AGAINST CONTEXT:
HYBRIDITY AS A MEANS TO REDUCE ITS IMPACT.

By
Tomasz Arnold

Faculty Advisor: Ronald J Kuivila

Readers: Paula Matthusen and Kate Galloway

A Thesis submitted to Faculty of Wesleyan University in partial fulfillment of the requirements for the degree of Master of Arts in Music

Middletown, Connecticut

May 2017
Acknowledgments.

I'd like to sincerely thank the following people:

My teachers:

Ron Kuivila
Paula Matthusen
Jin Hi Kim
Liz Phillips
Elliot Sharp
Noah Baerman
Barbara Merjan
David Nelson
Kate Galloway
Robert Morris

My friends and colleagues:

Omar Fraire
Lucero Alonso
Warren Enström
Hallie Blejewski
Jordan Dykstra
Matt Wellins
Andrew Colwell
Wan Yeung
Dave Scanlon

My family:

Artur Arnold
Maria Arnold
Jadwiga Arnold
Ryszard Arnold
Contents

Introduction ................................................................. 1

Chapter 1: Understanding Musical Hybridity:

Context and perception ............................................. 5
Genre and the production of meaning ......................... 14
 Appropriation and exchange
with the example of Robert Morris' Rapport ................... 19

Chapter 2: Exploring Musical Hybridity:

Village of Control – The analysis of cross-cultural references,
and the impact of ignorance on the failure of the realization
of musical Utopia .......................................................... 31

Cause there is no one like us and Scatter in the Sky:
Guilty Pleasure Self-Portraits ........................................ 57

The Conclusion with J.S. Bach ........................................... 66

References .................................................................. 70

Appendix 1+2 ................................................................. 72
Introduction.

How does our background influence the way we listen to music? What aspects of musical presentation shape musical perception? Can we perceive and compose sound free from the presupposed context that we operate within? Can we reduce the influence context has on an audience? Can we hybridize genres without the issues of miscommunication of musical meaning? If yes, what are successful ways of communicating this meaning? These are the questions that often arise in my work as a composer-performer, both when I compose music and when I think of how to program it with the work of others that I perform.

My musical interests have always been multi-directional, which resulted in exposure to a variety of influences, modes of musical thought, and performance practices. As a result, while both composition and performance are essential parts of my musical identity I have gravitated towards exploring different means of musical expression rather than subscribing to one style. Consequently, the two issues I face in my work are: how can I combine my varied influences in a meaningful way and what is the most effective way of presenting these combinations to the audience? At the same time I hope to keep my identity as a composer-performer intact and non-compromised.

These questions have led to my interest in appropriation and stylistic juxtaposition and a tendency towards hybridity within pieces and larger concert programs. I employ appropriation as a means to connect my own musical language with musical traditions, styles and cultures that I enjoy as a listener but haven't explored or internalized as a composer or performer. While close to my identity as a listener these interests can be far from my identity as a performer or composer. Thus, through this engagement with unfamiliar musical cultures,
I can slowly gain the knowledge and musical understanding that allows them to become parts of my active musical identity.

I have found juxtaposition to be useful in means of exploring my varied interests in my own work in composition and performance. I had concerns that if I enjoy performing Baroque and Renaissance music on solo marimba, I should probably separate those performances from when I want to improvise a drum-set piece or present a newly composed chamber work. If I want to play jazz, pop or techno, I should probably keep that separate from the “seriousness” of my “art music” pieces, or my presentations of established works of Western classical music. I should find separate venues and audiences for each of the projects I had in mind that would each explore one source of inspiration without running into a “danger” of having them cross paths with each other. However, it occurred to me after a while that if I don't have a problem with this combination of influences should others? This realization was the impetus for the idea of Hybrid Recitals that I started to organize in 2016.

The Hybrid Recitals juxtapose my works in different styles and genres with improvisation and transcriptions of classical Western music compositions from different periods. The recitals are solo performances with occasional inclusion of other musicians and/or fixed media. The first recital, entitled Hybrid Recital no. 1, was presented at Wesleyan University in May 2016 and included my electronic music pieces Micro Symphony, Birds and Significant Silence juxtaposed with works of J.S. Bach, Mark Applebaum, Ralph Towner, and Snatches of Memory (a piece I did in collaboration with my father). The second recital was entitled Happy Hybrid and included two semi-improved works of mine for drum-set and electronics (Cause there is no one like us and Scatter in the Sky), a chamber work of mine that involved non-western instrumentation (Village of Control), an electronic composition by
Robert Morris entitled *Rapport*, and Bach's E-minor lute suite transcribed for marmba. The third recital of the series *Hybrid #3 → Dance and Noise* included three pieces of mine: *Dance and Noise* – a piece for Cajon and electronics combining elements of noise with IDM (Intelligent Dance Music), *Intermission Music* – an IDM/Drum 'n' Bass track that was played during the intermission of the concert, *One of These Days* – a Jazz/Funk tune. The concert also involved transcriptions of lute music of John Dowland and harpsichord sonatas by Scarlatti, a study after Sam Pluta's piece *Switches*, and John Cage's *Child of Tree*.

It is important to mention that while juxtaposition is clearly a prominent element of the Hybrid Recitals, they are not focused on the sharp contrasts that can result from these juxtapositions. The Hybrid Recitals are about achieving musical hybridity through these sets of juxtapositions that I attempt to connect with each other in meaningful ways. I'm interested in keeping the identity of each musical work intact, and connecting them with one another into larger structures using my identity as a performer as the “glue”. In a way this idea of connection is similar to the work of DJs. The hybridity achieved by transitioning the juxtaposed works is my attempt to reduce the impact of cultural connotations these works carry and achieve listening experience based on purely sonic and kinesthetic elements of the music.

The Hybrid Recitals present one way I think about hybridity. However, many my pieces included in these programs are hybrids within themselves. They explore varieties of issues I face with my diverse musical interests. Some of them, such as *Village of Control* explore the concept of hybridity in terms of the cross-cultural exchange and appropriation. Others like *Cause there is no one like us* or *Scatter in the Sky* tackle on the problem of hybridity within the “taboo” genres that musically educated people often call “guilty
pleasures”. Others simply hybridize works of established artists that I admire. For example, my multimedia piece *Birds* appropriates footage and sound from Alfred Hitchcock's *The Birds*. Most of the works, however, are about connecting musical identities with each other rather than forging foreign musical elements into a new identity like in the case of works such as Steve Reich's *Drumming* or Jon Hassell's *Forth World*.

In the first chapter of this thesis I discuss the issues of musical context, perception, genre, and appropriation in the context of scholarly and musical work of others. Analyzing these issues, even though they are extremely broad and cannot be fully discussed in a short MA thesis, helped me understand how my hybridized works might be perceived by others, what kind of controversies or misunderstandings they could possibly trigger, and what kind of affective response they might provoke.

In the second chapter I analyze the three of my pieces that were presented in *Happy Hybrid*, and investigate how I addressed these problems in my own work. I present in detail the sources and inspirations for *Village of Control*, *Cause there is no one like us*, and *Scatter in the Sky* as well as my interactions with the musicians involved in them, and the dilemmas that arose during the compositional process or in performance.

In the appendix 1 I include scores and documentation of the works I discussed in the thesis, and programs for all of the Hybrid Recitals. In the appendix 2 I include scores and explanations for the other works that I have composed during my two-years in the Wesleyan University's graduate composition program.
Chapter 1: Understanding Musical Hybridity.

Context and perception.

To think about hybridity and juxtaposition as means to reduce contextual influence, I found it helpful to briefly consider how people perceive music and sound in general. The main issue here is how that perception is shaped by the context of where the sounds appear or what their origins appear to be. Some of the questions that made me pursue this topic are as follows:

- Is it possible to perceive music purely sonically and kinesthetically without the influence of social and cultural context?
- Is it possible to achieve genre hybridity using appropriation of existing musical materials as a compositional technique without it becoming exploitation?
- Can I think of musical appropriation in terms of a pursuit of sonic interest without any correlations to the cultural context connected with the subject?
- Does sonic interest itself carry a cultural context?
- Can juxtaposition be used to reduce the impact of cultural context by means of blending multiplicities? Or does juxtaposition lose its impact in the face of the constant stream of juxtapositions in recorded music?
- Or is it ultimately just a creation and design of a new context?

The issue of perception has been widely discussed. Andrew Hill unpacks this
problem in relation to context-based composition\(^1\) in his article “Listening for Context: Interpretation, abstraction and the real”. He constitutes context-based composition as being shaped by “real-world” sonic events that refer to something “extra musical” that exists outside of the sound itself. Further, he argues that those real-world sonic events do not possess a fixed, invariable nature but rather they are always shaped by an interpretation that is influenced by an individual's cultural background and past experiences.\(^2\) Coming from this argument, sounds cannot be perceived as universal, fixed entities but their perception will always be shaped by one's own history of listening.

The variability of perception is not shaped solely by one's background but also by the relationship of an individual to the sound that is produced at the given moment. In principle, the producer of the sound (whether a performer or a composer of fixed media electronic music) possesses all of the information on its source, purpose, date, place, application and such that went into its creation. Consequently, their experience is shaped by all of this background information. On the other hand, the individual that perceives the sound without any previously established knowledge has to rely on his/her imagination to infer the context that can influence their perception.\(^3\)

There are many aspects of what could potentially create a common or disjunctive perception of a sound event in a group of people. However, Hill argues that in almost any case a shared experience has to involve the sharing of a specific set of experiences that would

---

\(^1\) Andrew Hill explains context-based composition with a quote from Truax, Barry. *Soundscape Composition as Context-based Creation*. Organized Sound 22.1 (2017): 1-3: “Context-based practice can, among other approaches, range from sonifications, phonographic uses of field recordings, to site-specific installations, and abstracted soundscape compositions based in real-world or even virtual, imagined spaces.”


\(^3\) Ibid., 13.
shape the interpretation within a group of people in a corresponding manner. They do not have to share the specific context but they do need to share an experience of that context. The commonality can arise either from a natural, physiological experiences shared among everyone as humans, or from previously established cultural context that would be dependent on one's background. This is true both with abstract and concrete sounds.\(^4\) The commonality of lived experiences can create a shared context within which a common understanding of sound creation can form within a group of people. Without that understanding, however, the communication will always be variable, which means that one cannot assume the musical projection of a concept or idea to be understood globally.

The shared commonality is also apparent in the contemporary musical practices responding to Asian aesthetics such as the concept of *sawari* in Japanese music. *Sawari* has multiple meanings but the one relevant to this discussion is the act of coming into musical contact and understanding with a “foreign” element.\(^5\) An example of such foreign element could be some kind of environmental sound that one imitates during the performance (often with appliance of some kind of noise) to come in contact with the context of the world around them. Takemitsu describes his encounter with such an example through a performance by a shakuhachi master he dined with in a small Japanese restaurant. Between them was a gas burner with a pot used to cook the Japanese dish called sukiyaki. The master performed a piece on shakuhachi and explained that his performance goal was for Takemitsu to be able to hear the shimmering of cooking sukiyaki through the music.\(^6\) The master adapted his sound

\(^4\) Ibid., 14-15.
on shakuhachi in response to the sound of the environment to create a shared experience of
the immediate context between himself and his audience.

The discussion of context in the perception of sound does not limit itself to the
consideration of physical sound production but also to the place in which the sound is
produced. The place of the performance, just like the source of the sound can have relevance
in the dynamics of the individual or shared understanding of a musical context. The
understanding and perception of place seems to be of a highly individual and experiential
nature just as the previously discussed concept of perception and understanding of context.

Edward Casey's concept of “place” will facilitate this consideration. According to
Casey what comes with the word “place” can be understood as much more than just a region
of space where things happen. Place is a “gathering” of experiences and memories that
conjure together in space-time, “the very power of emplacement to bring space and time
together in the event.” Therefore, the framework of “place”, just as the perception of context
in sound production, depends largely on individual experience and interpretation. The various
elements that can contribute to the creation of “place” are: feelings, memories, emotions,
habitual actions, or sensory perception therefore making “place” dependent on the
relationship between the perceiver and perceived. Further, our natural ways of perceiving the
world around us are based upon the concept of how we “move in space” both physically and
intellectually, which then has an impact on how we create “places”. However, the creation of
places often happens through accumulation of seemingly unimportant experiences that we

---

7 Casey, Edward S. “How to Get from Space to Place in a Fairly Short Stretch of Time: Phenomenological
Prolegomena.” In *Senses of Place* by Steven Feld, Keith H. Basso, 13-52. (Seattle, Santa Fe, N.M: School of
American Research Press, 1999), 38.

gather subconsciously but which carry with themselves the building blocks for the highly individualized design of a “place”: “I do not decide to ‘make’ places when I relocate to a new town but gradually, through quotidian, knowledge-gathering movements, begin to map them, through my connection to them: the dog-walking fields; the market with the excellent bread stall; the road with the terrible potholes.”

Katherine Norman in her article “Listening Together, Making Place” argues that even though places seem to be created highly individually, they can also be thought of as a collective act of shared experiences because the ways in which we perceive the world are always interdependent on the experiences of others who at some point in space-time shared our particular endeavor in the place-making process. Concert performance can be viewed as an example of the collective creation of a place. The performer interacts with the environment created by the audience at the same time providing the audience with the common “place-shaping” material. That interaction leads to the creation of a concert environment specific to the location of the event, and the generally agreed social and experiential content shared between the audience and the performer. The overall result leads to yet another set of influences that can play an important role in shaping the musical perception of the collective.

In his article “The Impact of Recording on Listening,” Eric F. Clarke suggests that perceiving sounds can be thought of in terms of problem solving. The varied sound signals enter our auditory system in the everyday life situations, are then sorted out to remove disruptive elements and sustain the ones that contribute to our perception of reality. The elements that we keep then contribute to the creation of the mental picture that completes the
process of perception. Consequently, the sounds that we cannot recognize create a tension
that we attend to by inspecting the source of sound in the pursuit of solving a potential
problem posed by this confusion. The perceptual acts from our experience of the concrete
sounds of everyday reality influence our interpretation of abstract sounds such as music.
Therefore, our problem solving attitude naturally carries from everyday life to the concert
hall. However, the nature of the “place” created by the social context of a concert hall
considerably compromises our problem solving instincts and harnesses them leaving us
constrained by the situation that then has a direct impact on our musical perception: “...the
interdependence of perception and action...is significantly ruptured in the concert
hall...leaving listeners unable to act, or prohibited from acting, upon the events that they
witness...” The argument that Clarke makes here is that this dynamic of perceptual and
social constraint leads to a “contemplative perceptual attitude” as the whole situation makes
the listener “subject to the flow of perceptual information, powerless to intervene in any
way”.

The whole issue of perception influenced by the social constraints gained an entirely
new perspective with the invention of recording. The acousmatic nature of recordings
provided an opportunity to hear sound entirely out of context for the first time. The source of
the sound production is entirely out of sight of the listener, yet the acoustical properties of
recordings create an illusion that the source is right next to them. The ultimate source of
sound cannot be examined physically and so the music perceived in that way gains an extra
element of abstraction. Clarke notes Denis Smalley and Luke Windsor's argument that this

13 Ibid., 49.
disjuncture and increased abstraction provokes an especially intense auditory involvement.\textsuperscript{14} The availability of recording and reproduction of sound in today's culture has increased the presence of music in everyday life to a state of near ubiquity. That has had an impact on our understanding of music and its role in culture. The opinions on whether that impact is positive or negative differ. Clarke discusses Hans Keller's view that the reproductive nature of recordings stands in sharp opposition with the fundamentally creative nature of musical performance. Further, he argues that the ability to interrupt and resume the listening process as well as the ubiquity of the presence of music both as foreground or background has devastating effects on our ability to concentrate and so diminishes our quality of listening.\textsuperscript{15} On the other hand Anahid Kassabian in her introduction to \textit{Ubiquitous Listening} argues that the ubiquity of music that fill our days even though listened to without any primary attention still produce an “input of senses” that results in affect: “Once apprehended, the responses pass into thoughts and feelings, though they always leave behind a residue. This residue accretes in our bodies, becoming the stuff of future affective responses.”\textsuperscript{16}

The availability and the acousmatic nature of recording created an enormous possibility for decontextualization of music that is utilized not only as a creation of new artistic projects but also as a valuable economic and social strategy. An example of such usage is Muzak that began to be deployed in public spaces from around 1940s. Muzak is a type of music displayed through the means of recording and intended to provide a music

\textsuperscript{14} Ibid., 50.
\textsuperscript{15} Ibid., 52.
background for various types of spaces and scenarios. The musical content of Muzak is
dependent on its designated purpose depending on the characteristics of a place and the type
of people to attend it. The common purposes of Muzak are for instance to increase
productivity in factories or increase receptivity of customers in the commercial retail places.17

Muzak has been widely used since the mid 20th century but from around 1990s it
gained a new purpose as it became a “...deliberate form of aesthetic aggression, aimed at
alienating groups of potential listeners.”18 Jonathan Sterne discusses Muzak and the changes
in its usage in his chapter “The Non-aggressive Music Deterrent.” He argues that in the 1990s
the retail companies shifted their interest of the product by choosing Muzak's content not in
accordance with what they think their desired customers would enjoy to listen to but rather
with what their unwanted customers would feel uncomfortable with. Since then the dynamics
of Muzak's utility in public space expanded to include the premise of “domestication of a
public space” to “non-aggressive music deterrent” as Muzak's primary purpose started to
encompass discouraging certain unwanted social groups (such as teenagers, drug dealers,
homeless people, prostitutes and such) from loitering in the public spaces.19

Muzak's choice of the musical material is based entirely on the concept of familiarity.
In order for Muzak to work properly, the musical examples have to contain material that has
already been heard or is a familiar genre.20 The costumer who is exposed to the sounds of
Muzak does not necessarily have to be familiar with the specific musical example to be

18 Sterne, Jonathan. “The Non-aggressive Music Deterrent.” In Ubiquitous Musics: the everyday sounds that we
don't always notice, edited by Marta Garcia Quinones, Anahid Kassabian, Elena Boschi, 121 – 137. (Burlington,
19 Ibid., 125.
20 Ibid., 123.
affected by it but rather with the specific context that is associated with that example. For instance Victoria's Secret is one of the world's most successful dealers of “classical music”. The context that many consumers associate with classical music helps the store's lingerie to appear “classy” as well as prurient; just as 50s rock and roll hits can give a hamburger joint an “all-American feel.”

Muzak's success can be interpreted as coming from the recognition that using familiar music as context can create “places”. Thus the decontextualization of the original music enables its use to simulate what is imagined as its lost context. The designated group of people that can properly interpret the context of the presented musical material would then create a “place” in the public space that would be comfortable for them while possibly deterring others. Muzak clearly exemplifies how context in sound perception can have a powerful shaping influence on the social dynamics, an example of sound's profound entanglement with cultural background.

Creating a comfortable place for people to perceive the applied context of a musical performance or sound installation seems to be one of the key features of a successful music marketing strategy. Working against that principle can create a potentially interesting (or dangerous) perceptive outcome for the designated group of listeners. Further, the unique nature of background that shapes the perception of each individual provides yet another element of variability inside even the most established targeting intentions. Therefore, it seems that the outcome of music that uses frequent perceptual changes or foreign contextual elements will most likely be unpredictable and a subject of experimentation rather than a foundation for a clear projection of an idea. Unless, the idea itself is to confuse the listener.

21 Ibid., 126 – 127.
Genre, and the production of meaning.

With the great amount of variability in the process of sound and musical perception comes the need to parse incoming sound into meaningful sets of stimuli. While musical perception is highly individuated it is nevertheless shaped by the context. Thus, to be able to understand musical content collectively, a group of people need some kind of language of correspondence. This is where the concept of genre originates. “Genre is an aggregate of the means for seeing and conceptualizing reality.”

Genre has been described by John Frow in his book *Genre* as an element that's necessary for the construction of meaning. For instance, anything expressed in writing requires the reader to possess knowledge that informs their interpretation of the text. Genre is one of the ways that knowledge is organized. Therefore, genre can be thought of as the most basic condition for the meaning to take place within. While Frow discusses this in the context of writing I believe that the same reasoning can be applied to music.

Of course, the understanding of genre itself is not universal and may shift or veer depending with the context. In the case of music, genre can be understood as referring “to a particular kind of music within a distinctive cultural web of production, circulation, and signification.” So musical meaning can be derived from genre because “genre is not only “in the music,” but also in the minds and bodies of particular groups of people who share certain conventions.”

Because of its embodiment in social structures and conventions genre

---

23 Ibid., 7 – 10.
25 Ibid.
can appear to listeners as a “natural” attribute of music.

Genre is often considered as a necessary boundary for artistic creation. As stated by Friedrich Schlegel: “Without division, creation does not take place; and creation is the quintessence of art.”26 Further, genres are not only the “restrictions” placed upon artists to create works but are deeply embedded in any artistic or informational creation. In other words, genre does not exist because we categorize information after perceiving it, rather it enables us to receive that information in the first place and exists a priori of its name: “The singer sings the genre(s) of his music. No need to wait for some academic to come along and theorize it (them) for him... genre is only secondarily an academic enterprise and a matter for literary scholarship. Primarily, genre is the precondition for the creation and the reading of texts.”27

Genre, however, seems to be commonly associated with the idea of categorization, and is often met with skepticism, appearing to some as narrow-minded. This can provoke the desire to break categorical paradigms28 and hybridity is a way to undermine categories while retaining genre as a tool for organizing perception. Thus, hybrids seem to form as artists make room for their individual needs and considerations within a genre. Hybridity may then take many different forms and shapes, and be pursued with the particular generic entanglements that a particular musician may want to experiment with.

The techniques, guidelines and possibilities for genre hybridization are discussed in detail in Robert Bentall's article “Methodologies for Genre Hybridization.” Bentall writes

27 Ibid., 250.
about the specific musical trademarks that constitute a particular genre (such as specifics of rhythm, harmony, melody, timbre, etc.), and then provides the possible solutions to work against these establishments to create hybridized forms within the medium of electronic music. The examples of such techniques include manipulations such as including an oboe player in a conventional rock band. Bentall claims that because the line-ups for rock bands (vocal, guitar, bass, drums) are strongly identified with the genre, the inclusion of an oboe player would automatically hybridize the rock genre with Western classical. Same goes for an inclusion within a popular music song any time signature other than 4/4 or 3/4.29

The establishment of a genre in popular music, however, goes deeper than a simple usage of specific instruments or drum patterns. The boundaries are placed within multiple different elements inside a song both in its musical content and the lyrics. Bentall writes about the pre-established timbral elements such as playing on correct sort of guitar, in the lowest register of the instrument and with an appropriate tone to be able to fit into the pop genre.30 Changing any of these parameters would lead to hybridization. Another example could be the spectral placement of chordal sequences in the electronic dance music tracks, which usually appear within the mid range of the song, so they don't interfere with the bass line and the vocals. Bentall proposes the technique of switching registral placement within a dance song as a possible technique for its hybridization. For example, how it would change a song by just switching the registers of bass line with the melody or shifting the placement of chordal sequences so they constantly interfere with the bass line or vocals.31

The issues with generic specificity in song lyrics are mentioned in *Music Genres and*

---

30 Ibid., 119.
31 Ibid., 120 – 121.
Corporate Cultures by Keith Negus. He writes about his own experiences in writing songs for a band with the need to fit into very particular genres. The first attempt to introduce his songs was met with certain amount of acceptance but also criticism that they have resembled Paul McCartney too much. This is the solution that Negus found: “Somewhat irritated I went away, brought my limited knowledge of Deep Purple to bear on a riff stolen from Lou Reed, put it through a fuzz box, wrote about a rock band who cause minor havoc in a rundown hotel, and called it Rock Mansion Hotel— it was instantly accepted by the band.”32 By simply understanding the generic constraints of his band members, and finding a simple solution to fit within them, Negus was able to gain acceptance from the band.

The generic constraints seem to claim a broader means for compartmentalizing music within specific social groups but also have their aspects of individuality. The boundaries of a particular genre have to be in accordance with what particular individual imagine them to be. As Negus writes: “I have subsequently come to believe that the most successful bands knew exactly what genre they were playing, recognized its musical and social boundaries and understood what their audience wanted to hear, see and be told.”33

What happens though when genre boundaries are distorted to the level that hybridization itself becomes a genre? A situation like that could potentially lead to various sets of miscommunication. Negus talks about some genre miscommunication issues from the time he was playing in a band. Those issues would often result in opinions such as: “you are too poppy for this place”. Eventually he says that his band grew to understand the genre boundaries of their venues, which allowed them to adapt programming decisions to their

33 Ibid., 5 – 6.
specific venues. This knowledge included recognition of venues that would allow them to be “poppy” or where they could get away with “extended jams” or heavy sound. Genre as the most basic form of communication in the musical industry is also stressed in Fabian Holt's book *Genre in Popular Music* where he writes: “The apparatus of the corporate music industry is thoroughly organized in generic and market categories. From the moment an artist starts negotiating with a major label, he or she is communicating with a division specializing in a particular kind of music, and the production then follows procedures of that division before finally the music is marketed and sold as a product with a label and registered with a generic code in the database of retail stores.”

The issues with communication and mutual musical understanding become even more complex when the work attempts to not only lie between genres but also between musical cultures. One challenge with such composition is conveying the musical intention to the performer and then from the performer to the audience. Naturally, the variety of backgrounds of the performers and audience members involved precludes any certainty of success. And any attempt to compose a work explicitly drawing on multiple cultures raises issues such as the ethics of appropriation, the nature of cultural exchange and the specificity of context including the power relations between the cultures involved.

---

34 Ibid., 4.
Appropriation and exchange.
With the example of Robert Morris' Rapport.

Rapport is an improvisational composition for live electronics where the performers are mixing and processing pre-recorded “world music” tracks provided by the composer. It was composed in 1973 by Robert Morris, then a teacher at Yale University, to be performed with his graduate student and friend David Mott. The original version of the piece (from 1973) was created at the Yale Electronic Studio using a four-track tape deck, an ARP analog synthesizer, a reverberation unit, a tape delay system, and stereo sound. The revised version from 2010 is a MAX patch with digital delay system and digital synthesizer based on the ARP. The original version was intended for a performance inside the electronic music studio for the personally invited closed group of friends, colleges and music enthusiasts (up to 20 for one performance). The 2010 version can be performed at any concert venue with any number of the audience members or to be presented as an installation. In this section I will explore both versions of Rapport in the context of their usage of appropriation, how it changes with the performance setting and how it gets justified with the concept of meta-composition and the “Music of Musics”.

The basic sound material of the piece consists of four pre-recorded tracks of the

---

36The term “world music” as explained by Robert Morris in Remembering Rapport from the Open Space Magazine, issue 12/13, Fall 2010/Winter 2011: "The term “world music” is a bit of a catch all, but it aptly replaces problematic older terms such as “ethnic”, “primitive”, “non-western”, “non-classical”, “vernacular”, etc. A more limited predicate for “world-music” is “fusion”, where musicians of different cultures play music together”.

37See appendix for the written instructions for both versions of Rapport. Please note that in the instructions for the new version Robert Morris calls the 2010 version as 2012 because that was perhaps the year when he wrote the verbal instructions. However, he made the MAX patch in 2010, which is why I will call this version as such. 2010 was also the year when the album with both versions was released.

38As explained in the set of instructions for 2010 version. See the appendix section.
excerpts of music from different parts of the world (traditional folk music, ritual music, court music, Western classical music, jazz, pop and so on). The excerpts are different on each track and do not repeat. Performer 1 chooses the tracks played throughout the performance. This can be a single track, or a mixture of two, three or four all together. Tracks can be played in their original form or mixed through the delay system that creates streams of delays resulting in canons of varied complexity. They can also control the panning and reverberation. Player 2 processes the mixed tracks using the synthesizer that allows for frequency modulation, ring modulation and saw filter (lowpass filter with variable center frequency and resonance) with various chosen or automated processes within. The resulting sound is a blend of varied musical material from all over the world with electronic processing functioning as a sort of “glue” that connects the different excerpts being juxtaposed.

The impetus for Morris to work on Rapport was the music of Karheinz Stockhausen that uses appropriation (such as Telemusik or Hymnen) and the usage of tape delay system in works of Pauline Oliveros (such as I of IV). Morris' interests in non-western music dates back to his teenage years and eventually lead him to explore non-western materials and techniques in his own compositions. He started experimenting with scales that he read about in Alan Danie'lou's book North Indian Music when he began his studies at the Eastman School of Music: “When I finally got to Eastman, I found that these scales that I had read about in Danie'lou were very interesting and could be used in composition. I began to fool around with them and by the time that I was 18 or 19, I had a way of “polyphonizing” these things and putting them into Western forms.”\footnote{Kyr, Robert. Transforming Voices – An Interview with Robert Morris. http://lulu.esm.rochester.edu/rdm/Inter.html} After further studies of non-western music, Morris faced
a compositional crisis because he found it difficult to connect the concepts underlying his compositional training with the musical ideas he encountered in other traditions. His worries were that no matter the technique he used to find those connections, his efforts would always remain ethnocentric and he would be limited to creating musical “colonies” within these vibrant traditions. He resolves this by identifying electronic music as a sort of “neutral field” where music of any genre could coexist: “My work in the electronic medium helped provide a provisional solution for my dilemma. Electronic music was a sort of neutral playing field where anything was possible, limited only by issues of technology.”

Morris' justification for appropriation goes beyond the identification of recorded sound as an object that can be manipulated regardless of its origin and ownership. He cultivates the concept of an “exchange of goods” where, because both parties get some kind of benefit, the appropriation becomes a collaboration. Perhaps one of the most obvious examples of such exchange is obtaining permission from the owner in exchange for a material, emotional or intellectual benefit: “The issue is somewhat reduced if you do reality checks with the musicians with whom you collaborate, or whose music you use in your own work. So if I use a shenai recording in my work, if the player who made the recording approves, or doesn't care, or is happy about it if his/her name is mentioned in notes, or receives payment, then it is OK.” The situation changes if the maker of the music to be appropriated does not understand the context of the appropriating work or the usage that will be made of his or her music. In that case there is a possibility of a covert colonialism despite the previous agreement between the parties. In the case of Rapport, however, none of the

---

musicians are credited in the score of the piece, and consequently remain anonymous.

The concept of exchange, although mentioned by Morris as the simplest way of justifying the usage of appropriation and depriving it of colonialism, has no direct application in his piece. Because of the lack of credits and permissions for the usage of appropriated music, Rapport does not offer any kind of benefit to the creators of the subjected material in exchange for its musical content. Morris explains that he felt guilty about his approach in appropriating world music in Rapport until he gained an understanding of how the musicians in India often use the traditions of Western music and its scholarship without asking, to help them gain recognition. In that way, one could conclude that there is some sort of established non-written “agreement” between the West and the East where the music or musical tradition could fluctuate freely giving each side some kind of very generalized concept of benefit, which would then make the exchange of goods function without the necessity of verbal or written permission: “In my case, I do not credit each performer on the source files in my notes on the piece, or at a performance of the piece, so I am guilty of using music without exchanging something for it. I worried a lot about this until I saw that performers from other traditions use Western music for their own purposes without asking, too. More pertinently, in my interactions with Indian musicians, they get recognition because a Western musician/scholar is involved in their music, so the benefit goes both ways.”

Another aspect of Morris’ explanation of justifying appropriation in music links to his understanding of the musical practices in India. After living there for some time and acquiring what he called “street cred”, his understanding of the concept of musical borrowing has changed. His view formulated that certain musicians have a natural right to borrow music

---

42 Ibid.
of others if there is a previously established connection between their music and the subject of appropriation. The idea links to the concept of “homage” where, for instance, a Western music composer may quote iconic pieces of Western music in his own work. The idea touches on the concept of works of Western music being embedded so deeply in the Western music tradition that a composer working within that tradition automatically gains permission to quote them without asking for it: “If I quote a passage from Beethoven in one of my pieces, I do not need Beethoven's OK (not only because I cannot get it since he is dead), but because as a Western composer I have a sort of license to borrow music if I do it with respect.”\textsuperscript{43} The roots of that approach go back to the very beginnings of Western music in the pre-copyright times (before Haydn) where the concept of musical plagiarism simply did not yet exist.\textsuperscript{44}

Morris, however, bases the concept of homage on the Indian music practices where a student studying with a guru establishes a bond with his master that allows him to then create music in his master's style: “...in other cultures, when a performer has studied with a master teacher (guru) for some time, there is a bond that is not broken by playing music in the master's style without mentioning it—in fact, playing music not in that style may be seen as transgressing that bond.”\textsuperscript{45}

Finally, the main factor that functions as means of justification of the usage of appropriation in \textit{Rapport} is the very nature of the piece itself, which Morris calls “meta-composition”. He explains meta-composition as “a collection of rules, materials, technologies, and practices that produce compositions or improvisational results.”\textsuperscript{46}

\textsuperscript{43} Ibid.
\textsuperscript{45} Morris, Robert. “Rapport Question”. Message to Tomasz Arnold. Nov. 20, 2016. E-mail. See Appendix 1.
\textsuperscript{46} Ibid.
Consequently, a successful performance of *Rapport* depends not only on Morris' compositional and technological work but most importantly on the abilities and creativity of its performers. The piece (in its 2010 version) is very accessible for anybody who has a basic understanding of computer technology. Hence, it can be performed by any musician regardless of their background or the musical tradition they associate themselves with. This element of excessive compatibility makes subsequent performances of the piece different from one another depending on the performers. The general time deployment of material will be consistent but different musicians are going to have different relationships with the appropriated material, and consequently are going to react to it in various different ways depending on their background and ability to manifest their reactions in their performance. Morris acknowledges that these variable characteristics of *Rapport* make the piece impossible for him to fully claim ownership for. Thus, it could be concluded that this relationship of the core idea to the performative aspect of the piece automatically clears *Rapport* of the label of being colonialist: “Rapport is not something one can own in the same way I own a composition of mine notated in a score. And moreover, Rapport's success depends not only on its conceptual base as configured in its rules, materials, technologies, and practices, but on the people who use it to make a piece or improvisation. Considering the source music on the sound-files from this perspective means that if an Indian musician plays Rapport, then there will be some music from his/her tradition on the source files, just as when you or I play Rapport, where there is some new music on the source files. Also, when this Indian person plays Rapport his/her (traditional and practiced) way of hearing and playing will guide the piece differently from when you or I play it.”47

47 Ibid.
Morris himself talks about the piece in the context of the term “Music of Musics”. He provides the varied musical material, and performers then navigate them through the development of the piece making music that is solely about that material. The idea of making music that's purely about other musics is in Morris' view a celebration of music making “as it is” with all of its conceptual and emotional similarities cultivated in its sound, and not necessary in its cultural or geographic placement: “all these different musics from all over the world blending and succeeding each other in beautiful, subtle ways with the electronic sounds supporting and contributing to the texture without seeming artificial or inappropriate. It felt as if we [were] guiding all these musics to cooperate and make a music of musics.”48 One might wonder about the nature of interest and underlying goals of music of musics. Is the goal to create a new relation to the musics constituent of the piece congruent with the goal of Muzak or non-western music used in a film score? Is the goal to help listeners feel compelled to investigate the constituent musical sources? Or is there no particular goal other than experimenting with sonic interest?

The considerations of how performance setting and context affects the perception of Rapport and its relation with the usage of appropriation goes beyond the purely performative aspects discussed above. The issue also touches on the technological undertaking and its differences between the versions from 1973 and 2010. At the early stages of the piece's development Morris was considering the question of how Rapport, being so different from what was then thought of as a “typical” academic concert art music, is going to fit into the concert setting paradigm. The differences were that Rapport (in addition to its world music associations) was intended to be “wandering” and not have any clear direction or path of

development: “Part of my worry about the piece had to do with the kind of experience I wanted to project. This was not going to be a gripping concert piece with architectonic structure and a climax just at the “right” moment. The piece I had in mind was much more intimate and fluxy than concert music.” Rapport was not necessarily meant to be heard by many people but rather by those who shared Morris' passion for cross-cultural collaborations and would be hearing the piece with an open-minded attitude, and possibly willing to engage in discussion about it. This social boundary was reinforced by the difficulty of accumulating the technology needed for the piece. That is why, in its original form, Rapport was intended to be performed in an intimate setting of Yale Electronic Studio that could comfortably accommodate up to twenty people for one performance. Six performances were given in 1973 for the one hundred personally invited people from among Morris' and Mott's friends and colleges.

In its 2010 version, Rapport no longer poses such technical difficulties. One laptop with MAX/MSP, MIDI keyboard and a stereo PA system is all that is needed for a successful performance of the piece. Morris created the 2010 version after years of the piece being abandoned following the initial performances. He met again with David Moss to revive Rapport in 2010 with the new digital version. The original tapes with the world music excerpts have decayed, so it was necessary to gather new material, and record it digitally. Together with the excess of resources in the 21st century, the new sound tracks involve a much more varied and rich musical material than the original analog tapes from 1973. However, with the accessibility of the new version, the piece no longer needs to be presented

49 Ibid., 225.
50 Ibid., 227.
in an intimate studio space but can be brought into any concert venue (including the traditional concert hall). I don't believe that Morris' concerns for the presentation of *Rapport* continue to bother him as in the program notes for the 2010 version he himself mentions that the venue for the presentation of the piece is up to the performers to choose.\(^5\) The general devaluation of recorded music brought about by its ubiquitous availability as well as the development of music and musical thought from 1973 to the present has transformed the traditional western concert experience enough to accommodate music such as *Rapport*. However, the experience of performing and listening to the piece in the traditional concert setting with the clear division of performance and audience space is certainly different from the intimate atmosphere of the 1973 performances. Those considerations were the core idea for my interpretative decision (when I performed the piece with Omar Fraire on my recital *Happy Hybrid*) to bring the performance of *Rapport* into the seating area of the Wesleyan's World Music Hall to somehow recreate the intimacy with the audience that was originally intended for the piece. The accessibility of today's technology, even though it changes the perception of the piece considerably, is more in accordance with the piece's idea of being feasible for any performer regardless of their background. Even though *Rapport* in its 1973 version could in principle be performed by anybody, as a practical matter it needed performers with substantial expertise in electronic music technology, others would simply not know how to go about making the piece.

In the 2010 version the compact nature of digital technology eliminates most of the theatrical elements of the original piece. In the 2010 version, two performers just sit in front of a computer pressing buttons while the original required the physical engagement of

\(^5\) See the 2010 version score in Appendix 1.
patching cords and adjusting the sliders on the ARP synthesizer. The size and magnitude of the analog equipment required greater corporeal involvement and commitment. In a way, one could conclude that because of performers' relationship to analog sound during the realization of the first version of Rapport, the concept of the treatment of the appropriated material as sound on its own right is much more transparent than when dealing with digital technology. On the other hand, the increased accessibility of the digital version made the concepts of transethnic performance and “shared ownership” function much better than with the analog version.

If we lay out various aspects of Rapport from 1973 and 2010, we can notice elements that shape the perception of the piece and its relationship to the issues of appropriation and musical colonialism in both versions:

- The intimate setting of the 1973 version where people were able to observe every part of the performance closely as well as ask detailed questions about it made the piece interesting visually. While the intimate performance setting can be continued with the 2010 version, the usage of the equipment is not nearly as intriguing as in the first version, and so does not invite the same kind of curiosity (unless someone would be interested to dissect the MAX patch but then they would have to have previous expertise to understand it).

- The accessibility of the 2010 version provides an opportunity to explore any kind of performance setting making the piece much more diverse in terms of its possible perception and contextual complexity. Further, it also makes the piece available to be performed and received by the members of different cultures and places around the world, which seems to be one of its compositional goals.
The evolution of the musical thought and concert practice in the 21st century makes the piece's usage of world music and its “wandering” nature less controversial. However, it can also result in reduced interest for the musical relationships presented in the work, and ultimately make the listening experience less fresh and intriguing to some than it might have been in 1973.

The increasing hybridity and globalization of music in the 21st century makes the issues of appropriation in the 2010 version somehow less transparent (especially if we consider the digital reproduction technology and the excess availability of data).

These are only a few from the vast universe of cross-cultural and perceptual discussion topics that a piece such as Rapport can trigger. Issues such as appropriation, colonialism, copyright, ownership, perception, diversity, context and so on, are especially transparent with Rapport's extensive usage of world music recordings and the way they are manipulated throughout. The differences between what's a “borrowed” material and what would be considered musical thievery are vague and subjective, and cannot be answered with just one musical example (or perhaps cannot be answered at all). The possibilities for variability in musical perception in such cases are vast. The potential issues with transmission, communication and understanding are omnipresent. Much scholarship has been done on such issues and they have been considered from many possible angles. However, I still think that whether we decide that further discussion of these topics is useful or not, the works such as Rapport will always remind us of the subjective nature of musical perception, contextual complexity and cross-cultural communication. Those issues will remain based on one's musical understanding, past experiences, knowledge, degree of cultural conservatism as
well as something as mundane as pure interest and open mind.

In a way decontextualization and juxtaposition of musical contexts is the characteristic of contemporary culture that's inescapable. The excess availability of recordings we listen to in everyday life, various media sources such as youtube, bandcamp, soundcloud as well as the ubiquity of Muzak, radio broadcasts and TV screenings are only a few examples of such decontextualized musical juxtapositions. My goal when working within this reality is to embrace it and find successful strategies of navigating these juxtapositions in ways that lead to hybridity without the exclusion of any possible combinations. Works such as Rapport are congruent with my musical goals because they, too, seek for the unification of genres while keeping their identities intact. My response to this concept of unification is through performance and connection that's included in my own interests and instrumental abilities within each identity. Hybrid Recitals and works of mine that I'll discuss in the following chapter are all part of an ongoing project of understanding this diverse musical reality and navigating through it in honest and enriching ways.
Chapter 2: Exploring Musical Hybridity.

*Village of Control* – The analysis of cross-cultural references, and the impact of ignorance on the failure of the realization of musical Utopia.

In its original form *Village of Control* started from an idea similar to Morris' *Rapport*. My interest in the vast variety of musical languages and cultures has led me to the creation of a piece that would explore those cultures while trying to avoid ethnocentrism or colonialist overtones. Taking advantage of the Wesleyan's world music program with its diverse group of musicians, I searched among my colleagues for performers experienced in non-western instrumental or vocal techniques. I ended up with an ensemble consisting of: an overtone singer (fluent in Khoomei style of singing), Chapareke,52 Pipa, Marimba, Bass Steel Pans and Gamelan. The choice of this unusual mixture of instruments was based on the availability of experienced performers (in the case of the overtone singer, Chapareke player and Pipa player), and purely coloristic values (in the case of Marimba, Steel Pans and Gamelan).

The realization of the originating idea of creating a “non-aggressive” cross-cultural environment inside a piece of music turned out to be a failure because during the process of writing the piece, I consistently kept failing to remove my compositional personality from the creative process. In its original form, the piece was going to be a clash of cultural identities governed by the performers who would take control over the musical material working within each identity. In an attempt to gain a better understanding of each identity, I studied what

---

52For detailed information on the chapareke see the performance notes section of the score for *Village of Control* in the appendix.
appeared to me as its “iconic” repertoire. In retrospect, I realize that this approach, with all of its good intentions, worked against my original concept of the piece. The further I progressed in my studies, the more specific my musical ideas became, leading to an increased control over the material coming from me as opposed to the performers I wanted to work with. As a result, the piece, which originally resembled Morris' concept of a meta-composition became a fully-notated work of what some could call “concert western music”. What continued to stay faithful to the original vision is the piece's non-western instrumentation and perhaps just a little bit more indeterminacy in the musical material than what one could find in most of my other pieces.

As I kept working, I started to gain an increased awareness of the complexity of my original idea for this piece. I slowly started arriving at the conclusion that, while it might be possible in some cases, it is certainly impossible in my case to fully refuse exerting control over the material. If we strip the idea down to its very basics, we could already draw a conclusion that the most basic governing element of the compositional process (which in this case was to find an interesting group of musical cultures and put them together) could already be considered as an assertion of my own power statement influencing everything that followed no matter what my intentions were. This realization made me abandon my original Utopian idea of the cross-cultural altruistic sound environment. Instead, I accepted my inevitable control over the piece, and started searching for ways in which (while still being the governor) I could give certain elements of power to the players and their styles over one another, and navigate their mutual influences in a meaningful way.

The piece's musical material is drawn directly from the performance practice of each performer, and deployed in the instrumental pairs. The pairing is dependent upon the
workings of the instruments and the influence that they create upon the structure of the piece. The overall sequence of the pairs presents itself as follows (starting from the most influential):

1. Overtone singing with the chapareke – the overtone series made evident by vocal resonance is the most prominent melodic element of each of these and determined their pairing. The two appear as the most influential as thanks to their nature, the overtone series became the basis for all of the pitch material in the piece. The overtone singer's part is always in the foreground. The chapareke part appears as a background only when the overtone singer is featured as a soloist and never as a supporting part for any of the other instruments.

2. Pipa with Marimba – no elements of these two instruments have a direct influence upon the structure or basic musical material of the piece. Structurally, their parts are of secondary importance. The pointillist nature of the sharp attack and decay of their sound production functions as a contrasting material to the fluid nature of singing and bowing on the chapareke. Within the pair, however, the marimba plays a supportive role to the pipa as most of the motivic material of the pair is generated from my observation of the musical gestures from the pipa repertoire. The pair also provides the contrasting contribution of equal-tempered tuning to the natural tuning of the overtone series in the Khoomei and the chapareke.

3. Steel Pans and Gamelan – the instruments are chosen purely for their timbre making the parts function mostly as coloristic embellishments to the piece. The least amount of effort has been given by me to understand the workings of those instruments and their corresponding cultural identities, which lead to some issues with the Gamelan
usage (that I will discuss below). The gamelan, however, having the musically least involved part, is in direct control over the “tonal center” of the piece as the fundamental note for the overtone series (and consequently the “pedal tone” of the overtone singer and the tuning of the chapareke string) is dictated by the tuning of the specific gamelan set involved. In the case of Wesleyan's gamelan set, the approximate pitch of the gong suwukan labeled no. 1 on the scale matches something between C and Db but closer to Db according to my ear. Hence, the entire harmonic structure of the piece was written in accordance with the overtone series of Db. The relative tuning system of the gamelan with often approximate and/or detuned character of the bass steel pan's notes provides yet another contrast to the very specific tunings of the overtone series and equal-temperament of the other two pairs.

Having some of these relationships apparent from the early stages of the work, and some of them becoming clearer as the composition progressed, the piece materialized as a fairly specific set of instructions in spatial notation. Consequently, the piece requires people who are more or less fluent in reading western notation, which is another aspect that retreats from the original idea of a non-westernized musical environment. Nevertheless, I do not consider the piece a failure in terms of its musical and compositional values, and do not hold any nostalgia for abandoning its originating concept. Rather, I consider the whole process as an instructive way of understanding my own musical personality in my attempts at loosening its egocentric elements and understanding the vast varieties of my musical influences that I am constantly interested in exploring.

It became clear to me after taking my time to look at the piece in retrospect that I
took a different approach towards each of the six ensemble parts, which influenced the final musical outcome of each part as well as its relationship towards the issue of ethnocentrism and cultural appropriation. Each of the parts has its specific identity that is in dialogue with my understanding of its musical and cultural source material, and each provides a contrasting topic for discussion. In the following paragraphs of this chapter I will discuss the structure of influences, musical sources, usage of appropriation, and genealogies of each of the instrumental and vocal parts of Village of Control in an attempt to further examine my failure in realizing its original idea.

The dilemmas of transmission.

Before I start discussing the musical material of each instrumental part, I would like to discuss the issue of the form of transmission I used to deliver the musical content of the piece to its designated performers. Coming from a background of Western art music training, I naturally started using western notation from the very beginning of my work on Village of Control. As I'm used to, from many earlier compositions, I started writing ideas down on paper as soon as they appeared in my mind. First in form of sketches and written notes, later in form of orchestrated excerpts of material, and finally as a fully realized score. Considering the background of the performers who were going to realize my work as well as my own, the form of written transmission of the piece seemed the most logical and natural choice at play. However, it only occurred to me after the piece's premiere that the mode of transmission could have had a valuable impact on the realization of the concept of a cross-cultural environment without a dominating “Western” presence that the piece was going to encompass.
in its original form.

It is clear to me from my previous experience in learning composition that the widespread influence of Western music notation as well as its inevitable importance to Western music culture has created a sense of “dignity” in the treatment of score by a Western composer. The issue was very apparent in the music conservatories where I previously studied composition. Some composers I interacted with during those years treated notation as a goal for a one-way delivery of the musical thought from them to the performers. This was reflected in their pursuit of extreme clarity to a point of excess in their notational strategies. This understanding of the importance of notation also leads to the treatment of notation as a form of development over other forms of transmission creating a false dichotomy between notation as the “advanced” form of delivery as opposed to oral/aural tradition being the more “archaic” outdated one.\(^{53}\) I have learned a lot from this approach to increase the clarity of my own notated pieces but in my experience the transmission of the musical material is never single-directional and always involves an element of exchange between composer and performer that happens orally, outside of the notation.

The dichotomy between oral/aural versus notational modes of transmission is based upon the assumption that music has to be transmitted “either imperfectly through oral transmission or perfectly through written transmission” and the distinction of a notated piece traveling untouched through time as opposed to the orally transmitted one that encounters frequent changes along the path of the history.\(^{54}\) However, what needs to be considered is that composers of music intended for the oral preservation created music that could be orally

---


\(^{54}\) Ibid., 35 – 36.
communicated to other performers and, consequently, might be orally communicated to others.\textsuperscript{55} Further, notation itself does not guarantee successful preservation of the musical material, as it always requires substantial knowledge of performance practice, historical context and oral familiarity for its successful interpretation. These characteristics can become the context for extensive debates over interpretation, which suggests that notation has an inescapable entanglement with cultural context.\textsuperscript{56} A concrete example of this can be found in the methods conservatory musicians apply to learning new repertoire. That includes detailed studies of recordings to gain an understanding of a performance practice or, if the work has not yet been performed or recorded, extended interactions with the composer. This model seems to be shared by both classical and jazz learning techniques, not to mention pop music. Further discussion of the topic leads to the conclusion of inevitability of oral/aural aspect of music learning that is, and will always be, embedded in the music notation no matter the level of detail it provides. The connection of oral/aural method of transmission to the natural process of music learning is also evident in its increased interest in music education as well as in the observed methods of learning music among children.\textsuperscript{57}

If we go back to the Morris' concept of meta-composition (a collection of rules, materials, technologies, and practices that produce compositions or improvisational results), we can notice certain similarities between that concept and the origins of \textit{Village of Control}. Meta-composition in its nature produces musical results that are independent from the

\textsuperscript{55} Ibid., 39 – 40.  
composer and vary highly depending on the background of performers. Hence, the performer and their musical and cultural background become central to the subject for the workings of the piece making it in a way a “common property” of the composer (working as a governor of the concept) and the performer (functioning as the one who makes the music happen on both compositional and performative levels). My original idea was to base the material of the piece on the experience of the performers with their varied cultural backgrounds dictated by the instruments they play. That concept of commonality was clear to me from the very beginning of my work on the piece. How to actually achieve it in a successful way still remains a mystery to me even with the piece completed.

Contrary to Morris' approach, who provided a written, verbal set of instructions for Rapport that can be understood globally, I provided my performers with a very specific, customized form of notation that nevertheless drew on the notational conventions with which I am the most familiar. Its westernized elements such as staff notation, clefs, standard rhythmic notation, dashed barlines etc. are very apparent, and most definitely require a previously established knowledge of the tradition of Western music notation. However, the reason why I worked in this way and never even considered any alternatives lies in the general utility of notation in accelerating the learning process.

If we look back at the purpose of the early neumatic notation, we can see the dependency of the early notational practices with the issue of efficiency. In its earliest forms notation was there to remind the performers of the passages that they already had learned orally. Sramek mentions this in his article “Seeking Common Ground through Oral

59 For detailed explanation of the notation procedures in the piece see the performance notes.
Tradition”: “The earliest neumatic gestural notation (again, that which is “musically suggestive” but without actual musical notation) are simply a series of mnemonic symbols found above the text that aid singers in recalling or conjuring from the depths of their memories what has already been placed there. Such notation would have been used for teaching, and as a reference in the event of a memory slip rather than in performance.”

Further evidence can be found in the development of gamelan's kepatihan cipher notation and attempts of developing adopted staff notation for the Western students willing to learn the gamelan. An example is also provided by Patricia Campbell in her article “Unsafe suppositions? Cutting across cultures on questions of music's transmission” where she describes the struggle she went through when she was trying to learn Filipino kulintang through the traditional and authentic learning process, which is oral/aural and involves holistic listening and repeating after the teacher or joining them in the familiar phrases. The process is a combination of listening and kinesthetic approach of repeating the movement and then matching it with the sound. What Campbell had to end up with was a set compromises to the traditional learning process until she ultimately arrived at notation: “We continued, she compromising by playing the entire piece several times, then playing double phrases with me following in my attempts to play them back. Then she would give me time to scratch out a notation of stick rhythms, a combination of pitch numbers and solfege syllables, and comments on which phrase happened when.”

The evidence from various oral/aural musical traditions seems to lead to the

---

conclusion that there is no reason to assume notation as the only feasible form of delivery.
The ubiquity and efficiency of notational practice in Western music, however, can make it easy to ignore alternatives. This is exactly what happened in my case when working on *Village of Control*. I have used conventional notation because it was effective within the “local culture” of Wesleyan graduate students and it made it much easier to include in the thesis. This decision, however, makes the piece unfeasible for the performers unfamiliar with music notation, which is a big factor that contributed to the failure of the realization of my goal of a globalized and altruistic approach.

While an oral/aural form of transmission of the *Village of Control* to its performers would certainly require a much larger amount of rehearsal time, I would not discard it as a possibility. The piece, even though highly fixed in terms of its musical material, involves enough fluidity that an entirely aural rehearsal process could be followed without consuming too much rehearsal time.

Interestingly though, the nature of the score – with its movable fundamental tone that depends on the gamelan tuning and dictates the entire pitch structure of the piece – suggests the function of the score being more as a preservation of a customized version of the piece rather than a fixed set of instructions to be followed regardless of the circumstances. These characteristics are congruent with the nature of early neumatic notation functioning to revive the music in performer's memory, and perhaps suggests that the score in the case of my piece could be used in the same way.

My choice of notation for this piece that was supposed to detach the musical outcome from its westernized roots reveals my compositional training pretty clearly. It suggests how difficult it can be to detach myself from working with notation. It is so embedded in my
compositional training that using notation was an intuitive decision rather than a logical one.

**The overtone singer.**

The idea of writing a piece for an unusual combination of non-western instruments appeared to me quickly after I entered Wesleyan University's composition program and gained an exposure to the variety of musical styles that the students present here. However, the clear idea for the piece formulated after the first time I got exposed to *khoomei* (overtone singing). I came across the style for the first time through an interaction with Andrew Colwell, a doctoral student in the Wesleyan ethnomusicology program. He became fluent in singing *khoomei* after a two-year residency in Mongolia. My first encounter was when Andrew taught it to me in an informal tutorial session. Thus, the first time I heard overtone singing was live and through the process of trying to do it myself. When I started to be able to imitate the style (to some degree) and finally emphasized an overtone, I became interested in various artists from Mongolia and Tuva and became quite fond of their music. I decided that the piece I would write would be a kind of “song” for an overtone singer and an ensemble of non-western instruments that I labeled as a “world music ensemble”. Shortly after that I approached Andrew, asking if he would be interested in participating in the project. He agreed.

Since the piece was shaping as a solo feature for the overtone singer, I decided to give his part a fair amount of freedom. Various passages are often indicated by verbal instructions that specify the range of the overtone spectrum and an indication of the density appropriate for the passage (fig. 1). The listening I did from Andrew's recommendations
helped to guide my imagination for the type of music that the improvised passages would contain. With that in mind, I created the ensemble parts in those overtone singer-featured sections as an extremely simple accompaniment that helped sustain the overtone singer's pedal tone with occasional ornamentation. The overtone singer's part is the most featured, and the least specified of all of the ensemble parts, and, consequently, the most congruent with the original conception of the piece. With the vague character of the specifications that guide the improvisation, the overtone singer's performance practice becomes the element that controls much of the overall musical material in the sections where it is featured (3:50''-4:35'', 4:35''-5:20'', 5:20''-6:05'', 6:05''-7:00'', 8:04''-8:28'', 8:29''-8:39'').

fig. 1 (an example of an improvised passage featuring the overtone singer, 3:50''-4:35'')

A contrasting section appears in the passage from 7:20'' to 8:00'' where the overtone singer's part is in unison with the steel pans with the pan player cueing each note in the passage (fig. 2). This is the only time another instrument is in control of the overtone singer's musical material. However, even in this section the overtone singer is still the featured voice singing in very powerful xarxiraa style multiplied dynamically by singing into the microphone through cupped hands.

---

63An explanation of xarxiraa in the performance notes of the score.
Further passages of the overtone singer's part include the improvised featured sections similar to the ones discussed above and a more specifically notated duo with the chapareke player (fig. 3).

The duo section highlights the relationship of the overtone singer with the chapareke. In the other sections of the piece the chapareke mostly accompanied the overtone singer's part. In this one section the two voices clearly work as equals, which brings out their common
dependence upon the harmonic series as the source of all of their melodic possibilities.

The chapareke.

The relationship of the chapareke with my compositional process is somewhat special on a few planes. I have learned to play the instrument myself, so consequently I have some practical knowledge of its workings and possibilities. However, my initial encounter with the instrument and its cosmology was not through its original cultural background. I have learned about the chapareke from my classmate Omar Fraire. Omar's connection to the instrument is as an artifact that was the focus of the artistic project called Chapareke Hidrocálido that he developed with his friend and colleague Rolando Lopez. Therefore, my understanding and influence of the musical material I realized for the chapareke was navigated through my familiarity with Omar's and Roland's work, which itself appropriates and recontextualizes this instrument. That relationship created an interesting dynamic in the context of the cultural appropriation of the chapareke in Village of Control.

Chapareke Hidrocálido is a project hosted at Guggenheim Aguascalientes, a fictional museum created by Lopez on the toxic waste dump in Aguascalientes in Mexico, where the metal foundry of Solomon Guggenheim used to reside. Researching the historical linguistic habits of Aguascalientes people, Lopez found a passage in literature that lead to the creation of Chapareke Hidrocálido. The passage describes an encounter of journalist Fructuoso Lopez

---

(who wrote articles against the bad treatment of the foundry's workers) with a peasant who played an instrument that from the description appeared similar to the chapareke. The sound was produced by plucking the strings and modulating the tone with the mouth.  

The body of the instrument that Fraire and Lopez made was carved out of the root of a tree that was cut down by the Mexican government to make room for an extension avenue intended to be built there out of the foundry's toxic waste. This form of the chapareke is contrasted with the traditional chapareke made from the dried stem of a maguey flower.

My process of thinking about how the chapareke was going to fit into the soundworld of Village of Control was shaped by my experiments with the instrument and were influenced by its development in the context of Chapareke Hidrocálido. Further, the musical content of the chapareke in the context of my piece is meant to work in direct correlation with the overtone singer's part as well as the nature of overtone singing as it is. Thus my decision to use the violin bow throughout the piece; bowing provides the sustained drone sound coming from the chapareke string that serves as the pedal tone from which the overtone series melodies are created just like in overtone singing. Naturally then, the main string of the chapareke is tuned to the fundamental note of the overtone singer. The majority of the passages contain sustaining that fundamental tone and making melodies out of the overtone series in more or less specified ways (fig. 4). My notation for the chapareke in a way resembles tabulature as it specifies the movement of the mouth in relation with the production of the overtones resulting from the string tuned in dependence with the overtone singer (and ultimately with the specific pitch of gong Ageng in the gamelan). The two staff
lines represent the two strings needed to execute the piece. In the sense of specifying the action produced on the instrument, my notation resembles Fraires, however it's not nearly as specific as his in the aspects of performance practice other than the production of the overtones.

Fig. 4 (an example of the chapareke passage, 0:25"-0:55").

Examples from the piece that involve techniques other than regular bowing include: overpressure bowing technique, traditional plucking technique, and tremolo scrubs on the string with a threaded metal rod (fig. 5). The chapareke is amplified throughout the piece using a miniature condenser microphone (the chapareke micing technique developed by Fraire).

Fig. 5 (overpressure, plucking, tremolo with the rod, 0:24", 3:15", 6:50")

The development of the extended techniques in the chapareke part, and the general approach to the possibilities of its sound production is in dialogue with the specific musical material being generated in accordance with the overtone singer's part. Hence, the chapareke
part in *Village of Control* is governed exclusively by the cultural contexts outside of its origins yet with some correlations to the nature of its sound production as it is.

**The pipa.**

In contrast to with the chapeke and overtone singing, I was aware of the pipa and some of its heritage before arriving at Wesleyan. It was here though where I met Wan Yeung, an experienced pipa player who entered Wesleyan's ethnomusicology graduate program the same year as I entered the composition program. My occasional exposures to his performances made me aware of his performance skills and inspired me to ask him if he would perform in the piece to allow me to include pipa in its instrumentation.

The creation of the part was governed by my observation of Wan's performance practice as well as the listening to traditional pipa repertoire performed by contemporary players. What I've learned from my various conversations with Wan is that the pipa training in China is quite similar to Euro-American conservatory training. The training involves proficiency in reading Western notation, practicing techniques and familiarity with Western classical music styles (Wan mentioned to me that this expectation extended to bel canto).

Wan's teachers were all conservatory trained. What I learned from his descriptions is that Chinese conservatories seem to adhere to the Western model even though they have elements of traditional Chinese music in their curricula. This is apparent in Wan's playing with its high technical skills, comfort in the ensemble collaboration, high virtuosity and degree of practical unfamiliarity with improvisation. In response, his part is more specifically notated than the other instrumental parts. Certain less specific elements were also presented
with specifically notated examples to facilitate the learning process. One instance is in the passage from 7:00" to 7:20", where the specification “repeat with variation” was demonstrated with specific examples included with the pipa part on a separate sheet of paper (fig. 6). After our brief conversation, Wan explained to me that improvisation and indeterminacy are not typical of pipa training, which I found congruent with the classical training at Western conservatories where proficiency in reading staff notation is more highly regarded than proficiency in improvisation (except for perhaps the early music, organ and contemporary music studies).

Fig. 6 (repeat with variations section as presented with specific examples, 7:00"-7:20").

There are two basic gestural elements that shaped most of the pipa material in the piece that I observed through my listening to the pipa repertoire. The first one is the extensive usage of repetition of a single note as means of sustaining the sound and creating a smooth legato-like phrasing for passages that proceed through a stream of long rhythmic values. An interesting aspect of this technique is that the repeated notes do not seem to adhere to the principal of tremolo often being executed as fast as possible. Rather, the repetitions are countable and often fitting into larger beat structures in the metrically regular way. For example if a melodic line proceeds in half notes (in the tempo of let's say quarter note = 120) it seems as a pipa player would often play the passage in sixteenth notes repeating each half note melodic pitch eight times. This, and other forms of repeated single note that I observed
in the listening became a catalyst for the extensive usage of metrically stable single note repetitions in the pipa part (that also influenced its paired marimba part) (fig. 7).

Fig. 7 (different ways of using the repeated note pattern in the pipa and marimba parts, 1:30"-2:00", 3:50"-4:35", 9:50"-9:56").

The second musical element I observed in my pipa repertoire listening is what Wan once called “the signature pipa chord”. It is a simple arpeggiated chord that reflects the interval tuning of the instrument (4\textsuperscript{th}, maj 2\textsuperscript{nd}, 4\textsuperscript{th}). The gesture I have heard many times from different pipa pieces was an arpeggiated grace note at a loud dynamic leading to the strum of the full chord providing a great sense of arrival and grounding in the musical material. I used this element in the same way: as a grounding and arrival gesture before some of the phrases that included the extended overtone singing-featured section (fig. 8).
The elements of repeated notes and sharp, strong gestures have made the pipa part (and, to some degree, the marimba part as well) contrasting with the more fluid overtone singer and chapareke pair. The pipa-marimba pair with its rhythmic liveliness, sharp timbre of tone production and equal temperament tuning provides an element of dialogue for the leading overtone singer-chapareke pair. However, the genealogy of how those pairs were created is somewhat similar. Each pair originated from the observation of the traditional performance practice and repertoire of the leading instrument (overtone singer in the first pair, and pipa in the second pair) with the musical material of the secondary instrument of a pair being constructed in accordance with the leading one.
The marimba.

Being a classically trained Western percussionist, I did not treat the marimba as a foreign element requiring musical or cultural studies. Having the practice of marimba playing embedded deeply in my musical training, I considered the instrument “my own” and consequently didn't give much thought to its cross-cultural role in the piece. I based its musical material entirely upon the musical relationships with other ensemble parts.

As previously mentioned, the pointillist nature of marimba's sound production and its inability to naturally sustain sound was the reason to pair it with the pipa material. Both instruments share that similarity of sound production and equal tempered tuning. Their pairing would allow equal temperament to be separated from the unequal tuning systems of the rest of the ensemble.

The marimba shares the musical material with pipa in every instance except the extended overtone singer-featured sections where it provides a drone of a doubled perfect fifth with the lower pitch being the fundamental note of the used overtone series. The drone helps to sustain the fundamental note and covers the discontinuity in the cases where the singer needs to take a breath. Further, the perfect fifths enrich the underlying sound of the harmonic structure as they make the third partial appear in the drone instead of just the fundamental note alone (fig. 9)
The bass steel pans.

The choice of the bass steel pans for the piece was a purely aesthetic one based on my previous practical encounters with this instrument. The opportunities I had to briefly examine its sound qualities made me fond of its unusual metallic bass sound with the pitch specificity being often ambiguous. I have had the sound in mind for a while, and decided that it would be a good opportunity to use it.

The background of the instrument fits with the idea of using the non-western music ensemble for the piece but because the sound qualities were the only aspect of it I was interested in exploring, my knowledge of its cultural background remained minuscule. Similarly to the marimba, I treated steel drums with the correspondence to their assimilation with the Western percussion world where they appear every once in a while. An interesting example of such appearance in Western music is in the seventh movement of the orchestral version of *Notations* by Pierre Boulez. I had a privilege to perform the steel drum part as a member of the Lucerne Festival Academy Orchestra on a concert during the Lucerne Festival.
in the summer 2015. My encounter with the instrument in this particular setting provoked my later attitude towards it as a member of the Western percussion assembly.

The large portion of the steel drum part consists of the reinforcement of the sense of arrival in the overtone singer-featured sections. Those parts include the struck “down beat” note on the pitch of the fundamental with occasional freely-pitched falling figures that lead to it (fig. 10).

The two instances of different usage include the passage of disjunct single notes in the opening section of the piece (fig. 11) and the previously discussed short duo with the overtone singer (see fig. 2).

Fig. 10 (falling figure with the arrival, 3:49’-3:50’).
Fig. 11 (disjunct single notes passage on the bass steel pans, 0:08'-0:20').

The gamelan.

The usage of the gamelan similarly to steel pans was determined solely by its sound values. From my previous encounters with the gamelan I was especially drawn to the dark and ritualistic sound of the lowest gongs and the bell-like, reverberant sound of the gender. Hence, those are the gamelan instruments I used in Village of Control.

The sound-focused usage of the gamelan in the piece, just like with the example of steel pans, has created in me a lack of interest for the cultural inquiry of this instrument at the time I was writing the piece. Further, the simplicity of the musical material made it unnecessary to have a performer with previous experience in the gamelan performance practice or even with percussion playing per se. Therefore, I did not search for a performer with any cultural or technical background in the gamelan music but rather I just asked a first person that I thought would agree to realize the part. However, as with the steel pans cultural sensitivity was not a problem, the usage of gamelan created a set of cultural issues that arose after the premiere of the piece.

Unaware of the gamelan's cultural specifics, I guided my performer to play the part in standing position to be more comfortable in performance. The suggestion arose from my previous attempts to realize the part myself as I was working on the piece. At the time I was not aware of the treatment of the gamelan set by the Javanese people as an object inherited by
supernatural power thus acquiring the nature of a kind of divinity. Hence, the playing position of standing over the instrument is here considered a great disrespect to its heritage. Further, the musical material I used in the piece is of a loud nature, which is unfitting with the calm character of the Javanese gamelan music (which I found out from my later conversation about the issue with Sumarsam). The treatment of the Javanese gamelan as Chinese gongs with the large gongs struck harshly could potentially be dangerous for the instrument as the Javanese gamelan gongs are made of a very thin steel. Sumarsam instructed me to use Balinese gamelan for the future performances of the piece as the nature of those instruments allows for the loud sound production with the Balinese music being of a much louder and harsher character to the Javanese. His suggestions together with the cultural background I gained after the initial realization of the piece are now included in the performance notes section in the score of the piece to avoid future conflicts.

Incidentally the musical nature of the gamelan in the piece is in a way congruent with some of the aspects of the traditional gamelan music. An example is the usage of the large gongs as indicators for the beginnings of new phrases that stress the points of arrival in the subsequent sections of the piece (fig. 12). Similarly, in traditional gamelan music the largest gongs mark the beginnings and endings of the longer gendhing sections and give the feeling of balance to the structure of the piece. Perhaps the reason for such usage of the gamelan gongs on my part came from my previous listening exposures to the Javanese gamelan music as well as the general nature of the large gongs that I think naturally provokes this kind of

---


68 Ibid., 28.
musical thinking. However, the largest gongs are not the only ones that mark the beginnings of the phrases in *Village of Control*. Occasionally this role is also given to the *gender*, which in that case is contrasting with the traditional usage of this instrument in the gamelan music.

Fig. 12 (examples of the beginnings of the sections of the piece marked by *gong suwukan* and *gender*; beginning, 0:25”-0:55”, 0:55”-1:30”, 3:50”-4:35”, 7:00”-7:20”)

Further musical usage of the gamelan includes occasional coloristic embellishments on *gender* (fig. 13).

Fig. 13 (coloristic embellishments on *gender*, 4:35”-5:19”).

*Village of Control* evolved considerably from the inception of its original idea. Its universality was compromised by its means of delivery. Its “musical global village” Utopia
destroyed with the unharnessed hunger for controlling the musical material. Its diversity of influences highlights the concept of knowledge versus ignorance that leads to the desire for even more control in the case of the former and potential cultural conflicts in the case of the later. Its cross-references between the instrumental parts remain a topic for discussion in the pursuit of the greater understanding of musical context and historical heritage that often proves itself as inescapable from in one way or another.

_Cause there is no one like us and Scatter in the Sky:_  
Guilty Pleasure Self-Portraits

_Cause there is no one like us and Scatter in the Sky_ in contrast with _Village of Control_ were created as self-portraits. As previously discussed, the idea in the latter was to create a shared multicultural musical environment with reduced influence of composer's ego on the overall musical outcome. A large amount of control was intended to be given to the performers. _Cause there is no one like us and Scatter in the Sky_ on the other hand were created solely with my own performance pleasure in mind. Therefore, one could interpret these two pieces as a quite egocentric creations with the goal of self-promotion in the pursuit of artistic freedom of expression with all of its “noble” and “shameful” inclinations.

The two pieces share a set of similarities. Both are intended for drum-set and electronic sounds (with a small difference that _Cause there is no one like us_ uses a fixed media track and _Scatter in the Sky_ uses live electronics). Both are loud and of a rather virtuosic character. Both are intended for myself as a performer thus they do not have a score.
but only a simple set of verbal instructions that function as guides for improvisation⁶⁹. Or no instructions at all. Both have roots in popular music. The reason for using popular music as the basis of the musical material originated, in both cases, from my exploration of the concept of “guilty pleasure listening”.

“Guilty pleasure” appeared as a popular term in late 1990s. The modern meaning of the term relates to the act of enjoyment without any “pretense to edification”, which results in an activity that one takes pleasure in but knows they shouldn't.⁷⁰ Guilty pleasure often refers to artifacts of mass culture such as genre novels, popular songs, action movies, soap operas and such. Generally the meaning of “guilty pleasure” resides in one's affiliation with certain class or community. An activity that resides within the aesthetic boundaries of the affiliated group is perceived as something in accordance with one's need to please their intellect. An activity that works against this established aesthetic code gains a label of a pleasure with an element of gratification that one gets in spite of oneself, and not as a matter of a free choice.⁷¹ Therefore, the concept of guilty pleasure is different depending on one's background, geographical placement and historical context. Allan Bloom gives an example of this in his book The Closing of the American Mind in the chapter where he discusses the decreasing interest in classical music among the young generation: “University students [of the 1950s] usually had some early emotive association with Beethoven, Chopin and Brahms...This was probably the only regularly recognizable class distinction between educated and uneducated in America. Many, or even most, of the young people of that generation also swung with

⁶⁹ For the notes on how to perform Scatter in the Sky see the appendix section.
⁷¹ Ibid.
Benny Goodman, but with an element of self-consciousness...”

In the context of the two pieces of mine I'm discussing here, the term “guilty pleasure” (and my need to abolish it) has a few roles in relationship with my nature as a musician. Those concepts are explored in these works in different ways. I'll now discuss the influences and workings of both pieces in examining the concept of “guilty pleasure” embedded in each of them.

*Cause there is no one like us*
*disco polo and the concept of high culture.*

*Cause there is no one like us* in its original form was a fixed media piece generated out of a sound file of the song called “Tacy jak my” (the ones like us) by the group called Effect; a group that works within the genre of “disco polo”, an established genre of Polish popular dance music that first appeared in the late 1980s. The sound track was manipulated in various ways with frequency filters, time stretching, reverb and granular synthesis. The overall effect is a broad stretched sound taken from a short fragment of the sound track with the song's beat in its background slowly disappearing as the piece evolves. As the steady beat disappears, the disjunctive sound of granular synthesis processing takes over the whole musical content making the sound more and more scattered until the last section where it is stripped down to the short events separated by silence.

The addition of the drum-set to the piece was secondary, and based on my aesthetic decision that the fixed media track was not interesting enough on its own, and needed an

---

element of live performance. The structure of the drum-set part reverses the structure of the fixed media track. Where the fixed media track begins with a steady beat, the drum-set starts as the scattered events intended to imitate the granular synthesis material in the fixed media track at the end. As the beat of the fixed media track starts to disappear, the drum-set events start to acquire more and more steady rhythmic structure. When the beat in the fixed media disappears completely, the drummer moves from the acoustic drum-set to a MIDI drum-set (or sampler) and continues to provide the synthesized beat that lasts until it's abruptly stopped the end of the piece. The reason for the usage of the MIDI drum samples is to create the point of return from the acoustic beat to the synthesized beat that appears at the beginning of the fixed media track from the original song by Effect.

The impetus for creating *Cause there is no one like us* came directly from the concept of “guilty pleasure” that resulted in my need to work with the genre of disco polo in some way. Disco polo, as a genre, is probably the most iconic and nation-wide example of guilty pleasure in the Polish culture.

The genre itself originated out of the vulgarized sub-genre of contemporary Polish folk music that is often played at the wedding receptions (most frequently in the rural areas of the country). The content of the lyrics of these folk songs is often very simple, sexual and revolving around the topics of unfulfilled love, festivities, rural activities, customs and such. Disco polo added the “grilling culture”, tropical vacation, and more sex into the mix. Musically, disco polo uses some of the melodic specificities of those folk songs with very simple harmonic structure, simple synthesized instrumental sounds and extremely simple dance-like rhythmic patterns.

Over the years I noticed an interesting dynamic of disco polo with the musically
educated circles of people in Poland that I often interact with during my visits there. I am
certain that almost everyone from the circle of friends and acquaintances that I spend time
with could remember at least one instance where he or she would take pleasure in dancing to
disco polo music (usually first numbed by the extended consumption of alcoholic beverages).
I know it as a fact from being a witness, and my own participation in various situations like
that. Nevertheless, sober-minded some of these young musicians would face a difficulty
admitting that the whole situation took place. Further, they would never admit taking pleasure
in this kind of music in any kind of professional situation not only for the reason of being
ashamed but also for the concern that it could potentially be harmful to their employment.
The whole situation arises from the deeply rooted and strictly policed ideology of “high” and
“low” art in Polish culture, and the highly guarded assumption that an educated person should
never get these two confused. This dichotomy is present in most (if not all) institutions of
music education in Poland on every level (including elementary, middle, and high-school
music education).

Coming from the background of the “high” culture I have been chased by this
dichotomy from a very early age, as my entire education from age seven to twenty-five was
embedded in the Western music conservatory model first in Poland and then in US colleges.73
From my personal observations, I could conclude that this issue is more prominent in Polish
music conservatories than in the US although the separation of classical music from other
genres is quite obvious in the US conservatories as well. When I was a student in the classical
music programs at Eastman and Manhattan School of Music, I would often observe among

73 In the Polish education there are public music schools on elementary, middle and high-school levels that adhere
to the music conservatory model but provide music education together with the general education (with the
program designed by the ministry of education similar the general education schools).
my classmates the attitude towards classical music as a form of job or study subject rather than a genuine aesthetic fascination. They would often ask me: “what is the music that you normally listen to” in referring to the actual music that I take pleasure in listening to as opposed to the music I study or perform, which apparently appears in conflict with the former.

The years of attempts to “fit” into this dichotomy as a creator of “high” art influenced my musical outcome in a way that I often tried to compose music against my nature as a musician and a person. The music that resulted from this approach would often leave me dissatisfied aesthetically but fulfilled intellectually. I associate that period of time with great increase in my musical understanding and development of my compositional craft. However, after a while, I realized that this dichotomy exists and is affecting me in a way that it makes me feel my “guilty pleasures”. The need for my creative outcome to work against what I felt like I enjoyed the most but shouldn't, started to bother me. I started to feel as if I'm not one hundred percent artistically free, and that my music is indeed compromised by this cultural dichotomy. Since then I became interested in disregarding these pre-established cultural associations in my musical endeavors in the pursuit of freeing myself from any “guilty pleasures” that would influence my musical outcome against my nature. My attempts to examine the issue resulted in the interest to develop works such as Cause there is no one like us and Scatter in the Sky.
Scatter in the Sky -
intimacy and a step out of the comfort zone.

*Scatter in the Sky* moves on from *Cause there is no-one like us* to explore the concept of “guilty pleasure” within an active performance. In *Cause there is no-one like us*, the guilty pleasure music of disco polo was integrated into the structure of the piece but my drum-set performance remained independent from the idiom of disco polo. I simply performed a drum-set solo in a style that I was comfortable with, working with a fixed media track that I was also comfortable with musically but that was based upon the exploration of the guilty pleasure genre of music. In the case of *Scatter in the Sky*, I begin the piece with singing a “cheesy” pop song that I composed (both music and the lyrics), which not only draws on the concept of my guilty pleasures but also exposes me as the one that makes it happen on stage. By being an active performer of the genre that is my guilty pleasure, I put my “signature” on this style of music as my own honest identity, and expose it on stage. *Scatter in the Sky* works for me as a kind of immersion therapy to cure myself of “guilt” and arrive at artistic freedom.

The idea for the piece did not begin with the concept of stepping out of my comfort zone as a performer. It began simply as a drum-set improvisation session that I had during one of my practice sessions when I was working on a different piece of mine. I had a live electronics polyphonic pitchshift patch opened on my computer for that other piece, and I started exploring how my voice sounded through that electronic processing. After a while, I started experimenting with different sounds that my voice can make with the processing, and connecting them to drum-set solos in creating a sort of dialog of percussive voice-generated sounds with the drums. After a while I moved the microphone to the cymbal and had its sound electronically processed with the patch. I started hitting it with decreasing amount of
intensity, and listening to the rich sound that was resulting from the processing, which then made for the material for the ending of the piece.

After about three hours of drumming and experimenting with live electronics processing I finally arrived at some kind of form that could exist as a finished composition. I have noticed though that there was still something missing. As I was listening to the sound of the struck cymbal with processing I quietly started to hum some pitches that would be pleasing to me in the blend with the sound of the cymbal. Then it occurred to me that if the voice is such an important element in the piece, why don't I integrate a song into the structure somehow. I searched youtube for a song that I'd like to use but I couldn't find anything interesting. Therefore I decided to just go to the piano that was in the room, and come up with something myself. As the song started to formulate, I began wondering if I really should be doing this as I'm not a song writer and I should perhaps just adhere to the idea of appropriating one. Then it occurred to me that the song does not have to be “good” in the sense of displaying aesthetic judgment as it is not an autonomous composition but rather an element of a larger piece for drum-set and live electronics.

After another hour, I composed a short song that I could sing with a simple chordal accompaniment on piano. I began wondering how I could appropriate this song into the structure of the piece in a way that it would “make sense” to me musically. Then I got an idea. What if I abandon the need for being a formalist, and decide that what I do simply does not have to make sense to me? What if I instead just focus on being honest and sincere with this piece? Then I realized that in order to do it, I should simply sing the song myself, and stop pretending like it's somebody else that composed it. That idea became a big step out of my comfort zone as both a performer and composer and began an entirely new chapter in my
compositional work.

After I finalized the piece (that same night), I felt a deep sense of satisfaction with *Scatter in the Sky* both as a performer and composer. At the moment of its creation, the piece certainly felt as if it was the best piece I have composed up until then. Nowadays, in retrospect, I see it as perhaps not the “best” but the most honest (especially that after I thought of it, I couldn't even determine within which standard it would be the best). It was one of the first times that I truly enjoyed performing a piece of mine. I began wondering why that was the case because in the past the music I wrote could satisfy me as a composer but I never enjoyed performing it, and would always prefer to hear others do it for me.

As I think about this now, I realize that perhaps the reason was that I did something unexpected to myself both as a composer and a performer. In the previous times when I performed my own music, the process of learning it was one of fighting boredom rather than making discoveries. My compositional work before *Scatter in the Sky* would always involve a finalized unmovable set of instructions that I would hand to the performers in form of a score. When I handed those to another performer, I was excited to hear what he or she is going to contribute to the music, always hoping that I would hear something unexpected and interesting. When I hand a finished score to myself, however, I know all of the piece's musical workings before I even start realizing it on the instrument. There is no room for anything unexpected as I already spent many hours creating the work and getting to know it musically on every level. After that, the process of learning the piece on the instrument becomes a mere physical act without anything that would be musically surprising, informative, exciting or unexpected. For that reason I have always enjoyed performing works of others much more than my own.
In the case of Scatter in the Sky, however, I surprised myself on a few planes. As a performer I gave myself an improvisational freedom within the pre-composed structure that resulted in the exploration of sounds in unexpected ways that are slightly different from performance to performance, and thus keep me engaged and interested. Further, I also put myself in a very uncomfortable position of the singer of songs, which is a real challenge to my identity as a performer. As a composer I created something deeply intuitive and honest without any conceptual and formal constrains of my musical background. That approach opened up a whole new world of possibilities and made me feel free and comfortable with my music and what it can be if I take the uncompromised honesty as the only compositional constraint.

Both Cause there is no one like us and Scatter in the Sky mean to me more than just another addition to my catalog of works. They both function as important steps to further my understanding of my identity as a musician and a person. Both are logical and progressing steps with the former being the first and the latter being the second step. Both pieces opened a new chapter in my work that can potentially lead to the creation of a musical language that is interesting to me as both composer and performer, which is something that has never happened before.

The Conclusion with J.S. Bach.

Besides the previously discussed music (Rapport, Village of Control, Cause there is no-one like us, and Scatter in the Sky) Happy Hybrid included in its program the works of J.S. Bach. The concert had my transcription of Bach's E-minor lute suite that I
performed on marimba but broken into three segments programmed between the other pieces. The first segment was the second piece in the concert immediately after *Cause there is no-one like us*. It consisted of first two movements of the suite *Prelude and Presto*, and *Allemande*. The second segment included *Courante* as a first piece after the intermission and immediately preceding *Village of Control*. The *Sarabande*, *Bourree*, and *Gigue* were played between the *Village* and *Scatter in the Sky*. The function of the works of J.S. Bach could be interpreted in multiple ways, and I will examine some of these possible interpretations using them as the final conclusion of this thesis.

The works of J.S. Bach clearly provided contrast with every other piece of music that was presented that evening. First of all, they were the only works where my role was purely interpretative. The three pieces of mine I presented as a composer-performer and, while *Rapport* was a work by somebody else, its nature of the open form largely involved Omar Fraire and me working as composer/improvisers. The Bach pieces hold an unassailable position in the canon of Western Art Music and I certainly did not contribute to them as a composer in any way. The transcription from lute (which was the original instrument to play this music on) was very straightforward as it is possible to perform lute works on marimba exactly as they are without making any adjustments forced by the specificity of the instrument. Because the works were performed in a way that did not differ from the classical performance tradition, they functioned in a special relationship with the other pieces in the program. On the one hand, in the moments they were presented, the Bach's works have altered the context of the concert. They added a clear element of classical Western music concert tradition with all of its historical and cultural baggage. On the other hand, their presence in between the hybridized pieces added another element of juxtaposition to the
structure of the entire concert making the whole program together appear in the fashion of sampling music or plunderphonics.

From the various conversations I had with people who attended Happy Hybrid, I learned that the initial thought of deepening the level of hybridization and mash-up by addition of Bach's music was not perceived as just another layer of generic confusion. Rather some interpreted the repeated occurrences of Bach's music in the program as an element that sort of “glued” it together. I could gladly accept both interpretations as my intention to include Bach's music was neither to confuse the program nor to clarify it. My decision was driven simply by my personal taste and interest that comes out of my background as a classical performer. The reasons for the Western classical music of the past to appear in all three of the Hybrid Recitals is exactly the same as why I thought of the idea of hybridity in the first place: it is all there simply because I like it.

Before the idea for Hybrid Recitals came to my mind, I had some deeply rooted concerns that mixing genres, contexts, cultures and historical periods in music was a problematic issue, which could be received by some with a dose of skepticism. Then, I decided that I should not care about how the project is received but rather try to experiment with its possible issues and outcomes during my time at Wesleyan. Now, that I have performed all three Hybrid Recitals, and did some research on the subject, I conclude that indeed the hybridization of genres is a problematic issue for some but for others it is not at all. All three concerts were generally well received (from what I could read in people's reactions and thoughts). However, the issues of generic ambiguity, contextual instability, stylistic obscurity were surprisingly very problematic to some individuals of high intellectual and practical background in experimental music. I had to give thorough explanations about
the workings of my Hybrid Recitals, and provide reasons for why I'm doing what I'm doing to my fellow colleagues in the graduate music program. I also felt a strong push towards providing program notes for my concerts, which is something I deeply resent. Meanwhile people with no substantial background in experimental music who attended the concerts needed no explanation at all, and their interpretations of the program were surprisingly accurate and often unexpected. Nobody needed program notes for the second performance of the Hybrid Recital no. 1 that I did in Poland for the audience that included people trained in Western classical music, and some who were not at all trained in music. However, almost no member of that audience would have any background in experimental music tradition whatsoever. The reasons for such dichotomy remain unclear to me, and invite me to pursue them as a future research interest.

My understanding of the workings of Hybrid Recitals evolved greatly from the initial form in Hybrid Recital no. 1, through more thorough version in Happy Hybrid to the most refined version in Hybrid #3 → Dance and Noise. The various workings that are included in the contextual and musical hybridity of these concerts still leave a lot to think about. However, the most important principle of hybridity in my music that I think is absolutely crucial to my musical identity, and to the success of any future concerts like these is the same as it was at the very beginning of the project. It is, to me, as simple and plain as it can be, and really involves nothing more than my personal fascination towards musical diversity.
References.


Appendix 1

Rapport, Score for the 1973 version:

Robert Morris

RAPPORT

Instruction for Performance

A) Rapport is a “live-electronic composition”—i.e., a composition with electronic instruments to be performed in real time—for two performers.

B) The electronic equipment needed is as follows:

- one four-track tape deck (or two two-track tape decks).
- one medium-sized electronic music synthesizer.
- one reverberation unit (plate type preferred).
- one tape delay system consisting of two compatible two-track tape machines and a 6 to 2 audio mixer.
- one stereo audio amplifier
- two (sets of) loud speakers.

C) A prerecorded four-track tape is available from the composer. The output of the tape deck playing this tape is sent into the synthesizer for mixing with electronically generated sound. The synthesizer’s output is divided so that the signal can be reverberated and mixed with itself and sent into the tape delay system. The output of the system is then amplified and presented to the audience. The block diagram in figure 1 summarizes this arrangement.

---

1 There is no score per se for Rapport. These instructions function as directions for improvisation.
2 These were the requirements for the piece in 1973; today most of this can be substituted by DSP software.
3 If a four-track tape deck is not available, two stereo tapes containing the same tracks as on the four-track tape is also available. These tapes can be played on two stereo tape decks, starting the decks simultaneously.
D) Of the two performers, one controls the synthesizer and the mixing of the four tracks of the prerecorded tape(s); the other player controls the state of the tape delay system and spatial location of sound on verbal cues from the first player. The two players should be familiar with electronic music equipment, have a thorough knowledge of the contents of the prerecorded tape(s) and these instructions, and a desire to project the spirit of Rapport (see final notes).

E) Over seventy excerpts of recorded musics from an extremely wide spectrum of geographical areas and historical periods are to be found on the prerecorded tapes(s). Some—perhaps 10 percent—of this music is already electronically altered via electronic music transformations⁴ in order to provide connection with the electronic transformations that player one performs in real time.

F) Due to the differences between electronic music synthesizers, systems, and equipment, a block diagram of the ideal synthesizer⁵ for Rapport is given in figure 2.

Here I provide some comments of the use and function of the various components in figure 2.

1. Some of the potentiometers in the block diagram may be passive (attenuators); they are shown by “o” in the block diagram.

⁴ Such as amplitude, frequency and ring modulation, filtering, gating, and so forth. These are the same types of transformations that player one can use in live performance, so these alterations of the source material can serve as models for what player one can electronically perform.

⁵ Rapport was first performed at the Yale Electronic Studio using an ARP 2500 synthesizer.

Rapport: Instruction for Performance page 2
2. There is a 7 to 2 mixer in the synthesizer, not to be confused with the mixer used in the tape delay system.
3. OSC III’s audio output frequency modulated by OSC II.
4. OSC IV’s output is connected to its control input to produce a variety of complex (possibly chaotic) waveforms.
5. The envelope generator may be triggered from the keyboard or from the sample and hold unit (clock (or pulse) output) or both.
6. The sequencer is set so that the speed of its clock is in the audio range (30-700 Hz.)
7. The resonator is a voltage-controlled filter (band pass) with a very high Q so that when a pulse is sent into its input, the filter rings. The sample and hold unit may also control the resonator’s \( F_c \).
8. Both the sample and hold and sequencer units may have their clocks frequency modulated from the random voltage source.
9. One the outputs on the 7 to 2 mixer sends the final outputs of the tape(s) and the synthesizer into the reverberation unit and then into the tape delay system, the other output is sent directly into the tape delay system.
10. It can be seen from figure 2 that there are three inputs to the final 7 to 2 mixer. Mixer input 5 consists of the outputs of three oscillators, which may produce frequency modulated or ring modulated sounds that may be filtered and/or amplified with or without envelopes. The oscillators’ frequencies may be controlled from the keyboard, sequencer, or sample and hold unit. Mixer input 6 will produce vocal- and brass-type sounds as well as filtered white noise, depending on the settings of the filter’s \( F_c \) and Q. (NB: \( F_c \) control is usually set as low as possible so the input sound’s entire audio spectrum will be filtered out except when the envelope generator or the sample and hold unit (momentarily) raises the \( F_c \).) Mixer input 7 contains the resonator mentioned above.

Rapport: Instruction for Performance page 3
As it is assumed that the synthesizer player has had experience with electronic music system, there is not need to further explain the functions of each of the synthesizer components.

G) The components of the tape delay system are interconnected as indicated in the figure 3.

Tape is threaded from the supply reel of T.R. 1 (tape recorder 1) past its record/playback head and onto T.R. 2. The tape is then taken past T.R. 2’s record/playback head and onto its take-up reel. T.R. 1 is set in record mode and T.R. 2 is set in playback mode. When a sound is recorded on the tape at T.R. 1, it will travel on the tape to T.R. 2’s playback head, and, by virtue of the interconnections of equipment shown in figure 3, it will be rerecorded at T.R. 1. This process will occur continuously depending on the state of the tape delay system determined by the setting of pots on the mixer. The time delay between reiterations of the sounds is dependent on the tape speed and distance between the two tape heads. In Rapport, the distance should be about 52 inches at 7 1/2 ips (or about 104 inches at 15 ips) in order to achieve a delay of about seven seconds.

The 6 to 2 mixer should be set up as follows: the six inputs are labeled 1 through 6, and the two outputs labeled 7 and 8; inputs 1, 3, and 5 lead to output 7, and inputs 2, 4, and 6 lead to output 8. The output pots are set at equal optimum levels (maximum signal to noise ratio and minimum distortion). The output of the synthesizer (after the addition of reverberation) is patched into both inputs 1 and 2. The output of track A of T.R. 2 is patched in to the inputs 3 and 4. Track B of T.R. 2 is patched into inputs 5 and 6. Mixer outputs 7 and 8 are sent into the inputs of track A and B of T.R. 1, respectively. As shown in figure 3, the stereo amplifier and speakers monitor the

— Rapport: Instruction for Performance page 4

6 “Pots” is an abbreviation for potentiometers (often used as volume controls).
outputs of track A and B of T.R. 1. A summary of the mixer’s input/output configuration is given in figure 4.

[Figure 4 here]

The maximum settings for each of the pots on the mixer should be registered and marked next to each pot. Once the output settings have been made (see above), mark each input pot at the place where a test signal produces an output amplitude equal to any other pot setting already determined. This setting is called the max input level. The settings of the playback levels of T.R. 1 and T.R. 2 respectively should be set so that when either pots 3, 4, 5, or 6 are at their maximum input level the re-recording of a sound on T.R. 1 (either track) from T.R. 2 (either track) is one DB less than its initial recording level. Once this has been done, the settings of outputs 7 and 8 and input/output settings on the tape recorders should remain unchanged.

The next step is to reset pots 3, 4, 5, and 6 so that the reiterated sound is 5 DB less than its initial level. This marked on the pot and called the secondary input level. As a result, inputs 1 and 2 will have only a maximum input level, while the rest of the input pots will have two settings, maximum and secondary.

H) There are sixteen basic states of the tape delay system. Each state has a different effect on the rerecording of sound in the system. Each state has a name, and when the synthesizer player desires a particular state in performance, she calls for it by name. The graphs found below describe each state; the “mixer setting” in each is similar in format to figure 4. On the next page, three symbols are used to indicate a pot.

---

7 This ensures that the tape delay system does not inadvertently produce positive feedback, increasing the amplitude of the signal on each reiteration. If set correctly, then when all pots are at their maximum input levels, a sound should be repeated at a level very slightly less than the previous level; thus, if the system is left alone, a sound will eventually die away, but only after maybe 20 iterations.

Rapport: Instruction for Performance page 5
indicates a pot open to its maximum input level.

indicates a pot open to its secondary input level.

indicates a pot that is closed.

The sixteen states are classified into four *Types*.

Type-I states: material entered into the system on either pot 1 or 2 or both will produce reiterations.

Type-II states: material entering the system will be reiterated on only pot 1 or 2. The pot that will allow repeats is marked with an arrow. If the only the pot without the arrow is open, the state is said to be *NULL* (see below).

Type-III states: Closing state, in which the reiterations are reduced or eliminated.

Type-IV states: Panning states, which may be used in conjunction with the other states.

In general, Type-I, -II, and -III states use pots 3 through 6, while Type-IV states use pots 1 and 2.

In order to visually display what each state does, a graph of reiterations with respect to time on each mixer output track is given. The graph is explained under the states FULL and CROSS. It should be noted that for the purpose of explanation, the material entered at pots 1 and 2 is given a different letter, namely X and Y. 8

---

8 In performance, the material from the synthesizer entering the tape delay system on pots 1 and 2 may be identical.

*Rapport: Instruction for Performance* page 6
I) States of the Tape Delay System

Type-I states

<table>
<thead>
<tr>
<th>name</th>
<th>mixer</th>
<th>settings</th>
<th>graph:</th>
<th>tracks</th>
<th>initial</th>
<th>1st return</th>
<th>2nd return</th>
</tr>
</thead>
<tbody>
<tr>
<td>FULL</td>
<td></td>
<td></td>
<td></td>
<td>A:</td>
<td>X</td>
<td>X+Y</td>
<td>X+Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B:</td>
<td>Y</td>
<td>X+Y</td>
<td>X+Y</td>
</tr>
</tbody>
</table>

[X enters the system on track A, and Y enters on track B; both return on both tracks, etc.]

<table>
<thead>
<tr>
<th>name</th>
<th>mixer</th>
<th>settings</th>
<th>graph:</th>
<th>tracks</th>
<th>initial</th>
<th>1st return</th>
<th>2nd return</th>
<th>3rd return</th>
</tr>
</thead>
<tbody>
<tr>
<td>CROSS</td>
<td></td>
<td></td>
<td></td>
<td>A:</td>
<td>X</td>
<td>Y</td>
<td>X</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B:</td>
<td>Y</td>
<td>X</td>
<td>Y</td>
<td>X</td>
</tr>
</tbody>
</table>

[X enters the system on track A, and Y enters on track B; on the first return, X returns on track B and X on A; on the second return, Y returns on A and Y on B; these two returns alternate, etc.]

<table>
<thead>
<tr>
<th>name</th>
<th>mixer</th>
<th>settings</th>
<th>graph:</th>
<th>tracks</th>
<th>initial</th>
<th>1st return</th>
<th>2nd return</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIDES</td>
<td></td>
<td></td>
<td></td>
<td>A:</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B:</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

| JOIN A |       |          |        | A:     | X       | X+Y        | X+Y        |
|        |       |          |        | B:     | Y       |            |            |

| JOIN B |       |          |        | A:     | X       |            |            |
|        |       |          |        | B:     | Y       | X+Y        | X+Y        |

*Rapport*: Instruction for Performance page 7
Type-II states

<table>
<thead>
<tr>
<th>mixer settings</th>
<th>graph:</th>
<th>tracks</th>
<th>initial</th>
<th>1st return</th>
<th>2nd return</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIDEx A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A: X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| SIDEx B        |        |        | A: X    |            |            |
|                |        |        | B: Y    | Y          | Y          |

| A              |        |        | A: X    | X          | X          |
|                |        |        | B: Y    | X          | X          |

| B              |        |        | A: X    | Y          | Y          |
|                |        |        | B: Y    | Y          | Y          |

| ONCE A         |        |        | A: X    |            |            |
|                |        |        | B: Y    | Y          |            |

| SIDEx B        |        |        | A: X    | X          |            |
|                |        |        | B: Y    |            |            |

Note: if the pot (1 or 2) with the arrow above it is closed, the state is NULL. In NULL, there is no delay. For instance, here is the state graph of NULL SIDE A. Since pot 1 is closed the X material is silence and therefore not written on the graph.

<table>
<thead>
<tr>
<th>name mixer settings</th>
<th>graph:</th>
<th>tracks</th>
<th>initial</th>
<th>1st return</th>
<th>2nd return</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIDEx A</td>
<td></td>
<td></td>
<td>A:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Rapport: Instruction for Performance page 8*
Type-III states.

FLOAT Slowly turn pots 3, 4, 5, and/or 6 to their secondary input levels. The following mixer setting shows CROSS after being effected by FLOAT

```
  □ □
  □ □
```

CLEAR Gradually turn all pots 3, 4, 5, and 6 to zero (off).

Type IV states.

In the previous state graphs, the sounds entering the system via pots 1 and 2 were given different labels, X and Y. In actuality, the material entering at pots 1 and 2 is identical. Type-IV states allow the material entering the system to be differentiated depending on the relative levels of the two pots. This can be either static (where the two pots are equal or not—possibly yielding a NULL state—or dynamic, where each pot changes gain independently according to the actions of the tape delay system player. When this is made to happen, the sound entering the system will appear to move between the two speakers. Thus, Type-IV states involve dynamically changing the special location of the sounds emanating from the synthesizer and the prerecorded tape(s).

PAN…NOW

The tape delay system player starts panning between the left and right speakers. First, the synthesizer player calls out the word PAN; but the tape delay system player starts the panning only on the word NOW.⁹

---

⁹ This allows the tape delay player to be ready to pan and to allow the synthesizer player to call the word NOW at a particularly salient or dramatic moment.

*Rapport: Instruction for Performance* page 9
Here are the eight successive stages in the state PAN…NOW using pots 1 and 2. The pots are continuously changed to move from one stage to the next usually in the following order (or the retrograde) wrapping around from the last stage back to the first.

![Diagram of stages]

**SLOW PAN…NOW**
This state is similar to PAN…NOW except the panning should be rather slow and smooth.

**STABLE**
Stop panning very soon after the command. The levels of pots 1 and 2 may be at any level between off and the maximum input level.

It is important to understand the type of panning performed by the tape delay system player is not to be mechanical, but to follow the flow of the music as he hears it. Panning might not use the off level, so it might substitute a low level for the □ pot levels in the above diagram, or it might use only the ■ and □ pot levels as below

![Diagram of pot levels]

*Rapport: Instruction for Performance* page 10
In fact, occasionally the panning might not be so regular, moving between different pot levels and at different rates as the synthesizer player desires. But, the more usual regular panning (with some mild variations) should prevail.

A chart (list) of all the tape delay system states is included in these notes for the players to use during performance.

J) Performing Rapport: The synthesizer player is basically in control of the form (or flow) of the piece. She plays the synthesizer, mixes the electronic sound with any or all of the four tracks of the prerecorded tape(s), and tells the tape delay system player what state is to be used and when. The tape delay system player has a more limited freedom as she pans and times the change from state to another. These roles are subject to the following conditions and guidelines.

1. The piece lasts slightly longer than the prerecorded tapes—about 30 minutes
2. Rapport begins with at least the track on the prerecorded tape that contains a traditional south Indian composition in Thodi raga, played on the vina. The volume level should be full with some reverberation added. The first state should be CROSS. The other tracks may be brought soon enough in various combinations and levels. After this opening, all is free until the end of the piece within the range of suggestions given in 4. and 5. below.
3. The very end of the piece focuses or zones in on the track of the prerecorded tape containing south Indian classical vocal music. (Any reiterations of the previous musical fabric may be retained, of course.) The delay state should be CROSS then CLEAR.
4. The electronic sounds used in Rapport should not often assume a foreground role in the ongoing process of the piece. Their function is to produce an environment

---

10 The composition is *Kaduna variki* by Tyagaraja played by K. N. Naranyanaswami.
11 This is an alapana in raga Shankarabharana, sung by M. S. Subbulakshmi.

*Rapport: Instruction for Performance* page 11
for the prerecorded material, but not just to accompany it. Thus, the electronic sounds may sustain, imitate, embellish, contrast, neutralize, complement, etc. the music on the prerecorded tape. Exact imitation of the recorded material by the synthesizer player should be undertaken carefully so that these synthesized sounds (in their simplicity) do not weaken the character of the prerecorded music. Due to the presence of the tape delay system, the introduction of electronic music may be quite sparse and yet a “full sound” will easily be built up by the system. The same goes for the use of the tracks of the prerecorded tape(s); not all the tracks need be used at once or at peak volumes, and sometimes no prerecorded music need be introduced into the piece. This means that a good deal of the music on the tape(s) may not be used in a particular performance of Rapport. Electronic sound may be used to provide continuity and contrast when there is no or little prerecorded sound in the mix. In this way, drones, chords, canons, textures, imitations, etc. are easily built up by the state of the delay system. Indeed, a successful performance of Rapport involves subtle and dynamic mixtures of the four tracks of prerecorded material and the electronic sounds at differing and changing dynamic levels occasionally with frequent changes of the states of the delay system.

5. Rapport is an open, spacious, ongoing process composition whose details will be quite different from one performance to another. Its form or flow may be likened to the fugue or ricercar with its series of exposition and episodes. The piece will tend to have passages of four functions: accumulations; preservations (FLOAT is a useful state for this function); decays; and moments of repose—even silence (after a CLEAR state). In general, the recorded music and electronic sound are entered into the tape delay system in order to develop, for lack of a better word, a time field. A time field may be extended and changed by the change of a state of the delay system and/or the introduction of new sounds and materials. The amount of time spent in a time field is, of course, free, but usually three iterations (3 times 7 = 21 seconds) are need for a time field to fully develop. The piece may remain in the CLEAR or ONCE A or ONCE B state, as well as the NULL states for reasons of contrast.

Rapport: Instruction for Performance page 12
K) Final note: The roles of both players are to combine, embellish, extend, contrast, transform, accompany, and complement the prerecorded music. To accomplish this successfully depends on their skills, knowledge, intuition, taste, and humility in regard to musical expression in general and the music on the tapes in particular. The ultimate goal is to present the range of similarities and diversities of music as a musical expression as such.
Figure 1. Configuration of electronic equipment needed to perform Rapport.
Figure 2. Block diagram of synthesizer interconnections.

○ indicates a pot.

NB. The reverb unit may or not be part of the synthesizer.
Figure 3. The tape delay system.
Figure 4. Tape delay system mixer configuration
Playing the 2012 version of Rapport by Robert Morris

Two performers are required. (For overview and description of the piece, see the last section of this document, “Playing Rapport.”)

Performer 1 controls the prerecorded music selected from the four input tracks, the state of the delay system, and panning.

Performer 2 controls the state and outputs of the synthesizer, that is, the internal sound/modification sources. There are 1) the ring modulator (Ring Mod); 2) the frequency modulator (Freq Mod); and 3) the Sawtooth/Noise/Filter Module (Saw Filt). The synthesizer also includes two envelope generators and two control signals that control the three the internal sound/modification sources. Performer 2 also plays the midi keyboard to set and initiate pitches and rhythms.

Each performer controls the evolution of the piece once it starts, by moving, clicking and holding the functions on the two panels with his/her own mouse. There is an important complication to note: while the motion of the mice is totally independent, only one of the two performers can click and/or click and hold at once. Thus the two performers have to engage in mutual cooperation as they interact in performance.

The stereo output of the MAX-MSP patch should be sent to an amp and speakers in the performance space. The patch automatically records a performance by monitoring the stereo output.

There are two control panels that are used to play Rapport. The document on “Starting Rapport” shows both panels, and describes how to set up the preliminaries, start and end of the performance.

Below is the left panel of Rapport. It is used to set up the preliminaries, start and end of the performance, the levels of the four prerecording tracks and the output of sound generators, and the state of the delay system.
For the functions of the square toggle switches and the open buttons see the document on starting Rapport.

Playing the 2012 version of Rapport page2
Info for Performer 1

Performer one uses the left panel for his/her performance actions.

Overall input gain slider is set on about .1, but it may be raised later in the duration of the piece if the inputs seem less loud (this is due to normalization inside the MAX-MSP patch).

Automatic panning.

On/off square toggle switch turns this function on and off. If off, performer 1 can move the horizontal slider (marked A side, B-side) as desired.

I-r/rand square toggle switch changes the auto panning between the A and B side of the stereo field: 1) (l-r) regular back and forth motion and 2) (rand) a random walk. There are four speeds at which the auto panning can operate: these are set by the four buttons 1 to 4 under the auto panning toggle switches.
The input to the delay system consists of seven different channels, the levels of which are set by the **vertical shaded sliders** in the **Input box**. The four sliders on the left are signals from the four prerecorded tracks, 1 to 4 respectively; **the three sliders on the right** are signals from the Ring Mod, Freq Mod, and Saw/Filt respectively. Performer 1 controls the left four sliders, and performer 2 controls the three right sliders. Performer 2 (but sometimes performer 1) controls the degree of reverb is set by the slider marked dry $\leftarrow \rightarrow$ wet. Reverb is not automatically controlled, and resetting the degree of reverb is important as the piece goes on.
Delay System

The seven inputs are mixed to one channel, which is then sent into the panning controls that distribute the sound in the stereo field in different ways. The output of the panning is a stereo channel that is sent out to the external amp and speakers. This signal can also be sent into the delay system. When all vertical sliders are off (lowest position) the delay system is bypassed. The output of the delay system is also sent to the external amp and speakers.
Performer 1 controls the delay system sliders. The delay system delays the stereo channel by seven seconds. In the following, the two channels of the stereo are labeled A and B (L and R).

The upper left slider delays the A channel seven seconds and then routes it to the A channel.

The lower left slider delays the B channel seven seconds and then routes it to the A channel.

The upper right slider delays the A channel seven seconds and then routes it to the B channel.

The lower right slider delays the B channel seven seconds and then routes it to the B channel.

The degree to which these four sliders are set is very important. If they are set to approximately \( \frac{3}{4} \) full, the delay will be noticeable, and slowly fade away after many delay cycles.

At 1/3 full the delay will be in the background.

If the sliders are set too high (i.e., full up), positive feedback will begin to occur, in which each delay will be louder. If this begins to occur, the sliders should be immediately set lower. (Either performer 1 or 2 may correct this problem.)

Note that when the sliders are set to 0, then there will be no delay, but the delay system will continue to return sound for seven more seconds.

The states of the delay system are many.

Just one slider up can produce a one-time delay or a delay on either A or B channel.
With two sliders up the delay can recur in the following ways.

Lower left and Upper Right Sliders up: delay without channel exchange

Upper Left and Lower Right Sliders up: delay with channel exchange

Upper Left and Right Sliders up: A channel is delayed on both channels

Lower Left and Right Sliders up: B channel is delayed on both channels

Upper and Lower Left Sliders up: Stereo channel is delayed to A channel

Upper and Lower Right Sliders up: Stereo channel is delayed to B channel

Note that these sliders need not be at the same level to achieve interesting and subtle mixes of the delayed sound.

Important note: As already stated performer 1 is in control of the overall sound and delay of the piece. S/he controls what music is heard from the four prerecorded tracks, its dynamic level, and how it is mixed in the delay system. In order to produce an aesthetically sonic result s/he need to keep working with the levels of the 4 left input shaded sliders, and the sliders of the delay system (plus panning). Obviously, this will involve continual and subtle modification of these sliders as the piece goes on. In addition, performer 1 needs to know the content of the four prerecording tracks and should listen to these tracks one at a time and in combination. Eventually, the performer will approximately know the where a particular kind of music resides in time and on what track.

I advise performer 1 to rarely use all the four input tracks and/or have all the delay sliders up at once.
Info for Performer 2

Performer 2, the synthesizer player, uses the right panel for his/her performance actions, as well as the midi keyboard. In addition, on the left panel, performer 2 uses the three shaded right-most input sliders and the reverb controls.

Here is the right panel.

The right panel consists of many modules: amplitude and FM envelope generators, the presets, a ring modulator, an FM sound generator, a Sawtooth/Noise/Filt unit, and the discrete and continuous random control signals.

Playing the 2012 version of Rapport page8
Please note that there will be an audio signal sent to the delay system or to the external amp and speakers only if a keyboard note is depressed and one or more of the three input sliders (on the left panel) are up. One can however fade sound in and out: have the input slider down, press a key on the midi keyboard, then raise the slider up; or during a sustained sound (midi key is depressed), then fade the slider down and then release the key.

**Ring Mod module**

![Ring Mod module](image)

The ring modulator uses three sine wave oscillators named A, B, and C. The keyboard controls the pitch of osc A. The output of the modulator is the osc A modulated by osc B and C.

Osc B is also controlled by the keyboard, but is tuned to the oscil A by a fixed frequency ratio. This ratio is selected from the buttons under “Modulating Frequency for osc B.” For other values, performer 2 can use the computer keyboard to type in a value in the number box to the right and lower than the buttons. The 0 button silences oscil B.

Ocsil C is like oscil B, with its own set of buttons and number box, but it can be used as a low frequency oscillator to produce amplitude modulation (pulses) on oscil A (or other sounds as stated below). The buttons under “Beats for osc C” gives these low frequency pulsations; the numbers are the number of amplitude pulses per second; a number box can be used for

---

Playing the 2012 version of Rapport page9
other values. (The “beats of Osc C” buttons automatically cancel the input of Osc B to the modulator.)

The output of the ring modulator module is sent through an envelope generator before it emerges at the third-from-the-right shaded input slider on panel 1. This slider controls the level of the output.

The ring modulator can also used to timbreally modify the four prerecorded tracks; under “off internal external” there are six buttons. 0 turns off oscil A; 1 uses oscil A as an input to the modulator (as described above); buttons 2 through 5 allows prerecorded tracks 1 to 4 respectively to be used instead of oscil A.

Osc A’s frequency can be also controlled by a discrete or continuous (or both) control signal by pressing square toggle switches next to “random modulation discrete continuous.” The average frequency and amplitude of these signals is controlled in the Disct Rand and Cont Rand modules and are described below.

It may turn out that performer 1 is using material from prerecorded track 2 and performer 2 is modulating the same track by pressing the 3 button. The relative balance of the unmodulated track to the modulated version is the relation between the positions of shaded input slider 2 and the third from right input shaded input track.

The output of the Ring Modulator module is sent through an amplitude envelope generator. The output is subsequently found at the third of right input slider on the left panel.
In this module an Osc C is frequency modulated by OSCIL A and B. The midi keyboard controls the frequencies of all three Oscs. The frequency ratios of oscil A and B are set by the buttons and slider under “Mod Freq for Osc A” and “Mod Freq for Osc B”. The buttons under “Index of Osc A” sets the degree of FM modulation of Osc C and “Index of Osc B” The 0 buttons stops the modulation of Osc C by Osc A and/or Osc B.

Osc C’s frequency can be also controlled by a discrete or continuous (or both) control signal by pressing square toggle switches next to “random modulation discrete continuous.” The average frequency and amplitude of these signals is controlled in the Disct Rand and Cont Rand modules and are described below.

Furthermore, the index of Osc C is controlled by an envelope generator to produce dynamic timbres. This is explained later below.
The output of the FM module is sent through an amplitude envelope generator. The output is subsequently found at the second shaded input slider from the right on the left panel.

The Sawtooth/Noise/Filter Module

Here a sawtooth oscil waveform, white noise, or one of the four prerecorded tracks can be fed into a lowpass filter with variable center frequency and quality factor.

The buttons marked 0 to 6 select the input to be filtered.

0 no input
1 white noise
2 sawtooth
3 prerecorded track 1
4 prerecorded track 2
5 prerecorded track 3
6 prerecorded track 4

The filter center frequency is set by the number box over “CF”; the filter quality factor is set by the number box over “Q”.

The second row of buttons (numbers with decimal points) multiplies the center frequency in the CF number box.

The midi keyboard sets the frequency of the sawtooth oscil. In addition the frequency can be controlled by a discrete or continuous (or both) control
signal by pressing square toggle switches next to “random pitch mod: discrete cont.” The average frequency and amplitude of these signals is controlled in the Disct Rand and Cont Rand modules and are described below.

The filter center frequency can also be controlled by the same discrete and continuous control signals with the toggle switches next to “Rand CF Mod.”

The output of the FM module is sent through an amplitude envelope generator. The output is subsequently is set by the rightmost input slider on the left panel.

Amplitude Envelope Generator Module

The envelope is initiated by pressing any key on the MIDI keyboard. One of the three right-side shaded sliders on the left panel have to be up to hear sound. The buttons provide a variety of amplitude envelopes. 0 = no output; 1 short attack and decay; etc. to 8 = sharp attack, longer decay; 9 = repeating envelope the frequency of which is set by the slider or number window. Once a button is selected, the envelope type is set until another button is selected. As implied above, a sound may be faded in and out, overcoming the effect of the amplitude envelope generator.
FM index Envelope Generator Module

The envelope is initiated by pressing any key on the MIDI keyboard. The envelope only affects the output of the FM module. Second from right of the shaded sliders on the left panel has to be up to hear the FM envelope.

The buttons provide a variety of timbre envelopes. 0 = no output; 1 short attack and decay; etc. to 8 = sharp attack; 9 = repeating envelope the frequency of which is set by the slider or number window. Once a button is selected the envelope type is set until another button is selected.

Playing the 2012 version of Rapport page 14
Discrete random signal generator

This module sends a time varying series of random steps to the Ring Modulator, the FM, and the Saw/Noise/Filt modules. The toggle switch at the upper left allows or inhibits the signal to reach these modules.

The buttons and number box under “range” sets the range of steps from small to large values. The buttons and number box under “step size” set the size of the steps within the range. The average speed of the steps (never periodic) is set by the buttons and number box under “speed.” The higher the number, the slower the average speed.
Continuous random signal generator

This module sends a time varying curve of random values (wiggles) to the Ring Modulator, the FM, and the Saw/Noise/Filt modules. The toggle switch at the upper left allows or inhibits the signal to reach these modules.

The buttons and number box under “range” sets the range of the random oscillations from small to large values. The buttons and number box under “step size” set the average size of the random oscillations within the range. The average number of the random oscillations of time (never periodic) is set by the buttons and number box under “speed.” The higher the number, the slower the average speed.
Synthesizer Presets

The preset box has six active buttons (blue). When a button is selected, it turns yellow. Each of these six presets instantly configures a particular combination of synthesizer functions to produce quite varied sounds. After a preset is selected, it can be altered via toggle switches, buttons, number sliders and number boxes. Performer two should explore the sounds available from the presets, which will stimulate her/his sonic imagination to make new sounds and textures.

Playing Rapport

Obviously it will take time for both performers to learn what is on the prerecorded tracks and all the functions of the delay system and synthesizer. This is take many practice trials, for each performer alone and together.

Here are program notes for the piece that can serve as some guidelines for an appropriate performance of the piece.

*Rapport* was conceived in 1971 as an improvisational piece for two performers using pre-recorded tapes of music to be processed through electronic music equipment. By 1973, the nature of the piece stabilized into a set of specific instructions for performance. In 2010, I translated the original electronic hardware into computer software so Rapport could be performed on a laptop computer. In addition, the recorded music was selected anew; however, some of the original items were preserved.
The prerecorded “samples” are drawn from classical, popular, traditional (i.e. folk), and ritual music selected from a large selection of different geographical areas on each continent. Only a few of the excerpts are of western classical or pop music. The samples are not directly heard but sampled, modified, intermixed, and transformed by the performers in real time. Every performance is unique, often discovering unusual combinations of musical sound and reference.

One performer plays the synthesizer, which can alter the prerecorded music in various ways, and the other performer mixes the output of the synthesizer and unaltered musics and sends it into the digital delay system. The result is an intricate canonically web of musical texture varying continuously between montage to mixage depending on the actions of the performers.

The length of the pre-recorded material is 30 minutes, so the piece has to last a little less than a half an hour. While the piece always begins in the same way with a piece of South Indian (vina) music and/or mixed with an Egyptian art song accompanied by an oud, and/or mixed with a piece of Cambodian theater/dance music, each performance takes its own course, exploring the possible interconnections between the recorded music and the computer generated and transformed processes and sounds, depending on the improvisational skill of the performers. The performance can end with another South Indian selection, this time a vocal improvisation; however, the states of the delay system, the synthesized sound, and the previously selected prerecorded material may mask or disguise this selection.

The idea behind the piece was to allow two performers familiar with world musics and well-versed in live electronic music performance to improvise a piece integrating musics of all peoples and times into a vast tapestry of sound—a non-hierarchic tribute to music making in its many guises and incarnations.

In its original form, the piece was designed to be played in a comfortable setting for a small group of people invited to attend a performance. Before each performance, the nature of the piece was explained and the electronic
component illustrated; after the performance, the performers encouraged discussion and answered questions. Refreshments were often served to heighten the relaxed and informal nature of the event. In its present form, Rapport can be performed in any venue including installations.
E-mail on Rapport from Robert Morris:

Hi Tomek,

Here's my take on your question. See below.

Hi Bob,

Thanks for your input about the performance!

Also, as I'll be writing about Rapport as part of my thesis, I hope you don't mind me trying to steal a little bit more of your time and sometimes send you a question along the way?!

I'll be glad to help, although my reply might have to be delayed (as was this one) if I'm really busy.

Recently I've been wondering about one thing after reading your essay again: are the solutions you found for realizing Rapport fully satisfactory for resolving the dilemma about your efforts to connect your music with other music cultures being ethnocentric or a form of colonialism? It's a kind of problem I face too, as I'm interested in cultural appropriation in my music. Right now I'm trying to conceptualize if it is actually possible for me (or for anyone) to appropriate without it becoming colonialism, and how. It would be very interesting to hear what you think about all that in more detail or if there are readings you would recommend for me to check out.

The issue is somewhat reduced if you do reality checks with the musicians with whom you collaborate, or whose music you use in your own work. So if I use a shenai recording in my work, if the player who made the recording approves, or doesn't care, or is happy about it if his/her name is mentioned in notes, or receives payment, then it is OK. But there is the problem is that the player may not understand the use to which you put his/her music—for instance, you might get a lot of admiration and credit for using his/music, whereas her/his role in the exchange is not so valued (that is, ignored). There are etic and emic aspects of this exchange stuff, upon which the possibilities of covert colonialism is disguised. (In any case, if you think you are entitled to use someone else's music in your own, your are definitely implicated in some form of colonialism; but see below.)

In my case, I do not credit each performer on the source files in my notes on the piece, or at a performance of the piece, so I am guilty of using music without exchanging something for it. I worried a lot about this until I saw that performers from other traditions use western music for their own purposes without asking, too. More pertinently, in my interactions with Indian musicians, they get recognition because a western musician/scholar is involved in their music, so the benefit goes both ways. But I really didn't feel OK about such exchanges until I had gone to India and lived in that musical culture and got a feel for Indian music making as it is actually practiced there. I.e., I got "street cred".
But even the concept of experimentation in new music may be tainted with colonialism, in the image of "explorers" discovering "new worlds" which are misunderstood as places to be conquered or cultivated, paying no attention to those who live in such places.

In other words, there is no general way out of the dilemma that "borrowing" music (without credit or exchange) is actually stealing it. However, there is "homage." If I quote a passage from Beethoven in one of my pieces, I do not need Beethoven's OK (not only because I cannot get it since he is dead), but because as a Western composer I have a sort of license to borrow music if I do it with respect. And in other cultures, when a performer has studied with a master teacher (guru) for some time, there is a bond that is not broken by playing music in the master's style without mentioning it—in fact, playing music not in that style may be seen as transgressing that bond. Contrast this with the issues of plagiarism in Western scholarship, where all uses of other peoples research must be acknowledged up front in footnotes and the like. Here it is OK to use material without the author's permission, but only if one gives credit where credit is due. So, in general, the issues of colonialism are diminished within the intersections and acculturations of cultures, once certain practices are shared and evolved.

But after my Acculturation Trilogy (which was initiated by Rapport) I returned to writing "Western" music, but with a realization that different musics can influence each other not only by quotation and borrowing, but in conceptional, aesthetic, and conceptual modes and ways. So some of my recent work is in the spirit of Japanese painting or poetry, or reflects the world views of Buddhist art, such as in the concept of mandalas (mimesis), or in the "flowing" worldviews of Taoist sages, or in the concepts of no-self in Madhadyamika Buddhist philosophy where anything that appears to have identity is actually an algorithm. For instance, my outdoor music is not very "Western" at all, but resonates with those traditions that value nature as process, not as something to plunder, as in especially colonial Western practices.

I also realize that you talk about electronics providing a "place" for different musical cultures to coexist peacefully and I understand that concept but, I think it could also be easily argued that technological abilities do not provide means of justification for removing the sound source from its origin without first owning the rights for it. Also, do you think that concept changes with the excess of technological abilities nowadays?

The use of electronic or computer technology, which can take any music out of its performance and cultural setting into a perhaps neutral space only really works if the music used is not identified as "from a culture," but as music sound in its own right. But again one must check if this is OK with the people who made this music that you are putting in this neutral place.

In the case of Rapport, the "composition" is what I call a meta-composition, that is: a collection of rules, materials, technologies, and practices that produce compositions or improvisational results. So Rapport is not something one can own in the same way I own a composition of mine notated in a score. And moreover, Rapport's success depends not only on its conceptually base as configured in its rules, materials, technologies, and practices, but on the people who use it to make a piece or improvisation. Considering the source music on the sound-files from this perspective means that if an Indian musician plays Rapport, then there will be some music from his/her tradition on the source files, just as when you or I play
Rapport, where is there is some new music on the source files. Also, when this Indian person plays Rapport his/her (traditional and practiced) way of hearing and playing will guide the piece differently from when you or I play it. So by letting anyone play the piece, I as composer, am permitting Rapport to have features that derive from the musical practices that the pieces on the sound-files represent as embodied by the performer.

I hope this is useful to you.
TOMASZ ARNOLD

VILLAGE OF CONTOL

FOR OVERTONE SINGER AND "WORLD MUSIC" ENSEMBLE
**Performance notes:**

**Instrumentation:**
- Male overtone singer (Khoomei)
- Chapareke Rarámuri
- Pipa
- Marimba
- Steel pans (six bass)
- Gamelan (Gong Ageng, Gong Suwukan, Gender)

**Electronic equipment:**
- Two dynamic mics for pipa and the singer.
- One miniature cardioid condenser mic. for chapareke.
- Mixer (digital mixer with compressor is recommended to avoid possible feedback from the chapareke input).
- 2 channels PA
- Optional pair of cardioid mics if Javanese Gamelan is used.

**Set-up:**

The pitch material in the piece is generated spectrally in accordance with the fundamental note used by the overtone singer. However, the fundamental (and consequently all of the relative pitch material in the piece) can change from performance to performance depending on the tuning of the available Gamelan set. The fundamental should reflect the number 1 on the Pelog or Slendro scale of the used Gamelan. The following score reflects the tuning of the Gamelan set from Wesleyan University. A transposed version of the score can be provided by the composer upon request to fit the specificity of the Gamelan set to be used by the performers.

The placement of ensemble is as follows:

**Notation (global):**

Working with a stopwatch is necessary for performance. Sections are timed, with general timing indicated by the large markings. The time points at the end of each section (separated by the dashed bar line) are indicated by the smaller time marks within brackets. The passages occurring in reference to specific points in time are marked with the smallest font above the stave. Passages without specific timing are marked with "Timing ad lib."
indication, in which case the performer makes the decision of when to play in reference to the other ensemble parts and the general timing of the section.

Continue playing indicated sound until the end of arrow.

Continue playing indicated group of sounds until the end of the large arrow.

The points of exact synchronization are indicated by the vertical dashed arrows.

Stop the sound and muffle the resonance.

**Instrument-specific instructions:**

**Overtone singer:**

The part requires a male overtone singer fluent in the *Khooomei* style of singing. The three styles of overtone singing used in the piece are: *Khooomei* (regular open voice technique with tongue down), *Isgeree* (the “whistle” style, a pure tone whistle drone executed by the tongue touching the upper part of the mouth muffling the sound), and *Xarxira* (produced with less vocal tension, resulting in a rough sound and extending the length of the frequency wave 2 times that results in a subtone). Throughout the piece *Khooomei* is indicated with regular shaped notes, *Isgeree* with diamond-shaped and *Xarxira* with square-shaped.

*1 The line indicates the mouth movement. The bending indicates the opening and closing of player’s mouth resulting in the change of harmonics. The numbers above the line refer to the numbers of partials of the overtone series, and indicate which partial should be heard at each specific moment.

*2 Improvise the melodic lines on overtones as suggested with the line before. Use the full available spectrum of overtones and keep the improvisation low in density. The melodic lines should be moving rather slowly.
*3 Gliss from B to Db using Xarxiraa technique, and then gradually transition from Xarxiraa to Khoomei.

*4 Make a cup out of your hands and wrap the microphone with them. Sing into your hands producing more volume.

*5 If the note is outside the singer’s range, it can be sang an octave lower (like previously)

Chapareke:

The Chapareke is an indigenous instrument of the Rarámuri people who inhabit areas of Coper Canyon in Chihuahua state of Mexico.

The body of chapareke is a stick made out of a dried stem of Maguey flower (Quiote). The strings (usually 2 or 3) are stretched from one side of the stick to the other and can be tuned to a defined pitch. The range of the strings vary depending on the instrument. Originally Rarámuries used gut strings but nowadays the most popular are metal guitar strings.

The Chapareke is to be held in one hand leaving the other to pluck or bow the strings. (Plucking technique is the authentic way of playing the instrument, however, the piece requires the usage of violin bow most of the time). The player’s mouth is to be placed on the stick towards the top of the strings providing a resonant chamber, which results in the audibility of strings’ overtone series from approximately 4\textsuperscript{th} to 8\textsuperscript{th} partial. The partials can be changed with the lip movement resulting in melodic lines of the overtone series.

Because of the low dynamic range and subtle audibility of overtones, the instrument needs to be amplified for the piece. A miniature cardioid microphone is to be placed at the mouth spot (similar to flute miking). The microphone needs to be completely covered by the player’s mouth to pick up the overtone series most effectively. The gain needs to be high (just a notch below the feedback point). The player and the sound engineer need to be cautious of feedback and distortion. Feedback will most likely occur...
in the loud bowed moments (for example in min. 1:30) and distortion in the plucked section (3:15 to 3:35). The digital mixer with compressor is recommended for that reason.

*1 The notation is similar to tabulature. The two lines represent the two strings of the chapareke that are used. The main string needs to be tuned to the fundamental pitch of the piece (Db in the case of this score) within one octave below middle C. The second string is to be used for noise extended techniques, so its tuning is irrelevant. The separate string for extended techniques is to avoid detuning of the main string as the extended techniques often require high bow pressure that might lower the string’s pitch during the course of the piece. However, it is still possible to execute the piece if the available chapareke has only one string.

*2 Scratch tone. Muffle the string on both sides of the bowed spot to disallow the defined pitch. Use your hand that holds the instrument to muffle one side of the playing spot and your fingers of the other hand to muffle the other. Apply high bow pressure (just like the overpressure technique on string instruments). The resulting sound should be the low frequency noisy scratch of an undefined pitch. The gesture should start with the slow bow movement and increase the speed towards the end.

*3 The line indicates the mouth movement. The bending indicates the opening and closing of the player’s mouth resulting in the change of harmonics. The numbers above the line refer to the numbers of partials of the overtone series, and indicate which partial should be heard at the specific moment.

*4 Tremolo on the string with a threaded rod. Increase the speed of the tremolo together with the dynamics.

Pipa:

The recommended tuning of the instrument is A D Eb A. Although it is possible to perform the piece using regular pipa tuning, the performer is advised to tune the E string half step down as it will help to execute some of the passages starting at minute 7.

*1 The pitches for the passage are to be chosen from the scale and register as indicated by the small notes in parenthesis. The passage lasts for the amount of time indicated between the beginning and ending of the bracket. Within that time frame, the performer plays three instances of repeated 4-note figures. Each of the figures represent one freely chosen pitch repeated 4 times. The number of notes within the figure has to be exactly 4 and cannot occur more than three times. The performer chooses freely when to play the figures within the timeframe while keeping it relative to the marimba part in dialogue. The tempo of the repeated notes is relative to approximately quarter note = 160.

*2 Same as above with the following exceptions: the amount of notes varies from 4 to 8 and should be different with every new figure. The figures in dialogue with marimba are not always separated from each other as previously but are varied and can overlap. The gap between each figure and the amount of notes should be as varied as possible. The passage continues until 3:15.

*3 Similar to before. The number of repeated notes is varied from 4 to 8. The figure is to be executed no more and no less than 5 times. The timing is completely free within the 3:50 to 4:35 section.
*4 Same as before except this time only four 4-note figures.

*5 Tremolo with Jiaosixian technique. Twist all 4 strings in pairs and pluck continuously from mezzo piano to fortissimo. Bring the strings to normal position as fast as possible for the passage at minute 7.

*6 The passage is generally to be executed as fast as possible. However, during the subsequent repeats the performer should vary the tempo slightly speeding up and slowing down within each repetition. The order and occurrence of the notes within the passage should be slightly varied with each repeat. No two repeats should be exactly the same. The passage can be extended or shortened and groups of notes can be interchanged and repeated at will, but the overall arc of falling and rising is to be kept within each repeat. The passage should never rhythmically align with the marimba.

*7 The passage should not align rhythmically with the marimba. Similarly in 8:39, 8:46 and 9:10.

**Marimba:**

Five octave concert western marimba is needed for the part. Mallets need to be carefully chosen for the section between 3:50 and 9:20 as there is no time to change them for the high register passage at min. 7 from the low register tremolo occurring before. Two-tone mallets are recommended for that section to allow the low register to be as resonant as possible while keeping clean projection and loud dynamic of the fast fortissimo passages from minute 7.

*1 The pitches for the passage are to be chosen from the scale and register as indicated by the small notes in parenthesis. The passage lasts for the amount of time indicated between the beginning and ending of the bracket. Within that time frame, the performer plays two instances of repeated 4-note figures. Each of the figures represent one freely chosen pitch repeated 4 times. The number of notes within the figure has to be exactly 4 and cannot occur more than two times. The performer chooses freely when to play the figures within the time frame while keeping it relative to the pipa part in dialogue. The tempo of the repeated notes is relative to approximately quarter note = 160.

*2 Same as above with the following exceptions: the amount of notes varies from 4 to 8 and should be different with every new figure. The figures in dialogue with pipa are not always separated from each other as previously but are varied and can overlap. The gap between each figure and the amount of notes should be as varied as possible. The passage continues until 3:15.

*3 The passage is generally to be executed as fast as possible. However, during the subsequent repeats the performer should vary the tempo slightly speeding up and slowing down within each repetition. The order and occurrence of the notes within the passage should be slightly varied with each repeat. The passage should never rhythmically align with the pipa.

*4 The passage should not align rhythmically with the pipa. Similarly in 8:39, 8:46 and 9:10.
**Bass steel pans:**

The six bass set-up is to be used for this part. Bass steel pan mallets are recommended. The instruments are to be arranged in accordance with the performer’s preference. All six bass steel pans are recommended but if not available, the part can be executed with any number of instruments starting from 3.

*1 When pitch is not specified, the performer can choose freely within the scale indicated by the small notes in parenthesis.

*2 Freely chosen pitches. The passage lasts for the exact amount of time indicated between the beginning and ending of the bracket. The number of notes as well as the overall contour of the passage needs to be executed as written.

*3 Single stroke tremolo.

*4 Alternate between long (A) and short (B) notes. The length of the long notes as well as the amount of space between each note should vary constantly from approximately half a second to 2 seconds. Short notes should be muffled immediately after the note is struck. Cue the singer as you’re playing as the passage is in unison with him.

**Gamelan:**

The Balinese Gamelan is recommended for the realization of the piece because of the loud dynamics and Gender part requiring hard mallets. The thick metal of the Balinese instruments allows the player to achieve loud dynamics without the danger of hurting the instrument. Moreover, the nature of Balinese Gamelan music (that often makes use of hard mallets on Genders and loud dynamics in general) makes the part culturally more appropriate than in the case of Javanese Gamelan where the music is more calm in character and the instruments are made of thinner metal. If Javanese Gamelan is the only available option, arrangements should be made with the Gamelan instructor or the person in charge of the instruments to make sure they approve of the instrument usage. Amplification can be considered if the triple *forte* dynamics turn out to be impossible to achieve acoustically.

The Gamelan player should sit cross-legged in between two large gongs reaching for the gongs hanged on the two sides of the gong stand. The gender should be placed in front of the set-up.

The recommended scale is Slendro although the piece can also be played on Pelog. The pitches specified in the score are approximate and in accordance with the tuning of Wesleyan University’s Gamelan. While the pitch will vary with different sets of Gamelan, the provided numerical notation will be the same in every case. The numbers above the notes indicate which note of the Slendro or Pelog scale is to be played.
7:00

Pipa

Mar.

Gam.

(repeat with variations)

7:20

Cupped hands follow the steel pans player

7:30

Ovrt. Sing.

Pipa

Mar.

Bs. St. Pans

Gam.

(continue with variations)

7:30

Cue the singer

7:50

8:03

8:02

[7:19"

[7:20"

[8:00"

[8:04"

[7:50"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"

[7:19"

[7:20"

[8:04"

[8:03"

[8:02"
8:04"

Ovrt. Sing.  
Cupped hands  
with violin bow  
ad lib., full spectrum, varied density

Chapa.

Pipa

Mar.

Bs. St. Pans

Gam.

(Sunan-kan) (all of the available gongs)

8:05"

8:06"

8:07"

8:08"

8:09"

8:10"

8:11"

8:12"

8:13"

8:14"

8:15"

8:16"

8:17"

8:18"

8:19"

8:20"

8:21"

8:22"

8:23"

8:24"

8:25"

8:26"

8:27"

8:28"

8:29"

8:30"

8:31"

8:32"

8:33"

8:34"

8:35"

8:36"

8:37"

8:38"

8:39"

8:40"

8:41"

8:42"

8:43"

8:44"

8:45"

8:46"

8:47"

8:48"

8:49"

8:50"

8:51"

8:52"

8:53"

8:54"

8:55"

8:56"

8:57"

8:58"

8:59"

8:59"

8:59"
10:12"

Senza misura

 Continue dialog as in previous sections slowing the events down gradually.

Chapa.

10:30"

Continue dialog as in previous sections slowing the events down gradually.

Pipa

10:36"

Ovrt. Sing.

[10:14"]

Con la misura \( \frac{1}{2} = 120 \)

10:34"

10:34"

10:42"

10:42"
Scatter in the Sky notes:

Scatter in the Sky:

1. Song:

Scatter in the sky,
It's been falling by my side,
Skatter in the Sky,
Is it right? Or should I never fly?

Scatter in the foreign land,
Going far but still together, blends,
In something tender,
Tender.

Scatter in the Sky,
Go ahead, and do it for me, try,
Do it for me, try,
Do it for me, try.

2. Chatters over the chord changes:

Scatter in the sky sky sky, the sky, in the sky, why it's mine, blend in wine, my my my, sky sky sky, by my side, falling light, might might might, in the fight, fucking tight, my my my, splendid wine, why don't you fucking try, it's been light, might be night, by my side

Scatter in this foreign land, blend blend blend, be demand, for command, tend tend tend, foreign land land land, in the blend, fuck my hand, in the fucking foreign land, that's the brand, land land land, in my hand, be a band, stand in my hand, hand hand hand, why don't we do this stand, in the hand, blend blend blend, foreign land

Go ahead, mad mad mad, do it in the bread, thread thread thread, my my my, try try try, why don't you fucking try, and good bye, buy buy buy, scatter in the sky sky sky, in my fucking foreign land and bribe, do it might, fight fight fight, I want to fucking hide, in the foreign land the bride, might might might, fight fight fight, be it in the light, and finally fucking hide, hide hide hide, in the bride...

3. Piano clusters over Gb chord. sustain. Go to DR. keep chattering.

4. have mic. pick up single syllabes while you're chattering. Slides on the drum. Go closer and closer. As you go close, start chattering in jitters. Make dramatic pauses.

ssssssssssssssssssssssssss with crescendos. Rim clicks. Turn on snares.
5. Keep building up. Start some screams and short, single notes. As you progress, have drumset licks more elaborate while the voice decays. Go more and more crazy, and have more and more singing.

6. Play crazy drumset cadenza loud as shit and fast, no voice. At the end hit the ride cymbal and bring the mic to its side with dramatic gesture. Listen to the sound for a while.

7. Start hitting rims and sides of the crash and hh cymbals. Hit the Ride strongly two more times intersecting with the rims.

8. After the third time, start singing the song. First in audible, song comes in and out of the cymbal sound. Keep hitting the cymbal softer and softer, while you're singing the song gently and intimately.

9. At the end vamp on "Do it for me, try" and hit a couple more times very softly. At the end finish on "do it for me" and muffle the cymbal.
Programes for the Hybrid Recitals:

Hybrid Recital no. 1
Happy Hybrid
Hybrid #3 → Dance and Noise

PROGRAM:

TOMÉK ARNOLD: MICRO SYMPHONY
MARK APPLEBAUM: APHASIA
TOMÉK ARNOLD: BIRDS
JS BACH: VIOLIN SONATA NO. 2
   1. GRAVE
   2. FUGA

SHORT— — — — — — — — — — — — — — — — — — — — — — — — — — — — — INTERMISSION

   3. ANDANTE
   4. ALLEGRO

ARTUR ARNOLD: SNATCHES OF MEMORY
   1. NEWBORN IDEALIST
   2. MARTIAL CRUSH AND ROCK-POP
      BRAINWASHING
   3. INNER EMIGRATION

RALPH TOWNER: IF

TOMÉK ARNOLD: SIGNIFICANT SILENCE
Program

Tomek Arnold: *Cause there is no one like us*

**JS Bach:** *Lute Suite in e-minor: Prelude, Presto, Allemande*

**Robert Morris:** *Rapport*  
featuring: Omar Fraire (synth)

---intermission---

**JS Bach:** *Lute suite in e-minor: Courante*

Tomek Arnold: *Village of Control*  
featuring: Andrew Colwell (voice), Omar Fraire (chapareke), Wan Yeung (pipa), Jordan Dykstra (pans), Dave Scanlon (gamelan)

**JS Bach:** *Lute suite in e-minor: Sarabande, Bourree, Gigue*

Tomek Arnold: *Scatter in the Sky*
Program notes:

*Cause there is no one like us:*

I think it's fair to say that most of us have some kind of guilty pleasure listening. But why? Why is it called "guilty"? Why do we feel like we shouldn't be enjoying certain kinds of music even though our hearts and guts are saying the opposite? *Cause there is no one like us* is a celebration of what most culturally educated people label kitsch, bad taste and low-class musical entertainment (even though they often secretly put it up on youtube when no one is watching). (I sincerely hope there are people at this event who have no clue of what I'm talking about here)

Lute Suite in e-minor

Pretty self-explanatory, no?

**Rapport**

Rapport was conceived in 1971 as an improvisational piece for two performers using pre-recorded tapes of music to be processed through electronic music equipment. By 1973, the nature of the piece stabilized into a set of specific instructions for performance. In 2010, I translated the original electronic hardware into computer software so Rapport could be performed on a laptop computer. In addition, the recorded music was selected anew; however, some of the original items were preserved.

The pre-recorded "samples" are drawn from classical, popular, traditional (i.e. folk), and ritual music selected from a large selection of different geographical areas on each continent. Only a few of the excerpts are of western classical or pop music. The samples are not directly heard but sampled, modified, intermixed, and transformed by the performers in real time. Every performance is unique, often discovering unusual combinations of musical sound and reference. One performer plays the synthesizer, which can alter the pre-recorded music in various ways, and the other performer mixes the output of the synthesizer and unaltered musics and sends it into the digital delay system. The result is an intricate canonic web of musical texture varying continuously between montage to mixage depending on the actions of the performers.

The length of the pre-recorded material is 30 minutes, so the piece has to last a little less than a half an hour. While the piece always begins in the same way with a piece of South Indian (vina) music and/or mixed with an Egyptian art song accompanied by an oud, and/or mixed with a piece of Cambodian theater/dance music, each performance takes its own course, exploring the possible interconnections between the recorded music and the computer generated and transformed processes and sounds, depending on the improvisational skill of the performers. The performance can end with another South Indian selection, this time a vocal improvisation; however, the states of the delay system, the synthesized sound, and the previously selected pre-recorded material may mask or disguise this selection.

The idea behind the piece was to allow two performers familiar with world musics and well-versed in live electronic music performance to improvise a piece integrating musics of all peoples and times into a vast tapestry of sound—a non-hierarchic tribute to music making in its many guises and incarnations. In its original form, the piece was designed to be played in a comfortable setting for a small group of people invited to attend a performance. Before each performance, the nature of the piece was explained and the electronic component illustrated; after the performance, the performers encouraged discussion and answered questions. Refreshments were often served to heighten the relaxed and informal nature of the event. In its present form, Rapport can be performed in any venue including installations.
Village of Control

*Village of Control* is a failed attempt to create a non-aggressive multicultural musical environment based on cultural appropriation. When writing the piece I thought of ways to remove myself from being in control over the creative process, and instead give the power to the elements of different cultural identities that I planned to include in the piece. I quickly realized that it’s impossible for a composer to completely refuse control over his/her work as even the most plain and basic idea of a piece is already a power statement and puts one in charge with the material no matter its nature. Nevertheless, there are certain elements that were out of my control from the very beginning such as: the nature of the overtone singing dictating the pitch material, the fundamental pitch dictated by the availability and pitch approximation of the Gamelan instruments, certain gestural and textural elements inspired by my observations from traditional pipa music listening, and I’m sure a few more elements that I can’t really remember as I’m writing this...

Scatter in the Sky

Sometimes making a satisfying piece takes much less time and effort than we expect (or much less than it actually should take). *Scatter in the Sky* was a result of my boredom with another piece of mine that I was learning to play. After hours of productive but fairly dull practice session I started to improvise using the digital processing patch I made for that other piece. Soon it became a lot of fun, so I continued for a few more hours. All of a sudden I had a new piece ready. I found it very pleasing as the piece was attractive for me to perform and it also satisfied my compositional language. This all felt too good and too simple though, so I thought that it would be nice to just randomly throw a pop song into the structure. I started searching youtube but didn’t find anything I liked, so I decided to go to the piano and quickly come up with something bad yet with a certain element of charming naivete and roughness of ignorance. I still don’t know why I think it all fits together and makes sense for a coherent piece... maybe it doesn’t. Who cares?
I would like to thank everyone who contributed to the creation of this concert as it is:

Ron Kuivila, Paula Matthusen, Jin Hi Kim and Liz Philips for your great insights and inspiration.

Omar Fraire, Sam Anschell, Johnnie Gilmore, Becket Cerny for performing with me.

Warren Enström for sitting behind the mixer and being an extremely reliable sound guy.

Matt Wellins for operating lights and being OK with standing backstage for the entire concert.

Dush for your great artwork in making my drums look like I'm a cool person.

Hallie Blejewski for being yourself in giving the best concert introductions on the East Coast.

Jordan Dykstra for making the fine quality recordings.

and

Paula Matthusen for lending me the cactus.

HYBRID #3 -->
DANCE and NOISE

MA thesis recital by Tomek Arnold

Apr. 17, 9 pm.
Memorial Chapel
Wesleyan University
"...each sip of beer is inextricably linked with memories of past sips and of the expectation of future sips to come". Andrew Hill

Each of the Hybrid Recitals is my attempt to connect various musical cultures, traditions, contexts and expressions into one large meta-piece. Hybrid Recitals merge the musical forms of the past with the ones of the present and explore the boundaries of genre in attempt to reduce the impact of context and encourage purely sonic and kinesthetic musical perception.

Hybrid #3 --> Dance and Noise is the third Hybrid Recital from the set. The previous two (Hybrid Recital #1 and Happy Hybrid) were both premiered at Wesleyan in May and November 2016 consecutively. Each recital presents its own unique set of works that are hand-picked in accordance with the available instrumentation, specificity of the performance space, and contextual environment of the event.

PROGRAM:

Dance and Noise
Tomek Arnold (1990)

Lady Hunsdon's Puffe
John Dowland (1563)

Melancholy Galliard
Come Away
The Most Sacred Queen Elizabeth, Her Galliard

A Study After
Tomek Arnold, Omar Fraire
Sam Pluta's SWITCHES
featuring Omar Fraire on cello

Intermission with music
relax, dance and enjoy the festivities

Child of Tree
John Cage (1912)

Sonata K. 1 in D-minor
Domenico Scarlatti (1685)

Sonata K. 3 in A-minor
Sonata K. 402 in E-minor
Sonata K. 198 in E-minor

Birds
Tomek Arnold

One of These Days
Tomek Arnold

featuring
Sam Anschell – Sax, Johnnie Gilmore – Bass, Becket Cerny – Drums
Appendix 2: Scores and explanations for other works I did at Wesleyan.

Rosaline (December 2015):

Instrumentation: Trumpet, Drum-set, MIDI Drum-set and electronics.

Notes:

*Rosaline* was intended to be performed with my colleague Sam Nester. The only part of the piece ever performed was its first movement with Warren Enström on Bassoon. Sam never took the challenge.

The idea for the piece comes out of the structure of a rose flower. The first movement represents the root system then consecutively a stem, leafs, prickles, and the florescence. The titles of the movements reflect how I feel about each part of the piece.

The specifics of the underlying pitch and rhythmic material is taken out of the shapes of the rose leafs. I chose 12 different leafs over the summer, and counted their intersections that come out of the main vertical line that divides the leaf into two sides (left and right). I then counted the amount of subsections in between the larger intersections, and got the specific numbers that later on I changed into pitches and sometimes rhythms too.

This piece was my first attempt at working with the MAX/MSP programming language, and was developed as a part of workshop sessions for data-based composition with Ron Kuivila and Luke DuBois.
Bell Sanctuary (December 2015):

**Instrumentation:** Percussion Ensemble (six players)

**Notes:**

The piece was written as a part of the graduate composition seminar in the fall 2015 with Paula Matthusen. It's a piece written for the visiting ensemble Mantra Percussion. The idea came from my various experiments with micing percussion instruments and achieving interesting sounds. Structure based entirely on the sonic values of the sections that each develop a different sound. The piece was performed at the final concert for the composition seminar in December 2015 at World Music Hall in Wellesley.

SHIFT – Fajrant! (March 2016)

**Instrumentation:** Solo Percussion and fixed media.

**Notes:**

The piece was written for a Spanish percussionist Noé Rodrigo who I met at the Lucerne Academy in the summer 2015. The idea came from the structure of a manual laborer's average working day. The ABA structure adheres to the circularity of worker's life with the A section, extremely difficult and precisely notated imitating the hard labor and subordination. And an entirely improvised B section that symbolizes the illusion of freedom when one takes a break from work.

The fixed media track contains of sounds of beating metal as well as various verbal statements coming from manual laborers from different parts of the world and different periods of time talking about the issues connected with their jobs. During the B section, the sounds contain party noises, laughter, beer can opening sounds, and others. All of the human sounds used in the fixed media track come from people who live or lived in the socialist or communist countries. The work spirit and various idealizations of manual labor from communist propaganda was the main source of inspiration for that piece even though at the end it was more about people's issues rather than political systems.

**Program notes:**

01'18": "I can't do anything. For this kind of job all i can do is to keep working hard."

The sound of struggle crafted in metal commits the worker to his instruments and accompanies him throughout the shift. His work requires high amount of precision, coordination and stamina.

11'18": "We must also rest. We cannot work overtime every day. Not even those who want to can do that."
The form taken from the structure of the average working day allows for the certain amount of freedom after the shift is over (fajrant!). During the shift however, the system strictly controls worker's behavior.

12'10": "If we did that, we would be fired. They would never allow an independent union in the factory"

Hard and genuine work during Shift and Fajrant generates the capital of sound that provides its consumer with sonically introduced questions of value, virtue, difficulties and exploitation of manual laborer.

"Capitalism has triumphed all over the world, but this triumph is only the prelude to the triumph of labor over capital".

**Birds (April 2016):**

**Instrumentation:** Non-fixed, audio-visual multimedia (a MAX/MSP/Jitter patch)

**Notes:**

Composing *Birds* started out of my appreciation, enjoyment, and respect of Alfred Hitchcock's films. The piece is based entirely on his 1963 production *The Birds* that distinguishes itself from among other films of Hitchcock (and perhaps most of the Hollywood productions in general) with the complete lack of musical soundtrack, which perhaps functions as an opportunity to make bird noises (apparent throughout) appear as the only musical factor in the film. The absence of soundtrack and the musicality of various bird noises involved was the impetus for my work, and gave me the idea of creating an audio-visual representation of *The Birds* being at the same time an homage to the director that I highly admire.
The idea for the film's plot presents itself as quite simple and innocent from the very beginning; a wealthy socialite woman flirts with a man in a pet store, and after their playful conversation she decides to track him down and bring him a pair of lovebirds as a gift. Finding him absent in his apartment, she decides to follow him to a small town nearby San Francisco where he's been gone for the weekend. However, after her arrival the things start to become increasingly disturbing as birds of different species start attacking people and taking over the town.

As in various other films of Hitchcock, in *The Birds* we get a false introduction of the film's plot that from the beginning suggests a story completely unrelated and irrelevant to the true subject and nature of the film. After all, *The Birds* starts as nothing more than a simple romantic comedy, which from the beginning makes us feel safe, relaxed, entertained and, as a result, more vulnerable to what is about to happen next. The false introduction of the plot is Hitchcock's way of building suspense in the film by creating an expectation in a viewer, and then slowly destroying it using viewer's vulnerable state of mind and making it more and more unsettled as the film unfolds.
Hitchcock’s suspense-building technique was the basic formula I appropriated for the structure of *Birds*. The sounds starting from seemingly playful and innocent gain intensity and disturbing character as the piece unfolds. That basic structural idea was the factor that helped with organizing all of the audio and visual events in the piece based upon their degree of disturbance. I categorized the events, put them in the right sections, and then created a MAX/MSP/jitter patch that freely chooses the sound and video files from the correct folders associated with those sections. As the form unfolds, the software switches between the three sections of events progressing from the most innocent ones to the most disturbing and intense ones. Thus the global form of the piece always stays the same but the local structures happening within each section are freely determined by the software and, as a result, vary from performance to performance giving the piece a spontaneous character that can never be repeated in its subsequent presentations.

The sound and visual world of *Birds* is based entirely on appropriation. There is absolutely no original sound components used and almost no original footage. The sounds used in the piece are of three different types and come from various different places:

- **Type 1:** Background sound: a sinusoidal version of Eels' song *I Like Birds*. The song runs from the very beginning to the end of the piece always in the background and becomes more or less apparent in different sections of the piece. During the course of the piece, the song gets ring-modulated and slowed down considerably.
- **Type 2:** Bird sounds: coming from Hitchcock, from Columbia University's ornithology archives, and private contributions on youtube. Columbia's archives sounds are of small birds singing, youtube contribution is mostly large birds making noise, and Hitchcock's bird sounds are synthesized noise of large flocks of birds invading people or places during the film.
- **Type 3:** Human sounds: dialogues from *The Birds* that talk about or mention birds in some way.
The footage outside Hitchcock's comes from a documentary film *The Life of Craws* that can also be found on youtube, and 4 shots of sea gulls in Rome that I took during my summer trip there (which are the only original component in the entire piece).

The piece contains of three basic sections and a coda that are determining the categorization of the sound and video files. The shift from innocence to disturbance is based upon how the sound and footage is distributed within these sections. However, The idea of progression is happening in the piece on a few other plains as well. Besides the innocence to disturbance progression there are also: gradual appearance of *The Birds* out of bird footage from other places not related to Hitchcock; gradual appearance of people in the footage coming out of plain bird shots; gradual increase of the speed of footage and the rate of its appearance; gradual appearance of ring modulation and decrease in tempo of the background sound; gradual pitch-shift downwards in the bird noises of sections 2 and 3; gradual increase of bird sounds over people's sounds (dialogues become increasingly not understandable until they disappear swallowed by bird noises). The progressions evolve over the three main sections of the piece that lead to the coda section at the end. Coda functions as a final commentary on the elements of progression that appeared before. The footage (taken from the last minutes of *The Birds*) shows complete domination of birds over humans by showing the main character navigating through the stacks of birds sitting all over the human-inhabited household areas. Sound calms down at that moment, however, the progression of bird sounds over human sounds gets completed with the final silencing of humans in the soundtrack. The background sound, drastically slowed down at that moment becomes more apparent as it was at the very beginning. The reminiscence of the beginning comes into mind with the completion of the bird domination process. And the peace is once again restored.
Snatches of Memory by Artur Arnold (April 2016):

Instrumentation: Video projection accompanied by percussion with live electronics.

Notes:

Snatches of Memory is a piece I did in collaboration with my father Artur Arnold. It's a video accompanied by freely chosen percussion instruments with or without electronics. My dad provided the video and instructions for the improvisation of the sound track.

The inspiration for the piece came out of a challenge that I gave to him. After my first semester at Wesleyan, I brought back home various video documentations of the works that me and my colleagues did at Wesleyan. After I exposed my parents to different experimental works done by my peers, we had a vibrant discussion on the legitimacy of those works and the Wesleyan's composition program in general. My parents argued that the program is a sort of scam where people just do whatever they want, call it “work”, and then make up a bunch of academic non-sense to legitimize it. Their opinion was that with all this academic surrounding that legitimizes what we do here, most of the actual pieces involve no substantial musical skills, and virtually anybody could realize them without much difficulty. Defending the program, I challenged my dad to make a piece of experimental music himself if he thinks it's so easy, and if he did, I'd perform it at Wesleyan. He ended up making a video piece that projects pictures of highlighted events of his life that are “dipped” inside a bucket of liquid from which a hand tries to dive them out symbolizing the process of remembering. Composing it he found anything but easy.
Brains and Hands (April 2016):

Instrumentation: Laptop Ensemble

Notes:

A piece I did encouraged by the Wesleyan laptop ensemble director Paula Matthusen. My experience with performing in laptop ensemble was a strange one. Before taking this class I had no previous experience or idea of how it is to perform in this setting. My expectations were guided by my previous experience in performing with various chamber ensembles. The surprise was that after a few laptop pieces we did I quickly realized that it's a completely different experience to perform music live with others than to sit there with a bunch of people pressing buttons on their laptops. The, so to speak, “chamber music experience” of making music collectively with people and communicating within that activity was not there for me at all. It certainly seemed for me that no matter what I do in that ensemble will have no substantial relevance to the workings of the piece and to the overall sound result. I found it extremely constraining musically and dissatisfying on surprisingly many levels. In the most pieces we did, I just could not find a sufficient reason for the involvement of people doing it as opposed to having it presented as just fixed media compositions. Having said that, the experience was very interesting even though I did not enjoy performing in this setting very much.

Brains and Hands is my personal response to the dilemmas I have with the laptop ensemble format. The patch is very simple and consists of sign waves of different timbres that can be pitch shifted, ring modulated and dynamically varied. The piece involves two performative roles: brain and hands. Brain provides the instructions for improvisation for their partner to manipulate the patch in trying to realized those instructions. Brains speak the instructions to the microphone connected to a MAX patch on the master computer that later on plays the recorded verbal instructions into the main PA system on the top of the improvised sounds that come out of the speakers localized with the stations where performers reside with their laptops. Brains also record the sounds in the concert hall running back and forth from their partner to other places in the hall. As the piece unfolds, the MAX patch starts to break loose with uncontrolled bursts of pink noise, changes shapes graphically, and moves the sliders that control sound, which makes it increasingly more difficult for the performers to adjust sounds. At the end of the piece, the patch takes over and it is no longer possible to adjust sounds. The whole piece breaks into loud bursts of noise and the mess of constantly adjusting sounds of the sign waves.

Isolation, Materialism, Appearance (December 2016):

Instrumentation: Piano, Sampler, Flute, Drum-set, Cello.

Notes:

The piece was composed as a part of the composition seminar class with Ron Kuivila in the fall 2016. It's composed for the Ensemble Pamplemousse that visited Wesleyan to perform the works of people enrolled in the course.
The structure of the piece is a slow construction of a dance music track that I produced. The dance track was produced at the very beginning of the compositional process and was deconstructed into samples of beat, chords in mid register, high register enhancement and bass line. After deconstructing the soundtrack into samples, I composed the chamber piece that works itself sonically around the samples that are triggered by the piano player. Over the course of the piece the samples start to formulate the dance music track and the whole piece resolves with the ensemble providing the accompaniment for the track.

**Broken Breathing (March 2017):**

*Broken Breathing* is a piece for solo percussion and Wind Ensemble. In the Spring 2016 I was approached by Bill Sand to play a concerto with Wesleyan's wind ensemble WesWinds. The renting of the score for the piece I wanted to play, however, became a big financial and organizational undertaking, so instead I proposed to write a piece myself to perform with WesWinds in the spring 2017.

The piece draws on three sources of inspiration: noise, marching music, and techno. The elements progress from one to another in the series of episodes throughout which, the percussionist improvises the solo part using the verbal instructions included in the score.

**One of These Days (March 2017):**

**Instrumentation:** Jazz ensemble.

**Notes:**

*One of These Days* is a jazz/funk tune I composed for my spring thesis recital. I always wanted to write a jazz tune and have it performed. Before leaving Wesleyan I wanted to once again collaborate with Sam Anschell, Johnnie Gilmore and Becket Cerny, the undergraduate jazz musicians that I performed with in the Wesleyan jazz ensemble directed by Noah Baerman.

**Dance and Noise (April 2017):**

**Instrumentation:** Cajon (or any hand drum) with live electronics.

**Notes:**

The piece is an improvisation on Cajon with live electronics. The live electronics component is a MAX patch that mixes various samples that make an IDM using the verbal instructions included in the solo part track. In the middle section, the cajon player is triggering samples of noise using contact miced cajon as an impulse for the samples to be triggered. The piece blends the two sound worlds of dance music and noise into a virtuosic improvised solo.
Tomasz Arnold

Rosaline

for Trumpet, percussion and electronics
Rosaline
for Trumpet, Percussion and Electronics

I. Mature

Tomasz Arnold

Copyright © 2015 Tomasz Arnold
Cue 15: Stop all sounds!  Cue 16: Fade in middle voices

Keep the tempo (q=60)
II. Elevated

Trumpet resulting electronics

Trumpet in C

MIDI Drum Set

Drum Set

Cue 23: Start crescendo

Cue 24: Sound in

Elctr.

C Tpt.

M. Dr.

Dr. set

L.V. sempre

ca. 15”

(p pitch shift)

(“muffled,” note off)

ca. 4”

ca. 3”

ca. 4”

ca. 5”

ca. 7”

5

5

5

5

5

5

5

5

5

5

5

5

5

5

5

5

5

5

5

5
III. Flirtatious

Trumpet resulting electronics

Trumpet in C

MIDI Drum Set

Drum Set

Electric

C Tpt.

M. Dr.

Dr. set

"Tongue - nose, mouthpiece entirely covered, slapping produced by moving the tongue rapidly into the air stream. 500-620 for the melodic motions indicated by the unpitched pizzed triangular notes."
Elctr.

C Tpt.

Dr. set
Cue 12: Pitch shift at perfect 5th

Cue 13: Pitch shift off
IV. Sharp

\[ q = 80 \]

Trumpet in C

Drum set

Con la misura, \( q = 80 \)

Senza misura, ad lib.
accel.

\[ \text{C Tpt.} \]

\[ \text{MIDI Dr.} \]

\[ \text{Dr. Set} \]

\[ \text{C Tpt.} \]

\[ \text{MIDI Dr.} \]

\[ \text{Dr. Set} \]

\[ j = \text{ca. 130} \]

\[ \text{Senza misura, ad lib.} \]

\[ \text{Con la misura}\]

\[ \text{Senza misura, ad lib.}\]

\[ \text{G.P.} \]

\[ \text{crazy drum solo leading to the final mov.} \]

\[ \text{attaca} \]
V. Beautiful
Bell Sanctuary

For Percussion Sextet and Live Electronics

Tomasz Arnold
Performance notes

Movement and spatial distribution of sound is an important element in the piece, which is why the parts are not arranged in accordance with specific set-ups assigned to each player but rather on the basis of the placement of instruments. The score, too, is designed in accordance with the specificities of instruments, and arranged spectrally (from the lowest fundamental note, to the high partials).

Instrumentation (as arranged in the score layout):

- Crotale (upper or both octaves), Crt.
- Glockenspiel, Glc.
- Three metal pipes of defined pitch, Met. Pip. 1
- Medium bells (any kind of bells from mid to high range (for example disassembled bell tree) in a set of at least 3), Med. Bls.
- Three metal plates, Met. Plts.
- Three metal pipes of defined pitch, Met. Pip. 2
- Vibraphone (with a heavy object on the pedal keeping it down the whole time), Vib. 1
- Vibraphone (with a heavy object on the pedal keeping it down the whole time), Vib. 2
- Nipple Gong (medium to small, defined pitch), Gong 1
- Nipple Gong (medium to small, defined pitch), Gong 2

Distribution of instruments within parts:

Prc. 2: Met. Plts., Glc., Vib. 2 (bowed).
Prc. 6: Crt., Harm. Cymb. 2, Met. Pip. 2

Electronic equipment:

- 4 channel PA + Subwoofer (not required but STRONGLY recommended)
- 4 dynamic mics with wind screens
- 4 flat contact mics
- mixer with at least 8 channel input
Placement:

Setting up the piece:

- Pick a cymbal with the lowest fundamental note, and assign it to the “Fund. Cymb.” part. Then, pick the cymbal with the fundamental note in about major 5th distance from the Fund. Cymb. and assign it to the “5 up Cymb.” part. The remaining two cymbals are to be Harm. Cymbals 1 and 2.
- Place 4 dynamic mics under the cymbals in approximately one inch from the instrument. Distribute “Fund. Cymb.” and “5 up Cymb.” to all 4 channels and the sub. Harm. Cymbals 1 and 2 are to be distributed to 4 channels omitting the sub. Amplify all the cymbals heavily (especially the Fund. Cymb.).
- Raise the stands of Harm. Cymb. 1 and 2 high enough so the microphones do not pick up the signal at the beginning of the piece. The stands are to be lowered later on during the course of
the piece, when indicated in the score.

− Pick 4 different pitches from the metal pipes (2 from each set) and transpose them to the lowest registers of the vibraphones (F₃ – E₄). Each vibraphone should be assigned to two pitches distributed in about a 4\textsuperscript{th} of a distance if possible.

− Affix 4 contact mics to the chosen low register pitch bars on vibraphones. Mics should be placed exactly on the lower nodes of the bars cutting some of the frequencies and, as the result, making the first partial of each bar clearly audible. Distribute the pitches as follows: lower pitch on Vib. 1 to Channel 1, higher pitch on Vib. 1 to Channel 2, lower pitch of Vib. 2 to Channel 3, higher pitch of Vib. 2 to Channel 4 (omit the sub in each case). Amplify heavily.

− Pick 4 pitches on the Glockenspiel that reflect the 4\textsuperscript{th}, 5\textsuperscript{th}, 6\textsuperscript{th}, and 7\textsuperscript{th} partial of the Fund. Cymb. fundamental pitch. Assign those notes to the low register of Glock.

− Pick 4 pitches on the Crotales that reflect (in approximation) the 8\textsuperscript{th}, 9\textsuperscript{th}, 10\textsuperscript{th}, and 11\textsuperscript{th} partial of the Fund. Cymb. Assign them to the high register of crotale.

− Pick 2 pitches of the bowed Vib. 2 that correspond in the same register to the apparent high partials of the chosen low register pitches of the Vib. 1.

Notation:

\[ \text{\textit{= 60 sempre}} \]

Any rhythmic groupings in the piece are to be referred to the quarter note = 60 tempo.

\[ \text{0:30" [30"]} \]

Working with stopwatch is necessary for performance. Sections are timed, with general timing indicated by the large markings. The time marks at the end of each section (separated by the dashed bar line) are indicated by the smaller time marks within brackets.

\[ \text{2:35"} \]

The starting and ending points of gestures within the sections are indicated by the smallest markings. Ending points have small vertical marking underneath the number.

Continue playing indicated sound until the end of arrow.

Continue playing indicated group of sounds until the end of the large arrow.

The points of exact synchronization are indicated by the vertical dashed arrows.
Repeat the gesture as notated, using the rhythmic groups from the box in random order. The rhythmic indicators do not have to be grouped according to their tuplet number but should be treated more as an indicators of speeds and used in any desired configuration. The elements in boxes should be used more or less in the same amount.

Swap quintuplet to quarter note, sixteenth note to half note, etc. at the indicated time.

Rub the “contact-miked” bars of the vibraphone (lower, higher) with hard plastic mallets in a circular motion going from higher nod to the lower (close to the contact mic). Change the pressure of the mallet ad lib from extremely light (using only the weight of the mallet itself) to very heavily pressed (in which case the sound should result in a change of texture and a slight bend of pitch). The gesture should be started without the noticeable sound of touching the bars with mallet heads (which will be challenging provided the heavy amplification). Dynamics are controled by the speed of rubbing.

“Cymbal Harmonic Release”: bow on cymbal fastly from nothing to the forte dynamic (only one bow stroke) placing your finger (or a few) close to the bell, or muffling the cymbal slightly close to the bowing area, to make its high partial (or partials) audible. At the dynamic tip of the fast bow stroke release the bow and fingers letting the cymbal ring with the achieved harmonic (or wash of harmonics) for as long as possible. If the gesture repeats, try to excite different harmonics with each stroke, alternating occasionally with the fundamental or “low hum”.

Same as above but with a spin. Spin the cymbal (using the bell) continuously, slowing down the spins as the sound decays.
Play the notes from the box in random configurations using the provided speed indicator.

Grace notes indicate playing a passage falling as fast as possible on random notes finishing at exactly 2 seconds. The stems of the notes indicate the range of the passage (entire range in example 1, or the highest register only in example 2).

"p"

Dynamics with quotes are to indicate the lightness of touch on the instrument. The resulting sound might be much louder than the dynamic marking if the instrument is amplified.

Mallet choices:

- Pipes and bell plates are to be played with soft plastic xylophone mallets (such as “Becker Blues”). The aim is to get loud, full sound without the piercing high partials that start to be present after a certain point of hardness.
- Glock, Crotales, and Medium bells are to be played with brass or aluminum mallets.
- Vibes, in the case of the fast, high register passage in 5:40” should be played with medium hard plastic mallets or ultra hard vibe mallets (like “Balter Yellows”). The sound needs to be piercing!
- The cymbal strokes or tremolos should be played with medium-soft timpani mallets. The mallets as well as the touch should be light, due to the heavy amplification (hence the choice of timpani mallets over the marimba mallets). They also need to be soft enough to hide the separate strokes of the tremolo, though hard enough, and with small enough mallet heads, to engage the cymbal with the extremely light touch.
- Gongs are to be played with medium-soft vibe mallets.
for Mantra Percussion

Bell Sanctuary

for Percussion Sextet and Live Electronics

Tomasz Arnold

\[ J = 60 \text{ sempre} \]

0:00"

- **Prc. 1**: Metal pipes 1
  - notation and symbols
  - with soft plastic mallets

- **Prc. 2**: Metal plates
  - notation and symbols

- **Prc. 3**: Medium bells
  - notation and symbols

- **Prc. 4**: Metal pipes 2
  - notation and symbols

0:30"

- **Met. Pip. 1**: Metal pipes 1
  - notation and symbols

- **Met. Plts.**: Metal plates
  - notation and symbols

- **Med. Bls.**: Medium bells
  - notation and symbols

- **Met. Pip. 2**: Metal pipes 2
  - notation and symbols

1:00"

- **Met. Pip. 1**: Metal pipes 1
  - notation and symbols

- **Met. Plts.**: Metal plates
  - notation and symbols

- **Med. Bls.**: Medium bells
  - notation and symbols

- **Met. Pip. 2**: Metal pipes 2
  - notation and symbols

Copyright © 2015 Tomasz Arnold
1:30"

Met. Pip. 1
mf

Met. Plts.
mf

mf

Met. Pip. 2

2:00"

Met. Pip. 1
mp

Met. Plts.
mp

mp

Met. Pip. 2
mp

2:30"

Prc. 1
mp

Prc. 2
mp

Prc. 3
mp

Prc. 4
mp

Prc. 5

with hard plastic mallets

pressure changes ad lib.
3:00"

Prc. 6
Crt.

Prc. 2
Glc.

Prc. 1
Met. Pip. 1

Prc. 3

Prc. 4
Met. Pip. 2

Prc. 5
Vib. 2

3:02"

Harm. Cymb. 1

move to the instrument

3:20"

with bow

L.V.

3:02"

f

mf

mp

Prc. 3
Vib. 1

Prc. 3
with hard plastic mallets

pressure changes ad lib.

3:03"

3:20"

Prc. 3
Vib. 1

3:40"

accel.

Prc. 6
Crt.

Prc. 2
Glc.

Prc. 1
Harm. Cymb. 1

L.V.

Lower the cymbal stands of both Harm. 1 and 2, after the instruments stop ringing

3:02"

with bow

L.V.

3:03"

Prc. 3
Vib. 1

Prc. 5
Vib. 2
9:10"

Prc. 5
Vib. 1

Prc. 6
Harm. Cymb. 2

Prc. 4
5 up Cymb.

-morendo-
(decrease the dynamics, speed of the spin, and frequency of appearance)

9:40"

Prc. 3
Vib. 1

Prc. 2
Vib. 2

Prc. 6
Harm. Cymb. 2

Prc. 4
5 up Cymb.

-morendo-
(decrease the dynamics, and frequency of appearance)

10:10"

Prc. 2
Vib. 2

Prc. 6
Harm. Cymb. 2

Prc. 4
5 up Cymb.

-morendo-
10:25"

10:40]
SHIFT – Fajrant!
for solo percussion and fixed media

Tomasz Arnold
Performance notes:

Additional instruments not specified in the key:

- Tin cans and miscellaneous percussion: MSP
- Two shot glasses
- One empty beer can

Ringing bell BL
(free choice bell or metal tube with clean and long sound in mid. to high register)

Cow Bell CB

Bottles BTL (4 pitches)

Brake Drum BD

Trash cymbal

TC (ex. two cymbals on the top of each other making noisy, trashy sound)

Triangles TRG
(at least two of different size but could be more)

Kick Bass Drum KBD

Rim Shot

Snare Drum SD

High Bongo HB
(exremely tight head preferably plastic)
*1 “Chóng zuò Zhè zhǒng Gōngzuò Shi yào, Chóng zuò Zhè men Ràng de Gōngzuò, RénYǒu Rén de Zuòfǎ” – I can't do anything. For this kind of job all I can do is keep working hard.

*2 “Byliśmy bardzo pewni siebie, że kolumna stanie w najlepszym porządku, ponieważ nasi inżynierowie, nasi majstrowie wiedzieli jak to zabezpieczyć żeby kolumna poszła do góry.” - We were very confident that the column will stand in the orderly fashion because our engineers, our foremen knew how to secure it so it goes upwards.

*3 "Xià Yǔ tiān Dājiā dōu Lǒushuǐ ma, Yídīng huì Děngzhe ma, Wǎnshí Dàōshì dé huīchén, Yídīng huì Gǎn biàn yě xià, Chóng zuò yě gè hǎo de Gōngzuò dé fān ma." - In rainy days water leaks, and there is dust everywhere. The environment needs to be improved for a better working area.

*4 Start using shoot glasses – take two empty shoot glasses and hit them against each other. Raise your hands high above the set up so the audience can see it. Alternate between hitting shoot glasses against each other and using them to hit other instruments with. At that point in the piece you can still use mallets but you should keep at least one shoot glass in your hands until 8' 14".

*5 Kid: Jejku! Zobacz sobie na palec. Krew ci leci! Krew ci leci! - Oh no! Look at your finger. It's bleeding! It's bleeding!
Man: Leci tak... - It's bleeding, yes...
Kid: Dlaczego ci leci? - Why is it bleeding?
Man: haha! Daj buźki – Haha! Give me a kiss.
Kid: Ty ciężko pracujesz chyba! - You work hard, aren't you?
Man: Tak, pracuję! No, a ty...? - Yes, I work. What about you?
Kid: Ale masz brudne ręce! - Wow, your hands are so dirty!
Man: No, toż pracuję takie! - Yea, because I work with them!
Kid: A ja też mam brudne przez ciebie. - I got them dirty too from you.
Man: Po moim, po moim. – My fault, my fault.
Kid: Ktoś cię tu woła przez radio. - Somebody is calling you on the radio.
Man: Tak, możesz pogawarzyć. Kak skażysz, oni budiet. – Yes, you can talk to them. They will do whatever you tell them.
Kid: Oni mówią po Rosyjsku? - Are they speaking Russian?
Man: Aha, rozumiję, po Polsku mów. – Yea, but they understand Polish. Speak Polish to them.
Kid: Muszębiegnąć. – I've got to run.

*6 Trash the beer can – in the provided time frame pick the beer can with your right hand. Move it slowly high up above your head, and above the set-up. Slowly squeeze your hand squishing the beer can with the recognizable sound. Make sure the gesture is very slow and deliberate. After there is no more room to squeeze, throw the beer can behind you, so it hits the floor with sound. Try to have all the sounds from the beginning of the gesture to the throw at the end somehow rhythmically coordinated with your improvisation, so they don't appear random but rather as an integrated part of the soundworld.
*7 Slowly decrease the density and dynamics of the improvised part until you stop.

*8 "Podaję wyzwanie towarzyszowi Markiewskiemu, że ja, bezpartyjny górnik chodnikowy Słupik Józef rozumiał zadanie sześcioletniego planu. Zobowiązuję się w razie moich ładowaczy wykonać w tym samym okresie dwieście pięćdziesiąt dwa metry bieżącego chodnika. I my potrzebujemy więcej takich przodowników pracy, żeby się znalazły takie jeszcze jak jo jest! Żeby my mu poradzili udowodnić i nasze siły dać! A nie żeby Markiewka tylko, tylko my będziemy pracowali!! " - I challenge comrade Markiewski that I, nonpartisan pavement miner Słupik Józef understood the task of the six-year plan. I commit myself to make, in the same amount of time, two houdred fifty two meters of the current pavement. And we need more such work leaders like me! So we prove to him, and give him our strength! So it's not just Markiewka but we are going to work!!

*9 "Yí baǐ sān, yì baǐ sì, Yě jiù Xiūxí Xiūxí de ma, Kōngbù néng Tiāntiān Jiābān Wōmen Shòu bǔliǎo, Jiūshì Zài yān Jiābān Wōmen Shòu bǔliǎo de" - 130 – 140 hours. We must also rest. We cannot work overtime every day. Not even those who want to can do that.

*10 "Zhèyàng zì ha, Zhèyàng zì Tā hui Bā nǐmen Chǎo diào de, Chénlùn rèn Bù kěyǐ Yǒu gōnghuì de." - If we did that, we would be fired. They would never allow an independent union in the factory.
SHIFT - Fajrant!
for Solo Percussion and Fixed Media

Harsh, heavy, and rigid \( q = 85 \)

Copyright © 2016 Tomasz Arnold
2 34°

F.M.S.

[Music notation]

Perc.

44°

F.M.S.

[Music notation]

Perc.

55°

F.M.S.

[Music notation]

Perc.

1' 03°

F.M.S.

[Music notation]
Your rhythm doesn't have to be 100% precise anymore.

Bottle pitch ad lib.

simile (improvise on triangles)

Free improvisation on triangles, bottles, snare drum, and miscellaneous percussion with free choice mallets. Try to interact with the fixed media track.

 Ambient noise: voices, clapping, laughter etc.

Sí... music, laughter, qué bueno...
6' 08"

spanish talking, music, laughter.

F.M.S.

Perc.

6' 08"

6' 22" 

бутылка виски стоит двести пятнадцать крон... laughter.

F.M.S.

Perc.

6' 22"

6' 37"

Clapping, spanish talking, laughter.

F.M.S.

Perc.

6' 54"

6' 58"

Start using shot glasses

F.M.S.

Perc.

7' 19"

Kid: Dlaczego ci leci? Co? Man: Haha, daj buźki! Kid: Ty ciętka pracujesz chyba? Man: Tak pracuję! No, a ty...? Kid: Ale masz brudne ręce! Man: No, tak pracują takie... (see performance notes)

F.M.S.

Perc.

8' 22"

Trash the beer can some time in this section.

F.M.S.

Perc.

8' 22"

spanish talking, laughter, music etc.

F.M.S.

Perc.
Like a slightly slow heartbeat (q=55)

accel.

take stick with the free hand

take the other stick

(accents always sf z)
rozumiał zadanie sześciioletniego planu. Zabawiają się w razie małych ładowczych wykonać w tym samym okresie dwieście pięćdziesiąt dwa metry bieżącego chodnika. I my potrzebujemy więcej

tych przewodników pracy, żeby się znalazły takie jeszcze jak ją jest! Żeby my mu poradzić udowodnić, i nasze siły dać! A nie żeby Markiewka tylko,
11' 03"
F.M.S.  Perc.

11' 17"
F.M.S.  Perc.

11' 27"
F.M.S.  Perc.

11' 37"
F.M.S.  Perc.

Some of the workers, they

Yē jì Xiūxi de ma, Kāngbù néng Tiāntiān

12

Yì bā sān, yì bā sì,

Jiābān Wòmen Shòu bùli de, Jiābān Wòmen Shòu bùli de.
want to save their money, in early morning, they didn't eat their breakfast. After the long time of working maybe they feel very tired, and then feel

uncertain. Some sickness only. No big deal. Very soon she will recovery.
Oh, this is not a reasonable request! This is not a good thinking! To work less, get more money?

The demand, I think, from the worker is even bigger than the buyer. The worker always has endless demands.

...hum...
They prefer no holiday. They prefer continue working.
Tomasz Arnold

Isolation

Materialism

Appearance
Performance Notes

**Instrumentation:**

- Flute
- Drum-set
- Piano with MIDI keyboard as a sampler
- Violoncello

**Electronic equipment:**

- Miniature cardioid condenser mic for flute amplification
- Two condenser mics for piano
- One overhead stereo mic for drum-set (or a pair of condensers)
- One dynamic mic for cello
- MIDI keyboard
- Laptop with interface and Max/MSP
- Mixer with at least 8 ins and 2 outs
- Pair of speakers with subwoofer

**Notation and instrument-specific instructions:**

**Flute:**

\[\text{\footnotesize *1 Highest possible note achieved by strong overblow and with flutter tongue.}\
\]

\[\text{\footnotesize *2 Slap tongue.}\
\]

\[\text{\footnotesize *3 Gradual shift from regular to flutter tongue.}\
\]

\[\text{\footnotesize *4 Blow air in.}\
\]
*5 Highest possible note achieved by strong overblow and with slap tongue.

Drum-set:

Piano and Sampler:

Sampler is operated by the piano player. 4 octave MIDI keyboard is recommended as the trigger but other options are certainly available as well. The MIDI trigger is to be connected to a laptop with Max/MSP patch running. The samples are displayed as follows:

"Bass" samples are triggered by the MIDI numbers ranging from 36 to 47 (lowest octave on the 4 octave keyboard). The performer can press any note within that range to trigger a sample.

"Beat" samples are 48 – 59.

"Mid. Chords" samples are 60 – 71.

"High filling" samples are from 72 – 83.

Number 84 (the highest note on the 4 octave keyboard with MIDI displayed from 36) triggers the fixed media track that starts in measure 106.
As shown above, the sampler notation reflects the position of the samples relative to the 4 octave MIDI keyboard. Graphic visualizations are added next to each of the notes to help performer quickly recognize each sound before it gets triggered.

The samples are triggered in succession within their assigned octaves. The performer can reset the sampler to any given rehearsal mark as shown in the Max patch. In addition they can also skip one sample or repeat the previous one (which could serve a purpose in case of performance emergency). The number box on the right shows the sample number that's about to be triggered and can also be used to manually set the sampler to any position. When setting samples manually the chosen number needs to be confirmed with the "set" button. Letters G, H, I and J set the fixed media track to the position in accordance with the letter. Fixed media can also be stopped at any point using the "off" button.

*1 Scrape the few lowest strings inside the piano with a credit card or a piece of flat plastic. Move from slow to fast (the initial speed should be slow enough to make single threads of the piano strings audible as they are scraped with the card).

*2 Pluck the strings with credit card or guitar pick in between the upper screw and the nodal point for strings in the range from Eb5 to G6

*3 Scrape the lowest string of the piano with credit card or a piece of flat plastic. The speed should be very slow making single threads of the string audible one by one in groups of ca. 1 to 4 with brief rests in between.
*4 Fast scrape on as many strings as the credit card can reach.

*5 Keyboard cluster in the highest register. A sheet of paper should be permanently attached in between the strings of the highest register to allow the cluster to produce a slightly buzzing sound.

*6 Hit the lowest strings of the piano flat with the palm of your hand.

*7 Fast scrape on the highest strings with threads (F2 - A2)

*8 slide the two highest strings with threads (Ab2 + A2) with a plastic xylophone mallet.

*9 Slide the strings with the edge of the credit card pressing the strings firmly to produce a squeaking/whistling sustained sound. The strings used are ones without threads in the register from Ab4 to D5.

*10 Pluck the strings with credit card or guitar pick in between the upper screw and the nodal point for strings in the range from C4 to D5
**Violoncello:**

*1 On the bridge (different durations). Unrecognizable pitch.

*2 Gliss from the second highest note to the highest note.

*3 Overpressure on the C open string with unrecognizable pitch. Slow bow movement with frequent brief rests.

*4 Half overpressure. Indicated pitch still partially recognizable.

*5 Gradual shift from half to full overpressure.

*6 Full overpressure on the highest possible note.
4

Fl.

Dr.

Smpr.

Pno.

Vc.

C

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)

\( \text{mp} \)

\( \text{fff} \)
keep going in similar fashion exploring different noisy sounds.
repeat the pattern with occasional embellishments, keep accelerating.

Con la misura $q = 140$

G

Sul A
play the hits while continuing the solo

ff crec poco a poco
Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.

Repeat the pattern with extreme ritardando independent from other players and the fixed media track for the duration of roughly 3 min. Maintain extreme loud dynamic throughout.
Once the fixed media track stops continue for a few more seconds and proceed to the last measure.

Once the fixed media track stops continue for a few more seconds and proceed to the last measure.

Once the fixed media track stops continue for a few more seconds and proceed to the last measure.

Once the fixed media track stops continue for a few more seconds and proceed to the last measure.
Broken Breathing

For Solo Percussion and Wind Ensemble
**Broken Breathing for Solo Percussion and Wind Ensemble**

Duration: about 13 minutes.

Score is in C.

Accidentals hold for the bar.

Instrumentation:

**Piccolo**
5 Flutes
2 Oboes
5 Clarinets in Bb
6 Alto Saxophones
Tenor Saxophone
Baritone Saxophone

5 Trumpets in Bb
2 Baritone Horns
5 Trombones
2 Bass Trombones
2 Tubas

**Solo Percussion:** Kick BD, 2 Large Tom-Toms, Snare Drum, 2 Bongos, 4 Chinese Cymbals, 2 Western Suspended Cymbals.

**Percussion 1:** Suspended cymbals, Snare Drum, Xylophone, Maracas.

**Percussion 2:** Wind Chimes, Slap Stick, Suspended Cymbals, Finger Cymbals, Crash Cymbals (a due), Sand Paper Blocks, Metal Bowl with BBs, Hi-Hat, Rain Stick.

**Percussion 3:** Concert Bass Drum, Suspended cymbals, Metal Bowl with BBs

**Percussion 4:** Suspended cymbals, Glockenspiel, Tam-tam
Alto Sax. 3, 4
Alto Sax. 1, 2
B. Tbn. 1, 2
Perc. Solo
Bari. Sax.
Bari. Sax.
Ten. Sax.
Tbn. 1, 2
Tba. 1, 2
Bar. 1, 2
Tpt. 3, 4
Tpt. 1, 2
Tpt. 3, 4
Cl. 3, 4
Cl. 1, 2
Fl. 3, 4
Fl. 1, 2
Perc. 4
Perc. 3
Perc. 2
Perc. 1
Tbn. 5
Picc.
Fl. 5
improvised march on SD
improvised march on SD
Picc.

Fl. 1, 2

Fl. 3, 4

Fl. 5

Cl. 1, 2

Cl. 3, 4

Cl. 5

Alto Sax. 1, 2

Alto Sax. 3, 4

Ten. Sax.

Tpt. 1, 2

Tpt. 3, 4

Tpt. 5

Bar. 1, 2

Tbn. 1, 2

Tbn. 3, 4

Tbn. 5

B. Tbn. 1, 2

Tba. 1, 2

Perc. Solo

Perc. 1

Perc. 2

Perc. 3

Perc. 4

Switch to brushes gradually

Free improvisation with brushes with no specific pulse

lip gliss. up and down continue until the end of the arrow.

ppp g l i s s .

ppp g l i s s .

ppp g l i s s .
Picc.
Fl. 1, 2
Fl. 3, 4
Fl. 5
Ob. 1, 2
Cl. 1, 2
Cl. 3, 4
Cl. 5
Alto Sax. 1, 2
Alto Sax. 3, 4
Ten. Sax.
Bari. Sax.
Tpt. 1, 2
Tpt. 3, 4
Tpt. 5
Tbn. 1, 2
Tbn. 3, 4
Tbn. 5
B. Tbn. 1, 2
Tba. 1, 2
Perc. Solo

Keep going moving gradually to lower bongo.
Largo Cantabile \( \text{\# ca. 30} \)

Picc.
Fl. 1, 2
Fl. 3, 4
Fl.
Ob. 1, 2
Cl. 1, 2
Tpt. 1, 2
Tpt. 3, 4
Tpt. 5
Bar. 1, 2
Tbn. 1, 2
Tbn. 3, 4
Tbn. 5
B. Tbn. 1, 2
Tba. 1, 2
Perc. Solo
Perc. 1
Perc. 2
Perc.
Perc. 3
Perc. 4

\( \text{Largo Cantabile} \) \( \text{\# ca. 30} \)

30
One of These Days

Funky (q=100)

Tomek Arnold

\[\text{Cm}(add4) \quad E9 \quad F9 \quad \text{Cm}(add4) \quad Eb9 \quad F9\]

\[\text{Cm}(add4) \quad E9 \quad F9 \quad \text{Cm}(add4) \quad Eb9 \quad F9 \quad \text{E}_9/G\]

\[\text{A}^9 \quad \text{Bb9} \quad \text{E}_9/G \quad \text{A}^9 \quad \text{Bb9} \quad \text{C9} \quad \text{Fm7} \quad \text{E}_9/G \quad \text{A}^9\]

\[\text{Bb9} \quad \text{E}_9/G \quad \text{A}^9 \quad \text{Bb9} \quad \text{C9} \quad \text{Fm7} \quad \text{E}_9/G \quad \text{D}^9\]

\[\text{E}_9/\text{add4} \quad \text{Fm7} \quad \text{A}^9 \quad \text{D}^9 \quad \text{E}_9/\text{add4} \quad \text{F}^9 \quad \text{E}^9/D^9\]

\[\text{E}_9/\text{add4} \quad \text{F}^9 \quad \text{E}^9/D^9 \quad \text{Cm}^9 \quad \text{E}_9 \quad \text{F}^9 \quad \text{E}_9/G \quad \text{Bb}^9/D\]

\[\text{E}_9 \quad \text{F}^9 \quad \text{E}^9/D^9 \quad \text{Cm}^9 \quad \text{E}_9 \quad \text{F}^9 \quad \text{E}_9/G \quad \text{Bb}^9/D\]

\[\text{F}^9 \quad \text{E}_9/G \quad \text{Bb}^9/D \quad \text{E}_9 \quad \text{F}^9\]