might an alternative be actualized? Another conception and treatment of classical repertoire could serve to regenerate its nature as a, "dynamic phenomenon, defined by multiple evolving influences connecting experiences between disparate spaces and places, across time, and among groups of people" (Custodero, 2009, p. 77). Rather than focusing narrowly on transmission of the canon and preservation of a, "fixed end model" (Allsup & Westerlund, 2012), instructional approaches to classical music can lead to the discovery of repertoire as a means of experiencing and experimenting with the creative processes inherent within its design.

**Theoretical Framework**

Stravinsky (1970) memorably noted the, "terror" of attempting to invite the creative process in the absence of constraints: "If nothing offers me any resistance, then any effort is inconceivable, and I cannot use anything as a basis and consequently every undertaking becomes futile" (p. 63). Kenny and Gellrich (2002) likewise observe the role of, "culturally agreed upon constraints" that make improvisation possible: In the broadest terms, these are knowledge bases and referents, which are psychologically and socioculturally generated constraints.

In the larger context and literature of creativity studies, Stokes (2006) conceptualizes, "constraints" as, "barriers that lead to breakthroughs" (p. 7). Stokes further elaborates upon this idea, assigning roles to each of, "cascading" strategic constraints: The first serves as a, "barrier" (p. 7), allowing the second to further search

among novel responses. Several facets of Stokes's constraint theory apply to the use of classical music as a referent.

Stokes (2006) provides numerous examples of creative individuals across domains that began by expanding their basis of knowledge, not by rejecting established traditions. Borrowing the concept of the, "first chorus" (p. 8) from the musician and painter Larry Rivers, Stokes uses the term to represent a knowledge base in any domain that becomes the material for improvisation.

According to Stokes (2006), individuals are socialized to norms that guide, "variability" levels in any discipline. For example, if a child learns to perform a selection of repertoire according to a prescribed manner, the child will become accustomed to this single approach and may experience anxiety if asked to produce any variation. Instead, socialized patterns of interaction can promote the, "habitual variability" (pp. 122, 131, 134), to which Stokes attributes the seed of creative development, helping, "beginners attain the […] high variability levels necessary for their later efforts to be influential" (p. 121). Stokes suggests that instructional practices could involve, "reconstructing a constraint path" in the study of any work of art, in order to, "recreate and illuminate the structure of its solution" (p. 130).

In the case of music, "reconstructing a constraint path" allows the student to think as a composer and to develop comfort with the variability involved in creative work. Motives, harmony, and other salient features of musical repertoire can be considered as material for students' own creative activity. By isolating musical gestures and simplifying harmonic texture, repertoire may be treated as material for students' ideas, a springboard for generating ideational fluency as a disposition of mind. By experimenting with

different possibilities and showing a commitment to fluidity and fluency, combination and recombination, teachers can encourage dispositions of thinking that promote variability, while drawing from a range of musical sources and repertoire.

According to the predominant conceptual framework adopted within the interdisciplinary field of creativity studies, the processes required to work on the, "well-defined problem" (Stokes, 2006, p. 124; Weisberg, 2006, p. 138) as represented by a, "closed form" treatment of canonized works of classical music, "can be solved with little search and little variability" (Stokes, 2006, p. 124). This type of learning can take place through muscle memory and motor movement on the surface of understanding, expanding the student's, "first chorus" (p. 8), but without any realization of "habitual variability" (p. 122), through which a student develops comfort with the variability involved in creative work.

The act of improvising can be seen as a product of the, "dialectical tension" (Moran & John-Steiner, 2003, p. 63) between internalization and externalization processes according to Vygotskian socio-cultural theory. According to Moran and John-Steiner (2003), the socially-situated process of internalization is not merely the copying of cultural source material, but is realized as a transformation of mental structures and schemata: "Internalization is not the grafting of a culture onto a personality but an engagement with existing cultural resources, which leads to newly realized aspects of the self" (p. 63). Musical improvisation, involving the, "generation of novelty" (Cropley, 2010, p. 298), can be considered to further the process orientation and disposition of mind that support creative thought.

The norms that disallow spontaneous transformation of classical musical material are culturally agreed upon limitations, realized in the, "cultural context of artifact production and evaluation" (Glăveanu, 2013, p. 71). This arrangement serves a purpose of preserving artifacts, but denies the affordances of material culture as represented in works of art.

How might music educators promote processes of preservation of the original as source material, and spontaneous, fluidity of new ideas in dialogue with the source? How may classical music be treated as an open text with which students may interact in the present? How might the study of classical music involve active construction of knowledge through curriculum that is based upon primary concepts and discrepant issues, designed to engage students' conceptual understanding? How can music educators enact a dialogic encounter that speaks to the original work as symbol of musical elements embedded in dynamic interactions, furthering the examination of personal identity and positionality in reference to the exchange of ideas, present and past?

Consideration of the products of an, "open" source treatment of classical music repertoire raises further questions: What does it mean to treat an historical musical form as an open text? What meaning do teachers and students ascribe to the experience of opening traditionally closed forms to improvisation and participatory modes of interaction?

## Research Questions

The overarching research question guiding the study is: How do piano teachers experience the process of opening Western classical music to improvisation?
Further research questions address this primary question and include the following:

- How do piano teachers create pedagogical strategies that open classical music to creative interaction?

    - What are the teachers' experiences and reflections on improvising in interaction with commonly closed repertoire?

    - What do improvisational practices in response to classical music stimuli mean to the piano teachers?

    - What challenges do the teachers encounter in developing and implementing the creative strategies?

    - What are the teachers' perceptions of the instruction in terms of facilitating or hindering the students' exploration?

- How do the teachers perceive their students' responses?

- How might the teaching practices of the teacher-participants change as a result of collaborating to open classical music to improvisation?

**Plan of Research**

In order to approach the research questions, this study made use of a collaborative inquiry research model and a qualitative lens for the analysis of the experiences of the participants, who included three piano teachers as co-researchers. New York City-based piano teachers were recruited on the basis of interest in improvisation and the goal of the study: To develop and investigate strategies that open classical music repertoire to improvisation and creative interaction, as realized by the participating piano teachers working with their piano students, ages 8 through 10. A series of collaborative inquiry sessions were hosted at Teachers College, during which the piano teacher-participants

and I worked together as co-members of a collaborative inquiry research cohort to develop pedagogical strategies that were examined during piano lessons conducted and observed by the teachers.

The recursive design of collaborative action research facilitated development among members of the group, as it encouraged reconsideration and revision of strategies based upon spiraling cycles of, "planning, execution, and reconnaissance" (Oja & Smulyan, 1989, p. 17). The teacher-participants designed pedagogical strategies for use with the students, the teachers tried the strategies with the students, monitored student responses, and reflected upon teaching experiences. Working together over time, results were observed and reported by the teacher-participants as co-researchers.

The collaborative inquiry drew from two sources of data; each of which made use of multiple perspectives: 1) The teachers collected data pertaining to their own students and studio teaching; 2) I gathered data representing the teachers' participation in cycles of action and reflection, through which pedagogical strategies were collaboratively designed and revised for use with the students. The data collected by the teachers as co-researchers included: teaching videos and student improvisations, video-recorded Stimulated Recall (SR) -prompted student reflections following improvisations, blog posts, and analytic memos. Semi-structured interviews, exploratory interviews, and recorded and transcribed cohort discussions, were utilized by the researcher for the collection of relevant data in consideration of the research questions. Each meeting of the collaborative inquiry cohort was video-recorded, aiding recollection of details by the researcher for use in journaling and analytic memos.

**Guiding Questions**

A duality exists within the monological paradigm described by Kanellopoulos (2011), as some form of resistance between a reverence for the, "monological voice of authority" (p. 114) and improvisation as realization of creative impulse. In consideration of prevalent practices, how can points of tension, related to the role of experimentation and improvisation in classical music, be reconciled? How might educators animate the past as more than mere documentary evidence (Dahlhaus, 1983), and yet invest it with a treatment that honors the creative process through which it was composed? Rather than appraising classics as works in a finished state, how could the treatment of classics be an impetus to creative thought and improvisatory realization?

Chapter II

LITERATURE REVIEW

Primary sources, correspondence, treatises, and other historical documents reveal

the use of improvisation over centuries, dispelling the myth that improvisation is specific

to jazz among Western musical traditions (Campbell, 1991; Ferand, 1961; Moore, 1992).

The classical canon is one fraction of the whole of the tradition it represents, a tradition

that was bound up with the art of improvisation. According to Moore (1992), a strict,

canonized conception of Western classical music, "disallowing improvisation" (p. 62) has

only exerted influence since around the mid-19th century. Brown (2015) observes the

lack of creativity in much of current classical music performance, which he describes as

a, "stiffly formal distortion of what the greatest composers and performers of the past

expected" (para. 5). According to Brown, classical music was once approached and

performed in a manner more closely resembling popular music practices today,

"responding to the messages that lie behind the notes on the page" (3rd para). Sherman

(2003) raises a question that is essential to the discussion of creativity and classical

music: "When did the ethos change in classical music to our current one – when, in other

words, did the music become 'classical'?" (p. 316). Since sociocultural changes from the

mid-18th century resulted in a burgeoning class of amateur musicians, Moore (1992)

speculates that professional musicians became protective of their social status. By the

mid-18th century, music method books started to include admonishment to the amateur

musician, that improvisation should not be attempted without mastery of the art of

composition. By the late 19th century, practices of improvisation were largely lost as a consequence of classicization (Moore, 1992; Sloboda, 2004).

How might improvisation exist in interaction with traditions of the past? What conditions create the ideal environment for children's natural responsive and creative impulse? What pedagogical approach might satisfy these conditions, nurturing improvisation, while honoring traditions of the past that unified the roles of performer, composer, and improviser? With consideration for music education as an, "interactive social phenomenon that requires a responsive and receptive disposition to both the student and the musical material" (Custodero, 2009a, p. 528), this literature review considers various studies of the nature of children's spontaneous music making and varying approaches to the pedagogical cultivation of improvisation, in an effort to envision teaching strategies through which students may become acquainted with classical music as material for their own creative exploration.

## Improvisation

Though the practices of improvisation vary across sociocultural contexts, certain features are shared among its diverse forms, through which a multiplicity of socio-musical meanings are constructed (Kenny & Gellrich, 2002). Musical improvisation may be broadly defined as culturally-situated creative activity, taking place in real-time, with notation used as a point of departure, if used at all (Kenny & Gellrich, 2002; Pressing, 1984). A considerable body of research advances the concept of improvisation as socio-cultural activity, deriving its structure and character from cultural models and the internalization of a musical vocabulary, permitting the spontaneous expression of musical ideas (Azzara, 2002; Della Pietra & Campbell, 1995; Kenny & Gellrich, 2002; Moore,

1992). Kenny and Gellrich (2002) suggest the compatibility of cognitive systems used in music and in language, noting that improvisers often draw parallels on the basis that both involve syntax that can be applied to forming and reforming the structure of ideas.

Research on teaching and learning improvisation suggests that the effects of the study of improvisation include enhanced musical experience and creative thinking (Azzara, 1993; Guilbault, 2009; Koutsoupidou & Hargreaves, 2009; Moreira & Carvallo 2010). The risk-taking that is ingrained within the practice of improvisation is associated with positive personal and interpersonal attributes (Burnard, 2002; Nettl, 1998), including enhanced positive self-evaluation and, "sociocultural cognitive aspects" (Kenny & Gellrich, 2002).

**Improvisation and Composition as Distinct Ends of a Spectrum**

There is consensus among scholars that improvisation and composition occupy two ends of a spectrum, along which any performance varies in placement according to the extent to which the creative process is edited (Burnard, 2000; Kratus, 1994; Pressing, 1984; Sloboda, 1985; Webster, 1992; Wiggins, 1993). The poles of this spectrum consist of absolute freedom from pre-existing formulae on one end, and total immersion in the editing processes of composition on the other (Pressing, 1984). The fundamental aspects of these extremes are unattainable in practice, since the activation of prior knowledge of pre-existing musical material is unavoidable during improvisation and because slight variations in the performance of any composition are inevitable (Pressing, 1984). Studies concerning the cognitive aspects of improvisation reveal its similarity to the problem-solving phenomenon, whereby forward-thinking and backward evaluation take place simultaneously in a feat of, "generate-and-test processing" (Pressing, 1988, p. 151).

**Improviser Occupying Dual States**

Berkowitz (2010) investigated the experience of improvising as reflected upon by two highly skilled improvisers working within a classical music framework. Focusing upon the salient features of the experiences of creating musical improvisations, Berkowitz identified shared phenomenological aspects as reported by participants, leading to his conceptualization of the improviser occupying two states of consciousness, that of, "creator" and, "witness" (p. 121). As creator, the improviser devises constructs for creativity. In a, "witness" state, the improviser observes the act of his/her own improvisation, as if removed from conscious volition, perhaps enacting a vestige of embodied cognition. The dual states of consciousness observed by Berkowitz may be compared to Berliner's (2010) concept of improvisation encompassing interaction between the, "singing mind" (p. 208) and the performing body. Similarly, Nachmanovitch (1990) likens his experience of improvising to, "taking dictation" (p. 4), implying that the action of improvising captures an imagined sound source outside of one's own processes.

**Free Improvisation**

Among types of improvisation, free improvisation is defined by Kanellopoulos (2011) as the attempt, "to delve into shaping sounds in ways that are not the result of applying stylistic norms" (p. 120), a description emphasizing the distinction between free improvisation and that which functions, "as part of extant musical forms and traditions" (p. 118). Pressing (1998) distinguishes between free improvisation and, "referent-guided" improvisation, which is based upon a pre-existing formal structure that is used by the

improviser as a tool, "a set of cognitive, perpetual, or emotional structures (constraints) that guide and aid in the production of musical materials" (p. 52).

Free improvisation has been studied as a means of reducing performance anxiety. In an experimental dissertation study, Allen (2010) examined the effects of free improvisation on performance anxiety among pianists, ages 7 through 18. In consideration of the classificatory needs of the study, Allen (2010) defines free improvisation as, "a spontaneous musical creation […] incorporating and negotiating disparate personal perspectives and worldviews not limited by genre or methodology, applied to a wide range of highly personal, individual styles" (p. 42). Thirty-six piano students, who had no prior experience with improvisation, were randomly selected from 250 potential participants, all of whom were piano students of the researcher. Selection criteria required that participants 1) were piano students, 2) had experienced performance anxiety, and 3) had not received prior treatment for performance anxiety. This sampling of gender-balanced participants was then assigned to three randomized groups, according to which students 1) received instruction in, "melodic, harmonic, and rhythmic elements" (Allen, 2010, p. 47), then performed a free improvisation in a recital; 2) were given the same treatment, in conjunction with the learning of a piece of standard repertoire, after which the participants performed a free improvisation and a selection of classical repertoire in a recital; and 3) received traditional piano lessons, with no instruction in improvisation, then performed one piece of standard repertoire in a culminating recital. Student self-reports, analyzed by means of Spielberger's State-Trait Anxiety Inventory, as well as subject interviews and parent questionnaires, revealed that free improvisation was

perceived to reduce performance anxiety among students who received the experimental treatment as compared to the control group.

Després et al. (2017) investigated improvisational strategies utilized by expert improvisers working in Western classical music. Prompting improvisers' recollection of improvisational strategies through a retrospective verbal protocol, Després et al. analyzed the heuristics of expert improvisers to generate five categories of strategies, within which subcategories were further defined. Expert improvisers were found to form their improvisations according to the imagined perspective of others, consistent with Chamblee's (2008) observation that improvisers interact with the imagined response of an audience. Working in the field of creativity studies, Glăveanu (2015) introduces a, "perspectival framework" (p. 172) that mirrors this finding, by asserting that creativity necessarily involves adopting multiple perspectives.

## Perspectives on Children's Improvisation and Musical Creativity

Musical development generally occurs at predictable stages, with age and experience affecting the process and product of children's creative activity. In his writing on the aesthetics of children, Gardner (1973) ascribes to a child of five to seven the capacity and comprehension of formal properties needed for artistic creative endeavors, while a child of six to seven possesses a, "surprising intellectual grasp of music" (p. 196). According to Gardner,

> What is very common […] is for children to take a song or a musical pattern they have learned and then alter various aspects of it.  This kind of symbolic play with music, seemingly akin to the linguistic play characterizing all children, is very instructive. It reveals the aspects of the musical stimulus that are central to the child's perception […]. (p. 190)

Bamberger (1991) observes that 8- and 9-year-olds are able to formulate a representation of musical notation that can be interpreted by someone else, capturing time values, beat, and repetitions accurately.

Kratus (1989) investigated the compositional processes of children, ages 7, 9, and 11, who were general music students in suburban public schools. Without any prior experience of playing keyboard instruments, the students were asked to compose and repeat an original piece of music on an electronic keyboard. Kratus (1989) found that the 7-year-old students devoted more time to exploration, with little time spent on development, repetition, and silence. The 9- and 11- year-olds displayed, "evidence of internal problem-solving" (p. 7) associated with the compositional process, demonstrating a range of behaviors encompassing improvisation and composition.

**Improvisation as Assimilation of the Sociocultural Environment**

Baldi and Tafuri (2000) designed a nonexperimental quantitative study in response to the common practice of music educators requiring children to improvise a piece that has a, "beginning, middle, and end" (p. 15). The researchers assessed whether this prompt is really necessary by investigating children's ability to use formal structure, specifically the procedures used by children in creating a beginning and ending. Though the researchers refrained from imposing specifics of structure, they did present tasks as stimuli for the children's improvisations. Thirty-four Italian children, aged 9 and 10 years old, were invited to improvise short musical pieces in response to six different specific tasks. Two, "semiotic" tasks were used to prompt the children to capture musical representations of imaginary scenes, including waking from sleep and characters of an elderly man and child. Two other tasks prompted improvisations using specific notes and

sounds, while two additional prompts were based on alternation and repetition. The children, entering their fifth year of primary school, were from medium-low socio-economic backgrounds and had no previous formal experience in musical composition or improvisation. The children's pieces were analyzed with reference to classifications of different ways of beginning and ending, as compiled by Stefani (1976). The categories for analysis were not introduced to the children, but used exclusively by the researchers in analyzing the improvisations.

Since the participants had not received any formal music education, the researchers concluded that children assimilate structures, "from the sociocultural environment in the form of the most common musical repertoires to which they are exposed and by means of homologies with other cultural systems already experienced and assimilated" (Baldi & Tafuri, 2000, p. 20). Furthermore, findings support the researchers' hypothesis that children of a certain age are able to structure beginnings and endings spontaneously, without the need for imposition of a specific prompt concerning formal structure. The beginnings and endings improvised by the children resembled structures found in classical and popular music. Without any experience in composition or improvisation, the student participants had undergone a process of initiation by ear, as evidenced by their instinctive assimilation of the sounds of the environment.

**An Age-Based Continuum**

The theoretical contributions of Gordon (1990) recognize, "audiation" (p. 25) as the process of, "inner hearing" (p. 28), through which sounds of the environment are assimilated into musical thought. Based on the concept of audiation, Gordon (1990) conceptualizes children's spontaneous musical expressions along a continuum, in which

the child progresses from young initiate to expert, according to hierarchical stages of development.

Also representing a framework based on skill acquisition, Kratus (1991) outlines a developmental model of improvisation in which children progress through hierarchical levels of increasing sophistication. Kratus makes use of Gordon's concept of audiation in distinguishing the expert improvisation from that of the novice: a knowledgeable improviser is able to hear inwardly with meaning. Furthermore, an expert is oriented toward creating an improvisation as a product, whereas the novice is involved in, "the process of improvising for its own sake" (Kratus, 1991, p. 38). Kratus's proposed framework seems to devalue improvisation enacted for the sake of process alone, since he considers such an example to be of less artistic merit than the improvisation of an expert. According to Kratus's perspective, a child's musical exploration reveals, "process orientation" (p. 38) yielding, "idiosyncratic sounds that do not follow syntactic rules, such as meter and tonality, that could allow an audience to organize and understand" (Kratus, 1991, p. 38). This description does not seem to allow for a young student's thinking about the experience of improvising.

**A Phenomenological Approach**

A phenomenological approach, as represented in the contributions of Custodero (2007) and Burnard (2000), investigates the essential properties of the experience of musical improvisation, through systematic analysis and reflection. Custodero (2007) offers an alternative to the conceptualization of spontaneous music making along a single age-based continuum, viewing such a perspective as limiting to the interpretation of children's musicality. According to Custodero (2007), the perception of musical

creativity according to a linear scale and the consideration for a child's creative output as merely a preparation for adulthood often infers a, "deficit model" (p. 78), focusing on the, "normatively absent rather than the expressively present" (p. 78) and dismissing qualities of, "intention, personal meaning and complexity" (p. 78) in those who have not attained a certain degree of technical mastery and perceived expertise. Allsup (2016) similarly cautions that, "The teacher-as-diagnostician may see children as unfinished adults, or as bad adult musicians. A learner […] may be labeled insufficiently musical and *denied* a music education because of some perceived failure on her part" (p. 118).

Custodero (2007) adopts a, "lifespan-related perspective" (p. 79) in analyzing data drawn from two pairs of participants who realized collaborative improvisational performances: two adult composers and two 7-year-old children. This study is particularly relevant in consideration of the influences that applied instrumental instruction might exert upon the nature of children's improvisation. The children were more musically expressive and free with instruments on which they had not experienced formal training. According to Custodero (2007), this finding suggests limitations posed by, "habits of interaction and association" (p. 89) and concomitant, "self-perception" of expertise (p. 93). It would appear that patterns of convention introduced through instrumental instruction may have led the young participants to become narrowly focused upon perceived correctness, seeking out convention by relying upon a strict realization of musical material taken directly from their instructional setting.

Also working from a phenomenological perspective, Burnard (2000) investigates the distinguishing characteristics of the processes of musical composition and improvisation as realized and experienced by children. Eighteen multi-ethnic students at a

comprehensive Middle School in West London volunteered and participated in 21 weekly music-making sessions, conducted over six months. According to Burnard's design, the experiences of improvising and composing were identified as being oriented toward (i) time, (ii) body, (iii) relations and (iv) space, and mapped accordingly.

Using data drawn from the analysis of interviews, recordings, and observations, Burnard presents a model that qualitatively maps the distinct experiences of each. During the improvisations, the children demonstrated an acceptance of indeterminacy, and employed the use of, "communicative gesture" (p. 237), revealing a, "shared and negotiated space" (Burnard, 2000, p. 239), whereas performances of musical compositions by individual children yielded a preoccupation with details of performance, with repeat performances revealing issues such as dependence on formal musical elements and memory.

Burnard's (2000) research suggests that the performance processes and motivations actualized through improvisation and composition can be different, even though they may seem similar. A phenomenological perspective reveals that individual compositions tend to be objectified by the owners. Once composed, musical works are perceived as fully formed material, with subsequent performances involving the reiteration of a, "set of operations" (p. 234), dependent on memory of a preconceived outcome. Contrastingly, improvisation was considered by the student-participants to be a shared, time-bound activity, realized through interaction, and directed toward connecting successively unfolding musical parts.

Burnard (2000) concludes that educators must encourage children's natural capacity for creative and responsive musical processes through improvisation and

composition, "to evoke surprisingly separate, yet related worlds" (p. 243). In order to enhance and support creativity, the relationship between the performer and the audience must be characterized by trust. Burnard (2000) further posits that,

> Perhaps, music education should be a little less focused on the acquiring of adult constructions of knowledge and skills and allow a greater scope for children to focus on their experience of time, body, relations and space as ways of learning through improvising and composing. (p. 243)

In consideration of the inherent conflict that exists between instruction and freedom, these findings challenge the music educator to provide a framework, structure, and curricula, within which students can explore processes of both improvisation and composition, the, "unrepeatable and unpredictable as well as the repeatable and predictable" (Burnard, 2000, p. 243).

## Classical Music and the Social Processes of Collaborative Creativity

The choice of classical music as a genre for creative exploration has been seen as a limiting factor (Allsup, 2002), diminishing collaboration among students. In an ethnographic study, Allsup (2002) investigated the concept of democracy as interpreted, experienced, and considered by nine volunteer intermediate-advanced high school band students, ages 14-17, who volunteered to create original musical compositions as a collaborative activity. Themes of mutual learning and democratic action were explored by the participants, who not only created original music, but shared in the design of the study and assisted with the interpretation of the data through collaborative inquiry and participant observation. Two separate ensembles were randomly formed for the purpose of creating original musical compositions over the course of eleven weekly sessions, with each session lasting approximately 2.5 hours. Each ensemble acted as a community of

learners engaged in the process of collaborative creativity, with freedom to choose instruments and genre.

Classical music was considered by the student-participants to operate according to a predetermined structure, which became the subject of debate as the members considered, "form, tonality, historical style, orchestration, tempo, and even language" (p. 338) prior to producing any creative output. Musical ideas were not realized as a group in this case, but rather devised through individual efforts, yielding fixed ideas that did not evolve or develop. Group productivity was diminished among this group of participants, who relied upon individual labor; only combining as a group once the music was notated and fixed. In contrast, another group that was devoted to spontaneous music making emphasized sharing in every stage of the development of their composition, yielding a more cogent collaboration among members who achieved an enlarged vision of democratic action and a meaningful sense of community.

As the focus of this ethnographic inquiry was upon the students' interpretations of their own compositional processes, it is conceivable that the students in the classical music ensemble applied a relatively limited range of creative strategies to their collaborative compositional effort as a result of routinized patterns of interaction in private lessons in which classical music was learned. Since, "habitual variability" (Stokes, 2006, p. 122) is not often included in the practices of classical music-making, it is possible that the students enacted, "patterns *for* behavior" (Jacob, 1987, p. 11), those actions that are conditioned and based upon past experiences and socialization. Though Allsup makes a strong case for the limiting nature of collaborations based upon separate individual processes, the approach detailed in the study does not necessarily allow for the

development of new ways to creatively interact with classical music. I am curious as to

the potential for an alternative conception of classical music, involving the use of

strategic creative constraints and the negotiation of group decision-making under the

conditions of improvisation in real-time, rather than as the deliberative processes of

composition.

## Creative Processes in Piano Studio Settings

A search for literature on the subject of improvisation in the context of the piano

studio uncovered few empirical studies that pertain to the intersection of classical music

and improvisation. In order to find relevant literature, the search was broadened to

include studies addressing constructivist practices in the piano studio, in consideration of

the constructivist perspective that knowledge is actively constructed rather than passively

absorbed. This search also yielded very few empirical studies, which were specifically

relevant to the compositional processes of young pianists in the applied piano studio,

calling to mind the observations of numerous scholars that improvisation is relegated to a

less significant position as compared to composition in practices of Western art music

(Niknafs, 2013; Nooshin, 2003; Sawyer, 1999a), though this was not the case historically.

Kennell (1992) affirms the personal and collective benefits of the problem-solving

context presented through constructivist practices. Presenting scaffolding strategies

through which Vygotsky's Zone of Proximal Development can be enacted in the context

of the applied studio, Kennell (1992) promotes social learning as a process of experiential

knowledge construction, leading the development of the student in accordance with

Vygotskian sociocultural theory. Observing the scarcity of studies related to the

cultivation of aurally-based improvisatory activities in the context of the private applied

instructional setting, Rowe, Triantafyllaki, and Anagnostopoulou (2015) note that the majority of empirical studies of this nature focus on informal settings and music classrooms.

**Informal Treatment of Formal Musical Material**

The research agenda of Green (2002, 2014a, 2014b) breaks dramatically with conventional pedagogical practice, challenging standard methods of instrumental tuition by promoting informal modes of music making that are customarily excluded from formal instruction: informal learning through social interaction, copying sound sources by ear, and the autonomous selection of repertoire by students who choose from a range of options, including pieces of the classical canon.

Through a, "case-control" experiment and mixed methods, Baker and Green (2013) investigated the effect of informal learning strategies on instrumental students' aural skills. Instructors of applied instrumental lessons and group instrumental settings were among the 135 teachers total who participated in this national project in the U.K. Questionnaires indicated the participation of at least 340 students, of which 16 pairs of students were matched according to skill and placed in control groups and experimental groups by their teachers, who were thought by the researchers to be best positioned to coordinate parental consent.

Teachers implemented various informal learning strategies during instrumental lessons with the students in the experimental group, taking place during one 10-minute increment, once per weekly lesson, over a period of seven weeks. The dependent variable was student performance on a test of aural skills, defined according to achievement on the ABRSM, the exam board of the Royal Schools of Music. Pre-tests and Post-tests,

administered to the 16 pairs of students, consisted of a recording of a tonic chord in the key of a subsequent melody, played twice. After both the key of the selection and starting note were announced, the student was asked to recreate the melody using a primary instrument.

Analysis was made by the split-plot method, through which mean and score distributions for both groups were compared. Over seven weeks, the students of the experimental group improved their scores on each of the criteria, which included pitch, contour, rhythmic, and tempo accuracy, as well as, "closure," which was considered to be the recovery that takes place after error, through which the student makes continued attempts to conclude. Though the only interactions with any statistical power were those between control and experimental groups for the, "rhythm" and, "closure" criteria, Baker & Green surmised that power might have been increased, had the sample size been larger and had the experiment been carried out over a longer span of time.

The statistical power of the interaction between control and experimental groups on the, "closure" criteria is particularly intriguing, in light of the present dissertation study. Among students of the experimental treatment, sounds that were originally made in error were incorporated into the musical line, a procedure that would seem to resemble improvisation. Baker and Green (2013) conjecture that perhaps the students had, "internalized a greater sense of tonal centre, improved fluency and gained the capacity to apply a coherent, melodic ending to their test responses" (p. 150). When placed in the broader framework of Green's theoretical approach to the sociology of music education, I am reminded of Brown's (2015) observation that classical music was once performed in a manner more closely resembling popular music today. The skills that are developed as a

result of informal music learning, through which students shift among various modes of music-making, playing by ear, composing and performing, are allied to the potential for, "responding to the messages that lie behind the notes on the page as their predecessors did" (Brown, 2015, para. 11). A process of initiation by ear enables one to learn to instinctively communicate, furthering music making as the shaping of sounds rather than the mere manipulation of symbols.

**Classical Music as a Referent for Improvisation**

Rowe, Rowe, Triantafyllaki, and Anagnostopoulou (2015) made use of improvisation technology, "Musical Interaction Relying On Reflexion," or (MIROR)-Impro software (MI), to investigate how 19 young pianists, ages 6-10, engage in improvisatory interaction, or ,"reflexive interaction," with the technological system by means of a keyboard attached to a computer. Quality-sampling involved the selection of participants who were products of piano studios based on a traditional, "master/apprentice model" (p. 117), in which the students learned mostly classical music repertoire and scales, practiced sight-reading, and took aural exams, with limited improvisational activity. The participants were also purposively selected to range in number of years of, "formal piano tuition," varying from one to four years.

This multicase study took place during six 20-minute individual sessions for each child in two fieldsites: Wells, UK and Athens, Greece, and involved the detailed analysis of the improvisational activity of four of the 19 students. Two levels of analysis were used by the researchers in the interpretation of data: 1) the characteristics of the children's input, MI response, and subsequent development of both over time; and 2) the

extent to which the children borrowed musical content presented by the MI system,
considered an indication of reflexivity.

Observing commonalities among the participants according to level of experience,
the researchers concluded that the least experienced pianists relied on an, "uninhibited,
gestural" approach, while the older students of age 10, those with more, "formal"
experience, showed less spontaneity and more focus on examination repertoire, an
orientation that became more exploratory over the course of time during which the study
took place. The researchers observed the following improvisatory activities enacted by
the children: turn-taking with the interactive system, making use of a rhythmic or melodic
pattern introduced by the system, combining and recombining motives from learned
repertoire, and simplifying known repertoire in order to interact with the system.

The results of this study suggest that children naturally gravitate to use of
repertoire as a referent for improvisation, using selections committed to memory as a
point of departure for their own creative processes. A convergence of practices,
combining processes of improvisation in interaction with classical music repertoire, was
found to be naturally occurring in the improvisational activity of the young pianists, who
invented their own strategies, rather than relying upon any outside source.

**Compositional Processes in the Piano Studio**

Using a qualitative method of narrative inquiry, Miller (2012) documented
participant observation and thick description of the processes and products of her piano
students' compositional output. Investigating her own assumptions and beliefs about the
compositional process enacted by her piano students, Miller conducted interviews with
three student-participants, gathering their impressions so that the student-composers

could contribute to the interpretation of the meaning of their own compositional activities.

The student-participants reflected upon their past compositional activity, which took place within private applied piano lessons while the participants were in high school. Multiple student-participants communicated their impressions that they could not perform their own music, preferring for the teacher-researcher to play the finished products. Consistent with a definition of composition, this finding suggests the students' orientation toward an idealized conception of a statically existing product, emphasizing notation instead of the simultaneous forward-thinking and backward evaluation that characterizes improvisation (Pressing, 1988).

Miller (2012) concluded that the descriptions of the compositional processes, stories, field notes, conversations, and the student notations of compositions, provide a basis for the assessment of the meaning and purpose of her students' experiences in composition. As piano teacher to the student-participants, Miller gained insights into the thought processes of her students. Analytical conversations took place with frequency throughout the sessions, during which, "formal structure, tonal relationships, and expressive content […]" became not only the subject of conversation, but also material for the students' own compositional devices.

Among the compositional strategies utilized by the piano students, several seem apropos to the present investigation of creative strategies for use in interaction with classical music. For example, an eleventh grade student devised a compositional strategy involving a, "collection" of sounds that were originally made in error while playing standard classical music repertoire. Upon making a mistake, the student was intent upon

repeating the error, declaring, "I like that sound! Let me write it down" (p. 314). These collected sounds then became material for the creative process, taking the form of an original composition. Another student demonstrated her comprehension of the salient features of learned repertoire by applying structures and forms such as, "ostinatos, whole tone scales, or rondo […]" to her own compositions.

**Methods for Improvisational Practices**

Articles in practitioner's journals illustrate the pedagogical practices of piano teachers who include improvisation as an integral component of applied instruction (Blickenstaff, Moore, Moore, Rowe, & Thickstun, 2003; Farber & Cameron, 1994), offering insight into pedagogical practices that cultivate student improvisation. Blickenstaff (2003) provides introductory commentary to the contributions of Moore, Moore, Rowe, and Thickstun, in which he describes historical remove from the classical repertoire as a challenge faced by piano teachers, since the repertoire, "speaks to a different set of sensibilities and responses than those of our students today" (Blickenstaff, Moore, Moore, Rowe, & Thickstun, 2003, p. 42). Blickenstaff advocates the use of jazz and pop repertoire for improvisation, observing that it is, "readily accessible to the student" and that piano teachers, "do not usually teach improvisation through Clementi sonatinas" (Blickenstaff, Moore, Moore, Rowe, & Thickstun, 2003, p. 42), indicating that patterns of practice in private studios do not typically involve improvisation in interaction with classical repertoire. Moore and Moore consider jazz and pop a, "shot in the arm" (Blickenstaff, Moore, Moore, Rowe, & Thickstun, 2003, p. 43), an antidote counteracting the effect of, as Blickenstaff imagines his students' view of classical repertoire, "all this old stuff," (p. 42). I would argue that improvisation is not the exclusive domain of jazz

and pop music and that excluding classical repertoire from experimental and improvisational processes reinforces the common dichotomous conceptions and practices that make the classical repertoire seem so limiting, "formal, rigid, and lacking in emotional vitality" (Brown, 2015, para. 10).

Farber and Cameron (1994) observe that piano students tend to prefer repertoire that illustrates achievement in performance, noting that, "only very rarely does the act of improvisation find its way into the category that is marked by achievement rather than process" (p. 36). Recognizing that improvisation offers, "insights into form and feeling," Farber describes four game-like activities that she has designed to engage young students in improvisation. Encouraging her students to use ideas and techniques generated during the activities in their own compositions, Farber views improvisation as both an end in and of itself and a means to cultivate the compositional process of her students. Though the improvisation games developed by Farber are unrelated to specific repertoire, Farber presents creative ideas for improvisation that appeal to children and could possibly be adapted for use in interaction with classical music repertoire.

Konowitz (1980) recognizes that the pursuit of piano improvisation is often consigned to popular music or the study of jazz. Outlining strategies for keyboard improvisation, Konowitz (1980) recommends an approach based upon manipulating various combinations of music fundamentals including dynamics, rhythm, and contrary motion, through practice of scales, harmonic progressions, and theoretical analysis of repertoire yielding compositional devices for exploration through improvisation.

Supporting a view that opening canonized repertoire to improvisation can yield insights into the creative process, Konowitz (1980) documents the combinative potential of employing multiple strategies for improvisation.

**Exploratory Study**

Exploratory research, conducted during the spring of 2016, was designed to investigate the processes and experiences of Dalcroze classroom music teachers who treat classical music as an impetus to creative thought and improvisatory realization (West, 2019). Music classrooms of key informants, one kindergarten and one adult Dalcroze music class, served as field sites for ethnographic inquiry. Participant selection focused upon the recruitment of teacher-participants who cultivate a classroom environment in which improvisation is integrated with the study of classical music.

Descriptions of pedagogical practices, educational and teaching experiences, transcribed from semi-structured interviews and recorded through participant observation, revealed evidence of the musician-pedagogues' construction of meaning, conceptual schemata, and teaching strategies, providing a basis for the assessment of the influences of previous experiences, and pedagogical strategies for opening creative processes in interaction with classical music. Several themes, addressing the purpose of this dissertation study, emerged from the data analysis of the exploratory research.

Both key informants expressed and demonstrated a philosophical orientation toward teaching as improvisation. Rather than relying exclusively on plans or methods, both participants displayed openness to the unfolding circumstances as situated in the classroom. The social nature of learning appeared to be facilitated by means of instilling trust and building rapport, achieved in each context through the validation of multiple

interpretations and divergent ideas. In the kindergarten class, the students volunteered flavors of ice cream corresponding to rhythmic motives found in Schubert's *Trout Quintet*. The association of ice cream flavors with rhythmic motives functioned as a scaffolding strategy, retaining the students' enthusiasm as they enacted a story through movement while practicing the rhythmic syllables that became material for their own improvisations. Adult students were invited to conduct a metrically-ambiguous isolated part of a bagatelle of Beethoven, yielding multiple perceptions of meter, all of which were considered valid. An observable lack of fear among the students was found to accompany the subthemes related to the conditions of the socio-cultural environment. As Dalcroze pedagogues, both participants cultivated classroom environments in which embodiment of music was realized through movement. Intertwined with the act of making music, the physical movement of students demonstrated comprehension and imagination of new combinations of rhythmic motives, which were then situated within harmonic and melodic frameworks for improvisation. While the current teaching practices of one of the participants represented a departure from early training, the origins of another key informant's teaching practices, linking music, movement, and improvisation, could be traced to her memories of childhood.

Conventional approaches to Western European art music tend to presuppose that improvisation and classical music are opposing entities on the basis of the *Werktreue* model, through which Western European art music is canonized. The narratives of experience, teaching philosophies, and instructional approaches demonstrated by key informants counter this widely held perception. The instructional strategies of the

pedagogue-participants and the interrelationships among the themes suggest that

improvisation, in interaction with classical music stimuli, has potential for further

examination, through generative practices of collaborative creativity.

**Summary**

The present study seeks to advance creativity as collective activity among

collaborative researchers, taking place in a context that nurtures the social nature of

learning. Through collaborative inquiry, I have sought collaboration with teachers who,

"flourish in the moving landscapes of learning" (Allsup & Westerlund, 2012, p. 127),

empowering students to transform musical materials that are commonly considered

closed to improvisational processes. The present inquiry is focused on the dynamics and

interactions among the group and the meanings and experiences attributed to the process,

as well as the creative products that are negotiated within the social system. According to

Allsup (2016),

> In an open form, the totality of a teaching event can never be limited by subject-
> matter alone, rather subject-matter puts into motion an, "overflow" of production.
> This overflow is unstoppable, full of problems to investigate, opinions to share,
> questions to ponder, norms and standards to debate, and disclosures to reveal.
> While the Master-apprentice model is limited to the object […], *the laboratory
> treats all subject-matter as text* […]. Subject-matter, in other words, has open
> doors. […] It represents, above all, the idiosyncratic, never-repeatable, mash-up
> of a particular classroom community growing together through inquiry and
> experimentation, funded by the resources that the students and teacher bring to the
> classroom space. (p. 97)

Though this type of open engagement seems complex from an adult perspective, children

enact, embody, and explore by the nature of their being, improvising in every facet of

their existence. In consideration for music making as an, "inherited biological

predisposition," as premised by Blacking (1973, p. 7), the creative musical activity of young children seems to be evidence of deeply ingrained human nature.

There is a need to generate not only an expansion of teaching pedagogy, but also new ways to interact with classical music through collaborative processes of creating and improvising, with the aim of providing teachers and students enjoyment in collective experimentation, as well as creative license within the practices inherent in music making. Rather than focusing narrowly on transmission of the canon and preservation of a, "fixed end" model (Allsup & Westerlund, 2012, p. 134), the treatment of classical music has potential to foster collaboration, improvisation, and creative problem solving. The limited literature on the subject of creative processes and classical music, especially as practiced in a child's piano studio, suggests the rarity of these practices in applied piano contexts. Experiencing and listening to music of earlier times needn't enact merely a museum curator ethos, but can lead to the discovery of classical music as a means of experiencing and experimenting with the creative processes inherent within its design. Exploration, experimentation, and improvisation are crucial to this process, by which students learn to develop as creative artists.

While the age-based audiation approach acknowledges powerful, innate enculturation and assimilation processes, it presents music learning as an induction into hierarchical standards and convention. Practices such as dictating a set of standards and expecting students to conform to a predetermined criterion within a controlled environment can be stifling to a young student's musical creativity. The young and inexperienced are well suited to the task of operating without dependence upon formula. Unconfined by pre-conceived conventions, children allow themselves spontaneity of

expression and the wonderment of creating and experiencing aesthetics. According to

Custodero (2002),

> Taking intellectual ownership of musical materials by transforming them into something individually meaningful provides both aesthetic delight and a means to learning. By transferring knowledge from an imitated model to a source of original thought, children and adults demonstrate the depth of their understanding. (p. 7)

Sensitivity to the student and the musical material is needed in order to connect children

to their own creative potential. In order to design creative experiences for children,

educators must acknowledge and address the creative tension between a need for pre-

existing structure and the need to allow freedom for creative interaction.

As the principal subjects of inquiry, an intersection of improvisation, classical

music, and children's musical development seems most relevant and readily applicable to

applied instruction, in which children have attained a degree of skill on an instrument and

are committing a musical selection to practice and memory. Based on this review of

literature, it seems reasonable to suggest that this subject has potential for further

examination within a social learning environment. It would appear that more research is

needed in this area to determine a pedagogical approach that satisfies the conditions,

behaviors, content, and understanding of children's creative processes, while honoring

traditions of the past in which improvisation was considered the prerogative of the

performer.

Chapter III

METHODOLOGY

**Overview**

The purpose of this dissertation study is to examine strategies for introducing improvisation to classical repertoire that is often considered closed to improvisatory processes, nurturing creativity and improvisation within a dynamic community of learners (Lave & Wenger, 1991). New York City-based piano teachers were recruited to take part in a collaborative inquiry cohort, through which a variety of pedagogical strategies were designed to open Western classical music to improvisation by 8- to 10-year-old piano students of the teacher-participants.

This chapter details the design of the study and corresponding methods of inquiry. First, I describe the participants and setting, before outlining an overview of the foundations of the research approach. The research design and procedures are then summarized, which include description of the cyclical model through which action and reflection took place among teacher-participants as co-researchers. Data collection procedures are then detailed, which involved the gathering of data from different perspectives, including data collected by the teacher-participants and data that I collected, documenting the processes of the participants. The role of researcher, assumptions, and ethical responsibilities are then addressed, followed by the plan of analysis.

The methodology described in this chapter is designed to address the overarching research question: How do piano teachers experience the process of opening Western

classical music to improvisation? Further research questions address this primary question and include the following:

1. How do piano teachers create pedagogical strategies that open classical music to creative interaction?

2. How do the teachers perceive their students' responses?

3. How might the teaching practices of the participants change as a result of collaborating to open classical music to improvisation?

## Research Approach

*Action research* (AR) is viewed as a means to challenge existing pedagogical models and engage with everyday practices, empowering participants as agents of change, rather than as objects of reform (Pine, 2009). The practices associated with AR draw upon the philosophical tradition of American pragmatism, based upon the work of Dewey (Bray, Lee, Smith, & Yorks, 2000), while the coinage of the term and origins of AR methodology can be traced to Kurt Lewin (1946, 1947, 1948). Lewin's pioneering work in AR (Adelman, 1993; Greenwood & Levin, 1998; Stark, 2014) demonstrated that group interactions can exert powerful influence over the attitudes and behavior of individuals (Thomas, McGarty, & Mavor, 2016). Establishing a cyclical model for action research (Adelman, 1993; Rapoport, 1985), Lewin sought to examine problems encountered in social situations by involving participants in iterative cycles of action and reflection, through which participants reflect upon their own practices to enact social change (Adelman, 1993). From its origins in the seminal work of Lewin (1947), AR has emphasized the, "importance of the spirit of cooperation and of social responsibility" (p. 153), affirming democratic action as a powerful agent of positive social change.

As a type of action-oriented research approach, *collaborative inquiry* (CI) traces its foundations to *cooperative inquiry*, introduced in the work of Heron (1981a, 1981b, 1985, 1988, 1996), Reason (1988), and Rowan (Reason & Rowan, 1981), for whom phenomenology was a principle of scientific description. Retaining the systematic, iterative model of action and reflection, the design of cooperative inquiry departed from previous models of AR by involving participants as co-members of a research team (Heron, 1981a). An initial stage of research takes place as the co-researchers identify, explore, and anticipate the problem under investigation. Thereafter, co-researchers make decisions, assess, and monitor results, based upon discussion of challenges (Adelman, 1993). Alternating between action and reflection in recurring cycles of analysis (Bray, Lee, Smith, & Yorks, 2000; Yorks, 1995), the co-researchers formulate the assumptions, hypotheses, and conclusions that shape the inquiry (Heron, 1981a). According to Reason (1994), participation in cooperative inquiry is:

> An approach to living based on experience and engagement, on love and respect for the integrity of persons and on a willingness to rise above presupposition to look and to look again, to risk security in the search for understanding and action that opens possibilities for creative living. (p. 9)

Offering the potential for a unique creative experience, cooperative inquiry is realized through the examination of multiple perspectives and the negotiation of meaning.

Because of the complicated nature of conducting research *with* people, rather than *upon* people, Bray, Lee, Smith, and Yorks (2010) adopted the coinage of collaborative inquiry to signify adaptations that admitted methodological flexibility to cooperative inquiry based upon practical demands. In the present study, collaborative inquiry involved piano teachers acting as co-researchers through the exploration of possibilities for taking creative license within the structure and practices inherent in music making,

exploring well-known repertoire in new ways. Challenging culturally ingrained patterns of interaction that treat canonized works of classical repertoire as finished products that are closed to improvisation, the research cohort worked together to generate critical and reflective thinking, and to promote cooperation, dialogue, and imagination in pursuit of the development of strategies for opening classical music to improvisation.

## Participants and Setting

### Participant Criteria and Recruitment

Recruitment targeted New York City-based piano teachers who teach students ages 8 to 10. In consideration of the time commitment required of participants, it was essential to recruit piano teachers with professional goals likewise oriented toward the research problem. Piano teachers' interest in creative music making and Western classical music were considered indications of openness to the subject of inquiry. By recruiting piano teacher-participants for whom this intersection of topics was of personal and professional value, a collaborative inquiry cohort was formed to welcome experimentation and the opportunity to go beyond the limits of conventional practices for the purpose of constructing new meanings, negotiated within the social context.

Upon receiving IRB approval, I began the process of recruitment by networking through my personal and professional contacts. As I interacted with potential participants that were introduced to me, I shared a letter of invitation, which included details regarding the purpose of the study and the time commitment involved in participation.

**Initial recruitment attempts.** Contrary to the openness of Dalcroze classroom music teachers whose improvisational practices I had studied through ethnographic methods (West, 2019), it was challenging to find piano teacher-participants who were

willing to explore improvisation through Western classical music in the context of performance-based piano instruction. Throughout six months of active recruitment attempts, I met piano teachers of Western classical music who were averse to participation and one jazz piano pedagogue who was willing to participate in the study. For the most part, I didn't receive direct communication from classical piano teachers regarding any reason for disinterest.

Through a few direct responses, I learned that some piano teachers who did not integrate improvisation in their teaching of Western classical music seemed unwilling to try. In each of these cases, disinclination was expressed through something to the effect of, "I am a classical piano teacher and improvisation is not at all a part of my teaching practices." When I responded that prior experience with improvisation was by no means a condition for participation, I received no further communication. The hardships I encountered through my initial attempts at recruitment convinced me to offer monetary honorarium for participation in the study.

**Recruitment adaptations.** Having received IRB approval for modifications, I recruited participants on the basis of a redesign of my dissertation protocol that permitted me to recruit while collecting introductory stage data and to encourage participant response and commitment through monetary incentive. The jazz pedagogue whose interest I had already drawn was apprised of these adjustments, involving incentives through two stages of data collection.

**Additional Study Participants**

Having recruited one participant, a mutual friend introduced me to a second participant, who, in turn, put me into contact with a third. In total, participants included 3

New York City-based piano teachers who met in-person as co-members of a collaborative inquiry research cohort at Teachers College. The participants designed pedagogical strategies for use with their students, tried the strategies, observed student responses, and reported back to the group. Through cycles of action and reflection, the participants investigated pedagogical strategies for opening classical music to improvisation, generating reflections upon the meanings negotiated through action and interaction with their students, and assessing strategies in response to experiences in the field.

A fourth prospective participant joined the second collaborative inquiry session, but did not complete the components of data collection in order to be considered a full participant, despite efforts to make up an unanticipated absence at the first session of the cohort. Each participant was asked to choose at least one student, age 8-10, who would be willing to improvise in response to the pedagogical strategies for the purposes of the study.

## Research Design and Data Collection

### Overview

Semi-structured interviews prompted reflection and enabled negotiation of understanding of the nature of improvisation through a method examining knowledge and experience (See Appendices C, D and E). Exploring how improvisation could be integrated with Western classical music, participants designed and implemented improvisational strategies through cycles of action and reflection. Sessions of collaborative inquiry facilitated the sharing of strategies and reflections among participants, generating ideas for further development. As rapport and trust were

established, improvising together permitted reflection upon immediate experience for the sake of strategic design. Blogs and memos, organized through online modules that were linked to Canvas, allowed the sharing of ideas and the forming of an online community between in-person sessions of the group (See Appendix F).

After an introductory interview, each participant was offered incentives through two stages of data collection, through which they were asked to:

1. Submit a 30-minute video of the teaching of an 8- to 10-year old piano student, in which the student's face was not shown and classical music and improvisation were integrated. Reflective commentary regarding the experience was then gathered from participants through a *Qualtrics* survey, consisting of survey questions aligned with the research questions (See Appendix A).

2. Participate in an additional interview and three 2-hour sessions of collaborative inquiry, as well as collect videos of piano lessons in which improvisation through classical music was introduced to students through the use of pedagogical strategies. Reflections on experiences were shared with the group of participants through in-person CI sessions, as well as through blogs and electronic memos between face-to-face sessions.

As organizer of the collaborative inquiry, I secured the informed consent of each participant at each introductory interview, based on full disclosure of the purpose and objectives of the research. In the first stage of data collection, through which participants submitted teaching videos and reflective surveys, Informed Consent was obtained through the *Qualtrics* survey platform. The second stage of data collection involved the securing of Informed Consent, Parental Consent, and Student Assent in hard-copy format,

through which the purpose of the study, risks and benefits, time commitment, participants' rights, confidentiality, use of results, and data collection methods were detailed.

Table 1

*Participant Pseudonyms, Related Experiences, Corresponding Students and Repertoire*

| Participant pseudonym | Experience as related to study | Student Pseudonym and Age | Selection of music to be opened to improvisation |
|---|---|---|---|
| "Hanna" | Classical music piano performer and pedagogue, professional improviser, emeritus conservatory teacher of music theory and improvisation for musicians and actors, improviser for dance choreographers | "David," age 9 | Minuet from the French Suite No.3 in b minor, BWV 814 (1722) of J. S. Bach (1685-1750) |
| | | "Elizabeth," age 8 | An arrangement of the Rondo in C Major from Divertimento for Strings and Two French Horns, K. 334 (1779) of W. A. Mozart (1756-1791) |
| "Elise" | Professional jazz pianist and pedagogue | "Ava," age 9 | An arrangement of an aria from the Peasant Cantata, BWV 212 (1742) of J.S. Bach (1685-1750), arranged by Nancy and Randall Faber; In Faber & Faber Piano Adventures, Lesson Book, Level 2B |
| "John" | Classical music piano performer and pedagogue, church keyboardist | "Rob," age 8 | Étude Op. 82, No. 65 of Cornelius Gurlitt (1829-1901), *Die ersten Schritte des jungen Klavierspielers*, The First Steps of the Young Pianist. |

**Interviews**

In conducting interviews, I undertook an inductive approach, focusing on the salient features of improvisational experiences, according to the participants' descriptions. The semi-structured design of the first interview allowed the collection of

data revealing the attitudes, practices, and improvisational experiences of each of the participants before in-person sessions of collaborative inquiry began. Whereas each of the participants was interviewed twice, the structure of interview protocols varied according to circumstances. An open-ended exploratory interview served to illuminate concepts that required additional investigation in order to access key knowledge and experience of one participant. A second semi-structured final interview took place at the conclusion of the study with the other two participants.

**A Network of Face-to-Face and Online Collaborative Inquiry**

In-person sessions benefited rapport, allowing the participants time together to build relationships and trust, explore improvisation, generate strategies for use with the students, and prepare for the systematic observation of results through action, analysis, and reflection. A cyclical model of collaborative inquiry involved the designing and sharing of pedagogical strategies, returning to the studios to introduce the strategies to the students, observing and reflecting upon the student responses, documenting the results, and reporting back to the research cohort.

Membership in a group can counterbalance the feelings of isolation that often accompany creative work, since individuals are more inclined to go against norms in the company of others (Abra & Abra, 1999). Brookfield (1987) has noted that the action of challenging assumptions and discrepancies between an ideal and reality, "is made easier and more congenial" (p. 25) when undertaken in the presence of others. Since collaborative inquiry is approached with the belief that changes can be socialized within cultural systems, it was considered vital to the success of the study that the co-researchers themselves actively experiment with improvisation in order to design pedagogical

strategies promoting improvisation, historically inhered within the tradition and practices of classical music, but often absent from modern practice.

As reflexivity is considered to be an essential aspect of learning from experience (Bray, Lee, Smith, & Yorks, 2000), cycles of reflection and action were of central importance to the group, through which the participants analyzed actions and reflected on consequent experience, student responses, and ongoing interpretation. Participants examined individual beliefs and practices as related to the purpose of the study, activating engagement and individual agency, for the purpose of mutual learning through cooperative action (Bray, Lee, Smith, & Yorks, 2000; Habermas, 1984).

Throughout collaborative inquiry sessions, I consciously presented myself as a learner, sharing my own frame of reference and experiences and acknowledging divergent ideas, alternative conceptions, and revisions as we worked together to research the problem under investigation. Upon meeting, it became apparent that the participants I had recruited were well acquainted with variability practices through which Western classical music is opened to improvisation by their students. Still, there was potential for some form of change to take place upon undertaking a cyclical model of action and reflection, substantiating the selection of collaborative inquiry research methods. I guarded against making the participants research subjects by engaging the participants as inquirers into their own practices and experiences of opening Western classical music to improvisation. The design of pedagogical strategies was left entirely to the participants, who communicated their experiences through spirals of self-reflection in exploration of the research questions that had drawn the cohort together.

A variety of discussion-based approaches furthered communication within the community, for the purpose of enhancing freedom of thought. Brookfield and Preskill (2016) offer a number of practical approaches for establishing rapport, openness, mutual recognition, and reciprocal communication among members of a group, techniques that the CI cohort used in order to facilitate reflections and collaborative development.

According to Nijstad, Diehl, and Stroebe (2003), discussion for the purpose of generating creative problem-solving within a group can be maximized by furthering stimulation and preventing cognitive interference, which can occur when the ideas of one participant in a brainstorming session interrupt the emergent train of thought of another. To counteract interference and maximize the stimulation that is perceived as a benefit of group work, "brainwriting" (p. 142) techniques recommended by Nijstad, Diehl, and Stroebe (2003) were found to be operational features of conversational approaches designed by Brookfield and Preskill (2016). Thus, Brookfield and Preskill's (2016) approaches to facilitating group discussion may have served a function of reducing, "production blocking" (p. 139), so as to preserve the search and activation of imagery in associative memory used to generate ideas.

During sessions of collaborative inquiry, my observations of the teacher-participants took place simultaneously as I was a participant in the activities of the group. In this context, I relied upon video-recordings to aid my recollection thereafter, and devoted substantial time to transcribing conversations, expanding my notes and recounting details in documenting analytic memos following the sessions of the group.

**Session I.** Setting the tone for the dynamics and motivation of the group, participants began the first CI session by introducing themselves, describing teaching

practices and musical experiences, as well as interest in the subject of improvisation. Participants were invited to draw a representation of their teaching practices, to be described and shared with the group. The co-researchers and I then explored strategies for cultivating creativity through our own experiences of music making, as we improvised together on Bach's Prelude in C Major from the Well-Tempered Clavier Vol. 1.

Providing a framework for improvisation, the Bach Prelude in C Major is a piece that is widely known and practiced among piano teachers. Since the prelude functions as a rhythmic continuum, the structure generates certain patterns of expectation, deviation, and realization. Given the static nature of the rhythmic element in this piece, perception of relative harmonic tension and stability is confined to a single vertical dimension, which carries to a certain extent the expectation and projection of the patterns of resolving suspensions and dissonances. Harmonically driven, with a rhythmic *ostinato* as a basic textural feature, the piece offers many readily accessible possibilities for improvisation, such as altering the rhythmic texture or the shape of the arpeggios, any of which could be derived from the prelude and used by the members of the research team who had not improvised together before.

Following the improvisation by the group, I anticipated a methodological challenge represented in the prospect of capturing the improvisational output of students. In contemplation of methods of co-research, I posed the question to the group: How might we notate the improvisational output of the students in response to the pedagogical strategies? One of the teacher-participants quipped, "I wouldn't" (Hanna, first CI session, September 16, 2018). After laughter among the group subsided, conversation continued to the effect that, as, "an oral and listening […] experience," improvisation that is written

down is, "a total trap!" putting it, "into a different territory, then it's not improvisation" (Hanna, first CI session, September 16, 2018). The discussion shared among the co-researchers signaled that we would suspend concern over any form of notation for the purpose of recording the improvisational output of the students, in favor of immersion in the experience itself and openness in communication and exploration, teachers and students.

**An online network among co-researchers.** As the members of the collaborative inquiry cohort considered connections within data collected in their own studios, they were invited to share blogs, analytic memos and video excerpts with the group online in between CI sessions (See Appendix F). By linking these materials to an online learning management system, Canvas, webs of interactions and nodes of technological connectivity among the teacher-participants served as a medium through which experiential learning and meaning-making could be realized and negotiated between in-person sessions of the group.

**Session II.** In advance of the second session of the cohort, each piano teacher-participant was asked to provide a title and edition of a selection of classical music repertoire on which the design of pedagogical strategies could be based. Using these details, I gathered multiple copies of the musical scores as specified by the participants, so that the shared repertoire could be used to provide a starting point for conversations and collaborative activities, from which the design of specific strategies took form. A prospective participant, who had not attended the first collaborative inquiry session and subsequently dropped out of the study, was in attendance at the second session. Thus, pairs could be formed for collaborative activities yielding pedagogical designs.

A discussion technique was adapted from Brookfield and Preskill's (2016), "Newsprint Dialogue" (p. 25) for use in design sessions. First, individuals were invited to consider their own self-selected repertoire for the purpose of strategizing approaches that could open the particular piece to improvisation by a particular student. Situated at, "stations" in pairs, individuals first captured their own ideas for pedagogical design features by brainstorming, doodling, and writing on dry erase surfaces, a, "brainwriting" technique.

Seated at stations, the pairs of participants were then invited to share their individually designed pedagogical strategies. As each of the participants were given copies of all of the selections of music, the pairs of participants could discuss each other's designs while looking at the musical scores on which the strategies were based. Thereafter, the pairs of participants captured a written summary of each strategy at each station.

The larger group of participants then reconvened, traveling together to each of the stations, considering the strategies of each of the participants and responding by making comments and asking questions of individuals, in a manner much like, "show-and-tell." Using this technique for facilitating group discussion, the research team explored creative strategies together, with each piano teacher subsequently carrying out the strategies of their choice in the field and reporting reflections and student responses back to the group.

**Session III.** Seated at pianos, participants shared and played with musical ideas, remarking upon each other's pedagogical designs and the potential for further adaptations. After improvising together, pedagogical strategies took form as participants

returned to, "brainwriting" techniques to capture ideas for a final cycle of CI, conducted following the last in-person session.

Participant memos and blogs that were assembled through the first cycle were presented as printed materials and reflected upon by the participants, in preparation for a return to the field and collection of a final cycle of data. A discussion strategy, "Chalk Talk" (Brookfield & Preskill, 2016, p. 13), was introduced for the purpose of contemplating the salient features of the pedagogical strategies developed thus far. The central question that initiated participation in the study was written on a dry erase board, "In your opinion, what are the elements of an effective teaching strategy for opening classical music to improvisation?" Participants were invited to add comments and any further questions as related to the central question. The co-researchers responded by producing a, "mind map" on the board, reflecting upon the past cycle of collaborative inquiry to generate salient features for further exploration (See Appendix B).

**Stimulated Recall (SR)**

Chosen for its suitability to the conditions of the present study, *Stimulated Recall* (SR) was selected as an additional method holding promise for research investigating the influence of strategies on cognitive activity and learning processes, as well as the behavior of students and teachers engaged in, "complex, interactive contexts characterized by novelty, uncertainty, and non-deliberative behavior" (Lyle, 2003, p. 861). Since Stimulated Recall has been recognized as a compatible method for use in action research (Reitano, 2005), this method was considered as a means by which children's perceptions and interpretations of their own actions could be acknowledged (Theobald, 2012). According to Lyle (2003), the design of SR research is strengthened

when certain conditions are present: "Immediacy of recall, consonance between questions and cognitive organization, and indirect means of introspection in complex interactive contexts" (p. 861). To accommodate these recommendations and to guide students in reflecting upon their improvisations, participants were asked to video-record their students' improvisations and replay the video-recordings to the students within the lesson in which improvisations took place, while the students' thoughts and improvisatory realizations were fresh in mind. While a Stimulated Recall protocol was developed for use in the present study (See Appendix G), due to technological complications, Stimulated Recall data were not included in the study, because it wasn't possible to collect this data from each of the participants.

## Data Analysis Procedures

The entirety of the database was analyzed and coded with consideration for activities, behaviors, ideas and other phenomena that appeared repeatedly. Emergent themes are a product of iterative cycles of coding and reflection. By using an open coding scheme as a first cycle coding method, my data analysis procedures were attuned to the words chosen by the participants, from which I extracted and interpreted meaning. As I transitioned from first cycle to second cycle coding, I undertook a process of textual analysis as I read each transcript representing interviews and sessions of collaborative inquiry, commenting upon each transcription and summarizing. During this process, the primary focus was on comprehending the meaning of each participant's commentary. I used a methodology of reduction, whereby specific statements were distilled into

meaning condensations, which aided recognition of convergences and divergences across the three cases.

Through a recursive process of analysis, codes were consolidated according to themes, until the categories of themes could be applied to the entire database. These meaning units were then aligned with the research questions in order to analyze each in terms of the purpose of the study. In the search for dimensions of meaning and experience among participant reflections, as extracted from interviews, transcripts, memos, blogs and sessions of collaborative inquiry, practices that were observable on the manifest level began to emerge as an organizing scheme for my interpretation and conceptualization of concepts at a higher level of abstraction. Corresponding codes were abstracted to capture thematic elements that appear in different forms within a shared structure, operating at multiple levels. Through iterative cycles of analysis, I consolidated codes and established units of data as a basis for further examination, as I began the process of adding written description.

Portraiture was used as a method to depict my interpretation of the individual characteristics, personal histories, reflections and contributions of each of the participants (Lawrence-Lightfoot, 2005). In creating portraits, to be presented in Chapters IV, V, and VI, I drew from observations and interviews to describe meanings as presented to my understanding, a process dependent on consciousness of self as instrument. By identifying key features of my own identity as related to the subject of inquiry, I sought to reflect the complexity of experience through analysis and interpretation.

Table 2

*Data Collection Timeline*

| September 25, 2017 | Initial IRB approval |
|---|---|
| February 9, 2018 | Introductory semi-structured interview with "Elise" |
| March 25, 2018 | IRB approval for modifications |
| June 28, 2018 | Introductory semi-structured interview with "John" |
| August 10, 2018 | Introductory semi-structured interview with "Hanna" |
| September 16, 2018 | First session of collaborative inquiry |
| October 2, 2018 | Completion of first stage of data collection, through which participants submitted a 30-minute teaching video and reflective commentary, collected through *Qualtrics* surveys |
| October 7, 2018 | Second session of collaborative inquiry |
| November 2, 2018 – November 11, 2018 | Sharing of videos, reflective memos and blogs following first cycle of collaborative inquiry |
| November 29, 2018 | Exploratory interview with Hanna, when concepts required additional investigation |
| December 2, 2018 | Third session of collaborative inquiry |
| March 26, 2019 - April 4, 2019 | Sharing of videos, reflective memos and blogs following second cycle of collaborative inquiry |
| April 12, 2019 | Final semi-structured interview with Elise |
| May 8, 2019 | Final semi-structured interview with John |

**Research Questions**

The following data sources were used to address each of the research questions:

*Question 1: How do piano teachers create pedagogical and curricular strategies that open classical music to creative interaction?*

- *Qualtrics survey*

- *Semi-structured interviews*

- *Transcripts of collaborative inquiry sessions*

- *Videos of lessons*

- *Co-researcher memos and blogs*

- *Open-ended interview*

Semi-structured and open-ended interviews allowed the co-researchers to negotiate meaning and understanding. Each session of collaborative inquiry involved contemplation of features of the design of pedagogical strategies and reflective commentary. Sessions were audio-recorded and transcribed, as well as video-recorded to aid recollection of details for use in journaling and analytic memos. Between in-person sessions of the group, teacher-participants shared excerpts of teaching videos in an online media library, exchanging ideas and commenting upon features through blogs and video memos, all of which were linked to Canvas.

*Question 2: How do the teachers perceive their students' responses?*

- *Videos of lessons*

- *Transcripts of collaborative inquiry sessions*

- *Co-researcher memos and blogs*

Participants video-recorded their students' improvisations and reflected upon their perceptions of student response through memos, blogs and sessions of collaborative inquiry.

*Question 3: How might the teaching practices of the teacher-participants change as a result of collaborating to open classical music to improvisation?*

- *Qualtrics survey*

- *Semi-structured interviews*

- *Transcripts of collaborative inquiry sessions*

- *Videos of lessons*

- *Memos and blogs*

Semi-structured interviews permitted time with each teacher-participant at a preliminary stage and at the conclusion of the research (See Appendices C and D for semi-structured interview questions). By investigating the status that improvisation occupied among the teacher-participants as the study began, the design of the research was intended to illuminate any changes in practices and attitudes of the teacher-participants over time. Videos of teaching practices, as well as reflective commentary during sessions of CI, were recorded and viewed repeatedly by the researcher. Participant memos and blogs reveal reflections over time.

**Role of Researcher**

As researcher, I experienced dilemmas related to the role and function I needed to perform as initiator of the collaborative inquiry. Having served as piano teacher to young students in the past, as the study began, I did not teach piano students of the ages specified in the study criteria. In seeking to establish my peer status with the participants, I made arrangements to, "guest teach" young piano students of my aunt. In so doing, my plan was to become an, "analogous co-subject" (Heron, 1996, p. 23), in order to ground salient features of the design of pedagogical strategies in my own experience. Having obtained parental consent and student assent of these students upon first meeting, I had expected to reflect upon the experience through my own memos and blogs. However, as I

acted as a guest teacher, I was confronted with the unsettling apprehension of having only temporary rapport with the students on isolated occasions, whereas the participants in the study have long-standing student/teacher relationships. Thus, any reflections upon the experience or anticipations of my next steps for pedagogical design were purely abstract, somewhat artificial, and constrained by the complications of making arrangements through multiple points of contact. These obstacles were further compounded by the scheduling difficulties experienced by the group of teacher-participants. As sessions of collaborative inquiry needed to be rearranged, viable dates for gathering as a collaborative inquiry in New York conflicted with the window of possibility for teaching my aunt's students in Texas. I made the decision to differentiate my role from that of the participants who were acting co-researchers, a course of action that involved my meeting with the participants to serve as a facilitator for collaborative inquiry methods through sessions of the cohort, but required my withdrawal from memos and blogs.

As I am a member of the community of practitioners that formed the research cohort, I approached my position and appearances in CI with a self-reflective bearing. Defining my role in terms of the support I could offer to the participants, I was conscious that the participants were the acting co-researchers and that my status among the group was complicated, since I could not contribute data of my own. So as to avoid imposing upon the sense-making of the active co-constructors, I employed the use of open discussion techniques to facilitate participant reflections during CI sessions, as well as semi-structured and exploratory research protocols, to permit negotiation of understanding. Upon perceiving consensus among members of the group, I acted as an active questioner, asking participants how they had formed their impressions.

As I enacted the role of initiator of collaborative inquiry, it was essential to show sensitivity and responsiveness to the dynamics of social interchange and to the participants, whose participation in a gigging economy associated with concertizing meant that their availability was subject to change. As I collected the reflective analyses provided by the participants, I contemplated the constraints of time for the participants who acted in dual roles, as performing musicians and piano teachers who were already in the practice of integrating improvisational pedagogy. It became necessary for me to shift roles from my initial position, in which I acted as a facilitator for collaborative inquiry methods and an active questioner in conversation, to a position inhabiting an interpretative stance, grappling and deciphering meaning that could be attributed to the experiences shared by the co-researchers.

The first-person accounts of experience associated with a collaborative model served as a means for generating and sharing ideas and experiences among the participants as a collaborative inquiry cohort. As the study evolved, adaptations took the form of a shift to a 3rd-person narrative account through my depiction of the participants' cyclical research encompassing action and reflection.

Reflexivity reveals the deep connections between emotion, cognition, identity, and integrity, which have the potential to transform the community of learners. As an interpreter of the meaning that participants attributed to the experience of improvising, I strove to model congruity of identity and integrity in negotiation of the frequent quandaries posed by collaborative inquiry (Bray, Lee, Smith, & Yorks, 2000; Yorks, O'Neil, Marsick, Nilson, & Kolodyny, 1996). It is a challenging process to share in a vision of change as enacted through improvisation, experiencing tension in all of the

unknown variables, even using these unknowns as opportunities for learning to connect to the deepest part of ourselves and others.

As Brydon-Miller, Kral, Maguire, Noffke, and Sabhlok (2011) have noted, "Participatory action research is like jazz" (p. 387), an observation that is particularly salient in consideration of the present study. Like improvisation, collaborative inquiry cultivates a form of interaction that derives its character from responsiveness to others in the environment. The examination of individual beliefs and practices activates engagement and individual agency for the purpose of mutual learning through action (Bray, Lee, Smith, & Yorks, 2000). Education in its truest and optimum form creates a dynamic community of learning, in which there is freedom of thought, integrity and connectedness.

**Assumptions**

Several assumptions influenced the design of the research and interpretation of the data: 1) Written notation representing the classical canon is a fraction of the tradition it represents, a tradition that was infused with the art of improvisation. 2) A reverence for the, "monological voice of authority" (Kanellopoulos, 2011, p. 114) sometimes produces a resistance to creative freedom and transformation. 3) Though it is in common practice, any, "closed form" education based on the classical canon is incomplete, since the music history, practices, and tradition encompassed open forms and improvisation. 4) Collaboration can stimulate the generative processes of creativity, as well as enhance enjoyment and alleviate the strain of going against culturally ingrained norms.

These assumptions affected the research in several ways. I approached the design of the study with the assumption that improvisation in interaction with works of the past

is possible, but relatively rare, that improvisation was an integral component of the realization of works of classical music in the past, and that processes of creative transformation can animate the study of these works in the present. The interconnected elements of research design were built upon the assumption that creativity can be socialized through integration in a cultural system of existing artifacts, a process dependent on social interaction and validation, in a domain in which these processes are often denied.

I anticipated certain challenges as a result of departing from canonized interpretations of classical music. In consideration of preservation of music as an artifact of culture, the music educator who teaches improvisation must operate within certain points of tension, related to the conditions of improvisation and preservation, in studios that are situated within larger systems and prevalent practices that promote certain expectations for performance. Among the challenges represented in this process orientation toward exploring possibilities, the time and energy spent nurturing experimentation might seem as though it merely detracts from a student's performance of a single accepted and polished interpretation of the original work itself. While I regard my own childhood experiences with, "closed form" treatments of classical music as incomplete, I do not presume that any efforts in teaching, "closed form" realizations of classical music are necessarily flawed.

**Ethical Responsibilities**

Throughout the research, I strove to be aware of the potential effects of my background and identity on the process and participants. As I belong to the milieu I study, I am familiar with the conditions, behaviors, and content of a piano instructional

setting. Continuous reflection was needed in order to recognize and account for bias, sources of which could stem from 1) preconceived impressions of possible conclusions, and 2) my recruitment of piano teachers who value improvisation and musical creativity. Every effort was made toward self-awareness, to enter the field with new eyes, so that my background and identity could benefit productive dialogue and understanding as I enacted my role as co-researcher in collaborative inquiry.

Drawing upon a paradigm that views children as capable co-constructors and interpreters of meaning and experience necessitated acknowledgement of the potential risks and complex nature of power dynamics between adult researchers and children (James, 2001). Since risk-taking is ingrained within the nature and practice of improvisation, the research was approached with a cautious sense that the participants and their students might experience some degree of fear, embarrassment or even social exclusion, real or imagined, based on perceived skill in performance. Building trust and nurturing a sense of community was considered essential to the study of improvisation.

The musical practices, strategies, and descriptions of experiences, provided by the members of the research cohort, could have slight repercussions if the information is assessed by colleagues or peers. All participants were informed that they could feel free to refrain from answering any question or from participating in any activity, if any discomfort was experienced. The parental consent and student assent of participating students were secured and based upon a full disclosure of the purpose and objectives as related to this dissertation study.

**Summary**

Recognizing the individuality of contributors and the nuanced complexity and generative potential of the social context, collaborative inquiry complemented the purpose of the study, facilitating the positive and stimulating effects of the sharing of ideas among members of the research cohort, ownership in the process, and investment in a shared sense of purpose. By recruiting members of a collaborative inquiry research team from a context in which classical repertoire is often considered closed to improvisational processes, co-researchers were enlisted as agents of change, acting upon an intersection of pedagogy and practice, and engaging student learning and experience, with the aim of activating creative thinking, engagement, ownership, and individual agency.

Chapter IV

HANNA, PLAYFUL VISIONARY

"For me improvisation is a superior way of experiencing music. Moods and spirits and so forth." (introductory interview, August 10, 2018)

Upon exiting an elevator in an Upper West Side apartment building to meet, "Hanna" at her home, I could hear strains of piano music emanating from various apartments on the same floor. I imagined I might have time-traveled to another era of New York history as I searched for Hanna's apartment. The filigree of the iron railing of the stairwells and sconce lighting evoked my historical imagination, with the awareness that distinguished composers had lived in this same building. I followed the sound of a Chopin polonaise and found myself at the door of Hanna's apartment, where I met her for the first time.

Hanna greeted me and invited me inside her home, where numerous lamps cast a radiant warmth onto the pale-yellow walls and mahogany antiques and trimmings. Divided into living quarters and a music studio, the artful and cozy apartment contained collections of instruments from many different cultures and time periods, including two grand pianos. Even upon meeting for the first time, Hanna's cordiality in welcoming me, along with the glow from within the cheerful room, gave me the feeling of being at home and at ease.

**Portrait of a Playful Life**

A youthful appearance belies Hanna's 50 years of teaching experience. Inventive, warm, vivacious and playful, Hanna's narrative of experience reveals that she is in her 70s. Self-described as a, "professional improviser," Hanna has been commissioned to record albums of her original improvisations. With Bachelor's and Master's degrees in Piano Performance from a prestigious New York City conservatory, Hanna was among the youngest of music faculty appointed to the same institution where she had trained. Among her activities at that institution, Hanna recounted improvising for modern dance classes under the direction of famous choreographers as among her formative musical experiences, enhancing her improvisational skills. Having taught a range of courses from music theory to improvisation for actors on the basis of her improvisational practices and techniques, Hanna recounts her musical experiences with a sense of continuity of identity and personal narrative, such that her childlike ways of being and knowing are recalled as she discusses her current practices.

**A Chance, "To Play"**

Hanna's conception of her childhood self as improviser was multifaceted and became the subject of conversation from our first meeting. Having grown up in Central Europe under a Communist regime, practicing and competing as a pianist occupied Hanna's time from the age of 5, from which time she was labeled a musician. As she submitted to the strictures of a stringent practice regimen as a child, she would still figure out ways to invite her friends over, "to play," prefiguring her later roles as improviser and teacher:

So, I would always call my little friends over and said, "Okay, look, I'm practicing, and I can't go out to play, so why don't we play together at the piano?" And they said, "Well, I don't play." And I said, "Okay, so just play this one note, just play a C. Just keep that and I would play my piece [...]." And they would play because they wanted to play with me, but I couldn't really go out to play for many hours, so I started to just have my friends over. I would have two people and one would play on top, just play one note, and the other would play in the bottom, and I would just practice what I had to practice. So, I think this was sort of an idea for later on when I started to teach seriously. (introductory interview, August 10, 2018)

As a child, Hanna improvised her own means to companionship, a way to escape the isolation of solitary practice and enjoy the company of her friends. The improvisational activities Hanna suggested for her friends at the piano occupied their attention, even though they were not practicing piano themselves, a scheme that afforded Hanna company. Hanna's commentary indicates that this, "idea" taken from the recollection of her early life and scene of her childhood self is present in her current teaching practices.

Hanna's descriptions of her childhood self and improvisational activities contain aspects that are realized and developed at later points in time, through her persona and improvisational stratagem. Sociable and extroverted, the transcripts of interviews and collaborative sessions include numerous occasions in which Hanna invited others to come over, "to play" on her grand pianos at her home. Operating from a stance of learning from others, Hanna often reflects upon encountering new sources for novel ideas and practices in the form of people she meets.

From our first meeting, Hanna described her perspective and narrative of experience as based upon 19th-century musical practices and steeped in Hungarian and Romanian ethnic music, as she grew up in an environment in which improvisational practices were not considered, "unusual" (introductory interview, August 10, 2018). As Hanna described the musical practices with which she was familiar as she grew up, she

made many references to composer and piano virtuoso Franz Liszt (1811-1886), who she

described as, "our idol" in the, "part of the world" where she was raised:

> Everybody was improvising, Hungarian folk... old folk music that's improvised.
> And then, each musician tries, like in jazz, in their solos... to be better or more
> interesting with ... their version of that same, very, very simple little song. So, I
> grew up with this kind of listening and imitating and, "oh, what do they do and let
> me try [to see] if I can do it" in a different way. (first CI session, September 16,
> 2018)

As Hanna describes the practices of listening and imitation with which she is familiar, she

relates how a pre-existing fragment of musical material can be transformed to showcase

variability through improvisation. Situating her current practices of improvisation within

a postmodern outlook, Hanna views the act of creation as reassembly of pre-existing

material from a broad swath of historical performance practices:

> I think we are very lucky as improvisers; we're promoting improvisation in this
> day and… we are not bound to certain harmonies. We are not bound to any kind
> of strict rules because everything has been produced already. All the musical
> ideas, I think, have been done, so we are very free to do that, free to do whatever
> we want. (introductory interview, August 10, 2018)

If the act of creation is regarded as the recombination of pre-existent ideas, the notion of

originality may be viewed in tandem as a new way of combining familiar elements.

Despite Hanna's expertise, background and skills, she occupies a humble stance

in viewing teaching and learning as mutually enhancing activities. Hanna relates her

perspective on teaching:

> I have very few beliefs about teaching, and the more I teach the less I know... I
> respect more and more what each individual wants out of music… Everyone who
> has an opportunity to explore this art…. It's a personal journey, and it takes tools,
> naturally. But the tools are just the beginning of the exploration of the depth of
> how it could affect you as a musician… And because it has been done in the past,
> and a lot of music comes from that source, and composition still comes from that
> source. … Who am I going to imitate? Like a painter, am I going to do Picasso?
> That's easy, I can put the eye anywhere. Or am I really talented, can I make a
> painting that looks like a photograph? Then I'll copy the masters. It's so rich, so

many possibilities. And the advantage of musicians and improvisation in music is that it's very ethereal. Once it's done, it's gone. So, I was thinking about … judgment. There's very little judgment in improvisation. To me, that's the key of wanting to do it. (open-ended interview, November 29, 2018)

Hanna's comments suggest that the ephemeral nature of music and sound as a medium can encourage an approach suspending judgment and furthering exploration. Reducing judgment and fear are key factors in Hanna's approach to motivating others to play with sound. References to abolishing the concept of a, "mistake" permeate her musings, musical practices, as well as her design of pedagogical strategies and games.

Reflecting upon her musical experiences and background, Hanna recalled the first instance in which the act of improvising presented itself to her conscious awareness: "For me, this was the beginning of improvisation" (introductory interview, August 10, 2018). At the age of about 10, Hanna was invited to perform for a live radio broadcast. Selected to perform a Kabalevsky Novelette in d minor, Hanna had been prepared by her teacher for any eventuality that might transpire during the live program, including the possibility that she might experience a lapse of memory during the performance. In such a case, Hanna should, "just make it up as I go along" (introductory interview, August 10, 2018), not to stop for any reason. Accompanying this strategy was the imperative to, "study the ending of the piece," so that closure could be reached in any case. Though she had never before forgotten her music during performance, Hanna recounted that, "because I was told" there might be a memory lapse, "I did have a memory lapse" (introductory interview, August 10, 2018). The mere suggestion from her teacher prompted a prophecy of sorts:

And so, during this whole thing, all of a sudden, I had a huge memory lapse, and I just played, and I knew I was in d minor because I knew what key I was in, and I was just playing a lot of chords in d minor and I don't know what else, because it

was very, very obscure. And then I went to the ending. I finished. And it was traumatic. It was a traumatic, traumatic experience. The next day, I cried for hours and hours. I was so ashamed. (introductory interview, August 10, 2018)

Recalling this childhood memory as her foray into improvisation, Hanna's response to her initial improvisational activity was fraught with shame. As such, her memory of having been in the learner's position as an initiate to improvisation infuses her current teaching practices with the understanding of how the student might feel upon entering uncharted territory, especially a student who may be orientated toward showcasing formalized achievement.

In the debriefing that was to follow that incident on live radio broadcast, Hanna's piano teacher and music theory teacher offered an assessment of her performance that surprised Hanna, leading to the formation of strategies for use in her own childhood improvisational activities:

During my lesson, both my piano teacher and my theory teacher said that this was quite remarkable, and that they wanted me to start doing this on purpose, so [I] started a piece that I'm studying, let's say [a] Mozart sonata, and then [I was to] pretend that I forgot the music and start to make it up. So, they actually made me do this and I thought this was because they were very kind, and they just wanted me to not feel badly about what happened at the radio broadcast. But I started doing it and I thought this was very, very interesting… I was encouraged by my piano teacher, "Okay, let's do this Bach minuet for two bars and then just pretend that you have a memory lapse and see what happens." But we did start to analyze the piece a little bit, what chords there were and how the melody was constructed, how many notes [comprised] …the melody? Was it five notes? Was it three notes? So, I started to really think [about] the way the piece was constructed. (introductory interview, August 10, 2018)

When Hanna was prompted by her teachers to, "pretend" she had forgotten the music, there was an alternation of composer and self in performance, a strategy through which she found purpose in her later teaching practices. Tracing her childhood concept of the structure of any piece yielding material for exploration to her current teaching practices,

Hanna's initial experience in improvisation is similar to a strategy she designed for use with students in the present study.

**Improvising through Teaching**

As a piano teacher of, "professional music students" (introductory interview, August 10, 2018), Hanna relates that her students have chosen to focus upon classical repertoire. Hanna describes improvisation as her own primary interest, through which her consciousness of the individuality of each student facilitates learning. As she holds that, "each of us perceives sound in a very different way" (first CI session, September 16, 2018), Hanna attends to a search for what is interesting to her students. Lighting up with joy in noting how a student found some strategy or another particularly enthralling, Hanna looks for ways to connect to her students' naturally occurring interests. Inviting pretend and fantasy with her younger students, Hanna notes, "Sometimes, I use a story book that has photographs in it or pictures of animals […] or something and then they will make up a story through music based on visuals" (second CI session, October 7, 2018). Nurturing deeply embedded patterns of consciousness and social imagination, Hanna enacts improvisation through children's instinctive engagement in dramatic play, storytelling, and fantasy.

For some students, Hanna is solely an improvisation teacher, while piano performance is studied under the tutelage of Russian-conservatory trained musicians. Hanna doesn't consider it at all unusual to be one of many piano teachers for a single student. Remarking that she encourages her students to study with multiple teachers at once, she recalls her own background in which she had, "many teachers and they were all very different influences" (third CI session, December 2, 2018).

Having described and displayed her comfort and delight with improvisation from our first meeting, Hanna related the constancy with which she infuses her instruction with improvisation:

> My students work with improvisation (and musical analysis) right from the beginning of our student/teacher relationship. It is also integrated into the students' daily practice. With almost all of my students I teach improvisation and one of the aspects of improv that I include is improvising in the style of different classical music eras. (blog post, November 3, 2018)

Hanna went on to describe that, typically, during the first ten piano lessons or so, her students play free-standing improvisation games that are not at all associated with repertoire. Thereafter, features of repertoire could become material for improvisation, though a variety of improvisational strategies could take form, depending on the individual student.

## Coaxing Visual and Aural Orientations into Mutual Cooperation

Throughout interviews and sessions of collaborative inquiry, Hanna makes repeated references to her process of distinguishing the different modalities for learning music that appeal to different students. Among these differences, ear and sight orientations are acknowledged and utilized by Hanna in designing learning experiences for piano students, among other features that characterize individual students. Hanna observed that some students will follow directions carefully, while others don't care for sitting for long stretches of time, noting that some of this latter category would slide under the piano at times. "Have you ever had […] sliding ones?" Hanna asked at the first session of collaborative inquiry (first CI session, September 16, 2018), to sympathetic laughter and nods indicating familiarity among the other participants.

Clarifying that her teaching approach is not based on age, but perception, Hanna

remarked, "It's how one perceives. There are readers and there are not-readers." As an

ephemeral sound-based art, Hanna notes the peculiar ontological status that music

occupies:

> For the very young students, they [musical notes] look like little ants. And then they're really not music .... Music is when you're hearing something, using the quote from my daughter. "Music is music, and this is something else." But if you know how to read it, decipher it, then it's like a mystery. Then let's see what happens. (introductory interview, August 10, 2018)

Acknowledging the unknown as a, "mystery," Hanna's instruction brings the visual and

aural closer into mutual cooperation through successive approximations, "coming closer

to what's on the page" (first CI session, September 16, 2018). Throughout the process of

coaxing visual and aural cues into closer proximity, for Hanna, "everything has to be with

sound." Hanna continues, "To me, this is central […], because that's where I'm coming

from. […] That's my way, but there are so many, many ways" (first CI session,

September 16, 2018). Acknowledging multiple ways of perceiving and learning, Hanna's

teaching practices are anchored in deciphering what others hear, according to

individualized perception.

In her own childhood, Hanna recalled creating when she sensed her own

limitations as a reader, as she dreaded the effort involved in reading the notes on the page.

> You know what I used to do?... Because I was a very poor reader. So…I would get a piece like this. I'm sure you have students that don't like to read, that do things by ear. So, I would look at.... the music.... and sort of, "oh, okay, so we have"…I wouldn't even play the notes, I would just kind of play the rhythms. Just to get through the music and then I forced myself: "I have to do this because I have a lesson coming up in two days." (third CI session, December 2, 2018)

Relating to students who have, "trouble reading, the way I did" (introductory interview,

August 10, 2018), Hanna observes her students' orientations toward reading or playing

with sound and crafts opportunities to connect or bridge perceived barriers through creative strength. Among strategies for improvisation modeled off of her own childhood practices, Hanna encourages her students to play the rhythms as found within repertoire on different notes, as a means of exploring novelty.

For a student who is most comfortable with sound as a medium for understanding music, Hanna might invite creating a score from scratch using blank sheets of paper and a ruler: "And then we would just randomly write notes" (introductory interview, August 10, 2018). Following the crafting of a musical score, Hanna and the student would then try to perform the notes and talk about it. Hanna noted, "By writing it down, you have to know what you're writing" (introductory interview, August 10, 2018). A student's curiosity regarding the product of the randomly selected notes would seem to generate further incentive in the decoding of his/her own musical notation.

After exploring musical complexities free of a score through free-standing improvisation games, Hanna described what typically follows as a, "big shock that they [the students] have to read a little music, and the music was very simple and boring" (introductory interview, August 10, 2018). In such a case, the student's eyes and ears are on different levels: "They're making up pieces with arpeggios and melodies and all of a sudden, they have to read 'Twinkle Twinkle Little Star'" (introductory interview, August 10, 2018). In these cases, Hanna's response is, "to be very, very compartmentalized:"

> So, this compartment, we're just going to do boring reading because it's very, very important to your future, and also there's a little bit of just convincing that this is very different from really the fun part…, where you are coming to patterns and chords and melodies and harmony. (Introductory interview, August 10, 2018)

Hanna's teaching approaches are adapted to each student, familiarizing children with music through successive strategies to enhance visual and aural components. For her very young students, Hanna refers to musical notation as, "the little ants" (introductory interview, August 10, 2018). Building lessons on the basis of fun, play, wonder and exploration, Hanna marvels at musical concepts anew through the experience she shares with her students.

**Fun and Games with Symbols**

Before the design of strategies for improvisation through collaborative inquiry, participants were asked to draw a picture representing their teaching practices. This drawing was then used to further our conversation and understanding of teaching practices over time. Referring to the drawing representing her teaching practices, Hanna relayed her own childhood experience of confusing her left and right hands, then described how her drawings (See Figures 1 and 2) captured her current teaching practices:

> So, I had trouble knowing… my left and right hand… and I started out as a dancer… My grandmother, who was my mentor and roommate for many, many years until I was 21, she always cried because she would take me to the lessons… I was taking ballet classes and they'd say, "take two steps to the right" and I would take two steps to the left. I was always… "Which hand, which?" So… when I teach, I always talk about the left hand and the right hand and how it's a mirror image and we go to a mirror and we play with the mirror and … do parallel things …So, we always have this kind of discussion of the right and the left and sometimes… I say, "Okay, let's play something with the right hand" and they play with the left hand, I always say, "Oh the other, the other left hand." So, we make jokes about that. … This [the front side of the drawing, Figure 1] is about the left hand and the right hand. And how do you draw…. these symbols? So, we just have a lot of discussions about how to draw it and what does it mean? And sometimes we draw faces and animals [back side of drawing, Figure 2], make up stories about this. This is, of course, the very, very, young. (first CI session, September 16, 2018)
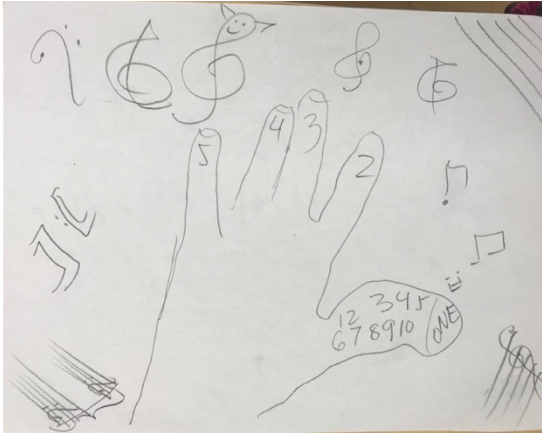
*Figure 1*. Consciousness of Hands and Symbols.
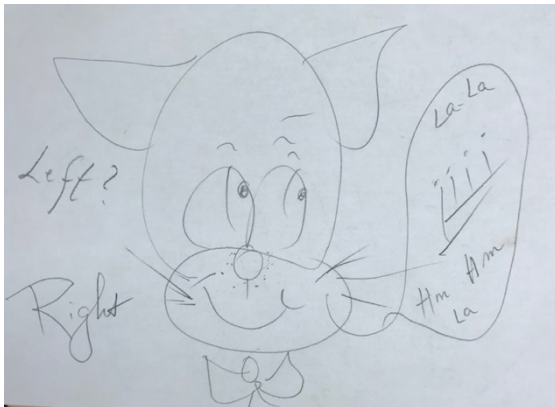


*Figure 2*. Light-Hearted Learning.

Hanna's drawings show the playful spirit with which she conceives of her role as teacher. The smiling faces and friendly characterizations intermingle with symbols of musical notation, furthering positive associations for the young initiate to music.

**Contributions to Collaborative Inquiry**

Having invented and collected a variety of tools, techniques, and experiences

through her personal exploration of improvisation, Hanna's presence as co-researcher in

collaborative inquiry was spirited and playful. For example, at the first session of the

piano teachers as co-researchers, one of the participants relayed experience with Western

European art music as limiting creative freedom in favor of a single, predetermined entity

to be captured in a way that is, "right" or, "wrong." Rather than directly contradicting the

experiences of others, Hanna used storytelling to relate how improvisation was conceived

differently in other places and times in history, relaying her own experience contrasting

with that of others in a storytelling mode of delivery.

> I read a wonderful book about… Franz Liszt…. his parents recognized his talent at a very, very early age. His father was a violinist at the court of Esterhazy. And so, [there was a] very, very modest family income, because musicians and cooks were in the same department, but he barely had enough to support [his family] and [Franz] was an only child…But then, in this little village where they lived in Hungary, there were some gypsies that were always practicing the violin and the bass fiddle and you know, all kinds of other instruments and…Liszt, as a little boy, would always run and… try to listen. And his father said, "no, no, no, no, no. We don't want you to listen to that kind of music." So, they forbid him. But any time that that his father was working, or the mother was cooking… you know, there were no cars on the street. You don't think that you are in New York City. This is a small village where… all the children play outside and you hear people practicing and [oh, let's go there] he was just fascinated, because he knew these tunes… folk songs. And he would hear it and say, "[lightly gasps with excitement, in dramatic storytelling fashion] I could almost not recognize it and then the tune would come back and go, and … he started writing down when he was older, his influences about what became a very important part of his practice, which was taking arias from famous operas and improvising and, you know, that was anyway in fashion to take known songs, mostly from opera, and make this fantastic improvisation. So that's where he got it from, just by these influences of listening, so, what you are saying is totally, totally true for a musician of what you pick up… it's about listening, because it's about sound. And I think each of us perceive sound in a very different way of what it means what we hear. (first CI session, September 16, 2018)

Through lighthearted storytelling, Hanna asserts a different basis of experience with the same tradition of canonized repertoire representing Western European art music. Note the details that Hanna included: Liszt's family didn't have money. They were not well-off dilettante dabblers, but skilled craftspeople in the same social strata as cooks. Franz was a rebel in the story. He shirked the influence of his father regarding which instrument he would play and as to what musical influences he would find. Through her story, Hanna rejects a common conception of Western classical music representing elitism, in recognition that the family of Liszt, whose work has been preserved vis-à-vis the classical canon, was in service to a patronage system to which they were not born aristocrats. Hanna's storytelling relates the notion that prototypes of the canon do not necessarily represent classism, contributing to the awareness of the social context of artistic production and historical practices of improvisation.

Hanna's playful spirit was evident in her joking throughout the sessions of inquiry as she shared her vantage point, techniques, observations, and improvisation strategies built upon elements of music-making. Among resources she shared, Hanna related various imaginative ideas and musical structures she had learned from a new friend, "Helen," a neighbor in her 90s whose career was made as a jazz pianist in Paris. "It's not easy," Hanna said, as she described Helen's formulation of, "her own scales." Hanna went on to say that, "as brain work," these scales are so difficult that they could be:"For when you are 90: You had better practice this in your 80s" (third CI session, December 2, 2018). As participants adopted strategies of other co-researchers, Hanna playfully chanted and teased in a childlike manner: "Stealing, stealing, stealing ideas, stealing ideas" (third CI session, December 2, 2018). As she encourages the social nature of

improvisation and learning, Hanna responds in the moment, consciously directing

musical ideas toward the individuals with whom she shares and perceives unfolding

stimuli:

> There are many, many tools for ... teaching tools in improvisation. And some
> people are very reliant with those tools. But those tools are actually only a spark
> of music, because music really, really has its own life force, and all you need is
> one note. And if you really hold that one note, then it's like taking steps when
> you're learning how to walk. One foot comes after the other foot, and then it
> becomes very automatic, because sound is produced... One of my key plans when
> I teach improvisation, that it would be a short ... that we start out with something
> very simple and very short. This gives you confidence. So, you don't have the
> feeling that you [need to] produce a masterpiece. (introductory interview, August
> 10, 2018)

Conscious of an intimidation factor in approaching a work of musical art, Hanna finds a

way to connect students to their potential to create through improvisation, instilling trust

in the process of expanding her students' self-discovery. To be instrumental in

accomplishing these ends, Hanna desensitizes her students to the concept of a, "mistake."

According to Hanna, the, "only rule" to which she adheres is that, "there are no wrong

notes," since the, "wrong notes are opportunities" (first CI session, September 16, 2018).

Dispelling the fear of errors by sharpening awareness and deepening curiosity regarding

dissonances, Hanna reconditions her students through a variety of activities and

techniques, tailored to the individuality of each student:

> I have another game. So, they're playing their piece and you tell them you just
> say, "okay make a mistake anytime that you want, or you could call it." So, let's
> say they're playing Twinkle Twinkle Little Star [Hanna sings] Can you…
> [continues singing] play a wrong note? Can you do that? Play a piece and, even if
> it [is in] just one hand and then make a mistake and then go back. You know so
> [singing], "play, play, play, mistake." So, we can call out to make a mistake and
> that's also, that's improv. It gets them out of the fear of making a mistake. (third
> CI session, December 2, 2018)

Adopting language usually reserved for heightened challenge, Hanna asks her students if

they, "can" make a mistake, altering the perception of error, as if daring students to take

on the challenge of pursuing mistakes as opportunities to maneuver in and out of dissonance.

As the collaborative inquiry discussed a spectrum of operational definitions capturing improvisational to compositional techniques, Hanna offered her view of improvisation and composition as, "different games," in which improvisation may be considered to enhance responsiveness.

> They're [improvisation and composition] different games, because there's some students, as you know, they're very … ready to play these musical games. This is the term, because if you say, "games," then they want to play. So, the game is that you play maybe the first bar. They don't know these pieces yet. It's not about rules or not rules. It's just here's: [singing a lively annunciatory and heraldic arpeggiated improvisation] and then you do, whatever you heard, what would you do as a response? And they might just go, you know, on any note, "*Teka Teka Teka Teka*" [4 sixteenths, 3 sixteenths, 1 accented eighth playfully delivered]. And that's a response. And I think that already equals improvisation. (first CI session, September 16, 2018)

This commentary provided by Hanna prompted agreement among participants that, "call and response" patterning is as, "formative" to improvisation as an instinctual impulse of the need to communicate.

**Strategies for Use with Repertoire**

Among Hanna's contributions to the Collaborative Inquiry was her formulation of a strategy for use with repertoire, which she tried with two different students in interaction with different pieces through a cycle of data collection. Before introducing the strategy, Hanna began each student's improvisation session with the use of a scale in the key of the piece, through an unconventional approach with basis in improvisation:

> I always start with the scale. So, what [key] is this piece in? And, and just do the arpeggios and do a little improvisation in the key...that was the starting point. ...play the scale, not as a regular scale... not in tempo, but stop anywhere that you want. So, if it's a C-Major scale, you go CDE and you can go backwards and forwards and stop anywhere, so that you just start already to feel where do you

want to go? Where do you want to repeat something? So, if you go C, D, E, C, D, E, [sings]... just already starting to move the… the eighth notes around.... Just stepping up and down and then using skipping. So, you're still using eighth notes, but now you can go from any place ... You can jump to G and then to C, so you can take different intervals. So, they're [the students are] really manipulating those eighth notes to the max with rhythms and…  But still just… just walking them and no harmonies you know, playing anything together... just using the scale.... So, that was the beginning. It's just… it's relaxing. I think that scales are very relaxing… (third CI session, December 2, 2018)

Hanna demonstrates her valuation of the individualism of the student, through which she actively connects the student and knowledge of scales as musical structures. By asking the student such questions as, "Where do you want to go?" and, "Where do you want to repeat something?" Hanna strives to intensify the individual nature of the student's awareness, until the student is creating using a scale as the material for improvisation and allowing the ear to guide the pathways that are chosen. Stimulating interest and building the student's confidence, this initial warm-up activity on the basis of a scale exemplifies benefits associated with constructivist practices, promoting construction of knowledge through activity that is based upon primary concepts and discrepant possibilities, designed to engage students' conceptual understanding.

**"Mr. David and Mr. Bach."** Hanna designed this strategy as an opportunity for a student to assert his strong sense of, "self-worth when he plays" (third CI session, December 2, 2018). Having noted that the 9-year-old, "David" is a, "physically strong child" with a, "strong technique," Hanna's strategy situates composer and child together, as if Mr. David is invited to respond to Mr. Bach through improvisation across time and space. Hanna discussed this strategy as placing David, "in the same status" as J.S. Bach (1685-1750), whose minuet from the French Suite in b minor (BWV 814) became a referent for improvisation:

He knows this piece very well and so...  I came up with this idea...I said, "okay, start the piece, start the piece and that's Mister Bach" [sings and gestures playing the piano]. And when I say, "switch," "Mr. David, you are going to just play an improvisation that's yours." And so, this was Mr. Bach and Mr. David and it really worked! He loved it! Because then he was in the same status as Bach, as Mr. Bach... And then he just kept the rhythm. At first it was just all over the place, but he just kept [Hanna sings and gestures] and then he became better and better...somehow. And I said, "just focus really your only focus is on the b minor, that you are in b minor and when we want to finish the phrase, just go back to b." So, there was a little bit of… the map…The Map was Mr. David and Mr. Bach.... Sometimes...when he was really getting into it, and ... he was enjoying it, and he was a little bit not just playing all over the place, I let him play longer. (second CI session, October 7, 2018)

Features of this strategy align with Hanna's own history and childhood experience with improvisation at age 10, when she was invited to perform on the radio, only to have a memory lapse and to venture into uncharted musical territory via improvisation. "Mr. David and Mr. Bach" are placed in shared company, elevating the experience of improvisation as Hanna tells her student that, through his improvisation, "Mr. Bach meets David" (piano lesson, September 21, 2018). This strategy for improvisation could be considered a, "riff" on her own teachers' strategy for use with Hanna at around the same age in her childhood, "pretend you forgot" (introductory interview, August 10, 2018). The effect is as if the student transverses time to explore how a, "map" (second CI session, October 7, 2018), as Hanna described the strategy, an outline taken from repertoire, could inform the selection of notes that depart from the notation.

As the video recording of Hanna's pedagogical strategy began, Hanna invited, "David" to play the original piece, of which he chose to play only the melodic figuration in his right hand alone. Hannah encouraged David to play using both hands, which he then did, producing a strong rendition of the piece as notated. After having checked that David had the substance of the piece in his grasp, Hanna reminded David how the improvisation activity would work: As David played the original piece, Hanna would

occasionally call out, "Mr. David" at which point David was to depart from the score, playing his own improvisation. Then, when Hanna called out, "Mr. Bach," David was to return to his playing of the original piece.

On his first try into uncharted territory of improvisation, David maintained the triple meter and rhythmic contours of Bach, but played seemingly random notes using a gestural approach, which Hanna later referred to as David, "dusting the keys" (third CI session, December 2, 2018). Next, David played a scale in the left hand, then transferred the scale to the right hand. Then, he played arpeggios in opposing directions, then slow motion arpeggios. Hanna stopped the first improvisation and asked, "why did you end on B?" Hanna's inquiry into David's decision-making seemed to demonstrate her interest and curiosity regarding his thought processes. Next, Hanna sought to establish expectations that David's next improvisations, interspersed with the minuet, would be shorter and that emphasizing B would function to establish a sense of placement and closure.

To further introduce the next improvisation, Hanna went to a different grand piano, positioned curve-by-curve at a distance, and said, "I am your Orchestra," at which point she accompanied David's realization of both the original Bach minuet and his own improvisations. Since David and Hanna couldn't see each other's hands, the improvisations to follow emphasized, "playing by ear." In subsequent improvisations, David again played using a gestural approach, seemingly fulfilling an exploratory function. When David returned back and forth to the Bach, he tried different expressive techniques in each rendition, varying his performance upon return. For example, upon

first performing the minuet, David's articulation was staccato. After improvising for a while, his return to Bach was marked with a legato articulation.

As David and Hanna played together, David pulsed quarter notes interspersed with eighth notes, adding to the Bach original as well as performing his own improvisation in alternation. At this point, even when David was playing Bach, he added material that was not written that was in harmony with the Bach. Whereas most of his earlier improvisations had been atonal or seemingly random and gestural, at this later point, it was almost as if David was playing continuo as he performed an eighth note chordal rhythmic improvisation emphasizing thirds.

David then played a series of seconds, setting them up as if they would be *appoggiature*, but left unresolved. While Hanna improvised upon b minor harmonies, David played very loudly and rhythmically notes belonging to C Major. Since Hanna had just suggested that b minor would be their emphasis, David's insistence upon clashing through his reliance on C Major may have been why Hanna later described David as, "rebellious" at times (open-ended interview, November 29, 2018).

David then played tone clusters on quarter notes, followed by slow, cross hand, b minor arpeggios sweeping the keyboard. Then, Hanna set up the potential for an ending by extending a realization of b minor chords signaling closure, to which David responded by vigorously playing something entirely out of the key. Seemingly rejecting Hanna's suggestion of an ending, David played coupled notes belonging to the chords in quarter notes. Then, Hanna offered a rhythmic flourish and a space thereafter, which David filled as if it was a rhetorical device. Through her extended playing of b minor, Hanna's improvisation implied that they would wind down the activity, at which point, David

started playing cross hand arpeggios in b minor at the top of the keyboard. Soon

thereafter, David and Hanna concluded as they both agreed on the last b minor cadence.

     ***Hanna's reflection upon features, challenges and goals of pedagogical design.***

In preparation for this improvisation session, Hanna shared that she and David had,

"examined the chord structure" together, steps that weren't shown in the video. Relating

that she had fragmented the minuet into, "smaller sections," Hanna and David began by

playing four measures of the minuet followed by four bars of improvisation using

rhythms found in the piece. As a feature of Hanna's design of, "Mr. Bach and Mr.

David," Hanna noted that direction, through her use of cues, allowed David to, "go back

and forth between the two modes of playing without overthinking either" (*Qualtrics*

survey, September 24, 2018). Since David could not foresee when his cue to improvise

would be called, he couldn't overanalyze. Instead, the surprise command would set into

motion an improvised departure or a return to the piece, through which David had no

choice but to release himself from pre-planning.

     As a challenge she had faced as teacher, Hanna reflected upon her decision-

making as she had observed the randomness with which David began his improvisations:

> He was playing random notes at the beginning of the improvisation. But I
> decided to just let him play because he was, after all, willing to improvise. So, I
> had the challenge of just letting him play and work himself into the experience.
> (*Qualtrics* survey, September 24, 2018)

Instead of curtailing improvisational activity or pointing out his use of, "random notes,"

Hanna reflected upon her appreciation for David's, "willingness to improvise," also

described by Hanna as, "enthusiastic" (*Qualtrics* survey, September 24, 2018). According

to Hanna's description, her approach allowed David to undergo a process that revealed a

depth of learning and understanding as David worked, "himself into the experience"

through his apparent enjoyment of the interactive strategy. Observing that David had

become, "more confident" in making use of, "Bach motifs and harmonies" (*Qualtrics*

survey, September 24, 2018) as time unfolded through improvisation, Hanna wondered if

David had experienced a form of liberation through this experience of improvisation:

> Not being fully attached to the written music is very liberating. In the case of this particular student, he plays mostly by ear so adding improvisation improves his confidence in his ability to do something from his own imagination. (*Qualtrics* survey, September 24, 2018)

While David's playing already occurs, "mostly by ear," this strategy allowed him to be

drawn into engagement with his own musical ideas and imagination.

   ***Hanna's perception of David's response.*** Hanna reflected upon her student's

realization of improvisation in interaction with this strategy, noting aspects and

characteristics specific to David:

> It [Mr. David and Mr. Bach] appealed to his imagination… At first, he was silly. He was, you know, he was just playing... just, "dusting the keys."  And then, I think he got it together. I think he's a little bit unpredictable because of the... [clears throat] …I think he's just rebelling a little bit because there's a lot of pressure on this child....He's a professional child. He has two teachers. He has me for improv. and a Russian teacher... And his mother said he never, ever laughs. So, I told you about when he was laughing…' (third CI session, December 2, 2018)

David's lighthearted play and a jolly demeanor were evident in his improvisational

realization, as well as in his engagement with the camera. Laughing and smiling, David's

sense of humor seemed to be frequently tickled through his improvisations.

   According to Hanna's perception, the greatest challenge David had encountered

as he engaged in improvisation through this strategy was the avoidance of, "judgment

regarding 'wrong notes'" (*Qualtrics* survey, September 24, 2018). Hanna elaborated upon

her sense of this challenge faced by David (and other students):

> A student tends to constantly try to copy the written material and to feel that his inability to do that represents bad playing. So, part of the challenge is to free yourself from this idea. And in [this] case, the student was able to do this by concentrating on the rhythmical pattern and not the harmonies. (*Qualtrics* survey, September 24, 2018)

Hanna expresses her view that David's focus upon the rhythmic motives freed him from concern regarding the harmonies, permitting his improvisational activity on a musical structure he had assimilated from the environment. Given his freedom to select features with which to improvise, David could choose for himself to disregard the use of the harmonies for the most part, in favor of the rhythmic motives on which his improvisation seemed to be primarily structured.

*Hanna's ideas for extension activities.* Projecting possibilities for the design of further activities following, "Mr. David and Mr. Bach," Hanna suggested that improvisation could be built upon additional repertoire and that David could begin writing his own themes upon which he could further improvise.

> I think more of the same is in order. Other pieces, other improvisations. I would like to add some composition to his studies where he would write his own themes or phrases, which he would then improvise on. This would also improve his reading skills by actually writing down music. It would help him understand form and structure better, as well as different forms of classical music (modern, Baroque, etc.). (*Qualtrics* survey, September 24, 2018)

As Hanna analyzes her rationale for promoting David's development of his own themes on which he could improvise, Hanna notes that David's creative process, realized through his writing his own musical ideas, would offer incentive for furthering his reading skills, as well as his awareness of musical form.

**"Mozart, improv."** Hanna introduced the same strategy to a different student, asking, "Elizabeth" to alternate her own improvisation with her performance of an arrangement of Rondo in C Major from Divertimento for Strings and Two French Horns,

K. 334 of Mozart (1756-1791). According to plan, Hanna called out, "Mozart" and Elizabeth performed the piece as written. When Hanna called out, "improv," Elizabeth seamlessly transitioned into her own improvisation.

The Mozart Rondo with which Elizabeth's improvisation alternated contains repeated C major arpeggios in the left hand. Elizabeth chose to maintain the C Major arpeggios in the left hand throughout her improvisations, while, in her right hand, she explores different material and ideas. There are two episodes of Elizabeth's improvisations, each of which are focused upon a particular musical element to be explored. In the first, Elizabeth continued to play the C Major arpeggios in her left hand, while exploring F sharp and G natural through an extended trill, as if in a classical cadenza, before her return to Mozart. During her second improvisation, Elizabeth continued to activate the same C Major accompanimental pattern in her left hand, while playing all the notes of the C Major scale in her right hand. Finding the subdominant, Elizabeth repeats the B natural in the right hand, while continuing to play the C Major arpeggios in the left hand, forming a Major 7th chord, which Elizabeth seems to find interesting.

***Hanna's perception of Elizabeth's response.*** Noting that Elizabeth's previous improvisations had been, "free form" (memo, November 2, 2018), Hanna observed that 8-year old Elizabeth seemed, "nervous" about this departure from her customary mode of improvising and the prospect of being filmed, so Hanna made particular efforts to relieve Elizabeth's worries:

> She wanted to know what questions I was going to ask her [through Stimulated Recall] and whether or not her face would be on camera (I said no… [relieving Elizabeth of her worry that her face would appear], but I didn't tell her what the questions would be). She wanted to practice the improvisation, but I said no. I

> demonstrated some improvisations using, "wrong" notes since I knew she would want to sound like Mozart. (memo, November 2, 2018)

Before the activity began, Hanna's demonstration of improvisation made purposeful use of, "wrong" notes, so as to free Elizabeth from a burden she might have felt to emulate Mozart in a feat of brilliance. By recalibrating Elizabeth's expectations through the modeling of purposeful dissonance, Hanna eased Elizabeth into improvisation, for the purpose of relieving Elizabeth's fears as revealed through her anticipatory questions.

Noting that Elizabeth had seemed much more comfortable as the improvisation proceeded, Hanna thought that Elizabeth had experienced a sense of accomplishment in meeting the, "goal of the challenge" (blog post, November 3, 2018). As Elizabeth transitioned in and out of the Mozart to her own improvisation, Hanna considered this pedagogical strategy to have promoted a, "feeling of creative liberation" (blog post, November 3, 2018), though Hanna indicated her sense that initial improvisatory activity is a frightening prospect.

***Hanna's ideas for next steps.*** While Hanna's strategy for use with Elizabeth was essentially the same as that she had used with David, Hanna's concept of her next activities with Elizabeth was very different. While Hanna was pleased that Elizabeth ended the activity with a sense of accomplishment, Hanna was conscious of the fear that Elizabeth had seemed to experience.

> The biggest challenge is helping my students over the fear of the unknown, which is what improvisation is for a beginning improviser. So, I use a variety of tools to help students over this fear. Tools include call and response, rhythms, restricting the number of notes employed, intervals, using visual imagery, etc. In a sense, as a teacher I have to improvise different ideas to find the place where the student feels comfortable and confident to improvise. Improvisation is experiential-- the more you experience it the better you become. (blog post, November 3, 2018)

Hanna suggests that her next steps as a teacher would be enacted through her consideration of teaching itself as a form of improvisation. As Hanna selects among her collection of strategies to suit the unfolding interactions within her teaching studio, she prioritizes those experiences that advance the student's comfort and confidence.

      **Interlude: Portrait of improviser reflecting the self.** Through the strategies, "Mr. David and Mr. Bach" and, "Mozart, Improv," Hanna's role is realized as that of director, an arbiter deciding when to call the commands. As Hanna delivered the cues, calling out, "Mr. Bach" and, "Mr. David," or, "Mozart" and, "Improv.," her students responded by transitioning between sound worlds, one of their own making and another in realization of canonized repertoire. A similar approach may be found in Dalcroze pedagogy, through the use of a technique that has been designated as, "interrupt-driven" (Roads, 1979) improvisational pedagogy. This technique effectively halts preplanning, ensuring that improvisation unfolds in real time.

      According to the predominant terminology used in creativity studies, Hanna presented each of her students with a, "problem space" (Stokes, 2006, p. 4; Weisberg, 2006, p. 123) that was, "ill-defined" (Stokes, 2006, p. 4; Weisberg, 2006, p. 138), since each student was offered multiple approaches to creating solutions through improvisation. Because each piece contains distinct musical features, the Bach minuet and the Mozart rondo were operationalized for, "ill-defined" treatment in different ways.

      Since the Bach minuet utilizes active harmonic rhythm, Hanna and David analyzed the chord structure of the Bach minuet before it was treated to improvisation. Hanna and David also prepared for improvisation by playing phrases of the minuet according to the notation, then using the rhythms contained within to generate new

material using the same phrase and rhythmic structures. David's subsequent

improvisation is percussive and gestural, in keeping with the triple meter of the minuet,

with occasional rhythmic flourishes making use of the minuet's predominant rhythmic

motives, realized on seemingly random notes.

Applying Stokes' (2006) theory of creativity to David's improvisation, operative,

"constraints" were posed in multiple forms. Hanna's commands, to improvise or to return

to the Bach minuet, enforced an improvisatory mode of operation. David could not

preplan his improvisatory devices, but could only rely upon ideas presented to his

decision-making, "in the moment." Since Hanna and David had considered harmonic

structure and rhythmic motives within the meter of the piece prior to his improvisations,

these features had been present in his mind before he had improvised. Of these structural

schemes, David chose to rely primarily upon rhythmic motives taken from the minuet to

search for novelty through his exploration of new notes. As David improvised in duet

with Hanna, he began to experiment with a new constraint imposed by harmonic

structure. By varying his realization of harmonic content, David chose to retain harmonic

structure and seek novelty through new rhythmic activations.

According to Stokes' (2006) theoretical framework, the metric and rhythmic

outline of the minuet combined to form a predominant, "constraint" (p. 7) for David's

improvisations. David's selection of rhythmic patterns from Bach's minuet served as a

strategic, "barrier" (Stokes, 2006, p. 7), functioning to limit rhythmic choices in the linear

dimension of sound, so as to promote search for novelty among pitches. As David's

improvisations fit an organizational scheme according to timing, "constraints," David

realized variable combinations of notes as he retained familiar constructs, meter and

rhythm, and found novel and surprising pathways and combinations among notes he chose in, "real-time," his solutions to the, "ill-defined" problem.

Occasionally, David applied the use of a further constraint through his adherence to the harmonic rhythm, as he added figuration as if he was playing continuo. This additional constraint was realized when improvising in duet with Hanna, as she improvised over the harmonic content of the minuet. Since David's choice to vary his realizations of harmonic content occurred as he improvised with Hanna, it would seem that Hanna's simultaneous improvisation served to keep track of the harmonic changes for David, imposing the harmonic structure as a further constraint, thereby promoting his search among other variables, in this case, rhythm.

Since the Mozart rondo contains repeated C major arpeggios in the left hand, this feature was readily maintained through improvisation, imposing harmonic constancy as a, "constraint" permitting a search for novelty elsewhere. Since her left hand could maintain the harmonic content in an, "autopilot" mode of delivery, Elizabeth was free to search for novelty among other features of sound, in this case a new melody, making use of meter as a further constraint. According to Stokes (2006), Elizabeth's adherence to Mozart's harmonic content and metric organization formed a pair of, "cascading constraints" (p. xiii; p. 7), directing and advancing her search for novelty in her right hand. In preparation for, "Mozart, Improv," Hanna demonstrated the use of, "wrong" notes, so as to free Elizabeth of a burden of expectation. Admitting, "wrong" notes, or additional dissonances into the options available for selection by Elizabeth, permitted her to advance her search among an expanded range of melodic possibilities that could fit the metric and harmonic, "constraints" posed by her left hand.

As Elizabeth maintained the left-hand pattern of C major arpeggios, she explored notes of the C Major scale in her right hand. Thus, C Major served as a, "constraint" that directed search among options to fit with her left hand. Since she was given an expanded tonal palette, Elizabeth was able to explore dissonances as she performed *appoggiature* and trills on F sharp and G natural. Since Elizabeth's improvisation is diatonic and tonally conceived, except for her use of F sharp, the operative, "constraints" for Elizabeth's improvisation would seem to be metric organization and the harmonic constancy of a C Major drone.

Both strategies produced the habitual variability that Stokes (2006) considers to be formative for creative endeavors. David's performance during the strategy resembled Hanna's childlike practice of looking at a musical score and playing, "just the rhythms" (third CI session, December 2, 2018) with different notes, as she dreaded the effort involved in reading the notes as written. Making use of rhythm as a, "constraint" to further the search for novelty in a different dimension of sound, this strategy is considered by Hanna to promote generative potential as a result of being constrained to the rhythmic outline. The comfort Hanna displays in the lesson, even when David, "dusted the keys," might be furthered by her consciousness of her own development as an improviser over time.

**Free-Standing Improvisation Games**

Hanna relayed that she is in the practice of introducing free-standing improvisation games, not at all associated with repertoire, during approximately the first ten piano lessons of a new student's entrance into her piano studio. Hanna's collection of games present incremental stages of complication and a model for children's creative

endeavors, stimulating the imagination and a creative and responsive impulse. Applying a Vygotskian zone of proximal development to Hanna's games, each would appear to offer scaffolding strategies to build a student's confidence and assuage fear, serving an exploratory function.

> I want to make them feel very comfortable to create their own with mostly rhythmical studies and intervals and getting chords and getting different sounds in their minds, so they're not limited to classical pieces. (open-ended interview, November 29, 2018)

Hanna shared the following free-standing games within an open-ended interview and during the third session of collaborative inquiry.
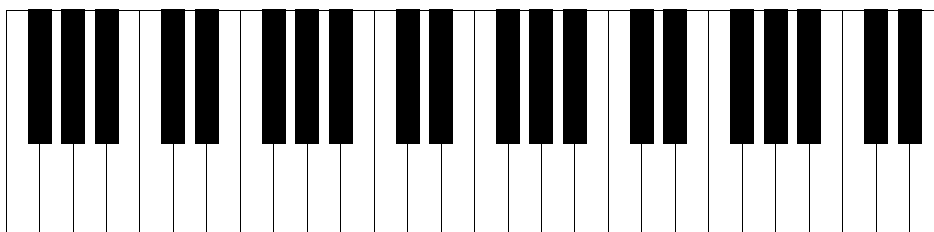


*Figure 3*. Pairs of Black Notes: "What do you do with that?" (open-ended interview, November 29, 2018).

**The black keys: Hand-over-hand**. In this game, Hanna asks a student to, "walk up" the keyboard, first using just the pairs of black notes (C#, D# pairs going up keyboard), then going back down. Hanna summarizes, "There are only two ways to go… Playing them together or separately like a drum, and then what do you do with that" (open-ended interview, November 29, 2018)? Hanna describes this procedure as leading the student to explore what can be done within those limitations, using the notes as percussion.

> And then we do the threes, same thing [improvises with F#, G#, A#]… And can you remember something that you liked? And you go on for a while exploring the threes, and then you combine all the black notes. So maybe one hand stays on the

same threes and the other one goes up and down [left hand crossing over right]. Or the right-hand stays on twos. How much do you remember so you can repeat the same thing over and over again? And so, you go on for a while with the black notes. (open-ended interview, November 29, 2018)

Hanna prompts the student to recall something that he/she particularly liked, emphasizing the individuality with which a student can explore sound, using preference to guide a pathway for creation. In a more advanced stage of experimentation with the black notes, one hand can stay positioned on a set of two or three black notes, while the other crosses back and forth to registers above and below in realization of percussive possibilities.

The child, he or she is creating, and they're free, they have control over these sounds, just to get to know the pentatonic scale, too. And a lot of technical things that are very difficult when you're reading it, but if you're improvising, they really sound very advanced. Hands over the other hand, and the rhythms that you get are very complex. Whereas, if you read that, it would be very difficult [plays Ravel-style improvisation]. Crossing the hands… It's also very relaxing, you're not tightening up the muscles… By repeating, you can actually learn the technique of going from the pinky to the thumb, using different parts of the fingers. (open-ended interview, November 29, 2018)

Hanna considers the multifaceted features of the game and the benefits it offers the young piano student, who is given the chance to explore sound and play freely first, then associate the sound with learned musical features.

**Mirrored intervals: The inversion conversion**. In this game, Hanna introduces students to intervals by asking them what each interval sounds like, "And there are sometimes stories that are attached to this, some funny stories" (open-ended interview, November 29, 2018). By the time she progresses to fourths and fifths, Hanna recounted that she often gets answers such as, "The King is coming!" (open-ended interview, November 29, 2018). Once the students gain some familiarity with the sounds, Hanna introduces the inversions of the intervals and prompts the students to create patterns using both an interval and its inversion: "And then combining… you combine 3rds and 6ths

and so on and so forth" (open-ended interview, November 29, 2018). Using this

approach, students can explore the related sonorities of inversions, associating each

sound with imaginative dimensions of play.

Commenting on the features of this game, Hanna noted that one should not make

it strict: "It doesn't have to be a fifth… So, the less you say, the more they're more

comfortable, and they're willing…" (third CI session, December 2, 2018). Hanna

emphasizes that it is *after* the experience of combining sounds that, "the instruction

comes," adding that, "the ear puts together the quality" (third CI session, December 2,

2018). If a sound doesn't have a particularly sonorous effect at any given time, "if you

repeat it long enough, it's acceptable" (third CI session, December 2, 2018). Hanna's

subsequent instruction comes in the form of questions on the basis of sound:

> Why does that sound funny? That sounds funny, doesn't that sound funny? And
> then we're going to the king, prince and princess. And more stories about those
> characters. And they play parallel, and match this one, and where is that [plays
> very low notes], the evil monster… And then the 7th, we know becomes a 2nd.
> And then we come to the octave [plays]. And most of them can't really reach an
> octave, so we are stretching, a seesaw, going up and down… And then combining,
> the next part, you combine 3rds and 6ths. And always be aware, find a sound that
> you really think is interesting, why? So, then you do patterns from that. (open-
> ended interview, November 29, 2018)

Hanna is in the practice of directing her line of questioning inward, to herself as she

improvises, as well as outward to her students in realization of improvisational pedagogy.

**The three players and the magnet.** Hanna introduces a game involving, "three

players" who are in constant motion, each moving one at a time by half step according to

the student's choice. As performed at the piano, the three players that enact the game are

one's own fingers. Hanna also related various other forms the game could take. For

example, trios of various instruments could each take a different note in a starting triad,

cuing each other as to who might alter the sound by half-step.

To start the game at the piano, a hand is placed on a major or minor triad in root position. Player 1 is the root of the chord, while players 2 and 3 are the third and fifth, though each takes on different identities through the constant movement of the game. Each chord may be repeated in a rhythmic pattern, which, according to Hanna, adds musicality and allows time for decision-making.

Upon first playing the game, the rhythm is maintained as, "plainly" as possible, usually in pulsed quarter notes (third CI session, December 2, 2018). Also, in early renditions of the game, the student participates by verbally directing the movements of each player, performed by Hanna. For example, the student might call out, "Two, down; one, up; three down," according to the student's choice.

According to Hanna, the utility of the strategy can be found in the student's participation and control of the kaleidoscopic variations realized through the game, while listening to a continuum of changing harmonies. As a student becomes more advanced, Hanna introduces principles of analysis, as the student is prompted to identify qualities of chords, major, minor, augmented, and diminished.

> It's very beautiful. And then you stumble upon something that's not beautiful. Then why?… And where? And then you stay there for a while analyzing. Why is this not more beautiful? And how can you make it [more beautiful]? (third CI session, December 2, 2018)

When playing this game with her students, Hanna provides questions to further conversation, inhabiting an inquisitive stance that furthers the ear training that can take place through the three players as a framework. Further, more advanced musical theoretical constructs can be defined according to a prescribed key upon analysis in retrospect. Riffing on the questions she could ask students, Hanna showed her characteristic playfulness, "Ah, what is that chord? What is that called? It's a Neapolitan

6th, oh it's the Landini cadence. They [the students] all want names, it's the New York

pollution chord" (open-ended interview, November 29, 2018). Hanna went on to describe

how the system of the three players functions musically:

> There's this magnet in chords… a natural magnet in the tuning… And then you're finding voicing, or what voicing is, so there are a lot of components to this, but you could go just simple. Why, why, did you go up? Why did you go down?...it's very organic. So, you really are not predisposing to any kind of a strictness. When you find… these marvelous chords or any kind of a system that comes out of that… you might want to make it into a composition and then you make all the decisions of how you want to do it. Then, you're more strict in your composition and presentation. And then, when you find something… if you like something… just stay there… It's ear training, also… So, find this note [plays the root]. What am I moving? So, there's a lot of ear-training. Hearing… just hearing, where is it going and why did that happen?... I use the word magnet. That magnet kind of… draws you into something beautiful, where you [sighs in acknowledgement of beauty, "ahh"] you settle in there. (third CI session, December 2, 2018)

Occupying an inquisitive stance, Hanna asks questions to further awareness and

responsiveness by her students in order to generate improvisation. According to the

perception of the creator, improvisation may be conceived as a search for something

intriguing or beautiful.

## Chapter Summary

As an explorer of ideas, teaching seems part and parcel of Hanna's improvisatory art. The

detail with which Hanna recalled the musical practices of her childhood provides basis

for contemplation of ontogeny, through which Hanna's childhood self could be

considered to contain features of her later development as an artist and teacher.

Continually expanding her circle of contacts and friends, Hanna's playful approach treats

each individual as a resource for new ideas, an action and reaction that reaffirms the

nature of perception as individual and the dynamic nature of music as communicative.

Attentive to the nuances of each student's individuality, Hanna treats the unique

temperament, nature and imagination as a code to be deciphered. Merging aural and

visual capacities and orientations into cooperation, Hanna appears to constantly analyze

the means by which each student seeks self-realization through music. Viewing teaching

as a form of improvisation, Hanna pursues the development of individual potentialities

and the process of self-discovery. As improvisation emanates from sound itself, each

realization is varied by its nature, due to the ephemeral essence of sound. Hanna's

thought-provoking musings, analysis, and accounts of her improvisatory practices and

teaching are a tribute to the vitality and instinctual nature of the social learning

environment.

Chapter V

ELISE, CREATIVE STRATEGIST

"Improvising... it's... the world that I live in." (first CI session, September 16, 2018)

I first met Elise at a jazz supper club on Manhattan's Upper West Side. A mutual friend arranged for us to meet at this casual venue, where I could invite Elise to join the collaborative inquiry and we could visit while listening to live jazz. Minimizing the trappings of any social obligation, Elise and I wouldn't necessarily see each other again after our first meeting. This thought bolstered my comfort and confidence, as I wanted to draw participants on the basis of shared interest, without the burden that sometimes accompanies social acquaintance. The shadowy interior of the supper club was teeming with boisterous spectators of the acts assembled for that evening. Plumes of smoke curled and seeped into the rich velvet upholstery of the chesterfield sofas that provided snug seating to the candlelit tables. Elise expressed her interest and enthusiasm for the project, charging the buzz of excitement I felt in anticipation as she and I took in the sights and sounds of that iconic supper club.

Holding Bachelors and Master's degrees in Performance from institutions considered among the premier centers for the study of jazz, Elise has been selected as recipient of top honors and awards for piano performance and jazz composition (ASCAP Foundation, Downbeat Magazine, NPR, The Kennedy Center). An up-and-coming young musician in her late 20s, Elise's gigs take place at established and prestigious jazz clubs

in New York City and other metropolitan areas, often featuring Elise leading a jazz trio from the piano and performing her own award-winning compositions.

## "Riffing" on the Changes: Contemporizing a Career

Having lived in New York City for five years, Elise is originally from the Pacific Northwest, while her studies and burgeoning career as a jazz pianist have taken her to cosmopolitan hubs around the United States, as well as Africa, Central and South America, and Europe. Having achieved a great deal at a young age, Elise is an efficient coordinator, quick in scheduling and in clearly defining goals and objectives.

### Learning to Teach: Teaching to Learn

At the suggestion of a teacher who felt that teaching furthers one's development as a learner, Elise began teaching piano lessons at the age of 15 or 16. Prizing education, Elise related the value of teaching and learning within her family, as teachers of various disciplines are among her immediate family members. Elise recounted that teaching piano was her primary source of income when she had first moved to New York City after completing her undergraduate degree. Currently, Elise maintains a piano studio of about 15 or more students who are both adults and children. Her students include those who seek out a jazz concentration, whose interest in jazz led to selection of Elise as teacher.

As each member of the collaborative inquiry was invited to introduce themselves and reflect upon a sense of purpose in joining the cohort, Elise considered her own childhood experiences with Western European art music from the age of 5 through 11:

> So, what draws me to the project? I guess… I felt, when I was young, very
> frustrated, with classical music…I kind of gave up on that, you know. I didn't

keep searching in there. I just was, like, "I feel very stressed out with this, having to play written material… the same way." So, I just switched genres, but I still love listening to classical music and I do teach my students some fundamentals of classical music, but also a lot of jazz. (first CI session, September 16, 2018)

Elise's comments and contributions to the collaborative inquiry showed her consideration that another treatment of classical music is possible, a view of Western European art music that is not merely constitutive of her own previous experience, but as potential subject of transformation. As a child, Elise, "didn't keep searching" in that space representing practices of Western European art music. Through her membership in the collaborative cohort, Elise demonstrated strategies for realizing an alternative conception of classical music, in which improvisation provided an interactive means of generating multiple possibilities, treating classical music as material for reimagining. Elaborating upon her decision making as she had left the study of classical music in her childhood, Elise recalled the savoring of freedom she had experienced through jazz:

> I started playing classical music when I was 5 and found it very stressful...having to have everything perfect every time. It didn't work with my personality. So, when I was 11, I was, like, "I don't want to do this anymore" and I started playing jazz music. I went to a different school and they had a great jazz program. So, I started taking jazz lessons and … I felt so much freedom... being able to improvise. (first CI session, September 16, 2018)

The stress that had accompanied Elise's early experience of classical music is described as a product of the pursuit of perfection in realizing a set rendition. In contrast, jazz offered a path to experiencing freedom through improvisation.

Expanding upon her impression of practices of Western European art music according to her experience in childhood, Elise emphasized the singularity of an acceptable route in capturing a predefined performance:

> Having a piece that's eight pages long and every note on the page has to be perfectly, exactly as you read it and it has to be played a certain way. It's supposed to be played the same way every time. If it's perfect, then that's what

you're going for. You're aiming for the same thing every time you play it. In jazz music, it's not like that at all. The goal is that it's always different. The goal is that you're able to be so well-versed in improvising that every time you improvise, you can go somewhere new based on who you're playing with, what they're doing, so many other elements. (introductory interview, February 9, 2018)

Instead of churning out multiple performances in the, "same" way, Elise's experiences in jazz positioned her to act as co-constructor of meaning and musical material, in realization of the capacity and stimulus to negotiate her music-making with others. Forming and reforming music through improvisation, the exact circumstances and responses could not be repeated, offering multiple realizations through exploration, experimentation, and generative processes contingent upon musical communication with others.

Reflecting upon the allure of music as remaining beyond a, "technical exercise," Elise asserted the need to be a part of something beyond the trappings of ego:

Music is meant for people… for healing. It's bigger than a technical exercise, a discipline. You know, those are just things you need to play music, but that's not the point. The point isn't to master this technical thing. If that was the point, there are thousands of musicians even in New York City that can do it better than me. So, to me, it needs to be bigger than that. (final interview, April 12, 2019)

Elise's vision of music recognizes powerful instinctive processes realized in the social sphere, through which individuals are considered more than a set of skills. For Elise, harnessing the nature of individuality through improvisation permits music making to take place as a kind of, "healing," implying an act of discovery, as participants are drawn into engagement with others.

Elise remarked upon the, "condition of artists" as to, "never think it's good enough" (final interview, April 12, 2019). Exploration and the constant search for multiple realizations necessitates managing a persistent lack of closure. Elise described,

"wanting to be better all the time," then finding peace through the maxim of one of her

teachers:

> I'm happy with where I am and a teacher of mine always says, "you're as good as you say you are" meaning, you write a piece of music, wherever you finish and however you say, "I'm done," that's as good as you are…it's your decision how much you want to go into it and how deep you want to go and whenever you say you're done…you're telling people, "This is how good I am." You know… we're always changing, I hope, and learning, growing. I have an album and I could apply it to my album. I could say… I presented this album and that's as good as I am, I said, "that *was* who I am"…I thought that ["you're as good as you say you are"] was very interesting …when [my teacher] made that comment, because he's an arranger and he makes his whole income off of publishing compositions … for… high school bands and other stuff like that…in books. And so, he says, "I always wonder… should I change that voicing? Should I do this? Should I do that?" But ultimately whenever I say, "I'm done"…. that's as good as I am." (final interview, April 12, 2019)

While any given structure used as a framework for variation could yield perpetually

more, it's ultimately the decision of the creator to form a sense of closure. With the

recognition that development and change are constant, Elise's thinking, modeled upon

that of her teacher, makes use of time itself as a defining aspect. "That's as good as I was

*then*" promotes peace and closure on the basis that further development is understood as

an operative function of time. Elaborating further, Elise reveals her concept of such

sense-making as highly individual:

> I think it's a type of person, though… I don't know if everybody's like that… every kid is different… some kids are… you can see that *that* is how they are and you should be able to go with that. But if they're not like that, you can encourage them to think that way, but you know, not everybody wants to not-be-good-enough, you know, it's not that you're not good enough, but it's that there's no sense of closure [in creative work], ever. (final interview, April 12, 2019)

Thus, the nature of improvisation extends to Elise's teaching practices: In recognition of

the individual as distinctive, Elise described creating a learning environment in which she

supports the individual's natural disposition for learning. Like improvising with others in

a, "jam session," Elise introduces a new approach to a student, negotiating its meaning,

spontaneously exchanging ideas and observing the response.

> I guess it will come down to, "everybody is different," but… the musicians that I admire the most and teachers I admire the most, people that I want to be like, that I want to… model my teaching after… they all learn from their students and they admit that they don't know it all… They really are on the journey to learn it just as much as anyone else. They just have more time and experience. (final interview, April 12, 2019)

By creating an environment that supports a student's natural disposition, Elise expands

her own experiences, exploring and sharing musical ideas anew. Elise elaborated upon

this idea, furthering a collective approach to meaning making through play:

> Lori Custodero talks about that [music as freeing and playful]. She talks about how to be childlike. Jazz music is inherently childlike because it's playful. It's community. It's working together to create something as a unit, not as myself. I could sound great by myself, but if I don't make other people sound great, it doesn't really matter. I think that's a really powerful point in jazz music. (introductory interview, February 9, 2018)

Through her teaching, Elise strives to connect to her students' instinctive learning

processes, treating musical structures as material for play by means of improvisation and

participation in the social setting.

**Improvising as Intertwined with Identity**

From our first meeting, Elise related that her teaching and improvisational

practices are tied to her identity as a jazz musician. Asked about her experiences teaching

improvisation, Elise responded, "Because I'm a jazz musician, I always came […] from

that point of view" (introductory interview, February 9, 2018). Self-defining as a jazz

musician throughout interviews and collaborative inquiry sessions, Elise related how

certain elements of style, structures and formulas taken from jazz permeate her practices,

furthering her rationale for her approach to teaching. After establishing, fundamentals,"

including how to read and identify notes and rhythms on the piano, Elise makes use of a,

"jazz perspective" (introductory interview, February 9, 2018) involving improvisation,

even in interaction with music belonging to the classical canon:

> Everything I do is improvise. So... I teach ... my students mainly from that perspective… I teach them all about improvising ... in a jazz context usually, but I also have them improvise over classical, I would say classical tunes... some of them are very beginner. So, ... they're... work-book tunes, but with a classical style…  (first CI session, September 16, 2018)

Thus, the collaborative inquiry did not initiate Elise's use of classical music as material

for improvisation by her students. At the introductory interview, before cycles of

collaborative inquiry took place, I asked Elise to describe how she had treated classical,

"tunes" to improvisation in her teaching practices, to which Elise responded:

> If I was to have a student improvise after playing one of those pieces… they would play the piece as it's written, the selection as it's written, and then we would just improvise over the structure of the song. In jazz music, it's the exact same. When we improvise in jazz music, we improvise over a structure. For instance, the blues is 12 bars. Just like Old McDonald is a set form, the blues is the same thing. In [learning jazz], for instance, we play all those songs, Old McDonald, Twinkle, Twinkle. We improvise over all of them in that structure, so it's all the same thing. (introductory interview, February 9, 2018)

Before the collaborative inquiry had begun, Elise described her teaching practices as

making use of improvisation in interaction with music that is considered, "classical,"

treating this material just as she would any other, "structure" upon which to build through

improvisation. Asserting an operational definition of improvisation as finding freedom

within structure, Elise noted that this definition applied even in the case of free jazz: "It's

[improvisation] making something up, but there is always structure. Everything

improvised: It has structure, even free jazz" (first CI session, September 16, 2018). In

crafting an improvisation, Elise seeks structure upon which to build, selecting from a

variety of musical materials in order to construct new improvisations with her students.

**Listening and Learning Music as Language**

As she discussed her craft as musician, performer and composer, Elise drew a parallel between music and systems of communication for language. Alluding to music and language as compatible systems, Elise cited the frequency with which language is considered as a metaphor for music in her experience in jazz. Upholding a premise that the manner with which music is learned is essentially similar to that through which language skills are acquired, Elise's musical thinking and teaching involve a process of initiation by ear, through which imitation is of primary importance:

> I really do think it [music] is an imitation… you know people trying to learn a language, you know, they live somewhere, they're immersed all the time and they just speak the language all the time. They're going to learn it way faster. So… I do think that it's [imitation] really important… so important because it's a language. Music is a language, whatever type of style you play. It's got its own vocabulary. (final interview, April 12, 2019)

Thus, Elise's teaching emphasizes imitation and, "playing by ear," so that creating music occurs as the manipulation of sounds rather than the mere decoding of symbols. Regarding the fundamentals of language and music, Elise reflected upon knowing music as a language learned through imitation. Having encountered a musical vocabulary through listening, musical thinking in real-time permits the forming and reforming of the structure of sound as in language through a, "vocabulary" (final interview, April 12, 2019), presumably built upon a knowledge base.

Bolstering a concept of a vocabulary of music functioning as an embodied knowledge base, Elise's commentary from sessions of collaborative inquiry suggested her consideration of knowledge as a source from which meaningful improvisation emanates.

> I feel like the idea that you play things different [*sic*] all the time. That's just not true. You know, I've been listening to people improvise and improvising myself for years and years and you play the same stuff all the time, you know. You [do] play different stuff and you grow, you listen to music and you're influenced, but I think it's never always new. There's no way. When people write music, they're just writing… other things they've heard, you know. Everything's come from something. (first CI session, September 16, 2018)

The inference is that improvisers show consistency through style and use of a personal knowledge base, revealing enduring features. Elise's comments demystify some of the mystique surrounding improvisation, in favor of a view of improvisation emphasizing the endurance of learned stylistic features and a knowledge base that continuously influences spontaneous realizations.

While Elise emphasized the development of listening skills in her teaching, she discussed instilling knowledge and experience with both reading and aural approaches as she reflected upon her pedagogical practices.

> A lot of times, I'll teach my students songs from a recording... I do believe that they [students] should learn how to read music and I do that too [in teaching]. But… I'm…in a specific world, because, in jazz music, people have very good ears, in general… I've seen… people that come from a classical background [that] don't have very good ears. And I mean, including myself, definitely… I grew up playing classical music too and reading music and the whole thing and… I'm stronger at that [reading] than my ears and I think in improvising… and in everything actually, in everything in life, I think you have to have good ears. You have to be a good listener. You have to be open to what's happening. And so, I almost prefer that they [the students] have better ears, you know, and they're going to learn how to read music. So, that's what I focus on with them [ear training, playing by ear], but I do both. (first CI session, September 16, 2018)

In her own musical experiences, Elise claims a primary route to music through visual cues, which she suggested is due to the influence of her experiences with classical music in her childhood. Yet, comparing music and life, Elise asserted the primacy of listening for the purpose of remaining open to others.

**Starting and Stopping, Listening and Playing Together**

Upon prompting to draw a picture representing current teaching practices at the first session of collaborative inquiry, Elise drew herself sitting beside a student as they played the piano while listening to music through a speaker system (See Appendix C). Describing her illustration to the other participants, Elise offered a glimpse into her teaching practices and an explanation of the meaning represented in her drawing:

> This is me [pointing to her drawing] ... and my students, because I'm always …physically showing [demonstrating at the keyboard], and… playing music. That's [pointing to the square in her drawing from which lines emanate] supposed to be a speaker. I believe in doing things by ear and… playing with my students. I'll teach my students songs from a recording. So, I'll play the recording and then we'll stop it and start it and learn from the recording, and then, when they feel comfortable, I'll play with them... usually I walk a baseline and play with them.....I don't give them an option. I think it's [aural skills, ear training, playing by ear] all they know.... (first CI session, September 16, 2018)
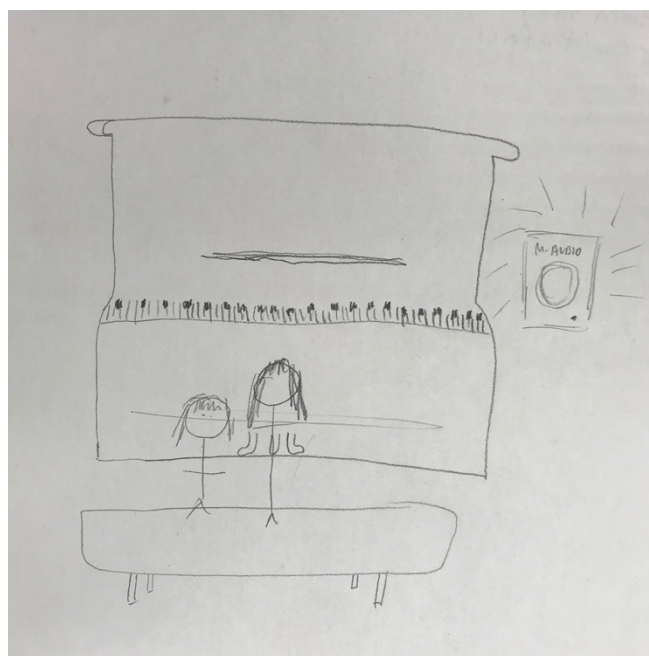


*Figure 4*. Playing by Ear Together.

As she discussed the representation she had drawn, Elise described her teaching practices as situating herself in a position together with the student at the keyboard, decoding

sounds through trial and error, starting and stopping a recording, and learning from sound itself.

## Contributions to Collaborative Inquiry

Elise's presence and course of reasoning in sessions of collaborative inquiry furthered the apprehension of complexity in realizing improvisation in interaction with classical music. For example, Elise introduced a new layer of nuance as she mused upon the meaning and purpose of improvisation in the context of Western European art music. Accustomed to processes through which improvisation takes place as a form of imitation, Elise questioned what the research cohort would be striving to imitate through the design of pedagogical strategies, the score or the composer:

> I guess it would be important to know whether you're trying to teach the kid to imitate the person that played the piece or just the actual notes on the page, you know, because that's a big difference really. If you're teaching them to imitate the notes on the page, you're kind of teaching them how to compose a piece in the style of this composer… I guess in my experience it's been something improvised that I'm trying to imitate someone's style. It's not a composition. It's them improvising. I mean composition is kind of improvised. It is improvising in slow, very slow time. (first CI session, September 16, 2018)

As Elise reflected upon the meaning of imitation in the context of Western European art music, the usual function of imitation as she had experienced it in jazz presented itself as distinct in this context. Since Elise's customary sense of purpose in imitating others was to capture improvisatory style, not elements of compositional design, the musical score, the structure upon which improvisation was to take place, was removed from her experience, bearing the features and refinements of a finished work. Since Elise had further mused that perhaps composition could be considered to be, "very slow" improvisation, she posited the experience of time as a distinction between composition

and improvisation. This line of inquiry drew the cohort into discussion regarding the distinguishing features of improvisation as compared to composition in terms of the relationships suggested by Elise's comments, as well as goals as related to elements of style, decided to be uniquely situated, to be negotiated within the context of each studio.

Adding further complexity, in her study of jazz, Elise had been accustomed to procedures through which sounds played in, "real-time" are transcribed through a series of steps, enacted with a different sense of purpose for notation than that understood according to the, "work-concept" (Goehr, 2007, p. 4) in the context of Western European art music practices:

> I took a class in college where we were trying to imitate the style of someone, like from the trad jazz (traditional jazz) [of the] 40's, you know, and the way that we had to go about imitating them was first to transcribe their solo, aurally, you know write it out, and be able to play it, then make up our own solo, in the style, but written out, you know? In the style of that. And then the third one, was, improvise in the moment, our own solo in that style. So, if it was something like that, you could have, like, this piece as the example, you know? And then, from there, the student could write their own example and dissect… the key elements of what makes this Bach. Or whatever the goal is, if it's to imitate Bach or it's to imitate classical arpeggios, whatever the goal of the piece is, for whatever piece. And then, the third could be that they improvise it in time in the style. (first CI session, September 16, 2018)

As described by Elise, the procedures through which sound was transcribed into musical notation served a function supporting internalization processes, whereby sound is committed to understanding, for the purpose of re-enacting improvisatory impulse. In the manner with which Elise is acquainted with the process of transcribing sound into notation, the artful features of music are played and improvised first, *then* transcribed for the purpose of internalizing a session of improvised riffing on a structure. Improvisation exists for its own sake, to play with musical features, exploring the possibilities inscribed within. First is the act of creation by the jazz improviser, then comes notation for an

entirely different purpose: to become further acquainted and well-versed in elements of improvisatory style.

Elise further asserted the peculiarity of the notion of learning music from a score that is seemingly finalized.

> In the jazz tradition… to talk about you learning it from a piece of paper is, it's not authentic. You know… if my student did that, I would tell them that's not the right way to learn it, honestly, because it's not written *right* and there are a lot of subtleties in music that you can't write out, you know… it's never going to sound the way that it looks, you know what I mean? That's what I think…. (first CI session, September 16, 2018)

Working in the field of jazz, Elise operates in an environment in which it is already assumed that the score doesn't contain all that there is. In striving for authenticity, Elise approaches music according to her understanding of the practices inherent in a tradition of notational representation or lack thereof.

Pondering the historical remove of the canon of Western European art music from the current time and context, Elise mused upon the complexity of approaching this repertoire through her customary processes:

> The challenges that leave me uncertain about my choices or next steps in this whole process are mainly that it's difficult to recommend musicians for my student to transcribe or listen to in classical music because historically there aren't many examples or role models for improvisation. Yes, there were classical musicians that made up cadenzas but not everyone did that and that was also hundreds of years ago. There aren't too many modern examples of this, so in a way these students are pioneering this for the next generation and it leaves me wondering what do I have my student listen to for examples in classical music or transcribe? The ways I learned to improvise in jazz music with imitation and transcription. The only things I can really think to have them analyze or transcribe are compositions by these composers, but those weren't really improvisations (if we're defining improvisation as making something up on the spot) so it's not the same. It would be great if there were classical musicians doing this for the past hundred years. I'm sure there were a select few classical musicians that have been doing this and I would be interested in learning about those musicians were so I can show my students. (personal correspondence, November 5, 2018, shared with permission)

Since Hanna, among the members of collaborative inquiry, is an example of a, "professional improviser," composer and performer working within the field of classical music, I relayed this information to Elise, asking Elise directly how she might prefer for me to approach the subject of the challenges she had described within the collaborative inquiry. As Elise was on a tour of gigs, she had to miss the final session of collaborative inquiry. Expressing her interest in Hanna's response, Elise gave me expressly stated permission to share her written reflection with Hanna, who took a streamlined approach in response: "There aren't role models because it's improvisation. They didn't write it down." Hanna then added commentary addressing similar aspects discussed by Elise during introductory and final interviews:

> I have recorded and would be very happy to burden you with some CDs. I've recorded over the years lots of CDs of improvisation. For me improvisation is a superior way of experiencing music. Moods and spirits and so forth. But… I tell you, when I listen to my improvisations, they're not as great as what I thought they were when I was playing them. They were commissions from various sources. Somebody said, I'll give you this much money and you go and record it, I want to have your CD. So, I was very lucky that way. But they were a long time ago, and I totally have a different way of thinking about it. (open-ended interview, November 29, 2018)

Recalling Elise's sense that it is the, "condition of artists" to, "never think it's good enough," it would seem that Hanna experiences a similar pattern of consciousness. Furthermore, in response to the challenge posed by Elise, as Hanna looks back upon her improvisations from another time in her life, time itself seems to mark a boundary, serving as an operative function through which development is constant, ensuring that improvisation is constantly new and evolving, along with one's musical thinking.

**Strategies for Use with Repertoire**

Elise conducted two cycles of collaborative inquiry, through which she designed multiple improvisation strategies for use with the same student, "Ava," in interaction with an arrangement of an aria from the Peasant Cantata of J.S. Bach (1685-1750), BWV 212 (1742).

**Cycle 1**. Elise developed instructional designs for two pedagogical strategies through the first cycle of collaborative inquiry. Filming the entirety of the lesson in which the improvisations took place, Elise then selected excerpts of the video to be shared. Once posted to an online forum, the video excerpts were used to prompt reflection and conversation among members of the research cohort. Posting analytic memos and blogs to the online forum, Elise identified salient features according to her perception.

***"Call and response."*** The design of this improvisation strategy resembled a game of, "Simon," the electronic game of memory that was popular among children in the 1980's. If the student's response didn't match the, "call" provided by Elise, Elise would replay the phrase until Ava returned Elise's call to her in identical form. Thus, each call was repeated until the response matched, an approach emphasizing memory through a call and response formula taking the form of pure imitation.

Verbal instruction was kept to a minimum in the video excerpt selected by Elise, in favor of the music itself leading the instruction. Playing a repeated drone of an open fifth in the bass of the keyboard, just as notated in the arrangement, Elise maintained the 4/4 time signature of the original piece to provide a foundation for improvisation. To begin the improvisation, Elise provided examples for the student, consisting of several syncopated calls on just one note. As Ava was invited to repeat Elise's calls, at first, she

experienced challenge when echoing syncopated calls back to Elise. After several calls were repeated accurately by the student, the number of notes used to generate a, "call" was increased to two.

Turns were taken in delivering the calls, so that the student was not merely the recipient of the teacher's improvised phrases, neutralizing a master-apprentice dynamic. When it was Ava's turn to generate the calls, she began by improvising rhythms on one note, just as Elise had previously modeled. After Ava created several rhythmic calls on one note, Elise prompted her to proceed by using, "any two notes" (piano lesson, October 10, 2018), to which Ava responded by introducing chromaticism with which she subsequently experimented.

By the time it was her turn to present the calls, Ava eventually incorporated upbeat syncopations that were accurately spaced, making use of upbeats similar to those used in Elise's calls and revealing that she had assimilated musical structures from the environment by means of her participation in the social setting of the applied lesson. There was a delightful moment when Ava, delivering the calls, looked over to Elise to show her approval when Elise echoed Ava's call back to her. Ava smiled and said, "That's right," approving of Elise's response to her own call. This interaction seemed to showcase the activity as a dialogue and not an inculcation of monologue.

*Elise's reflection.* In reflecting upon her use of, "Call and Response" as an improvisation strategy, Elise relayed thoughts she perceived as crucial to her effectiveness as a facilitator of improvisation. Noting the game-like character of the activity, Elise emphasized the repetition through which efforts were made to correct responses that didn't match original calls:

It seems like a game to her and it's fun for her to try and imitate me and me imitate her. A challenge in this activity was some of the calls I gave her had syncopated rhythms she found difficult and had trouble copying, but I think that's a great thing about the activity too. When she couldn't get a rhythm exactly, I would keep repeating it until she got it…some of the calls I gave were a little long and she had trouble remembering the whole passage for when it came time for her to play it back to me. (memo, November 5, 2018)

Having viewed the activity as successful, Elise observed Ava's facial expressions as evidence of her engagement and enthusiasm throughout the improvisation session. Any divergence that appeared in the response as compared to the original call prompted additional repetitions, through which the response was corrected until it was a precise match.

*Elise's consideration of extension activities.* Considering future steps she could take to expand upon this improvisational strategy, Elise offered possibilities that came to fruition in the second cycle of data collection:

My next steps with my student would be to continue improvising over a one-chord vamp from the song. Then I would have them incorporate some improvisation techniques into the solo such as more call & response, taking one note and a specific rhythm and developing that idea throughout the whole solo, learning different scales that work over that one chord, singing some melodies and have them try to find those melodies on the piano. This would be my next step because I believe you have to meet the student where they're at and then present a challenge slightly above there. My student is getting comfortable improvising over a one-chord vamp but the improvisation techniques I plan to introduce would give them an added challenge and meet them a little over their level. (blog post, November 5, 2018)

Elise's projection of, "next steps" outlines incremental challenge that she could introduce to Ava. Elise plans to ensure that the gap between the challenge she poses and the student's current level is manageable. Interactive, open, and cooperative, Elise's design scheme creates a zone of proximal development through which Ava can be drawn into engagement in the instructional setting.

*Elise's ideas for conversation with Ava.* In recommending topics of conversation that could follow this activity with her student, Elise suggested a line of questioning that would encourage the student to implement aspects of the improvisation into performance of the piece itself, according to the discretion of the student.

> I think interesting topics of conversation to have with my student immediately following this particular improvisation … would be: how can we incorporate what you learned in this improvisation activity into your playing of this piece? Are there elements of improvisation you can incorporate into classical music? (blog post, November 5, 2018)

Implementing improvisation in performance could impact the perception of legitimacy within practices associated with classical music, in light of prevalent practices and larger systems within which any performance is situated.

As she reflected upon aspects of instructional design that had facilitated the students' exploration, Elise focused upon the usefulness of the, "call and response" formula for improvisation.

> I think it's always important to lead by example and call and response is a beautiful way to do that. They get to hear you demonstrate how to improvise and then try to imitate you. It also strengthens their ears which is something I find is often missing in classical music. (blog post, November 5, 2018)

The, "Call and Response" strategy served as a structure for developments realized through improvisation, in which meaning was negotiated and transformed through exchange.

***"Improvisation over the harmonic structure."*** This strategy took place over a longer span of time and presented greater challenge to the student. As in the previous, "Call and Response" strategy, Elise let the music, rather than words, drive the interaction. To start the improvisation, Elise invited Ava to create an improvisation over the structure of the piece. Telling Ava, "I'm keeping track for you," Elise played the reduction of the

harmonic content in repetition on quarter notes. Ava began by playing just one note in a clipped manner, then murmuring to herself with a sigh that sounded like, "No." Elise responded by continuing to play the harmonic structure while making brief comments such as, "keep going," "what else could you play?" and, "jump in whenever you can." Ava then returned to the same note she had previously played, but this time she developed it into a metrically organized phrase on the notes: A, F, C, C, A ("*mi, do, sol, sol, mi*"). As Ava continued to explore new material through improvisation, she played a sharply dissonant note, F#, and immediately looked to Elise for her reaction. Self-critiquing, Ava made comments such as, "that wasn't very good," to which Elise replied, "oh, that was interesting," so as to encourage Ava to explore the sounds without fear of the unknown.

As Elise repeated the harmonic reduction, Ava found more notes that fit within the structural scheme of the chord progressions. Sometimes, "wrong notes" seemed to provide an unexpected fascination for both the student and the teacher. Elise and Ava looked to each other in instances of surprise at various sounds that were produced. Elise continually called out encouraging commentary while the student was playing, such as, "yeah, good, right, that was interesting" (piano lesson, October 10, 2018). While the student occasionally played notes outside the harmony, she eventually played melodically inflected notes that formed an arc, following this development with various smaller directional melodies.

*Elise's reflection.* According to Elise's perception, a challenge encountered by her student was a result of the multiple chord changes the student needed to manage through the use of different chords and scales in, "Improvising Over the Harmonic Structure."

The challenges I think my student encountered during this improvisation activity were keeping the form of the song and knowing when to change chords and scales, since the song wasn't over one chord change the entire time. I think she was most successful when I gave her one small part of the piece to improvise over and she could focus on creating melodies and developing her ideas over that section. The aspects of the activity I found least useful was teaching my student specific scales that work over each individual chord since she wasn't able to keep up with so many moving parts. It was above her level and I quickly realized that. (blog post, November 5, 2018)

Elise's comments show the constancy with which she adjusts her instruction, striving to anticipate and fulfill the needs of her student with regard for the student's current level of skill. For Elise, recalibration of challenge involves analysis of her instruction, her plans, the student's interactions and responses, and further continued analyses of how she might better anticipate and improve upon the outcomes of all of the complex and interwoven variables of the lesson, requiring subject preparation, emotional intelligence, personal interaction and enthusiasm.

***Elise's perception of Ava's response, Cycle I.*** As Elise reflected upon her student's response to both of her improvisation strategies through the first cycle, "Call and Response" and, "Improvisation over the Harmonic Structure," she noted those aspects of instructional design that she felt had promoted or hindered Ava's improvisations.

My student's musical response to the improvisation strategy was overall very positive. I think she enjoys improvising and creating her own music. Some of the activities I tried with her went over her head slightly (especially keeping the form and following each individual chord change [in, "Improvising over the Harmonic Structure"]), as opposed to vamping and soloing over one small part in the song [in "Call and Response"]. I know for next time what worked and what didn't. She did well when we played over one chord and she only had to think about what notes she wanted to play. (blog post, November 5, 2018)

Elise's comments reveal her efforts to recalibrate challenge to meet the student just above her current level of skill. Conscious of ways in which Ava might feel thwarted or baffled, Elise finds a path forward to motivate learning outcomes.

As Elise observed Ava's response to, "Call and Response," she noted that Ava had produced melodies that were not limited to the material they had reviewed prior to the improvisation, viewing Ava's improvisation encompassing an enlarged palette of tones as an accomplishment:

> A success was that she came up with melodic material that wasn't restricted to all of the chords and scales we were discussing before doing this activity, so she felt there was freedom to makeup something she was hearing. A surprise to me was some of the melody notes she chose. It tells a lot about her personality and character and I love that! (memo, November 5, 2018)

Elise deduces that Ava's departures from the chords and scales during improvisation were ear-driven products of inner, "hearing," yielding surprising elements that Elise views as revealing aspects of Ava's personality. Elise's perception of Ava's improvisatory output is consistent with Elise's concept of her own improvisations as intertwined with aspects of self and the expression thereof.

In addition to the surprise that Elise experienced upon hearing the novelties Ava generated through her improvisation, Elise also noted the possibility that Ava herself was surprised upon encountering difficulty in matching Elise's calls through call and response. Elise's comment, "A surprise to her was maybe that some of the rhythms I used were difficult for her to repeat back" suggests that Ava may be accustomed to producing answers to, "well-defined" problems that are, "right." Since surprise is experienced as a contrast to expectation, Ava might be expected to display signs of anxiety or disappointment. Yet, as noted by Elise, in her reflection upon call and response, this

activity, "seems like a game" to Ava, whose facial expressions display delight and enthusiasm.

Upon viewing and replaying the video, Elise made an observation she hadn't noted during the improvisational activity itself:

> She [Ava] seemed to be looking to me for approval of everything she played. I never noticed that in the moment but when I watch the video back I can see it clearly. It's a good reminder to me that as teachers we have to be positive and reinforce and demonstrate good habits. I personally love that she played notes that were out of the scale. That's what makes it musical and unique in my opinion, but I can see how some teachers that weren't as comfortable with those, "outside" notes could make a face or react in shock and that might have thrown her off and made her not want to play those notes again. (memo, November 5, 2018)

Elise's commentary reveals her sensitivity to the student and her regard for the, "habits" of mind and practice that are cultivated in the setting of applied instruction. Even subtleties of facial expression are considered as cues that motivate or discourage, sometimes without the awareness of a teacher.

Speculating as to what the improvisation in response to classical music stimuli might mean to her student, Elise suggested, "freedom," reminiscent of her own recollection of her childhood foray into improvisation.

> I think the improvisation in this lesson might mean to my student that she can have more freedom in playing music. I think it might have shown her that using her ears and listening while playing music is an effective and fun way to play music. I think improvising empowered her to trust herself and her instincts. (blog post, November 5, 2018)

As Elise nurtures the social nature of learning music through improvisation, she demonstrates the value she places upon her student's individuality, enabling Ava to be drawn into engagement with her own musical ideas and, "instincts."

*Interlude: Portrait of improviser as cultivator of instinct.* Elise's pedagogical design for her call and response strategy presented a classic well-defined problem for one

player and an ill-defined problem for another. Novelty was limited for whoever responded to each call, as this particular formula defined the problem space to such an extent as to require a single correct solution. Thus, deliberate practice took place within a well-defined problem space for the responder to the calls, through which mistakes were corrected through repetition in order to produce a response precisely matching the original call. As teacher and student traded places, each had a turn at the ill-defined problem space represented in generating a new call to the other.

Occupying an ill-defined problem space, the originator of calls could experiment with variability through improvisation, altering each call once a matching response was received. In this context, the use of constraints acted to impose limitations on certain musical features that furthered search among others. For example, by limiting the number of notes that could be used to generate a call, the originators of calls could focus creative effort toward rhythm, developing novel rhythmic delivery in subsequent repetitions in realization of variability.

Throughout the activity of, "improvisation over the harmonic structure," Elise maintained the harmonic rhythm of the piece, to which her student was invited to add an improvisation of her own, representing the open space of an ill-defined problem, with, "many moving parts" (blog post, November 5, 2018). Elise repeated the harmonic structure in a loop to invite the recognition and internalization of patterns, occurring according to a fast harmonic rhythm. The student gradually found notes that fit the structural scheme of the harmonic content. As Elise encouraged her student's acceptance of dissonance, she greeted her student's spoken self-critiques ("That wasn't very good," Ava, piano lesson, October 10, 2018).

According to the theoretical framework of Stokes (2006), the activity of, "improvisation over the harmonic structure" began by presenting, "constraints" in the form of metric organization and harmonic rhythm. Directing the selection of notes for use in the generating of melody, harmonic rhythm was the operative constraint, acting as a, "barrier" that limited search for novelty among notes that belonged to each chord.

I would propose that a further constraint appeared in the form of a perceived, "mistake." Since unintentional dissonance seemed to surprise both teacher and student, it presented another form of constraint. Rather than hurriedly escaping the tone, emphasizing perception of fault, the unexpected dissonance begins a constraint path that seeks to recondition the perception of, "error." Asked to elaborate on her treatment of mistakes, Elise offered the following:

> Yeah, it's not a nerve-racking thing. It's more of an excitement of just, oh, I didn't know I was going to go there, but cool. Let's find a way to get around, to make something happen out of that. (final interview, April 12, 2019)

Thus, Elise's encouraging response to her student, "that was interesting," may be seen as reconditioning her perception of error to permit the search for a way, "to make something happen out of that" in pursuit of novelty.

As she applied the operative constraints of metric organization and harmonic rhythm, the student occasionally happened upon notes outside the harmony. Eventually accepting these sounds, rather than fearing them, the student began to play melodically inflected notes that formed an arc of beautiful melody.

**Cycle II**

Elise had to miss the session of collaborative inquiry in which the teacher-participants designed pedagogical strategies for use in the second cycle of data collection.

Having planned for her absence, Elise prepared the following pedagogical strategies,

along with other contributions to be shared with the research cohort, including her

perception of the key features of her instructional design of pedagogical strategies that

open Western European art music to improvisation.

*"Contrafact: Same rhythm, different notes."* In this excerpt, music making took

place during shorter episodes, interspersed with Elise's verbal instruction. Elise began

this improvisation strategy by prompting Ava to identify any rhythms that were repeated

throughout the Bach aria. At first Ava pointed in the score to various passages that shared

the same rhythmic patterns. Then, Elise asked Ava to clap the rhythm she had found in

the score. Once Elise had checked that Ava was familiar with the rhythm, Elise suggested

that she could, "use that rhythm, but change the notes to improvise," an approach Elise

called a, "contrafact" (piano lesson, January 22, 2019).

Elise then played an example for Ava, by improvising a new melody that made

use of the familiar rhythm, during which Ava voluntarily clapped the rhythmic pattern to

accompany Elise. After Elise had finished playing, Ava appeared to concentrate on

internalizing the rhythm by continuing to clap the pattern. As Ava processed the rhythm,

Elise prompted Ava's recollection of a scale, to which Ava responded by playing a scale

in parallel minor, f minor. Elise then recommended the F Major scale to fit with the

piece, which Ava proceeded to play.

Elise's instruction continued as she prompted Ava to remember how she had

marked the form the last time they had improvised over the structure of the same piece.

Telling Ava that she would, "do that again" (piano lesson, January 22, 2019), Elise

invited Ava to create a contrafact, effectively imposing some limitations upon the

material with which Ava could create. Any note of the F Major scale could be used while the rhythm was to stay the same. Rather than prompting Ava to vary her scales to match the harmonic structure as she had in, "Improvising Over a Harmonic Reduction," Elise's design scheme in this improvisation strategy allowed the student's ear to take over in shaping the inflection of notes selected from the F Major scale.

As she improvised, Ava played notes mostly taken from F Major, while tentatively matching the predominant rhythmic pattern taken from the Bach aria. Though there was some fluctuation in her rhythmic accuracy, this aspect began to, "fix itself" through repetition. Ava stayed relatively within the rhythms of the piece, while creating new melodic and rhythmic material, spinning out a particularly pleasing episode of melodic inflection. In aiming for the goal established by Elise, Ava shaped a coherent melody, making it seem less important that the rhythmic values were imprecise and not always taken directly from the piece.

Elise responded by adapting her instruction to meet what Ava had played, so that Ava's improvisation fit the constructs given as an improvisation strategy. Describing what Ava had just done, Elise said, "Something else we can do is take a shorter [rhythmic] phrase as an idea and expand on it" (piano lesson, January 22, 2019). Elise then provided an example in which a shortened form of the rhythmic motive was interspersed with newly created rhythms on notes in F Major.

***"Sing,* then *play."*** Elise began with the line of questioning, "Why don't you try singing something and then we'll try to play it" (piano lesson, January 22, 2019)? Elise then provided a model by singing a melody, which she sang over her playing of the bass line taken from the Bach aria. After listening to Elise's example, Ava displayed

remarkable ease in singing a new melody over the same bass line played by Elise, taken directly from the aria. The next step suggested by Elise was for Ava to decode her sung melody into notes on the piano, which proved more challenging.

At first, Ava settled upon notes she hadn't previously sung. In response, Elise led Ava to figure out the notes she had actually sung, by singing Ava's original tune and treating the material as a, "call" to be repeated precisely by Ava at the keyboard. Breaking Ava's sung melody apart into manageable, "chunks" furthered Ava's process of deciphering the notes on the keyboard.

The video seems to show Ava learning, "on the spot," managing the difficulties and realizing what she would need for future endeavors of this kind. What had come naturally in sung form was not easily found on the keyboard. The expressions on Ava's face seemed to show her processing and realization of the difference between the notes as sung and as found on the keyboard through trial and error.

***"Sing*** and *play."* Serving to enhance awareness of sound, melodic inflection and physical positioning on a keyboard, this improvisation strategy involved combining vocals and keyboard in unison in a simultaneous realization of an improvisation over the bass line taken from the Bach aria. Elise began by suggesting that Ava could sing her improvisation simultaneously as she performs it on the piano, "Can you try and sing and play at the same time" (piano lesson, January 22, 2019)? At first, Ava's singing didn't at all align with the notes that she played. Then, Ava adopted an approach in which she allowed her physical selection of notes on the keyboard to guide her vocalise, at which point Ava sang slightly after she played. Eventually, Ava anticipated the sound of each note with her voice.

A few minutes into her improvisation, Ava got caught in a chromatic conundrum of sorts, a loop of three consecutive chromatic notes. Elise responded by encouraging Ava to expand the range of her improvisation, "Try bigger leaps." In response, Ava played a more diatonic melody with leaps, again playing the notes on the keyboard slightly before singing them.

***Elise sings, Ava plays.*** To start this improvisation strategy, Elise reminded Ava of the previous, "call and response" strategy, in which Elise had played a call and Ava had repeated it back to her on the keyboard. Elise said, "This time, I sing, you sing it back to me, then you try to play it on the piano." Elise looked for complete accuracy from Ava, requiring that Ava's sung repetition precisely match Elise's call, before she is prompted to find the notes on the keyboard. Throughout the action and interaction of dialogue, singing and playing, Elise would often keep playing while she and Ava were talking, so that communication took place throughout.

At one point, Elise stopped the session to ask Ava, "Is the note going higher, lower, by steps or leaps" (piano lesson, January 22, 2019)? Elise then sings a triad and asks Ava if her voice had moved by steps or leaps, to which Ava responded that she thought Elise's singing had moved by steps. After further experimentation, Ava realized that Elise had not sung stepwise motion after all, but had outlined a triad, at which point Ava proceeded to decipher the notes on the keyboard.

Resembling Elise's, "Call and Response" of Cycle I, this strategy features an added component of ear training through singing first, enhancing audiation. Once sung with accuracy, a motive is transferred to the keyboard. Ava displayed heightened attentiveness in listening to the melody as sung, as she could recreate it in her own voice.

As in the previous strategy, this video excerpt shows Ava processing and learning on the spot. Here, Ava appears to learn how her vocal singing, delivered in a natural manner with ease, translates to the keyboard.

*"Incorporating multiple strategies."* According to this strategy, Elise invited Ava to combine multiple elements with which they had experimented, including call and response, aspects of ear training, as well as the, "contrafact," or the use of pre-existing material as an outline or, "shell" for new material. In this case, the, "contrafact" refers to the use of the pre-existing melodic rhythm taken from the piece to be played with new notes or the adopting of one small portion of the rhythm and developing that small rhythmic motive throughout an improvised solo upon the pre-existing bass line.

As Elise prompted Ava to develop a musical idea throughout an improvised solo using all of the cumulative concepts with which they had improvised thus far, Elise clarified that to develop a musical idea meant that either a melody or a rhythmic motive would be present throughout the entirety of a solo, demonstrating development throughout. Before improvising, Elise asked Ava to play an F Major scale and reminded her that this would be the tonal material for the improvisation.

After reviewing the different ideas with which they had previously experimented, Elise asked the student to define the concept of melody, checking for understanding. Ava responded that the melody is the tune that is remembered, "that you can sing." Elise and Ava discussed how melodies could also be purely instrumental, though melodies often have words, such as in pop music. Elise differentiated that, because, "we hear melodies all the time, it is natural to hear melodies 'in your head.'" On the other hand, playing a melody on the piano is a, "learned skill." To this, Ava added that, "you can hear

Harmony, but you don't really sing it." Thus, Elise presented to Ava's understanding that singing is an important element in creating a melody, even a melody that is played on the piano. Ava then declared that she didn't want to use the rhythms from the piece, so Elise recommended that, if Ava was to make up her own rhythms, she would need to develop her rhythmic choices very clearly so that, "by the end, I should know exactly what your chosen rhythm is" (piano lesson, January 22, 2019).

Bringing the ideas Elise and Ava had discussed to fruition, thereafter Elise walked a baseline, as Ava developed a musical idea, consisting of a repeated rhythmic motive: quarter note, quarter note, quarter note, quarter note, whole note. Occasionally, Ava replaced the whole note with more active rhythms as she searched among rhythmic possibilities. Throughout her improvised solo, Ava dwelled upon B natural while the accompaniment figuration and musical source material was in the key of F Major. As Ava kept hovering over that one particular note, B natural became a sort of mono theme of her improvisation. As it is the one note that doesn't belong in the F Major scale as compared with the C Major scale, the result was an effect of Lydian mode.

Upon finishing the improvisation, Elise and Ava debriefed, remarking together that Ava had developed an idea over time, according to plan. Since Ava had departed from the key, Elise then prompted Ava to recall the F Major scale, in order to enhance Ava's awareness of the salient features, linking sound and conceptual content. As Ava played the F Major scale, she realized for herself that she had made use of a B natural rather than B flat throughout the entirety of her solo. Ava laughed upon realizing her departure from the scale and the plan that Elise and she had made together.

***Elise's reflection upon Cycle II.*** As she viewed the videos of improvisations and

contemplated the strategies that compose her second cycle of data collection, Elise

identified the utility of various features of her instructional design. Reflecting upon all of

the cumulative strategies, Elise designated, "Teacher Sings, Student Plays," as

particularly productive for use with this particular student.

> I would sing something to her and she would try to find the notes on the piano. I think she might not have thought about the notes of her voice and how they could be played on the piano so it was eye opening for her and something I think she will want to explore more in the future. (blog post, March 29, 2019)

In appraising the usefulness of a strategy, Elise observes the individual nature and

response of her student, deciding which future possibilities to pursue based upon

revelations in-the-moment.

Reflecting upon her delivery of instruction, Elise critiqued herself in viewing the

excerpt, "Incorporating Multiple Strategies," as she perceived that her talking had

exceeded time spent demonstrating.

> When I tried to go deeper into the theory behind improvisation. I think talking about the theory and trying to have her understand that and then apply it was less powerful than just playing or singing something and having her do it. Less talking and more doing seemed to be most effective, also because she was pretty tired when we did this activity and her attention span wasn't the longest. (blog post, March 29, 2019)

Elise emphasizes the development of experiential knowledge through which students may

explore concepts through improvisation. Preferring to speak less and play more, Elise

aims to let the music itself lead the instruction, through which the student's current skill

may be challenged through action negotiated on a moment-to-moment basis.

In considering the meaning that improvisation might have for her student, Elise

reflected upon the nature of the action performed through improvisation:

> I think the improvisation in this lesson might have taught my student that improvisation has a huge component of ear training and it's not all about music theory and reading music, which is what we have focused a lot of time and energy on in the past. (blog post, March 29, 2019)

As she contemplated connections between various facets of her music instruction, Elise considered that the action through which improvisation takes place connects features of music-making that are often separated into formal components of music study.

*Perception of Ava's response.* In reflecting upon her student's musical responses throughout the strategies collected through the second cycle of collaborative inquiry, Elise observed features ranging from her student's general demeanor and disposition to the musical skills she displayed, as well as the challenges she encountered.

> My student's musical response … seemed to be excitement and curiosity. She loves to sing so when I asked her to sing her solo and then play what she sang, it was fun for her. I think this was the first time my student really tried to apply what she sang to the piano and it was definitely a challenge for her. It seemed she was having trouble matching the initial pitch she was singing with a note on the piano. Once she got the first note, she struggled to figure out if the next note was a step or a skip (something we have been talking about for a long time) and which direction the phrase was going in. After trying a few different notes, she finally got it and I think she was proud that she was successful at this activity relatively quickly. An observation I had was it's difficult to remember longer phrases and even I forgot at one point what the original idea she sang was, so it's a great activity in memory and retention. (blog post, March 29, 2019)

A combination of skills was required to meet the challenges posed through the Elise's strategy that prompted Ava to sing and transfer her singing to the piano. While Ava excels in singing, as evident in her enthusiasm, pleasant tone and accurate intonation, she hadn't realized the challenge represented in transferring her musical ideas, captured through singing, to the piano. Elise's instruction makes strides toward harnessing and utilizing Ava's natural skill in the development of her musical creativity as realized through improvisation.

Since Elise abides by an overarching principle by which she meets the student just above a current level of skill, Elise made careful note of challenges she sensed had exceeded a manageable course of action. Reflecting upon the incorporation of multiple strategies, Elise noted how she had presented the cumulative effect of all of the approaches of each of the strategies for Ava's selection and exploration through improvisation:

> The solo went on for a while and her idea morphed over time into something in a different key and the idea changed. My hopes in the future would be for her to recognize what she was playing wasn't exactly in the key and trust her ears more to play things that sound good to her, but this comes with listening to tons of music over time. A success was the moment I reminded her that we were originally in the key of F major she realized she had been playing that B throughout her solo and it wasn't in the key. When I explained to her why that note doesn't always sound good against the F major chord, I felt that she really understood and heard why it didn't work that well. (memo, March 29, 2019)

Instead of treating the B natural as an abject mistake, Elise's commentary thereafter allowed for the note to be admitted into the possibilities for use in her improvisation, but she asked Ava to observe how it, "clashed" within the key of F Major. While noting that B natural could be used, Elise clarified that, "You just don't want to sit on it for a long stretch of time." Elise's discussion of dissonance encouraged the student to be open and receptive to a note outside the scale, while furthering the student's awareness of the effect of dissonance.

In this case, Elise wanted Ava to learn the F major scale and how it could fit in with the progression that forms the harmonic content of this particular piece. Prompting Ava to observe the tension produced by her choice of a dissonant note, Elise guided Ava to rely on her ear to use dissonance less frequently.

> It's interesting how some students have stronger ears and others have a stronger sense of the theory behind improvising. Every student is so different, and you

really have to take on a different approach with each student, catering to their needs. (memo, March 29, 2019)

As Ava chose to dwell upon B natural, a note falling outside the boundaries of traditional harmony, Elise's subsequent demonstration of dissonance served a purpose in furthering Ava's ear training and recognition of dissonance occurring as a clash, so that the rebellious nature of that choice presents itself to Ava's conscious awareness.

*Ideas for next steps.* After concluding a second cycle of strategies for improvisation with Ava, Elise contemplated future directions her improvisations with her student could take. Having identified a feature of her pedagogical design that she found particularly useful, Elise could foresee developing the practice further.

> My next step with my student would be to take the first 5-10 minutes of every lesson moving forward and work on call and response with her. She could sing something and try to play it on the piano, I could sing something and she tries to play it on the piano, I play something on the piano and she tries to play it on the piano or sing it. I think it's important to do different exercises like that to get her ears more aware of what she hears and how it applies to an instrument. This would be my next step because I think this is something she really enjoyed and also something she could benefit from investing more time into. I think she's a stronger music reader than she has a strong ear so improving her ear would help her overall musicianship. (blog post, March 29, 2019)

Since Elise noticed that Ava seems to enjoy singing and is a skilled singer, Elise actively connects Ava's interest and skill to the development of additional aural and keyboard skills. As Elise imagines a variety of practices that further expand the call and response formula, she draws upon the interests of her student to inform her teaching practices.

At her final interview, Elise likewise reflected upon call and response as among her favorite formulas for improvisation that she had contributed to the collaborative inquiry. Referring to this scheme as, "the best way to learn" improvisation in her opinion, Elise attributed her favoring of this formula to her, "jazz background" (final interview,

April 12, 2029). Asked to reflect upon the meaning within the pattern of call and response for teaching purposes, Elise further elaborated.

> I feel like a lot of times, music is taught just from sheet music without any reference for…musicality behind it. It just becomes kind of a theoretical thing and I think it's more fun, in my opinion …to learn how it's actually applied in a real setting, as opposed to just being an isolated theoretical piece of material. It makes it more musical and more applicable, I guess, to life.  (final interview, April 12, 2029)

Elise's evocation of musicality, "behind" the musical notation calls to mind the purpose with which the collaborative inquiry was conceived, advancing call and response as a means of exploring music-making apart from notated preconceived compositional designs. Contemplating the possibility of further improvisational developments on the basis of call and response, Elise thought that she could invite Ava to transfer the formula of call and response to her favorite music:

> I would like to have a conversation with her to see if she could find a way to apply what she learned …to other things she loves because I believe, "call and response" and improvisation are in all walks of life and some people don't think about it or recognize it but it's all around us. (blog post, March 29, 2019)

By transforming known material into new forms, Elise expands the practice of call and response to encompass the practice of any form of music, in consideration of the dynamic nature of music as intrinsically dialogical.

**Interlude: Improviser in search of novelty through adaptation.** Through Elise's design and implementation of the strategy, Contrafact: Same Rhythm, Different Notes, Elise prompted Ava to identify repeated rhythms that appear in the Bach aria. Suggesting that a large-scale rhythmic motive could become a scheme for improvisation, Elise encouraged Ava to use a contrafact to maintain the rhythm as found in the notation with new notes.

As a strategy for improvisation, this scheme presents Ava with a constraint (Stokes, 2006) that limits choices in one direction, in order to direct search for novelty in another. In this case, the adoption of a pre-decided rhythmic outline or contrafact settles the rhythmic decision-making in order to advance the search for novelty among new notes.

An additional constraint is posed as Elise suggests that Ava select notes from the F Major scale for her use in the contrafact. Instead of improvising over the harmonic rhythm (Cycle I), the choice of any notes from F Major present Ava with a simpler basis for the selection of notes, which Ava combines with the contrafact as she improvises. Playing notes predominantly from F Major, while maintaining a large scale rhythmic pattern taken from the Bach aria, enables Ava to create new material, generating a particularly pleasing phrase of melodic inflection.

Through her pedagogical designs, Elise creates and enacts strategies that make use of both the, "well-defined" and, "ill-defined problem space." Using both to advance the reciprocal actions of listening and creating, Elise's variability practices are built upon call and response formulae as a formative and reciprocal dynamic furthering improvisation. Creating a setting for her students to explore spontaneous musical creativity within certain constraints, Elise promotes the variability practice to which Stokes (2006) has attributed the seed of creative development.

## Chapter Summary

Self-defining as a jazz musician, Elise tends to approach musical notation with the assumption that the score cannot possibly contain all the potentialities within. Accustomed to this view, Elise perceives that her usual path to improvisation comes into

some form of conflict with Western European art music, as its notation takes on the finality of a musical composition. Further complicating her customary approach to improvisation with her students, Elise doesn't locate tenable or manageable examples of improvisation for her students to imitate within the genre of classical music. Since Elise's operational definition of improvisation necessarily involves demonstration and imitation, she develops a collection of pedagogical strategies emphasizing call and response, through which she and her student explore improvisation, finding freedom in structure. Elise sees her role of teacher as encouraging frames of mind that further the creative process, as she views conditioning as a fundamental aspect governing the perception of dissonance as either a, "mistake" or an invitation to maneuver through creative pathways. To develop as an improviser, Elise holds the view that one must consistently practice variability, through which comfort with the unknown and the creative process are gained. Since Elise views a rigorous definition of imitation as including elements of style, she questions the material of Western European art music to be imitated: composition or improvisation, assumed to have generated the piece. As certain elements of jazz style and tradition, structures and formulas influence her teaching practices, Elise's improvisational strategies employ a variety of devices for enhancing processes related to demonstration and imitation, awareness and responsiveness, through which the dynamic nature of improvisation is negotiated.

Chapter VI

JOHN, CONSCIENTIOUS PEDAGOGUE

"My own journey with improvisation has always been rather personal."
(first CI session, September 16, 2018)

As I networked among my acquaintances to recruit participants, a mutual friend

thought that, "John" would have recommendations among his contacts. Having been

classmates, John and I had not previously exchanged conversation until we were

introduced by our mutual friend. Upon visiting with John, I learned that he himself was

interested in participating in the collaborative inquiry, as well as his contact, "Hanna."

Students were rushing to and from class on the Columbia University campus, the air was

newly scented with the freshness of spring, and I had a skip in my step with the

excitement of having just made the new contacts of John and Hanna. With a calming

presence, John's empathetic and conscientious nature revealed itself in the immediate and

considerate manner with which he responded to correspondence and put me in contact

with Hanna, whose grandson is one of John's piano students.

**A Seriousness of Purpose**

Currently in his early 30s, John recalled that he had begun piano lessons at the age

of 6. Having become, "serious" about classical music at the age of 12 or 13, John had

practiced the piano for three to six hours every day by the time that he was in high

school. Though he had taught piano lessons as early as when he was a teenager, John

related that he counts the last 8 years as his, "official" teaching experience, following his

graduation with a Bachelors in Piano Performance and a Master's degree in Piano

Pedagogy and Performance.

**Evolving Priorities**

Teaching piano at the college-level as well as independently, John currently

maintains about 18 – 23 students in his private applied piano studio. Reflecting upon his

education, John considered his experiences through the completion of his Master's degree

as having equipped him to approach piano pedagogy in, "new" and, "experimental" ways

that were, "outside" the tradition of method books (introductory interview, June 28,

2018). Yet, as time had passed since his graduation, John relayed that he felt he had

gradually placed a higher priority on reading over creative endeavors in his piano

teaching.

Describing himself as tending to be, "systematic, prioritizing certain things that I

value in piano pedagogy," John described his placement of priority on reading music

notation as a result of his experience, background and identity, intertwined with the

practice of Western European art music.

> I think, for me and my independent teaching, the thing that I prioritize most is
> reading. I really work… to develop each student's reading skills. I think the
> reason for that is partly due to the fact that I was always an okay reader, as an
> adult, as a young adult. But as a kid I was not a great reader… I think, looking
> back on my learning experiences as a kid, I would have wanted more reading…
> for myself and so... I think it is very connected with my own experience. But, it's
> also connected with the fact that I just know that if you're going have any sort of
> functional or social life as a pianist, you really need to know how to read. And
> what I mean by social, is that if you're known as a pianist, you're getting requests
> all the time from other potential collaborators to play things: "Oh, can you play
> this sonata with me? Can you play this trio with me? Can you accompany this
> song for me?" And if your reading skills are weak, all of that becomes anxiety-
> inducing or just a point of defeat... I know that just to function happily in the real
> world, it's nice if one can read easily. Of course, that also reveals my own bias as
> a Western, classically trained pianist. I know a jazz pianist would say the
> opposite. They would say, "Oh, you need to have really strong aural skills, and

improvisational skills, and you need to be able to hear it and make it up." …Of course, that's all valid too. (introductory interview, June 28, 2018)

Since he had appraised his own reading skills as lacking in his childhood, John had

emphasized the development of skill in reading musical notation among his students.

Acknowledging that his inference of the importance of reading was formed through his

experiences as a, "Western, classically trained pianist," John remarked that a pianist

functioning in another tradition, such as that of jazz, might invert his system of priority in

favor of, "aural skills and improvisational skills." Recognizing a sense of purpose in

cultivating reading skills as a means to social enrichment and minimization of anxiety,

John revealed his consideration for the efficacy of his instruction according to function in

the larger sphere of influences associated with Western European art music. Since

reading skills are required to fulfill the role of collaborative pianist and to accompany

others in the realization of a musical score, John alluded to reading as a demand levied by

the, "real world."  Thus, the value John had placed upon reading is tied to his experiences

and awareness of the role and function that a keyboardist occupies as situated within

practices associated with Western European art music.

**Church, as a Setting for Learning to Improvise**

As he had introduced himself to the other participants during the first session of

collaborative inquiry, John recalled his experience as a church musician and his previous

practices of improvisation as occurring within a, "language and place," to suit the form

and function of the setting:

I… worked as a church pianist for a long time and, in that context, improvised quite a bit, but always in the context of some… hymn tune or some liturgical tune. So, there's always some, you know, language and place. It wasn't totally free improvisation. (first CI session, September 16, 2018)

Considering such a setting as conducive to his development as an improviser, John recalled how a hymn or liturgical tune served as material for improvisation, providing a musical structure upon which he could vary his performance through improvisation.

As he reflected upon his experiences as a church musician, John described those aspects he had perceived as formative to his musical development as he had learned to improvise:

> That's [working as a church pianist] why I have a lot of experience improvising… hymns or congregational playing, accompanying congregational singing, improvising preludes or service music... That was all very tonally-based, obviously, very Western in that sense, and always centered on melodies and so it was about a hymn or something. And I've had that kind of experience since I was a kid, because I started playing in church when I was... 14 or 15. (introductory interview, June 28, 2018)

John's improvisatory practices were realized through the functions he had performed and the specific tasks and context in which he had improvised. John described the church setting as one in which he had explored improvisation within certain, "tonally-based" parameters that were, "centered" upon pre-existing melodies. As John would have needed to adjust his playing in order to produce music that was suited to the variable conditions of a church service, the mode of musical operation required of him necessarily involved spontaneity in musical performance.

**Creative Processes in the Piano Studio: Improvisation and Composition**

Throughout his previous experiences as a piano teacher, John reported that he had tended to include improvisational and compositional activities in piano lessons upon request from his students, usually those ranging in age from about 13 to 15 who had demonstrated interest in composition or in mixing music through digital automation.

> In terms of improvisation proper, where I'll take five or ten minutes in the lesson to just improvise or work on elements of composition, that's something

that I haven't done very much of at all with my younger students. That's something that tends to happen more with my 13, 14, 15-year-old students, usually, if they're expressing an interest in composing or mixing music… They might come to me with questions about that, and then I'll take them to the piano and work through some of their musical ideas on the piano. (introductory interview, June 28, 2018)

John's comments indicate his openness to the interests of his students as revealed over time, suggesting his preference that creative endeavors in improvisation or composition manifest organically, arising from expressly stated interest on the part of the student.

John revealed an analytical temperament and stance toward his teaching practices, taking account of the possibility of multiple interpretations of any action and its accompanying meaning. Reflecting upon his sense of purpose in joining the collaborative inquiry, John expressed his perspective that his teaching practices were lacking in improvisation.

Improvisation is something that I lack in my independent teaching… not from a lack of interest…but from a lot of constraints I feel… time constraints, lack of practice by my students…goals of teaching reading and basic musicianship. (first CI session, September 16, 2018)

Yet, as John elaborated on his view of the limited status of improvisation in his teaching, certain of his preexisting practices were revealed to resemble improvisation. John considered the possibility that some form of improvisation had been taking place, even in his teaching of younger students in middle childhood. However, John referred to much of this activity as encompassing, "practice steps," a practice-oriented framework for improvisation:

Improvisation finds its way into, I would say, all of my students' lessons in the space of practice steps. More often than not, I assign students a variety of practice steps that get them engaging with the music differently from just playing the notes the way they're written... in some sense they are forms of improvisation because they're playing with the music in a way other than the music is originally notated. The result is that… what you're playing sounds quite different from what the piece will ultimately sound like, once you play it as written. I'm not approaching

it as improvisation *per se*. I'm approaching it as practice steps, but I know there's this element of improvisation there… I always call them practice steps, and the students think of them as practice steps. (introductory interview, June 28, 2018)

Hesitating to classify his teaching practices with younger students as including improvisation in itself, John traced an outline of his concept of, "practice steps" as existing to further the students' knowledge base as pertaining to a particular piece. Asked to provide examples of his use of practice steps, John described variability practices through which musical material was subjected to multiple realizations by his students.

Examples of practice steps: I'll have a student play one line of music doubled. So, they'll play the melody doubled, for example, and usually two octaves apart… the sound is so distinct… when you're hearing it two octaves apart and engaging both sides of the body. Or, for example, if there are two voices on the top staff, I'll have them play the top voice with the right hand, and the lower voice with the left hand. And then try with the right hand, and then try both parts doubled, two octaves apart. Or then try both parts doubled, two octaves apart, pulsed on the sixteenth note, or whatever. These are just a few kinds of common examples. (introductory interview, June 28, 2018)

Since John's concept of the goal of practice steps is enhanced acquaintance with repertoire, variations in this context served a function of isolating musical passages, whereby component sounds are taken apart and varied in order to better understand the original musical structure. Analyzing his teaching practices, John mused upon the reasons that, "improvisation proper" was not a more substantial fixture of his teaching:

I think the reason I haven't done a lot of improvisation with my younger students is really just in the interest of time… Some of these students are coming from families that keep piano in the mix as one of many activities, and they value and prioritize the lesson time, but there's often not a lot of disciplined practice outside of the lesson time. So, I find that often, what I have to do in the lesson is just help them learn the assignment from the previous week or for the upcoming week, and I just find that it's very difficult to help build some kind of pianistic foundation or reading foundation and also include some improvisation beyond the practice steps that I'm doing....And I guess they're not improvisation in the sense that I've directed them, and I've assigned them. But, I think in the sense that they produce sounds that are different from the original. …it's a departure that I hope is planting the seed, at least, with some of these young students for later curiosity. A curiosity that I know, for many of them, is already there, it's really just we're

dealing with time constraints of a forty-five minute lesson, and the fact that they haven't practiced more than twenty minutes over the past week, and I just need them to know how to read some notes already. (introductory interview, June 28, 2018)

John's reluctance to describe practice steps as improvisation reveals his concept of an operational definition of improvisation. John considers his framework for practice through, "practice steps" to be distinct from improvisation because, as teacher, he had directed the specifics of how departures from the score had taken place, assigning predefined variations to be realized by his students. John's comments suggest his concept that, "improvisation proper" exists for its own sake, with variations to be generated by the students. Yet, John considered his use of practice steps to represent enough of a, "departure" from the score, that its practice could be, "planting the seed… for later curiosity" among his students (introductory interview, June 28, 2018). Furthering a sense of the regard with which John holds knowledge of repertoire, the end-goal of practice steps is enhanced knowledge of the musical structures inscribed within repertoire as notated.

While John perceived his prior use of practice steps as somewhat related and complementary to improvisation, a further distinction appeared to be drawn as a result of John's valuation of the use of a knowledge base to direct creative endeavors.

> I know my personal point of tension [in incorporating improvisation in interaction with classical music] is that I feel a student should know the point of departure before departing from it. I feel that if the student is going to rewrite the Chopin Waltz, the student should first know the Chopin Waltz. You know what I mean? Know what it is that she or he is changing or doing differently, because I think that's really interesting. You create a lot of interest in that way, in the process of improvising. It's not to say that the student needs to know perfectly the Chopin Waltz, for example. It doesn't have to be fully mastered, but know it enough to thoughtfully engage with it, or engage with it in an informed way. (introductory interview, June 28, 2018)

John expressed a view that, without recognizing what represents a, "point of departure,"

source material is potentially conflated or confused, remaining unknown to a student.

Supporting his view of the importance of familiarity with repertoire as a

knowledge base, John noted that he had observed certain patterns of interaction through

which his students had engaged in composition.

> What I've found with the slightly older kids who I've done a bit more composition with, is that they're finding their inspiration for their composition ideas through the music, the Western classical music that I've assigned to them. And so, they'll come in with a chord progression and I'll say, "Oh, wow. That really sounds like the Kabalevsky piece we just played." And the student will be like, "Yeah, I got this from Kabalevsky, and I got this idea from the microcosmos…" And they'll start riffing on the stuff, and blending it… from personal experience, for some students, if they know the music first it feeds their imagination and it gives them ideas. (introductory interview, June 28, 2018)

Without prompting, John's students had drawn upon a knowledge base of learned

repertoire to provide the material with which the students had subsequently composed.

Thus, John's students had appeared to assimilate musical structures from the instructional

setting for use as a framework, through which they could alter and reimagine certain

features while maintaining others as a structure on which to build.

## Ambivalence in Viewing Creativity as Necessarily Emanating from a Knowledge Base

Through sessions of collaborative inquiry, John revealed a complicated and

nuanced view of a knowledge base as a structure from which creative processes emanate.

As the topic of conversation among participants had turned to whether or not knowledge

of the original piece as notated should be considered essential before improvising, John

expressed ambivalence, problematizing a well-known adage:

> I see value in both directions, actually. Because I think the problem with saying, "you can't improvise on this until you know how it goes" is that you're basically

saying, "you have to know the rules before you can break them." And I don't actually buy that. I know that's… an old adage... I think it's… just not true… I think we see a lot of examples of rules getting broken, of just people being creative. They don't know they're breaking rules. They're just doing amazing stuff and maybe people who know rules can identify the rules that have been broken. But you know, I don't think you have to necessarily know the rules in order to break them. You can just do your thing… if you're breaking rules or not… (first CI session, September 16, 2018)

In this instance, John's line of conversation took a slightly different direction in public and private, in recollection of his introductory interview comment, "I feel a student should know the point of departure before departing from it" (introductory interview, June 28, 2018). As he had conversed among the other participants, John seemed to envision the larger domain and sphere of influences in which liberties are readily taken without consciousness of rules represented throughout music history. Here, John's comments seemed to indicate a shift of priority to action, experimentation and variability practices. Rather than emphasizing the daunting prospect of knowing the rules as fully notated and inhered within a musical score, John's comments signaled his pursuit of affordances for creativity offered through the processes inherent in music-making:

> I think if the goal is to learn this piece, that you could also use improvisation as a pedagogical journey to learning the piece, you know, so, not [maybe not] the entire piece, but just isolate a few measures, draw [figure] the chords or identify the melody and say, okay, just this bit let's improvise on, and it's just a way of interacting with the music and then, as they learn the notes and their knowledge of the piece emerges, they will have already had some, you know, physical, bodily, you know, tactile experience with these sounds with these harmonies and that's going to inform their process of learning the music. (first CI session, September 16, 2018)

Thus, John's concept of practice steps serves as an intermediary between the composition as notated and improvisation, "proper," offering a solution to the ambivalence John had expressed.  In this case, improvisation can be realized as part of the process of gaining familiarity with a knowledge base as represented in the repertoire.

**Knowledge and Rules, Bridge and Barrier**

The appeal of the intermediary as a link between notated score and

improvisational practices may be further explained as a means of reducing anxiety caused

by the contrast between the tradition of textual authority as represented in the score and a

post-modern conception of, "anything goes," or having free reign to break rules that may

remain as yet unknown.

> I feel like I don't know any of the rules really of improvising. I'm just sort of
> doing my own thing. And the rules…I say, "rules" because I'm so used to… If
> you've played Western classical for a long time, you're used to these rules, right?
> And you assume there's a correct way of doing it. That's my own problem: I
> know I need to just let go and understand that what I'm doing is valid and
> valuable. (introductory interview, June 28, 2018)

Accustomed to abiding by rules as represented through the course of Western art music

history and practices, John seemed to sense some anxiety in the prospect of realizing

freedom in a post-modern aesthetic. There is either the absence of rules on the one hand,

or a saturation point through which improvisational activity is stunted on the other. In

contemplating what rules might govern the selection of musical material deemed worthy

of artistic merit, John intuits that he must simply, "let go" and esteem his improvisational

process as valid.

**Distinct Aural Skills Needed for Improvisation**

John further elaborated upon his concept of the tradition of textual authority as

represented in the score, through which a composer's intentions are inscribed and upheld

by performers according to the, "work-concept" (Goehr, 2007, p. 4) in the context of

Western European art music practices. A quotation from Kanellopoulos (2011) was used

as a data elicitation tool according to a method used in anthropological fieldwork:

> Music education's rather ambivalent attitude toward improvisation can, to a large extent, be attributed to the, "monological voice of authority" imposed on music education by art music and the ideology of classicism that dominates its production, transmission, and consumption. (Kanellopoulos, 2011, p. 114)

In response, John revealed his familiarity with a strict, canonized conception of Western classical music as experienced through his background.

> That monological voice of authority, that's so steeped in the Western classical training that the composer is god, and that the adherence to the score and to the composer's intent is everything, you know? Opening up these very closed forms is really tricky, but really exciting when it happens. (introductory interview, June 28, 2018)

John anticipated that, "opening" canonized repertoire to improvisation by his students would pose challenge and excitement, realized in contrast to a system of values, motives, and attitudes that limit the creative potential of the individual, in favor of conservation and transmission of a work-concept model of the Western classical canon. As John established a new basis for improvisation emerging from Western classical music, he reflected upon the means through which he had been conditioned to adhere to the score and the composer's intentions.

> I think I favor the eye more than the ear. It's like you were saying [looking to Elise], you start first with the ear. For me, it's the opposite, partly because we're working in two different traditions, but I also do a lot of... aural skills with my students. But ...I think aural skills, just like pitch recognition and interval recognition, I think that's still a separate skill from the ear needed for improvisation. (first CI session, September 16, 2018)

John's comments show his recognition of the separation and formalization of music theory as distinct from music-making, apart from the fluid practice of improvisation in real time. Taking his line of inquiry further, John's comments suggest that areas of study that are often separated could be fused through creative processes.

**Negotiator and Facilitator of Musical Learning**

Describing his teaching as taking place in negotiation of a, "community effort," John analyzes the dynamics of the family and each child's interaction within it, so that he can facilitate the learning processes of the student within the social framework and encourage a generative, "flourishing of music in that home." In reflecting upon a drawing representing his teaching practices, John again revealed an analytical perspective, taking account of the possibility that there is a discrepancy between his perception of his own teaching and the reality of his student's experience.

> So... this circle... represents...the context of my studio... I ....view what I do within the studio as this... triangular sort of relationship between me, the parents, and the student...it's this ... ongoing conversation between the three or four of us to facilitate the student's growth ...and the overall...musical growth and ....flourishing of music in that home, within that family… I might be bringing... a set of knowledge or skills or experiences into the mix and the parents might be bringing this set of... expectations or ideals and the student might have these musical tastes... I don't know if this is actually what's happening, but this is my idea [laughter].... I don't know if a student would agree with this... I'm not sure, but this is, at least, what I have in mind. (first CI session, September 16, 2018)
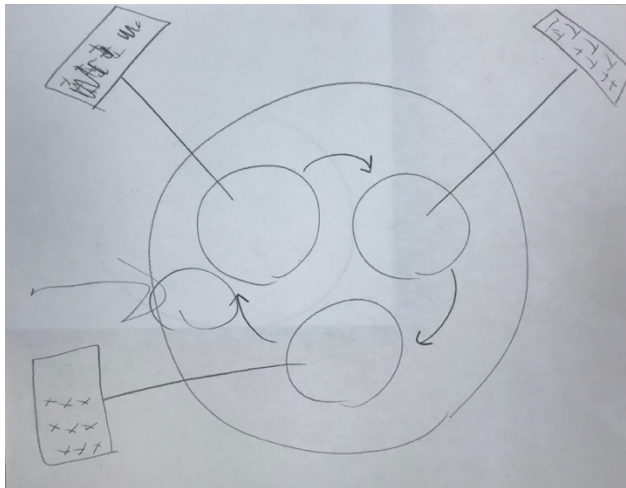


*Figure 5*. Negotiating Meaning.

John's reflection demonstrates an engagement with multiple perspectives, imagining other points of view and enacting a perspectival shift as various, "expectations, experiences, and preferences...get...brought into this mix." John's drawing revealed that he envisions his role as that of negotiator and facilitator who must manage continuous analysis and consciousness of individuals, interactions, and the environment, in order to facilitate the learning processes of the student within the framework of his/her individuality. At one point in collaborative inquiry, when Hanna had asserted the importance of certain repertoire for beginning piano students, John, "penciled her in," adding a representation of Hanna into the, "mix" of his drawing, since Hanna had begun to exert her influence upon John's decision-making as he currently teaches her grandson.

By extension, John's perception of the legitimacy of his teaching practices is informed by patterns of interaction in the larger social sphere of influences. Thus, designing pedagogical strategies for improvisation takes place as the seeking of a valid form of improvisation that will gain traction and legitimacy in the networks through which meaning is negotiated and opinion is formed. John's vision for the study of piano recognizes that connectedness within the social sphere of influence strengthens the perception of the value of musical experience. By negotiating meaning among parents and student, John strives to provide a unique offering and setting for music study, activating social and cultural processes of meaning-formation.

### Contributions to Collaborative Inquiry

Through sessions of collaborative inquiry, John described his focus as intent upon setting and fulfilling an, "intention" through the design of his pedagogical strategies for improvisation by his students. Each of John's pedagogical design schemes featured a

planned, "point of departure," variously called a, "jumping off point," or an, "intention,"

all of which John considered relatively interchangeable terms for his search for openings

for improvisation in the notated score.

Asked from what exactly he was departing, John responded, "Well, departing

from the strict notation, the strict notation of the etude" (third CI session, December 2,

2018). As John expanded upon his concept of, "setting an intention," he imparted a vision

of teaching improvisation in which he endeavored to provide a framework and structure

within which students could experience musical concepts through discovery and

experimentation. "A point of departure" existed as a, "space" (third CI session, December

2, 2018), to be outlined at the outset using materials from the notated score, which were

then negotiated through improvisation with the student.

In preparation for improvisation, John designed a, "point of departure" as a

framework for variability through his selection of musical materials derived from the

notated score.

> I started from the music and my process, I think, was pedagogical, so I was
> thinking, "how would I… what point of entry would I give a student into this
> music? And where would we go from there?" And so, I think I started first with
> key, you know that we would first identify the key and improvise within that key.
> And then, I think I went from there to harmonies, identifying recurring intervals,
> in this case seconds and thirds. And then I think … I identified rhythms, like
> recurring rhythmic patterns that we could use as jumping off points… I was
> thinking in terms of possible jumping-off points, like, what would be points of
> departure for beginning an improv or for improvising? (third CI session,
> December 2, 2018)

Revealing the pattern of his thinking in devising design schemes for improvisation by his

students, John's course of thought and action focused upon key center, then harmony, a

conception of which was formed through contemplation of predominant intervals within

the texture of the preexisting piece. Thereafter, John considered notated rhythms as, "jumping off points," to be used as models for generating improvised rhythmic impulse.

As the collaborative inquiry cohort was in conversation with John, an interjection on my part revealed my thinking of the key center as an approach to generating a scheme of chords, whereas John revealed his thoughts that distinguish key center from harmonic content.

> Julia: So, you thought of this as a, "point of departure" and you thought first in terms of the harmony?
>
> John: No, I think I thought first in terms of the key. (third CI session, December 2, 2018)

In this case, John's thinking of d minor as a key center for exploration, rather than a harmonic scheme, freed tonic to act according to harmonically or melodically inflected functions.

In review, John's use of a rhythmic model or, "jumping off points" (third CI session, December 2, 2018) may be considered analogous to Elise's "contrafact," as she had made use of a working terminology as situated within jazz. Likewise, we might recall Hanna's childhood practice of playing the rhythms as notated in a score, but not the notes themselves, a device she would later use in her teaching practices, "I encourage my students to do that" (third CI session, December 2, 2018). As a unified concept, a preexisting rhythmic outline is used as a kind of, "shell," a strategic and structural device to be played while searching for new notes and musical ideas.

Establishing a set tonal scheme and pre-established materials for use in improvisation, John's word choice in describing his design of strategies served as further evidence of his thinking, revealing his conception of a kind of problem space, as described in creativity studies. "What point of entry would I give?" and, "Where would

we go?" denote an expanse of possibilities, free for the taking, on the impulse of the improvisers (third CI session, December 2, 2018). According to John, "We […] set the intention of what […] space we would stay in first and then we went into that space" (third CI session, December 2, 2018). John's describes the, "space" for improvisation as defined by certain variables that were pre-decided, seemingly in the spirit of inquiry, rather than as an imposition of limitation.

During the exploration, experimentation, and improvisation to follow the, "setting of an intention," John could adjust the broad terms that defined the boundaries of the space for exploration.

> And the negotiation, I guess, is somewhat… subconscious, you know? Because it's not like the student's telling me, verbally negotiating with me. I mean, sometimes my students are negotiating, but it's… often… a negotiation in terms of… what they're able to do or where their playing is going… their… skills in that moment…I'll recalibrate… (final interview, May 8, 2019)

As described by John, his pedagogical design schemes benefitted from an arrangement in which the teacher and student could experience the initial boundaries of a space for exploration and then renegotiate, as both are drawn into improvisation on the basis of broad terms associated with the musician's craft.

As John's past experiences in improvisation had involved particular musical material, the structure of which he expanded in order to serve a function within a church service, similarly John displayed comfort and ease in formulating openings within set material for improvisation by his students. Features of John's pedagogical designs included an emphasis on key center and the use of sequencing, as might be used in a church service in preparing a congregation to sing or in filling an indeterminate interval of time needed for a congregation of varying size to finish an order of service. John

referred to his use of sequencing as, "an improvisational tool," a scheme considered to maximize a return on an investment in a musical idea:

> I think I started using it [sequencing] in the context of teaching... traditional beginner piano. Teaching note reading, teaching beginning piano repertoire pieces, that sort of thing and … helping students identify patterns that then get sequenced. And then, it was in the context of this project that I thought. Oh, that could work really nicely [for improvisation by students]… an improvisational tool or technique or something to conceive of a pattern and then to sequence it, because then you get a lot of…more… a lot of, "bang for your buck," because it's just one pattern to come up with and you can use that sequence five times. (final interview, May 8, 2019)

Built upon form and function, John's pedagogical designs for improvisation emphasize constituent musical parts that can be expanded or sequenced according to the whim and impulse of the student, "in the moment," much as a church keyboardist might bide time, amending musical structures to suit unfolding conditions.

**Strategies for Use with Repertoire**

Through two cycles of collaborative inquiry, John designed and implemented four pedagogical strategies for opening classical music repertoire to improvisation by his student, "Rob," the first of which took place as Rob's foray into improvisation. John described Rob's focus throughout his previous piano lessons as having been fixed upon, "learning to read notes," as Rob had studied piano for less than a year. Each of John's design schemes, two strategies per cycle of data collection, were built upon the same selection of repertoire, Étude Op. 82, No. 65 of Cornelius Gurlitt (1829-1901) (See Appendix K for musical score).

**Cycle I.** During the first cycle of collaborative inquiry data collection, John filmed the entirety of a piano lesson from which he excerpted two episodes featuring different pedagogical strategies that he had designed, "Our own notes" (John's coinage)

and, "Intervallic Improv" (my name for John's second strategy). Both strategies make use of a pre-established palette of tones to be used at the whim of teacher and student, thus resembling forms of free improvisation, as there were no preconceived rules beyond a selection of tonal structures.

To introduce improvisation to Rob, John adopted an approach that would seem to relieve any burden of grand expectations:

> We were playing it exactly the way Gurlitt wrote it. Now we're going to, "mess it up" a little bit, alright? We're going to improvise! (piano lesson, October 13, 2018).

While relaying excitement in anticipating uncharted territory, John's comments also functioned to allay anxiety that might accompany the apprehension of creative processes as yielding a specimen of perfect art.

John spoke to Rob in a manner suggesting curiosity: "What if we take this idea of d minor?" and, "This time, what could we think about?" accompany John's invitations to play, as, "setting an intention" served to define the boundaries of a space for free exploration. Like establishing rules before playing a game, intentions were set in a tone suggesting challenge, seemingly sensed as such by, "Rob," who occupied a heightened state of attention and focus.

***"Our own notes."*** As John described the session, "This improvisation is the first in our lessons" (piano lesson, October 13, 2018). To begin the session marking the first occasion of improvisation for, "Rob," John and Rob both played a portion of the piece as written (mm. 1-5), with John playing the right hand and Rob playing the left-hand part, containing the melody.

After playing this portion of the piece as notated, John suggested that next, "Instead of keeping these notes going [pointing to measure 6 and on in the score], we're going to play our own notes" (piano lesson, October 13, 2018). John then reviewed Rob's prior knowledge of d minor as a key center. Prompting Rob to consider, "What are the two black keys we will be using in d minor?" (piano lesson, October 13, 2018) served to map the visual terrain, by identifying the notes to be used as material for improvisation.

As Rob played the opening segment of melody as notated before embarking upon his first improvisation, he varied the pulse, as if hesitant or anticipating what he might play next. John played the right-hand pattern in realization of an accompaniment role, altering his pulse to match Rob's melodic deliberation.

As he ventured into his first improvisation, Rob pulsed a single note, tonic, on eighth notes. Then, he added a major second, so that he played, "d" and, "e" together, his first experiment within the diatonic scheme, also played using eighth notes. Then, Rob played other major seconds on eighth notes, using notes within the established tonal scheme of d minor, while John outlined d minor using quarter note arpeggios.

Basic elements of the process that followed encompassed a joint free improvisation session between Rob and John with the original piece as a general source for musical materials. John altered his accompaniment to suit Rob, as he continued to treat his student as a soloist. Playing motives composed of notes within the key of d minor, John experimented with melodic and harmonic material.

While the pulse was initially established through eighth notes, the metric division was then doubled to the quarter note value, with Rob matching John's quarter note pulse, using the rhythmic value to noodle about melodically. In this tempo resolution, Rob

occupied a position of melodic inflection, while John experimented with harmonically inflected quarter and eighth notes, making use of arpeggios with passing tones, like *acciaccature*. Next, Rob altered the meter through a sudden metric onset of eighth notes, through which he generated smaller impulses of melodic inflection. After an episode of sporadic eighth note pulsation, Rob settled upon finding a bass line in quarter note values, resembling a cadential formula. John then began making up melodies, as Rob ventured off into distant harmonic areas. In an inviting tone, while still improvising, John suggested, "Shall we make our way back to d minor?" Rob responded by arpeggiating a d minor triad and incorporating a passage from the original piece. After a *ritardando* without the closure of any cadential formula, John asked Rob, "How do you want to end? Rob then played flat 7, tonic, on eighth and quarter values, making his performance of those notes sound final. John had left the ending in the hands of the student, letting the student create a conclusion.

*John's reflection.* As John reflected upon his pedagogical strategy for improvisation, "Our Own Notes," he noticed his own feelings of uncertainty, both in getting started and in finding an appropriate manner of ending the session. According to John, the difficulty he had experienced in beginning the improvisation was the greatest challenge he had faced as a teacher during the first session of improvisation with Rob:

> The largest challenge for me was finding a suitable place to begin. I felt that we got off to a rocky start. (blog post, November 4, 2018)

A later reflection, shared during a session of collaborative inquiry, revealed further facets of John's thinking about the challenge he had experienced in crafting openings for improvisation during the first cycle of strategies.

> What I found after…after the memos and blogs we exchanged was that that method [Our Own Notes] was maybe a bit too open… that it would have been more helpful… especially [with] such a beginner student, to do something… with more modeling or more structure… I think that would have actually been a better place to start for a beginner student... pedagogically that probably would have been better. (third CI session, December 2, 2018)

John's subsequent pedagogical design schemes enacted a gradual trajectory through which parameters were further adjusted and defined: Broad terms were successively delimited in favor of more structure, further bounding the space for exploration.

As John reflected upon the challenge he had experienced in ending the improvisation, he revealed his sensitivity to the student, affirming his concept of a point of departure as serving to establish dimensions for discovery.

> I felt unsure of a natural way to allow the improvisation to end. I was not entirely comfortable prompting the ending of the improvisation. When my student resolved his melody to tonic, I was happy to know he felt the tonal center of d minor. Although if he had ended on a note other than d, that would have been fine too. (memo, November 4, 2018).

John's commentary suggests his consciousness of the space for exploration as belonging to his student, thus his discomfort in the prospect of being the one to define the conclusion. While the intention had been set for the improvisation to take place in d minor, John hadn't designated the means by which his student would form an ending. Thus, the improvisation did not take place as an indoctrination into cadential formulas.

*Perception of Rob's response.* In spite of the challenges John reflected upon experiencing as a teacher throughout, "Our Own Notes," John noted his surprise in observing the, "really nice melodic moments of improv" (memo, November 4, 2018) that Rob had created through this first session of improvisation. Despite John's consciousness of the broadness of the parameters defining the point of departure, Rob had used the session to explore and construct melody. Furthermore, John perceived Rob's return to the

tonal center of d minor as a success, demonstrating Rob's awareness of the musical

structures defining the space of exploration.

Describing his student's musical response as, "consistent with the intentions we

set" (blog post, November 4, 2018), John observed that Rob's improvisation displayed a

knowledge base of features that Rob activated in real-time. As John observed that, "when

we intended to play in d minor, he played in d minor, and when we intended to play with

2nds and 3rds, he played with 2nds and 3rds" (blog post, November 4, 2018), John

seemed to take account of an operative and actionable knowledge base as displayed by

the student.

Observing that the pedagogical strategies that guided improvisational activity

were different from the student's previous experiences which had emphasized reading

skills, John speculated that the departure from the pre-established norm was seemingly

well-received by his student:

> I think my student found the improvisation in this lesson to be different from the
> activities we typically do in a lesson - different in a fun way. He has been taking
> lessons for less than one year, and our focus has been on learning to read
> notes. This improvisation is the first in our lessons. (blog post, November 4,
> 2018)

John's commentary aligns with the emphasis upon reading skills he had described as his

customary priority.

***Intervallic improv: Doing, "Our own thing."*** To start this improvisation strategy,

John and Rob again began by playing a portion of the original piece on which their

subsequent improvisation would be based. Performing the Gurlitt original, Rob played

the left-hand part, but this time, he was situated in the treble register. John prepared

Rob's expectations that his part would, "sound different" because, "now, it's higher" (piano lesson, October 13, 2018).

As a design scheme for improvisation, John suggested to Rob that they had a choice of intervals from those found in the piece, with which they could, "do our own thing." Since Rob recognized that the piece contained 2nds and 3rds, John suggested that they could use those materials for improvisation. Taking turns in decision-making, John then asked Rob what he thought John should play, to which Rob responded that John could play fourths and fifths. Prompting Rob to trace the origins of his idea of using fourths and fifths, John asked Rob if his choice of those intervals had come from the score, to which the student responded that, "No," he just thought that they could also try using fourths and fifths, since they had already decided to work with seconds and thirds. The forthright nature of Rob's response suggested his comfort and honesty in his interactions with John. Taking turns in decision-making, John then suggested that the student could play his seconds and thirds harmonically, while John would play fourths and fifths melodically, a decision that functioned to preemptively curb discord.

Throughout the improvisation that followed, Rob played his chosen intervals, varying them as he wished and selecting among a range of harmonic seconds and thirds as situated within the key of d minor. In doing so, Rob created a musical form of his own, with highly structured metric units of quarter notes in 4/4 time through which dissonances were resolved according to a larger phrase structure. Thus, using materials he had found in the piece, Rob explored consonances and dissonances he could create with his selected intervals.

Taking creative license within the predetermined structure of set intervals, John and Rob explored the nature of an, "intention" as a soundscape. Once John and Rob began playing, the music itself took over the interaction through an improvisation that featured a more cohesive musical approach in this episode than in the previous. It would seem that the reduction of material to a limited choice of intervals to be played harmonically served to provide a structure for the student's exploration.

After improvising according to this scheme for a few minutes, John and Rob switched intervals for their use in improvisation, so the student took on the fourths and fifths to be played melodically and John made harmonic use of seconds and thirds. Thereafter, there was a suggestion from John that melody and harmony could vary in terms of dynamics and that whoever would take the harmonic role could be softer, playing a supportive role to the player of melodic material. In each improvisation, John made a point of stopping before the conclusion of each episode, letting the student play the end. After the final improvisation had concluded, John and Rob debriefed, conversing about how the improvisation had gone according to Rob's perception ("Good!") and noticing that they had stayed in the key of d minor throughout. As an improvisational scheme, "Intervallic Improv" served a function enabling the exploration of salient intervals through free improvisation, through which the student gained familiarity with intervals he had identified in the piece and selected on his own accord.

*John's reflection.* In reflecting upon his, "Intervallic Improv" pedagogical strategy, John expressed his surprise that Rob had suggested 4ths and 5ths as further material for improvisation, in addition to the 2nds and 3rds Rob had identified in the score.

> I asked him where he got that idea or why he introduced that, because there are some melodic fourths in the melody in the left hand… but that that hadn't informed his decision. He said he was just thinking [that] we had talked about seconds and thirds, so he was just sort of continuing that idea into fourths and fifths, so I think it was kind of a conceptual hydroplane. (third CI session, December 2, 2018)

As John had expected that the etude had been the source material for the intervals, Rob clarified that he had simply wanted to expand the range of intervals.

Since John noted that his student had tended to gravitate toward the use of the same rhythms throughout his improvisation, he contemplated designs for a future improvisation that would promote rhythmic variety. John's thought processes regarding the uniformity of Rob's chosen rhythms were not relayed to Rob as a limitation of his improvisation, but rather observed for the sake of future pedagogical designs.

> Exploring rhythmic variety was challenging for my student. I address this challenge later in a different improvisation, but here his rhythms are mostly the same. (memo, November 4, 2018)

While the student's use of quarter notes throughout his improvisations were observed as homorhythmic by John, the feature may have aided the student's exploration of consonance and dissonance. Maintaining a uniform texture in the rhythmic aspect may have permitted variability in another dimension, in this case realized as various seconds were resolved to the consonance of thirds within a metric frame of time.

***John's reflection upon Cycle I.*** Following the first cycle of improvisation strategies, John noted that he had found the, "setting of an intention" particularly, "helpful" (blog post, November 4, 2018) as a feature of his instructional design. By identifying a space for improvisation using musical features that are recognized by the student, the structure upon which improvisation takes place is defined by the student learning outcomes, so that improvisation reveals what aspects are understood. The setting

of an intention establishes multiple dimensions to form the boundaries for musical

exploration.  Since a student could be receptive to an idea, but not yet inclusive of that

feature in improvisation, the act of improvising reveals the functions and applications of

the student's knowledge base.

As John contemplated future improvisational strategies through which his

instruction could develop, he revealed the instructional design features of greatest

importance according to his perspective:

> My next steps with my student would be to help him more thoroughly learn to play the piece as written, as a way of expanding the number of tools in his musical toolbox… the next time we improvise on this piece together, he might be able to draw upon some of those musical, "tools."  He might even become comfortable with a solo improv. (blog post, November 4, 2018)

These comments suggest that John views improvising as activity that is essentially based

upon a knowledge base. John views the enlargement of a knowledge base as likewise

enacting an expansion of, "tools" with which one can create.

*Co-researcher commentary.* John's observation that Rob seemed to encounter

challenge in playing with both hands and in finding an ending through, "Our Own Notes"

prompted an online discussion with Elise. Upon viewing Rob's first improvisations and

reading John's reflections as relayed through blogs and memos, Elise related to the

challenges John had experienced as a teacher, while noting how, "fun" it was that John's

Cycle I strategies presented Rob with his first occasions for improvising. Elise's

comments would seem to allay any concerns about the intricacies of detail in favor of a

view that encompasses the pursuit of improvisation as a worthwhile practice for its own

sake: "From what I've found in learning to improvise and teaching my students how to

improvise, it's all about experience and doing it all the time" (blog response, November

5, 2018).

In response to the uncertainty John had experienced in finding a, "natural way to allow the improvisation to end" (John, online memo, November 4, 2018), Elise related her thoughts and experiences in finding conclusions to improvisations:

> You bring up another good point, which is how do you end the improvisation in a natural way? I tend to end the improvisation when I've either completed the activity I was hoping to accomplish with my student or there's something they did that I want to comment on before they forget they did it. Sometimes I feel the most powerful thing to do is just let students improvise for as long as they wish without commenting or stopping since experience and exposure is so important in improvising, but I'm sure the way you ended it was natural and at a good time. Interesting the student was able to feel the tonal center of d minor and ended on a D. That tells you they were probably using their ears! (Elise, response to John's memo, November 5, 2018)

Elise adopts various approaches in concluding improvisations with her students, a treatment showing her teaching as a form of improvisation that deemphasizes the perceived challenges that may be found in detail, in favor of the encouraging view of a larger picture, formed through learning improvisation by consistently practicing improvisation. While some occasions lend themselves to expressing an observation before the musical activity is forgotten, other sessions of improvisation take place, "without commenting or stopping," seemingly occurring in a meditative mode of operation. On these occasions, the emphasis is upon improvisation as a way for teacher and student to be present together, making sounds together, responding in the moment, exploring the nature of sounds in new ways.

In response to John's observation in which he had, "sensed that playing with both hands was challenging" for his student, Elise thought that the difficulty offered potential for problem-solving through pedagogical strategy:

> I can see playing with both hands to be a challenge for a beginning piano student. I didn't even think about having my student improvise with both hands until I read your memo. It would be interesting to brainstorm some ideas for how

to get beginning improvisers to play with both hands. Typically, the left hand would mainly be used to play chords, but it could be cool to have the student try to create melodies with the left hand by itself and then the right hand by itself and then eventually use both the left and right hands to create one continuous line. I would like to try that with my student as well. My student only improvised with their right hand… (Elise, response to John's memo, November 5, 2018).

Thus, the challenge faced by the student became an impetus to creative thought through problem-solving and appraisal of the potential for pedagogical strategy by the teachers.

*Interlude: Improvising as activating a knowledge base.* John's pedagogical designs for improvisation through his first cycle of collaborative inquiry make use of a knowledge base, as a figurative, "first chorus" (Stokes, 2006, p. 8), on which his student improvises. John's concept of, "setting an intention," which he regarded as particularly, "helpful," served to select the operative, "constraints" with which the improvisations unfolded.

As John and Rob mapped the visual terrain of pitches that could serve as material for improvisation through, "Our Own Notes," they familiarized themselves with options available according to the tonal center. Establishing d minor as the key center for exploration served as a constraint, reducing the notes admitted to a tonal palette, so as to advance search according to different elements of sound, in this case, rhythm, as well as the choice between simultaneous, harmonic renderings of pitches, or alternatively, melodically driven tones.

Through, "Intervallic improv.," Rob improvised using an additional constraint through his recognition of intervals found within the etude. Having gained comfort with his use of d minor to further search among novel pathways through rhythms and harmonically- and melodically-inflected tones, the design of this strategy established set intervals as a second constraint. As John and Rob improvised together, they explored

novelty through application of a pair of constraints, a strategy that seemed to generate a more cohesive structure.

While John had considered his student's use of quarter notes throughout his improvisation as somewhat limiting to his student's expressive potential, this rhythmic constraint may have promoted the student's exploration of consonance and dissonance. Maintaining a homorhythmic texture may have furthered variability in another dimension, in this case realized as various seconds were resolved to the consonance of thirds within a metric frame of time.

**Cycle II.** John designed two pedagogical strategies for improvisation through his second cycle of collaborative inquiry, both of which were created on the basis of call and response formulae. Since John reflected on his second cycle of collaborative inquiry by synthesizing his thoughts as related to both pedagogical strategies, I present his responses through a correspondingly unified approach following descriptions of both strategies.

***"Call and response, with varied response."*** John's memos, blogs and conversation through Collaborative Inquiry suggested his plans to incorporate call and response, modeling his approach upon the strategies shared by Elise. John began by experimenting with forms of call and response in which the responses should match the calls. After Rob had attempted to match the call exactly and had varied his response unintentionally, John introduced a new variety of call and response in which the student is invited to play something, "slightly different" (piano lesson, December 8, 2018). Whereas Elise's design scheme for call and response involves the repetition of a call until it is matched by the student through deliberate practice, John redefines the object of the activity to match what Rob had already done.

John began by highlighting essential features of the space for exploration, setting an intention that the improvisation stay in the key of d minor, emphasizing the Bb accidental and the leading tone of C#. Adopting the use of a bordun in his left hand, as Elise had demonstrated through her strategies, John generated, "calls" that accentuated d minor, with inflection accentuating the defining accidentals. In response, Rob played responses that began very similarly to John's calls before departing from the model John had provided, creating an effect of mostly parallel phrases. When Rob strayed from the, "intention" by playing a C natural, John reminded Rob that C# belonged in the key as they were improvising together.

Staying primarily within a tonally defined space for improvisation, the student introduced a B natural at one point that was considered interesting by both student and teacher, with John encouraging the exploration of this accidental, as it seemed to display a kind of modal resonance. While Rob continued to start each of his phrases very similarly to the calls modeled by John, he began departing more dramatically from the model provided as he concluded his response, resulting in some wildly divergent moments of improvisation through parallel phrase structures.

***Sequenced call and response.*** In this strategy, John dispenses with his use of a bordun to accompany call and response, presenting only a melodic motif to the student, which can be repeated in a precise form echoing the call, or modified. This time, a further challenge is introduced to the student in the form of an option to sequence the motive. The key center of d minor is set among these, "intentions" for exploration.

John's invitation to improvise distils these operative boundaries into a language the student can readily understand: Rob could play, "the same response or a different

response, then play it in a different spot" on the keyboard. To prepare for the improvisation, John and Rob practiced sequencing patterns from one white key to another, up or down by step, at which point John and Rob decided upon one motive that the student had invented as material for practice that occupied the remainder of the video excerpt.

To practice his sequencing through the whole scale, Rob sequences his pattern up the d minor scale until he reaches Bb and C#, on which he practices his pattern using the defining notes of d harmonic minor. The activity of sequencing appeared to occupy Rob's interest and curiosity, such that the original call and response scheme was temporarily suspended in favor of generating sequences built upon Rob's improvised pattern.

*John's reflection.* John formed the impression that sequencing offered a challenge that heightened his student's attention, as Rob appeared to be in a state that was receptive, but not yet fully responsive through his command of the physical action required.

> I think my student found the sequencing challenging. He seemed to cognitively grasp sequencing, but the physical reality of playing a pattern in sequence seemed challenging for him, although he did it better than I anticipated he would. (blog post, March 26, 2019)

As Rob's improvisations had abided by the tonal scheme and sequencing formula that had been set as a, "point of departure," he had demonstrated his awareness of musical structures as an operative knowledge base from which his improvisation was formed.

***John's reflection upon Cycle II.*** Contemplating his strategies composing his second cycle of collaborative inquiry, John identified both the, "call and response with varied response" and, "sequenced call and response" as approaches he regarded as particularly successful, on the basis that his student had responded to each of the

challenges posed, exploring variability and occupying the space that had been set as an intention.

*Perception of Rob's response.* Reflecting upon his student's response, John described Rob's improvisations through Cycle II as, "melodic, diatonically situated, and thoughtful." Discerning that his student's response through improvisation suggested a spirit of, "fun," John reinforced his Cycle I impression that the novelty represented in departing from a focus on, "reading and technical skills" was regarded as, "special" by his student, a meaningful break from a norm established through previous lessons.

*Next steps and further conversations.* Upon concluding his second cycle of pedagogical strategies for improvisation, John reflected upon the next steps he had projected and already enacted, observing his impressions of further developments.

> After this lesson, my next steps included playing the Etude – the piece on which our improvisational activity was based – as written. I encouraged my student to maintain the feeling of the piece's complexity we had explored through our improvisation, though now playing it as written. We were both amazed by the nuance and complexity he was able to access. It's like he had become aware of the infinite number of colors lurking behind every note. The result was that his playing of the piece as written, after having done the improvisation, was far more mature, vibrant, and exciting than was his playing of the piece prior to the improvisation.  (blog post, March 26, 2019).

Asked why he had chosen to make the performance of the Etude as written his next course of action, John responded that he thought he had, "instinctively" returned to the piece as notated, "out of curiosity of the improvisation's practical impact" (blog post, March 26, 2019).

Later still, the Gurlitt Etude, on which all improvisations had been based through two cycles of pedagogical strategies, was presented in recital as performed by Rob. John

shared his reflective commentary upon his student's performance through an electronic

memo:

> The Etude my student played and on which we improvised for this study became one of two pieces he played for my studio's winter recital.  It was only his third public piano performance, and it was, in my estimation, his best. His mastery of the Etude was surely partly due to the degree to which we had interrogated it throughout the course of these improvisations.  He was able to access an array of sounds and nuance I have not heard from him before. I was thrilled to witness what seemed to me to be a direct consequence of the classical improvisation process: a kind of full circle that involved learning a classical piece in a rather traditional way, interrupting it with various improvisational activities, while staying true to the piece, and finally, returning to it as written.  If we started in the Museum and then spent time in the Laboratory, we must have ended up in a space that was neither fully Museum nor fully Laboratory, but some amalgamation of the two - some space in which the ethos of both were honored and palpable. (memo, March 26, 2019)

John's reflection includes such word choices as, "interrogated," implying a questioning

stance, and, "interrupting," suggesting spontaneity through surprise, as well as his

consideration of an in-between space that is, "neither fully Museum nor Laboratory." It

would appear that John has expanded his concept of, "practice steps," through which his

students have practiced variability as a route to learning repertoire, to encompass

improvisation that abides by an operational definition suggested by John's introductory

interview comments. Noting the features of practice steps that distinguish their

application from that of improvisation, John commented that, "the practice steps that I'm

doing.... And I guess they're not improvisation in the sense that I've directed them, and

I've assigned them." While John's pre-study practices had included variability practices

in which John had directed the specific variations to be practiced by his student, the

strategies for improvisation John designed through collaborative featured an, "ill-defined

problem space" through which his students searched for novelty among surprising

pathways through improvisation.

Following the last cycle of strategies that he had designed and implemented for inclusion in the present study, John suggested intriguing lines of conversation he might pursue with his student, based upon his student's improvisatory experience.

> I think interesting topics of conversation with my student immediately following this particular improvisation might include musical phrase structure and its relationship to spoken dialogue. Further conversation on sequence would also be helpful. (blog post, November 5, 2018)

Reflecting his frame of mind and the meaning he had attributed to the process of designing openings for improvisation, John's comments reveal his regard for the generative potential of dialogic communication.

***Interlude: Improvising as manipulating material.*** While John's pre-study practices had enacted variability practices to which Stokes (2006) attributes the seed of creative development, the variations were pre-decided by John. According to John's descriptions, "practice steps" seem to function as continuously changing, "well-defined" problems, specifying the variability through which the student matches John's pre-decided rhythms or voicings. Since the activity of practice steps encompasses variations through which students become acquainted with the frame of mind needed for creative development, John's conception of possibly, "planting the seed" of, "later curiosity" (introductory interview, June 28, 2018) has basis in Stokes' (2006) theoretical framework.

As John invites his student to play something, "slightly different" in a call and response formula, he readjusts the intention to match Rob's current improvisational activity. In terms of a, "problem space," John adopts the openness of an ill-defined problem when his student does not produce the single acceptable solution to the well-defined problem he had initially proposed. As Rob played responses that began in parallel

to the model provided by John, he started his improvisation by limiting his search for novelty, in favor of finding a, "convergent" solution to a well-defined problem (Stokes, 2006, p. 124; Weisberg, 2006, p. 138). As Rob transitions to the ill-defined problem posed by the expectation that his improvisation be, "slightly different" (piano lesson, December 8, 2018), he appears to use the conformity of the, "well-defined" space to prepare a new idea for the, "ill-defined" space.

As in John's previous strategies for improvisation, operative constraints are established through the setting of an intention. In, "Call and Response, with Varied Response," a surprising departure from the intention is performed by Rob, startling in that it was accepted by John, though it defied the established, "point of departure." As Rob searched among novel pathways, he happened upon a B natural, which didn't belong in the key, as set by the intention. Just moments before, John had reminded Rob that C#, rather than C natural, belonged in the key. Now, a B natural, an accidental that technically doesn't belong, is accepted and garners encouragement from John. As the note is evocative of a modal structure, John's departure from his conception of the intention admits a, "blue note" for the interest it generates, based upon approval afforded by the ear. This accepted departure seems to teach Rob that heightened awareness through listening can afford new constraint paths that are based upon unfolding conditions.

As Rob practices sequencing through, "Sequenced Call and Response," John alters course, diverting from what he had originally proposed midstream. Detecting that practice in sequencing was needed before applying the concept to a novel formula for call and response, John centers his instruction upon his student, simplifying the constraints.

Using a pattern that Rob already generated, John teaches Rob how to move the motive to

a, "different place" on the keyboard. The pattern created by Rob serves as a barrier,

predefining the pattern of pitches, which are then moved to a, "different place" on the

keyboard and situated within a second, "constraint" of the tonal center of d minor. As

Rob applies his pattern to the defining accidentals of d minor, he demonstrates that he has

situated his motive within the second tonal constraint. A pre-formulated pattern and the

tonal center operate as a pair of constraints, thus conserving Rob's decision-making

efforts, in order to advance the search for novelty in another dimension of musical sound.

As Rob generates sequences across the keyboard, he expands one musical pattern to

occupy an extended length of time, an approach that may be seen as, "biding one's time,"

conserving effort, so as to prepare for a new musical idea.

## Chapter Summary

John's teaching practices enact a purposeful presence, through which he seeks to

connect to the individual student through the framework of his/her individuality by

negotiating goals and objectives with the student and his/her family. In recognition of the

social sphere of influence upon music-making in the home, John pursues musical goals

that will gain traction and legitimacy within the setting of the home and the larger socio-

cultural influences shaping the student's tastes and musical goals. Displaying

ambivalence regarding whether creativity necessarily emanates from a knowledge base,

John's prior development and application of, "practice steps," as a means of transforming

musical material found in repertoire, is enlarged through the present study to include

improvisation for its own sake, using materials selected by his student as found in

selection of Western art music repertoire, to be varied according to the impulse of the

student. By, "setting an intention," John and his student define the, "space" that they will explore through improvisation, using musical structures found and identified within a score.

As John's own formative experiences with improvisation took place in a church where he served as keyboardist, he is adept at crafting, "openings" for improvisation within the set structure of musical notation. John describes the priority that he places upon reading notation as a function of his sensitivity to the larger domain within which his music-making takes place. As situated within practices associated with Western European art music, John sees reading as a route to a, "functional or social life as a pianist," as his role is often realized as collaborative pianist in the performance of canonized works.

John's reflective commentary reveals his concept of a knowledge base advancing the search for novelty through improvisation. Since John observes that the larger social sphere of influences often recognizes musical activity as, "creative" that is out-of-sync with historically informed rules governing musical structures, he recognizes the possibility that improvisation can yield intriguing activity without necessarily depending upon knowledge. As applied in the context of his studio, improvisation functions to further a knowledge base of musical structures through exploration and experimentation, which, in turn, can further direct the search for novelty. John's glowing review of Rob's recital performance reveals John's concept that, like, "practice steps," improvisation that is performed at the will of the student advances maturity in performance of repertoire as notated.

Chapter VII

DISCUSSION ACROSS CASES

Awareness and Responsiveness:
Improvisation as Communication within Oneself and with Others

**Overview**

The purpose of this study was to explore and examine pedagogical strategies for

opening Western European art music to improvisation by piano students, ages 8-10. In

Chapter VII, I analyze and synthesize findings across cases, positioning and discussing

my analysis in terms of related bodies of literature and existing knowledge. Several

overarching themes, addressing the purpose of the study, emerged through my analysis of

data, pertaining to the dynamic nature of music, call and response as formative, and

knowledge and novelty as means and ends.

Accompanying the activity of improvisation are states of consciousness, reflected

upon by each of the participants as taking place through component conditions of

awareness and responsiveness. Hanna, Elise and John each described a heightened state

of awareness as essential for the practice of improvising, through which the action of

responsiveness occurred.

The reoccurrence of conditional statements throughout reflective commentary

suggests the participants' consideration of awareness as an imperative for improvisation.

As Hanna described her improvisatory teaching practices, she discussed maneuvering

through dissonance: "…*then* you have to really be aware" (first CI session, September

16, 2018). Hanna's commentary suggested contingencies, that exploring sound through improvisation requires awareness. Describing the dynamics of improvising with others, Elise signaled function through a conditional relationship as she reflected on her role in offering support through heightened awareness, "*If* I'm an aware musician and I'm really listening and I'm sensitive to what's happening, and I want to support that [other] person, I need to adjust myself to make them look and sound better" (final interview, April 12, 2019). Presenting awareness as a means of affecting responsiveness, Elise adjusts her playing to alter the perception of sound. A causal relationship likewise appears in John's description of his teaching presence, focused upon offering support: "…when I was improvising with the student, I played primarily a supportive role…which is challenging *because* it's really essential to pay attention…" (final interview, May 8, 2019). As a teacher, John perceived challenge as a product of his assuming a state of heightened awareness.

Each participant reflected upon his/her role in facilitating improvisation as harnessing and cultivating awareness, manifesting inwardly as analysis taking place in real time, in response to unfolding musical stimuli. Thus, the pedagogical design of strategies for improvisation can be seen as the purposive honing of a heightened state of awareness, through which emerging improvisation is processed. Participants demonstrated interpersonal and musical awareness and responsiveness to each other and to their students through the adapting of ideas through the design of pedagogical strategies for improvisation.

**Furthering Awareness: A Questioning Stance**

Participants expressed curiosity, presenting itself through a questioning stance, to which a response is realized through exploration and the search for novelty within structures of music. Questioning can be directed inward or outward in realization of improvisation. For example, Hanna expressed curiosity as to which improvised pathways to follow, modeling questioning techniques to advance her own awareness, as well as that of her students. Occupying a questioning stance, Hanna described her search for novelty through improvisation using the structure of a musical scale, a practice she described utilizing in preparation for any form of improvisation. Asking herself questions, such as she poses to her students, Hanna presented her inquiry through questions she could direct inward or outward, "Where do you want to go?" and, "Where do you want to repeat something?" (third CI session, December 2, 2018). The structure of a scale furthered the search for novelty, as Hanna and her students were free to, "manipulate those… notes to the max" (third CI session, December 2, 2018). The essential structure, composed of a simple scale, functioned as material that could be used to extemporaneously construct an improvisation by directing search among variable possibilities, responsiveness that is the product of questioning.

As a questioning stance directed inward produces an analytical state of mind, conducive to heightened awareness and responsiveness within oneself, the bearing of questions directed outward encourages states of awareness and responsiveness in another. Through the use of questions, each participant established musical structures that could be used to generate improvisations by their students. Questions such as, "What chords do we have here…?" and, "What key are we in?" (Elise, piano lesson, October 10, 2018) as

well as, "What… could we use in our improv?" (John, piano lesson, October 13, 2018) direct students' attention to basic building blocks of musical sound that may be used as material for improvisation. The students then searched among familiar constructs, finding novel and surprising pathways, combinations, and solutions among variable combinations of discreet blocks of musical structures.

Improvising upon familiar musical structures constitutes the use of a constraint path built upon a knowledge base, according to Stokes' (2006) theoretical framework. Acting as strategic, "barriers" (Stokes, 2006, p. 7), the selection of musical concepts served to limit choices, as situated within pre-established musical structures, so as to advance the search for novelty in different dimensions of sound. The use of patterns and conceptual features as devices for improvisation resemble improvisational practices recommended by Konowitz (1980) and found within the heuristic devices of expert improvisers as classified according to, "conceptual strategies" by Després et al. (2017). By governing the selection of notes or rhythms for improvisation according to an overarching structure, a conceptual device enables spontaneous decision-making to be conserved: As one direction of sound is pre-formulated, the search for novelty in another is advanced.

**Enacting Responsiveness as a Form of Empowerment**

Pedagogical strategies for improvisation took place as schemata, marking a break from practices of reading notes precisely as written. As participants improvised at the piano with their students, they were placed in a communicative exchange, such that hierarchies were leveled and the experience of time connected teacher to student in realization of music-making that was free of the finality of a score.

Through reflections recorded in *Qualtrics* surveys and blog posts, participants were prompted to speculate upon the meaning that improvisation might have for their students, revealing the participants' perception of negotiation and construction of meaning. Among comments collected over time, Hanna imagined that her student might feel, "liberated" (*Qualtrics* survey, September 24, 2018), as his confidence in his, "own imagination" may be enhanced through improvisation (*Qualtrics* survey, September 24, 2018). Elise commented that improvisation offered her student a route to knowing a piece on a, "deeper level" (*Qualtrics* survey, October 2, 2018) and that experiencing, "freedom in playing music" might have, "empowered her to trust herself and her instincts" (blog post, November 5, 2018). John thought that improvisation represented a, "chance to be creative" (John, *Qualtrics* survey, July 26, 2018), noting that improvisation was not entirely, "removed from various practice steps" that he and his student were accustomed to using in gaining familiarity with repertoire (John, *Qualtrics* survey, July 26, 2018). John later speculated that the chance to improvise may have been considered to be, "special and fun" by his student (blog post, March 26, 2019). As teachers and students took turns originating and/or transforming musical material, improvisation was described as taking place as participation in a larger social sphere of influence, empowering improvisers, teachers and students, through the pursuit of spontaneous action. While different patterns of interaction appeared among each of the participants, across cases, various structures for improvisation may be considered as manifestations of the urge to listen and act in the moment, in realization of awareness and responsiveness.

**Reconditioning the Concept of a Mistake**

Each participant reflected upon and modeled a concept of dissonance as offering intriguing possibilities, desensitizing students to the notion of an error. As improvisation took place within a space of experimentation, the concept of a mistake was redefined, so that a dissonance appearing unexpectedly presented itself to the perception of teacher and student as a form of challenge in and of itself. Furthering an analytical state of mind, the operative question became, "why did [that] seem like a wrong note?" in the case of Hanna (first CI session, September 16, 2018), and a call to action, "Let's find a way... to make something happen out of that," in the words of Elise (final interview, April 12, 2019). As John expressed his goal of togetherness in improvising, "If I were playing with my student, […] I think he would be more inclined to experiment and make 'mistakes' if he heard me doing the same" (*Qualtrics* survey, July 26, 2018). Each of these approaches promotes awareness, to which the action of improvisation is a response.

Participants forged a basis for accepting unexpected dissonance by altering the effect of error. If a sound was perceived as unpleasant, pathways could be found in and out of dissonance through heightened awareness and responsiveness. Playfulness and consideration of improvisation as a search for novelty accompanied the repositioning of the concept of a mistake, serving a vital function by reducing the fear of the unknown and desensitizing improvisers to the apprehension of error.

**Problematizing the well-defined problem.** In pursuit of the, "well-defined problem" (Stokes, 2006, p. 4, p. 130; Weisberg, 2006, p. 138), the skills required to read music, as well as to produce and copy sound sources, serve to limit novelty in favor of a, "correct solution" (Stokes, 2006, p. 7). Since the well-defined problem space presents a

simple binary through which a response is considered right or wrong, the perception of error is met with, "deliberate practice" (Ericcson, 1996, p. 21; Stokes, 2006, p. 124) through repetitive efforts toward correction.

Across cases, Elise provided the only example of a pedagogical strategy for improvisation representing a well-defined problem space. Elise's matching call and response formula was adapted into an ill-defined problem space by John. While Elise found opportunities to embrace unexpected sounds through a range of pedagogical strategies, matching sound sources through mimicry existed as a purposeful mode of action for its own sake, as a well-defined problem. While the performance of repertoire as notated can be considered a form of well-defined problem, in the cases of Hanna and John, the representation of a selection of repertoire was treated as material to which the students responded freely through improvisation.

Elise's treatment of the well-defined problem space through her formula for call and response is particularly intriguing in light of her reflective commentary, relaying her perspective and experience as a jazz musician. Applying the predominant conception of the problem space to Elise's description of experience, it would appear that Elise had sought out and found enjoyment in the ill-defined problem space provided through her study of jazz, in sharp contrast to her experience of a well-defined problem treatment of classical music in her childhood.

> To me, that's why jazz music is very freeing, because when I was growing up playing classical music, it was wrong. That's all there was to it. There was no if, and, or but… there was no way to justify it. It was just not correct. And for me that was really, really stressful. I wanted to know that I could make it right, that I could make the situation right. (final interview, April 12, 2019)

Elise's jazz studies led her to an understanding that reconditioning the concept of a mistake is essential for experiencing liberation through creativity, yielding new pathways for exploration through the open space of the ill-defined problem. Given Elise's expansion of the ill-defined problem space through various pedagogical strategies, her reliance upon the well-defined problem space appears to exist for its own sake, advancing function in the role and purpose of imitation. Elise's comments suggest that she is enforcing a mode of operation she had rejected in her own childhood, but through a game-like spirit for a larger purpose of honing imitative skill.

**The open space of the ill-defined problem.** The treatment of an unexpected dissonance as the start of a new pathway for creativity fits within the ill-defined problem space, since this scheme encompasses the possibilities of multiple solutions in problem solving. While the perception of error implies a well-defined problem space, the process of finding a new pathway or constraint path in order to respond occupies an ill-defined problem space. By furthering analytical processes in response to dissonance, Hanna, Elise and John advance improvisation as action through which the perception of error can be strategically shaped.

Addressing unexpected dissonance, participants suggested multiple pathways, reliant upon listening, for reshaping perception. In the context of her game involving mirrored intervals, Hanna suggested that, upon encountering dissonance, "repeat it long enough, it's acceptable" (third CI session, December 2, 2018). Elise similarly commented on her process of shaping perception after an unexpected dissonance: "If you just panic and get away from it, it's going to sound wrong. But if you keep playing it, and develop that idea, it's going to become actually a right note" (first CI session, September 16,

2018). Within that session of collaborative inquiry, Hanna responded to Elise's idea, expressing agreement, "Whatever you repeat becomes then [a state that] you are used to... And listening is the key." (first CI session, September 16, 2018). Upon realizing unexpected dissonance, a new constraint path can take shape, in order to affect perception and lead to a realization of a new pathway for creativity. John's commentary regarding reconditioning the perception of error seemed to be focused upon togetherness in shaping sounds: By making mistakes together with his student, John could model acceptance of the dissonances involved in experimentation.

Miller (2012) observed a piano student to have maintained a collection of sounds made in error, recorded in a notebook, to which the student returned in development of dissonances originally experienced in error. As the student sought to develop sounds originally experienced as mistakes, he relayed that he could inwardly hear development that he couldn't yet reproduce at a keyboard. Similarly, participants in the present study sought to treat mistakes as, "opportunities" (Hanna, first CI session, September 16, 2018), navigating unexpected sounds by strategizing new formulations for improvisation.

Distinguishing between ontological features of composition and improvisation, Burnard (2000) observed that the, "shared and negotiated space" (p. 239) of improvisation permits exploration, while an operational definition of composition involved recreation of predetermined structures, reliant on memory, for the purpose of reproducing a series of preexisting musical constructs. In recognition of the distinct performance processes involved in recreating a composition or creating an improvisation anew, some form of well-defined problem space must be present in mind in order to recognize departures from predefined constructs. Hanna's and Elise's comments

regarding strategic repetition of dissonance suggest that unanticipated sounds set into motion a new mode of operation and entry point into an ill-defined problem space.

Hanna's prompting to, "play a wrong note" (third CI session, December 2, 2018) as an improvisation strategy would appear to drive a shift from the well-defined to ill-defined problem space, a forced departure from preexisting structures to exploration of new pathways in search of novelty. Applying Stoke's (2006) theory of creativity from constraints, a surprising dissonance may serve to introduce a new, "constraint path" (p. 6) with multiple possibilities for altering the perception of error.

Baker & Green (2013) defined, "closure" as the recovery that takes place after error in realization of new pathways of sound (p. 148). The researchers observed that participants in a treatment group who had undergone informal music learning by copying sound sources had incorporated erroneous sounds into a musical line in performance. The practice of playing by ear appeared to benefit participants' internalization of musical structures in the formulation of new pathways. Since imitation of sound sources had taken place without musical notation in the experimental group, every action had emanated from sound itself. In the present study, each of the participants demonstrated strategies that were reliant on sound, removed from notation. Leading their students to gain comfort with the unknown, participants encouraged openness in exploring unexpected dissonances, which could prompt students to realize, "closure" as defined by Baker & Green (2013).

Given the ephemeral and varied nature of sound sources to be copied, practices of deciphering and recreating sounds through imitation may be considered in terms of variability practices of Stokes (2006), through which comfort is gained with variations

involved in the creative process. As music is conceived through the transitory medium of sound, comfort with variability can be gained through processes of imitation and improvisation.

Elise's practices would appear to assume that improvisation can occur as an act of imitating one's own inner voice. By preparing Ava to copy sound, Ava can also be equipped to recreate, "something she was hearing" (Elise, memo, Nov 5, 2018). Elise's reflective commentary suggested her approval of Ava's departure from the musical structures they had just discussed, as the quest to imitate a new sound overrode preformed conceptual considerations.

Theoretical contributions of Gordon (1990) are based upon, "audiation" (p. 25) as a process of, "inner hearing" (p. 28). Conceiving of audiation as a means of assimilating sounds of an environment into musical thought, Gordon (1990) recognizes developmental stages of enculturation. Elise's commentary suggests that she prizes her student's audiation processes over technical and conceptual devices for improvisation, indicating a priority placed upon the internalization of culturally assimilated musical structures.

**Socially-Situated Consciousness**

Participants reflected upon the dynamics of the instructional setting and the interactions within it, so as to facilitate the learning processes of the student within the social framework, as situated within larger spheres of social influence. The pedagogical strategies designed by the participants demonstrated gradations with which freedom may be found within any musical structure. As the concept of the, "situated nature of learning" (Lave & Wenger, 1991) recognizes children's natural inclination to situate themselves for ideal learning, participants appeared to act in multiple roles to support the students'

processes, listening, observing, and presenting, in order to actively connect subject and the students in the studio setting.

**Resocializing tradition.** As a part of Hanna's teaching persona, storytelling served to convey the value of creative processes, returning improvisation to a folk tradition, "of the people" through invocation of historical imagination. Hanna's storytelling reveals her consciousness of the historical precedent for improvisational practices in interaction with Western classical music.

Relating that composers of the Western European canon prized reimagining musical works through improvisation, Hanna's folklore reveals aspects she considers important. In describing Liszt's practice of taking arias from operas and making them into his own improvisations, "you know, that was… in fashion to take known songs, mostly from opera, and make this fantastic improvisation" (first CI session, September 16, 2018), Hanna relates popular consciousness as an impetus for reimagining musical material across time. Liszt responded to famous tunes through improvisation that transformed the original source material into elaborate fantasies belonging to his own time and place, just as Hanna and her students do in the present. Through storytelling, Hanna relates the importance of building a knowledge base by listening to others, using a pre-existing tune as a structure for improvised response.

**Surviving in an environment.** Discussing, "tension and resolution" as inherent in music, Elise referred to the skills needed to play with perception through improvisation as, "key techniques of… surviving in this environment" (first CI session, September 16, 2018). Utilizing demonstration and imitation, Elise endeavors to copy sound sources with her students, by starting and stopping recordings, listening and echoing sounds.

Connecting Elise's practical compendium of strategies to her concept of,

"surviving" in an environment, Elise's pedagogical design schemes appear to culminate

in imitation for the purpose of expanding a working knowledge base of skills.

Maneuvering in and out of situations her ear might deem as, "wrong…making them

right" (first CI session, September 16, 2018), Elise reflected upon her strategies for

improvisation, regarding, "less talking and more doing" as, "most effective" (blog post,

March 29, 2019). While Elise's strategies might seem controlling on those occasions

when the student needed to replicate a call, a function was served through copying, as the

replication provided proof of listening comprehension.

> In jazz music, we teach kids about improvising all the time, you know. I think you're teaching people to be prepared for the unexpected of something. You know, to feel comfortable with unknown and things that might seem… dissonant to you. You know, like at the end, when she [Hanna] did that [produced an unexpected dissonant chord], to me, I was not even phased by it. Beautiful, you know, like what's going to happen next? But, I could tell from your face [Julia], you were, like, "oh my gosh, where is she going? What's happening?" Julia: "What do I do, I'm not prepared?" Elise: I think that's a key point in improvising … and I think it comes from listening. I really don't know what else it would come from other than hearing… if I was to teach kids how to do this, I would show them people doing it and I would do it with them. I don't know if I would say anything to them about it. I would probably just do it. (first CI session, September 16, 2018)

An operative feature of Elise's approach is to promote the processes of deeply hearing

and actively doing, serving a pattern of awareness and responsiveness. By greeting the

unexpected and deciphering clues to meaning and implications for new pathways through

improvisation, Elise practices reconditioning the fear of the unknown to accept the

unexpected.

**Situated in a larger social system.** John revealed his sensitivity to the social

sphere of influence in which he is situated as a musician, operating within practices of

Western European art music. John is aware of the demands of, "the real world" (introductory interview, Jun 28, 2018), to which he responds through the acquisition of skills needed to participate in the larger domain within which his music-making takes place. John reflected upon experiencing the primacy of reading in his musical life, as the social sphere calls for him to be a good reader in order to function. John's response is the fulfillment of his ability to read music to the best of his ability and to encourage that skill in his students.

While John is firmly situated within one sphere of influence as associated with Western European art music, his reflections reveal his recognition that other pathways and forms of music-making exist, in acknowledgement of popular consciousness. Since other genres of music-making do not necessarily demand the same skillset to which he is accustomed, John seems to be aware of his students' consciousness of other forms of music. In consideration of the individuality of each, John responds by equipping his students with the means to develop musically in a chosen area of interest.

While John says that the student need not, "know the rules" in order to create, alternatively, he also indicates that a student should have a firm background and knowledge base before embarking upon creative divergence. John's ambivalence and acceptance of ambiguity represents a departure from the use of a knowledge base as exclusive source from which creative processes emanate. John's reflections and commentary suggest his view that creative endeavors can be used as both a route to acquiring a knowledge base of musical structures and a path proceeding from a knowledge base.

**Dynamic Nature of Music**

Participants reflected upon the development of pedagogical strategies through negotiation, by means of participation with others and material artifacts. Reflections upon the processes of differentiating among possible strategies and negotiating to suit present company and conditions in real time demonstrated that the design of any pedagogical strategy could not fully capture unfolding circumstances, just as notation cannot represent the ontological status of music. Participants expanded boundaries formed through past experiences in order to create pedagogical strategies for students to improvise in the present.

**Individual Nature of Perception**

Throughout the process of designing and implementing pedagogical strategies for improvisation, participants reflected upon the individual nature of perception. Across cases, the design of pedagogical strategies appeared to be anchored in deciphering what the student hears, according to the student's perception. Recognizing that different modalities for learning music appeal to different students, Hanna guided her students' awareness of structural features inscribed within notation, then compelled departure, allowing her students to select their own constraints for creativity in acknowledgement that, "each of us perceive sound in a very different way" (first CI session, September 16, 2018). Hanna's decision to let her students select their own means of improvising in exchange with Western classical music reveals the individual nature of perception operating within their improvisational devices.

Expressing a perspective emphasizing conditioning, Elise discussed exposure to new sounds as essential for expanding boundaries formed through past experiences:

"…When kids are young… they're growing their ears, so whatever you expose them to as right, they're going to think that's right" (first CI session, September 16, 2018). Acknowledging variability specific to individuals, Elise seeks out improvisation with others as an action that reveals alternate pathways, negotiated through sociocultural adaptation: "… Everyone's going to interpret what you do in different ways… even if you're playing with someone else, that person's going to interpret" (second CI session, October 7, 2018). As improvisation is embedded within social networks through which meaning is interpreted and actively shaped, awareness and responsiveness operate on multiple levels.

John approached his design of pedagogical strategies in contemplation of, "what point of entry would I give a student into this music?" (third CI session, December 2, 2018). The setting of intentions occurred as John deciphered the knowledge base of the student and invited creativity based upon those features. "I used… d minor as a point of departure… we had talked about it already [with the student]… He was already familiar with that and so I suggested that we stay within d minor for our improvisation" (third CI session, December 2, 2018). John's choice of words shows that, because musical structures were present in his student's knowledge base, then they could become material for creativity. While John would sometimes suggest a knowledge base as a constraint for improvisation, other times he prompted the student to define the terms. In each case, John sought out the articulation of features of a pre-existing knowledge base to be explored through improvisation.

**Calibrating Challenge**

In each case, the participants' perception of appropriate challenge informed the design of strategies for improvisation, decision making that was highly situated and individualized according to each student's current level of skill. As Hanna implemented her pedagogical strategy with different students, she envisioned different pathways for future development for each, according to the challenge Hanna had perceived her students to have encountered.

Elise described her pedagogical approach through the design of strategies for improvisation as that of posing incrementally more challenge: "Meet the student a little over their level" (blog post, November 5, 2018). As she continually recalibrated her instruction to pose new challenge, Elise demonstrated awareness of her student's current knowledge base, responding by posing challenge just above her student's current level of skill. Enacting Vygotskian sociocultural theory, Elise creates a zone of proximal development, an operative framework for the posing of challenge.

John appeared to adjust his pedagogical strategies to meet, not to exceed, his student's current level of skill. Introducing further challenge in the form of new features to be added to a working knowledge base, John recalibrated challenge to match his student's level. Since John's student had studied piano for less than a year, it's possible that John's priority was to enhance his student's confidence and enthusiasm through use of material with which his student was most comfortable.

In describing the strategic use of challenge within practices of teaching improvisation, each participant emphasized consciousness of a student's current level of skill in enacting a course of action for learning to improvise. According to Stokes'

theoretical framework, incremental challenge serves a function in recalibrating variability practices to reduce fear and avoid boredom.

**Maneuvering Musical Material**

Participants demonstrated multiple approaches in maneuvering musical structures as represented in notation. The musical material for improvisation was selected by the participants for use with particular students, a choice that is individualized and situated within the context of the teaching studios of the participants. While Hanna and John adopted the use of primary source materials as musical scores on which improvisation was based, each of Elise's improvisation strategies was built upon an arrangement found in a method book.

Hanna, Elise, and John demonstrated ease and skill in reducing and altering musical structures to invite spontaneity. As an example, on one occasion when I was not a full participant in improvisation, I observed Hanna as she mused upon opening the *Sarabande* from Bach's French Suite in B Minor to improvisation. Hanna began by rhythmically altering the melodic contour, then she played a sequence of the original, then another alteration using inversions of the original intervals. Next, Hanna played the opening melodic passage, with her left hand echoing her right hand in syncopation, further sequencing the melodic contour. Hanna then played the largest chordal realization of b minor tonic, remarking, "There's the piece!" (third CI session, December 2, 2018). Hanna's reduction of the entirety of a piece to one large chord, showed her processes of distilling musical material into different organizational schemes, varying each to conceive of alternative possibilities for improvisation.

**Pretending to forget.** Hanna demonstrated awareness and responsiveness through her childhood practice of pretending to have a memory lapse. Hanna's study and performance of source material as notated served to advance her awareness of musical structures contained within, to which she responded through improvisation. At whatever moment Hanna decided to pretend that she forgot the music, the, "fake" memory lapse was staged, occurring as a negation of her actual memory of the material inscribed within the score.  Hanna then made use of those musical structures as a knowledge base on which she could improvise.

In preparation for, "forgetting," Hanna pursued knowledge of the musical structures inscribed within the notation, asking herself how notated repertoire was constructed: "What chords there were and how the melody was constructed… how many notes [made up] the melody? Was it five notes? Was it three notes? So, I started to really think [about] the way the piece was constructed" (introductory interview, August 10, 2018). This instance of awareness and responsiveness was both present as the transmission of sound across time, and as a negation: Pretending to have a memory lapse activated Hanna's curiosity about the transformative potential within the musical structures inscribed within notation.

Hanna recalled expanding her knowledge base of repertoire, in preparation for forgetting. Building her knowledge base provided a, "first chorus" (Stokes, 2006) upon which Hanna created a, "second chorus" through variability, appearing to take place through the use of novel constraints Hanna instated for her exploration. Discussing her process of finding openings for improvisation, Hanna offered:

> How is it constructed?... Take it apart, so … [sings], you know, make a
> sequence of that one, too. So, take all of the little parts and take it apart and make

your own composition from *just* that...what material did Mozart use? Okay, these are his materials and *what would you do with what you have here*? So, whatever you can squeeze out of any of ...the ...piece, I think it's a great thing because lot[s] of artists did that, you know, in the 18th and 19th centuries, 16th and 17th [centuries], it was a common practice. So, I think you can do a million things, with…any of this. (third CI session, December 2, 2018)

Hanna's improvisational and compositional processes appear to involve limitations she places upon her own creativity as she adopts pre-existing musical structures. By reducing materials into constituent parts, Hanna observes the compositional process inhered within notation, then reorders and expands those musical elements.

**Reducing harmonic content to invite spontaneity.** Elise made use of harmonic reductions to invite her student's improvisation. By repeating a reduction until the content formed a recognizable pattern, Elise placed the musical material in the present, a repetitive sound source to invite variability. As Elise produced a harmonic framework, she provided stability and harmonic function to her student who was invited to add ongoing response through improvisation.

**Conceiving of a pattern for sequencing.** By exploring methods of expanding musical material, John reveals a pattern of awareness and responsiveness within himself, which he introduces to his student as a strategy for the use of sequences in improvisation. In this case, the original motive, created by the student, requires awareness of patterns within in order to respond through sequencing, to encompass a longer segment of time and extended passage of material. The sequence provides an endless source of material for merging improvisatory passages together, as the improviser can continue the pattern ad infinitum through use of the original material. The response expands the boundaries of the original motive by displacing the original material to a different position within a scale, in exploration of variability practices and in the search for novelty. A first

constraint is the use of a set pattern, while a second constraint situates the pattern within a key center.

**Riffing on ideas.** At the final session of Collaborative Inquiry, John took the constructs featured in Hanna's free-standing games as material to which he responded with new adaptations, expanding ideas Hanna had presented and imagining how the games could be used to interact with selections of repertoire.

> I'm thinking about all of these things [free improvisation games] you've just showed us, how they could relate to an improv that's inspired by a piece… I'm just thinking about how you [Hanna] have this amazing vocabulary of improvisation apart from any notated music and what we've been thinking about in this study is how can the Western Art music, the notated music be the impetus for the improv. So, I'm thinking… how do you… take… this amazing vocab you have and sort of... bring it together... Because I don't have this kind of vocabulary you have for improv. So, I'm just really starting from the music… (third CI session, December 2, 2018)

John's choice of words shows his perception that he lacks a vocabulary for improvisation, therefore, he relies on repertoire. Applying the ambivalence John had expressed to his own statements, notated repertoire can serve as both a route to acquiring a knowledge base of musical structures and a path for using those structures for creativity through improvisation.

## Call and Response as Formative

Through my analytic process, call and response emerged as a primary and, "formative" means for inviting improvisation within the structures inherent in music making. While Hanna and Elise referred to call and response as, "formative" (first CI session, September 16, 2018), John described the musical formula as, "profound" (final interview, May 8, 2019). Found in many traditions throughout history, call and response or antiphony, consists of a musical phrase that is offered, to which there is a musical

response. Multiple forms of call and response permeate the participants' descriptions, reflections and improvisational teaching practices. Some forms require a response that is returned in a precise form that echoes the call, replicating the original; while other formulas permit the response to depart from the call, expanding a search for novelty through improvisation. Across cases, a call emanates from within one's self or from one person to another. Improvisation is thus positioned as essentially a form of communication, as call and response and dialogue unfold within an unknown sequence of questions and answers. In the case of each participant, a personal history connects to a teaching persona, facets of which are directed toward the nature of improvisation, in order to create pedagogical strategies for improvisation by students.

The action that unfolds as teacher, student, and musical material interact directs the approach and the distinctive character of improvisation unfolding within the situated dynamics of the studio setting. The expression of themes in the case of each participant depends upon the unfolding action, conveying a character's essence only partially, with further expansion gleaned through the analysis of self-reflective commentary.

**Call and Response across Time**

As Hanna situated student and composer, "in the same status" (second CI session, October 7, 2018), figuratively, Bach called out through a minuet and, "Mr. David" answered through his own improvisation. Thus, the pre-existing work of Bach served as a call, portions of which David played as notated before Hanna invited David to improvise a response.

As John relayed that he had used Hanna's strategy to position one of his older students in an improvisational exchange with, "Mr. Beethoven," Hanna remarked, "You

see? He just felt like he was in the same company with Beethoven! It's Beethoven and now it's me together" (third CI session, December 2, 2018). Hanna's comments, among other reflections, further the concept of Hanna's abstraction of the composer and student residing together in a shared space in which there is a call and response across millennia.

Vygotskian sociocultural theory recognizes interaction with others as a prerequisite to development through socialization, with a Zone of Proximal Development occurring as a learner is assisted by someone with a higher skill set. It would appear that an end product of realizing call and response in interaction with music inscribed within notation resembles socialization with and awareness of a creative partner in absentia.

Since a former self-contained aspects realized in a later stage of development, Hanna's conception of her own development over time may have become a feature of design in her later teaching practices. A meta call and response would seem to be present in the transgenerational effect of Hanna's childhood strategy used with a child of a different era. As Hanna found interest and an appeal to her imagination in conversing musically with composers as she pretended to forget the music in her childhood, Hanna invited a child of a different generation to respond through an improvisation of his/her own. Hanna's childhood-self presented a form of call to a child removed in time and geographic space, with constructs from Hanna's childhood producing a response in her student's improvisation in the present.

With humor and confidence, Hanna described David's initial foray into improvisation using this strategy as, "dusting the keys" (third CI session, December 2, 2018), perhaps taking comfort in a sense of her own development over time. Here, David's, "dusting," in which he began his improvisation by playing the rhythms as found

in the Bach minuet on seemingly random notes, served an exploratory function and was similar to Hanna's childhood practice of playing only the rhythms (third CI session, December 2, 2018), in exploration of other notes, as she would put off to a later date her learning of the score as written. Like the use of a scale, the adoption of a pre-existing rhythm in the search for novelty is categorized by Després et al. (2017) as a, "conceptual strategy" (p. 150), found in the heuristic devices of expert improvisers. Informing the selection of rhythms for improvisation according to an overarching structure, predefined features in one direction of sound may be considered to advance the search for novelty in another.

Due to the, "interrupt-driven" (Roads, 1979) approach of Hanna's strategies for use with classical music, forethought was limited for her students, who crafted their own constraints for improvisation. Since Hanna's cues functioned to restrict her students' preplanning, her strategies for use with classical repertoire may be placed at one end of a spectrum of improvisational and compositional devices, emphasizing freedom and momentary unfolding of sound (Sloboda, 1985; Kratus, 1994; Webster, 1992; Wiggins, 1993; Pressing, 1984; Burnard, 2000). After Hanna and her students had studied musical constructs inscribed within notation, the act of improvisation presented an open space for exploration, undefined by those preexisting constructs.

Comparing musical and linguistic development, Gardner (1973) attributes meaning to children's musical improvisation, taking place as, "symbolic play," through which features are altered by the child, displaying the musical structures that are, "central to the child's perception" (p. 190). Since Hanna's students were free to craft their own improvised responses, the structures chosen through improvisation thus revealed central

perceptual features according to her students' choice and understanding. While Hanna thought that David had seemed to experience a form of liberation, Hanna suggested that Elizabeth seemed to learn, "how to sound like Mozart, following his musical structure" (Hanna, blog post, November 3, 2018), as she devised her own improvisation in response to Mozart. Since David had chosen to form his improvisation primarily through the use of rhythms and occasional use of harmonic rhythm taken from a Bach minuet, his strategies for improvisation would be placed in the, "conceptual" (p. 150) category of improvisational strategies observed and classified by Després et al. (2017). Having adopted a conceptual strategy by using harmonic content taken from Mozart as a drone, Elizabeth embellished and recombined elements by adopting and imitating structural devices found in Mozart, considered by Després et al. (2017) as an, "atmospheric" category of improvisational strategy (p. 150), in imitation of a composer's stylistic features.

**Convergence of Open and Closed Models**

Among participants, Elise alone asserted a model of call and response that involved precise replication through a game of skill, showing memory and listening comprehension. According to this model of call and response, creativity was pursued solely by the originator of an improvisation. As a classic example of a, "well-defined problem" (Stokes, 2006, p. 124; Weisberg, 2006, p. 138), in which there is a single correct response, Elise and Ava took turns in, "deliberate practice" (Ericcson, 1996, p. 21; Stokes, 2006, p. 124), as they endeavored to produce a response matching each call precisely.

Elise imagined and projected the possibility that in some cases, call and response following this formula could be understood as the demand for a strict realization and inculcation into a pre-established model of authority. Noticing that her student appeared to be looking, "for approval of everything she played" (memo, November 5, 2018), Elise related that she could imagine how piano teachers, "that weren't as comfortable with those, 'outside' notes could… react in shock and that might have… made [Ava] not want to play those notes again" (memo, November 5, 2018). Yet, the game-like realization Elise conceived presented turn-taking as communicative exchange and acceptance of pathways forged through dissonance.

In her reflection on her use of a matching call and response formula, Elise regarded as particularly successful her student's creation of melody that was free of limitations represented in chords and scales discussed immediately prior. As Elise considered Ava's construction of melody to reveal, "a lot about her personality and character" (memo, November 5, 2018), she noted that these improvisations must have been products of, "something she was hearing" (memo, November 5, 2018). Elise's concept of Ava's improvisation taking place in imitation of her own inner hearing suggests her conception of inner awareness producing an outward response through improvisation. Elise had described how she and her students start and stop recordings to mimic sounds and practice reproducing what they hear (first CI session, September 16, 2018), a process of imitation that can also benefit the recreation of sounds emanating from one's own inner voice. As Elise relayed her concept that, "Everything's come from something" (Elise, first CI session, September 16, 2018), Elise's collection of

pedagogical strategies appear to assume a model of improvisation with basis in mimetic skill shown through the demonstration and imitation of sounds.

On a higher level of abstraction, a formula in which the response is expected to reproduce a call may be compared to the, "monological voice of authority" (Kanellopoulos, 2011, p. 114) associated with Bakhtinian philosophy. Since a canonized conception of Western classical music asserts a system of values that prizes conservation, the performer's search for novelty is often limited, in favor of the transmission of an idealized form. From the vantage point of the, "monological voice of authority" (Kanellopoulos, 2011, p. 114), the task of the musician is to replicate the work of art in a precise manner corresponding with the composer's intentions. Yet, accompanied by the space for freedom, replication can enact the internalization of musical structures that expand an actionable base of knowledge and skills for use in the creative process, in realization of one's own inner voice.

**A Conceptual Playground for Knowledge**

As John tended to approach his design of pedagogical strategies by deciphering what was already known by his student, questioning techniques allowed John to ascertain which musical structures were consciously assessed by his student prior to the improvisation. Those musical structures then formed the boundary of a space to be explored through improvisation, a sort of conceptual playground for experimentation serving multiple functions.

By using what was already conceptualized and articulated by the student to bound the freedom explored through improvisation, subsequent exploration could serve to reinforce familiarity and confidence with a knowledge base of conceptual features.

Revealing the concepts that are actionable within the student's knowledge base, this scheme would seem to assuage fear of the unknown through reliance upon knowledge. John's setting of intentions appears as an adoption of patterns of free improvisation as defined by Kanellopoulos (2011), Pressing (1988), and Allen (2010), whereby improvisers depart from stylistic conventions and traditions in shaping sounds as based upon a selection of musical materials.

While John's strategies functioned to pre-define formulae for use in improvisation, the student could negotiate the terms of the intention verbally at the outset, or renegotiate by introducing some musical element outside the intention during improvisation. John would then adjust the parameters of the space for exploration accordingly, by adding the novelty to the pedagogical design scheme, furthering consciousness of form and function by articulating recognition of operative musical structures.

For example, John's student took intervals he had identified in the score and abstractly expanded them through an additive process as he set intentions for exploration. John described his student's process of decision-making in this particular instance as resembling a, "conceptual hydroplane" (third CI session, December 2, 2018), whereby the student's impetus to create was based upon curiosity for its own sake, without the score informing his decision.

Another example of the student's renegotiation of intentions took place as John introduced a call and response formula modeled after Elise's instructional design, through which his student was asked to produce a response matching John's call. When Rob produced responses that were similar but not precisely the same as John's calls, John

recalibrated the boundaries of the space to be explored: "This time, instead of playing exactly what I play, play something slightly different" (piano lesson, December 8, 2018). In contrast, Elise and her student adopted a pattern whereby the initiator of a call would repeat the pattern until it was replicated. As John revised musical intentions, he met his student at his current level of skill, articulating conceptual categories for musical exploration that allowed and encouraged his student's present improvisational activity. Since John's student had studied piano for less than a year, John's negotiations may be seen as efforts to retain his student's interest and enthusiasm, by encouraging improvisational activity that appeared to be naturally occurring.

By admitting departures from intentions, John's subsequent recalibrations may suggest to his student that intriguing novelty may be pursued for its own sake. The improviser may discover surprising sounds, then recalibrate, adopting new constructs in order to shape design schemes in the search for novelty.

## Knowledge and Novelty as Means and Ends

Participants' reflective commentary suggested individual definitions of improvisation and distinct conceptions of the types of activity constituting improvisatory experience. Through the design of pedagogical strategies, each participant operationalized distinct definitions of improvisation. Whether intentionally selected prior to improvisation, generated by ear, or happened upon through impulse, a spectrum of constraints appeared in the improvisations prompted by the pedagogical designs of the participants. Across cases, the strategic function of certain limitations appeared to promote exploration of the unknown in the search for novelty, advancing and emanating from a knowledge base.

Berkowitz's (2010) conceptualization of two dialectical states of consciousness, as experienced by improvisers, provides intriguing potential for interconnection with a responsorial model of call and response. According to Berkowitz (2010), during the perceptual processing of improvisation in a, "witness" state, the improviser observes his/her own embodied cognition unfolding through improvisation, removed from conscious problem-solving. In response, the, "creator" undertakes a mode of operation to perceive the emergent stimuli, for which his/her own consciousness does not seem responsible. Conscious direction is thereafter resumed by the, "creator," responding to these unexpected sounds and, "steering the bobsled" (quotation of Robert Levin noted by Berkowitz) back to cognitive processes of problem solving. According to Berkowitz (2010):

> Thus, a constantly evolving dialogue emerges between the initiation of the musical flow and the response to it, a seemingly near-universal characterization of the experience of improvisation across cultures. (p. 130)

The dialogue appearing between dialectical states of consciousness within oneself resembles a response shown to others, in receipt of a musical idea for development through improvisation. By extension, the treatment shown to oneself is analogous to the receptiveness shown to others through the act of improvisation. As Levin, "steers the bobsled" (p. 125), his own consciousness provides a call and response pattern precipitating improvisation. Levin's observation of his own improvisatory process, in a state removed from conscious preparation, provides a scenario in which the decision-making of performance in real time dictates ongoing call and response.

**An Impulse to Improvise**

Hanna describes the simplicity with which improvisation can take place, noting the automatic nature of responding in the moment with materials as simple as one note alone: "All you need is one note" (introductory interview, August 10, 2018). Conveying communicative vitality and the instinctual nature of responding to sound, Hanna refers to one note as analogous to, "one step," as if making music is like walking or dancing, a premise that any singularity can serve as a springboard to improvisatory possibilities.

**Do Rules Exist Without Consciousness of Them?**

John's ambivalence regarding rules as inhered in music history and a knowledge base as a source from which creativity emanates, suggests his efforts to exist in multiple planes of existence. On the one hand, John abides by the rules and performance practices inscribed within the Western classical repertoire he practices as a performer. On the other, John recognizes an overriding principle that larger spheres of influence recognize the innovations of creative individuals who depart from historically situated musical practices.

Expanding upon this dilemma, if rules are to be broken, they must first be perceived as rules. Children, unconfined by pre-conceived conventions, would not be in a position to recognize rules ingrained within music history. Since one cannot break rules that aren't recognized, the question becomes whose rules are to be adopted? What constitutes knowledge and according to whom?

By encouraging students to display their own improvisations in interaction with Western European art music, participants enacted forms of call and response as a form of back-and-forth pattern of communication. A student improvises in response to a piece of

Western art music and that improvisation, in turn, creates a response in how the student performs the original piece. Performed in tandem, the source material and the student's improvisation display knowledge of repertoire as a, "first chorus," on which a, "second chorus" is built through the realization of, "variability" through improvisation (Stokes, 2006).

**Improvisation as Freedom from Preconception**

Elise discussed an operational definition of improvisation that diverged from that of John, whereas Hanna's improvisatory practices seem to encompass multiple formulations from preplanning to interruption-driven. According to Elise:

> If you come into it with the preconceived notion of what you're trying to achieve, is that really improvising? It's kind of a complicated question… for me, I improvise, that's my career... mainly, and I feel like if I come and start and I know what I'm going to do, it doesn't feel authentic to me. (second CI session, October 7, 2018)

Elise rejects as inauthentic a kind of improvisation that is semi-planned in advance. Yet, she also acknowledges that improvisation is, "never always new" (first CI session, September 16, 2018), with the inference that features endure and improvisers show consistency through style and the use of a knowledge base that continuously influences spontaneous realizations. While Elise demonstrates openness to unfolding stimuli and a refusal to preplan, some measure of planning in the immediate or long-term must present itself to the conscious mind in the form of a knowledge base. Thus, Elise's order of operations appears to be situated in gradations between finding freedom within structure, responsiveness to present company and a continuity of identity and consciousness informing present decision-making and development.

**Creating Closure**

Elise finds closure on the basis of time itself marking a kind of conclusion to the variability involved in creative work. "That's as good as I was then" (final interview, April 12, 2019), promotes a kind of finality that the current improvisation is to be left standing, accepted as a product of the moment, not to be worried over, analyzed, or corrected. The process of learning from one's past improvisations is a call of sorts to future development. As a practical dictum for finding peace with persistent lack of closure, Elise's comments emphasize the operative function of time, as presenting potential for expansion of a knowledge base and further variability.

## Summary

Participants demonstrated distinct operational definitions of improvisation, each of which appeared to connect to a model of awareness and responsiveness through the expression of interrelated themes. Organized under an overarching scheme of awareness and responsiveness, this chapter relates the relationships among the component conditions present in perceiving and responding to musical material. Participants reflected upon reconditioning the concept of a mistake by altering the perception of error through heighted awareness and responsiveness. Revealing a socially-situated consciousness, participants respond to larger spheres of social influence by cultivating skills for participation in music-making. By means of participation with others and material artifacts, participants develop pedagogical strategies through negotiation of the dynamic nature of music. Call and response formulae appear at manifest and meta levels of analysis, permeating the participants' teaching practices and reflections. Across cases, whether spontaneously generated or chosen intentionally, limitations promoted

improvisation as the exploration of novelty, advancing and emanating from a knowledge

base.

Chapter VIII

SUMMARY, RECOMMENDATIONS AND IMPLICATIONS

The purpose of this collaborative inquiry was to examine pedagogical strategies for integrating improvisation and Western classical music, which is often considered closed to improvisatory processes. By investigating pedagogical practices through which improvisation and Western classical music are integrated, I seek to illuminate patterns of interaction that support variability practices associated with the creative process (Stokes, 2006). In Chapter VIII, I answer the research questions, address limitations of the present study, make recommendations for future research, and discuss implications for practice.

Three piano teacher-participants designed, implemented and reflected upon pedagogical strategies for use with their piano students. The prior experiences and teaching practices of participants were examined through interviews, teaching videos and *Qualtrics* surveys. Subsequently, two cycles of collaborative inquiry involved the collection of teaching videos and reflective commentary, shared through memos, blogs, and in-person sessions. Taking place over approximately six months' time, collaborative inquiry involved the sharing of reflections among participants from the first session of collaborative inquiry to the final blogs and memos posted online.

Through the process of interpretation and analysis of data, codes were linked to Stokes' (2006) theory of creativity from constraints, as an operative theoretical framework in response to the research questions. Making use of *a priori* theoretical

constructs through structural coding did not capture certain features and relationships among themes. Stokes' (2006) theoretical framework did not account for interactive features of awareness and responsiveness, taking place through the dynamic nature of music and call and response formulae, appearing to operate on multiple levels of abstraction within the reflections and improvisational practices of participants. Multiple data analysis strategies were applied to the data base through cycles of open and structural coding, yielding conceptualizations of emergent themes pertaining to the experiences of teacher-participants.

<p align="center">**Research Questions and Findings**</p>

In the following section, the research questions guiding the study are addressed. Findings are presented as answers to the subquestions addressing the overarching research question: How do piano teachers experience the process of opening Western classical music to improvisation?

### RQ 1. How do piano teachers create pedagogical strategies that open classical music to improvisation by their students?

Across cases, participants discussed the process of designing pedagogical strategies in terms of an operative knowledge base of musical structures that could be made actionable by their students through improvisation. Participants and their students prepared for improvisation by examining musical structures inscribed within notated scores and subsequently extracting elements for improvisation. Participants then led their students to either consciously choose particular features of source material in advance of improvising or to spontaneously generate material during the course of improvisation.

Differences occurred in the participants' presentation of a spectrum of schemes from preplanning to freedom. Elise was the only participant who implemented a, "well-defined problem space" (Stokes, 2006, p. 124; Weisberg, 2006, p. 138), for the purpose of cultivating skill in listening and imitating. While the operational definitions of improvisation among Hanna and Elise limited forethought in favor of momentary selection of musical materials, John's pedagogical strategies focused upon setting and fulfilling an intention, realized as the selection of musical materials negotiated with his student, through which articulated musical features could enter the conscious activity of improvisation.

As a device for generating the creative process, "cascading constraints" (Stokes, p. 2006, p. xiii; p. 7) appeared in the pedagogical designs of the participants and in the improvised output of the students, both consciously preplanned and spontaneously generated. Design schemes for improvisation demonstrated the participants' consciousness of a knowledge base, utilized as material for the creative process and informing the endurance and development of learned stylistic features and creative devices over time.

Representing a knowledge base that becomes the material for a second chorus of the creative process, Stokes (2006) uses the concept of the, "first chorus" (p. 8), as borrowed from musician and painter Larry Rivers. Across cases, participants practiced accessing and internalizing a knowledge base as first chorus material, in preparation for improvisation. Among participants, John grappled with ambivalence in his perception of a dual function of improvisation, used as pathway emanating from and to a knowledge base. Across cases, participants and their students appeared to use improvised second

choruses to become more deeply acquainted with the first chorus of the repertoire. Pedagogical stratagem designed by the participants cultivated variability practices, with participants attributing to the process of improvisation liberating features of personal agency and social negotiation, as well as a means of enhancing the internalization of musical structures.

**(a)      What are the teachers' experiences and reflections on improvising in interaction with commonly closed repertoire?**

Each of the narratives relayed by participants assert a different basis of experience with the same tradition of canonic repertoire, as socially constructed norms guided the variability practices that were explored in the experiences of each. As a Western classical musician and improviser who grew up in Central Europe, Hanna relayed a continuity of identity, through which her past educational experiences in classical music supported her creative development. Self-defining as a Western classical musician who grew up in the United States, John relayed points of tension regarding adherence to the composer's intentions, devising a system for incorporating variability practices through his use of, "practice steps" before his participation in the study. Also from the United States, Elise recounted her decision to leave her studies of Western classical music in childhood, a choice Elise suggested was based upon her pursuit of the ill-defined problem space represented in creative processes of improvisation, in contrast to her childhood experience of canonized repertoire.

Throughout the study, participants reflected upon the experience of improvising with their students in interaction with Western classical music, generating ideas for further development. Participants suggested conversational lines of questions to be posed

to their students, composition assignments, new pieces and improvisations, as well as expansion of call and response formulae utilizing demonstration and imitation. Participants also recommended further study of repertoire and music theory as future courses of action to build upon improvisational experiences in interaction with Western classical music.

**(b)     What do improvisational practices in response to classical music stimuli mean to the piano teachers?**

Participants' reflections suggested their consideration of improvisation as a route to enhanced musicality and expanded knowledge of musical concepts and structures. Freedom from the stricture of notation and escaping binaries of, "right" and, "wrong" were discussed among participants in contemplation of meaning cultivated through improvisation. Participants expressed their views of personal agency and creative development as the desired ends, for which purposes the pedagogical designs took form to support the students' improvisational processes.

**(c)     What challenges do the teachers encounter in developing and implementing the creative strategies?**

Hanna addressed the challenges she had faced as a teacher as including the perceived randomness with which a student began improvising and the process of easing her students past their, "fear of the unknown" (blog post, November 3, 2018). Elise related the challenges she experienced as: negotiating the gap between her student's existing knowledge base and the comprehension of music theory needed to improvise over chord changes. Elise also recognized the challenge experienced in guiding her student to perceive dissonance, but not to fear it. Elise encountered yet another challenge

in teaching her student to apply, "tension intervals" tastefully, without the years of listening experience through which musical conventions are assimilated. Elise also expressed her concern that she had overwhelmed her student with improvisational tools from which to choose. John approached his pedagogical design schemes with a cautious aversion to didactic step-by-step directions, experiencing challenge in getting started and providing prompts that would invite his student's creative process without dictating instructions.

**(d)      What are the teachers' perceptions of the instruction in terms of facilitating or hindering the students' exploration?**

In assessing the benefits of her pedagogical strategy for use with Western classical music, Hanna considered the interruption posed by her cue to enable a transition between two distinct, "modes" (*Qualtrics* survey, September 24, 2018) of performance, through which she purposefully limited preplanning by her students. Viewing the strategy as a means of gaining, "tools" (memo, November 2, 2018) for improvisation, Hanna observed her students' transitions in and out of an adherence to predetermined musical structures as specified in notation into improvisatory freedom.

Among pedagogical strategies Elise developed and implemented, she reflected upon the benefits of call and response as particularly useful, expanding her student's listening and imitation skills. Preferring to enact operative functions of theoretical constructs through improvisation and ear training, Elise perceived verbal explanations of music theory to be less effective. Among her pedagogical design schemes, Elise considered a variation of call and response as particularly effective, as she and her

student took turns singing and finding their own ideas on the piano, a process through which imitation was turned inward to one's own inner voice.

As John considered the efficacy of his strategies for improvisation, he noted the generative potential of playing alternate responses to musical questions found in antecedent phrases in notated repertoire. Among his approaches he considered less useful, John considered his suggestion of multiple pathways and schemes for improvisation to have lacked, "clarity" and structure in support of his student. By setting intentions for improvisation, John and his student identified musical features that formed the material for improvisation.

## RQ 2. How do the teachers perceive their students' responses?

According to Stokes' (2006) theory of creativity from constraints, students might be expected to display an attendant affect of fear, in experiencing an incipient creative endeavor. Stokes (2006) considers variability practices to form the conditioning through which comfort with the creative process may be attained. Conversely, if expectations for variability are too low, Stokes (2006) predicts boredom. Anxiety and boredom are considered by Stokes to influence efforts to regain equilibrium and comfort, through a habitual level of variability.

Hanna described the enthusiasm and growing confidence with which David seemed to approach his improvisation, suggesting the freedom David may have experienced in bringing to fruition, "something from his own imagination" (*Qualtrics* survey, September 24, 2018). According to Hanna, David appeared to build confidence in his own ideas. Hanna speculated that Elizabeth had seemed to experience a sense of accomplishment as her improvisation concluded, despite her perception of Elizabeth's

nervousness as she began to improvise. Hanna thought that Elizabeth had learned, "how to sound like Mozart" (blog post, November 3, 2018) and that transitioning between Mozart's musical structures and her own, provided a sense of, "creative liberation" (blog post, November 3, 2018).

Elise speculated that Ava had enjoyed a, "leadership role" (*Qualtrics* survey, October 2, 2018), through which she could create without having to adhere to notation. Observing Ava's enthusiasm, Elise suggested that Ava had participated in matching call and response formulae as if a game, alternatingly imitating and generating improvisations. According to Elise's perception, Ava's improvisations seemed particularly successful when she could focus on creating over a limited excerpt of the larger piece. Elise relayed that Ava had seemed excited and curious at the prospect of playing material she had originated through her singing, since Ava had expressed her love of singing.

John observed that Rob's improvisations had been, "consistent" (blog post, November 4, 2018) with the space for exploration defined by the intentions that were set. Noting that he had experienced challenge as a teacher in getting started improvising with Rob, John remarked at his own surprise that Rob had produced melody on the first lesson in which he had improvised. As time progressed, John noted that Rob's improvisations were, "melodic, diatonically situated and thoughtful" (blog post, Mar 26, 2019), adding that Rob seemed to think of improvisation as a fun departure from lesson time usually occupied with reading music and the development of technique.

Applying Stokes' (2006) theoretical framework to participants' perceptions of students' improvisations, David, Ava and Rob appeared to experience states of

equilibrium, whereby they seemed to demonstrate neither the anxiety nor the boredom predicted to take place upon experiencing variability practices that are qualitatively too agitating or too boring. While Hanna perceived Elizabeth's induction into improvisation in interaction with Mozart to have produced the nervousness and anxiety associated with variability practices that are qualitatively too high, Hanna's illustration of purposeful, "wrong notes" (memo, November 2, 2018) seemed, to Hanna's perception, to recalibrate Elizabeth's expectations, allowing Elizabeth to admit purposeful dissonance into her improvisation.

Hanna suggested that David might equate departures from the score with, "wrong notes" and unpleasant associations with, "bad playing" (*Qualtrics* survey, September 24, 2018). Hanna speculated that David was freed from these unpleasant connotations by focusing on rhythmic motives to expand his search for novelty. In describing Elizabeth's response to improvising in interaction with a Mozart rondo, Hanna observed that Elizabeth appeared to be anxious, with the presence of the video camera accentuating her nervousness. While Elizabeth expressed her willingness to participate, she wanted to prepare by practicing her improvisation in advance, which Hanna didn't allow.

Among musical challenges Elise observed Ava to have encountered, identifying chords and associated scales was difficult and memory-intensive, limiting Ava's freedom by requiring recollection of functional harmony. Ava faced additional challenges when she tried to find her improvised notes, as sung, on the keyboard. At the start of the study, Elise described the challenge Ava had faced in producing melody. Yet, by the end of the study, Ava generated small scale directional melodies and phrases of sung melody over Elise's harmonic reduction of an aria from the Bach Peasant Cantata.

In describing the challenges Rob had faced through improvisation, John thought that improvising using both hands was difficult, since Rob had studied piano for less than one year. John also sensed that Rob had intellectually grasped sequencing, but faced challenges in implementing a kinesthetic realization. Adding that an appeal of the sequencing was the challenge it had presented, John noted that sequencing seemed to capture Rob's attention and enthusiasm.

## RQ 3. How might the teaching practices of the teacher-participants change as a result of collaborating to open classical music to improvisation?

There did not appear to be any evidence of change among the participants through the duration of this collaborative inquiry study. Reflective commentary made by each of the participants suggested that they would continue to practice variability, as they had before, as a means of gaining acquaintance with the creative process. Hanna and Elise indicated that their contributions to the present study draw upon each of their life's work as improvisers, while John reflected upon his experience of designing pedagogical strategies for improvisation as occupying a similar function as practice steps, through which his students were already accustomed with variability associated with the development of creativity. John's final reflection suggested his concept that variability practices could be directed by his students themselves through improvisation to achieve an enhanced performance of the repertoire as originally notated, gaining deeper awareness and appreciation of the patterns and structures inhered within musical notation. Whereas practice steps had initiated variations introduced by John, the present study seemed to suggest that students could choose the constraints and pathways for exploration.

Since the present collaborative inquiry focused upon improvisation, the subject and content of investigation was change itself, as experienced through the act of improvising. Participants appeared to rely upon structures drawn from knowledge and personal history to inform their improvisational practices. Yet, each improvisation was unique, realized *in situ*, unrepeatable. An inference is that practices predicated on change require structure through which some continuity with the past is inevitable.

Addressing the philosophical underpinnings of collaborative inquiry methods as based upon foundational work of Heron (1981a, 1981b, 1985, 1988, 1992, 1996), Bray, Lee, Smith, and Yorks (2000) note that past experiences inevitably intrude upon the present. Therefore, *epoche*, as a tenant of phenomenology, is unattainable. Tracing the basis of Heron's model of cooperative inquiry to Gadamer's (1993) hermeneutic phenomenology, a distinction of this phenomenological model is the conscious awareness of past experiences shaping a present inference of understanding, rather than bracketing, as if to objectively hold past experience in abeyance.

Perhaps the greatest change that occurred through the course of this study was my perception of the patterns of interaction that sometimes go unrecognized within the sociocultural settings in which works of Western classical music are practiced. Having experienced a, "fixed end model" (Allsup & Westerlund, 2012) of classical music in my own childhood, my concept of the widespread closed form treatment of Western classical music is influenced by my early educational experiences. Piano teachers who practice the integration of improvisation and Western classical music may be under the impression that they are alone in their teaching practices.

Yet, I experienced challenges in recruiting participants, having conducted this study in New York City, a vibrant cultural milieu drawing artist-educators from around the world. The candidates who declined participation suggested that they do not improvise because they are classical piano teachers. Therefore, it would seem that those who do not practice variability may be unwilling to face the fear of the unknown, just as participants in the present study suggested their own students might experience anxiety in their initial improvisational efforts.

## Limitations

Since this study made use of a qualitative lens for the analysis of the experiences of the teacher-participants, findings are not generalizable. By describing the context and conditions within which the pedagogical strategies were experienced and developed, I provide analysis and interpretation that aim to supply the reader with detail for the determination of any transferability to his/her own instructional settings. This study was limited by the inability to include nuances of students' experiences according to their own perceptions. Since it was not possible to collect Stimulated Recall data from all of the participants, due to technological complications, I made the decision to exclude SR transcripts from the data base. Consequently, I needed to rely upon the teacher-participants' perceptions of their student's responses in order to address R2: How do the teachers perceive their students' responses? Adjusting this question had epistemological ramifications, as I could not access through reliable means the children's perception of their own improvisations, nor the meaning they had ascribed to their own processes.

As a further limitation, this study does not have the prolonged engagement of an extended investigation because of limitations of time (Lincoln & Guba, 1985). Data

collection took place during two cycles of collaborative inquiry over the span of approximately eight months' time, from September 16, 2018, encompassing final blog posts of April 4, 2019, with final individual interviews taking place in April and May of 2019.

Throughout the research process, I underwent constant consideration of fairness in representing the accounts and actions of each of the participants. Throughout the methodological design and data collection process, I analyzed features and dynamics that may have posed validity threats, so as to combat these challenges. I conducted member checks, seeking clarification of my interpretations with the participants through in-person sessions of collaborative inquiry. As I recognized the potential for premature consensus seeking among members of the collaborative inquiry, I actively questioned the members of the cohort. Since I considered that teachers may have felt obligated to provide validation of my efforts as initiator of collaborative inquiry, I perceived my role as that of active questioner, posing problems and discrepant issues. During interviews and CI sessions, I posed clarifying questions that asked how participants had formed their impressions. Multiple data sources were incorporated into the design of the study to further combat validity threats.

## Recommendations for Future Research

*How do variability practices transfer to performances of works previously considered closed to improvisation?* Through this study, I have gained insight into the formative experiences and pedagogical practices of piano teachers who offer an integration of improvisation and classical music making, a convergence that is considered to be relatively rare in current performance practices. Rather than focusing narrowly on

transmission of the canon and preservation of a, "fixed end model" (Allsup & Westerlund, 2012), the pedagogical approaches demonstrated by participants reveal that the treatment of classical music can lead to the discovery of classical repertoire as a means of experiencing and experimenting with the creative processes inherent within its design. By revealing pedagogical practices that demonstrate heuristic models for experimentation with variability practices, this study illuminates patterns of interaction that open works of musical art to the sociocultural activity of improvisation, through which a multiplicity of meanings can take form.

*How does a surprising dissonance influence improvisational strategy?* The theoretical framework of Stokes (2006) put forth an *a priori* hypothesis, through which a promising direction for future research would seem to include an investigation of the unexpected pathways of improvisers as a surprising sound initiates a new path for exploration. While all participants demonstrated conscious efforts to recondition the concept of a mistake, Hanna and Elise described admitting unexpected sounds into a new set of conditions for improvisation. In order to alter perception, Hanna and Elise appear to apply the new sound as a constraint in devising new strategies conditioned upon the occurrence of the unexpected dissonance.

*How might solitary improvisational practices transfer to skill in collaborative improvisation?* The dialectical states of consciousness as conceptualized by Berkowitz (2010) could conceivably converge with a responsorial model of improvisation, involving the self, responding as, "witness" to one's own processes, and the self, responding to others. According to such a model, it would seem that the treatment one affords oneself in the process of witnessing unexpected sounds might be similar to that shown in

improvising with others. For example, learning to respond to a surprise encountered in one's own improvisational process may be similar to preparing to improvise with others, in interaction with the unknown and unexpected sounds of self and others.

*How does improvisation in interaction with Western classical music come to fruition in different settings?* For future investigation, a collaborative inquiry research cohort of classroom music teachers could be formed to design instructional strategies for exploring improvisation and Western classical music within classroom settings. Since the present study took place within piano studios in which students have attained a command of musical structures with which improvisation took shape, a music classroom environment might pose additional challenges for engaging through improvisation with Western art music and everyday practices. Another promising direction for future research could be the replication of the present study with more teachers in another region of the United States or a different area of the world. By recruiting less experienced piano teachers, a process of change might be observable over a longer period of time with more frequent sessions of collaborative inquiry. Stimulated recall would enable focus upon the meaning that students attribute to their own processes of improvising.

## Implications for Music Education

Participant experiences and reflections suggest that improvisation can support both the variability practices associated with creative endeavors and a deeper acquaintance with the musical structures inhered within musical notation. The pedagogical strategies of participants and the interrelationships among themes suggest that the enactment of a call and response pattern forms an action and reaction that reaffirms the nature of perception, with potential for connection with dual states of

consciousness (Berkowitz, 2010) through which it is possible to relate to both self and others. Sounds originally made in error can yield a new creative development through maneuvering new pathways encompassing surprising dissonance. By extension, erroneously conceived actions in other domains and disciplines may be considered to supply a new idea for further development. "Mistakes" that are reconditioned as acceptable sounds, or errors that are considered revelatory, can prepare one to display openness to the unexpected contributions of others when improvising and collaborating together.

In consideration of larger spheres of influence and preparation for the professional life of a musician, participants reflected upon the socially situated contexts in which they perform and teach, in which certain calls are issued from the demand of a larger domain of influence. Participants suggested that their students were accustomed to producing, "right" or, "wrong" answers, so that the variability practices associated with improvisation and creativity seemed to introduce an unsettling apprehension.

The field of music performance often equates excellent teaching with the dictating of a set of standards and the conforming to a predetermined criterion. Therefore, students are often conditioned to a controlled environment in which practices associated with Western classical music operate as an arena showcasing the defining features of prototypes of idealized works. Early music offers an alternative to this conception, in which performers meet the paradox represented in the complicated ontological status of the score, in acknowledgement that any notation can be a framework for creativity.

Participants reflected upon improvisation as a means to internalizing musical structures. Since the perception of the legitimacy of variability practices is informed by

larger patterns of interaction, it seems reasonable to suggest that structures that are analyzed in theoretical terms could invite the creative processes of student musicians, as music theory in action. Such opportunities would seem to offer complementary practices to sight-based reading skills, as well as the socialization and conditioning that can reduce anxiety and fear related to variability practices.

As associated with the creative process, participants in the current study perceived variability practices and improvisation to cultivate a process of self-discovery. In response to the creative potential, "behind the notes" (Brown, 2015, para. 11), Western European art music can be re-socialized to encompass improvisational processes within a social setting.

## Coda

Students tend to rely on the resources offered by their teachers to form an inference of music's meaning as inscribed within notation. As symbol, notation is most frequently used to deduce what is known about the properties, elements, and essential features of a piece, as transmitted from one time period, geographical locale, or person to another. Yet, learning music from notation can also afford access to the *unknown*, those aspects yet to be realized, inscribed, "behind the notes" (Brown, 2015, 3rd para) that are the material for imagination. What might a piece have sounded like if Beethoven had conceived an anachronistic progression backward? What other rhythmic realizations of the same chords might Debussy have contemplated? To invoke the existentialism and phenomenology of Merleau-Ponty (1945/2012), music notation can exist not only as an *object* of consciousness, but also as an *operation* or process of consciousness.

In keeping with the structures of awareness and responsiveness that proliferate the reflections, teaching practices and stratagem of the participants, the present study interposes certain questions to the larger social sphere within which the, "work-concept" model of music education is embedded (Goehr, 2007). As John observed that his teaching of improvisation began a double process, a response provokes a new and different question:

> When I was improvising with the student, I played primarily a supportive role, which is challenging because it's really essential to pay attention to how my question starts and then the end of the question could be different, or should be different, and then the contrasting questions could be completely different from where I started. (final interview, April 23, 2019)

As in double hermeneutics, a question begins a double process of interpretation, where a second-order concept becomes a first-order concept as interpreted by actors in the immediate sphere of influence. Illuminating one another through circulation in the sphere of social influence, I imagine a conversation of shifting questions and answers. What does it mean to learn to read music? Notation offers a glimpse of other landscapes, removed from one's own surroundings. What does it mean to learn music? Central to this study is the view that an enormous terrain of possible soundscapes is accessible through viewing music notation through the lens of symbolic interaction: Viewing notation as a *process* of consciousness and not merely an *object*.

Heeding the words of Elise, the persistent lack of closure involved in creative work, an accompaniment to the, "condition of artists" (final interview, April 12, 2019), may not be a mode of existence suited to everyone. Yet, teachers can encourage frames of mind that introduce students to the multiple realizations and the variability practices of

the artist's craft and condition. The notation of musical structures offers both the potential for reimagining and the important work of preserving artifacts of culture.

Kurt Vonnegut (1990) noted, "everybody wants to build and nobody wants to do maintenance" (p. 238). A circumspect view of symbolic interactionism might contend that a deconstructive reading of art music as open text for reimagining could detract from the preservation of works of music as a form of primary source material, through which a knowledge base is built vis-à-vis familiarity with a canon of works. Adopting this perspective, further questions come to mind: What would a, "second chorus" improvised upon an impartial or misunderstood, "first chorus" sound like? *How* would it mean? A museum ethos sensibility does serve a vital function, maintaining a sound landscape in the, "museum of imaginary works" (Goehr, 2007, p. 4).

Due to the complicated ontological status of music as art, the schematic material of notation, to be realized through performance, is not the same as the performance of the music inscribed within. While a painting exists as the work itself, music depends upon the performer realizing the ephemeral nature of sound through time. As an, "ontological mutant" (Tormey, 1974, p. 207), notation contains elements to be filled out by the performer. As Hanna reflected upon this idea, "Notes are not sounds. They represent sounds" (first CI session, September 16, 2018). Based on Elise's background experiences as a jazz musician, she remarked how she is free of the assumption that a musical score inscribes within it all the sounds that she could create based upon notation: "There [are] so many things that I can play that aren't even in these chords" (first CI session, September 16, 2018). How would an understanding of Western art music change if it was likewise assumed that a canonized score doesn't contain all of a piece?

The teacher is a vital part of the medium and the message is constantly evolving through new calls and responses, as culture and new experiences test not only constancy, but paradoxically, change and adaptation, those traits which allow us the capacity to relate and learn from each other, transforming the teacher, student, and the subject matter.

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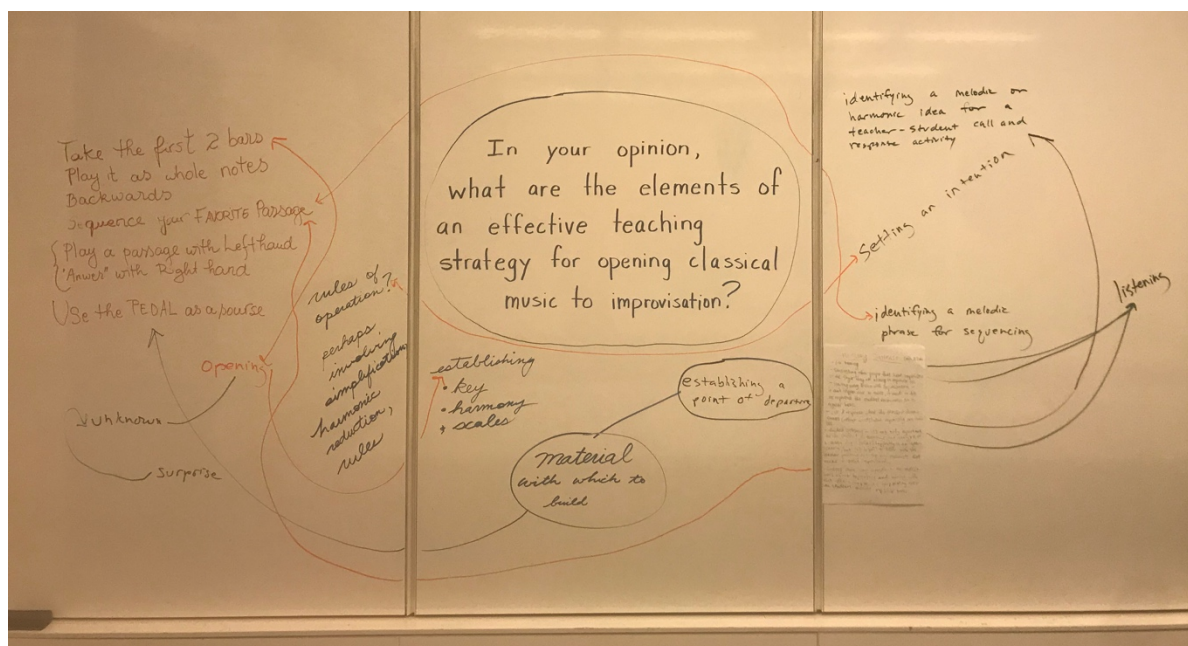
Appendix A

*Qualtrics* Survey Questions for Piano Teacher-Participants

| Research Question | Subquestion | Survey Question |
|---|---|---|
| 1. How do piano teachers create pedagogical and curricular strategies that open classical music to creative interaction? | | 3. Why did you choose this particular piece as a basis for improvisation? |
| | | 4. How did you decide to design the improvisation activity? |
| | a. What are the teachers' experiences and reflections on improvising in interaction with commonly closed repertoire? | 10. After this lesson, what would your next step with your student be? |
| | | 11. Why would this be your next step? |
| | b. What do improvisational practices in response to classical music stimuli mean to the piano teachers? | 12. As a teacher, what would you want for your student to gain from the experience of improvising? |
| | | 13. What do you think might be interesting topics of conversation with your student immediately following improvisation? |
| | c. What challenges do the teachers encounter in developing and implementing the creative strategies? | 14. What challenges did you experience as a piano teacher during this activity integrating improvisation and classical repertoire? |
| | | 15. Please identify one or more times (e.g. 10' 33" or 10 min 33 sec) during the video during which you experienced challenges as a piano teacher. |
| | d. What are the teachers' perceptions of the instruction in terms of facilitating or hindering the students' exploration? | 8. What aspects of the improvisation activity did you find most useful? |
| | | 9. What aspects of the improvisation activity did you find least useful? |

| Research Question | Subquestion | Survey Question |
|---|---|---|
| 2. How do the teachers perceive their students' responses? | | 5. How would you describe your student's musical response to the improvisation activity? |
| | What do the teachers think that improvisation in response to classical music stimuli might mean to the piano students? | 6. What do you think that the improvisation in this lesson might mean to your student? |
| | How do the teachers perceive challenges encountered by the students? | 7. What kind of challenges do you think your student encountered during this improvisation activity? |
| 3. How might the teaching practices of the teacher-participants change as a result of opening classical music to improvisation? | | The video and survey data collected in the first stage of data collection were considered as concrete evidence of teaching practices of individual teacher-participants before participation in collaborative inquiry. |

Appendix B

Co-Researcher, "Mind Mapping"

Appendix C

Opening Semi-Structured Interview Questions for Participants

| | | |
|---|---|---|
| | | *Thank you for taking the time to visit with me today. As I have mentioned, I am a doctoral student in Music Education at Teachers College.* <div align="center">**Outline**</div><ul><li>*I am particularly interested in your teaching practices as a music teacher. I'd like to visit with you about what you do, from your point of view – How you see your work, your students, and yourself.*</li></ul><div align="center">**Request consent**</div><ul><li>*I'd like to record our intervie, so I can go back over it later. Would that be alright with you?*</li></ul><div align="center">**Provide timeframe and outline for interview**</div><ul><li>*The interview will last about 30-40 minutes. Would that timeframe work in your schedule this afternoon?*</li></ul><div align="center">**Remind participant of rights**</div><ul><li>*You may certainly decline in answering any question at any time. Please let me know if you might like for me to refer to you by pseudonym.*</li></ul><br><ul><li>*Do you have any questions before we begin?*</li></ul> |
| *What previous experiences do piano teachers have in using improvisation in their curricula?* | Narrative of Experience<br><br>History of teachers' pedagogical practices | <ul><li>*Can you tell me a little bit about your experiences as a piano teacher?*</li><li>*Please tell me about your experiences in improvisation.*</li><li>*Can you tell me about any experiences you might have had in teaching improvisation?*</li><li>*Was there any specific experience that led you to join this group in exploration of improvisation?*</li></ul> |
| *What attitudes to piano teachers have regarding the potential for using improvisation in interaction with classical repertoire in their curricula?* | Pre-study attitude of teacher | *I have read accounts of certain widely held beliefs regarding the limited nature of improvisatory practices within the tradition of Western classical music, as currently practiced (Kanellopoulos, 2011; Nooshin, 2003; Sawyer 1999a). Show Kanellopoulos excerpt as data elicitation device. I'd like to see what you think of this particular quote:*<br><blockquote>*Music education's rather ambivalent attitude toward improvisation can, to a large extent, be attributed to the "monological voice of authority" imposed on music education by art music and the ideology of classicism that dominates its production, transmission, and consumption (Kanellopoulos, 2011, p. 114).*</blockquote>*What do you think are some of the points of tension related to the role of experimentation and improvisation in classical music?* |
| | Closing | <ul><li>*Is there anything else you would like to share with me about your experiences in improvisation?*</li></ul> |

Appendix D

Final Semi-Structured Interview Questions for Participants

| Research Questions | Purpose | Interview Questions |
|---|---|---|
|  | Introduction | *The purpose of this study is to inform a larger research project concerning classical music and improvisation, preservation and conservation on the one hand and creative freedom and transformation on the other.*<br>**Outline**<br>● *I am particularly interested in your teaching practices as a music teacher. I'd like to visit with you about what you do, from your point of view – How you see your work, your students, and yourself.*<br>**Request consent –**<br>● *I'd like to record our interview, so I can go back over it later. Would that be alright with you?*<br>**Provide time frame and outline for interview**<br>● *The interview will last about 30-40 minutes.*<br>**Remind participant of rights -**<br>● *You may certainly decline in answering any question at any time.*<br><br>● *Do you have any questions before we begin?* |
| *How do piano teachers create pedagogical and curricular strategies that open classical music to creative interaction?* | Question based on observation | ● *As I observed our sessions as a collaborative inquiry cohort, I noticed _____ (particular contribution made by interviewee). How did you create this strategy? (If applicable, how did you select pieces with which this strategy could be used?)* |
|  | Question based on strategies developed in Collaborative Inquiry | ● *Among the pedagogical strategies developed in our sessions together, which did you apply in your teaching?* |
| *How do the teachers perceive their students' responses?* | Teacher perspective of student response | ● *How did the student respond?* |
|  | Closing | ● *Is there anything else you would like to share with me about your experiences in improvisation throughout the course of our collaborative inquiry together?* |

Appendix E

Idea Bank: Final Semi-Structured Interview Questions

| Research Questions | Purpose | Interview Questions |
|---|---|---|
| How do piano teachers create pedagogical and curricular strategies that open classical music to creative interaction? | Question based on self-perception of contributions | *What was your favorite idea or strategy that you contributed to the collaborative inquiry and why?*<br><br>*How did this idea or strategy open a piece to improvisation? How did it function?*<br><br>*In response to the strategy, how did you improvise, making the piece your own?*<br><br>*How did you decide to do what you did during improvisation based on your strategy* |
| How do the teachers perceive their students' responses? | Teacher-participant perception of student response | *How did your student respond to the strategy, making the piece his/her own?* |
| How might the teaching practices of the teacher-participants change as a result of opening classical music to improvisation?<br>    How do teachers communicate their understanding of an intersection between improvisation and classical music?<br><br>    How do the teachers interpret the meaning of their own improvisations, in response to their own strategies?<br><br>    How do the teachers interpret the meaning of their students' improvisations, in response to the strategies? | Post-study attitude of teacher | *How does your improvisation compare with the source material?*<br><br><br>*What does your improvisation strategy make you think about?*<br><br><br>*What did your student's improvisation make you think about?*<br><br>*What would you like for a listener of your student's improvisation to think about?* |

Appendix F

Blog Post Prompts for Participants

| Research Question | Subquestion | Prompt |
|---|---|---|
| 1. How do piano teachers create pedagogical and curricular strategies that open classical music to creative interaction? | | Why did you choose this particular piece as a basis for improvisation? *Addressed during in-person sessions* |
| | | How did you decide to design the improvisation activity? *Addressed during in-person sessions* |
| | a. What are the teachers' experiences and reflections on improvising in interaction with commonly closed repertoire? | Blog Prompt 6). After this lesson, what would your next step with your student be? |
| | | Blog Prompt 7). Why would this be your next step? |
| | b. What do improvisational practices in response to classical music stimuli mean to the piano teachers? | Blog Prompt 8). What do you think might be interesting topics of conversation with your student immediately following improvisation? |
| | c.        What challenges do the teachers encounter in developing and implementing the creative strategies? | Blog Prompt 9). Please identify one or more times (e.g. 10' 33" or 10 min 33 sec) during the video during which you experienced challenges as a piano teacher. |
| | | Blog Prompt 10). Please describe the challenge(s) you identified above. |
| | d.        What are the teachers' perceptions of the instruction in terms of facilitating or hindering the students' exploration? | Blog Prompt 4). What aspects of the improvisation activity did you find most useful? |
| | | Blog Prompt 5). What aspects of the improvisation activity did you find least useful? |

| Research Question | Subquestion | Survey Question |
|---|---|---|
| 2. How do the teachers perceive their students' response? | | Blog Prompt 1). How would you describe your student's musical response to the improvisation activity? |
| | What do the teachers think that improvisation in response to classical music stimuli might mean to the piano students? | Blog Prompt 2). What do you think that the improvisation in this lesson might mean to your student? |
| | How do the teachers perceive challenges encountered by the students? | Blog Prompt 3). What kind of challenges do you think your student encountered during this improvisation activity? |
| 3. How might the teaching practices of the teacher-participants change as a result of opening classical music to improvisation? | | The video and survey data collected in Part A of the study were considered as concrete evidence of teaching practices of individual teacher-participants before participation in Collaborative Inquiry. |

Appendix G

SR-prompted Questions for Students

| Research Questions | Interview Questions |
|---|---|
| How do students respond to these strategies? | *How did you make this piece your own?*<br><br>*How did you decide to do what you did?* |
| How do students respond individually during lessons? | *What was your favorite part of your improvisation and why?*<br><br>Stimulated Recall prompts the student to describe the experience of improvising. |
| How do students communicate their understanding of an intersection between improvisation and classical music? | *How does what you did compare to what the composer did?* |
| How do the students interpret the meaning of the creative product? | *What does your improvisation make you think about?* |

Appendix H

Minuet from the French Suite No.3 in b minor, BWV 814 (1722) of J. S. Bach (1685-1750)

Appendix I

An arrangement of the Rondo in C Major from Divertimento for Strings and Two French Horns, K. 334 (1779) of W. A. Mozart (1756-1791)

Appendix J

An arrangement of an aria from the Peasant Cantata, BWV 212 (1742) of
J.S. Bach (1685-1750), arranged by Nancy and Randall Faber; In Faber & Faber Piano
Adventures, Lesson Book, Level 2B

Appendix K

Étude Op. 82, No. 65 of Cornelius Gurlitt (1829-1901), *Die ersten Schritte des jungen Klavierspielers*, The First Steps of the Young Pianist