Audience Interactivity and the Concert Hall Audience

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Abstract

Audience Interactivity and the Concert Hall Audience Lanier Sammons

The second half of the 20th century and the beginning of the 21st have witnessed the creation of a largely unanalyzed body of works that harness as a creative force audiences gathered together for a shared musical experience. This dissertation seeks to examine the emergence of these audience-interactive works, offer classification designed to illustrate the range of such works, consider the myriad aesthetic and social concerns that composers of these works must address, and contribute to this oeuvre through the composition of new audience-interactive works. This dissertation explores audience interactive music and its creation through concepts like Christopher Small's "musicking" and Nicolas Bourriaud's "relational aesthetics" and situates audience interactivity within work from scholars of play, ethnomusicology, and aesthetics. The dissertation also includes in-depth analysis of audience-interactive pieces composed by Pauline Oliveros, Robert Ashley, Jason Freeman, Bruce Adolphe, and members of Fluxus. The composition portion of the dissertation consists of five works: a set of event scores calling for audience improvisation, a work for computer-generated sound and images resulting from data produced by audience-directed sensors, a branching musical structure through which a performer navigates based on audience preferences, a system for reading characteristics of an audience as notation, and a piece in which audience members move about the performance space to offer individual musical prompts to performers. This collection of compositions demonstrates both the diversity of

techniques for achieving audience interactivity and the multitude of purposes for which audience interactivity may be used. Taken as a whole, the dissertation aims to comprehensively consider concert-hall-audience-based audience interactivity through analytical, theoretical, and creative means.

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Chapter I: Introduction, Definitions, and History

1. Introduction

Prophesying a sea change in the musical world, the composer Marc Blitzstein wrote in 1936:

One thing is certain – the face of our musical life must change, if we are once again to realize the ideal picture of a composer and his music in vital traffic with the public. This time it will be the entire public – everybody; an economic fact which will induce certain consequences. It may mean the end of the platinum Orchestra Age. It may mean a participation of audiences in music to a degree unheard of since the Greeks. It may even mean a revival of chamber music, with one program having a 'run' of nine-performance-aweek throughout a season, like today's theatre – why not? But one place music had held in society is on its way out, and another on its way in.¹

Though Blitzstein's image of composers and the public joined in artistic union has remained unrealized, his less far-reaching predictions have achieved some degree of accuracy. While orchestras remain a vital part of the Western art music landscape, the great radio orchestras of Blitzstein's platinum Orchestra Age have faded.

Chamber music, though perhaps not demanded by the public in theatrical runs, has achieved a new level of prominence in musical culture as the principal site of

¹ Blitzstein, Marc. "Coming – the Mass Audience!" *Modern Music* 13.4 (May-June 1936): 29.

innovation.² But what of audience participation? It, too, has arrived since Blitzstein wrote. A growing number of works have emerged that call on audience members to assume roles in addition to that of listener. The success of this prophecy, more than the decline of orchestras or the rise of chamber music, presents the best hope for the realization of Blitzstein's vision of composers and their music "in vital traffic with the public."

Western art music has conventionally maintained a strict boundary between its audiences and its creators. Composers and performers in the Western classical tradition have occupied a variety of cultural, intellectual, and economic positions, but rarely have producers and receivers of music met on an even plane. For thinkers like Christopher Small and Nicolas Bourriaud, dissolution of the barrier between creator and receiver is a social and aesthetic necessity. For Small, the strict focus on listening established within contemporary classical performance spaces produces an environment in which relationships extending past the individual listener lack significance. This isolation is heightened by the classical concert hall itself whose "very form...tells us that the performance is aimed not at a community of interacting people but at a collection of individuals, strangers even, who happen to come together to hear musical works." In Small's formulation, the absence of interaction within the concert hall is particularly troubling as the creators and receivers of musical performances of all kinds "articulate relationships among

² Baron, John. H. *Intimate Music: A History of the Idea of Chamber Music* (Hillsdale, NY: Pendragon Press, 1998): 375.

³ Small, Christopher. *Musicking* (Hanover, NH: Wesleyan University Press, 1998): 27.

themselves that model the relationships of their world as they imagine them to be and as they think (or feel) that they ought to be."⁴ For Bourriaud, previous models of social interaction represented in earlier artworks have exhausted their utility, and "the role of artworks is no longer to form imaginary and utopian realities, but to actually be ways of living and models of action within the existing real."⁵

Contemporary art, in Bourriaud's formulation, must take as its subject social encounters both between audience and creator and among the audience to remain relevant.

In practice, composers have not heeded the urgency of these thinker's calls. While the act of removing the barrier between receiver and creator has comparatively blossomed in the post-Cage avant-garde, it remains a fringe upon that fringe.

Composers who traverse the fourth wall in one piece do not preclude themselves from composing with the confines of the conventional audience-performer/composer divide in another, and works that do make permeable the barrier retain a sense of novelty for both audiences and performers when they are included in programs or encountered online or in galleries. Indeed, discussion of these works in both academic and non-academic literature tends to focus on the novelty of the experience and on the mechanisms by which the audience participates in the music rather than on the results of transgressing the convention.

The chapters that follow aim to provide a deeper reading of works in which

⁴ Small 96.

⁵ Bourriaud, Nicolas. *Relational Aesthetics*. Trans. Simon Pleasance and Fronza Woods with Matthieu Copeland (Dijon, France: Les presses due reel, 2002): 13.

musicians and traditionally formed audiences share in musical creation by exploring the emergence of such works, offering classificatory considerations designed to illustrate their range, considering the myriad aesthetic and social concerns that composers of these works must address, and presenting a collection of new contributions to the oeuvre.

2. Definitions

As a label for works linked to the Western art music tradition that blur the distinction between producers and receivers of music, I apply the term "audience interactive." Despite its cumbersomeness, the term offers the clearest encapsulation of the link between the works in question and has some currency across media. While "interactive" might be the ideal descriptor, the unadorned word was claimed in the later half of the 20th century for human-computer musical collaboration. The more familiar phrase "audience participation," with its connotations of clapping the beat and singing along, fails to capture the breadth of the works in question (which, as described in Chapter II, do not necessarily require even audience awareness of their own contributions). Preferring "audience interactive" to "audience participatory" also help avoid confusion with the "participatory field" as outlined by Thomas Torino in *Music as Social Life*.

⁶ Emmerson, Simon and Denis Smalley. "Electro-acoustic music." *Grove Music Online. Oxford Music Online.* [n.d.]. Web. 24 Jan. 2012.

For a compelling attempt at recapturing "interactive" for music outside the digital domain see:

Oliveros, Pauline. "The Roots of the Moment: Interactive Music." *NewMus Music Net* 1 (April 1995). Web. 28 Sept. 2011.

⁷ Turino, Thomas. *Music as Social Life* (Chicago, IL: Univ. of Chicago, Press, 2008).

While "audience interactive" is not a new contribution to the lexicon, the term has often been used without the accompaniment of a precise definition.⁸ Accordingly, identifying works that firmly merit the descriptor is not always easy. In addition, composers, performers, and listeners are often eager to reiterate Jacque Rancière's reminder that spectatorship (and listenership along with it) is already an active interpretive enterprise.⁹ The pages that follow do not seek to disagree with this assertion, but they do distinguish between the active task of interpreting a piece as an individual listener and the task of interaction through which the piece is collectively formed into a shape experienced by every audience member.

This difference is illustrated by the following test. If the audience and the performers (whether human or not) are separated into two rooms with visual and sonic information fed from the performers' room into the audience's room but not in the opposite direction, can the piece in question be performed as directed by its score? If so, the piece can certainly claim active listenership, but it should not be considered audience interactive. If not, then the work in question is audience interactive. While composers, performers, and audience members would almost surely find such presentation less than desirable for nearly any work purported to be a live performance (though the Met broadcasts, for instance, take precisely this

Communication Theory 21.1 (Feb. 2011): 67-89.

⁸ For some discussion of definitional issues, see: Yoo, C.Y. "Modeling Audience Interactivity as the Gratification-Seeking Process in Online Newspapers."

⁹ Rancière, Jacques. *The Emancipated Spectator*. Trans. Gregory Elliott. (New York: Verso, 2009): 1-24.

form for viewers), this test asks only for the possibility of accurate performance rather than the possibility of ideal performance. Audience-interactive works become impossible, not just less than ideally performed, if communication between the audience and the performers is not reciprocal.

The chapters that follow do not concern themselves with all works that fit the definition of audience interactivity presented above. Instead, the focus lies on pieces that address what I have termed the "concert hall audience." Many composers seeking to refashion the contemporary performance model for Western art music have turned to alternative venues like galleries and the internet that offer more discrete and less temporally bounded audience experiences, and literature on audience interactivity tends to focus on work in these sites. However, other composers have preserved, if not the physical concert hall, the conventions of audience formation that the concert hall established. These composers address an audience gathered for simultaneous, shared musical experience. I identify this audience type (again, regardless of the audience's physical location) as the 'concert hall audience.'

3. A brief history of audience interactivity and the concert hall audience
Both audience interactivity and the concert hall audience, as defined above, are
concepts contextually specific to Western art music and developed comparatively
recent. Music making without audience and performer distinction, of course, is
neither. In his *Music as Social Life*, Thomas Turino identifies music making in which

"there are no artist-audience distinctions, only participants and potential participants" as "participatory." He contrasts this field of musical performance with "presentational" music making, in which "one group of people, the artists, prepare and provide music for another group, the audience." 10 Turino's examples of participatory performance include mbira music from Zimbabwe, Peruvian Aymara panpipe and flute performance, and Midwestern contra dance, while European concert music serves as his principal example of the presentational field. 11 Though audience-interactive music shares many of the qualities of participatory music, it depends, as an outgrowth of European concert music, on two features of the presentational field: the presence of a producer-receiver divide to be breached and the concept of a work that requires accurate realization. Accordingly, audience-interactive music should be thought of as injecting elements of participatory music making into the presentational field rather than as situated with the participatory field.

Tellingly, Turino does not require that listening in the presentational field be fully attentive. Rather, the audience's social responsibility is context dependent; they must grant "more or less attention to the performance *depending upon the genre frame.*" For much of the history of Western art music, the genre frame mandated relatively little attention from the audience. Small asserts that audiences through at least the early 19th century would consider their "own audible responses...[to be] a

¹⁰ Turino, Thomas. *Music as Social Life.* (Chicago: University of Chicago Press, 2008): 26.

¹¹ Turino 36, 52.

¹² Turino 52.

legitimate element of the performance." ¹³ In *Listening in Paris: A Cultural History*, James H. Johnson offers confirmation that eighteenth-century audiences in Paris "considered music little more than an agreeable ornament to a magnificent spectacle, *in which they themselves played the principal part.*" ¹⁴ In this context, the reciprocal communication that audience interactivity requires would likely have seemed an unwelcome garnish to the meat of the musical event; indeed, Lydia Goehr observes that compositions were expected to serve the needs of the function at which they were performed rather than determine the function's needs. ¹⁵ Additionally, audience members already had few qualms about producing audible interjections; both Johnson and Goehr describe audience members of the time singing or humming along, interjecting jokes and expressions of displeasure, and applauding the arrival of prominent individuals in their boxes. ¹⁶ Unsurprisingly, the emergence of audience-interactive work required a departure from this mode of listening. ¹⁷

Of course, many audience members, performers, and composers hailing from the seats of the Western classical music tradition did participate in an embryonic form of audience interactivity: congregational singing. Though the Catholic Church

¹³ Small 44.

¹⁴ Johnson, James H. *Listening in Paris: A Cultural History* (Berkeley, CA: Univ. of California Press, 1995): 10. Italics mine.

¹⁵ Goehr, Lydia. *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press, 1992): 178-181.

¹⁶ Johnson 27-30, Goehr 192.

¹⁷ Though, see Johnson's reading of Mozart's *Symphony No. 31* as "a virtual dialogue with the inconstant audience" for a description of Mozart's attempt at commandeering these unsolicited audience contributions as part of the musical work.

approached music as a principally sacerdotal function until the twentieth century and therefore featured few opportunities for congregational song, Martin Luther's fervent support of congregational singing of hymns elevated the practice to a place of prominence within most Protestant traditions. While the tricky attribution of 'performer' and 'audience' roles in the Protestant service make congregational hymns difficult to classify definitively as audience interactive, this method of musical performance would at least have been part of the musical world for midseventeenth century audiences. Indeed, congregational singing did provide the model for the initial forays of secular composers into audience interactive writing, though it took the French Revolution to inspire them.

Following the Revolution, musical performance was expected no longer to facilitate aristocratic sociability but instead to promote solidarity and national unity. To this end, composers employed a variety of techniques including audience interactivity. Composers distributed song sheets to their audience to encourage them to sing along with the performers and laced their works with popular melodies to further inspire participation. Johnson describes one particularly memorable example involving the composer Méhul and the crowd at a festival:

Méhul divided the crowd into four sections, and on a cue from the composer one sang the tonic, another the third, another the fifth, and the last the octave

¹⁸ Rogal, Samuel J. *A General Introduction to Hymnody and Congregational Song* (Lanham, MD: Scarecrow Press, 1991): 22-23.

Dickinson, Edward. *Music in the History of the Western Church* (New York: Charles Scribner's Sons, 1902): 223-224, 250.

¹⁹ Johnson 119-121.

above, producing a glorious major chord sung by thousands...The subtext was simple if unprecedented. In these times, all were performers. This was the musical expression of revolutionary democracy.²⁰

The same time period witnessed the emergence of the *Musikalisches Würflespiel*, or musical dice game. These pieces, intended for realization and performance in the home, allowed those untrained in composition to create pieces conforming to familiar genres by rolling dice to select each measure or note.²¹ However, these musical innovations did not prove lasting. After Thermidor brought an end to the Terror, French music quickly returned to functioning primarily as background for social spectacle.²² Nearly simultaneously, the musical dice game faded from fashion, and the separation of audiences from performers and composers returned.²³

The pendulum of audience mores, however, soon swung in the opposite direction.

As Goehr describes:

A given performance of a work ceased to be interrupted by a long interval between movements, and audiences gradually ceased to participate in the way that they had earlier on. The general desire for a quieter, more considerate, and more attentive audience was part and parcel of the growing respect for a new and 'civilized' musical event.²⁴

²⁰ Johnson 127.

²¹ Hedges, Stephen A. "Dice Music in the Eighteenth Century." *Music & Letters* 59.2 (1978): 180-183.

²² Johnson 156-159

²³ Hedges 184.

²⁴ Goehr 237.

For Goehr, this change was precipitated by the rise of the Romantic aesthetic and its advocacy of the musical work as valuable for solely musical reasons and, accordingly, demanding fidelity and transparency in performance.²⁵ Johnson similarly cites a shift to appreciation of music apart from extra-musical considerations.²⁶ He describes the emerging code of silence as emanating from bourgeois values while also offering opportunities for internal confirmation of bourgeois status through adhering to and policing the new standard.²⁷ By the 1830s and 1840s, concert-going attitudes had changed enough that the preferred seats for French audiences were those in the center of the theater rather than the stage-adjacent spots most conducive to being seen by fellow attendees.²⁸

Through the later half of the nineteenth century, the code of silence solidified and intensified. While audience self-policing continued to serve an important role in establishing silent listening as standard practice, many of the final statutes in the code came from other sources. Illustrating the power and influence wielded by conductors around the turn of the twentieth century, Joseph Horowitz describes Mahler and Toscanini establishing new concert hall procedures to keep focus squarely on the musical work; Mahler "removed the claque, closed the door to latecomers, and eliminated all customary cuts in *Tristan* and other huge operas," while Toscanini at La Scala "made the women take off their hats, darkened the

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²⁵ Goehr 222-236.

²⁶ Johnson 225.

²⁷ Johnson 231-233.

²⁸ Johnson 245.

house, and outlawed encores."29 The two conductors also joined in the midperformance enforcement of etiquette in their own ways with Mahler glaring and whispering at transgressors and Toscanini responding with fury.³⁰ Indeed, the most stringent expression of the code of silent listening could be found in Studio 8H from which performances of Toscanini's NBC Symphony were broadcast from 1933 forward. Horowitz describes these concerts as "a stranding of the musical event" in which invitation-only audiences were subject to "extraordinary precautions...taken to ensure silent listening; the programs were printed on rattleproof materials; ticket holders with coughs were asked to leave."31 Along with the performances of Toscanini's orchestra, listeners to the NBC broadcast and similar radio shows received a clear message about the place of audiences in the performance of classical music: they were to be invisible and inaudible save for providing rapturous applause at the appropriate intervals. Through radio and later television, the model of silent listening spread to audience members even before they attended a live performance.

However, composers were already beginning to explore and encourage alternative roles for the audience prior to broadcasts of the NBC Symphony. Foremost amongst these composers was Arthur Farwell. As a fervent advocate of the community music movement, Farwell sought a democratization of music in America. As a composer and as Supervisor of Music in the Parks of New York City, Farwell employed

²⁹ Horowitz, Joseph. *Understanding Toscanini* (Boston: Faber and Faber, 1987): 45-46.

³⁰ Horowitz 47-48.

³¹ Horowitz 186.

audience interactivity as a tool for achieving this goal.³² From the early 1910s through the 1920s, Farwell included audience singing in orchestral works like *Symphonic Hymn on "March! March!"* and *Symphonic Song on "Old Black Joe"* as well as in his music for community pageants.³³ As the Supervisor of Music for the Parks, Farwell also organized audience-interactive events. Farwell's Song and Light Festival in Central Park in 1916 included "antiphonal singing by the chorus of 800 voices positioned at the north side of the park's lake and the audience of some 30,000 that crowded the south end each night."³⁴

The parallels between Farwell's approach to audience interactivity and congregational singing are no accident. Indeed, Farwell himself describes his symphonic songs as being "suggested by the Chorale Prelude of the Reformation, where the organist developed a hymn known to the congregation, and at the conclusion brought the congregation in."35 Several other early adopters of audience interactivity in the twentieth century followed the same model. Benjamin Britten's *Saint Nicolas,* from 1948, included hymns meant for singing by choir and congregation, while his *Let's Make an Opera* dramatizes the planning and performance of an opera with the audience asked to sing four songs with the

³² Stoner, Thomas. "'The New Gospel of Music': Arthur Farwell's vision of Democratic Music in America" *American Music* 9.2 (Summer 1991): 183-184.

³³ Stoner 196, 199. Stoner describes community pageants of the time as events that "involved generally a large cast of community members in an outdoor setting depicting some aspect of local history, often in a series of alternating historical and allegorical scenes, the latter generally making greater use of music."

³⁴ Stoner 195.

³⁵ Qtd. in Stoner 207.

audience learning and rehearsing the songs in the course of the narrative.³⁶ Paul Hindemith's *Ite, angeli veloces* from 1953 similarly included the audience joining in song with on-stage performers.³⁷ Even Toscanini was known to turn his orchestration of "The Star Spangled Banner" into an audience-interactive event in which "he would conduct facing a singing audience, eyes blazing, and singing along in his hoarse baritone."³⁸

While composers like Britten and Hindemith were introducing audience interactivity based on the model of congregational signing into the symphonic repertoire, composers less connected to the establishments of Western art music were moving toward alternative versions of audience interactivity. Erik Satie's *Furniture Music*, meant to be played as background music at a social function, recalled the listening habits of the past.³⁹ Cage's 4'33", though not adhering to the definition of audience interactivity above, offered the potential for un-scored and even unintentional sonic contribution of the audience to be considered part of the piece.⁴⁰ The Happening, as a form originated by Allan Kaprow, questioned

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³⁶ White, Eric Walter. *Britten: His Life and Operas* (Berkley, CA: University of California Press, 1983): 63, 169.

³⁷ Skelton, Geoffrey, ed. *The Selected Letters of Paul Hindemith*. Trans. Geoffrey Skelton (New Haven, CT: Yale University Press, 1995): 216-217.

³⁸ Horowitz 178.

³⁹ Tyranny, Gene. "A Short History of Sound Art" *Diapason Gallery* (2003): 2.

⁴⁰ Intriguingly, when I solicited examples of audience-interactive pieces from the Society of Composers, Inc. email list, 4'33" was the most frequent response. While many interpretations of the work stress the audience's unintentional contributions, it is worth noting that the piece neither specifies nor requires the presence or involvement of an audience. Indeed, the work by Cage that most closely adheres to the definition of audience interactivity presented here is 33 1/3, which is designed for an audience more fluid than that of the concert hall.

performance conventions of many types, including the separation of audience and performer.⁴¹

Emerging from the same Cage-led class that birthed the Happening, the movement known as Fluxus led the exploration of audience interactivity beyond the sing-along. That Fluxus should serve this role is not surprising given the views of George Maciunas, its ostensible founder. Just as Martin Luther sought to dispel the notion of the priesthood as a barrier between worshipper and divinity (though congregational singing, among other means), Maciunas claimed that "anything can be art and anyone can do it" and insisted that Fluxus art "demonstrate the selfsufficiency of the audience."42 Even though Maciunas' ultimate goal was to undo the separation of art and life implied by the concert hall as a physical entity, he did find a purpose for the concert form, if "only as educational means to convert the audiences to...non-art experiences in their daily lives."43 In practice, many Fluxus event scores do address themselves to a concert hall audience, perhaps both heeding Maciunas' vision of the concert as an opportunity for conversion and recognizing the gathered audience's potential to facilitate art that meets Ken Friedman's definition of Fluxus as "profoundly simple premises [that] can create rich, complex interactions that lead to surprising results."44 While exploration of

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⁴¹ Kelley, Jeff. *Childsplay: The Art of Allan Kaprow* (Berkeley, CA: University of California Press, 2004): 22-25.

⁴² Qtd. in Proctor, Jacob. "George Maciunas's Politics of Aesthetics." *Fluxus and the Essential Questions of Life*. Ed. Jacquelynn Bass (Hanover, NH: Hood Museum of Art, Dartmouth College, 2011): 25.

⁴³ Qtd. in Proctor 31.

⁴⁴ Friedman, Ken. "Forty Years of Fluxus" Art / not art (N.d.): n.p.

audience interactivity was not a constant across Fluxus, many of the associated artists did produce event scores that included audience interactivity and pushed audiences to participate in ways less familiar and less comfortable than massed, unison singing. Emmett Williams' *Duet for Performer and Audience* serves as an early example of this expanded approach to audience interactivity. Williams' score reads: "Performer waits silently on stage for audible reaction from audience which he imitates." In contrast to models based on congregational signing, Williams shares the role of the composer, not just the performer, with the audience.

Through mid-century exposure via the occasional orchestra sing-along and more focused efforts by Fluxus artists and lesser known groups like Musica Elettronica Viva, audience interactivity emerged from the 1960s as a valid, if still rare, compositional option. Composers without strong attachments to Fluxus or MEV, like Don Erb, Francis Schwartz, and Pauline Oliveros, have harnessed audience interactivity for their own experimental, educational, and/or entertainment goals in works from the 1970s through today. Additionally, the rise of interactive media enabled by the personal computer and the Internet and the increasing profile of musical installations offered composers further incentive, inspiration, and opportunity to adopt audience interactivity. Indeed, audience-interactive works both based on digital technology and intended for concert hall audiences have been particularly successful in attracting the attention of press and audiences outside academia as coverage of works like David Baker's Concertino for Cellular Phones and

⁴⁵ Friedman, Ken, Owen Smith, and Lauren Sawchyn, Eds. *The Fluxus Performance Workbook.* (N.p.: Performance Research, 2002): 115.

Orchestra and Jason Freeman's *Glimmer* attests.⁴⁶ Despite its faltering start at the end of the eighteenth century, audience-interactive music at the beginning of the twenty-first century appears to be ensconced as a stable and growing alternative to silent listening, if not quite the revolutionary, revitalizing force Blitzstein foresaw.

⁴⁶ For example:

Wakin, Daniel J. "Horns Up. Bows Ready. Cellphones On." *New York Times*. 3 Oct. 2006. Web. 20 Oct. 2011.

Tommasini, Anthony. "With Lights in Hand, Audience Becomes the Conductor." *New York Times.* 22 Jan. 2005. Web. 27 Nov. 2010.

Chapter II: Classifying Audience-Interactive Works

1. Toward a classification of audience-interactive works

While audience-interactive works are fundamentally linked by their reconfiguration of the role of the concert hall audience, it is important to remember that this linkage is the only inherently shared trait among these works. Audience interactivity is not a single technique; it is an approach to composition that leaves room for a broad range of musical methods and meanings. This chapter offers a classification for audience-interactive works based on several particularly salient features. This classification is not intended to obscure differences between individual works or to obstruct alternative approaches to parsing this set of works. It is intended, instead, to foster recognition of the diversity encompassed within audience-interactive works and to facilitate examination of the aesthetic and social implications engendered by different realizations of audience interactivity.

Four features comprise the classification: audience role, grouping, mechanism of interaction, and audience awareness. The audience role is the type of musical task or tasks that the composer has allocated to the audience members. Whether the audience interacts as a whole or in subsets establishes the grouping. The mechanism of interaction is the means through which the audience interacts with the work. Finally, the audience's ability to detect its own involvement in the music determines the level of audience awareness. Each feature offers its own range of auditory and social implications from which a composer must select. Cumulatively,

the four features provide a thorough description of how audience interactivity is realized within any work.

2. Audience roles

The composer may assign the audience one or more of three core roles: performer, composer, and score. Individually, each of these three transfers a different set of responsibilities to the audience and presents a different set of musical possibilities and social implications. These three roles may also be combined within a piece to produce four more composite audience roles as presented in the diagram below (Fig. 1).

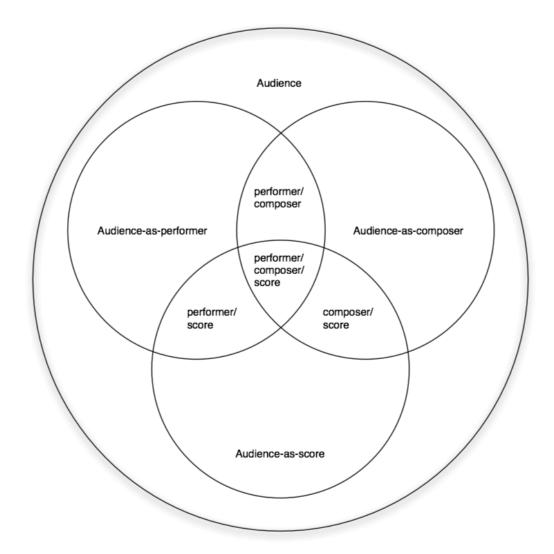


Fig. 1

2.1 Audience as performer

Audience-as-performer works involve the audience as producers of sound. One of the earliest examples of audience interactivity in the concert hall, Hindemith's *Ite, angeli veloces*, places its audience in precisely this role. In the first and third movements of *Ite, angeli veloces*, Hindemith calls for the audience to sing along with a chorus. Parts are distributed to the audience members, and Hindemith introduces

the desired melodies before the audience is asked to produce them (Fig. 2).¹ The piece was commissioned for a 1953 UNESCO event, and Hindemith intended audience participation in the piece to serve as a representation of the unity and cooperation aspired to by the United Nations.²



Fig. 2

¹ Hindemith, Paul. *Cantique de l'Esperance*. Piano Score. Poem by Paul Claudel. Trans. Paul Hindemith. New York: Schott & Co., Ltd., 1953. Print.

² Skelton, Geoffrey, ed. *The Selected Letters of Paul Hindemith*. Trans. Geoffrey Skelton (New Haven, CT: Yale University Press, 1995): 216-217.

Involving the audience as performers places several musical constraints on the composer. First, the means by which the audience can produce sound are limited. Many audience-as-performer works, like *Ite, angeli veloces*, ask audience members to sing or contribute other vocal sounds. Other sounds produced by the body, such as clapping or stomping, are readily available as well. On occasion, instruments are distributed to audiences. Frederic Rzewski's *Zuppa*, as realized by Musica Elettronica Viva, involved instruments left out in the performance space for audience members to claim.³ Ellsworth Millburn's *Toys in the Audience* calls for the audience to receive a variety of toy instruments.⁴ The ubiquity of cell phones has allowed composers to assume that their audiences may harness these devices as instruments. David Baker's Concertino for Cellular Phones and Orchestra asks audiences to activate their ringtones at prescribed moments in the piece.⁵ Alternatively, audiences may be asked to bring their own sound production devices. Matthew Burtner's *Money MICE* relies on audience members throwing coins into onstage resonators, while the Emergence Collective's *Unity Groove* requires that audience members bring laptops in order to participate.⁶

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³ Beal, Amy C. "'Music Is a Universal Human Right: Musica Elettronica Viva." *Sound Commitments: Avant-gard Music and the Sixties*. Ed. Robert Adlington (New York: Oxford University Press, 2009):108.

⁴ Bacon, Thomas. "New Musical Works Commissioned by and/or Written for Thomas Bacon." *Horn Planet*. 2009. Web. 27 Sept. 2011.

⁵ Wakin, Daniel J. "Horns Up. Bows Ready. Cellphones On." *New York Times*. 3 Oct. 2006. Web. 20 Oct. 2011.

⁶ Burtner, Matthew. *MICE: Mobile Interactive Computer Ensemble.* 2009. Web. 24 Mar. 2011.

Second, the variability in the size of the audience from performance to performance adds an additional orchestrational consideration in audience-as-performer works. Balance between the audience's and on-stage performer's contributions can be difficult to achieve. Most audience-as-performer works do not address this concern; instead, they assume an audience within a certain size range. Of course, the audience's numbers also serve as a compositional resource. With even meager attendance, the potential number of sound producers provided by the audience will exceed that of a large chamber ensemble, and at well attended events, the audience members would constitute a performing force several times greater than the largest of orchestras.

Third, composers must acknowledge the limits of their audience performers to comprehend and reproduce a composer's musical intentions. Indeed, *Ite, angeli veloces* serves as a warning in this regard. Speaking to conductors, Jonathan D. Green observes that Hindemith "has written passages for audience singing which are beyond the expected abilities of our contemporary audiences," and Green suggests that an antiphonal choir perform the parts in lieu of the audience. Avoiding this sort of assessment (regardless of its accuracy) requires composers to create parts clearly suitable for untrained performers. Some strategies to avoid exceeding the audience's performance abilities include asking the audience to performer familiar actions, like throwing coins in a container for Burtner's *MICE Money*, and requiring minimal musical skills, such as singing a single pitch in Don

⁷ Green, Jonathan D. *A Conductor's Guide to Choral-Orchestral Works: Twentieth Century Part II* (Lanham, MD: Scarecrow Press, 1998): 64.

Bowyer's *Unity*.⁸ Giving audience members the freedom to choose their own musical material, as discussed in section 2.2, offers another solution. Many alternatives to conventional notation are also available. Baker's *Concertino* uses color-coded lights to tell audience performers to start and stop their ringtones.⁹ The audience of Millburn's *Toys in the Audience* receives detailed verbal instructions regarding how and when to play the toy instruments they have received.¹⁰

Of course, even with non-virtuosic parts and clear instructions some inconsistency is unavoidable with a large number of untrained and unrehearsed performers; audience members are bound to realize some performance instructions less than accurately and even their willingness to perform at all may wax and wane.

Accounting for this prospect becomes a fourth constraint for composers. In some applications of audience performance, this inconsistency can create desirable effects as a source of orchestra-like thickening or aesthetically desirable indeterminacy.

Bowyer's *Unity* combines both effects by calling for the audience to contribute to a drone on a single pitch. The massed audience voices (supplemented by a few non-vocal instruments) produce a dense and active texture, and the staggered entrances and exits that result from their attempts at sustaining the pitch through the final several minutes of the work facilitate a continuous texture.

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⁸ Bowyer, Don. "Unity." Don Bowyer. N.d. Web. 3 Oct. 2011.

⁹ Wakin.

¹⁰ Bacon.

Though audience members cannot be expected to perform as trained performers, the audience-as-performer role is often a familiar one for most audience members. When a hymn leader signals for the congregation to join in or the lead singer of a band exhorts the audience to clap along to a drumbeat, those who participate assume a form of the audience-as-performer role. Of course, these activities are solidly encoded as not only acceptable, but desirable in the church and at the rock concert, while in the context of contemporary Western classical music performance, the production of even unintentional sound by audience members constitutes a *faux pas*.

As discussed in Chapter I, Thomas Turino discusses these divergent modes of musical reception in his *Music as Social Life*. Turino's description of the participatory field offers useful language for considering audience-interactive works that blur the lines between creator and receiver given the common goals that participatory music making and audience-interactive composition often share.

Again though, the participatory field and audience interactivity should not be conflated, and several types audience interactivity present little or no overlap with the participatory field. For example, Turino identifies the absence of "artist-audience distinctions" as the "primary distinguishing feature of participatory performance," but this lack of distinction in participatory traditions produces a deemphasis of the sonic results of music making. The auditory element is valued for its ability to inspire participation, and the music making is evaluated based on the

¹¹ Turino 28.

¹² Turino 29.

level and quality of participation that it achieves.¹³ Accordingly, musical features are selected for their ability to facilitate participation and spaces for individual expression, extensive variation, and overt virtuosity are reduced. The expression of these values in participatory music making yields "a space for direct, intimate, dicent social connection and experience and provides the potential for flow experience that is readily accessible to anyone."15 The extent to which such a space is realized in audience-interactive works is important to remember in evaluating their success even as their distance from the participatory field must be recognized. The integrity of the work as a sonic object remains a concern in audience-interactive pieces, and even composers who might be willing to abandon that concern face a system of evaluation predicated upon it. Moreover, the notion of the composer itself lies awkwardly within the participatory field, which Turino identifies as "the most democratic, the least formally competitive, and the least hierarchical" of the fields he identifies. 16 Turino describes the "piece" in participatory traditions as "a collection of resources fashioned anew in each performance like the form, rules, and practiced moves of a game" rather than as a "set item." While audience-interactive works may aspire to this condition, the "game" is still established by an individual as a distinct and identifiable entity. The apartness of the composer is especially noticeable in the uncombined audience-as-performer role in which the boundary

¹³ Turino 29, 34-35.

¹⁴ Turino 33-47.

¹⁵ Turino 234.

¹⁶ Turino 35.

¹⁷ Turino 59.

between audience and performer is dissolved, but the dividing lines between audience and composer and between performer and composer remain firmly intact.

2.2 Audience as composer

When placed in the audience-as-composer role, the audience assumes responsibility for a portion of the aesthetic decision-making process that is usually held by the composer. The scope of the compositional authority that the audience receives can vary widely from piece to piece, but audience-as-composer works are united in providing direct, real-time control over some aspect of the music to the audience. These compositional decisions must be communicated to a performer, an ensemble, or an electronic method of sound production.

David Ward-Steinman's *Improvisation on Five Notes from the Audience* presents a direct and simple version of this role. As the title suggests, the performer solicits five notes (as pitch classes) from the audience and treats these as the central melodic material in an improvisation. Ward-Steinman also performs a version of the piece in which he requests a familiar melody from the audience as asks the audience to suggest styles in which they would like to hear it performed. Don Bowyer's *Time Zones* offers an example in which the audience's opportunities to provide compositional input persist through the performance of the work. *Time Zones* is a programmatic representation of a composer, performer, and academic's

¹⁸ Ward-Steinman, David. "RE: [scimembers] Audience-interactive pieces?" Message to the author. 27 Sept. 2011. Email.

life in which different musical material represents different time commitments including teaching, administrative duties, and spending time with family. At any time during the piece, audience members may call a cell phone number to prompt an "unplanned demand" section that interrupts whatever material is currently being played. 19

As these two pieces illustrate, the aesthetic considerations required by the audience-as-composer role are quite different from those of the audience-asperformer role. With sound production out of the audience's purview, the composer must instead account for the variability introduced by the compositional decisions passed on to the audience. In Improvisation on Five Notes from the Audience, Ward-Steinman relies on the performer's ability to craft musical interest from any five notes provided by the audience. Limiting the audience's choices to the twelve pitch classes within the equal tempered system substantially limits the risk of an unsatisfying performance. Bowyer's *Time Zones* gives the audience control over form rather than content. To accommodate this flexibility of form, the "unplanned demand" section must be capable of emerging from any of the other sections in ways that makes sense for both the coherence of the work and for the logistical requirements of the performer. Of course, the programmatic construction of the "unplanned demand" section as an interruption facilitates the transition involving a certain degree of disjunction in *Time Zones*.

¹⁹ Bowyer, Don. "Time Zones." *Don Bowyer.* N.d. Web. 3 Oct. 2011.

Notational issues also manifest differently. Audience members must still clearly understand the role they are to play, and this information is generally conveyed verbally or textually before the performance begins. The crux of the notational problem, though, is providing the audience with a system of communicating their compositional desires readily. As *Improvisation on Five Notes from the Audience* and *Time Zones* illustrate, this task is often accomplished by combining a narrow set of possible audience choices with a direct and familiar means of indicating preference. Providing a broader range of compositional choices to the audience demands a broader system of communication, and in these cases, composers must be careful to account for the audience's ability to learn and retain the workings of the system employed. When the audience's ability to comprehend the system is carefully balanced with the ability of the system to provide engaging challenges, the audience-as-composer role can provide the experience of "flow," which Turino identifies in participatory traditions. As described in the work of psychologist Mihaly Csikszentmihalyi, flow is achieved when individuals engage in an adaptive activity capable of presenting challenges appropriate for their level of skill.²⁰

Ward-Steinman's *Improvisation on Five Notes from the Audience* and Bowyer's *Time Zones* are not explicitly designed to offer their participants flow experiences, but they do offer their audiences a novel challenge: collaborating in the composition of a musical work. This particular transgression of the boundary between audience and composer more strongly disrupts the hierarchy of Western classical music than

²⁰ Turino 30-32.

breaking the audience/performer divide. However, the composer's abdication should not be exaggerated; audience members receive compositional authority in audience-as-composer works only, of course, to the extent that the composer chooses to grant it. Ward-Steinman's audience, for example, determines the pitch content of the theme used in *Improvsiation on Five Notes from the Audience*, but they have no say in the piece's rhythm, harmony, form, or style.

2.3 Audience as score

Audience-as-score works involve the translation of some aspect or aspects of the audience into music; certain qualities of the audience as a whole or of its individual members determine or alter the musical materials of the piece. Unlike audience-asperformer and audience-as-composer pieces, the audience in this case lacks the ability to shape the music intentionally in real-time. Rather, decisions that audience members make prior to performance or characteristics beyond the control of audience members determine the course of the piece. Despite this lack of intentional control, the presence of the audience and their distinctiveness as an audience remain vital to the successful realization of audience-as-score works.

Tayloe Harding and Brian Williams' *Grassroots 2008* utilizes the audience-as-score role. In this piece, the audience is presented with information regarding issues pertinent to the 2008 presidential campaign. The audience expresses their opinions on these issues by voting with a handheld device, and the opinions of the audience

determine what the performers play subsequently.²¹ Fluxus member Emmett Williams' *Counting Songs* places the audience in the score role very differently. In *Counting Songs*, the performer counts every member of the audience audibly while distributing items to them or otherwise marking each count.²² The duration and content of the piece are, therefore, determined by the size of the audience.

Both *Grassroots 2008* and *Counting Songs* illustrate another aspect of audience-asscore works. While the boundary between audience-as-performer works and audience-as-composer or audience-as-score works is firm, the boundary between audience-as-composer and audience-as-score works is more permeable. In both *Grassroots 2008* and *Counting Songs*, audience members could manipulate the piece to allow audience-as-composer interactions. An audience member aware of the linkage between voting and sonic results in *Grassroots 2008* might vote to achieve a particular musical end rather than to accurately reflect his political opinion. Similarly, an audience member in *Counting Songs* could easily leave or move to control the performer's counting.

The similarities between the two categories continue in the constraints they place upon composers. As in audience-as-composer works, the composer of audience-as-score pieces must account for the variability that the compositional decisions

²¹ Harding, Tayloe and David Brian Williams. "Grassroots 2008 and 2012." *David Brian Williams, Ph.D.* Oct. 2011. Web. 27 Oct. 2011.

²² Freidman, Ken, Owen Smith, and Lauren Sawchyn, Eds. *The Fluxus Performance Workbook* (N.p.: Performance Research, 2002. Web. 17 Mar. 2011): 116.

determined by his audience's qualities produce. Given that the composer has control over which qualities are considered, the possibilities can be more contained. In *Grassroots 2008*, the audience responds with levels of agreement between strongly agree and strongly disagree or by selecting a preferred candidate. These restricted options allow potential responses to be confined to a predictable and manageable range. *Counting Songs* allows for an expansive number of results, but the piece relies only on the performer's ability to account as high as the audience's total number.

Notational issues also exist for audience-as-score pieces, but because of the absence of intentional audience input, they are reduced. If desired, the composer and performers can rely on conventional notation. Instead, the difficulty for the composer arises in translating the relevant audience qualities into notation or directly into sound in real-time. Harding and Williams use handheld voting devices and a dedicated computer to process their audience's political opinions, convert these opinions into musical decisions, and to convey the musical results to their performers. Williams' piece avoids notational issues by treating the audience itself as the visual score from which the performer counts.

Unlike the audience-as-performer and audience-as-composer roles, the audience-asscore role is not found in Turino's descriptions of participatory tradition. In fact, attendees at a performance of an audience-as-score piece could be entirely unaware of their contribution to the piece. For example, *Counting Songs* makes clear to its audience that they are what is being counted, but it could easily be altered so that the audience's number determines the duration of the performer's count but she gives no indication of this relationship. From the standpoint of composition and performance these works are as dependent on the audience as works of the two other types regardless of the audience's awareness of their involvement, but from a social perspective, the audience's awareness is vital to the experience. In practice, composers rarely hide the audience's contribution, as *Grassroots 2008* and *Counting Songs* demonstrate. Both these works makes the audience fully aware that the music they are hearing is, in some fashion, a representation of themselves. The flow state is ruled out of audience-as-score works because of the absence of intentional audience participation, but audience-as-score pieces can be particularly successful in joining the entire audience is the act of musical creation.

Caveats presented for the other two roles persist here since audience-as-score works do not emanate from a participatory tradition. Audiences for an audience-as-score piece are likely to evaluate the work at least in part as an aesthetic object rather than solely as a social experience, and the absence of intentional interaction reinforces this approach as the composer and performer are left in their traditional roles from the presentational field. Also, the composer, as in audience-as-composer works, retains the full say in the extent of the audience's contribution to the piece. The hierarchies of the presentational mode remain in place, though the audience as a separate entity is confronted with a social experience resembling that offered by participatory music.

2.4 Audience as performer/composer

When the audience-as-performer and audience-as-composer roles are combined, audience members assume some responsibility for both the production of sound and for making compositional decisions. In many pieces combining these two roles, the responsibilities are coupled, and audience members act as improvisers.

Rzewksi's *Zuppa*, referenced above, enacts the audience-as-performer/composer role in precisely this way. Audiences attending a performance of *Zuppa* by Musica Elettronica Viva would enter the performance space to discover performers already playing and a variety of instruments available for audience members to assume.²³

With the audience's performance and compositional contributions coupled as in *Zuppa*, the notational concerns that the roles introduce in isolation are mitigated. If the composer wishes to restrict the scope of the audience's improvisations in any way, this information must be clearly conveyed. However, the audience's ability to channel their compositional intentions directly into performance remove the need for the bulk of the communication between the audience and the composer and all of the communication between the audience and the performers not realized directly through the musical performance. If the audience-as-performer and audience-as-composer roles appear distinctly, the notational concerns remain. However, this version of audience-as-performer/composer music does not appear

²³ Adlington 108.

in any of the examples of audience-as-performer/composer pieces collected in Appendix C.

While issues regarding the skill of the audience's performance remain, they center on the audience's ability to improvise appropriately within the musical context rather than on the audience's ability to reproduce notation accurately. Similarly, the composer must account for the range of compositional decisions that an audience may make, but again, this concern manifests slightly differently. The composer need not worry about the possibility of the audience making decisions outside the possibility of realization by the performers. The concern again rests with the confluence of the audience's compositional desires and the aesthetic goals of the piece. A third and potentially greater concern may be the audience's willingness to participate when burdened with both the pressure to perform without firm compositional direction and the pressure to compose without the benefit of trained musicians to perform their intentions. Musicians like Musica Elettronica Viva address these issues by establishing an aesthetic predicated, as Alvin Curran describes it, upon "individual freedom and democratic consciousness." 24

As Curran's description of the goals of Musica Elettronica Viva suggests, the audience-as-performer/composer role comes the closest to existing entirely within the participatory field. Indeed, Michael Nyman approaches the ideals of participatory music when he describes Rzewski's music as "involving the erstwhile"

²⁴ Qtd. in Adlington 113.

'spectator' in a sphere of activity where the *production* of music takes precedence over *perception*."²⁵ While many audience-as-performer/composer works do not liberate the audience to the extent that *Zuppa* does, even more limited implementations of the performer/composer role offer the audience some window for social experience as both performers and creators along with the opportunity for the flow experience that elaboration roles in participatory music offer. Though the extent of the challenge depends on the specific implementation, the audience-asperformer/composer role challenges the hierarchy of the presentational field by breaking down divisions between the audience and the performer; the audience and the composer; and, frequently, the composer and the performer. That said, works of this type do not entirely forsake the presentational field; the composer still retains responsibility and credit for the creation of the work to an extent largely foreign in participatory traditions.

2.5 Audience as performer/score

In audience-as-performer/score works, audience members both produce sound and yield qualities that determine some aspect or aspects of the piece's musical materials. As with audience-as-performer/composer works, these two roles may be coupled with the audience performing material that they generate or distinct with the audience performing and generating distinct material. David Baker's *Concertino*

²⁵ Nyman, Michael. *Experimental Music: Cage and Beyond* (New York, NY: Cambridge University Press, 1999): 130.

for Cellular Phones and Orchestra and Brian Belet's Lobby Reforms provide two examples of this combined role.

As described above, Baker's *Concertino* asks the audience to perform by triggering their cell phones' ringtones at cued moments. The as-score component arises from the content of the ringtones. Rather than ask the audience members to download specially designed ringtones (as is required for Levin et al.'s earlier cell phone work, *Dialtones (A Telesymphony)*), Baker's piece relies on ringtones already available on the audience's phones.²⁶ These ringtones constitute a reflection of the audience's commercial, technological, and musical preferences rather than a compositional decision made for the sake of the piece. In this implementation of the audience-asperformer/score role, the score predetermines when the audience performs, but what they perform is a function of their makeup.

In Brian Belet's *Lobby Reforms*, the when and what both result from qualities of the audience. As the title suggests, *Lobby Reforms* annexes the concert hall lobby as a space of creation and performance. To realize the piece, microphones record the audience members as they mill through the lobby. These recordings are then processed and projected into both the lobby and hall.²⁷ For Belet, the piece serves to capture the sonic activity inherent in the social space of the lobby. The sounds that he envisions capturing include "people arriving for this concert, buying tickets, discussing the printed concert program, chatting about the day, and just milling

²⁶ Levin, Golan. "Dialtones (A Telesymphony)." Flong. 2011. Web. 24 Sept. 2011.

²⁷ Belet, Brian. *Lobby Reforms*. Program note. 2006.

about before the concert itself begins," and he intends the piece to serve as "a sonic environment that leads organically into the concert itself as the lobby sounds eventually diminish as a result of the audience leaving that space for the concert hall."²⁸

Lobby Reforms illustrates some of the boundaries of both the as-performer and asscore categories. While Baker's *Concertino* involves the audience performing in a cued and thoroughly intentional manner. Belet's audience members instead serve as performers only in the sense of being producers of the sounds of work. The content and form of the work are generated from activities, like ticket buying, chatting, and moving around the space, that the audience members would pursue without the accompaniment of the piece. This lack of intention is, of course, essential to identifying the work as being of the audience-as-score type, rather than the audience-as-composer type. Belet emphasizes the importance of this unintentional participation by describing the forces required for performing the work as including "unsuspecting audience." ²⁹ Of course, the permeability of the as-score and ascomposer roles remain. Though Belet's description of the work makes it clear that intentional audience involvement in the piece is not among his goals, and audience member aware of the mechanism of the piece might certainly choose to contribute to the work in an as-composer capacity.

²⁸ Belet.

²⁹ Belet.

As these two works illustrate, the aesthetic concerns that result when the asperformer and as-score roles are combined can be quite variable. In *Concertino for Cellular Phones and Orchestra*, the accuracy of the audience's performance is important enough that time is reserved for rehearsal before the piece begins and a special lighting system serves as notation.³⁰ In *Lobby Reforms*, the fusion of content generation and performance results in the audience performing by acting exactly as they would were the piece not present, rendering rehearsal and notation unnecessary. Concerns related to the as-score role, however, remain intact; both composers must account for the variability that their sonifications of the audience introduce. Baker counts on his audience participatory sections producing a fair amount of cacophony, and he describes the work as pitting "chaos versus organization."31 Belet, by framing *Lobby Reforms* as "an informal collage of social activity," leaves room for a wide range of realizations, and the presence of Kyma processing provides him with an additional opportunity to shape and constrain the audible results of the audience's social activity.³²

Socially, the combined form retains many of the features of its constituent parts. In Baker's *Concertino* the audience's role solidly bridges the audience-performer divide. Belet's piece removes the divide entirely, though audiences may only realize their contribution to the performance of the piece after the fact. While this ex-post-facto awareness is not present in any of the participatory traditions that Turino

³⁰ Wakin.

³¹ Wakin.

³² Belet.

describes, it does not obstruct the audience from experiencing the sort of communal connection that participatory traditions seek to create. Additionally, the projection of the piece both within the lobby and the concert hall allows the possibility of awareness occurring while the audience members are contributing sound. However, the surveillance-like aspect of *Lobby Reforms* does highlight the hierarchical status of the composer and the divide established between the composer and his audience.

From the audience-as-score perspective, both pieces do allow broad inclusion typical of the audience-as-score role. Baker's decision to use cell phones as performance devices in *Concertino for Cellular Phones and Orchestra* does require that audience members posses cell phones to participate, but the ubiquity of cell phones makes it likely that relatively few concertgoers are excluded. Belet's *Lobby Reforms* allows extremely broad participation as any sound of any type make become part of the work. Both works provide a clear and transparent representation of characteristics of their audience, and this clarity is facilitated by the awareness generated by the combination of the audience-as-performer and the audience-as-score roles. The link between ringtone and cell phone owner is immediately perceptible in Baker's works, and Belet's piece, both in performance and in presentation, displays its thorough dependence on its audience.

2.6 Audience as composer/score

While the previous combinations of audience roles allowed either coupled or independent configurations, the audience-as-composer/score implementation of audience interactivity does not. Because the as-composer and as-score roles are both methods for generating, rather than realizing, musical materials, their combination requires either at least two simultaneous methods of generating materials or the possibility of transitioning between the two options. This transitional approach is facilitated by the porous nature of the boundary between the audience-as-composer and audience-as-score roles.

Jason Freeman's *Flock* serves as a distinctive example of the audience-as-composer/score role. Freeman's piece uses a computer-based monitoring system to track the movement of its audience and its performers. The positional data produces notation for the performers and electronic sound. The interaction between the audience and the music is also represented in animation.³³ This video representation, dancers who interact with the audience, and an explanatory introduction encourage intentional interaction with the piece from the audience members, which yields the audience-as-composer role.³⁴ At the same time, each audience member's positional data is transformed into music whether or not she intends it, which establishes the audience-as-score role. Moreover, the mechanism by which the notation is generated varies between sections of the piece, so even the audience members most devoted to intentional shaping the work are likely to

³³ Freeman, Jason and Mark Godfrey. "Creative collaboration between audiences and musicians in *Flock*." *Digital Creativity* 21.2 (2010): 87.

³⁴ Freeman and Godfrev 93, 96.

unintentionally interact with it at least occasionally. In sections that combine notation and electronic sounds, the two simultaneous methods of sonifying audience position also increase the chance that a portion of each audience member's contribution to the work will be unintentional.

Since the aesthetic concerns attached to the audience-as-composer and audience-asscore roles are similar, the combination of the roles intensifies, rather than broadens, the challenges confronting the composer of audience-as-composer/score works. The variability introduced by the wide range of potential audience movement, whether intentional or not, must be accounted for and the musical decisions determined by this movement must be clearly and quickly communicated to the performers and rendered in electronic sound. In *Flock*, Freeman addresses these issues in several ways. By devising a system in which positional data from a fixed number of actors within a bounded space is the sole determiner of the music generated, Freeman limits the range of audience contributions. Moreover, he introduces variation by altering the actors considered and by interpreting positional data in different ways rather than by adjusting the method throughout which the audience contributes to the piece.³⁵ Freeman relies on forms of graphic notation to simplify both the translation of positional data into readable form and the performer's sight-reading.³⁶ *Flock*, however, does not guarantee that the notation displayed to its performers is playable. In these situations, the performers are expected to treat the notation as a basis for improvisation. Indeed, Freeman

³⁵ Freeman and Godfrey 91-92.

³⁶ Freeman and Godfrey 90-91.

describes designing *Flock* specifically for jazz musicians likely to find this improvisatory approach comfortable.³⁷

Though audiences in audience-as-composer/score works do not contribute sound to these pieces, they are vital both as intentional and unintentional contributors. As with *Flock*, audience-as-composer/score pieces often present audience members with a system in which they may discover their compositional contribution and explore its boundaries. The presence of the as-score component in these works ensures that audience members receive auditory feedback during this process of discovery and exploration of the as-composer possibilities. This combination of the possibility of intentional control and feedback that facilitates the realization of the possibility is well suited to achieving flow-like experiences through its presentation of a sonic environment that both facilitates and challenges as-composer interaction. Additionally, the presence of the as-composer role informs the audience of their involvement in the work so that the as-score functions of providing a representation of the audience and achieving broad inclusion are more likely to be readily discernible. While audience-performer boundaries are untouched, the audiencecomposer boundary is traversed in two ways. Though the composer ultimately maintains a separate authority over the extent of the boundary traversal, the dual forms of determining compositional decisions make it likely that audience-ascomposer/score works are capable of establishing a social space very similar to that sought within the participatory field.

³⁷ Freeman and Godfrey 87, 92.

2.7 Audience as performer/composer/score

Audience-as-performer/composer/score works combine all three possible roles; the audience contributes sound, intentional compositional decision making, and unintentional compositional decision making to the piece. Any two or all three distinct roles may be coupled, or the three roles may provide three separate streams of musical activity. While this most comprehensive combination might suggest complexity and confusion, Alison Knowles' *Shoes of Your Choice* offers a simple and elegant implementation.

Knowles' event score reads:

A member of the audience is invited to come forward to a microphone if one is available and describe a pair of shoes, the ones he is wearing or another pair. He is encouraged to tell when he got them, the size, the color, why he likes them, etc.³⁸

In performance, the piece is not limited to only one audience member's contribution. The as-performer role is, of course, instantiated by the audience member's delivery of the description, and the suggestion of microphone usage heightens the performative aspect. The audience member's compositional contribution is to decide the specific content of the description. The as-score role arrives through Knowles requirement that the subject of the monologue be restricted to a pair of shoes that the audience member possesses; the subject is

³⁸ Friedman, Smith, and Sawchyn 70.

determined by a sartorial choice made by the audience member outside the context of the work.

As *Shoes of Your Choice* demonstrates, the three roles in combination can account for many of the aesthetic concerns that each introduces in isolation. The as-composer role mitigates concerns about accuracy of performance. In turn, concerns regarding translating the as-composer and as-score components of the work into sound and notation that arise disappear through the fusion of those two roles with the asperformer role. Of course, ceding so much musical authority to the audience increases, rather than removes, the risk of audience members being unwilling to participate or choosing to participate in a way contrary the composer's goals. *Shoes of Your Choice* is certainly vulnerable to these risks, though the invitation for which the score calls offers a strong prompt for participation. If the three roles are present simultaneously but left distinct unlike in *Shoes of Your Choice*, willingness to participate and the aesthetic fit of the audience's participation becomes less problematic. However, the concerns present with the isolated roles return.

Audience-as-performer/composer/score works also combine the social features of the three roles. The inclusiveness and communal representation facilitated by asscore audience interactivity meet the participatory features of social connection and flow experience enabled by as-performer and as-composer interactivity. In *Shoes of Your Choice*, the fusion produces a piece in which audience's members selection of footwear and the complex social, aesthetic, political, economic, and practical

considerations that such a selection carries serves as the basis for an improvised performance in which audience members take sole responsibility for the details of the composition and its realization. Audience-performer and audience-composer boundaries are transgressed, though the composer retains an overarching authority and responsibility for the work and at least some degree of presentational evaluation of the work is likely to persist. Indeed, the performative gesture of microphone usage in *Shoes of Your Choice* might be construed as a conscious nod to the presentational field, which the piece (and audience-interactive music emanating from the Western classical tradition) cannot fully escape.

3. Grouping

Regardless of the role or roles into which a composer places the audience, the composer must decide also how the audience will be grouped. The piece may facilitate interaction by the audience as a whole, as individuals, or as a group of any possible size between the two extremes. The level selected need not be fixed throughout an entire piece, and different divisions need not be given equal weight in impacting the work. Also, the work may be scaled to account for audiences of different sizes.

The level of grouping present in a work has important impacts on the audience's social and aesthetic experiences. In participatory traditions, Turino finds two forms of grouping, which he labels "simultaneous " and "sequential." Simultaneous participatory music making involves the audience performing together; in

sequential participatory music making, individuals or groups take turns performing. Sequential participation injects aspects of the presentational field and its separation of audience and performer, but through encouraging broad participation regardless of skill level, sequential participation can remain grounded in the values of the participatory field.³⁹ Apart from influencing the balance of the presentational and participatory fields and their associated social experience in audience-interactive music, grouping can also have a pronounced effect on the ability of audience members to recognize and assess their own involvement. Toward the whole-audience end of the grouping spectrum, audience unity is emphasized and presentational performance pressures are limited. However, the value and range of individual contributions are suppressed, and audience members can have difficulty recognizing the presence and importance of their respective contributions. At the opposite end of the spectrum, individual input is foregrounded, but presentational performance pressure is high.

Several of the works discussed above fall to the ends of the grouping axis.

Concertino for Cellular Phones and Orchestra; Ite, angeli veloces; Toys in the Audience; and Unity treat their audiences as unified, simultaneous performing forces. In these four pieces, the full audience (or at least as much of it as is willing and able) performs as a single unit. In Counting Songs, the audience members are sonified as a single unit; though they are counted sequentially, their total number is the most important factor in the piece. In contrast, audience members for Shoes of Your

³⁹ Turino 48-51.

Choice and Time Zones interact with the work sequentially. In Shoes, a single audience member takes the microphone to describe her shoes, and in Time Zones, a single phone call from an audience member triggers the "Unplanned Demand" section. Significantly, Time Zones removes much of the performance pressure found in sequential participation. The use of a cell phone as the method for audience-ascomposer interaction allows audience members to participate with, at most, minimal recognition by their fellow audience members.

The remaining works use more ambiguous divisions. *Grassroots 2008* calls for simultaneous participation from the audience at specifically dictated times, but its approach to audience-as-score interactivity yields a more complex incorporation of the whole audience than that present in the examples of simultaneous and unified participation above. The voting procedure requires that audience members act independently, but the cumulative results of the voting produce a single musical decision. Works with audience-improvisational components like *Zuppa* and *Money* MICE offer the opportunity for simultaneous involvement as well. Like Grassroots 2008, these pieces call for independent audience interaction, but unlike Grassroots 2008, each audience member's interaction also generates an independent musical contribution. In *Zuppa*, each audience member contributes his own improvisations on whatever instrument he chooses, and in *Money MICE*, each audience member's coin tosses produce distinct sonic events. This sort of differentiated performance is a staple of participatory traditions, but does present performance pressure not found in audience-interactive works in which the entire audience performs the

same material. Additionally, participants in participatory traditions draw from a stable of familiar resources for their contributions, as described by Turino, while audiences for *Zuppa* and *Money MICE* encounter the particular systems of interactivity that the pieces offer without previous experience. Through the audience-as-performer components of their interactivity, the two works do offer some chance for audience members to act as if they were presentational performers. This element of playful emulation is emphasized by the presence of 'real' instruments in *Zuppa* and through the amplification of participant's involvement in *Money MICE*.

Lobby Reforms renders the same combination of potential for full-audience participation and individual musical contribution that Zuppa and Money MICE do despite featuring unintentional participation via the audience-as-score role. While its combination of roles mitigates performance pressure and ensures widespread involvement, the absence of intentional participation clearly separates it from participatory traditions. In Unity Groove, each audience member works to match the tempo of a beep produced by her laptop to the tempo of beeps around her. The emergent process that results offers full-audience participation (for those with laptops) and individual contribution but generates groups of audience members centered around a few tempi before the audience coalesces on a single tempo. Here the simplicity of the demands of performance (adjusting a single musical parameter with a slider) helps to reduce performance pressure. Though, the movement from

⁴⁰ Turino 38-40.

individual actors to groups to a single, unified entity instantiates an aesthetic and social form foreign to participatory music making. In *Improvisation on Five Notes* from the Audience, all audience members receive the ability to suggest a note, but only five suggestions (barring duplication or enharmonic equivalence) will be chosen; the possibility of participation for the whole audience gives way to a much smaller group who ultimately contribute sequentially to the piece.

Of the works discussed above, only *Flock* structurally alters the level of audience division during performance. *Flock* offers the full audience the opportunity to participate, and individual decisions do generate individual musical results. But the dancers control the number of audience members actively influencing the music, and audience members are encouraged to behave in groups. At the beginning of the work, audience members are seated. As the piece progresses, dancers begin to guide audience members from their seats into the performance space. Through the course of the piece, the dancers alter the number of participants on stage. Also, the dancers encourage the audience members to move collectively, and in the initial incarnation of the piece, audience members received cards that specified group formation.⁴¹ This formulation recalls group sequential participation, though the cohesiveness of the group remains extremely flexible.

Group division also suggests the possibility of competition, though the works above do not feature any explicit competitive elements. Maynes-Aminzad et al. discuss the

⁴¹ Freeman and Godfrey 95.

use of competitive groupings in audience-interactive games,⁴² and in another work by Jason Freeman, *Glimmer*, competition serves an important role in audience interaction.⁴³ In *Glimmer*, audience members are given light sticks and divided into groups. Each group controls the music presented to a group of instrumentalists through activating and deactivating their light sticks.⁴⁴ Groups are rewarded for coordinated variation in their use of the light sticks by hearing their corresponding group of instrumentalists perform more prominently and continue playing after other groups go silent at the end of the work.⁴⁵ Freeman intended the competitive aspect of the piece to encourage intra-group collaboration and found that it proved to be the most engaging aspect of the interactivity for the audience at the premiere.⁴⁶

4. Mechanism of interaction

In addition to determining the audience's musical role and grouping, the composer of an audience-interactive work must determine the logistics of how audience members will interact with the piece. The mechanism through which audience interactivity is achieved also contributes to the possibilities and limits of the aesthetic and social experience offered to the audience. While every piece differs in

⁴² Maynes-Aminzad, Dan, Randy Pausch, and Steve Seitz. "Techniques for Interactive Audience Participation." *ICMI '02 Proceedings of the 4th IEEE International Conference on Multimodal Interfaces*. Los Alamitos, CA: IEEE, 2002. 15-20. Web. 8 Jan. 2011.

⁴³ Freeman, Jason. "*Glimmer* for chamber orchestra and audience." Diss. Columbia University, 2005. Web. 17 Oct. 2010.

⁴⁴ Freeman, "Glimmer for chamber orchestra and audience" 1.

⁴⁵ Freeman, "Glimmer for chamber orchestra and audience" 25, 39.

⁴⁶ Freeman, "Glimmer for chamber orchestra and audience" 38.

the specifics of audience involvement, some common features serve as ready and important dividing lines.

Several of the works mentioned above involve mechanisms of interaction that require digital technology. *Concertino for Cellular Phones and Orchestra, Time Zones,* and *Unity Groove* require that the audience provide that technology. *Flock, Glimmer,* and *Grassroots 2008* provide a digital technology based system through which the audience interacts with the works. *Lobby Reforms* and *Money MICE* also include digital components, but in these works the technology serves to modify the results of the audience members' interaction (by amplifying and transforming the sounds they generate) rather than to mediate the interaction itself.

As exemplified by *Flock, Glimmer, Grassroots 2008*, and *Unity Groove*, mediating audience interaction through digital technology can allow methods of involvement that would be too complex or too time consuming to achieve without computer assistance. Placing responsibility for translating audience information within the digital realm allows complex results from even simple activities like moving around a performance space, waving a light stick, voting, and adjusting a slider. *Flock, Glimmer*, and *Grassroots 2008* also take advantage of their digital interfaces to produce visual feedback about the audience's involvement. In all the works, digitally mediated interactivity also serves to reduce audience performance anxiety by making audience members less directly responsible for their own contributions. *Unity Groove* and *Concertino* also take advantage of the sound producing capabilities

of portable digital devices, and both *Concertino* and *Time Zones* read as commentary about the interruptive qualities of the cell phones that they both harness.

Additionally, the presence of the technology can, in and of itself, provide appeal.

Baker's audiences for *Concertino* expressed their pleasure in the work's technological novelty,⁴⁷ and Freeman describes how the lighted hats that audience members for *Flock* must wear foster excitement about the piece.⁴⁸

Of course, mediating audience interaction with digital technology also potentially leads to several problems. A technological solution to the task of translating audience information into music often makes the task of discerning their own contributions increasingly difficult for audience members. Freeman conveys that at the premieres of both *Glimmer* and *Flock*, only some audience members reported understanding how their actions shaped the music.⁴⁹ Audience-as-performer works like *Concertino for Cellular Phones, Time Zones*, and *Unity Groove* that use digital technology are less likely to leave audience unclear about their involvement, but by requiring audience members to provide their own devices, they limit the scope of who can participate. Audience members uninformed of the need for a cell phone or laptop or not in possession of one cannot interact with the work. The socioeconomic implications of this exclusion are potentially troubling, though they might be at least partially addressed by making the necessary devices available for audience members to borrow. Digital technology can also present a barrier through

⁴⁷ Wakin.

⁴⁸ Freeman and Godfrev 88.

⁴⁹ Freeman, "*Glimmer* for chamber orchestra and audience" 32, Freeman and Godfrey 96.

the instruction it requires if audience input is to be intentional. Audiences typically receive short explanations of how to interface with the technology immediately before the performance, and any confusion can prevent, discourage, or disrupt participation. This concern proved so great for even the comparatively simple act of ringtone activation required by Baker's *Concertino* that the orchestra sent subscribers instructions via email and provided an explanatory insert along with the program.⁵⁰

Works without digitally mediated mechanisms of involvement naturally avoid most these concerns. Clarity of instruction can still be an issue for non-digitally-mediated works that require intentional audience involvement, though, as works like *Unity* and *Shoes of Your Choice*, non-mediated pieces generally present their audiences with simple, familiar tasks. Also, complex mechanisms of interaction can still make it difficult for audience members to ascertain their impact on a piece even in the absence of digital technology; audience members participating in *Lobby Reforms*, for example, might well be unable to hear their contribution to the piece. For the most part though, audience interactive works that forsake digital mechanisms sacrifice the complexity and novelty that these mechanisms entail in favor of more direct, accessible, and ascertainable methods. Even works that feature non-digitally mediated methods of involvement, like the instruments used for *Zuppa* and *Toys in the Audience*, work to maintain accessibility. In *Zuppa*, this accessibility is facilitated by the judgment-free improvisatory aesthetic that the piece and MEV fostered, while

⁵⁰ Wakin.

Toys in the Audience uses toy instruments to keep the mechanism of interaction unintimidating.

The level of physical involvement required is also a useful method for distinguishing between various methods of involvement. In general, works that involve the audience-as-performer role tend to require high levels of physical involvement and works that involve the audience-as-score role require lower levels, though levels naturally vary from piece to piece. *Zuppa*, precisely because of its use of instruments, offers an example of a work that requires substantial physical involvement from the audience; to participate audience members must move to an available instrument and engage in the likely unfamiliar action of attempting to play the instrument. *Counting Songs* exemplifies the lower end of the scale; audience members remain in their seats and, at most, must receive whatever item the counter is using to mark the count.

In the participatory traditions, physical involvement is consistently high, but also unproblematic due to its status as an established component of the tradition. Physical involvement in audience-interactive works for concert hall audience does pose a potential problem because the traditions of the concert experience stipulate stillness and silence to facilitate that act of listening. Asking audience members to move or make sound during a piece leads not only to pressure from assuming a creative role but also to anxiety from departing the conventions of pure listening. Accordingly, composer of works requiring high levels of physical involvement must

create an environment designed to assuage audience fears, incentivize participation, or risk failure at the hands of an unwilling audience. Avoiding this sort of failure appears to be precisely the goal of Green's suggestion that a professional choir perform the audience's role in *Ite, angeli veloces*. Hindemith's expectation that the audience sing a melodic line rendered in conventional notation requires the audience to attempt a skilled, physical act. The pressure to perform accurately and well is acute, and though the chance to contribute to the work was intended as a "reward" by Hindemith. 51 the level of interaction it allows may not prove a sufficient incentive to contemporary audiences since the work will proceed adequately and stably even in the absence of audience interaction. While works requiring low levels of involvement are less likely to produce an unwilling audience, they gain this certainty at the expense of the wide range of social and aesthetic results that more involved participation can, as demonstrated by participatory traditions, produce. This exchange is encapsulated in Christopher Small's observation that "[t]he more actively we participate, the more each of us is empowered to act, to create, to display, then the more satisfying we shall find the performance of the ritual."52 Indeed, audiences sometimes attempt to participate more actively than the work allows. In an interactive game involving tracking the shadow of a beach ball batted among the audience, Maynes-Aminzad et al. describe audience members throwing additional objects around the theater in an attempt to generate greater interaction.⁵³ Similarly, Freeman relates that the audiences at the premiere of

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⁵¹ Skelton 217.

⁵² Small 105.

⁵³ Maynes-Aminzad et al. 3.

Glimmer focused on waving their light sticks even though only on-and-off activity influence the music.⁵⁴

5. Audience awareness

The final classificatory feature, audience awareness, is determined by the audience's consciousness of its involvement in the piece. While certain audience roles and mechanisms of involvement suggest certain degrees of audience awareness, these other features do not exclusively determine the composer's decision regarding audience awareness. The audience-as-composer role is predicated on some level of audience awareness of their ability to impact the music, but the audience-as-performer and audience-as-score roles require none. Moreover, the audience need not be fully aware of how it contributes to the music even in audience-as-composer works. If the composer does seek to establish awareness, it may be conveyed within the performance or outside of the performance, and various degrees of awareness are possible.

Outside of the performance, the composer may inform the audience of their role in the work through a program note, introductory remarks, or even the opportunity to rehearse. Most of the works mentioned above avail themselves of this option, though they do so to varying degrees. As mentioned previously, notification about audience interactivity for the premiere of *Concertino for Cellular Phones and Orchestra* involved emails to subscribers, an insert in the program, and a rehearsal

⁵⁴ Freeman, "Glimmer for chamber orchestra and audience" 35.

period before the performance. For *Concertino* to be successfully performed, the audience members must be very aware of their role and able to use their cell phones in the way Baker intended. For *Lobby Reforms*, outside-performance notification takes the shape of a program note that many audience members are likely to read only after they have participated in the piece. *Counting Songs*, of course, neither provides nor requires any explanation outside of its performance.

As both *Counting Songs* and *Lobby Reforms* illustrate, audience awareness can emerge in the course of performance. In these pieces, its emergence plays an important role in the audience's experience of the piece. Audience members for *Counting Songs* surely realize quickly that their role is to be counted by the performer, though they might expect deviation from the pattern or further development. Audience members involved in *Lobby Reforms* may recognize their own contributions as they are played back in both the lobby and the hall, but the processing rendered by Belet creates a more fluid level of awareness; what sounds clearly like live amplification of the audience in the lobby at one moment may quickly transition to an electronic texture that does not disclose its source material.

An important factor in determining whether audiences develop awareness of their interaction during the course of a piece is the transparency of linkage between the audience's action and the resulting sound production. Mechanisms of interaction can instantiate separation between action and sound in the temporal and perceptual domains. Delay between action and response can prevent audience awareness, and

Freeman reports audiences for *Flock* even complaining of a delay of "about a second" between their motion and change in the music that results from the need to display notation to the musicians with sufficient time for them to realize it.⁵⁵ A lack of correspondence between the action that is required of the audience and the resulting sound can also impede awareness. For example, *Grassroots 2008* thoroughly explains audience involvement at the beginning of its performance, but without this explanation, audience members would be very unlikely to recognize a connection between their voting and the music that it produces.

Of course, a composer could construct a work in which audience interaction is necessary, but never revealed. *Lobby Reforms* could easily be rendered in such a way if its program note was altered and the processing of the audience's sonic contributions was substantial. While these works would pass the two-rooms test, they would offer a purely presentational experience to their audiences. Accordingly, they might be considered aesthetically audience interactive, but not socially. Significantly, none of the works collected in Appendix C take this approach to audience interactivity. Audience interactivity without audience awareness, though possible, does not appear to be an appealing option for composers.

⁵⁵ Freeman and Godfrey 97.

Chapter III: Considering Theories of Audience Interactivity

1. The social and the auditory in audience-interactive music

In describing the function that concert hall performance serves, Christopher Small observes that during "any musical performance...desired relationships are brought into virtual existence so that those taking part are enabled to experience them as if they really did exist." Audience-interactive musical works present an intriguing exception to Small's formulation; rather than virtual existence, they create a performance in which relationships are brought into actual existence. Composers of audience-interactive music acknowledge these actualized relationships through an integrating the symbols of musical aesthetics with the actuality of social interaction. Accordingly, two sets of compositional concerns confront these composers. In addition to assuming the standard task of crafting an auditory experience, they must consciously compose a social experience that will be enacted in the performance rather than merely implied by the auditory components of the piece and the conventions of musical performance. Moreover, these two tasks are not exclusive; choices made with respect to one set of compositional concerns in an audience interactive work inevitably influence and limit those that exist in the other set. Criticism and analysis of audience interactive music must address these two sets of concerns and their interaction. Fortunately, the tools provided by musicology and music theory still serve to address many of the purely auditory aspects of audienceinteractive music. The remainder of this chapter offers approaches for analyzing

¹ Small 183.

and theorizing both the fundamental areas of overlap between the auditory and the social and the composition of the social experience as a distinct enterprise.

2. Interaction between the auditory and the social

The principal impact of audience interactivity on the auditory domain is the inevitable presence of the quality described as "variability" in Chapter II. As described there, each method of audience interactivity carries a certain degree of unpredictability based upon the contribution expected from the audience. While it is tempting to equate variability with Cagean indeterminacy, there are important differences. In the section entitled "Indeterminacy" of his essay "Composition as Process," Cage offers several examples of music that is "indeterminate with respect to its performance." Significantly, these examples all deal with pieces in which the performer resolves the indeterminacy. Perhaps the most illustrative example that Cage cites is Bach's *The Art of Fugue*, in which Cage identifies timbre and dynamics as components left indeterminate. Cage describes a number of approaches that a performer might take to determining timbre and dynamics in the piece, but what unifies these approaches is that the performer's resolution of the indeterminacy is taken to be intentional and purposeful. Indeed, Cage contrasts his examples of

² Cage, John. "Composition as Process." *Silence* (Middletown, CT: Wesleyan University Press, 1973): 35.

³ It is worth considering, though, Goehr's thinking about the work concept (and its establishment as a regulative concept after Bach's time) before agreeing with Cage's pronouncement of *The Art of Fugue* as indeterminate. Indeed, a thoroughly developed notion of *Werktreue* may well be required for indeterminacy to serve as useful concept. Of course, the remainder of Cage's examples come from the twentieth-century avant-garde, so it is reasonable to offer Cage some didactic leeway.

indeterminacy in performance with the role of the performer in his own *Music of* Changes in which he describes the performer as "a contractor who, following an architect's blueprint, constructs a building" and who "is therefore not able to perform from his own center but must identify himself insofar as possible with the center of the work as written."⁴ Both of these models presuppose a skilled performer; she must either possess the ability to make intentional and purposeful determinations about musical elements like timbre and dynamics or possess the ability to realize the work's blueprint with a high degree of fidelity. The variability inherent is audience-interactive music is not, of course, performer-centered and, therefore, composers cannot assume that it will be resolved through recourse to skill. While indeterminacy in Cage's formulation is a tool that composers harness to "bring about an unforeseen situation" that is resolved through the skill of their performers, variability in audience-interactive music is instead relies upon the far less predictable audience, and the composer must accept and navigate this unpredictability in choosing the audience-interactive form.⁵ While this constraint can, in the hands of capable composers, become an opportunity, it remains a challenge unique to audience interactivity that distinguishes it from indeterminacy.

Umberto Eco's discussion of the open work provides an alternative description of the variable aspects in audience-interactive performance and helps further delineate the difference between indeterminacy and variability. In particular, Eco's construction highlight the discrepancy between the two concepts in regard to the

⁴ Cage 35-36.

⁵ Cage 36.

positioning of the audience. Eco distinguishes the open work "in movement" from more general "openness," which he identifies as "the theoretical, mental collaboration of the consumer, who must freely interpret an artistic datum, a product which has already been organized in its structural entirety." In contrast, a work in movement requires its receiver to participate in the "organizing and structuring of the musical discourse...[as he] collaborates with the composer in *making* the composition."⁷ In the music that Eco cites, this collaboration is primarily located within the act of receiving the work, but it is difficult to imagine Eco objecting to the inclusion of works in which collaboration is made external and audible.8 Eco's conception of works in movement matches audience interactivity's focus on the act of collaboration rather than interpretation. In indeterminate works, the composer establishes a range of decisions from within which a performer may choose. In audience-interactive works, the composer places the work "in motion" by inviting the audience into the process of creating the work and then attempts to account for the range of responses they might produce.

This process of accounting produces many of the impacts on the auditory aspects of audience-interactive pieces. In even the narrowest realizations of audience-asperformer audience interactivity, this process must occur. In *Ite, angeli veloces*, Hindemith introduces the melodies his audience is to sing before he asks them to

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⁶ Eco, Umberto. "The Poetics of the Open Work." Trans. Anna Cancogni. *Participation*. Ed. Claire Bishop (Cambridge, MA: MIT Press, 2006): 30. ⁷ Eco 30.

⁸ Indeed, one of Eco's examples, Henri Pousseur's *Scambi*, points in the direction of audience interactivity by suggesting that home listeners might manipulate a recording of the piece to interact with its openness. See pp. 20-21.

join in singing. In *Unity*, Don Bowyer asks his audience to sing only a single pitch. In broader realizations, the process operates on the entire auditory aesthetic. Rzewski's *Zuppa* establishes and accepts the absence of any sort of judgment based on performance skill in order to facilitate expansive audience involvement in the piece. Turino addresses this process of shaping auditory elements to account for the in-movement qualities within the practice of participatory music making. He identifies a set of musical characteristics that tend to occur:

- Short, open redundantly repeated forms
- "Feathered" beginnings and endings
- Intensive variation
- Individual virtuosity downplayed
- Highly repetitive
- Few dramatic contrasts
- Constancy of rhythm/meter/groove
- Dense textures
- Piece as a collection of resources refashioned anew in each performance like the form, rules and practiced moves of a game⁹

These characteristics, in direct or slightly varied form, often appear in audience-interactive compositions. For instance, *Ite*, *Unity*, and *Zuppa* all feature a dense texture, require little conventional virtuosity even from their non-audience performers, and do not emphasize dramatic contrasts. Other audience-interactive works utilize different characteristics from the set. Knowles's *Shoes of Your Choice*,

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⁹ Turino 59.

for example, consists of a single short, open, redundantly repeated form, intensive variation on the given topic, repetitive content, and dramatic contrasts only if participants build them into their descriptions of their shoes. Harding and Williams' *Grassroots 2008* also includes a short, repeated form (pre-composed music while the audience votes followed by improvisation based on their voting) and is designed to function as a collection of resources refashioned in performance. Indeed, Harding and Williams have presented the version of the piece for the current election cycle, entitled *Grassroots 2012*, in a "town hall" format where the piece is performed twice: before and after a discussion of the relevant political issues. ¹⁰ The structure of *Grassroots 2008* also encourages intensive variation from the performers in their improvisations and largely avoids strong dramatic contrasts, though a particularly polarized or particularly uniform audience might produce different results. Additionally, changes in rhythm are used to delineate structural breaks, but within sections, a consistent groove provides a ground for improvisation.

Unsurprisingly, composers of audience-interactive works have developed some techniques other than those found in participatory music to account for their audience's impact on the sound of the piece. As discussed above, performers often model the actions desired from audiences by methods like presenting material beforehand, as in *Ite*, or demonstrating aesthetic openness, as in *Zuppa*. On occasion, performers are planted in the audience to serve this purpose covertly. Alternatively, Britten's *Let's Make an Opera* and several of Bruce Adolphe's

¹⁰ Harding and Williams.

audience-interactive pieces incorporate rehearsal into the act of performance. Beginnings and endings of works, while sometimes feathered as Turino finds them in participatory music, are more often left ambiguous. In *Unity*, Bowyer does not give a cue for the audience to begin singing and to stop, and in *Shoes of Your Choice*, Knowles gives no stipulation as to how or when the piece should end. While Bowyer's ambiguity leads to a feathered opening, the ending occurs more abruptly once the on-stage performers stop. The one-at-a-time aspect of Knowles' piece prevents even the possibility of feathering. The density, which is harnessed in the participatory field to ease performers' anxiety about standing out, often features in audience-as-performer pieces, but audience-as-composer and audience-as-score approaches encourage a more transparent texture that makes audience contributions perceptible. William's Counting Songs offers an example in which each audience member undoubtedly will be aware of his impact on the piece. Virtuosity, too, finds ways to manifest itself in audience-interactive performances. Ward-Steinmann's *Improvisation on Five Notes from the Audience*, for example, relies on the performer's virtuosic ability to transform the audience's suggestions into a cogent and appealing piece; the performer's virtuosity becomes the reward for the audience's contribution. Bowyer's *Time Zones*, on the other hand, incorporates a less traditional sort of virtuosity: the ability to smoothly and convincingly transition between material at the whim of the audience. Again, the audience tests the performer's virtuosity. Of course, the interruptive nature of the audience's involvement in the piece also relates to its extra-musical message.

The examples above by no means exhaust the options that composers have and will develop to influence the musical results of audience interactivity. Participatory music-making cultures benefit from a stable, accepted collection of techniques that participants can expect; this familiarity emphasizes the inclusivity that Turino describes as the focal point of participatory music making and contributes to the persistence of the tradition. Audience-interactive composers, unless they explicitly conceive their works as constituents of a participatory oeuvre, need not duplicate earlier techniques. Audience interactivity is not pervasive enough for concert audiences to have developed a set of expectations about how the sound of a work might encourage their interaction with a piece, and the legacies of modernism and avant-gardism encourage composers to seek out novel solutions rather than return to familiar ones as in participatory traditions. What unites audience-interactive works in this regard is not specific approaches to accounting for the auditory influence of audience interactivity, but the necessity of accounting for it.

Another connection between the auditory and social domains of audience interactive works is the potential impact of the audience's creative involvement on their aural attention. In discussing musical listening, Mari Riess Jones distinguishes between two types of audition: analytical attending and future-oriented attending. Analytical attending involves focus on the local details, while future-oriented attending privileges formal awareness. Jones discusses how prioritization of one mode of audition can lead listeners to miss musical information highlighted by the

other mode. Audience involvement may well emphasize one mode of listening over the other, and different mechanisms of interaction may engender this emphasis in different ways. Moreover, Jones observes that "temporally complex contexts" discourage "attentional flexibility." The rate of interaction in audience-interactive works with readily perceptible mechanisms of interaction could contribute to temporal complexity by offering an additional stream of temporal information, which would foster attentional inflexibility and further color the audience's musical perception.

Composers' responses to the impact of audience interactivity on musical listening are difficult to assess. The musical language of audience-interactive works varies widely from the tonal, metrical approach of *Ite, angeli veloces* to the unrestricted improvisation of *Zuppa*. Moreover, aesthetic decisions that might reflect a concern for divided audience attention, like the consistency of the "unplanned demand" section in *Time Zones* and the stark clarity of *Counting Songs*' sound world, may just as easily result from other considerations. However, Peter Keller and Denis Burnham's research on performers' ability to attend to their own performance in relationship to aggregate rhythmic patterns does suggest that having audience participation affixed to a consistent metrical framework can help audiences listen

¹¹ Jones, Mari Riess. "Attending to Musical Events." *Cognitive Bases of Musical Communication*. Ed. Mari Riess Jones and Susan Holleran (Washington, D.C.: American Psychological Association, 1992): 92-93.

¹² Jones 96.

broadly.¹³ Composers will surely welcome other strategies suggested by further research.

3. Composing the social experience

In composing the social experience, composers have few models to draw upon within the musical world. Neither participatory nor presentational modes of music making specify conscious creation of the social aspects of their performance.

Convention, rather than composition, has long established the scope and form of interactions amongst participants in both fields of music making. Accordingly, analysis of composition of the social in audience interactive music for concert hall audiences must begin where the composer begins: with consideration of the current conventions of listener experience.

3.1 The conventional social experience of concert hall listening

Christopher Small's *Musicking* provides a convenient, if controversial, starting point for considering the conventional listening experience of Western art music audiences. *Musicking* is an attempt to reestablish music as an activity rather than object. Small decries the professionalization of music making that has accompanied its reification and calls for a revision of the relationships that professionalization and reification have established between creators and listeners. Small's primary target is the concert hall culture of Western art music, and he summarizes the relationships he finds there:

¹³ Keller, Peter E. and Denis K. Burnham. "Musical Meter in Attention to Multipart Rhythm." *Music Perception* 22.4 (Summer 2005): 629-661.

A flowchart of communication during a performance might show arrows pointing from composer to performers and a multitude of arrows pointing from performers to as many listeners as are present; but what it will not show is any arrows pointing in the reverse direction, indicating feedback from listeners to performers and certainly not to the composer...Nor would it show any that ran from listener to listener; no interaction is assumed there.¹⁴

As described at the beginning of this chapter, Small identifies musical performance as a ritual through which social relationships are represented and brought into "virtual existence." Moreover, the social relationships thus represented are offered as ideals through being performed in the ritual space of the concert hall. As described at the beginning of Chapter I, Small finds the current set of relationships troubling. For Small, the current model of listener-creator relationships renders an activity that fails to serve the purposes of ritual: community affirmation, exploration, and celebration. Additionally, Small fears that the current model suggests a politics of suppression of the majority, who are forced to remain still and silent by a minority who posses full control over the proceedings.¹⁵ Unsurprisingly, Small's proposed revision to this status quo has much in common with audience interactivity. Small identifies that musical performance creates two sets of relationships: sonic and social, and he advocates music education that emphasizes social relationships encouraging broad participation and suggests an ideal for musical performance that values most highly performances in which all the participants are empowered "to explore, affirm, and celebrate the concepts of ideal

¹⁴ Small 6.

¹⁵ Small 105.

relationships of those taking part."¹⁶ Indeed, Small's proposed course of action might well move Western art music beyond audience interactivity and into a genuine form of the participatory field.

Small's bleak assessment of the social relationships currently established within the concert hall is by no means the only description available. Indeed, Turino stresses the unique possibilities and limitations of both the presentational and the participatory fields:

Participatory music has the potential to make artists of us all, even the shyest of individuals, and for social synchrony and bonding and fun. But participatory traditions place constraints on individual creativity and experimentation. Presentational music offers the challenge of demonstrating the heightened abilities one has developed for others without the safety net of high fidelity editing, and to provide inspiration and enjoyment for others with those abilities. Presentational performance, however, generates anxiety – stage fright – in certain types of individuals and thus alters the performing experience and limits the number of people who choose to perform.¹⁷

Turino, however, does muddle this equivalency by joining Small in critiquing the emphasis on professionalization of musical performance established by what he terms the "capitalist cosmopolitan formation" (within which Western art music is created and consumed). 18

¹⁶ Small 184, 208, 215.

¹⁷ Turino 92.

¹⁸ Turino 231-233.

Jacques Rancière, in his essay "The Emancipated Spectator," takes an approach contrary to both Turino and Small. Rancière argues against descriptions of spectatorship (and listenership) as passive. Instead, he emphasizes the activity of the spectator as interpreter and, recalling Eco's thoughts on the open work, locates the value of performance not in "the transmission of the artist's knowledge or inspiration to the spectator...[but in] the third thing that is owned by no one, whose meaning is owned by no one, but which subsists between them, excluding any uniform transmission, any identity of cause and effect." Rancière draws in the lines pointing back from the audience to the creators that Small found missing in the concert hall, though Rancière's lines are formed by aesthetic interpretation rather than social connections. At the very least, Rancière's description of a channel of feedback between the receiver and the creator suggests that the status quo might not be so ethically and politically troubling as Small finds it.

One more approach is suggested in Richard Schechner's *Performance Theory*.

Schechner's work casts a broad analytical net that captures activities of many types and many cultures and unites them under the label of 'performance.' While Schechner's approach foregrounds his art form, theater, its cultural and formal breadth allows his ideas to retain relevance for audience-interactive music. Unlike Small, Schechner separates ritual, which he sees as seeking efficacious results, and theater, which aims for entertainment, on either ends of a continuum of

¹⁹ Rancière, Jacques. "The Emancipated Spectator." *The Emancipated Spectator.* Trans. Gregory Elliott (New York: Verso, 2009): 15.

performance.²⁰ He identifies a natural ebb and flow between the two poles throughout the course of performance history, and sees post-World-War-II performance as tending toward the ritual pole.²¹ For Schechner, performance traverses the continuum as part of an evolutionary process of social change, and neither pole is inherently privileged. In Schechner's model, the concert hall listening experience lies toward the entertainment pole, while audience interactivity represents a move toward ritual. Schechner also observes that any performance, whether ritual or theater, exists only at the whim of its audience; each performance is "licensed by its audience which can, at any time, re-ratify or withdraw that license...though most of the time the audience doesn't know its own power – or is provoked only occasionally into exercising it."²² In this respect, every audience member constantly occupies an emancipated, participatory, and interactive position from which he can stop and start any performance (at least for himself).

The activity of composers of audience-interactive music suggests that Schechner's and Turino's descriptions most closely approach the attitudes of practitioners.

Significantly, none of the composers whose works are listed in Appendix C exclusively compose audience-interactive pieces. The ethical and political crisis that Small locates in the contemporary concert hall experience is clearly not so acute that composers feel the need to entirely forsake the traditional approach. The same fact also undermines Rancière's position (at least in relationship to music). The desire

²⁰ Schechner, Richard. *Performance Theory* (New York: Routledge Classics, 2003): 130.

²¹ Schechner 132-136, 155-157.

²² Schechner 219-220.

of many composers to provide audiences with something other than the conventional mode of listenership demonstrates a perception that the status quo is lacking in some respects, but composers' disinterest in doing away with the norm counters any notion that conventional listenership carries a strictly negative connotation for even composers of audience-interactive composers. Nonetheless, both Rancière and Small remain useful as plausible, if less adopted, descriptions of the traditional concert hall experience, which may inform composition of the social experience of audience-interactive music.

3.2 Approaching audience interactivity

With descriptions of the concert hall status quo and audience interactivity's challenges to that status quo established, how might analysts discuss the break that audience interactivity entails in the social experience of music? Some thoughts come from other artistic disciplines. Nicolas Bourriaud's *Relational Aesthetics* addresses a similar phenomenon in the visual arts.²³ Indeed, Bourriaud's work, as its title suggests, offers an approach to aesthetic evaluation of works generated by artists who claim social relationships as their artistic materials. While the works that Bourriaud discusses emanate from a different field and could not all be comfortably defined as audience interactive, his desire to create space for a socially-based form of artistic analysis serves the needs of audience-interactive music well, even if his specific theories encounter limits in their application here. Borrowing

²³ It should be noted that Bourriaud lodges an objection to the application of the term "interactive" to at least one of the works he describes, though he does so only in a brief, parenthetical aside (see p. 59).

from Marx, Bourriaud posits each relational artwork as a "social interstice," which he defines as "a space in human relations which fits more or less harmoniously and openly into the overall system, but suggests other trading possibilities than those in effect with this system."²⁴ The aesthetic implications of this definition are tested by a "criterion of co-existence" in which the receiver asks of the artwork:

Does it give me a chance to exist in front of it, or, on the contrary, does it deny me as a subject, refusing to consider the Other in its structure? Does the space-time factor suggested or described by this work, together with the laws governing it, tally with my aspirations in real life? Does it criticize what is deemed to be criticisable? Could I live in a space-time structure corresponding to it in reality?²⁵

Evaluating a work's success by this criterion of co-existence clearly would not be a simple matter. However, the extreme subjectivity and the political nature of the questions asked stand out. Unsurprisingly, Bourriaud asserts the presence of a democratic impulse as common element amongst relational artists that emphasizes intersubjectivity and even certain conceptions of beauty (through which the visual aesthetic serves the social).²⁶ The social interstices established by the works that Bourriaud highlights use the relational form to propose and enact specific, often experimental, models of social activity established in relationship to the aesthetic, historical, and social forms already present in the art world. In discussing the work

²⁴ Bourriaud 16.

²⁵ Bourriaud 56-57.

²⁶ Bourriaud 57-58, 62-64.

of Rirkrit Tiravanija in particular, Bourriaud offers this encapsulation: "It is not a matter of representing angelic worlds, but of producing the conditions thereof." ²⁷

While *Relational Aesthetics* offers some compelling strategies that can be borrowed for the purposes of considering the social aspects of audience-interactive music, critics suggest some limits to his work. Claire Bishop, observing the usage of participatory forms as tools for business and reality television, wonders whether interactivity can really be considered more intrinsically political than any other medium.²⁸ Bishop also identifies two "streams" in the impulse to involve the audience: "an authored tradition that seeks to provoke participants, and a deauthored lineage that aims to embrace collective creativity; one is disruptive and interventionist, the other constructive and ameliorative."²⁹ Bourriaud's approach focuses on works flowing from the second stream. Hal Foster shares in and expands upon Bishop's concerns. Perhaps addressing the separation between audience interactivity and participatory culture, Foster warns against ascribing political meaning only "on the basis of a shaky analogy between an open work and an inclusive society, as if a desultory form might evoke a dramatic community, or a non-hierarchical installation predict an egalitarian world."³⁰ Additionally, Foster questions whether audience interactivity risks an illegibility that requires privileging of the author's position, and he expresses skepticism regarding the

²⁷ Bourriaud 83.

²⁸ Bishop, Claire. "Introduction: Viewers as Producers." *Participation*. Ed. Claire Bishop (Cambridge, MA: MIT Press, 2006): 11-12.

²⁹ Bishop 11.

³⁰ Foster, Hall. "Chat Rooms." *Participation*. Ed. Claire Bishop (Cambridge, MA: MIT Press, 2006): 193.

compensatory quality of artistic participation and the glossiness with which it represents democracy and social interaction.³¹ While *Relational Aesthetics* offers an approach that can be productively co-opted to evaluate certain audience-interactive works, the concerns raised by Bishop and Foster show the value of considering other approaches alongside it.

Schechner's work emerges as a useful pairing. In his theater-focused consideration of performance, he proposes his own aesthetic to account for the move to efficacy/ritual in contemporary performance and the tendency toward audience interactivity that this move entails. Schechner labels his theory "rasaesthetics." Based on the Sanskrit word rasa, which loosely translated means flavor and the process of experiencing it, rasaesthetics attempts to relocate the site of aesthetic reception from the distanced, visual, and rational to the immediate, tactile, and pleasurable.³² For Schechner, this shift is quite literal; the rasaesthetic experience "is not something that happens in front of the spectator, a vision for the eyes, but 'in the gut,' an experience that takes place inside the body specifically engaging the enteric nervous system."33 Schechner contrasts rasaesthetic performance with the agonistic impulses inherited from Greek theater and emphasizes the active processes by which Indian audiences and performers are expected to intertwine in performance.³⁴ While Bourriaud's criterion of co-existence asks the receiver to consider how she might inhabit the world offered by a work of art, Schechner's

³¹ Foster 194-195.

³² Schechner 336-339.

³³ Schechner 345.

³⁴ Schechner 343, 356-357.

rasaesthetics ask the receiver simply to inhabit that world. The connections to audience interactivity, in which audience members must sacrifice their distanced, contemplative position as listeners only, are palpable. In emphasizing the physical and pleasurable, Schechner calls for analysts to consider not what the interactions proposed by audience interactivity resemble or suggest, but what they are; the tactile experiences of creating sound, communicating with a performer, and traversing a performance space deserve consideration in their own right.

While rasaesthetics offers welcome suggestions, it, too, encounters limits. Schechner's theory informs audience-as-performer interactivity particularly richly, but it has a bit less to offer the forms of audience interactivity that do preserve greater physical distance between audience and creator. Moreover, the emphases on multisensory experience and forsaking competition that Schechner identifies as hallmarks of rasaesthetic-relevant works are not inherent to audience interactivity; for many audience-interactive composers, the sonic result retains a certain privileged status and competition (as discussed below) is by no means banished. Like relational aesthetics though, rasaesthetics does present a lens through which many aspects of the social experiences of audience-interactive works are brought into clearer focus, and its highlighting of the tactile and immediate offers a corrective to analytical and composerly tendencies to gaze beyond performance in search of meaning.

3.3 Audience interactivity as play

Along with rasaesthetics, Schechner's *Performance Theory* offers another helpful gesture: invoking play. Indeed, Schechner proposes a potential definition of all performance as "ritualized behavior conditioned/permeated by play."³⁵

Unfortunately, the remainder of Schechner's discussion of the link between play and performance concentrates on how identifying the hunt as the origin of playful activities might relate to form and content, rather than the experience, of performance. The road suggested by considering play, though, is not a dead end; it leads to welcome concepts for conceiving of the audience's experience of interactivity.

Contemporary studies of play begin with Johannes Huizinga and his *Homo Ludens*. Huizinga separates the study of play from biological concerns, stresses the absence of opposition between play and seriousness, and posits language, myth, and ritual (along with their offshoots) as rooted in play. According to Huizinga, three characteristics define play: it must be freely undertaken; it must be separate from the rest of life; and it must be bounded in both time and space.³⁶ These three characteristics certainly appear to be true of audience-interactive experience. Roger Caillois expands upon Huizinga's work in a manner that proves useful for contemplating audience experiences.³⁷ In his *Man, Play, and Games* he reformulates Johannes Huizinga's work in *Homo Ludens*, which focused on competition as the

³⁵ Schechner 99.

³⁶ Huizinga, Johan. *Homo Ludens*. Trans. Unknown. (Boston: Beacon Press, 1955): 28.

³⁷ It is worth noting that both Huizinga and Caillois ultimately position artistic creation apart from play by insisting that play cannot be "productive." Fortunately, Schechner offers a compelling refutation of this separation (see p. 11-12).

exclusive motivation for play, and presents four categories of play experiences.

These four categories are:

- Agôn "a question of rivalry which hinges on a single quality (speed, endurance, strength, memory, skill, ingenuity, etc.), exercised, within defined limits and without outside assistance, in such a way that the winner appears to be better than the loser in a certain category of exploits."38
- Alea "based on a decision independent of the player, an outcome over which he has no control, and in which winning is the result of fate rather than triumphing over an adversary."³⁹
- Mimicry in which "the subject makes believe or makes other believe that he
 is someone other than himself."⁴⁰
- Ilinx "based on a the pursuit of vertigo and which consist[s] of an attempt to momentarily destroy the stability of perception and inflict a kind of voluptuous panic upon an otherwise lucid mind."⁴¹

The activities of the audience members in audience-interactive works can be described in relationship to these four categories. *Agôn*, explicitly removed in a rasaesthetic approach, is reinserted with Caillois. Competition is specifically a part of works like Freeman's *Glimmer*, where intra-audience competition is used to motivate the audience's participation. Of course, *agôn* can emerge as a guiding principle in other ways as well. The desire to perform well that the as-performer

³⁸ Caillois, Roger, *Man, Play, and Games*, Trans. Meyer Barah (Urbana, IL: University of Illinois Press, 2001): 14.

³⁹ Caillois 17.

⁴⁰ Caillois 19.

⁴¹ Caillois 23.

and as-composer roles carry leads to the presence of a less oppositional form of agôn. In works like Money MICE and Shoes of Your Choice, where individual contributions are particularly perceptible, agôn can be a significant part of the social experience. Works in which the audience has some degree of control over the performer, like *Time Zones*, also offer the opportunity for an agonistic relationship between the audience and the performer in which the audience challenges the performer's ability to realize their instructions. While *alea* can be a component of any concert going experience (with "winning" here taken to mean having an satisfying musical experience), it arises pointedly in audience-as-score pieces. In pieces like Grassroots 2008 and Concertino for Cellular Phones and Orchestra, the audience bets their aesthetic experience on collective qualities that are largely established outside the confines of the piece. Each audience member wins or loses to the extent that the collective qualities and system for translating them into music produces a result that matches their aesthetic preferences. Caillois describes all types of play as presupposing some level of *mimicry*, which pervades audience interactivity.⁴² Regardless of the role, audience members are asked to behave "as if": as if they were performers, composers, and/or the score. *Mimicry* is emphasized, though, in works where what is asked of the audience either very closely resembles the conventional version of the role they are mimicking or presents them with the same or greater responsibility than their non-audience counterparts in the role. *Ite*, angeli veloces asks little less of its audience during their contributions than it does of its non-audience performers. Zuppa gives audience members and non-audience

⁴² Caillois 19.

performers exactly the same task. In these works, audience members are united in receiving the opportunity to act "as if," and distinguished by their willingness and ability to assume the role. *Ilinx*, similarly, contributes something to all audienceinteractive social experiences as Caillois links "the pursuit of vertigo" to the more general "desire for disorder and destruction." 43 As long as audience interactivity remains outside the conventions of concert hall performance, its challenge to expectations presents a disorienting undermining of stability. Many pieces offer audience members the opportunity to heighten this disorientation by delying deeper into the role offered by the piece. Belet's *Lobby Reforms* initially presents audiences with an *ilinx*-informed transposition of their own sound making from the social areas of the venue into the performance space. Audience members who become aware of their role in the work may contribute voluntarily and delve into the sensation of *ilinx* produced by hearing themselves transformed and broadcast. Of course, the four categories need not exist in isolation, though Caillois identifies some combinations as less compatible than others. A thorough consideration of a piece's social experience should consider the potential presence and impact of all four categories.

To these four categories of play, Caillois adds a continuum to represent the relative level of organization and fixity found within a certain embodiment of play. The first pole of this continuum, *paidia*, refers to play grounded in improvisation and spontaneity. As play moves toward the other pole, *ludus*, it gains organization and

⁴³ Caillois 24.

stability.⁴⁴ For audience interactivity, *paidia* and *ludus* offer a welcome mechanism for describing the flexibility of audience involvement within a piece. *Ite, anglei veloces,* with its conventional notation, sits firmly toward the *ludus* end of the continuum, as does *Counting Songs,* with its one, very fixed expectation of its audience. *Concertino for Cellular Phones and Orchestra* edges toward *paidia* by allowing audience members to use their own ring tones, though it still maintains tight control over exactly when they are allowed to participate. *Shoes of Your Choice* moves further from *ludus* by stipulating form and theme but not duration or material. Pieces even more reliant on audience improvisation, like *Zuppa,* lie closest to the *paidia* pole. Taken together, Caillois' *ludus/paidia* continuum and four categories of play offer a diverse vocabulary for describing and identifying the types of interactions that audience-interactive pieces present to their audiences.

3.4 Rhetorics of audience interactivity

An additional method of conceptualizing audience experience arises from considering what composers identify as their reasons for creating audience interactive work. Since audience interactivity sits outside the bounds of Western art music convention, composers are often asked to or feel the need to justify their adoption of the form. Their responses offer insight into the value they see in audience interactivity and what they hope their audiences take from their interaction.

⁴⁴ Caillois 27-35.

In discussing these responses, literature on play once more proves helpful. In *The Ambiguity of Play, Brian Sutton-Smith addresses the multitude of explanations of* play and their contentiousness. In doing so, he identifies and examines seven "rhetorics of play" into which these explanations fall. Smith defines "rhetoric" here as "a persuasive discourse, or an implicit narrative, wittingly or unwittingly adopted by members of a particular affiliation to persuade others of the veracity and worthwhileness of their beliefs."45 Composers of audience interactivity appear to be in the process of creating a similar set of rhetorics for their own practice. Due to the audience interactivity deviation from Western and music convention, composers are often called upon or feel the need to explain their motivations for adopting the approach, and these explanations tend to follow a few, familiar paths. Drawing upon Lydia Goehr's work in *The Imaginary Museum of Musical Works*, these rhetorics serve as potential "regulative concepts." Regulative concepts are powerful, but flexible entities that guide the practice they inform by "indicating the point of following the constitutive rules" of the practice.⁴⁶ The rhetorics of audience interactivity serve as regulative concepts by establishing why composers use audience interactivity at all and why, when they do use audience interactivity, they choose a particular form of it. Though the five rhetorics described below can be reasonably well delineated, composers, intriguingly, seem comfortable moving between them in their discourse.

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⁴⁵ Sutton-Smith, Brian. *The Ambiguity of Play* (Cambridge, MA: Harvard University Press, 1997): 7-11.

⁴⁶ Goehr 102.

The first rhetoric of audience interactivity proposed here is the rhetoric of ideology. In line with Small and Bourriaud, composers operating within this rhetoric harness audience interactivity as a metaphor for social and/or political relationships. Pieces informed by this rhetoric use audience interactivity to both model and enact relationships they hope to encourage beyond the bounds of the performance. This rhetoric is evident through early implementations of audience interactivity as well as in many contemporary examples. The Terror-era audience-interactive spectacles in France, with their transparent aims of promoting national unity and solidarity. are a prime example, and given Luther's theological justifications for congregational singing, the rhetoric of ideology might be considered the foundational rhetoric for audience interactivity. Hindemith's description of *Ite, angeli veloces* as intended to "emphasize the aims and ideals of the United Nations" is another clear statement of this rhetoric.⁴⁷ Similarly, Alvin Curran describes the distinctiveness of MEV's audience-interactive music as originating in its ideological motivations through observing, "there had never before been a music made on such far reaching principles of individual freedom and democratic consciousness."48 Unsurprisingly, the ideologies advocated tend to be egalitarian and anti-hierarchical, though the elements of nationalism and militarism in Terror-era audience interactivity should not be overlooked.

The second rhetoric is that of education. Composers present audience interactivity as a method of informing audiences or presenting them with novel experiences.

⁴⁷ Skelton 216.

⁴⁸ Qtd. in Adlington 113.

Often the information conveyed or experience offered is musical in nature. Britten's *Let's Make an Opera* is a prime example. Britten and his librettist, Eric Crozier, created the dramatization of the composition of *The Little Sweep* within the play and its actual (for the audience) rehearsal with the intent of introducing children to operatic conventions, and the Britten-Pears Foundation describes the piece as an "operatic counterpart to *The Young Persons Guide to the Orchestra.*" Harding and Williams' *Grassroots 2008* demonstrates extra-musical education via audience interactivity. Harding and Williams sought "to create a context that encouraged the audience to contemplate many of the deep political issues that have gripped the nation over the unprecedented two-year-long political campaign for President of the United States." Their description illustrates the distinction between the rhetoric of education and the rhetoric of ideology; while *Grassroots 2008* addresses political issues, it does so with the intent of stimulating thought and discussion rather than in order to advocate for a particular political position.

A third rhetoric advanced by composers focuses on audience interactivity as enjoyable and entertaining. Composers frequently cite the potential pleasure provided by communal creation and participating in performance. David Baker describes his goals for *Concertino for Cellular Phones and Orchestra* in these terms: "I'm hoping people will see the comedic element, but more importantly, that maybe

⁴⁹ "The Little Sweep: An entertainment for young people. Op. 45 (1949)." Britten-Pears Foundation. [n.d.]. Web. 27 Feb. 2012.

⁵⁰ Harding and Williams.

you can have fun at a symphony concert."⁵¹ While the aim of associating fun and the symphony interjects a bit of the rhetoric of education, the focus of Baker's description is the "comedic" and "fun" possibilities evinced by the piece. Other composers echo Baker's thoughts. Jason Freeman describes including audience interactivity in *Glimmer* as, in part, a response to the American Composers Orchestra's stipulation that the work they commissioned "must be fun."⁵² Indeed, Schechner also points to the rhetoric of enjoyment as a primary form of audience interactivity by citing laughter in response to performance as fundamentally breaking the divide between performer and audience.⁵³

Engaging with the fourth rhetoric, composers focus on the musical value of employing audience interactivity. These composers select audience interactive forms at least in part for the sonic variability that they entail. Bowyer's *Time Zones*, for instance, plays upon the disjunction that its audience interactivity entails in creating a programmatic representation of the composer's struggle to devote sufficient time to composing, performing, teaching, and being part of a family.⁵⁴ A program, though, need not be present; Freeman, again writing about *Glimmer*, also discusses audience interactivity as a method of satisfying his aesthetic enjoyment of "uncertainty and surprise in music."⁵⁵

⁵¹ Wakin.

⁵² Freeman 22.

⁵³ Schechner 281.

⁵⁴ Bowyer, "Time Zones."

⁵⁵ Freeman, "Glimmer for chamber orchestra and audience" 22.

The fifth and final rhetoric proposed here aims to create a certain desirable social situation through audience interactivity. In these pieces, audience interactivity is used specifically for the social relationships it engages during the performance; composers are after the social aesthetic that audience-interactive techniques can achieve. Bowyer's *Unity* provides one instance of this rhetoric. He describes audience interactivity in this work as "a metaphor for the community support that the university had received after the shooting"; by joining in the performance, this support is reenacted within the concert hall.⁵⁶ While this rhetoric shares certain characteristics with the rhetoric of ideology and the rhetoric of enjoyment, it distinguishes itself from the former by remaining focused on the social relationships within the performance, while ideological motivations point outward, and from the latter by prioritizing *shared* experience, while enjoyment is experienced on an individual level.

While this set of five rhetorics aims to be comprehensive, composers are certainly not limited these justifications for their usages of audience interactivity. Indeed, composers need not provide justifications at all, though audiences, performers, and analysts are likely to continue looking for them. Given this impulse and the fact that composers do seem interested in explaining their reasons for writing audience-interactive music, the set of rhetorics is likely to grow, though as audience interactivity matures as a field some rhetorics may achieve the status of regulative concepts. Ultimately though, Sutton-Smith suspects that none of his seven rhetorics

⁵⁶ Bowyer, Don. "RE: [scimembers] Audience-interactive pieces?" Message to the author. 28 Sept. 2011. Email.

of play could serve alone as a satisfactory explanation for the value of play. He observes, "the possibility arises that it is this variability that is central to the function of play throughout all species." Indeed, audience interactivity also appears to gain vitality through its flexibility. Composers will likely be best served by preserving and expanding the purposes to which audience-interactive techniques can be applied rather than narrowing the options down to a smaller collection of regulative concepts or a single concept. Accordingly, analysts should keep audience interactivity's diverse uses and meanings in mind when studying audience-interactive works; applying relational aesthetics, rasaesthetics, or play-based theories exclusively would hinder understanding of the audience-interactive work in much the same way that looking only at its sonic aspects would.

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⁵⁷ Sutton-Smith 221.

Chapter IV: Analysis of Audience-Interactive Works

1. Five sets of audience-interactive pieces

The chapter that follows considers five different examples of audience-interactive practice: Bruce Adolphe's *Urban Scenes* and *Three Pieces*, Pauline Oliveros' *Deep Listening Pieces*, several pieces by composers associated with Fluxus, Robert Ashely's *Public Opinion Descends upon the Demonstrators*, and Jason Freeman's *Glimmer* and *Flock*. Adolphe's works offer children a chance to perform along with professional ensembles. Oliveros' work explores listening and sound production as meditative practices. The Fluxus composers use audience interactivity to challenge art and music world convention and the division between art and life. Ashley's piece presents a nearly performerless version of audience interactivity in which audience dissent produces musical results. Freeman's works emphasize sharing in the creative act. Taken together, these works illustrate the breadth of audience interactive methods and meanings. This breadth is revealed through the approaches to categorization and analysis developed in Chapters II and III.

2. Bruce Adolphe - *Urban Scenes* and *Three Pieces*

Bruce Adolphe has devoted much of his career to musical outreach and education, and his audience-interactive compositions emerge from these efforts. Adolphe's first pieces to employ audience interactivity were composed while he served as

Composer-in-Residence with the 92nd Street Y's school music programs.¹ Given Adolphe's connection to musical education, his audience-interactive music tends to maintain many of the conventions of concert hall performance; his works generally include traditional acoustic instruments, audience/performer division via the stage, and standard musical notation. The two works considered in detail here, *Three Pieces* and *Urban Scenes*, are not exceptions.

Both *Three Pieces* and *Urban Scenes* place children in the audience into the asperformer role. In "Ta Woop!," the first of the *Three Pieces*, the children contribute several vocalizations of the titular phrase (Fig. 1), which serves as a refrain. In "Rainbow," the children sing the piece's melodic theme at three points. In the third piece, "TDT," the children reply to the chamber orchestra's call (the opening of the "Ta Woop" gesture) with claps, clicks, and a single stamp at the conclusion. For the four movements of *Urban Scenes*, the children respond to cues with a variety of sounds appropriate to the theme of each movement. These sounds include birdcalls, an alarm clock, whistling, car horns, and police sirens. While the children's parts in *Three Pieces* are exclusively in unison, *Urban Scenes* includes five opportunities for solo performance. Adolphe specifies that all the sounds required from the children in *Urban Scenes* can be created vocally, but suggests that sound making devices be used for the birdcalls, car horns, and alarm clock.²

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¹ Jermé, Kirsten. "Engaging Your Audience in the 21st Century: An Interview with Composer-Educator Bruce Adolphe." *Polyphonic*. 18 Mar. 2010. Web. 16 Mar. 2011: 1

² Adolphe, Bruce. *Urban Scenes* (St. Louis: MMB Music, 1993): [i].



While both piece's materials are certainly appropriate for their target audience, Adolphe stresses that his approach relies on "humor, energy, focus, and musical honesty" to create audience engagement and that he rejects the need to "dumb things down." The music of both works bears out Adolphe's assertions; both contain challenging passages and avoid the clichés of "children's music." Indeed, the primary audible impact of audience interactivity in *Three Pieces* is the orchestral possibilities offered by a large performing force. *Urban Scenes* more varied use of its audience injects some aleatoric elements and does include some onomatopoeic gestures from the string quartet that link their sound world with the children's contributions.

The greatest deviation from concert hall convention in Adolphe's audience-interactivity occurs outside of the formal boundaries of the works; both pieces involve pre-performance rehearsal. For *Three Pieces*, Adolphe suggests that 10 to 12 minutes be allocated for rehearsing each piece. For *Urban Scenes*, he offers three options: a group of children may be selected in advance to rehearse with the ensemble, a group of children may be selected to rehearse during the allotted performance time, or the children planning to attend may rehearse the material in

³ Adolphe, Bruce. *Three Pieces for Kids and Orchestra* (St. Louis: MMB Music, 1988):

⁴ Jermé 3.

advance with a teacher (though Adolphe still advises some additional rehearsal with the ensemble before performance in this case). The first option for *Urban Scenes*, in particular, nearly eradicates the selected children's status as audience members distinct from the ensemble. Being a select group who has rehearsed outside of the frame of the performance with the ensemble, their claims to retaining audience status center on their affiliation with the targeted audience (often, a group of students at a particular school) and being non-professional and untrained apart from their rehearsals for the piece at hand. Through bringing the audience into the rehearsal process, Adolphe makes one of the strongest challenges to the audience/performer divide of the pieces considered here.

Naturally then, Caillois's category of *mimicry* play fits *Three Pieces* and *Urban Scenes* well. The inclusion of rehearsal leaves little of the performer's role outside the scope of the audience's involvement. The other categories of play are minimally involved; alea enters only during the selection process when a subset of the children in attendance will be invited to perform, and agôn enters only through the desire of the participants to perform their parts to the best of their abilities. Interestingly, *Urban Scenes* sits further toward the paidia end of the paidia/ludus axis with its less strictly notated audience contributions. While it is tempting to attribute this move to Adolphe revising his approach for the more recently composed work, his most

⁵ Adolphe, *Urban Scenes* [i].

recent audience-interactive pieces, City Sounds and Farmony, return to ludic play through precisely notated audience parts.⁶

The emphasis on *mimicry* in *Three Pieces* and *Urban Scenes* reflects Adolphe's engagement with the rhetoric of education. Describing his audience-interactive pieces, Adolphe states that like "all really good education, the idea is to inspire kids to go out on their own and do more of it, to become independently motivated." Children are asked to act as performers in the hope that they will pursue performance, or at least further attendance, on their own. Perhaps ironically, Adolphe's work answers Small's call for music education to contribute to "the musicalizing of the society as a whole," but Adolphe does so with the intent of preserving the Western art music tradition rather than with Small's more radical aims.8

Of course, Adolphe's work, like most good musical outreach, also draws upon the rhetoric of enjoyment. Indeed, Chamber Music Today even deemphasizes the educational potential in describing a performance of *Urban Scenes* as "not any conventional 'out-reach' or didactic 'stuff that's good for you' program. It's an hour of non-stop, genuine fun."9 Similarly the rasaesthetic pleasure of the experience

⁶ See:

Adolphe, Bruce. City Sounds. New York: Wannacracker Press, 2010.

Adolphe, Bruce. Farmony. New York: Wannacracker Press, 2006.

⁷ Jermé 2.

⁸ Small 208.

⁹ "Bruce Adolphe and Daedalus Quartet: Serious Joking Around." *Chamber Music* Today. 17 Feb. 2008. Web. 6 Mar. 2012.

Adolphe provides for audience members is suggested by his story of children using "Ta woop!" as a greeting for each other after participating in the piece. While it is difficult to assess Adolphe's educational impact in the short term, these confirmations of the enjoyment that the works provide at least bode well for their potential (and that of audience interactivity in general) to nurture future performers and listeners.

3. Pauline Oliveros - Deep Listening Pieces

While Bruce Adolphe's audience-interactive music is anchored in the conventions of the concert hall, Pauline Oliveros' music seeks its moorings elsewhere. Oliveros' work makes full use of the definition of "concert hall audience" offered in Chapter I; performances of her work rarely occur in traditional concert halls and are not intended for them, though they do tend to engage with audiences gathered together for a shared musical experience. The pieces considered here, her *Deep Listening Pieces*, are ostensibly all possible audience-interactive works for concert hall audiences (again, as defined in Chapter I) as Oliveros specifies in the score that the set is "for vocal solo and group performance by anyone willing to try whether trained in music or not." In practice, some lend themselves less naturally to audience-interactive realization, but the set is considered here in the context of open, group performance that the vast majority of the pieces facilitate.

¹⁰ Jermé 2.

¹¹ Oliveros, Pauline. *Deep Listening Pieces* (Kingston, NY: Deep Listening Publications, [1990]): [i].

¹² "The New Right of Spring," for example, calls for its performer or performers to "play any piece but give up middle C" (26). While untrained performers might well

The individual works within *Deep Listening Pieces* include a variety of types of audience interactivity. Nearly all the works place their participants in the audienceas-performer role as producers of sound. Many of the works also involve the audience-as-composer type by giving the performers conscious control over the sound. Some of the most intriguing pieces involve distinctive approaches to audience-as-score interactivity. "Threshold Meditations," for example use physiological constraints as a determining factor; the durations of sung tones are fixed to length of a single breath.¹³ Other realizations of the audience-as-score role require performers to produce a sound present in the environment, often with as little conscious selection as possible. In "All of Nothing," the performers, after a period of listening, must respond to a cue with "with some pitch or sound that you are hearing at the exact instant of the cue." Oliveros stresses that this sound production should occur "without premeditation" and that the response to the cue should be so immediate that the performer becomes aware of their contribution only after it is vocalized.¹⁴ "All or Nothing" also demonstrates Oliveros' tendency to score listening as performative act. The listening that precedes vocalization in the piece is specified as lasting a few minutes. Indeed, several of pieces specify only listening; no sound production is ever required. Through this Rancière-like act of scoring listening, Oliveros achieves perhaps the most thorough dissolution of the performer/audience divide possible. Indeed, these works frustrate the two-rooms

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realize the piece with minimal instruction, the score as written does demand knowledge of what middle C is and the ability to play some other piece.

¹³ Oliveros, *Deep Listening Pieces* 38.

¹⁴ Oliveros, *Deep Listening Pieces* 3.

test by rendering the performer and audience into an inseparable unit. One possible reconciliation is to consider the scored listener as embodying either the audience-as-composer or audience-as-score role (depending on the piece) and to identify the performer as the environment in which the listener listens. In this interpretation, a piece like "Country Meditation," which asks performers to listen to a forest and attempt to identify the trees by the sound of their leaves, the audience-as-composer role is fulfilled by the performer's selection of the forest while the audience-as-score role might be considered to enter via the geographic constraints that limit that choice. 15

The *Deep Listening Pieces* also present a variety of audience groupings. Pieces like "All or Nothing" and "Country Meditation" that allow for performance by any number of participants present a unified performing force. The presence of a single cue triggering audible expression in "All or Nothing" preserves this unity regardless of the size of the group. Other pieces establish subgroups or offer space for individual sound production. "Angels and Demons" presents both opportunities. In this piece, the participants are divided into two groups, angels and demons. The angels blend "steady, even, breath-long tones" together, while the demons are invited to listen for and then produce sounds "from their own inner spirits." While neither group sounds in unison, the angels offer a more cohesive, less individuated sonic profile, while the vocalizations of single demons are likely to be more

¹⁵ Oliveros, *Deep Listening Pieces* 40.

¹⁶ Oliveros, *Deep Listening Pieces* 4.

conspicuous. The groups are, of course, united by their tasks, though Oliveros does also invite the participants to switch groups during the course of the piece.

While audience role and grouping vary widely across the *Deep Listening Pieces*, the mechanisms of interactivity and the audience's awareness of their involvement are more consistent. The meditational framework of the pieces demands that the audience be fully aware of the tasks required of them. Accordingly, the pieces take the form of instructions to conveyed, and Oliveros, speaking of her related *Sonic Meditations*, describes these scores as "articulated" rather than "composed" because of their origins in oral form.¹⁷ Similarly, the vast majority of the pieces rely exclusively on vocal sound, if sound production is called for, and emphasize environmental and physiological awareness. Digital technology is never used, and even acoustic instruments are permitted only rarely. Also, the dissolution of the concept of the audience/performer divide negates the need for the mechanism of interaction to regulate communication across the divide. Though in practice performers more acquainted with the work tend to assume leadership roles and negotiate any confusion regarding the score, the same instructions are presented to all participants.

This absence of formal 'performer' status means that *mimicry*, such a substantial part of the experience of Adolphe's audience-interactive music, is not a compelling description of the audience's interactions in the *Deep Listening Pieces*. *Agôn*, too, is

¹⁷ Oliveros, Pauline. *Software for People: Collected Writings 1963-80* (Baltimore, MD: Smith Publications, 1984): 149.

not particularly relevant. Competition would surely contradict the meditate aspects of the pieces, and the aesthetic openness and freedom from conscious sound creation that many of the pieces entail reduce the possibility of internal competition to perform accurately or creatively. However, Oliveros does identify "competition with oneself in order to improve" as value that the *Deep Listening Pieces* embody; clearly, a certain variety of *agôn* is intended. **Alea* (again with 'winning' defined as having a satisfying experience of the piece) also plays some role, as many of the pieces are heavily dependent on environmental sounds. **Ilinx* ultimately offers the best fit. Though, the "vertigo" and "panic" that Caillois associates with **ilinx* do not accurately describe the experience or goals of the **Deep Listening Pieces*, certainly producing an altered mental state is a primary aim of these works. Given that this alteration is in the direction of calmness and attention, the works tend toward **ludus* on the **paidia/ludus* continuum, though Oliveros' instructions are often open enough to allow some **paidia*-evoking flexibility*.

This aim is clearly stated in many of Oliveros' discussions of her work. The crux of this altered mental state is awareness. Invoking the rhetoric of education, Oliveros tends to couch this heightened awareness as a learning opportunity. Describing the process of sonic meditation in general she suggests that the experience is like "a teacher, mentor, or guru in the form of oneself has appeared internally to give on feedback or reflect the way things are." Similarly, her preface to the *Deep Listening Pieces* states directly that they are intended "for personal growth, awareness,"

¹⁸ Oliveros, *Deep Listening Pieces* [i].

 $^{^{\}rm 19}$ Oliveros, Software for People 152.

emotional and intellectual development."²⁰ Intriguingly, Oliveros tends to focus on the potential musical benefits that her works offer to musicians and listeners even though, as William Osborne has noted, her methods are "radically egalitarian" and "hint at new types of music making, new concepts of social order, and new forms of spirituality."²¹ Though Oliveros does not shy away from these more ideological implications, she appears to prefer discussing her music within the terms of the rhetoric of education.

This preference, though, does not exclude the introduction of other rhetorics. Indeed, Osborne also identifies space for "folly," which he identifies as "radical playfulness," in Oliveros' work. Such a description hints at the rhetoric of enjoyment, and Oliveros confirms the connection by linking her work with a desire to share the "great pleasure" that music making has provided her.²² Osborne's work also points toward the possibility of the rhetoric of musical aesthetics. He cites works like the *Deep Listening Pieces* as suggesting "new types of music making." The presence of this rhetoric is mitigated, though, by Oliveros' persistent descriptions of the *Deep Listening Pieces* and other works as training for other forms of performance. Her conclusion to the preface to the *Deep Listening Pieces* illustrates this tendency:

²⁰ Oliveros, *Deep Listening Pieces* [i].

²¹ Osborne, William. "Sounding the Abyss of Otherness: Pauline Oliveros' Deep Listening and the *Sonic Meditations*." *William Osborne and Abbie Conant*. Web. 28 Sept. 2011.

²² Taylor, Timothy. "The Gendered Construction of the Musical Self: The Music of Pauline Oliveros." *The Musical Quarterly* 77.3 (Autumn 1993): 392-393.

These pieces are intended to provide opportunities for trained and untrained musicians to practice the art of listening and responding in solo and ensemble situations. The experience gained should be applicable to all forms of performance.²³

Both musically and socially, Oliveros views her meditation-based pieces as pointing beyond themselves. Indeed, the very act of making listening performative in many of the pieces raises the question of whether evaluative, critical listening has any function in relationship to these works.

This possibility, of course, invokes rasaesthetics with its move away from distanced, visual experience to immediate, tactile experience. Oliveros' focus on the body as the producer of sound (with the *Deep Listening Pieces* being primarily vocal) and as a determiner of form (through the physiological approach to the audience-as-score role described above) evinces a strong connection to Schechner. The ubiquity of approaches like unpremeditated sound making, environmental listening, and physiological determination might well be read as an attempt to construct an aural path to the enteric nervous system. In this rasaesthetic-influenced interpretation, the *Deep Listening Pieces* do still point beyond themselves, but they also point within the listener/performer as a method of bypassing the evaluative, critical processes and facilitating pleasurable, instructional awareness of self and sound.

4. Fluxus - Event scores

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²³ Oliveros, *Deep Listening Pieces* [i].

While Oliveros' music challenges a variety of the conventions of musical performance, skeptical readers might require justification for considering the Fluxus Event scores as music. The activities of the Fluxus artists often tend to fit more comfortably within the visual arts, but for the Event scores, in particular, linkage to music is not difficult to establish. Indeed, the concept of the Event score, attributed to George Brecht, arose during a class taught by John Cage at the New School.²⁴ This musical origin is reflected in the music-derived terminology on display throughout and around these works (Event scores and Fluxconcerts in addition to other musical language used in specific pieces). Douglas Kahn, discussing Fluxus and the musical avant-garde, identifies two approaches through which Fluxus artists engaged with musical tradition: consideration of sound "in its singular, existential, and elemental state" (typified by La Monte Young) and focus on the non-sonic trappings of musical performance (with Nam June Paik as exemplar).²⁵ The pieces that fuse Fluxus musicality with Fluxus audience interactivity emerge from this second category.

Fortunately, the connection between Fluxus and audience interactivity needs little, if any, defense. Hannah Higgins points toward audience involvement as perhaps the unifying element of Fluxus practice by establishing "the performative element of all Fluxus work" as lying within the demand that "the audience has to do something to

²⁴ Higgins, Hannah. *Fluxus Experience* (Berkley: University of California Press, 2002):

²⁵ Kahn, Douglas. "The Latest: Fluxus and Music." *In the Spirit of Fluxus*. Ed. Janet Jenkins (New York: Distributed Art Publishers, 1993): 104-108

complete the work."²⁶ While the audience's involvement in Higgins' formulation need not rise to a level meriting the descriptor "audience interactive," that it often does is reflected in the Event scores compiled in the *Fluxus Workbook*.²⁷ Many of the artists represented therein invoke audience interactivity in at least a score or two, and several return to the audience interactive form throughout their scores. Significantly, this engagement with the sonic potential is not a contradiction of Kahn's second approach. In these pieces, sonic results are generally secondary; they are results of actions rather than justifications for actions.

In keeping with Higgins' formulation of audience activity as central to the performative nature of Fluxus, audience-interactive Event scores place their audiences into many different roles. As discussed in Chapter III, Knowles's *Shoes of Your Choice* fuses all three roles and Williams' *Counting Songs* embodies the audience-as-score role. Indeed, the isolated audience-as-performer role, so primary in most conceptions of audience interactivity, is the least emphasized in the Event scores. Even when the as-performer role does appear in isolation (as in George Brecht's *Word Event, Fluxversion 1*, which reads, "The audience is instructed to leave the theater."), the composer asks the audience to perform for the reaction, rather than the orchestration, that their performance will entail.²⁸

²⁶ Higgins 25.

²⁷ Friedman, Smith, and Sawchyn.

²⁸ Friedman, Smith, and Sawchyn 23.

The Event scores also offer varied groupings. *Shoes of Your Choice* demands individual action; Counting Songs recognizes each audience member individually, but without differentiation from the whole; and Word Event requires collective action. What the groupings in these three examples have in common, however, is the offering of a single activity to all members of the audience; every audience member may describe her shoes, be counted, or leave the venue. This parity and singularity of opportunity is characteristic of the Event scores and links grouping and mechanism. The simplicity and brevity demanded by the form insure that each work restricts its own scope, and this restriction is often accomplished by encompassing the entire audience with a single instruction, which they may be asked to realize or a performer may be asked to realize in relationship to them. Indeed, Ken Friedman's Cardmusic for Audience, which subdivides the audience by asking each member to produce a self-selected sound and action in response to cue cards, is among the longest of the scores in the *Fluxus Workbook*.²⁹ *Cardmusic* appears to outline an upper limit for the complexity of the description of the mechanism. Friedman himself identifies one of the goals of the Event scores as being the presentation of "profoundly simple premises [that] can create rich, complex interactions that lead to surprising results."30 In practice, this goal tends to stipulate premises (and methods of interaction) that can be conveyed in profoundly simple means, if not necessarily premises that can be carried out with profound simplicity.

²⁹ Friedman, Smith, and Sawchyn 40-41.

³⁰ Friedman, Ken. "Forty Years of Fluxus." *Art / not art.* N.d. Web. 18 Sept. 2010.

Audience awareness, like interactivity type and grouping, appears in several forms. Scores like Shoes of Your Choice, Word Event, and Cardmusic take the form of instructions to be conveyed to the audience. Accordingly, the audience for these pieces learns immediately what their role will be. *Counting Songs* requires no audience-directed preface, but the simplicity and consistency of the action it entails allows the audience to quickly establish their involvement. Other works are less clear. Ben Vautier's Shower II, for instance, calls for a performer to stand elevated in the center of the venue with a fire hose. At the first audible complaint from the audience, the hose is turned on and the performer soaks the crowd.³¹ Shower II is one of several works in the Fluxus Workbook that do not reveal to the audience their impact on the piece until that impact occurs. Surely audience members for Shower II might suspect that the fire hose positioned above would likely turn on, but what might trigger that event is unclear until it happens. In fact, Vautier's *Make Faces*, composed in the same year, reverses the relationship. While audience protest in Shower II triggers punitive action, the performers of Makes Faces stop making objectionable faces and gestures at the audience when complaint ensues.³²

Intriguingly, the diversity present in other aspects of the Event scores narrows in considering the relationships between the social situations they instantiate and their sonic results. Most of the Event scores, as Kahn's second approach suggests, privilege the non-sonic trappings of the concert experience. While sound is a necessary and inevitable part of works like *Shower II, Make Faces*, and *Word Event*, it

³¹ Friedman, Smith, and Sawchyn 102.

³² Friedman, Smith, and Sawchyn 103.

emerges as a secondary result of the actions the scores specify. Even audience-interactive Event scores like *Counting Songs, Shoes of Your Choice*, and *Cardmusic* that do stipulate sound-producing events offer minimal description about the quality of the sounds they entail. In Higgins' formulation, this disavowal of sonic detail perhaps displays a relationship to Cage's compositional privileging of time. For Kahn, it displays a desire explore the social, theatrical, and ritual content of the concert to produce "a performance not so much *of* music but *within* musical practice."

With respect to musical practice, many of the Event scores present a version of *ilinx*-based play that comes very close to Caillois' literal definition. While Oliveros' *Deep Listening Pieces* entail a change in mental state away from "vertigo" and "panic," which Caillois links to *ilinx*, Fluxus composers often embrace confusion and uncertainty. Here Vautier's *Shower II* is a prime example. Vautier counts on the wait for activity in *Shower II* being disorienting and unsettling enough to provoke audience dissent. The shower that results, surely, only heightens these sensations. Brecht's *Word Event* relies on a similar disjunction with typical performance expectations. Other pieces incorporate *mimicry*. Williams' *Duet for Performer* does so quite literally by asking a performer to take the stage and wait silently for audible audience reactions, which the performer imitates.³⁴ The *ilinx*-inducing silence gives way to the audience speaking through the performer. Vautier's *Concerto for Audience by Audience* explores similar territory. The piece invites the audience to

³³ Higgins 51; Kahn 108.

³⁴ Friedman, Smith, and Sawchyn 115.

take up instruments on stage and play. If they do not, the performers bring the instruments to them. Audience members are invited and then, if necessary, prodded to play at being performers.³⁵ Several of these Event scores also betray the presence of agôn-related play. Word Event and Concerto for Audience by Audience, in particular, produce a struggle between the will of the composer (to have the audience leave and to have the audience play instruments, respectively) and the will of the audience (to remain and to not play, in the case that the performers must bring the instruments to the audience). *Alea* also appears in the interactions realized by the Event scores. In Shower II and Make Faces, audience reaction constitutes a roll of the dice as complaint either triggers or arrests elements of the performance. Eric Andersen's *Please Leave* offers the audience the choice of remaining in the venue or taking food and drink from the stage and leaving; audience members must make a gamble based on their evaluation of the appeal of remaining in the venue and the appeal of the consumables on offer.³⁶ While the play spectrum is broad, Event scores do tend uniformly toward paidia. The brevity of the form, again, encourages composers to accommodate wide ranging audience involvement rather than constraining it through additional clauses.

As the diversity of experiences described above suggests, the rhetorics of audience interactivity engaged across Fluxus are not easy to pin down and neither are the relationships of Fluxus as a whole to theories about audience interactivity. The

³⁵ Friedman, Smith, and Sawchyn 107.

³⁶ Higgins, Hannah. "Food: The Raw and the Fluxued." *Fluxus and the Essential Questions of Life*. Ed. Jacquelynn Baas (Chicago: University of Chicago Press, 2011): 20.

Event scores do support Claire Bishop's identification of two streams guiding audience interactive practice. *Word Event, Shower II*, and *Make Faces* certainly seek to provoke their audiences, while *Shoes of Your Choice, Counting Songs*, and Cardmusic point toward collective creativity. Intriguingly, Concerto for Audience, with its confrontational contingency, and *Duet for Performer and Audience*, with its initial silence followed by acquiescence to audience response, seem to embody both streams simultaneously. As these dual-stream works might suggest, it is possible to see both confrontational and collective approaches as serving a similar goal. While a soaking from a fire hose does not offer, to return to Bourriaud, a compelling "space-time structure" for audiences to inhabit, it certainly cannot be accused of denying the audience as a subject. The inclusion of the audience is at the heart of George Maciunas' desire for Fluxus to illustrate that "anything can be art and anyone can do it" and to "demonstrate the self-sufficiency of the audience."37 While other Fluxus associates were not willing to follow Maciunas to the extremes of this doctrine (the end of art and erasure of the authority of the artists), its influence pervades Fluxus work.³⁸ In this context, confrontational Fluxus Event scores offer a more forceful attempt at making the audience into artists and creating a specific and shared social interstice. Indeed, Friedman describes all of Fluxus, in terms Small and Bourriaud would find natural, as "a direct contribution to a more democratic world."³⁹

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³⁷ Proctor, Jacob. "George Maciunas's Politics of Aesthetics." *Fluxus and the Essential Questions of Life*. Ed. Jacquelynn Baas (Chicago: University of Chicago Press, 2011): 25.

³⁸ Proctor 29-31.

³⁹ Friedman, "Forty Years of Fluxus."

Freidman's and Maciunas' language points strongly toward the rhetoric of ideology and toward a particularly political bent of it. Maciunas leaves no room for doubt with the conclusion of the Fluxus manifesto, which calls for the movement to "FUSE the cadres of cultural, social & political revolutionaries into united front & action."40 However, Higgins questions the political efficacy of the Event scores and suggests they are poorly suited for political activism. Higgins sees the Event scores as useful "not because they construct political ideologies but rather because they construct contexts...for primary experiences."41 Higgins move pulls toward Bourriaud's desire for recreated rather than represented "angelic worlds," but her analysis ultimately pulls past Bourriaud toward a rasaesthetic approach. For Higgins, Fluxus events are first and foremost sensory and performative experiences, and in this capacity, they suggest the rhetoric of social aesthetics more than ideology. As Higgins formulates it, performance of the event scores offers "ontological knowledge that connects people to a real world and to each other, expanding the individual's sense of belonging to a place and a group."42 This interpretation is very literally embodied in Knowles' String Piece and Vautier's Audience Variation No. 1, which both call for performers to tie up their audience.⁴³

Given the scope of Fluxus work and Fluxus artists, the other rhetorics cannot be discounted but are less prevalent. The prevalence of humor throughout the Event

⁴⁰ Reproduced in *Fluxus and the Essential Questions of Life* 22.

⁴¹ Higgins 55, 58.

⁴² Higgins 59.

⁴³ Friedman, Smith, and Sawchyn 70, 108.

scores suggests the rhetoric of enjoyment, and Friedman identifies "playfulness" as one of the 12 criteria of Fluxus.⁴⁴ Similarly, Vautier states that Fluxus is, among many other things, "gag, pleasure and shock" along with "light and [with] a sense of humor."⁴⁵ However, documents like the *Fluxus Manifesto* and pieces like *Shower II* and *Make Faces* nullify any suggestion that providing pleasure to the audience serves as an overriding Fluxus principle. The humor of Event scores is often, after all, at the expense of the audience. Similarly, Kahn's first approach might suggest a strong rhetoric of musical aesthetics, but since audience-interactive Event scores emerge from his second approach, sound-focused rationales for audience interactivity are unlikely. Regarding the rhetoric of education, Higgins ultimately offers Fluxus as a model for pedagogy suggesting that its works encourage "us to look at, listen to, and feel the environment, to learn from that experience and to remain open to new perception."⁴⁶ Within Fluxus practice however, ideological or social aesthetic goals consistently lurk behind any educational aspects of the works.

While the breadth of Fluxus Event scores presents an analytical difficulty, the presence of a body of audience-interactive works by a set of interconnected composers offers a unique opportunity for studying audience-interactive practice emanating from a community. The Event scores are notable for the variety of types of audience-interactivity that they offer and especially for their comparative minimization of the as-performer role. The requirement of brevity entailed by the

⁴⁴ Friedman, "Forty Years of Fluxus."

⁴⁵ Vautier, Ben. "Text on the Fluxus." *Art/not Art*. N.d. Web. 14 Mar. 2012.

⁴⁶ Higgins 206-207.

form has importance consequences for mechanisms of involvement and for the looseness of play that the works consistently entail. The influence of the Fluxus community on its members also channels discussion about audience interactivity through the rhetorics of ideology and social aesthetics even as other rhetorical options rear their heads. Given these complex sets of intra-group influences, truly establishing the emergence, development, and meaning of audience interactivity within Fluxus demands additional space and focused study.

5. Robert Ashley - Public Opinion Descends upon the Demonstrators

Robert Ashley's *Public Opinion Descends upon the Demonstrators* is distinctive among the works discussed here in several ways. First, the piece features only electronic sound sources. A single performer, who Ashley calls the "sound controller," triggers these sounds. At intervals determined by the Fibonacci series, the sound controller alternates between silence and sound. During the silent sections, certain audience actions cause the sound controller to interject additional electronic sound.⁴⁷ Indeed, Ashley relates that the relationship between the interjected sound and the audience actions should ideally be "automatic," though he either "couldn't imagine suggesting how that automatic quality could be accomplished or...didn't suggest it for practical reasons" at the time of the piece's

⁴⁷ Ashley, Robert. "Public Opinion Descends upon the Demonstrators." Outside of Time: Ideas about Music. Ed. and trans. By Ralf Dietrich (Köln: Edition MusikTexte, 2009): 368.

composition in 1961.⁴⁸ Second, the piece deemphasizes the presence of its performer and even of its sound sources. Rather than look at the sound controller, the audience members sit around a central point, and the sound controller is stationed in the best location for viewing the audience. The sound sources are positioned similarly atypically; speakers stand behind sections of the audience in order to also face the central point.⁴⁹ Third, *Public Opinion*'s score directly engages with issues of scale. Ashley offers instructions to account for six different sizes of audience. These sizes range from "exactly 6" to "28,278,466 or more." Different sizes entail different durations of the piece, numbers of audio channels, types of sounds, organization of the sounds selected, dynamic levels, and varieties of audience actions that trigger sound.⁵⁰ Fourth, as suggested by the impact of scale, the audio components of the piece are composed specifically for each performance according to directions provided in the score. Ashley describes the category of sound required for each size of the piece, but provides no material. His most specific description comes for Size I for which he suggests using six radios.⁵¹

As this description of the work illustrates, *Public Opinion* places its audience in the as-score role. Indeed, significant portions of the work have to be based on an estimate of the audience's numbers as the electronic sounds, form, seating, and speaker orientation all must be set prior to performance. While an audience aware

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⁴⁸ Ashley, Robert. "Public Opinion Descends upon the Demonstrators (1961)." Outside of Time: Ideas about Music. Ed. and trans. By Ralf Dietrich (Köln: Edition MusikTexte, 2009): 568.

⁴⁹ Ashley, "Public Opinion Descends upon the Demonstrators" 372.

⁵⁰ Ashley, "Public Opinion Descends upon the Demonstrators" 369.

⁵¹ Ashley, "Public Opinion Descends upon the Demonstrators" 370.

of the role of size in the piece might attempt to influence which of the six options they experience by encouraging or discouraging attendance (or perhaps by purchasing or reserving more than one ticket for themselves), Ashley's windows for each size (other than Size I's "exactly 6") are sufficiently large to render these attempts almost certainly unsuccessful; even Size II, which encompasses the smallest range other that Size I, covers audiences numbering from 15 to 40.52

However, Ashley does exploit the fluidity between the audience-as-score and audience-as-composer roles through the sound controller's responses to audience actions during the otherwise silent sections of the work. These actions (listed in Fig. 2 for sizes I-IV⁵³) are likely to occur initially as reactions to the piece or as natural behaviors within a concert setting. However, audience members are also likely to realize their ability to control the piece after the actions have triggered a few sound events. Philip Krumm describes this process of realization at a performance of Size III:

"[Ashley] had taken the audience and he set four blocks of chairs facing each other, so everyone was facing the center. He wasn't in the center, he was off at the side with his tape player and big speakers. He was playing "The Fourth of July," a tape piece of his. And it is sounds of people walking around, somebody says something, and noises, and radio sounds and then it stops.

And then there is a long silence. And then the sound came back on, and then

⁵² Oddly, Ashley does not indicate what should happen if an audience with between 6 and 15 members is present.

⁵³ Ashley notes that for the two largest sizes "it must be assumed that only a generalized indication of audience activity will be significant" (376).

more silence. And then more sound. And then an audience member stood up to leave and the sound went off and everybody watched that person leave, and then the sound came on again. And everybody looked at everyone else. When somebody stood up to leave, the sound went off. The person sat down. Then people finally understood [Ashley] had them where he wanted them. Are you going to leave? A very interesting exercise in crowd control. It was very brilliant, and clever and nasty. It was the kind of thing Ashley was really good at."54

Through this development of awareness that Krumm describes, the audience-ascomposer role arrives.

As Krumm's account makes clear, the sound controller's responses to audience actions also create a palpable focus on individual audience members whereas the other audience-interactive components of the piece reflect the audience as a collective unit. Krumm also notes Ashley's presence as the sound controller.

Ashley's decision or inability to render the reactions automatically renders the audience-interactive mechanisms of the piece thoroughly human, though their results are delivered electronically. Indeed, the presence of the performer increases the probability of audience awareness. As the sound controller is not hidden from the audience (merely removed from their focus), audience members can monitor the sound controller's actions to determine their ability to shape the piece.

⁵⁴ Ronsen, Josh. "Philip Krumm." *Monk mink pink punk* 17 (Aug. 2009): N.p.

Scale of Audience Activity *

If any member of the audience should: Size IV ···· · · · l. Leave the auditorium 3. Speak aloud or laugh Size II .. 4. Whisper (audibly or noticibly) 5. Make any kind of exaggerated gesture 6. Make any kind of secretive gesture 7. Glance "meaningfully" at another member of the audience Size I 8. Seek a remote visual diversion (through windows, about the ceiling, etc.) 9. Look toward a loudspeaker 10. Make an involuntary physical gesture (yawn, scratch, adjust clothing, etc.) 11. Show an enforced physical rigidity (waiting it out') Fig. 2⁵⁵

While Ashley's score makes the size of the audience a vital factor in determining the auditory presentation of the piece, the principal effects of the interaction between the auditory and social domains lie within the boundaries of the social. *Public Opinion's* audience is confronted with long periods of silence that sharply veer into monolithic blocks of sound. This confrontational quality is most evident at the most extreme sizes. Size I challenges it audience with a duration in excess of three hours of which the last hour and 12 minutes are silent (except, of course, for sound triggered by the audience). Size VI lasts for only 30 seconds but should be played at

⁵⁵ Ashley, "Public Opinion Descends upon the Demonstrators" 377.

"unspeakably loud/destructive" levels.⁵⁶ It is no coincidence that the actions Ashley selects as prompts for the sound controller principally suggest frustration or boredom with the piece. Additionally, Ashley's co-opting of the act of leaving the theater by making it into a creative gesture undermines the "license" that Schechner identifies as the audience's fundamental form of authority in any piece. In rescinding their attendance, unsatisfied audience members simply contribute to the performance of the piece.

Accordingly, it is hard to reconcile *Public Opinion*'s version of audience interactivity with Bourriaud's and Small's visions for proposals of ideal, democratic social relationships. Rather, *Public Opinion* fits better in Bishop's stream of provocative audience interactivity, as Krumm's description of the piece as "crowd control" confirms. Ralf Dietrich links the piece to Ashley's witnessing of a walkout at a 1960 concert by Cage and Tudor and claims that the piece aims "to tackle the disconnection between avant-garde sounds and audience as a problem intrinsic to the concert situation in general." Describing the premiere at the 1962 ONCE Festival, Dietrich says:

Every audience member became a potential demonstrator faced with the sonic consequences of the opinion that he or she may have fancied to express or manifest. No matter how they decide to react to this unusual situation, they could not 'out-behave' (disturb or break up) the performance. This

⁵⁶ Ashley, "Public Opinion Descends upon the Spectators" 369.

⁵⁷ Dietrich, Ralf. "ONCE and the Sixties." *Sound Commitments: Avant-gard Music and the Sixties*. Ed. Robert Adlington (New York: Oxford University Press, 2009): 172-173.

effectively inverted the customary roles of audience and performers.

Without being provocative or 'political,' the sounds heightened listeners' consciousness of their own reactions. *Public Opinion Descends upon the*

Demonstrators was thus a concert piece about the concert situation.⁵⁸ Indeed, Dietrich's claim that *Public Opinion* is not provocative or political despite his description of the audience's ensnarement within the performance suggests a discomfort with the social situation that *Public Opinion* enacts. Of course, Dietrich's description may also reflect that the premiere performance was of the Size III version of the piece, whose duration, at 26'30", and dynamic, at "loud, dominant," are comparatively moderate.

Intriguingly, Ashley's own description of the piece goes even further in downplaying its confrontational qualities. Despite its title, Ashley says that he "never thought the piece invites demonstration, though that's what it has invariably gotten." Ashley confirms Dietrich's assertion that the piece is about the concert experience, but rather than invoke the Cage/Tudor walkout, he suggests that the work aspires to generate the "divided consciousness" that he finds typical of the concert experience in order to produce a self-consciousness that becomes "increasingly rarefied, approaching even a 'collective' self-consciousness that might be enlightening." He adds that the work "could have the quality of a meditation, allowing individuals of the audience to experience getting some control over their divided attention and stop being rattled back and forth between the 'situation' and the 'music' wherever

⁵⁸ Dietrich 173.

⁵⁹ Ashley, "Public Opinion Descends upon the Demonstrators (1961)" 568.

they are."60 Here Ashley begins to resemble Bourriaud and Small by positing the work's confrontational elements as challenges meant to inspire a positive experience of self-consciousness. Similarly, his invocation of collective self-consciousness suggests a rasaesthetic approach as does the focus on audience physicality which Ashley particularly notes at smaller sizes of the piece in which audience members "are aware of the importance of fleeting, sometimes unpremeditated indications of individual states of mind."61 However, Ashley's admission that the work "invariably" does meet with demonstration suggests that his professed goals of self-consciousness and self-awareness are seldom realized.

Whether the analyst relies on Ashley's score or his description of the work has important consequences for the identification of play within the audience's experience. From Caillois's categories of play, the confrontational *Public Opinion* appears to have a strong component of *agôn*; the confrontation between the sound controller and the audience is a competitive one even if, as Krumm suggests, the audience is destined to lose. This fusion of *agôn* with a system weighted against the audience can also lead to *ilinx*-like experience as the audience's protests produce unintended and unwanted sonic results. From Ashley's consciousness-focused explanation of *Public Opinion*, *agôn* departs and *ilinx* is reshaped. Now, rather than confusion created by battling against the system, the piece reflects the "divided consciousness" that Ashley identifies and the experience of *ilinx* arrives from acceptance of that unfamiliar experience rather than from struggle. Similarly,

⁶⁰ Ashley, "Public Opinion Descends upon the Demonstrators (1961)" 568.

⁶¹ Ashley, "Public Opinion Descends upon the Demonstrators" 376.

mimicry arrives through the control that the audience receives; in the confrontational interpretation, the piece functions as a trap, preventing as-if associations, but without confrontation, the audience can choose to assume a performative role. In either case, alea functions to establish many of the conditions of the work, but within the audience's experience, it plays a minimal role. Relatedly, the tightly structured nature of the audience's involvement in the piece places the work firmly toward the *ludic* end of the *ludus/paidia* pole.

The discrepancies between Ashley's score and his description of the work also impact which of the rhetorics of audience interactivity the piece engages. The work's title and Ashley's description of it as tending to incite protest suggest a rhetoric of ideology with a political focus. Indeed, the work might serve as welcome example of audience-interactive practice not presenting a uniformly shiny vision of democracy, even if analysis of audience interactivity, as Foster suggests, often does. However, both Dietrich and Ashley minimize the political aspects of the work. Dietrich's mention of the Cage/Tudor concert walkout as inspiration locates *Public* Opinion within local, music world politics while Ashley seeks to separate entirely the titular demonstration from the audience's experience of the piece. Dietrich's description maintains a relationship to the rhetoric of ideology (even though its ideological focus lies within the music world), but Ashley's moves in the direction of the rhetoric of social aesthetics. The collective self-consciousness that Ashley says the piece aspires to create is a shared, social state valued for its existence within the performance rather than for any metaphorical relationship to social states outside

the work. While Ashley's suggestions that this state "might be enlightening" gestures toward the rhetoric of education, it is his only gesture in that direction, and neither Ashley, Dietrich, or Krumm employ the rhetoric of musical aesthetics or the rhetoric of enjoyment in their discussions of the work. Ultimately, *Public Opinion* appears ideological in practice, construction, and title, but its composer's intentions mark it as an attempt at achieving a certain social state.

6. Jason Freeman - Glimmer and Flock

Jason Freeman's *Glimmer* and *Flock* are the two most recently composed pieces considered in this chapter, and they demonstrate their dates of composition in the technology they use. As described in Chapter II, both pieces rely on computer-driven visual monitoring of their audiences to facilitate audience interactivity. In *Glimmer*, this monitoring places the audience into the as-composer role. Through activating and deactivating glow sticks, sections of the audience control the prominence of a group of performers in real-time.⁶² In *Flock*, an overhead camera monitors the positioning of audience members and performers, and this positional information spontaneously generates notation for saxophone quartet, electronic sound, and animation.⁶³ The complexity of the interpretation of positional information and the flexibility of audience grouping within *Flock* yields both the audience-as-composer and the audience-as-score roles.⁶⁴

⁶² Freeman, "Glimmer for chamber orchestra and audience" 1.

⁶³ Freeman and Godfrey 87.

⁶⁴ For more detail on the establishment of the two audience roles in *Flock*, please refer to Chapter II.

While audience role and grouping deviate between the two pieces, *Glimmer* and Flock still have much in common. In addition to their reliance on visual analysis of their audiences, both pieces use their audiences to generate real-time notation for their performer and attempt to make the relationship between the audience's actions and the music transparent. In *Glimmer*, these goals are simultaneously addressed in part by the presence of a light on each musician's music stand. The light's color indicates pitch, while its brightness determines dynamic level and flashes denote accents.⁶⁵ To further illustrate the audience's involvement, Freeman provides an additional display that correlates the hall's seating chart with the associated performers and provides information regarding each group's activity.66 Pre-performance instructions also contribute to the work's transparency. For *Flock*, each performer's notation is visible, but only on a small display attached to the saxophones. Instead, audience attention is directed to an on-screen representation of their positioning. Early performances of *Flock* featured a more abstract representation; in response to audience feedback, Freeman altered the animation to more closely resemble the notation.⁶⁷ In addition, *Flock* features dancers, who model and lead audience involvement, and a pre-performance component in which the audience is free to explore interaction with electronic sound.⁶⁸ In both pieces, multiple approaches to creating audience awareness demonstrate that transparency is a high priority.

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⁶⁵ Freeman, Jason. "Extreme Sight-Reading, Mediated Expression, and Audience Participation: Real-Time Music Notation in Live Performance." *Computer Music Journal* 32.3 (Fall 2008): 31.

⁶⁶ Freeman, "Extreme Sight-Reading" 36-37.

⁶⁷ Freeman and Godfrey 93.

⁶⁸ Freeman and Godfrey 93-95.

Indeed, transparency is also a prime factor in interaction between the auditory and social aspects in *Glimmer*. The desire for instantly sight-readable and aurally recognizable material in *Glimmer* leads to a texture consisting entirely of sustained tones and small, but non-overlapping pitch sets for each group of musicians.⁶⁹ Indeed, Freeman acknowledges an experiential dissonance between stillness of the music and the excitement of the work.⁷⁰ *Flock*, which lasts for an hour in comparison to Glimmer's 10-minute duration, demands a more complex solution. Freeman retained the use of real-time notation but reduced the specificity of that notation and encouraged improvisation. Indeed, Freeman describes composing the piece for musicians with jazz experience precisely to avoid the limitations that *Glimmer* imposed upon its performers.⁷¹ These performers receive conventional and graphic notation generated by audience positional data, and importantly, Freeman allows for the possibility of unplayable notation by deemphasizing complete fidelity to the notation.⁷² Significantly, the aesthetic goals of *Flock* also push back. Indeed, the changing interpretations of positional data, which provide musical variation and sectional differentiation, reduce transparency, and they, along with the overlapping systems for electronic and acoustic sound generation, establish the presence of the audience-as-score role.

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⁶⁹ Freeman, "Glimmer for chamber orchestra and audience" 24.

⁷⁰ Freeman, "Glimmer for chamber orchestra and audience" 43.

⁷¹ Freeman and Godfrey 87.

⁷² Freeman, "Extreme Sight-Reading" 35.

Flock and *Glimmer* deviate from other pieces considered in this chapter in foregrounding *agôn*. Both works explicitly involve competition. As described in Chapter II, Glimmer encourages audience coordination by rewarding cooperating groups with increasing prominence for their associated performers. The competitive aspect is particularly apparent at the piece's close: the less coordinated the audience group, the more quickly their performers fall silent. In documentation of the piece, the final active group emits an audible cheer in response to their victory, even though that moment does not mark the immediate conclusion of the piece.⁷³ In *Flock*, competition works similarly. Again, audience members who organize coordinated activity are rewarded with a greater impact on the music of the piece.⁷⁴ Of course, the less *ludic* form of competition in *Flock* makes it a far less pronounced part of the social and physical experience for audience members. *Mimicry* is also present in both pieces as the audience is offered the opportunity to share in the creative act within conditions designed to produce successful results. In Glimmer, audience reactions suggest that agôn trumps mimicry, but audience responses to a survey after experiencing *Flock* indicate that participants did develop an understanding of their contribution to the piece and feel that they had contributed to its creation.⁷⁵ While the transparency of its system of interaction and competition leaves *alea* largely absent from *Glimmer*, it does influence *Flock*. Especially given the changing interpretations of positional data and the overlapping systems of sound generation, an audience member can rarely predict precisely what

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⁷³ Freeman, Jason. "Glimmer." *Jason Freeman.* 2004. Web. 17 Oct. 2010.

⁷⁴ Freeman and Godfrev 86.

⁷⁵ Freeman and Godfrev 95-96.

musical result will ensue. Each interaction with the system expresses a compositional desire for change, but the precise nature of that change (from the perspective of the audience member) is governed by chance as much as by intent. Given the prominence of $ag\hat{o}n$ and mimicry in both pieces, the relative absence of ilinx is not surprising; successfully competing and successfully composing demand focus and control contrary to the aims of ilinx-drive play. The strictness of these roles in Glimmer also makes it a pronouncedly ludic experience. While Flock gravitates more toward paidia and might lead to ilinx through the density of its interactive systems, the inclusion of dancers as guides points back toward ludus. Freeman describes including the dancers late in the compositional process for exactly this purpose:

During test runs of *Flock* before its premiere, we discovered that the audience needed guidance in their participation; otherwise, they became frustrated, paralyzed and eventually bored by the completely open-ended nature of their participation. To address this, we have recruited dancers to assist in performances of *Flock* and to facilitate the audience's participation.⁷⁶

Freeman's experience illustrates how important considering the *paidia/ludus* continuum can be for the successful realization of audience-interactive work.

Given that good-natured competition drives *Glimmer*, it is little surprise that Freeman's discussion about the value of audience interactivity often lies within the rhetoric of enjoyment. As mentioned in Chapter III, the American Composers

⁷⁶ Freeman and Godfrey 94-95.

Orchestra, who commissioned Freeman, stipulated that the resulting piece "must be fun," and Freeman describes audible reactions from the audience as evidence that this goal was achieved.⁷⁷ In discussing the motivation for *Piano Etudes*, an online audience-interactive project, Freeman makes the relationship between enjoyment and participating in musical creation abundantly clear:

I love to compose music. I love to start with some simple musical ideas and then experiment with them, gradually transforming them into something that captivates my imagination...It saddens me that so few of us make music. I believe that all of us are musically creative and have something interesting to say. I also wish that everyone could share in this experience that I find so fulfilling.⁷⁸

Freeman's post-*Flock* survey, too, reveals his desire for audience interactivity to provide enjoyment. Audience members were asked about their agreement with the statements "I had fun" and "I enjoyed participating."⁷⁹ This emphasis on enjoyment naturally evokes Schechner's rasaesthetics, and both pieces do also require physical involvement well beyond the normal expectations of the concert hall. Certainly the experience of raising, lowering, and waving a light stick as an audience member attending a performance of *Glimmer* and moving about the stage while wearing a lighted hat as a participant in *Flock* are as vital a part of the experience as the sound of the music. Addressing this balance, Freeman asks, "Can audience members both participate actively and listen carefully at the same time?" He answers affirmatively,

⁷⁷ Freeman, "Glimmer for chamber orchestra and audience" 22, 31.

⁷⁸ Freeman, Jason. "Compose Your Own." *New York Times: Opinionator*. 22 Apr. 2010. Web. 17 Oct. 2010.

⁷⁹ Freeman and Godfrey 96.

but suggests that participating yields qualitatively different listening and that since such multi-tasking is not simple, oscillation between careful listening and active participation may be inevitable.⁸⁰

Freeman's discourse, though, does not restrict itself to the rhetoric of enjoyment. While enjoyment is undeniably a goal of his audience-interactive work, his descriptions of *Glimmer* and *Flock* ultimately suggest that he is more interested in establishing an experience driven by both musical and social aesthetics. In prefacing a description of *Flock*, Freeman observes that concert attendees attend live music events because they "want to participate in a unique spontaneous musical experience and to share that experience with others," but that many concerts "seem more concerned with delivering a consistent product than with creating music in the moment."81 Glimmer and Flock serve as correctives to these product-oriented concerts. The social and musical aesthetics are linked through the establishment of environments focused on shared exploration of musicality. Within pieces like *Flock* and Glimmer, Freeman wants "the audience to feel connected to the musicians, the music and to each other, to discover new ways to be creative, and to realize the each performance is unique, in part, because of their contributions to it."82 The roughness and limitations that even the most skillfully realized real-time notation entail are simultaneously tools for achieving this goal and expressions of it. Freeman's audience survey confirms these goals. In addition to asking audience

⁸⁰ Freeman, "Glimmer for chamber orchestra and audience" 37.

⁸¹ Freeman, "Extreme Sight-Reading" 28.

⁸² Freeman and Godfrey 86.

members if they had fun and enjoyed the piece, Freeman asked the audience about their feelings of connectedness to each other, to the musicians, and to the music itself as well as whether they actively listened to the music, understood how they shaped it, and felt the performance would have been different without them.⁸³ Freeman's discussion of the survey makes it clear that he wants audience members to respond positively to all of these questions; audience interactivity in *Glimmer* and *Flock* conjoins social connection and musical creativity. As opposed to the distancing effect of technology in *Public Opinion Descends upon the Spectators*, Freeman's use of computer technology seeks to bring the performers, the audience, and the composer closer together.

While Freeman's focus on social and creative results of audience interactivity in the concert hall evokes Bourriaud and, even more strongly, Small, he retreats from broader implications of the practice. Discussing *Glimmer*, he is quite explicit in the limits of his intentions:

Glimmer is not a protest against current orchestral performance conventions. It is not a vision for the symphony hall of the future. It is not a marketing gimmick to draw younger audiences to classical music. It is merely an experiment in reshuffling the roles of composer, performer, and listener a little bit, so that they can have something more to do with each other, so that they can all be a part of the same moment.⁸⁴

⁸³ Freeman and Godfrey 95-96.

⁸⁴ Freeman, Jason. "Swooping the Orchestra..." *American Composers Orchestra*. N.p, 2005. Web. 25 Nov. 2010.

Indeed, this reluctance to accept audience interactivity as a concept counter to musical tradition is a theme of the composers in this chapter regardless of their other attitudes about audience interactivity. Adolphe creates audience-interactive works designed to nurture the concert hall tradition; Oliveros often frames her meditative approach to audience interactivity as practice to improve other listening and performing; many of the Fluxus artists balked at Maciunas' vision of the end of the artist; and Ashley describes *Public Opinion* as a representation of his experience of concert attendance. Small, Bourriaud, and others might be inclined to criticize these composers for not embracing more fully the revolutionary capabilities of audience interactivity. While such criticism may be well justified, audienceinteractive composers of many stripes do not feel compelled by it. While Bourriaud's relational artists might have severed historical ties with their predecessors in the visual arts, audience-interactive composers seem quite happy to view their work as an extension of, rather than as a break with, the works that preceded them in the concert hall.

Chapter V: A Portfolio of Original Audience-Interactive Compositions

1. Introduction

The pieces I composed for this dissertation explore much of the range of audience-interactive music intended for concert hall audiences. A variety of roles, mechanisms, groupings, and levels of audience awareness are represented, and the pieces also instantiate diverse social situations in their performances. This exploration, however, does not begin from scratch; it adds detail to an already well-drawn map. Many of the works directly respond to and were inspired by the audience-interactive works discussed in previous chapters. Similarly, the theories of Turino, Bourriaud, Small, Schechner, Caillois, and others inform the social aspects of the pieces. Perhaps most vitally, though, the works described below are a continuation and extension of my own audience-interactive practice. While the pieces aim to illustrate many of the concepts discussed within the dissertation, they are principally expressions of the interests, goals, and ideals that inspire me to write audience-interactive music.

2. Origins of my audience-interactive practice

Audience interactivity appeared early in compositional history. My initial exposure to experimental music and my initial attempts at composing in relationship to the Western art music tradition came in the context of a summer course in twentieth-century music that I attended at Duke University while I was in high school. My final project for the course was a piece, whose name and score have been lost to time,

that invited audience members to participate in a game of telephone in which rhythms performed on hand percussion were passed around a circle. Gradually, new instruments and new rhythms were introduced to produce overlap. The piece counted on audience members' lack of performance experience to generate variation and development of the patterns.

I returned to audience interactivity as an undergraduate at Columbia University. A course on Cage and the New York School inspired me to explore audience interactivity as a method of indeterminacy. The piece that resulted, "Best to wear your sweater," places audience members in the as-composer role by giving them control over the repetition of sections of music.¹ Audience members are asked to raise a hand to trigger the ensemble to progress to new material. The material for the work was based upon the chorus of Outkast's "ATLiens," which was selected for its suitability for looping, lyrical reference to hand-raising, and direct address of its audience as well as its aesthetic merit.²

I composed three more audience-interactive pieces during my undergraduate career.³ "I was looking back to see if you were looking back at me to see me looking back at you" offers the audience greater involvement than that available in "Best to wear your sweater." Over a stable ground, the ensemble performing "I was looking" performs material in response to cues from the audience and the environment. The

¹ See Appendix B for the score of "Best to Wear Your Sweater."

² Outkast. "ATLiens." ATLiens. LaFace. 1996.

³ See Appendix B for scores of all three pieces.

piece explores the boundary between the audience-as-score and audience-asperformer role. The materials triggered take the form of quotations from popular songs, onomatopoeic gestures, and freely composed material. All the triggered material and the ground share a single mode to provide cohesion. Welcome explores audience interactivity through electronics means, adds a visual component, and utilizes the transitional time and space that exists as the audience enters a venue. Audience members are asked to play a single key on a MIDI keyboard as they cross into the performance space. The pitch and velocity of their key presses manipulate a dense texture of sine waves and draw simple geometric graphics that are projected on screen. "And you remember the jingles used to go" combines acoustic and electronic sound and generates its interactivity through analysis of color data pulled from a video camera pointed at the audience. The material that the ensemble plays during the first portion of the piece is recorded. During the second and third sections, this material is played back as triggered by the color data derived from slowly panning over the audience with the camera. During the second section of the piece, the ensemble and the recorded sounds play simultaneously. During the third section, the ensemble mimes playing, only occasionally producing sound, while the recorded sounds play back.

Audience-interactive works continued to be a regular part of my compositional output in graduate school.⁴ I adapted "Better play the note you know," a text score specifying that each member of an ensemble improvise using only a single pitch, to

⁴ See Appendix B for the score of "Better play the note you know."

include the audience. I also further explored the liminal period of entry into the concert hall. Step in, Step out confronts randomly selected audience members with sounds of crowd reaction when they enter the performance space. These sounds range from raucous applause to concerted booing and may be processed or left unaltered. Cookie priming focuses on social, rather than aural, composition.

Audiences are confronted with a teddy bear implanted with a speaker who invites them to partake of cookies as they arrive in the venue. The piece responds to research studying the impact of mood on viewer evaluation of visual art. Unity Groove, composed as part of the Emergence Collective, invites audience members with laptops to attempt to move beeps generated by a stand-alone application into rhythmic and pitch unison. The piece focuses on the potential emergent properties of this interaction.

3. Portfolio

I composed five new works specifically for this dissertation. The first of these, *Three Pieces for Audience*, consists of three improvisational explorations of the brief, text-based form used in Fluxus Event scores and in *Deep Listening Pieces*. The second, *Loose Can(n)on*, provides detailed instructions for reading the audience as a score. The third, *Your Move*, gives the audience a particularly active role in crafting a musical conversation with the performers. The fourth piece, *11 Measurements*, uses

⁵ For Max/MSP patches and other documentation of *Step in, step out, Cookie priming,* and *Unity Groove*. please contact the author.

⁶ A full recording of *Unity Groove* is available on Ecosono's *Agents Against Agency* DVD, and a brief sample of a performance can be found here: http://www.youtube.com/watch?v=9ljhe4MaPmk

electronic hardware and software to create audience interactivity without the presence of human performers. The fifth piece, *Pollical Variations*, borrows its branching form from audience-interactive narrative. The pages that follow describe these five works logistically, musically, and socially. The scores to all five pieces can be found in Appendix A.

3.1 Three Pieces for Audience

"underscore"), Points, and Contact. Each of the scores provides instructions for improvisation involving an ensemble of any size and their audience, though the tasks allotted to the ensemble and audience vary from piece to piece. The pieces in the set are intended to stand alone rather than to function as movements of a whole. The pieces' notational form, improvisational quality, and flexibility recall both Fluxus Event scores and Oliveros' Deep Listening Pieces. Unlike Oliveros' work but in line with most Event scores, each of the Three Pieces does address performers and audience as distinct entities. Even when the performer and audience share tasks, as in "_", the performers receive additional instructions and are expected to guide the audience through the work. Unlike the Event scores but in line with Oliveros, the scores of Three Pieces do not privilege brevity and ambiguity. Each of the pieces fits on a single page, but explanatory notes head off confusion whenever possible.

Three Pieces for Audience also bears a relationship to Adolphe's and Freeman's works. As in Adolphe's and Freeman's audience-interactive works, the preservation

of some degree of distinction between the audience and the performers highlights the presence of *mimicry* in the audience's experience. The audience is offered the opportunity to play as if they were performers or composers, and the performers both ease their passage into this form of play and offer a model. *Three Pieces* also emphasizes musical creation as a shared act in way that evokes Adolphe, Freeman, and Oliveros; collaboration between the audience and the performers is central.

I composed *Three Pieces* with several aims in mind. Each of the pieces seeks to make participation facile, to emphasize that both audience and performer contributions are integral, and to establish a strong connection between performers and audience. Both " " and *Points* also inspire to generate a distinctive musical profile despite their openness, while *Contact* features stronger emphasis on the social aesthetic created. To encourage and facilitate collaboration and broad participation, each of the *Three Pieces* restricts itself to a few simple instructions conveyed to the audience. Elaboration and qualification of these instructions appears for the performers only. The mechanisms of all three pieces insure that the importance of both audience and performer roles is conveyed. The mechanism of each piece also connects the two groups. *Points* and *Contact* require an action involving both an audience member and a performer for sound to occur, while "_" offers both groups the same opportunity for participation. The musical profile of "_" is inherent in its instruction, while *Points* includes additional instructions for the performers that specify the outline of the piece.

3.1.1 "_" or *Underscore*

The audience and performers of "_" are all invited to make any sound that they wish provided that it is preceded by silence. A member of the ensemble extends this invitation to the audience and explains to them that simultaneous sounds need not be avoided; that sounds can be extended, dynamic, and non-continuous; and that all the participants determine the end of the piece by collectively choosing to remain silent. The score provides a few additional instructions for the ensemble. In addition to specifying that a member should explain the piece to the audience and invite their involvement, the score requests that a performer signal the end of the piece by thanking the audience and suggests that the ensemble model a few examples of interactions early in the performance for the audience. The score also relates that the instructions may be provided to the audience in printed or projected form and clarifies that the silence required by the instructions need be only an absence of performed sounds.

Since the audience chooses their sounds, chooses when to make their sounds, and performs the sounds themselves, they act both as performer and as composer. Thanks to the explanation provided before performance, the audience is also fully aware of its contribution. The piece's central instruction groups the audience together by its universality but demands that audience members make their choices and realize them alone. Simultaneous sound production is an appealing occurrence in the piece but a coincidental one (unless audience members spontaneously organize themselves). The simplicity and consistency of the mechanism of

interaction make the piece easy to understand and perform. The mechanism is also responsible for providing the work with a distinctive and predictable form despite the inclusiveness of its sound world. Regardless of the decisions made by its participants, "_" will always consists of a series of discrete sound events bracketed by silence.

The social experience entailed by " "most closely resembles that offered by the Deep Listening Pieces, though the leaderships roles implicit in Oliveros' work are made explicit in "." The score tasks the performers with explaining the piece, modeling possibilities, and confirming its conclusion. Significantly, these tasks are designed to facilitate audience involvement rather than to distinguish the performers from the audience. Both groups should feel equal responsibility for the musical result. Indeed, the intended social experience hinges upon audience members experiencing the piece as collaboration. While the consistency of the central instruction unifies the audience and the performers, the individual decision making required and the silence bracketing each event render every contribution discrete. Audience members become performers not only by producing sound but also by being heard. Though " "has much in common in with Turino's participatory field this isolated performance and the potential anxiety that it produces originate in the presentational field. Overcoming such anxiety is a vital part of the social aesthetic of the piece. In line with Schechner's definition of fun as occurring "when the energy released by an action is more than the anxiety, fear or effort spent either on making the action or on overcoming the obstacles inhibiting it," the piece seeks

to reward audience members brave enough to participate with an enjoyable, creative experience.⁷

3.1.2 *Points*

Points differs from "_" by more firmly separating the audience and the performers, reducing the compositional input of the audience, and presenting a more dynamic musical form. In *Points*, audience members are still invited to make any sound that they would like but they must restrict themselves to a single sound and produce it only when a performer (or "conductor" in the terminology of the score) points at them. The score provides the conductors, whose ideal number is determined by audience size, with specific instructions regarding the density, variety, and dynamics to be achieved by their pointing.

Through selecting their own sounds and making them audible, audience members participating in *Points* retain the as-performer and as-composer roles. Because the number of conductors and, therefore, the number of possible voices is determined by the size of the audience, the as-score role is also invoked. Grouping and awareness are both similar to "_". The audience is unified by the instruction they receive but required to carry out that instruction individually. The presence of multiple conductors does offer the possibility of subgroup identification, though conductors might overlap areas of the audience with their pointing. Audience awareness is again well established through pre-performance explanation, though

⁷ Schechner 236-237.

the full text of the score in not shared with the audience in this case. Audience members are aware that they will make sound, aware of what sound they will make, and aware of how they will be asked to make sound. They are unaware of when and for long how long they will make sound. The familiarity but potential ambiguity of the triggering mechanism takes advantage of this unawareness. While audience member will expect and recognize the pointing gesture, there will undoubtedly be occasional confusion regarding at exactly whom a conductor is pointing. The silences or dual soundings that result from these moments are welcome in the piece for the variation and levity they are likely to offer.

While "_" features a form determined by its mechanism of interaction, *Points* imposes a form on its proceedings. Conductors could well have been left to improvise freely with the palette of sounds offered by the audience. However, the establishment of a fixed form helps to guarantee directionality within the piece, to compensate for the invariable set of available sounds, and to provide a stable aural identity across performances. The establishment of directionality and compensation for the invariable sound world help to push the piece toward musical norms of form, structure, and aural interest in order to make the more accessible to a wide range of potential audience members. I suspect that preserving a certain proximity to musical convention helps audiences better understand and enjoy their own contributions to audience interactive works. The desire to maintain a stable aural identity, on the other hand, is a personal compositional goal intended to both distinguish the piece from others with substantial improvisational components and

demonstrate the ability of improvisation-based audience interactivity to produce an identifiable musical profile.

The social experience of *Points*, as in "_", focuses on collaboration. Though audience and performers assume separate roles, the two are intertwined. Without the cooperation of both sides, the piece would be silent; conductors have no sound to produce without the audience, and audience members have no opportunity to produce their sound without the conductors. The potential anxiety about performance present in " "also appears in *Points*, though it is modified in several ways. Most significantly, audience members have no choice about when they make sound. A point from a conductor thrusts them into performance, and in this context, even the decision to remain silent becomes a performative act. The absence of choice does not preclude audience members experiencing fun, as defined by Schechner, but it does externalize and concentrate the experience of overcoming fear and anxiety to participate. The potential for subgrouping in *Points* also raises the possibility of a good natured, agonistic relationship between audience groups under the sway of different conductors. Similarly, the conductors' focus on audience members who produce interesting or distinctive sounds, if recognized by the audience, introduces agôn.

3.1.3 *Contact*

In *Contact*, performers play only while in eye contact with a member of the audience. When eye contact is broken, a performer must cease playing and find

another audience member willing to resume eye contact before proceeding. What the performers play is left to their discretion, though the score offers a few options for deciding upon material. The performers may choose to inform the audience of their role before performing the piece but are not required to share the instructions.

As this description suggests, *Contact* departs from many of the elements that "_" and *Points* share. The piece's focus lies squarely on the social aesthetic that its mechanism of audience interactivity yields. This shift in focus places *Contact*, out of all of the *Three Pieces*, closest to the Event scores. However, *Contact* distinguishes itself from the majority of Event score by being very explicitly musical. *Contact* is intended for trained performers playing musical instruments. The social focus impacts the piece's musicality principally by leaving the task of material selection to the performers.

In performances for which the ensemble chooses not to inform the audience of their involvement, *Contact* begins as an audience-as-score piece. Given the pointed nature of the mechanism of interaction though, the audience is likely to quickly connect eye contact to performance. With this development of awareness, the piece moves into audience-as-composer territory. If the ensemble chooses to share their instructions with the audience, the piece begins as audience-as-composer. *Contact* shares with "_" and *Points* the combination of unification of audience via a universal mechanism of interaction and differentiation of the audience via discrete participation. The decision to avoid specifying musical material in *Contact* allows

the performers to focus their visual attention on establishing and maintaining eye contact; performers never need to look down at a score.

The social aesthetic of *Contact* is again centered on collaboration, but naturally, the experience is significantly colored by the intimacy of eye contact between performers and audience members. While "_" and *Points* spotlight individual contributions, the light shines much more brightly on individual audience members in *Contact*. The one-to-one connection established by a conductor gesturing to an audience member in *Points* lasts only for a moment, but the connections that occur throughout *Contact* can be much more extended. *Contact* challenges its audience through the potential discomfort of maintaining prolonged eye contact. However, eye contact also serves to personalize the performance and humanize the performer. Audience members willing to maintain eye contact will have little doubt about their impact on the piece, and the performer's active visual contact with the audience prevents the distanced, voyeuristic viewing that is typical of the concert hall audience's experience.

3.2 Loose Can(n)on

Loose Can(n)on presents a very literal realization of audience-as-score interactivity. The score provides instructions for performers to translate their perceptions of visibly ascertainable characteristics of an audience member into musical action. Performers enact the results of their assessments upon a steadily repeated note: assessment of gender influences the note's pitch; assessment of age influences the

tempo at which the note is repeated; assessment of attire influences timbre; and assessment of height influences dynamics. The performers read through all the audience members in the same order, but begin on different pitches and stagger their entrances to produce a loose canonic form. The other "loose cannon" in the title refers to the influence of awareness and its impact on the available audience roles. Though no announcement is made about the audience's involvement in the piece, the program note does explain the mechanism and by observing the performers' visual attention, the audience is likely to glean further clues about their participation. Audience members who become aware of their involvement in the piece can assume the as-composer role by becoming a "loose cannon" with respect to concert hall conventions. For example, an audience member might move from one seat to another in order to alter the score.

Like *Three Pieces for Audience*, Fluxus Event scores, and *Deep Listening Pieces*, *Loose Can(n)on* provides its performers with text-based instructions. Unlike these other pieces, *Loose Can(n)on's* instructions span several pages. This increased length results from a corresponding increase in notational specificity, which, in turn, is required by the assertion of a greater degree of compositional authority over traditional, well-established musical domains like pitch, tempo, and dynamics; improvisation is much less prevalent in *Loose Can(n)on. Loose Can(n)on* also distinguishes itself from these pieces by deemphasizing actions that occur during performance, like expression of audience frustration in *Shower II* and performer breathing in "Threshold Meditations," in favor of qualities, like height, gender, and

age, that are established outside the temporal and spatial confines of its performance and not alterable within them.

Loose Can(n)on also shares aspects of Freeman's Glimmer and Flock as well as Ashley's *Public Opinion Descends upon the Demonstrators*. In all four pieces, the audience is visually monitored and this visual monitoring determines significant aspects of the work. Again though, *Loose Can(n)on* distinguishes itself from its predecessors. While Freeman's pieces use a video camera and software analyzing the video feed to convert visual information about the audience into music, Loose Can(n)on entrusts the monitoring process to its human performers. Ashley's piece also features a human monitor, but Ashley camouflages the activity by isolating the monitor from the visual field of the performance. In contrast with Ashley's goal of "automatic performance," the monitoring in Loose Can(n)on is readily evident and is an important part of the social experience of the piece. Loose Can(n)on's monitoring process is also distinct from that of *Public Opinion* in its independence from audience action. Silent, still audiences of approximately equal size listening to Public Opinion might well hear identical versions of the piece, but similarly sedate audiences would be extremely unlikely to hear identical versions of *Loose Can(n)on*.

Of course, the audience qualities evaluated by the performers of the piece are more than simply resources for generating musical material. As qualities that are often quickly visually ascertainable, gender, age, height, and attire are amongst the primary attributes through which people are identified, categorized, and,

unfortunately, stereotyped. Loose Can(n)on aspires to redirect this process by associating these attributes with musical results. While the mappings acknowledge stereotypical associations, they do so in an attempt to undermine pejorative connotations by shifting these associations into musical language. For example, the stereotype of increasing age corresponding to decreasing mental and physical speed is troubling and damaging, but redirecting this association to connect increasing age with slower tempi acknowledges that age changes experience while also demonstrating the value to be found in these changes. Slower tempi are in no way less preferable than faster tempi; points across the full axis of tempo are valued equally for the effects they produce. Similarly, the piece's musical mappings value diversity and ambiguity for the variation they produce. A diverse audience will produce an active, varied piece, while a homogenous audience will hear a static, repetitive work. An intriguing side effect of the piece's mappings is that a recording of a performance also serves as an auditory census of the audience. The relevant qualities of each audience member could be reconstructed through listening to a recording.

The canonic form of *Loose Can(n)on* helps to convey the audience-interactive mechanism to the audience during the performance. While audience members are unlikely to derive the full mapping from their experience of the piece, they will have multiple chances to ascertain the connection between certain characteristics and certain musical results. The audience-interactive mechanism similarly informs the rest of the musical experience of the piece. The pitch world consists of four

tetratonic and pentatonic subsets of G major, which roughly outline a I-vi-V-I progression. The stable tonal center, the common progression, and the major key ease the tension created by the performers' visual assessment of each audience member. The repetition of material, focus on standard articulations and timbres, and the unlikelihood of extreme registers and dynamics also compensate for the visual tension. The steadiness and familiarity of these musical elements recalls Freeman's *Glimmer*, in which subtle, gentle music accompanied lively, competitive audience interaction. In contrast, the rhythmic aspects of the piece heighten tension though the persistent pulsation of each part and the presence of multiple, simultaneous tempi.

As with *Contact*, the experience of being watched is central to *Loose Can(n)on*.

Conditions in the performance space, such as lighting and performer positioning, both facilitate performers seeing their audience clearly and emphasize to the audience that they are being watched. However, the performer's gaze in *Loose Can(n)on* contrasts with the intimacy required by *Contact*. In an inversion of the standard concert hall dynamic, the performer assesses the audience. Additionally, audience members, as in *Public Opinion*, have no choice regarding their participation. The experience of being subject to involuntary visual assessment by the performers is likely to produce an experience even less comfortable than that of *Contact* for many audience members. *Loose Can(n)on* emphasizes *ilinx* offered via this visual scrutiny from the performers, disjunction between the musical and social

experiences, and the convention-violating opportunities for moving from the asscore role to the as-composer role.

3.3 Your Move

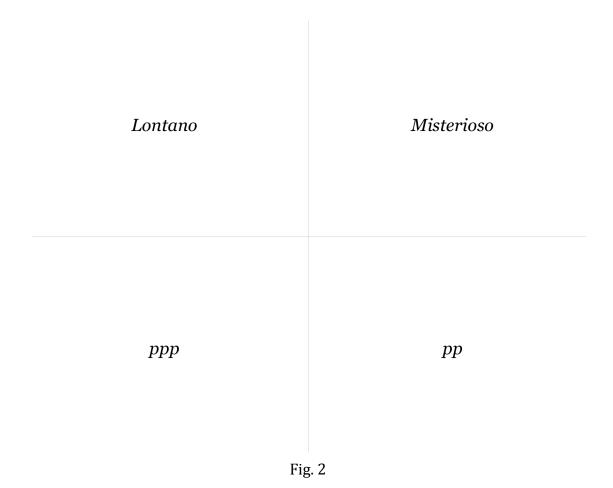
Your Move places the audience in a physically active version of as-composer interactivity, and of the pieces included in the dissertation, it requires the furthest deviation from the spatial conventions of the concert hall. Audience members attending the piece receive cards upon which musical instructions are written. The instructions provide either materials, which range from traditional staff notation to prompts that will be specific to each performer (see Fig. 1), or modifiers, which specify tempo, mood, dynamics, or articulation (see Fig. 2). Audience members are invited to place these cards on empty music stands located in front of performers who are spread throughout the performance space. Performers then realize these instructions, whether in isolation or in combination with other cards. Whenever they like, audience members are free to move their cards to a new stand.

Please play one of your favorite melodies.

Please play one of the first things you learned on your instrument.

Fig. 1

The reconfiguration of the concert hall required by *Your Move* resembles Oliveros' move out of the concert hall in *Deep Listening Pieces* and Freeman's reworking of the concert hall in *Flock*. The identification between performer and audience member produced by the use of individual cards also evokes Freeman's *Glimmer*, though *Glimmer* associates sections of the audience with sections of the ensemble rather than the more discrete relationship evinced by *Your Move*. The performers' direct responses to audience prompts also recalls Williams' *Duet for Performer and Audience*.



The mechanism of audience interactivity featured in *Your Move* has several sonic effects. First, the ensemble is spatialized. The performers are stationed around rather than in front of the audience, and the audience's movement through the performance space will shape their sonic experience. The mechanism also makes audience sound inevitable. Audience members must move through the space to participate, and they will produce sound in doing so. These sounds are not emphasized in the piece but neither are they suppressed or discouraged.

Of course, the cards themselves are key to the musical profile of the piece. The materials cards further subdivide into three categories: prompts, drones, and

traditional notation. The drones and traditional notation establish a pitch space built on C major pentatonic. The traditional notation also offers various meters. The prompts ask the performer to respond with materials specific to their musical experiences and their instruments. For example, a performer might receive a card asking him to play his favorite melody or something in the lowest register of his instrument. These prompts inject variety into the musical materials. Performers generally transpose their responses to prompts into keys related to C major, but they may preserve the original pitch when desirable. The modifier cards fit into four categories: tempo, mood, dynamics, and articulation. These cards employ typical musical vocabulary for these categories and ensure that a wide range of tempi, moods, dynamics, and articulations will be present throughout the piece. If a performer's stand contains only modifier cards, she improvises material to which she applies the quality requested by the card. When performers receive contradictory cards, they do their best to acknowledge all of the conflicting instructions.

The confrontational and uncomfortable aspects of *Loose Can(n)on* and *Contact* are absent from *Your Move*. Audience members do face some of the performance-related anxiety present in "_" and *Points*, but the removal of the as-performer role reduces this anxiety. Additionally, the compositional decisions of each audience member are realized simultaneously throughout the piece; rarely will any audience member's impact on the piece be ascertainable in isolation to all other listeners.

Despite the reduction of aurally isolated interaction, audience members should have

no doubt about their contribution to the piece. The mechanism of the work is thoroughly explained, and audience members immediately are able to hear the effect of placing their cards on the performers' stands. Indeed, each audience member gains a particular musical identity through their card, which performers and other audience members may come to associate with them. This musical identity, the directness of the interaction, and the personal quality of several of the prompts lend the piece a conversational form. Significantly, this conversation is not only between audience members and performers: it may also involve communication among audience members as they compare cards and explore the interactions of their cards. The comfortable, conversational interaction offered by the piece connects well with Bourriaud's and Small's visions of audience interactivity. The feedback from audience to performers that Small finds so lacking in concert hall performance is decidedly present in Your Move. Indeed, Your Move echoes the welcoming inclusivity of participatory performance, as defined by Turino, despite preserving an easily recognizable division between performer and audience.

3.4 11 Measurements

While all the preceding pieces explore interaction between the audience and the performers, 11 Measurements eschews human performers entirely. All the sounds of the piece are produced electronically, and the audience interaction, which can take as-performer, as-composer, and as-score forms, occurs through a set of sensors that detect information about the audience. The 11 measurements of the title

include measurements from these sensors as well as measurements related the circumstances of the performance that are shared by but not determined by the audience. Five of the measurements come from sensors, which detect motion (via infrared), overhead light, forward light, temperature, and humidity. Four of the measurements arise from contact microphones placed within the audience. The final two measurements are the date of the performance and the precise time at which the performance begins. Through an Arduino microcontroller and an audio interface, these measurements enter Max/MSP (see Figs. 3 and 4). Within the software, the measurements cumulatively shape pitch, dynamics, timbre, and duration. The piece may be programmed as a standard part of a concert or may overlap with audience entry or return from intermission.

11 Measurements comes very close to realizing Ashley's goal of automatic audience interactivity. The human sound controller required by *Public Opinion* is unnecessary for 11 Measurements. Non-audience human contribution is requisite only to start the piece; the sensors and software determine and realize all other aspects. Of course, the absence of a human monitor does constrain the types of activities to which the piece responds. Any sufficient audience movement will trip the infrared sensor or be registered by the contact microphones. The sensors cannot assess the intentionality and subtlety of action looked for in Ashley's piece.

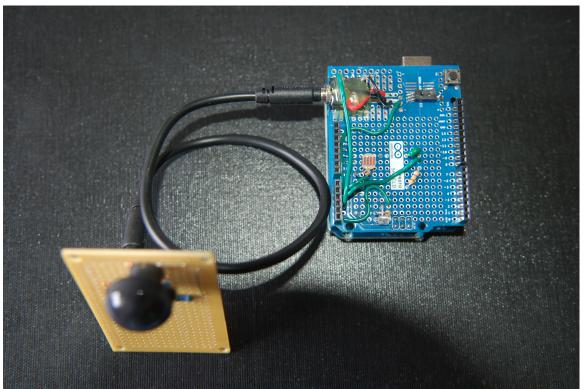


Fig. 3

The inclusion of environmental factors in 11 Measurements also recalls works like "All or Nothing" and "Country Meditation" from the Deep Listening Pieces. But while Oliveros' pieces tend to focus on the natural environment, 11 Measurements makes no distinction, though in indoor spaces the audience will more significantly determine some measurements. Indeed, 11 Measurements might well be considered a sonification of the environment in which it is performed with the audience functioning as a vital, but not dominant part of this environment. The infrared sensor and contact microphones function only with audience input; however, the humidity, temperature, and forward light sensors are only partially influenced by the audience, and the overhead light sensor, date, and time are unaffected by the audience. The piece, in fact, can be performed without any audience present, though the absence of the audience will produce a far less active musical result.

Significantly, combinations of measurements produce the majority of the musical results, and this composite construction further blends audience and environmental contributions.

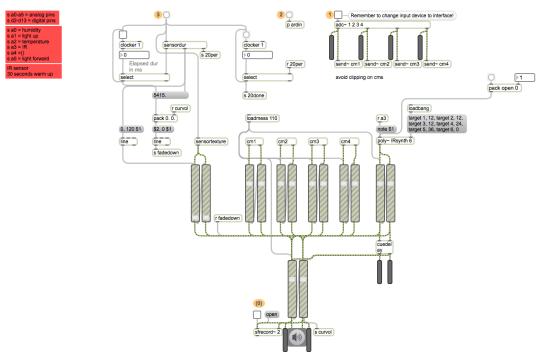


Fig. 4

With or without audience involvement, the piece features a drone produced by an oscillator bank. The forward light sensor determines the pitch of this drone while the date shapes its density and the humidity alters the timbre. With audience involvement, the drone may also be subject to vibrato shaped by a combination of humidity and temperature, initiated by a certain number of infrared sensor events, and lasting for a duration determined by the year of the performance. The time at which the performance is initiated sets duration of this drone and the performance as a whole.

The audience triggers the rest of the musical events in the piece. Activation of the infrared sensor produces synthesized tones. The number of times the sensor has been tripped shapes the timbre, and a combination of temperature, humidity, and the two light sensors shape the envelope and duration of these tones. The forward light sensor, which establishes the pitch of the drone, also shapes the pitch of these events, though a series of weighted probability tables gradually guide the pitch world through a V-IV-I progression, with the drone establishing the tonic, over the course of the piece. The infrared sensor's contribution is also subject to delay triggered by activation of the first two contact microphones. All four contact microphones transmit processed versions of the input they receive. The first two microphones travel through comb filters with delay designed to impose pitch in line with the pitches of the synthesized responses to the infrared sensor. Humidity, the overhead light sensor, and the triggering of the other two contact microphones establish the feedforward and feedback parameters of these filters while temperature conditions their envelope. The third and fourth contact microphones add a rhythmic component to the piece by presenting delayed versions of their inputs. Temperature, forward light, and overhead light determine delay time and feedback with the number of times that the infrared sensor has been triggered providing an additional variable. Input into these two microphones also runs through a high-pass filter with forward light determining the filter's cutoff frequency and humidity establishing its resonance.

The absence of human performers is key to the social aesthetic of 11 Measurements. Audience members lose the visual cues regarding their involvement that the other pieces described in this chapter and even *Public Opinion* provide. Audiences must determine their contribution to the piece exclusively through their own exploration of the system and the minimal clue provided by the piece's program note. Additionally, the system's ability to produce music without audience input can complicate the arrival of awareness and, with it, the transition from as-score to ascomposer interactivity. Despite the difficulties in establishing awareness, the absence of performers does remove some of the anxiety surrounding performance and encourage audiences, freed from the presence of professionals, to explore the system. Similarly, the confrontational attitude of *Public Opinion* is not present in 11 *Measurements.* The pitch world, in particular, places the audience in familiar musical territory, and the synthesized and filtered timbres will not be foreign to audiences familiar with electronic music. The stability of the drone also contrasts with the potentially extensive periods of silence that contribute to the tension of Public Opinion.

However, 11 Measurements does include some complications that separate it from idyllic presentations of audience interactivity criticized by Bishop and Foster.

Specifically, audience-interactive resources are not equally distributed in the piece.

The infrared sensor has a limited range, which makes it likely to cover only a small portion of the audience. The contact microphones, too, are much more sensitive to vibrations originating near them. Audience members positioned near a contact

microphone may struggle to avoid contributing sound, while audience members positioned further away may struggle to contribute sound at all. Furthermore, the interactions between different sensors make contributions rarely predictable and introduce an *alea*-based element. *11 Measurements* offers its audience a thoroughly collaborative experience in which they are the only participants but also an experience in which collaboration is tinted by the fact that audience members receive quite varying levels of possible contribution.

3.5 Pollical Variations

Pollical Variations utilizes branching, which is one of the most prevalent forms in audience-interactive narrative. In branching narratives, according to Riedl and Young, "many points exist in the story at which a user action or decision alters the way a narrative unfolds or ends." The speed with which these branches can multiply is useful for the variety and differentiation that it can yield but also potentially problematic for the ratio of created work to experienced work that it produces. In Pollical Variations, there are seven points at which audience members express their desire for similar or different material with a thumbs up or a thumbs down. The performer, a solo classical guitarist, assesses the collective will of the audience and proceeds down one of several paths according to the pervasiveness of the audience's desire for similar or different material (see Fig. 5). The score is

⁸ Riedl, Mark O. and R. Michael Young. "From Linear Story Generation to Branching Story Graphs." *IEEE Computer Graphics and Applications* 26.3 (May/June 2006) Web. 8 Jan. 2011: 24.

<u>Cell</u>	Incoming	Outgoing (S+, S, N, D, D+)
A1	N/A	B1, B2, B3, B4, B5
B1	A1(S+)	C1, C2, C3, C4, C5
B2	A1(S)	C2, C3, C4, C5, C6
В3	A1(N)	C3, C4, C5, C6, C7
В4	A1(D)	C4, C5, C6, C7, C8
B5	A1(D+)	C5, C6, C7, C8, C1
C1	B1(S+), B5(D+)	D1, D2, D3, D4, D5
C2	B1(S), B2(S+)	D2, D3, D4, D5, D6
C3	B1(N), B2(S), B3(S+)	D3, D4, D5, D6, D7
C4	B1(D), B2(N), B3(S), B4(S+)	D4, D5, D6, D7, D8
C5	B1(D+), B2(D), B3(N), B4(S), B5(S+)	D5, D6, D7, D8, D9
C6	B2(D+), B3(D), B4(N), B5(S)	D6, D7, D8, D9, D10
C7	B3(D+), B4(D), B5(N)	D7, D8, D9, D10, D11
C8	B4(D+), B5(D)	D8, D9, D10, D11, D1
D1	C1(S+), C8(D+); D6(S)	E1, E2, D6, E4, E5
D2	C1(S), C2(S+); D6(S+)	E2, E3, D6, E5, E6
D3	C1(N), C2(S), C3(S+)	E3, E4, D6, E6, E7
D4	C1(D), C2(N), C3(S), C4(S+)	E4, E5, D6, E7, E8
D5	C1(D+), C2(D), C3(N), C4(S), C5(S+)	E5, E6, D6, E8, E9
D6	C2(D+), C3(D), C4(N), C5(S), C6(S+); D1-5,7-11(N)	D2, D1, D*, D11, D10
D7	C3(D+), C4(D), C5(N), C6(S), C7(S+)	E9, E8, D6, E6, E5
D8	C4(D+), C5(D), C6(N), C7(S), C8(S+)	E8, E7, D6, E5, E4
D9	C5(D+), C6(D), C7(N), C8(S)	E7, E6, D6, E4, E3
D10	C6(D+), C7(D), C8(N); D6(D+)	E6, E5, D6, E3, E2
D11	C7(D+), C8(D); D6(D)	E5, E4, D6, E2, E1

Fig. 5⁹

displayed dynamically using a MIDI foot controller, a Max/MSP/Jitter patch, and a computer monitor or laptop screen.

Structurally, *Pollical Variations* resembles certain varieties of open-score work. In his "Extreme Sight-Reading, Mediated Expression, and Audience Participation," Freeman cites Earle Brown's *Available Forms I* and *Calder Piece* along with Stockhausen's *Klavierstück XI* as examples of works in which performers move through materials in an unpredictable order. Freeman's *Glimmer* and *Flock* extend this principle by presenting the performers with dynamically generated materials. *Pollical Variations*, however, retains the Brown and Stockhausen approach of

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⁹ The full chart is available in the score.

¹⁰ 27.

reconfiguring fixed material, though *Pollical Variations* achieves this reconfiguration through audience interactivity. While fixed material limits the responsiveness of the piece to audience interaction, it facilitates performer rehearsal and reduces the need for a performer comfortable with improvisation. Accordingly, *Pollical Variations* uses material idiomatic to the classical guitar rather than relying on improvisation. In this respect, the piece resembles Adolphe's audience-interactive compositions, and the piece shares with Adolphe's work a desire to inspire critical, active listening and to encourage future engagement with Western art music.

The use of idiomatic material also has the advantage of giving the audience familiar footing upon which they can ground their preference for similar or different material. In particular, the piece's opening theme is designed to present a clear musical statement for the audience to assess (see Fig. 6). The material selected for the piece is also designed to serve a few other functions. While the performer is determining the audience's preference at branching points, he must look up and scan the audience. To accommodate this action, the performer repeats a two-measure phrase. The thematic material of the piece makes this repetition noticeable, but not foreign to the rest of the work's musical language. The piece's form also confronts the performer with unpredictable transitions. While the repeated sections of the work may be used to grant the performer time to look over the selected upcoming material, virtuosity is constrained within the piece to avoid overwhelming the performer with challenges.

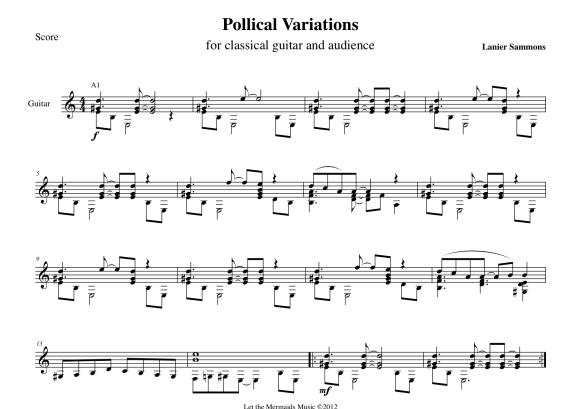


Fig. 6

Of course, the form of *Pollical Variations* also demands that its materials clearly portray similarity and difference. While standard musicological thought often emphasizes motivic and thematic information as the primary source of musical similarity, literature on listener perception paints a broader picture. In their "Motivic Structure and the Perception of Similarity," Alexandra Lamont and Nicola Dibben present a somewhat disheartening, though not entirely surprising insight into audience perception of similarity. The participants in their study overwhelming relied on "surface" attributes like dynamics, texture, and tempo to ascertain similarity. "Deeper" relationships based on motivic and thematic information proved of little use even to participants who had received a substantial

amount of musical training. 11 Emilios Cambouropoulos also offers several points for consideration in his "How Similar Is Similar?" Cambouropoulos proposes a definition of the "musical surface" that takes musical streams as the most basic perceptual unit, argues against similarity thresholds by emphasizing the contextual nature of similarity, and reinforces the connection between similarity and categorization.¹² His work demands that branching paths in *Pollical Variations* evoke similarity and difference on the stream level (rather than that of the note), respond to musical context (both of the piece as a whole and within its constituent parts) in construing similarity, and consider the linkage between similar or contrasting sections and the category formations they suggest to the audience. Ultimately, Pollical Variations does not forsake motivic and thematic constructions of similarity and difference, but the piece makes sure to couple them with surface level attributes to convey the strongest expressions of similarity and difference. In particular, changes in dynamics, tempo, texture, and key are used as markers of difference in the piece.

Socially, *Pollical Variations* focuses on inspiring attentive, critical listening and giving the audience compositional authority to shape the piece according to their listening. The piece also enacts a process of social negotiation that, as in *11 Measurements*, depicts a more complicated version of the democratic process

¹¹ Lamont, Alexandra and Nicola Dibben. "Motivic Structure and the Perception of Similarity." *Music Perception* 18.3 (2001). Web. 22 Sept. 2011: 250-264.

¹² Cambouropoulos, Emilios. "How similar is similar?" *Musicæ Scientiæ* Discussion Forum 4B (2009). Web. 26 Sept. 2011: 9-12.

represented in the piece's audience interactivity. Audiences who continually present an evenly divided set of preferences will proceed exclusively down a neutral path. While this neutral path is composed to present an appealing musical experience, audiences may well wish to hear greater similarity or difference over the course of the piece. Audience members wishing for this more diverse path find themselves forced to forsake their initial preferences in order to push the piece in new directions. Indeed, two sections of the piece specifically react to audiences stuck on neutral responses. Cell D6 returns to the cell that precedes it if audiences remain neutral, and it redirects to more remote outcomes once the audience avoids a neutral response. Cell E5 also redirects the music to less probably outcomes, though rather than create a loop based on neutral responses, it takes similarity to its logical end by repeating itself when audiences overwhelmingly request similar material.

By restricting the audience to the as-composer role and relying on collective decision making, *Pollical Variations* presents audience interactivity with minimal pressure on the audience. Audience members must visually and publically express their preference in order to participate, but this expression is voluntary, achieved through a familiar gesture, and occurs simultaneously with the rest of the audience. Through its low-pressure audience interactivity, its idiomatic music, and its maintenance of many of the conventions of concert hall performance, *Pollical Variations* presents an accessible gateway to audience interactivity focusing on

mimicry of the composer's role but also offering some wrinkles in its democratic compositional process.

4. Considering my own rhetorics of audience interactivity

As a composer of audience-interactive music, I am also engaged in my own rhetorical justifications for and explanations of audience-interactive practice. I strive, in line with Sutton-Smith's attitude toward his rhetorics of play, to value the variability of rhetorics of audience interactivity. Nonetheless, certain rhetorics do appeal more strongly to me and do more directly inform my composition. Of the composers surveyed in Chapter IV, my rhetorical leanings place me closest to Jason Freeman and his dual focus on the rhetoric of enjoyment and the rhetoric of social aesthetics. As is the case for Freeman, audience enjoyment is regularly a priority in my works. Even in pieces that entail some discomfort for the audience, as in *Contact*, or some confrontation of the audience, as through the unequal distribution of resources in 11 Measurements, I hope that the discomfort and confrontation entailed lead to an aesthetic and social experience that is ultimately satisfying and pleasurable. Also in line with Freeman, I emphasize social space and shared creation in my audience-interactive work. Works like Three Audience Pieces, Your Move, and Pollical Variations are especially concerned with forging links between performers and audiences so that audiences both feel they are a vital part of the realization of the piece and acknowledge performers as partners in creation rather than tools for experiencing music. I share with Freeman the use of musical aesthetics designed to foster these goals, and the presence of familiar harmonic

progressions in *Loose Can(n)on* and *11 Measurements* and of idiomatic material in *Pollical Variations* attest to this approach. Accessibility does not solely dictate the musical language of any of these five pieces, but it remains a constant consideration.

Other rhetorics, of course, appear in my works. As the connection to Adolphe's music in *Pollical Variations* suggests, I do value the educational possibilities of audience interactivity, and I hope that audience interactivity can serve as method of developing audiences for new music of all types. While the rhetoric of ideology does not undergird my audience-interactive work to the extent that it does for the composers of MEV or many of the Fluxus composers, ideological considerations do appear in my work, too. I am especially attuned to Bishop's and Foster's criticisms of rosiness with which audience interactivity often depicts democracy and participatory experience. Approaches like providing an unequal distribution of audience-interactive resources in 11 Measurements and pushing audiences to vote cohesively despite their preferences in *Pollical Variations* attempt to illustrate the complexities and difficulties of the democratic model. I am also intrigued by the possibilities for social commentary inherent in audience interactivity, and I hope that Loose Can(n)on's reconfiguring of stereotypes and valuing of diversity might resonate outside its performances.

My approach to composing audience-interactive music departs from the composers considered in Chapter IV most strongly through my emphasis on the rhetoric of musical aesthetics. For the composers who do engage in language that evokes this

rhetoric, it is often a firmly secondary or tertiary consideration in their discourse. However, the musical possibilities of audience interactivity were some of the strongest motivations for my initial engagement with the practice and are some of the strongest reasons that I continue to find audience interactivity a compelling compositional approach. I value the openness that results from audience-interactive structures. I appreciate hearing the musical decisions made by audiences, and I enjoy the possibility of being surprised by my own work. Perhaps most importantly, I relish the compositional challenges that arise from incorporating audience-interactive mechanisms, such as crafting a brief text score that manages to establish a distinctive, consistent musical shape or writing a musical phrase that naturally flows from five possible preceding phrases and into five possible succeeding phrases.

As I continue exploring audience-interactive practice, I suspect and hope that my own rhetoric of audience interactivity will change. I also hope that I can begin to answer potential problems posed by audience interactivity. For instance, audience-interactive pieces can, in the manner of participatory traditions, suppress virtuosity and fail to engage the skills that performers trained in the Western art music tradition most prize. While audience-interactive performance entails its own set of virtuosic abilities, audience interactivity should not disenfranchise its performers through its efforts to enfranchise its audiences. I hope that my audience-interactive works can point toward a social and musical aesthetic that engages performers talents well and avoids turning them into musical toys subject to audience whim.

Negotiating this balance demands further study of the performer experience of audience interactivity.

Just as unconsidered audience interactivity risks alienating performers, audience-interactive works often exclude individuals with disabilities or developmental differences. While musical experience already privileges those without hearing impairments, the status of music as an auditory art form is at least well established; individuals with hearing impairments would be unlikely to attend a concert and be surprised by its auditory focus. Audience interactivity, however, often confronts audiences with unexpected physical requirements that deny audience members with disabilities or developmental differences the chance to participate. The works presented in this dissertation strive to avoid exclusionary mechanisms of audience interactivity and to suggest methods of facilitating participation where disabilities or developmental differences pose an obstacle. Other audience-interactive works, however, rarely take the same measures. I hope that these five pieces and my subsequent audience-interactive compositions can offer a model for insuring that mechanisms meant to engender participation do not produce exclusion.

Audience interactive practice might also benefit from future empirical research. As discussed in Chapter III and mentioned by Freeman, the impact of engaging in audience interactivity upon musical listening is difficult to intuitively assess. With a better understanding of how the listening experience is altered by participation, composers can more successfully craft pieces that succeed both socially and

aesthetically. Relatedly, audience interactive works must be situated in relationship to the emotional and experiential effects that non-audience-interactive music provides its listeners. John Sloboda's research demonstrates the ability of nonaudience-interactive music to convey emotions of "enjoyment," "wonder/surprise," and "sadness" and to evince emotional change as well as the "intensification or release of existing emotions."13 Whether audience-interactive music achieves the same range of expression, operates within a narrower range, or expands the possibilities is an open question. Sloboda also finds that positive emotional experiences are more prevalent in musical situations when the listener feels relaxed and free from threats.¹⁴ The tendency of audience-interactive works to transfer some presentational performance pressure to the audience would seem to predispose audience-interactive music to providing negative emotional experiences. Nonetheless, creators and receivers of audience-interactive pieces do widely report a range of positive reactions to the experience. This contradiction suggests that musical experience in the context of audience interactivity functions differently than in its absence and that the study of music cognition, as well as the composition of audience-interactive music, could learn much from further investigation.

5. Conclusion

While audience interactivity remains a largely unfamiliar experience for concert hall audiences and performers alike, the practice appears to be growing and maturing.

¹³ Sloboda, John A. "Empirical Studies of Emotional Response to Music." *Cognitive Bases of Musical Communication*. Ed. Mari Riess Jones and Susan Holleran (Washington, D.C.: American Psychological Association, 1992): 34-35.

¹⁴ Sloboda 38-39.

As evidenced by the works analyzed in Chapter IV, composers in the past fifty years have turned to audience interactivity for a variety of purposes. The stature of the Fluxus movement and composers like Pauline Oliveros and Robert Ashley positions audience-interactive pieces as a part of the canon of twentieth-century music. The works of younger composers like Bruce Adolphe and Jason Freeman also demonstrate that audience interactivity has expanded beyond its status-quo challenging roots; audience interactivity today can be used just as easily to introduce students to classical music or to entertain adventurous audiences.

With the growing prevalence of audience interactivity and its enshrinement within the traditions of Western art music, the practice faces a crossroads. Theorists like Bourriaud, Small, and Schechner offer three useful views of the utility and meaning of audience interactivity. These views demand acknowledgement from scholars. However, their theories have not emerged specifically to address audience-interactive music. If they are to help steer audience-interactive music away from dead ends, they require critique, development, fusion, and expansion. While composers of audience-interactive music currently engage in a variety of rhetorics to explain and justify their incorporation of audience-interactive mechanisms, the practice faces a choice between establishing a regulative concept or preserving and growing its diversity. While a regulative concept can help a musical practice achieve perch and facilitate fluid utilization, pinning down audience-interactive music would unnecessarily constraint its musical, social, and expressive potential. This

to head off this process and preserve audience interactivity as an activity, like play, capable of accommodating an array of rhetorics that facilitate diverse methods and meanings across the practice.

As a scholar, I can pursue this goal through analytical approaches that acknowledge both auditory and social components, through continuing to explore the relationship of theoretical and empirical work in other fields to audience interactivity, and through drawing attention to works that illustrate the range of logistical and expressive possibilities of audience interactivity. As a composer, emphasizing and preserving the diversity of audience interactivity is more complicated. Just as an audience member participating in *Grassroots 2008* might need to vote against their political beliefs if they seek to consciously impact the musical results of the piece, a composer interested in countering the formation of a regulative concept might well be forced to write music counter to his compositional values. Naturally, the consequences of this compromise of values are more significant and longer lasting than a misdirected vote in *Grassroots 2008*.

So far, this compromise has not been one I am willing to make, and the pieces composed for this dissertation distinctly embody my own rhetorical, social, and musical preferences. As 11 Measurements' revision of Public Opinion Descends upon the Demonstrators suggests, confrontational forms of audience-interactivity lack appeal for me as a composer, despite their analytical interest. Three Pieces for Audience and Loose Can(n)on do place audiences in situations that are likely to begin

with discomfort, but they do so with the goal of allowing the audience to overcome anxiety and discomfort to have a satisfying, fulfilling experience of musical creativity. Also, works that harness audience interactivity principally for orchestrational power, like Ite, angeli veloces and Concertino for Cellular Phones and *Orchestra*, are unlikely to appear in my compositional oeuvre. While the impact of a large audience performing together is undeniable, I aim to make audience interactivity an integral part of compositions in which I turn to it. While the orchestrational approach does carry its own compositional challenges. I particularly value the type of challenges posed by works like *Your Move* and *Pollical Variations* in which audience interaction demands that I solve multilayered musical puzzles. Of course, works that step further beyond the congregational singing model of audience interactivity have the additional benefit of providing further confirmation of the versatility of the approach. However, I suspect that my composition of audience-interactive music will always be guided first by my compositional goals and only secondarily, if at all, by my goals for audience interactivity as a practice. Indeed, Blitzstein's "ideal picture of a composer and his music in vital traffic with the public" requires that audience-interactive music emerge from priorities arranged thusly. Audience-interactive music succeeds in being full of possibility precisely because composers bring a wealth of possibility to it. As is the case with any compositional approach, the greatest argument that I, or any composer, can make for audience interactivity is to create inspired, well crafted, and well considered music using its resources.

Three Pieces for Audiences

for ensemble and audience

Lanier Sammons

Three Pieces for Audience Composed 2010-2012 in Charlottesville, VA and Santa Cruz, CA © 2010-2012 Let the Mermaids Music

PROGRAM NOTE:

Each of the *Three Pieces for Audience* explores audience-interactive improvisation built around one simple constraint.

PERFORMANCE INSTRUCTIONS: Three Pieces for Audience consists of:

"_" (to be pronounced "underscore")

Points

Contact

While these three pieces are collected here, they are independent works. They should note be performed in immediate succession as movements of a single piece, though more than one might be performed on a single program.

Performance notes specific to each piece appear below with the relevant score.

COMPOSER BIO:

Lanier Sammons is a composer whose music often explores ideas like audience interactivity, improvisation, the intersection of popular and classical musics, and the pairing of electronic and acoustic sound. His works have been featured recently at the Spark Festival, SEAMUS, the SCI Student National Conference, and on EcoSono's *Agents Against Agency* DVD release. Ensembles such as the Talujon Percussion Quartet, counter)induction, the Da Capo Chamber Players, and Rêlache have premiered his pieces. Lanier is currently pursuing a Ph.D. in composition at the University of Virginia, where his dissertation examines audience interactivity and the concert hall audience. He has studied composition with Bonnie Miksch, Arthur Kampela, Brad Garton, Joseph Dubiel, George Edwards, Ted Coffey, Judith Shatin, and Matthew Burtner.

For further information, please visit laniersammons.com.

"" —

(to be pronounced "underscore") for ensemble and audience composed by Lanier Sammons on June 30, 2010

Any ensemble member or audience member may make any sound of any type and any duration at any time – provided the sound is immediately preceded by silence.

Sounds initiated simultaneously should not be curtailed. Again, the only requirement is that silence *precedes* the initiation of a sound.

The sounds selected need not be static or continuous. However, performers of non-continuous sounds should be prepared to be interrupted during pauses.

The piece ends by collective decision to remain silent.

Performance notes:

- Before the piece begins, a member of the ensemble should read the score to the audience and invite them to participate. Whoever addresses the audience should feel free to elaborate on the directions and/or take questions. This person should also confirm the end of the piece by thanking the audience.
- The score may also be printed in the program or projected on stage.
- "Silence" should be interpreted here in a relative sense. Absolute silence in not necessary just an absence of sounds being *performed*.
- The ensemble may want to model a few possible interactions at the beginning of the piece to spark audience involvement. Feel free to use resources other than just your instruments to produce sounds.

Points

for audience and conductors composed by Lanier Sammons on November 18, 2011

Audience members are instructed to select a sound that they would like to make and to produce that sound when pointed at by a conductor. They should be given a chance to collectively practice their selected sounds.

The number of conductors should be sufficient so that there is a conductor able to point to every audience member without moving substantially.

Conductors should begin the piece by rapidly exploring all the sounds provided by their audience members. Next conductors should gradually reduce the texture and focus on audience members producing particularly interesting or distinctive sounds. For the final section of the piece, the conductors should dramatically crescendo before ending abruptly.

Performance notes:

- Conductors should not forget that they have two hands!
- Conductors may use batons or similar items for pointing in lieu of fingers
- Conductors may agree upon an approximate duration or allow the piece to unfold freely. Stopwatches or other sorts of timers should not be used, however.
- The sounds that audience members produce need not be vocal, and this clarification may be added to the introduction of the piece.
- With a small enough audience, a single conductor may be sufficient, though having at least two conductors is preferable.

Contact

for audience and any number of performers composed by Lanier Sammons
Spring 2012

Play only while maintaining eye contact with an audience member. If either party disengages, cease playing and scan the audience for a new partner. Any material is permissible.

Performance notes:

- The audience need not be informed of their involvement.
- Lighting conditions should facilitate viewing the audience. House lights may need to be left on.
- Brief blinking is permitted if it is clear that neither party intends to be disengaging. Longer closures of eyelids should be considered breaking eye contact.
- Duration may be specified or determined in the course of performance. A performer can indicate the end of their contribution to the performance by looking down.
- The ensemble may coordinate the material they will play, but coordination is not required.
- Improvisation could be geared toward the expression and demeanor of the audience member.
- An ensemble might play a piece in their repertoire and either only progress while eye contact is maintained or progress normally but only play while maintaining eye contact. This piece, of course, would need to be memorized to enable eye contact to be sustained.

Loose Can(n)on

For four or more pitched instruments

Lanier Sammons

Loose Can(n)on for four or more instruments Lanier Sammons Composed Winter – Spring 2012 in Santa Cruz, CA © 2012 Let the Mermaids Music

PROGRAM NOTE:

In *Loose Can(n)on*, the audience becomes the score. The performers translate visible characteristics of their audience into the materials of the piece. The title refers both to the form this process takes (a "loose canon") and to the audience's ability to alter the unfolding of this procedure only through actions that violate traditional concert hall protocol (becoming a "loose cannon").

PERFORMANCE INSTRUCTIONS:

To perform *Loose Can(n)on*, members of the ensemble translate their perceptions of each audience member's gender, age, attire, and height into musical action. These musical actions take the form of alterations to the pitch, tempo, timbre, and dynamics of a repeated note.

Performers enter one at a time upon a predetermined pitch. The first performer starts on a G; the second on D; the third on G; and the fourth on B. Any octave is permissible, though performers are encouraged to take into account the range of their instruments. If more than four performers are participating, they cycle back through the set. Performers sound their initial pitch as a repeated eighth note at a moderate tempo, at a moderate dynamic level, and with a standard articulation. Performers remain on this note while visually assessing the relevant characteristics of the first audience member. The rate of performer entrances should be determined by the ensemble in relationship to the size of the ensemble, the size of the audience, and any considerations of duration.

Performers begin reading the audience with the highest, leftmost member who can be comfortably seen. If there is any doubt about which audience member this might be, performers should agree upon their starting point before the performance. From this point the performers read to the right and move to the far left of the next row down when a row is completed. Empty seats should be interpreted as rests with the duration of the rest approximately equal to duration accorded to each audience member (i.e., how long it takes the performer to determine the next set of alterations). Once all visible members of the audience have been read, the performer ceases playing.

The performer's assessment of an audience member's gender influences pitch. If an audience member is perceived to be female, the performer raises the pitch of the repeated note. If the audience member is perceived to be male, the performer lowers the pitch. If the performer is uncertain about an audience member's gender, the performer should make a determination to the best of their ability; such instances of ambiguity add welcome variation to the piece. Four pitch sets are provided within which alterations should take place. Each pitch set

corresponds to a quarter of the visible audience and remains in effect while the performer is reading from that quarter. Performers are free to estimate individually where the divisions into quarters occur. If the range of the performer's instrument prohibits required movement, the performer should remain at the most extreme pitch possible until an audience member's gender allows a move in the other direction.

The performer's assessment of an audience member's age influences tempo. If an audience member is perceived to be 37 or older, the performer reduces the tempo at which the note is repeated. If an audience member is perceived to be younger than 37, the performer increases the tempo. If the performer is uncertain about an audience member's age, the performer should make a determination to the best of their ability; such instances of ambiguity add welcome variation to the piece. The tempo change should be proportional to the distance between the dividing point and the audience member's perceived age. If the tempo required reaches unperformable levels, the performer should remain at the most extreme tempo possible until an audience member's age allows a move in the opposite direction.

The performer's assessment of an audience member's visible attire influences timbre. If an audience member is wearing white, the performer moves to a brighter timbre (for example, *sul ponticello*). If an audience member is wearing black or dark grey, the performer moves to a darker timbre (for example, *sul tasto*). If the timbral alterations reach the limits of the performer's instruments, the performer should remain at the most extreme timbre possible until an audience member's attire allows a move in the opposite direction. If an audience member is wearing a different solid color, the performer plays without vibrato. If an audience member is wearing a pattern, the performer plays with vibrato. If an audience member is wearing glasses, the performer employs an alternative articulation (for example, *pizzicato*). If an audience member is wearing a hat, the performer returns to standard articulation when an audience member is not wearing a hat or glasses.

The performer's assessment of an audience member's height influences dynamics. If a female audience member is perceived to be above 5'3" or a male audience member is perceived to be above 5'9", the performer plays louder. If an audience member is perceived to at or below these heights, the performer plays softer. If the performer is uncertain about an audience member's height, the performer should make a determination to the best of their ability; such instances of ambiguity add welcome variation to the piece. The dynamic change should be proportional to the distance between the relevant dividing point and the audience member's perceived height. If the dynamic range of the performer's instrument prohibits required movement, the performer should remain at the most extreme dynamic possible until an audience member's height allows a move in the other direction.

These instructions are summarized in the performance score for use as a reference during performance.

PERFORMANCE NOTES:

While any pitched instruments are welcome to play the piece, performers should insure that the timbral alterations required by the piece can be realized clearly on the instrument selected.

Rehearsing the piece naturally requires an image of an audience. Image searches and stock photo suppliers can be good sources for rehearsal material. Ensembles might also consider taking a few photos of audiences at their own performances for rehearsal purposes.

In performance spaces without inclined seating or an elevated stage, it may be difficult for the ensemble to see much of the audience. In these situations, performers might consider standing (when possible) to obtain a better vantage point. Alternatively, an elevated still or video camera can provide an image of the live audience for use, though this solution is not ideal technologically or socially.

Performers need not rush through the audience members; they should move forward when ready. However, care should be taken not to linger too long on any one audience member. If performers find the instructions particularly difficult to realize with decent speed, they may enact the changes one at a time to avoid prolonged stasis.

For especially large audiences or when duration is a concern, the ensemble may wish to perform only a subsection of the visible audience. For especially small audiences, the ensemble may want to cycle through the visible audience more than once.

The dividing points for age and height are based on the median age for the United States as given by the CIA Factbook and the mean height as given by the CDC. If the ensemble desires, they may adjust these dividing points to reflect different or more specific locales.¹

COMPOSER BIO:

Lanier Sammons is a composer whose music often explores ideas like audience interactivity, improvisation, the intersection of popular and classical musics, and the pairing of electronic and acoustic sound. His works have been featured recently at the Spark Festival, SEAMUS, the SCI Student National Conference, and on EcoSono's *Agents Against Agency* DVD release. Ensembles such as the Talujon Percussion Quartet, counter)induction, the Da Capo Chamber Players,

https://www.cia.gov/library/publications/the-world-factbook/fields/2177.html http://www.cdc.gov/nchs/fastats/bodymeas.htm

¹ See:

and Rêlache have premiered his pieces. Lanier is currently pursuing a Ph.D. in composition at the University of Virginia, where his dissertation examines audience interactivity and the concert hall audience. He has studied composition with Bonnie Miksch, Arthur Kampela, Brad Garton, Joseph Dubiel, George Edwards, Ted Coffey, Judith Shatin, and Matthew Burtner.

Loose Can(n)on Performance score

Starting pitches:

 $G \rightarrow D \rightarrow G \rightarrow B$

Gender/pitch:

Female = raise pitch Male = lower pitch

Pitch set -1/4: G, A, B, D

Pitch set – 2/4: G, B, D, E, F#

Pitch set – 3/4: A, B, C, D, F#

Pitch set -4/4: G, B, C, D

Age/tempo:

≥ 37 = slower < 37 = faster

change is proportional to distance from dividing point

Attire/timbre:

White = brighter timbre
Black or dark grey = darker timbre
Other solid color = non-vibrato
Pattern = vibrato
Glasses = alternative articulation 1
Hat = alternative articulation 2

Height/dynamics:

Female > 5'3" = louder ≤ 5'3" = softer

Male > 5'9" = louder ≤ 5'9" = softer

change is proportional to distance from dividing point

Your Move

for large ensemble and audience

Lanier Sammons

Composed Fall – Winter 2011

© 2011 Let the Mermaids Music Composed Fall – Winter 2011 in Santa Cruz, CA Lanier Sammons Your Move for large ensemble and audience

PROGRAM NOTE:

audience members build a musical dialogue with the performers. a card with a musical instruction, and through sharing these cards with the members of the performing ensemble, PERFORMANCE INSTRUCTIONS: Your Move asks audience members to collaborate with performers in creating the piece. Each audience member receives

audience member should be in possession of one card. should be distributed to audience members as they enter the venue or immediately before the performance. Every generate the music. These cards contain musical instructions that the performers realize as described below. The cards *Your Move* is an audience-interactive piece in which audience members place cards on the performers' music stands to

cards among performers as often as they wish. Audience members may also exchange cards with each other. direction contained on it. Multiple cards may rest on a stand at the same time, and audience members may move their on the music stands in front of the performers. As long as the card rests on the stand, the performer will follow the member or representative of the ensemble should explain to the audience that they create the piece by placing their cards Ensemble members should be positioned around the audience with empty music stands. Just before the piece begins, a

audience should be informed that they must all retreat to their seats with their cards for the piece to end performer may leave at any point that reasonably suggests a conclusion. If only the first ending option is desired, the performer would find a point at which no cards lie on their stand, but if such a moment does not present itself, the duration is approached, ensemble members may begin leaving their positions at appropriate points. Ideally, each should be considered complete. Alternately, the ensemble may agree upon an approximate total duration. As this The piece may end in two ways. If all the audience members return to their seats and no cards remain on stands, the piece

PERFORMANCE NOTES:

to the performer's instrument and musical experiences. Modifiers include indications of tempo, mood, dynamics, and articulation. These are rendered in typical musical The cards that audience members will present to performers fall into two general types: modifiers and materials language. The materials cards include phrases presented in standard notation, drones, and prompts for materials related

If a performer's stand contains only modifier cards, the performer should improvise material for the cards to modify. The tonality of the piece rests on C major pentatonic (C, D, E, G, A), and the improvised material should be based on this scale Creative responses to the presence of multiple cards are very much encouraged multiple materials are present, performers may choose to attach certain modifiers exclusively to certain materials. with polyphonic instruments might consider realizing the materials simultaneously. Where multiple modifiers and the materials present. Performers of monophonic instruments might alternate passages or mix the materials. Performers *allegro* tempi). If a performer's stand contains multiple materials cards, the performer should also attempt to realize all example), the performer should endeavor to acknowledge all the modifiers (by, perhaps, alternating between lento and or reasonably closely related scales. If a performer's stand contains contradictory modifiers (*lento* and *allegro*, for

their responses to the prompts in advance. played in a key or mode not too distant from C major pentatonic. Given this request, performers are advised to consider notated passages. Performer responses to prompt cards should, when not logistically or aesthetically undesirable, be clef for ease of reading rather than to indicate specific octave or two lines. Performers may pause between repeats of necessary. Octave transpositions are always permissible, and pitches in notated passages are duplicated in treble and bass Pitches specified on notated and drone materials cards are in concert pitch, and performers are asked to transpose where

music stands. of the performance. Cards should be printed on card stock or similarly firm material to provide stability while they lie on performance area, and audience members should be invited to trade their cards in for one of the extras during the course performers are invited to add their own cards. If there are surplus cards, the extras should be made available in the There are 76 cards provided below. If the audience is expected to number more than 76, the set may be duplicated, or

moving to and from performers, the ensemble might consider providing an assistant. consider performing the piece in the lobby of the venue. If the audience contains individuals who may have difficulty surrounding the audience. If the performance space contains fixed seating that is difficult to navigate, performers might If at all possible, performers should not be located on stage. The most desirable configuration would have the performers

confronted with an unmanageable number of cards. A ratio between 3:1 and 6:1 is recommended audience members should have no difficulty sharing their cards with performers, and performers should not be The ratio of audience members to performers should ideally be very low. In the most desirable performance conditions,

COMPOSER BIO:

studied composition with Bonnie Miksch, Arthur Kampela, Brad Garton, Joseph Dubiel, George Edwards, Ted Coffey, the University of Virginia, where his dissertation examines audience interactivity and the concert hall audience. He has Players, and Rêlache have premiered his pieces. Lanier is currently pursuing a Ph.D. in composition at Agency DVD release. Ensembles such as the Talujon Percussion Quartet, counter)induction, the Da Capo Chamber intersection of popular and classical musics, and the pairing of electronic and acoustic sound. His works have been featured recently at the Spark Festival, SEAMUS, the SCI Student National Conference, and on EcoSono's *Agents Against* Judith Shatin, and Matthew Burtner. Lanier Sammons is a composer whose music often explores ideas like audience interactivity, improvisation, the

Andante	Lento
Moderato	Adagio

Presto	Allegro
As fast as possible	Vivace

Rallentando	As slow as possible
Espressivo	Accelerando

Dolce	Sostenuto
Agitato	Cantabile

Furioso	Animato
Liberamente	Doloroso

ppp	Lontano
pp	Misterioso

mf	A second of the control of the co
	mp

Crescendo	f
Diminuendo	ff

Portamento	Staccato
Molto vibrato	Legato

Drone on C	Senza vibrato
Drone on C	Tremolando

Drone on D	Drone on C
Drone on D	$Drone\ on\ C$

$Drone\ on\ G$	$Drone\ on\ E$
Drone on G	$Drone\ on\ E$

Please play one of your favorite melodies.	$Drone\ on\ A$
Please play one of the first things you learned on your instrument.	$Drone\ on\ A$

Please play something particularly fun to perform on your instrument.

Please play some of the last thing (other than this piece) that you rehearsed.

Please play the first thing you think of when you read this.

Please play the saddest melody you know.

Please play something pretty.

Please play something aggressive.

Please play the happiest melody you know.

Please play something rhythmic.

Please play something gentle.

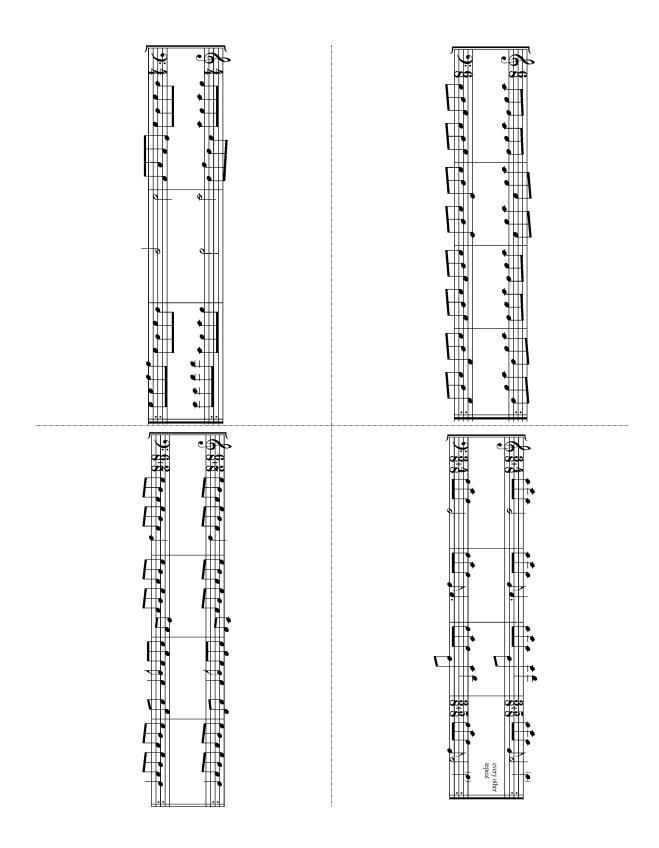
Please play something in the highest register of your instrument.

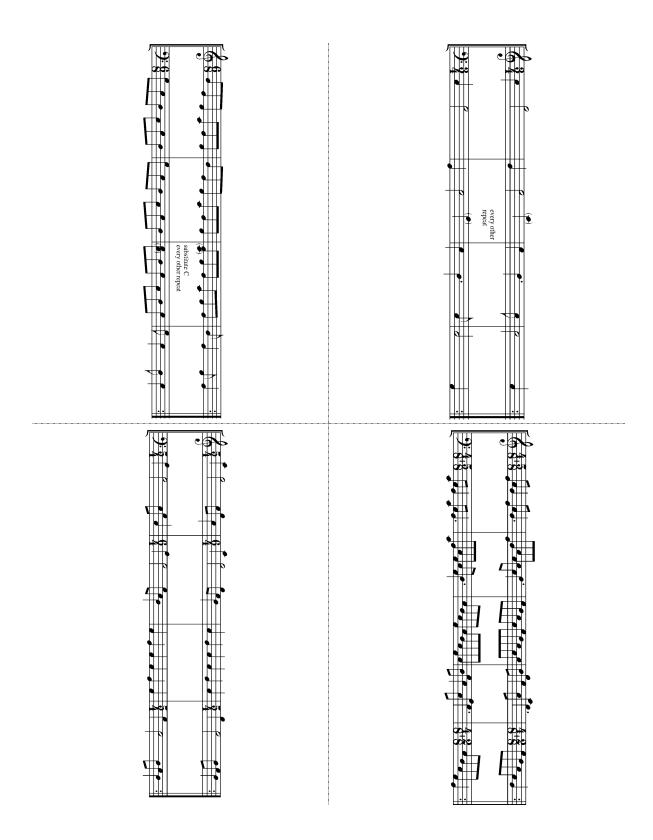
Please play a passage from a piece you like to use for auditions.

Please play something that shows off the best qualities of your instrument.

Please play something in the middle register of your instrument.

Please play something in the lowest register of your instrument.





11 Measurements

for sensors, contact microphones, laptop, and audience

Lanier Sammons

11 Measurements for sensors, contact microphones, laptop, and audience Lanier Sammons

Composed Winter – Spring 2012 in Santa Cruz, CA

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PROGRAM NOTE:

11 Measurements creates music from information gleaned in real-time about the circumstances of its performance and its audience.

11 Measurements is dedicated to Daniel Paluch in thanks for his valuable assistance in designing and assembling the sensors used and for his invaluable friendship.

PERFORMANCE INSTRUCTIONS:

Performance of 11 Measurements requires:

- IR sensor
- 2 light sensors (one facing up, one facing out)
- Temperature sensor
- Humidity sensor
- Arduino microcontroller
- 4 contact microphones
- Audio interface
- Computer with appropriate connections for the Arduino and the audio interface
- Max/MSP 6 or later
- Max patches included with this score
- Necessary cables
- Powered USB hub (recommended, particularly if both the Arduino and the interface will be drawing power from the computer)

The IR sensor and outward facing light sensor should be positioned facing the audience and as close to them as the performance area allows. The four contact microphones should be distributed in four quadrants behind the range of the IR sensor (in small venues, they may placed within the IR sensor's range). The remaining sensors should be located on stage as well. If possible, the computer should be located offstage and out of view of the audience. To begin the piece, initialize the Max patch and click where indicated. The piece ends of its own accord.

11 Measurements may be realized in two different formats. In the first format, the piece is programmed as any other piece on a concert and triggered at the appropriate time. In the second format, the piece begins as the audience enters the performance space or returns to it after intermission. In both formats, house lights may be lowered, but should not be completely dark, and stage lights may highlight the sensors, but should not be overpowering. In the second format, lighting and other preparations should proceed as they normally would.

PERFORMANCE NOTES:

Due to the role of light in the piece, sound check should occur with lighting conditions that mimic performance conditions as closely as possible. Especially in the second format of the piece, the lighting technician should be involved in rehearsal.

Contact microphones should be as sensitive as possible and should be placed where they will be inconspicuous, but maximally accessible. For large venues, additional contact microphones may be added, though the structure of the Max patch must be revised to accommodate additional microphones. If contact microphones are not available, air microphones may be substituted. If this substitution is made, care should be taken to avoid feedback.

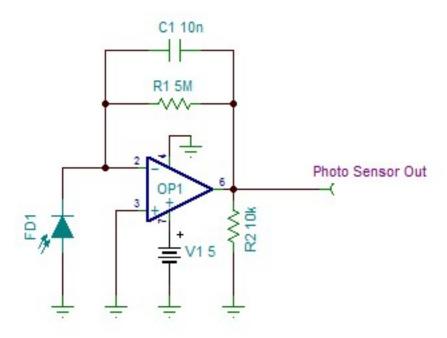
The duration of the piece is determined by the time at which the performance begins. Hours become minutes; minutes become seconds; and seconds become tenths of seconds. If a particular duration is required, the computer's clock may be adjusted to provide this duration, though this alteration should be avoided if possible. Do feel free, however, to makes this adjustment in sound check to approximate performance duration.

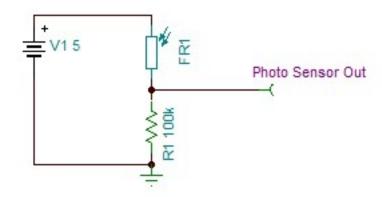
COMPOSER BIO:

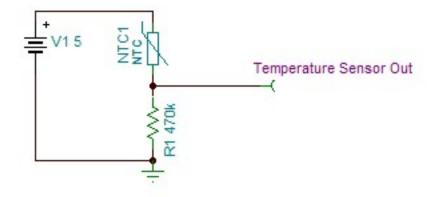
Lanier Sammons is a composer whose music often explores ideas like audience interactivity, improvisation, the intersection of popular and classical musics, and the pairing of electronic and acoustic sound. His works have been featured recently at the Spark Festival, SEAMUS, the SCI Student National Conference, and on EcoSono's *Agents Against Agency* DVD release. Ensembles such as the Talujon Percussion Quartet, counter)induction, the Da Capo Chamber Players, and Rêlache have premiered his pieces. Lanier is currently pursuing a Ph.D. in composition at the University of Virginia, where his dissertation examines audience interactivity and the concert hall audience. He has studied composition with Bonnie Miksch, Arthur Kampela, Brad Garton, Joseph Dubiel, George Edwards, Ted Coffey, Judith Shatin, and Matthew Burtner.

For further information, please visit laniersammons.com.

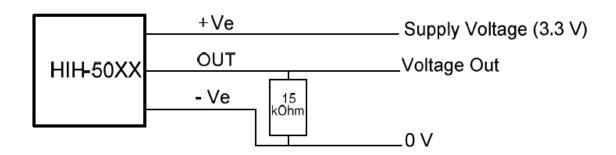
11 Measurements Sensor Schematics



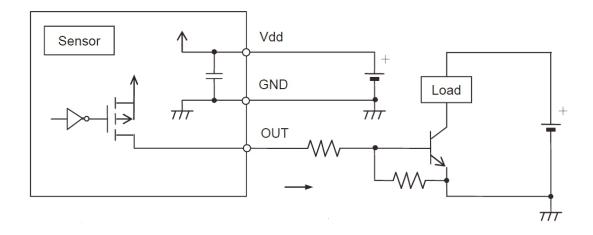




Humidity Sensor



IR Sensor



Pollical Variations

for classical guitar and audience

Lanier Sammons

Composed Fall 2011 – Spring 2012

Pollical Variations for classical guitar and audience Lanier Sammons Composed Fall 2011 – Spring 2012 in Santa Cruz, CA

PROGRAM NOTE:

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different from what they have just heard, and the performer proceeds accordingly. audience members give a thumbs up or thumbs down to indicate their desire for the next material to be similar or In Pollical Variations, the audience helps a guitarist navigate through a branching musical structure. At appointed times,

PERFORMANCE INSTRUCTIONS:

Pollical Variations requires:

- MIDI foot controller with at least five buttons
- Computer running Max 6 or later
- Monitor or other screen to display the score for the performer

2 and 4 respectively should the performer not adjust. There are 7 branching points in the piece. more different. MIDI foot pedals 2-4 correspond to these choices, though the pedals 1 and 5 are programmed to duplicate corresponds to the assessment. For cells F1-G6, the performer has only three options: more similar, relatively even, or predominantly similar. MIDI foot pedals 1-5 correspond to these choices, and the performer should step on the pedal that predominantly similar, more similar than different, relatively evenly divided, more different than similar, or down. The performer should assess the full audience. For cells A1-E9, the performer has five options for this assessment: audience. At this point, the audience will indicate their preference for similar or different material via a thumbs up or surrounded by repeats, he or she should, while continuing to repeat the enclosed material, pointedly look up to the input. The performer serves as the arbiter and conveyor of this input. Whenever the performer encounters measures As suggested by the program note, Pollical Variations features a branching structure with paths determined by audience

involvement to them. The performer might consider practicing the interaction with the audience. Performance of Pollical Variations must be prefaced by an introduction in which the performer explains the audience's

performed with respect to any preceding tempo changes rather than with respect to the original tempo different material. Otherwise, these indications should be ignored. These tempo indications are relative and should be surrounded by parentheses should only be applied if the performer has arrived at the cell through the audience's desire for Apart from the branching element, the notation of the piece is traditional with one exception. Tempo indications

PERFORMANCE NOTES:

designed to encourage the audience to present a more unified opinion, but if it becomes tiresome, the performer may If the performer tends to rest on the repeated sections for a particularly lengthy duration, some improvised variation may liberally. The performer is welcome to remain on a repeated section while quickly reviewing the newly selected material. Given the performance challenges that the piece entails, the performer should feel free to use the repeated sections Cell D6 redirects to the cell that precedes it if the audience is assessed to be relatively evenly divided. This repetition is

eventually wish to avoid the neutral assessment. Similarly, E5 offers the audience the most natural result if they

audience, the piece offers enough variety to justify repetition. performing the piece more than once on a substantial program. The composer hopes that, with a sufficiently discerning 30 minutes. Given the discrepancy between performance time and required rehearsal time, the performer might consider In performance, the piece is likely to last only 5 or 6 minutes. However, the total possible material in the piece total nearly as they wish, though the perform may redirect the piece if duration is a concern. overwhelming desire similarity: it repeats. In this case, it is preferable to allow the audience to repeat the section as often

relationships between cells is also included in table format below. of the possible preceding cells so that the performer can rehearse transitions. Information about the possible The score that follows presents every cell is numerical order with one cell per page. Beneath the label of each cell is a list

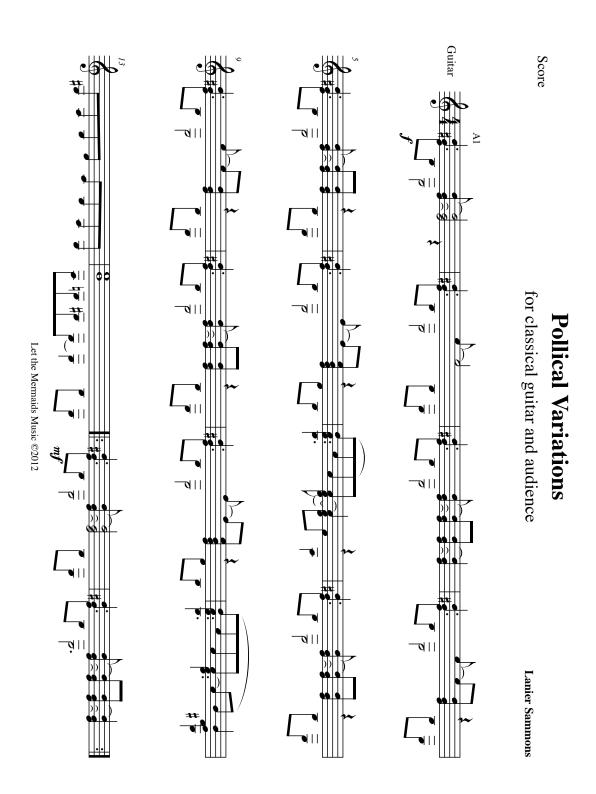
COMPOSER BIO:

Judith Shatin, and Matthew Burtner. studied composition with Bonnie Miksch, Arthur Kampela, Brad Garton, Joseph Dubiel, George Edwards, Ted Coffey, Players, and Rêlache have premiered his pieces. Lanier is currently pursuing a Ph.D. in composition at the University of Virginia, where his dissertation examines audience interactivity and the concert hall audience. He has Agency DVD release. Ensembles such as the Talujon Percussion Quartet, counter)induction, the Da Capo Chamber Lanier Sammons is a composer whose music often explores ideas like audience interactivity, improvisation, the intersection of popular and classical musics, and the pairing of electronic and acoustic sound. His works have been featured recently at the Spark Festival, SEAMUS, the SCI Student National Conference, and on EcoSono's *Agents Against*

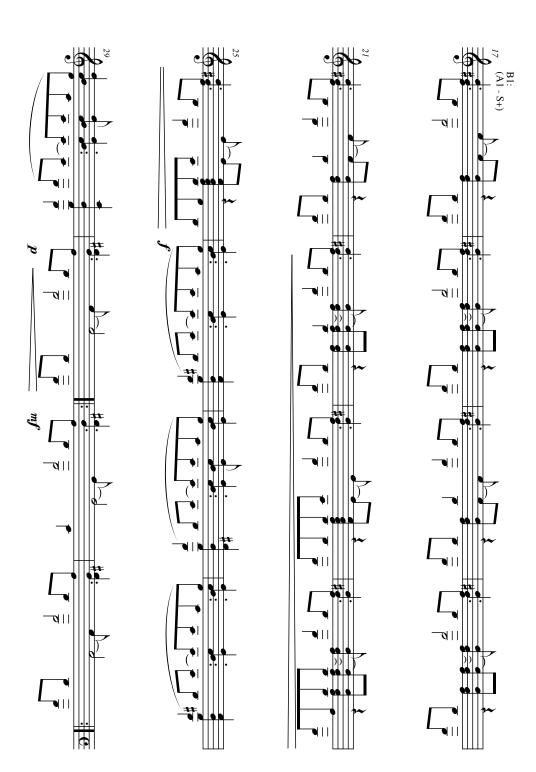
For more information, please visit laniersammons.com.

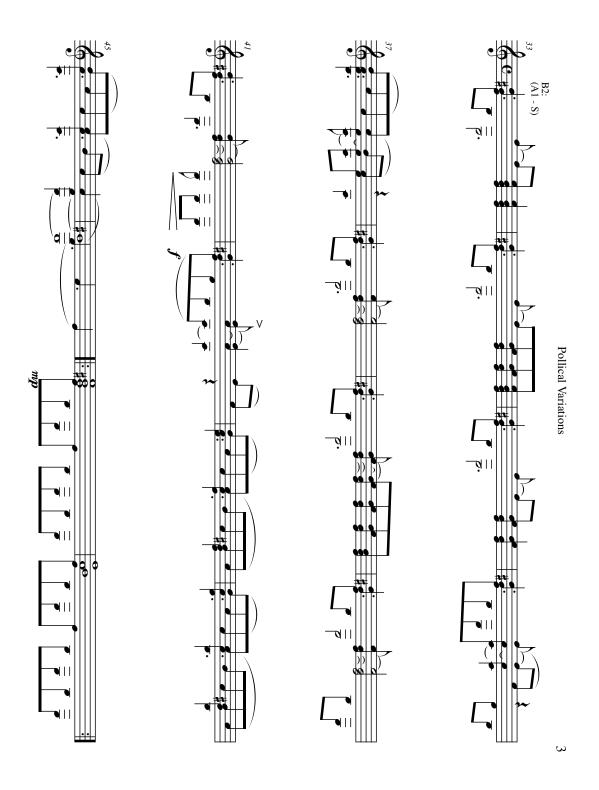
C6(D+), C7(D), C8(N); D6(D+)
C3(D+) C5(D) C6(N) C7(S) C8(S+)
C2(D+), C3(D), C4(N), C5(S), C6(S+); D1-5,7-11(N)
C1(D+), C2(D), C3(N), C4(S), C5(S+)
B5(S+)

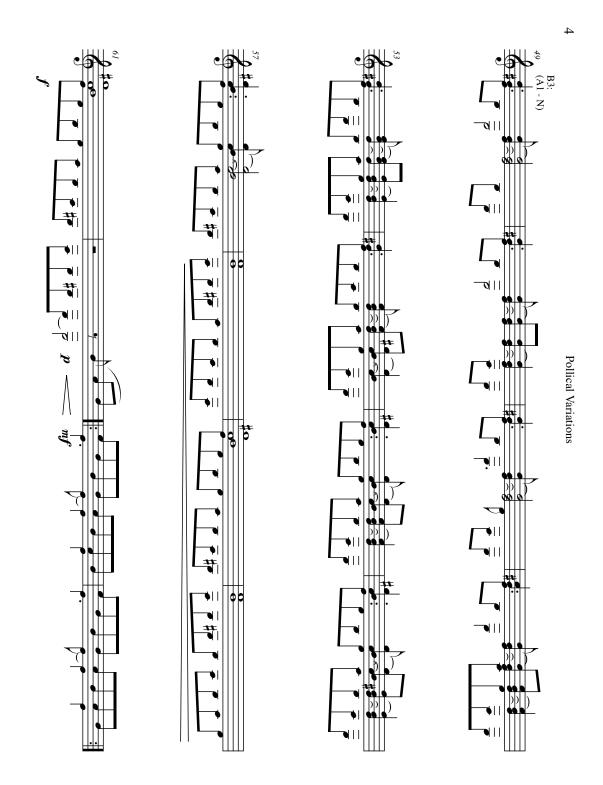
N/A	n3 u3(<i>D</i>), u4(S)	[7
N/A		Į
N/A		ᄑ
N/A	H2 G1(N), G2(S), G5(D), G6(N)	Ŧ
N/A	H1 G1(S), G6(D)	프
Н3, Н2, Н1	G6 F4(D), F5(S)	G
H4, H3, H2	G5 F3(D), F4(N), F5(N), F6(S)	G
Н5, Н4, Н3	F2(D), F3(N), F4(S), F5(D),	ر و
Н3, Н4, Н5	G3 F1(D), F2(N), F3(S), F6(D), F7(N), F8(S)	G.
Н2, Н3, Н4	G2 F1(N), F2(S), F7(D), F8(N)	G
Н1, Н2, Н3	G1 F1(S), F8(D)	G
G3, G2, G1	F8 E4(D+), E6(S+);	F8
G4, G3, G2	F7 E3(D+), E4(D), E6(S), E7(S+)	F7
G5, G4, G3	F6 E2(D+), E3(D), E4(N), E6(N), E7(S), E8(S+)	F6
G6, G5, G4	F5 E1(D+), E2(D), E3(N), E4(S), E6(D), E7(N), E8(S), E9(S+)	돐
G4, G5, G6	F4 E1(D), E2(N), E3(S), E4(S+), E6(D+), E7(D), E8(N), E9(S)	F4
G3, G4, G5	F3 E1(N), E2(S), E3(S+), E7(D+), E8(D), E9(N)	F3
G2, G3, G4	F2 E1(S), E2(S+), E8(D+), E9(D)	F2
G1, G2, G3	F1 E1(S+), E9(D+)	F1
(S, N, D)		
F5, F4, F3, F2, F1	E9 D5(D+), D7(S+); E5(D)	ΕG
F6, F5, F4, F3, F2	E8 D4(D+), D5(D), D7(S), D8(S+); E5(D+)	ΕE
F7, F6, F5, F4, F3	E7 D3(D+), D4(D), D8(S), D9(S+)	E7
F8, F7, F6, F5, F4	E6 D2(D+), D3(D), D5(S), D7(D), D9(S), D10(S+)	ΕĆ
E5, E2, E1, E9, E8	E5 D1(D+), D2(D), D4(S), D5(S+), D7(D+), D8(D), D10(S), D11(S+); E5(S+)	Щ
F4, F5, F6, F7, F8	E4 D1(D), D3(S), D4(S+), D8(D+), D9(D), D11(S)	ΕĹ
F3, F4, F5, F6, F7	E3 D2(S), D3(S+), D9(D+), D10(D)	Ш
F2, F3, F4, F5, F6	E2 D1(S), D2(S+), D10(D+), D11(D); E5(S)	Ш
F1, F2, F3, F4, F5	E1 D1(S+), D11(D+); E5(N)	Ш
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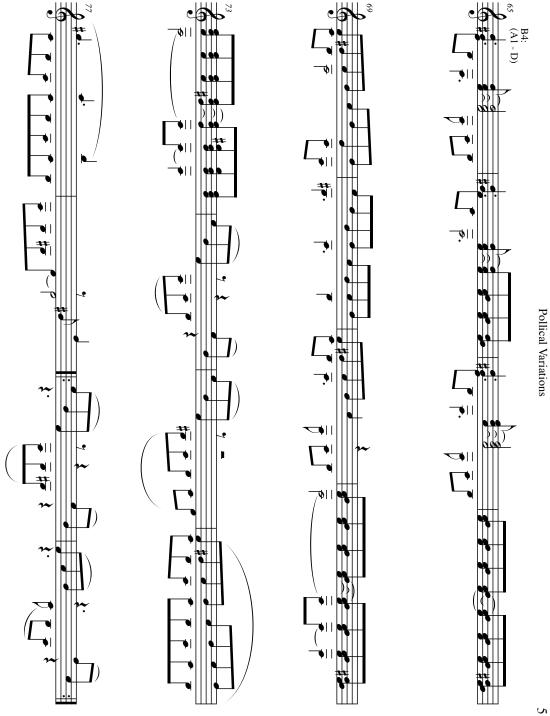


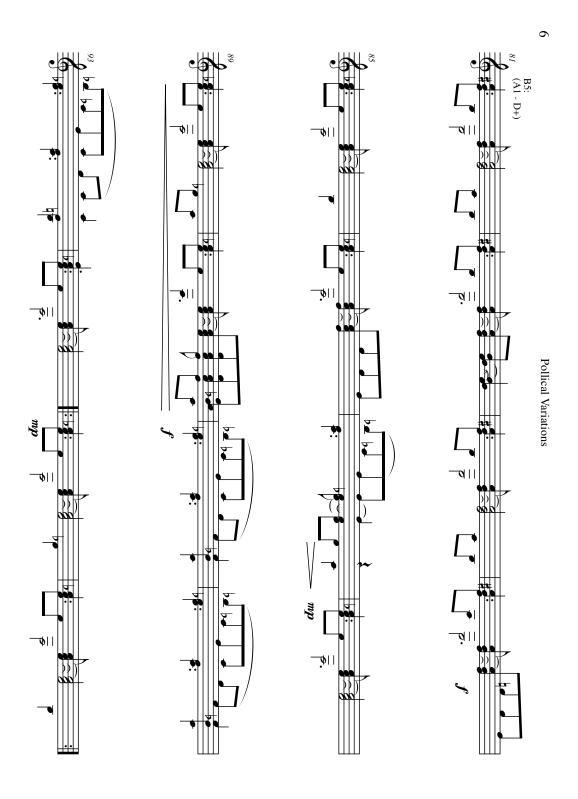


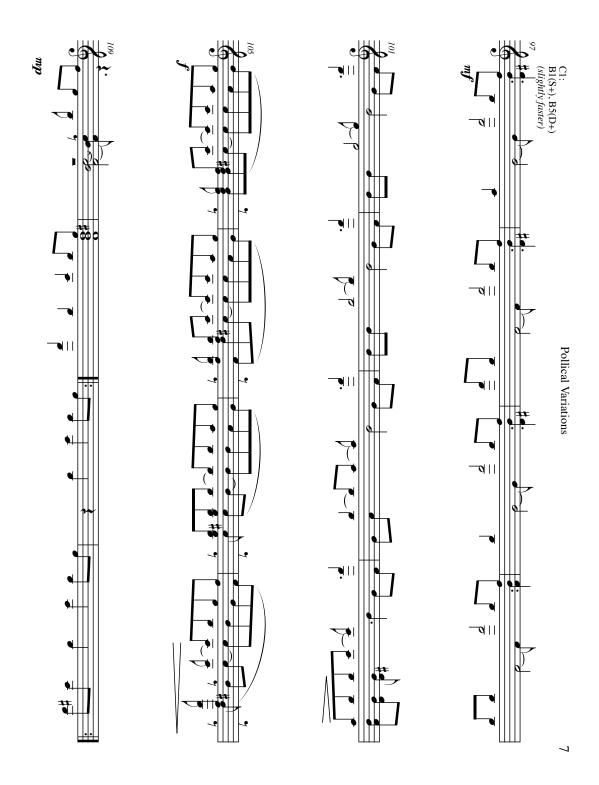


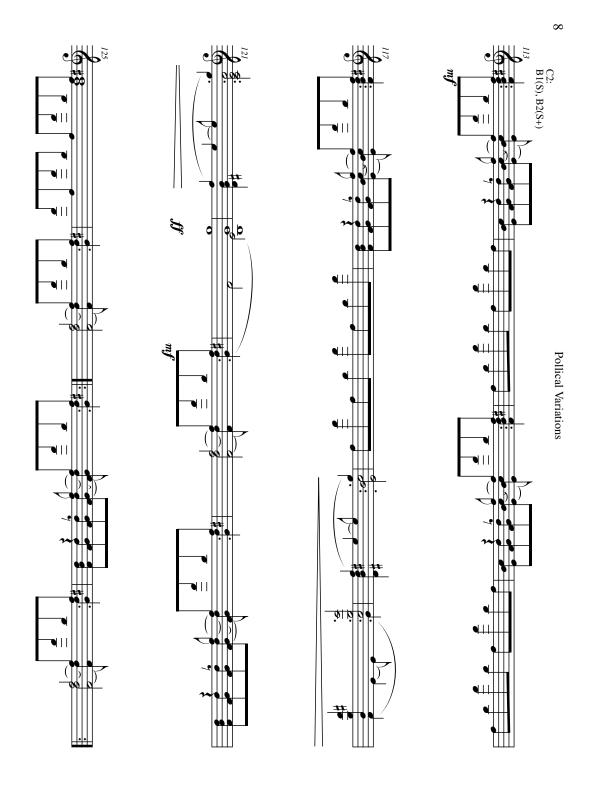


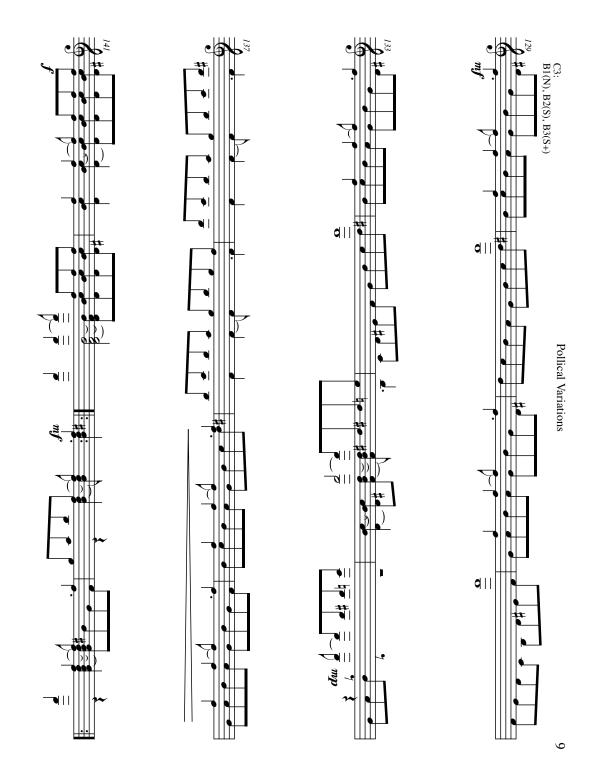


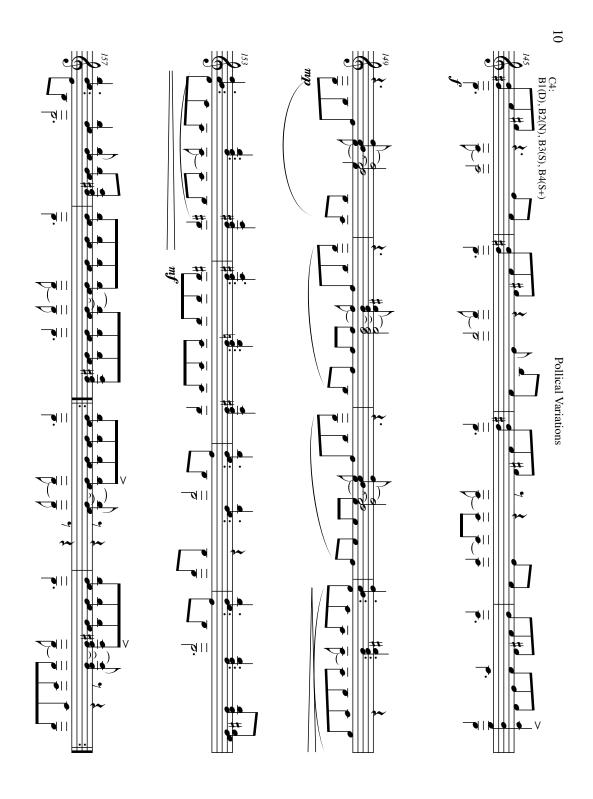


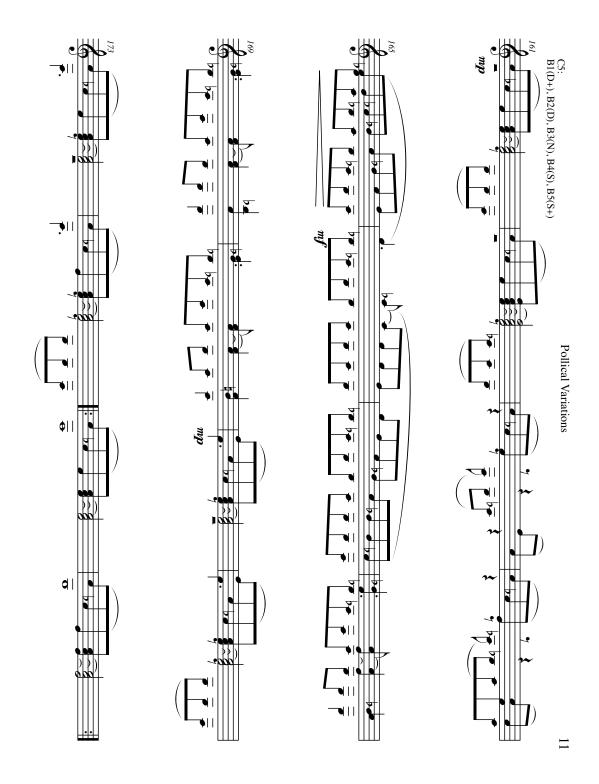


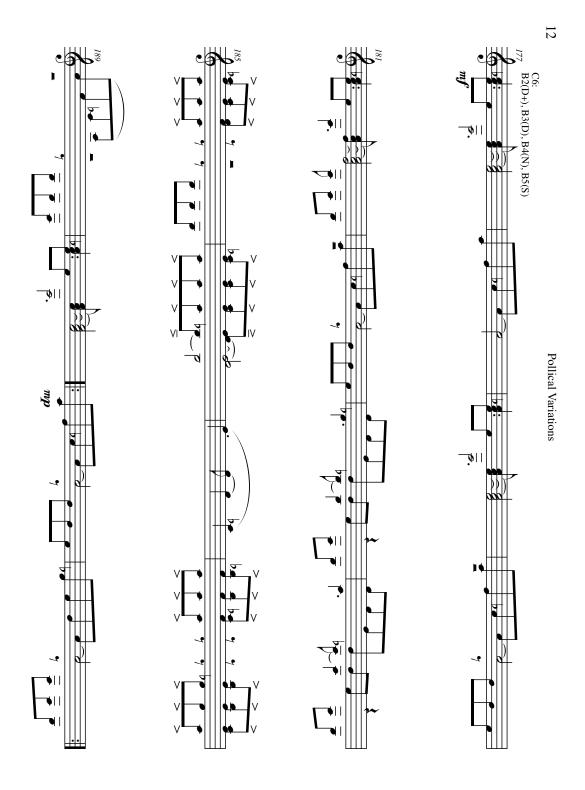


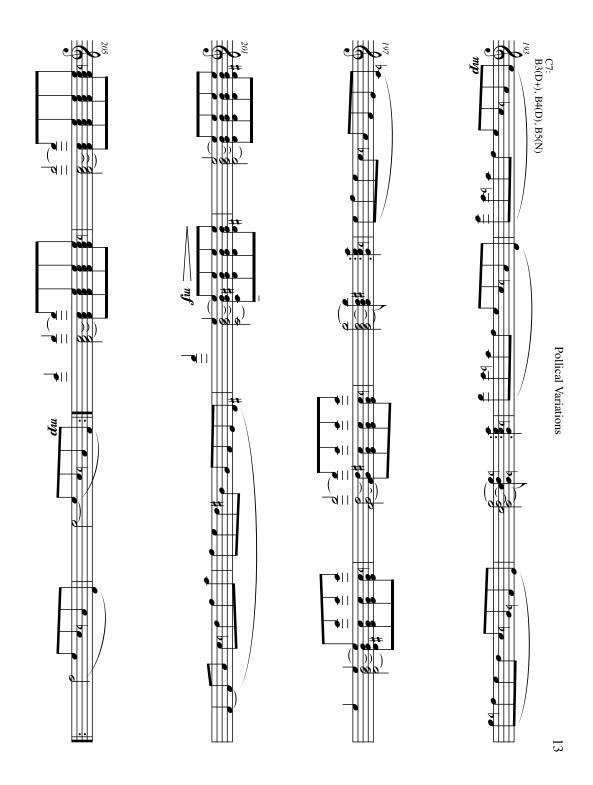


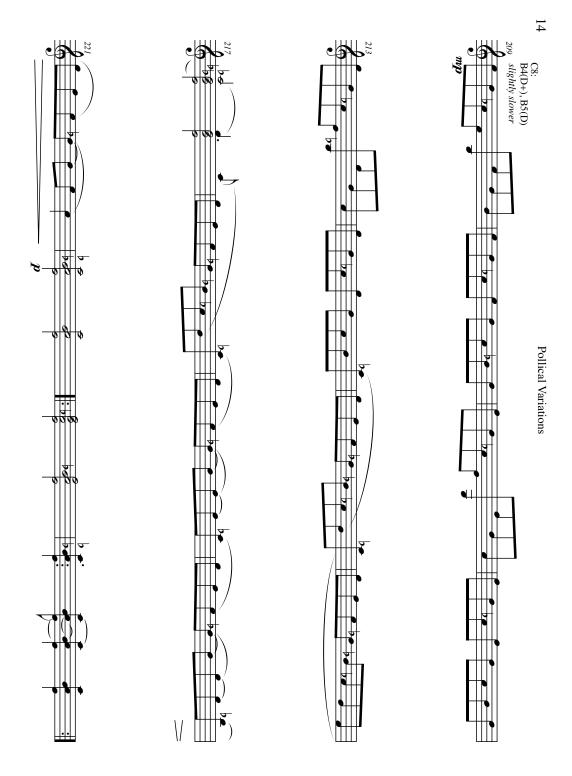


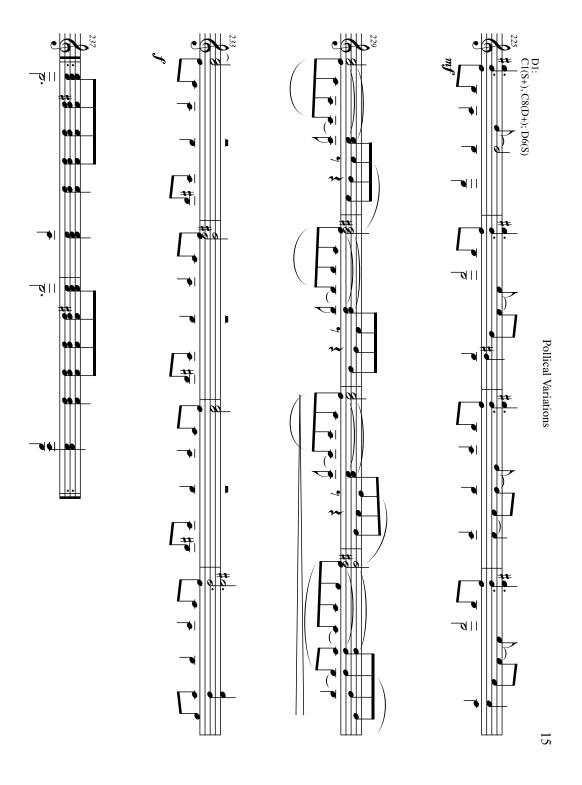


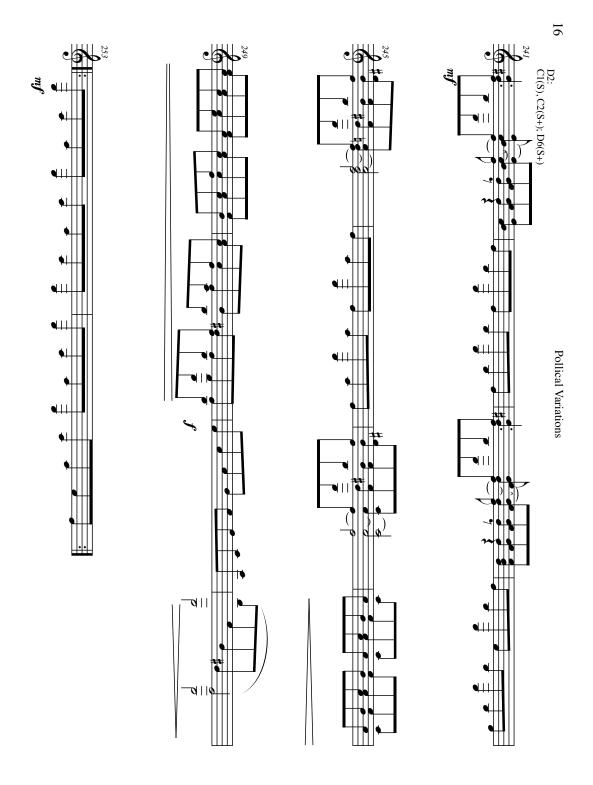


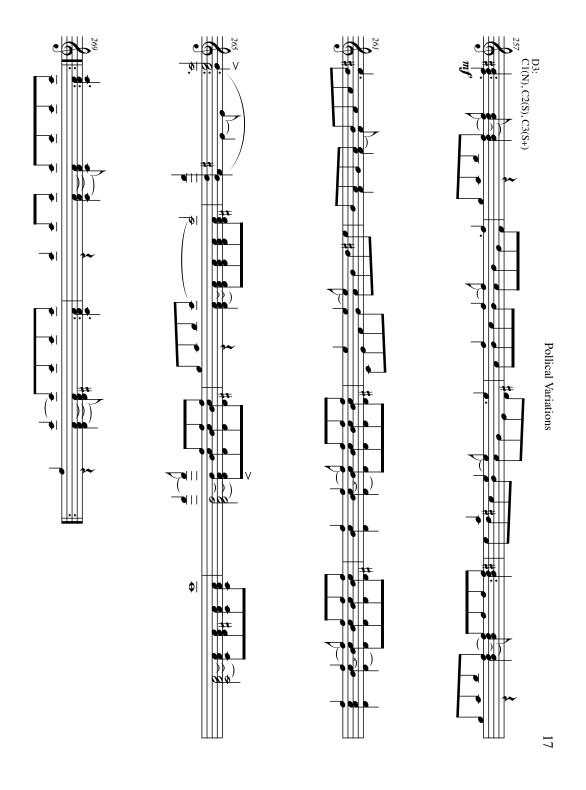


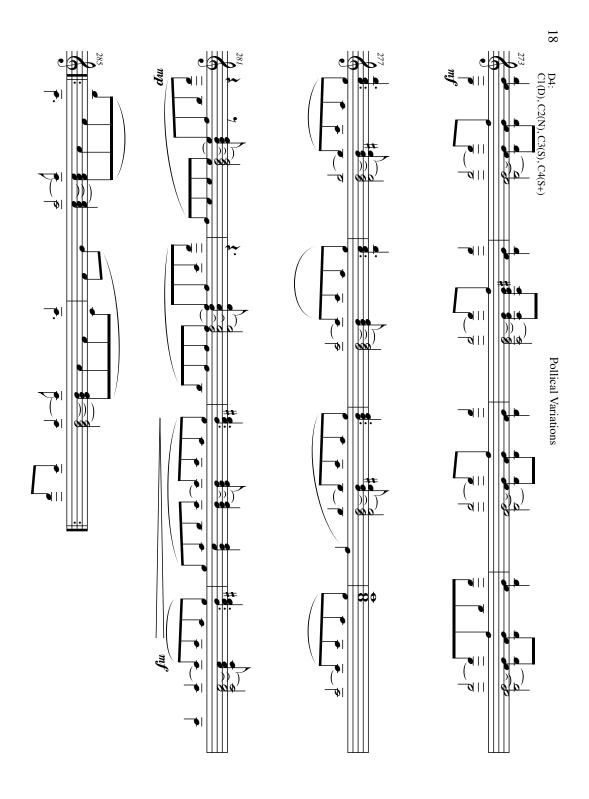


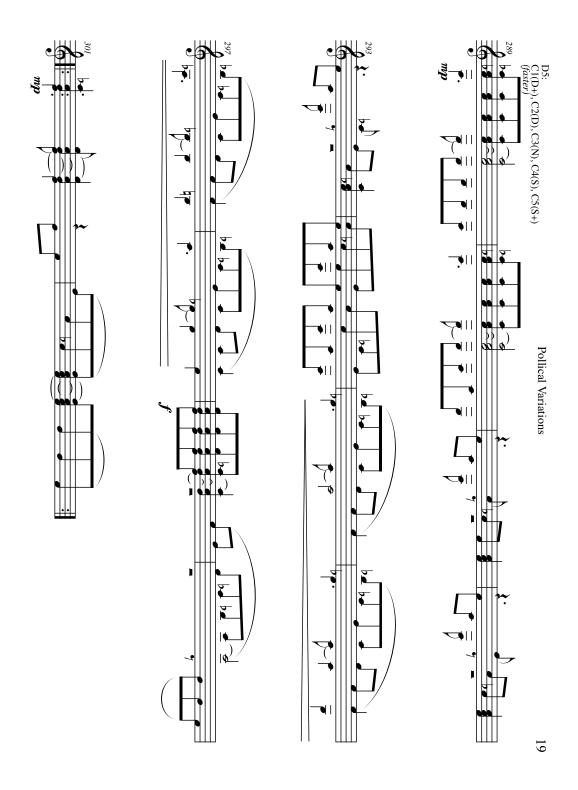


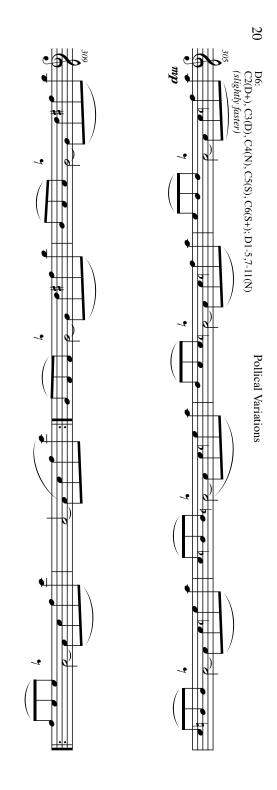


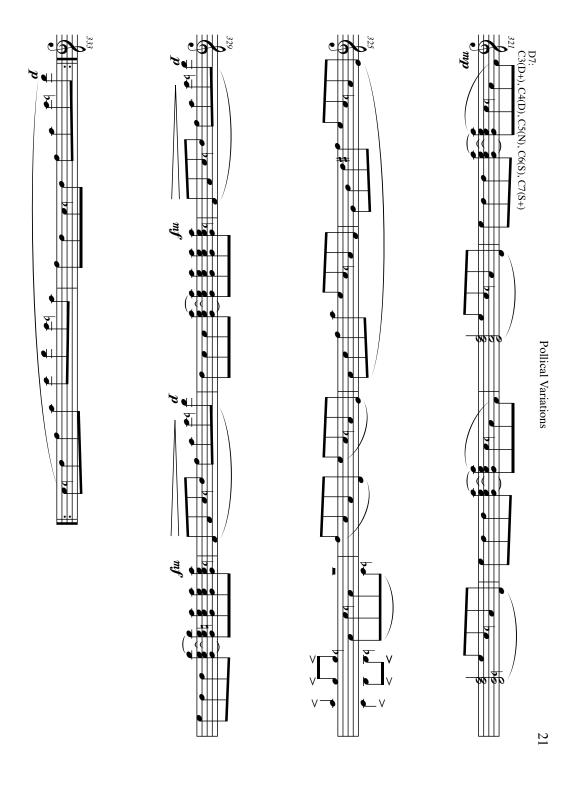


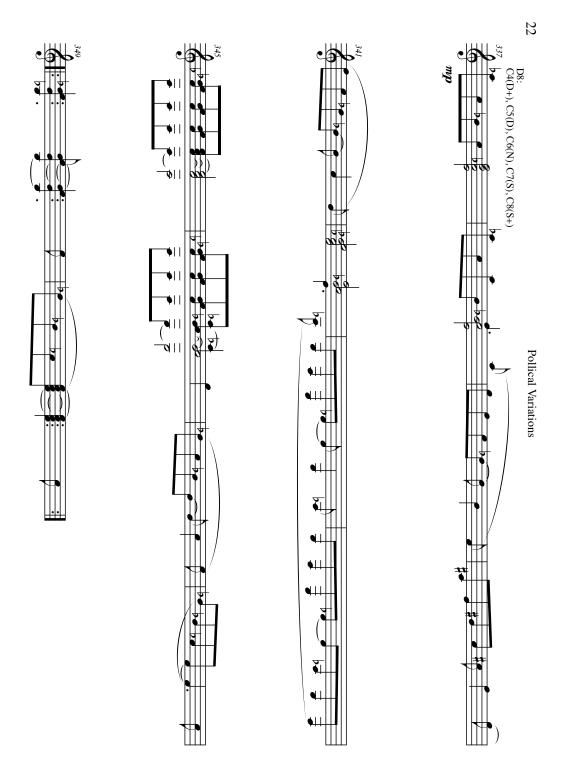


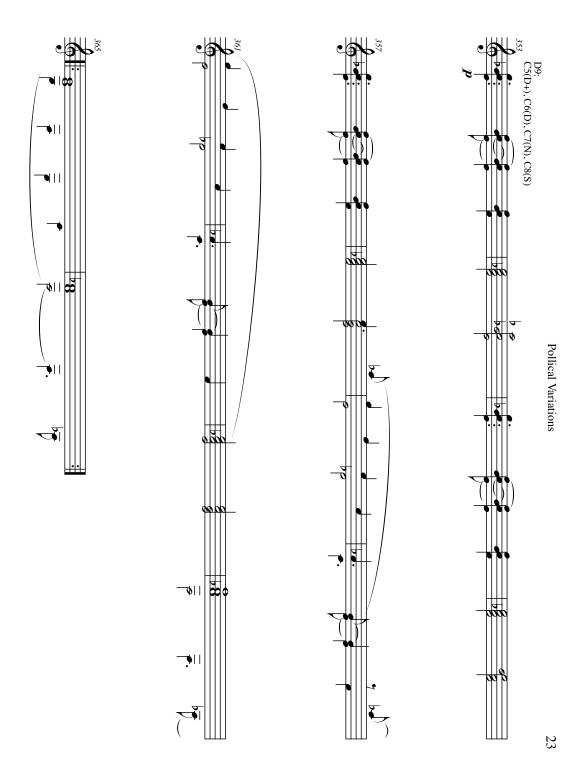


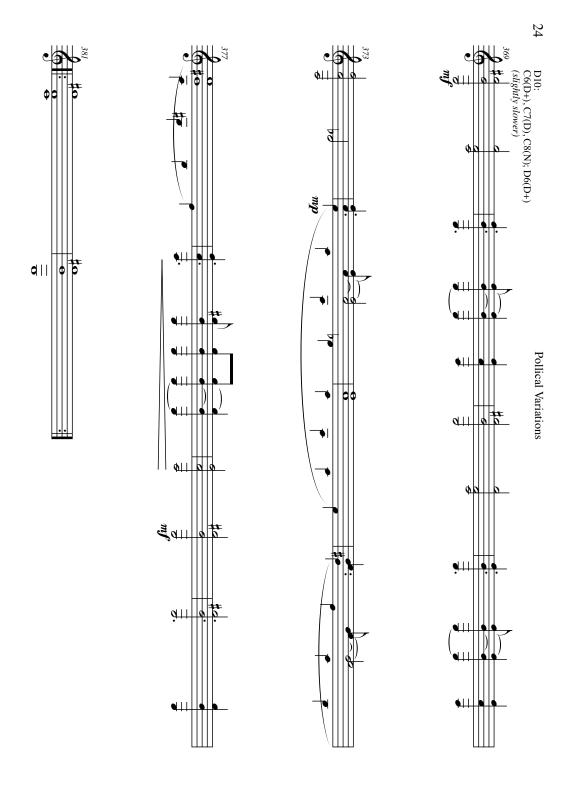


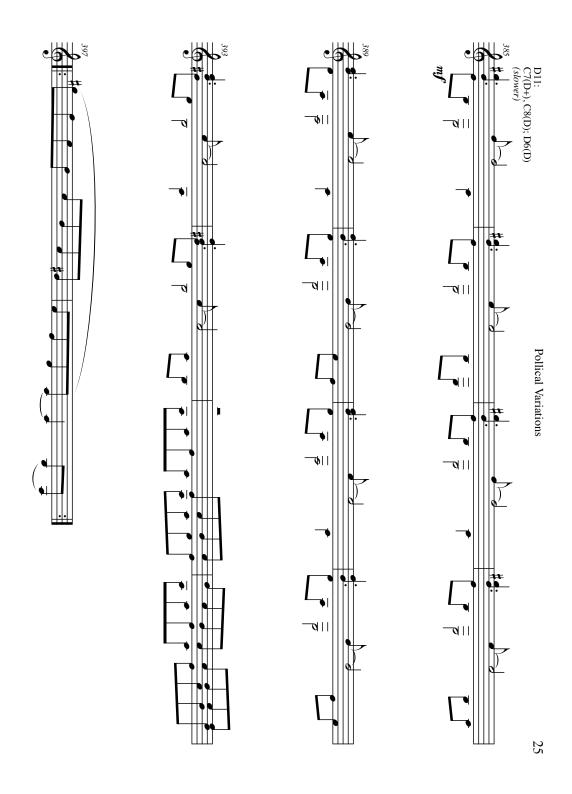


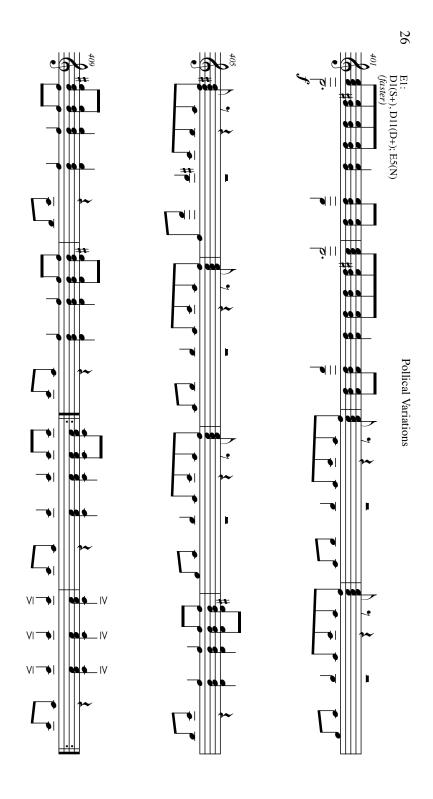


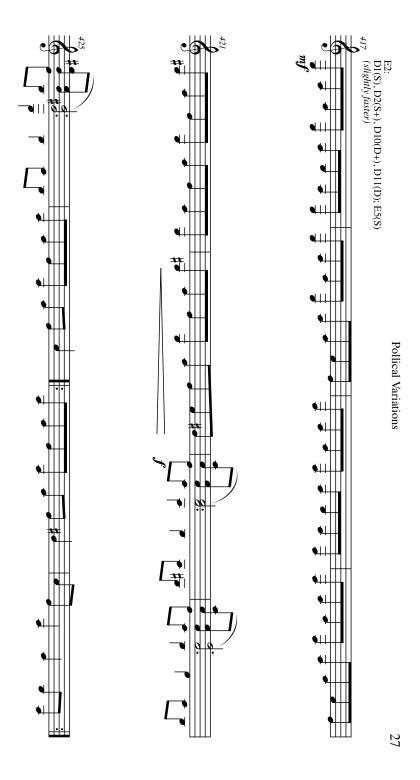


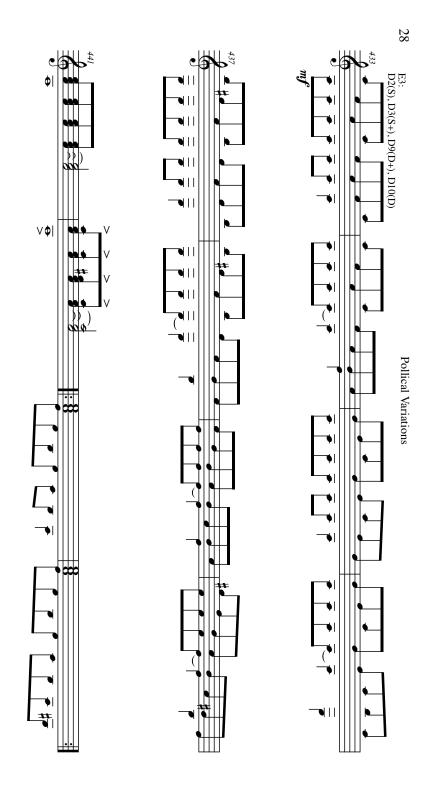


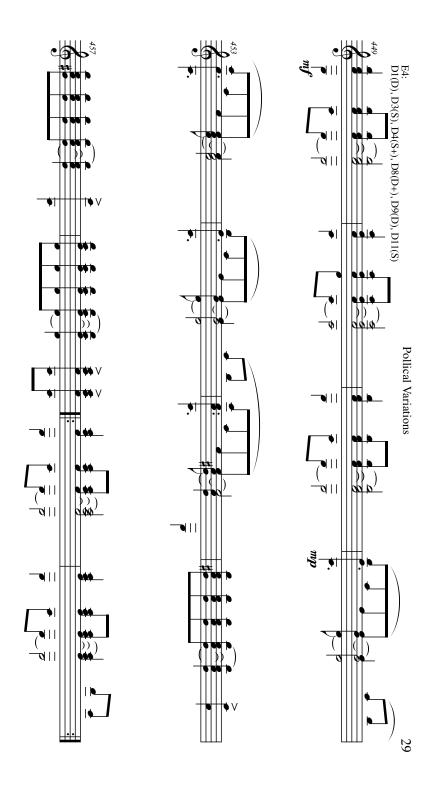


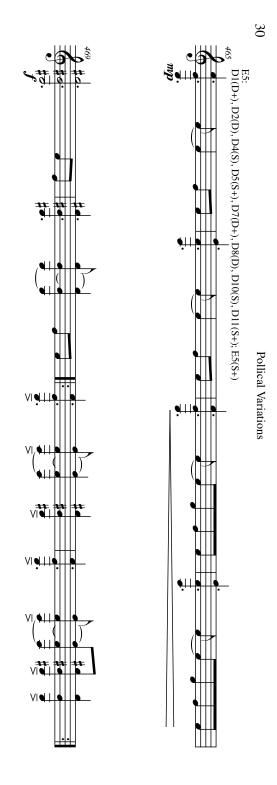


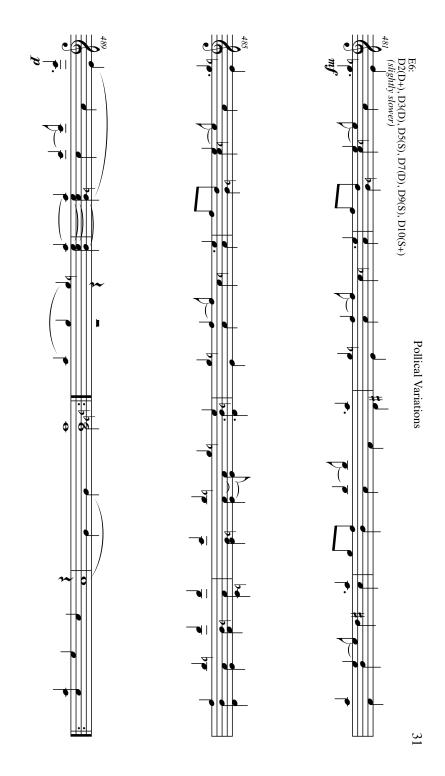


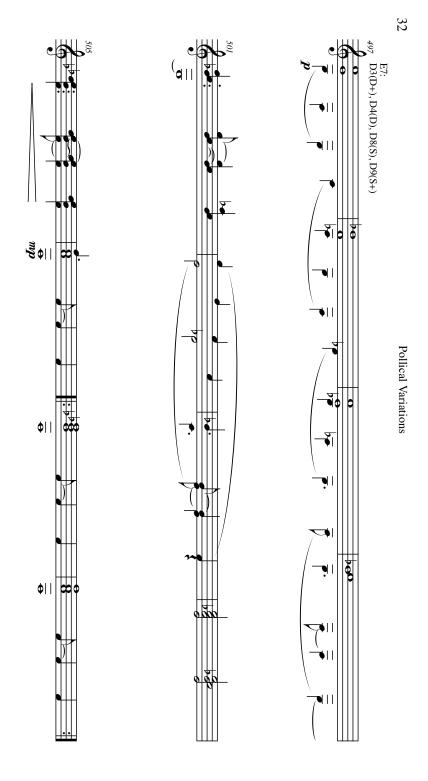


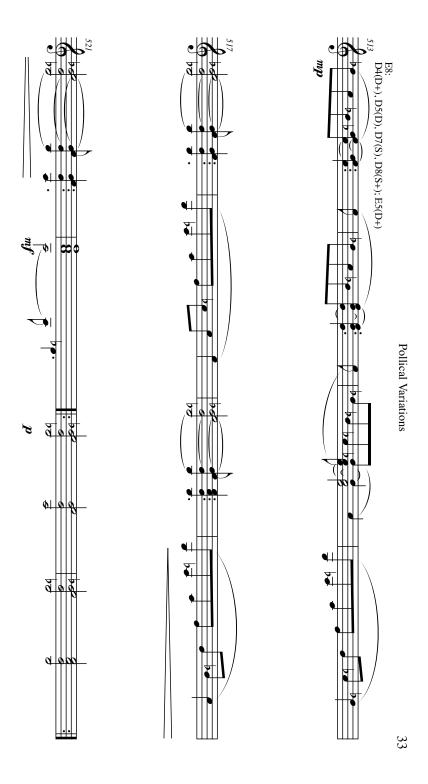


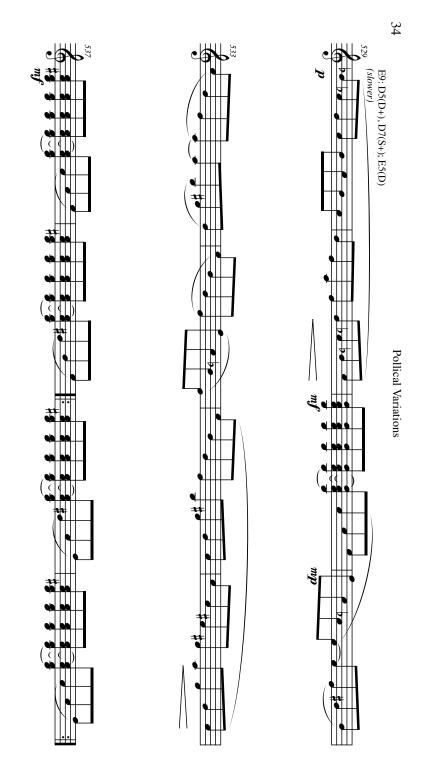


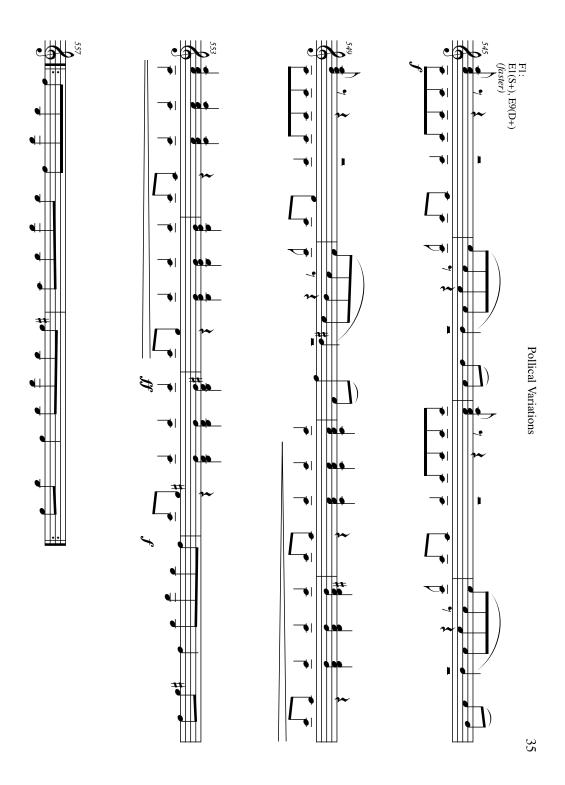


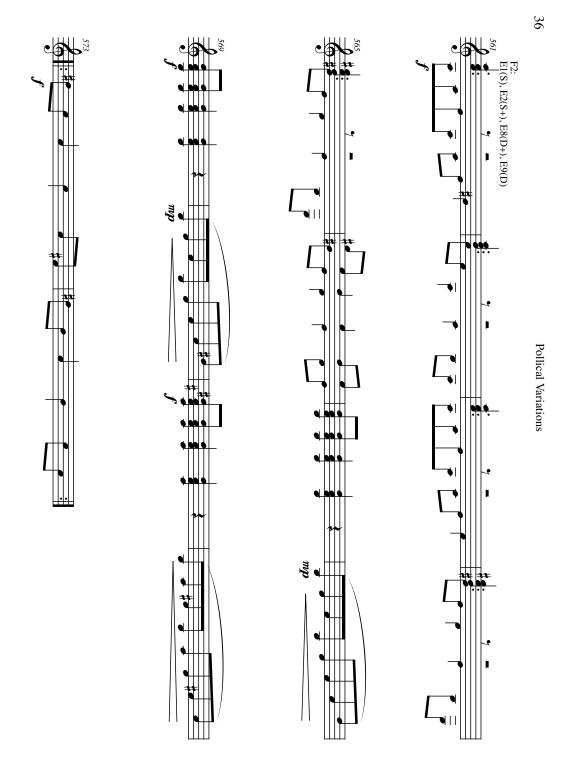


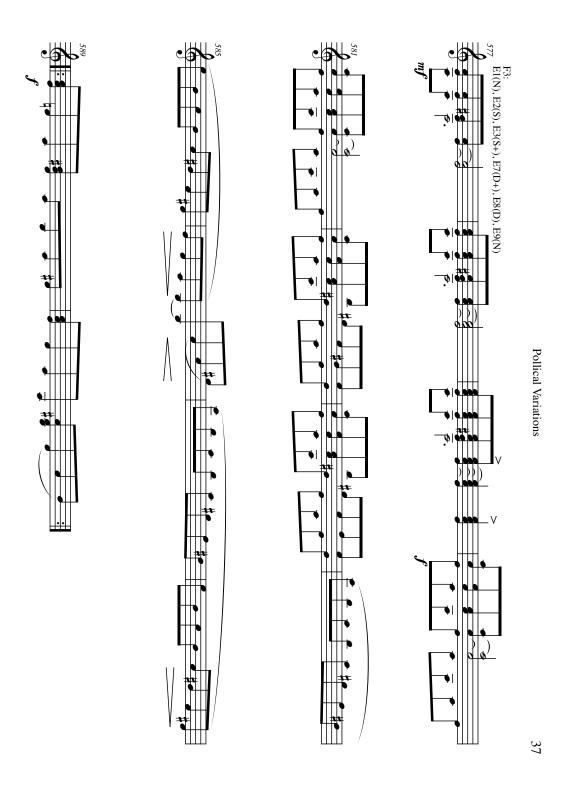


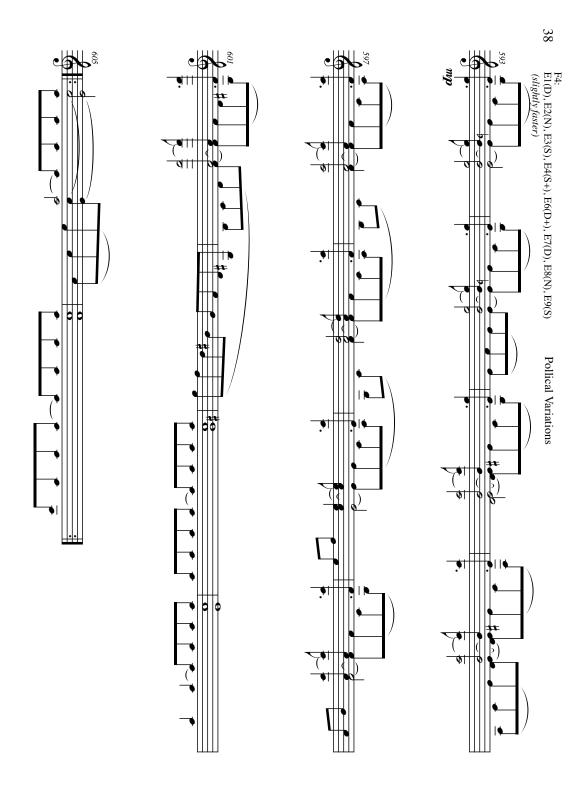


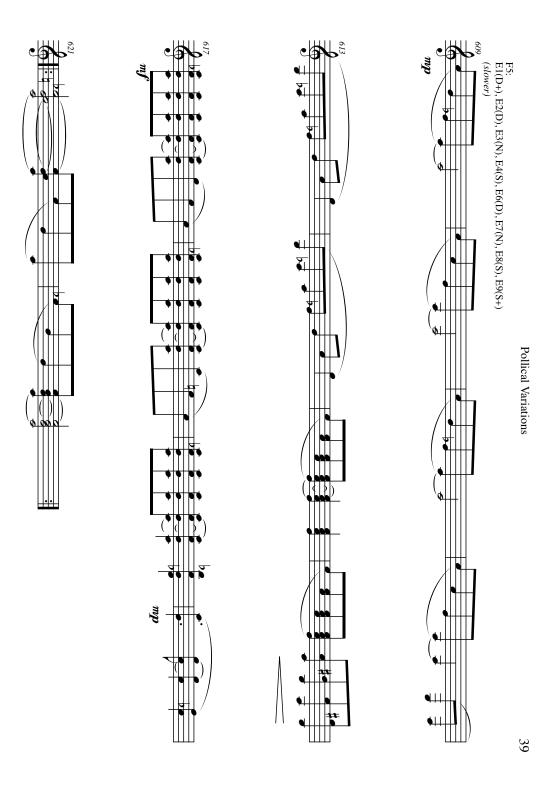


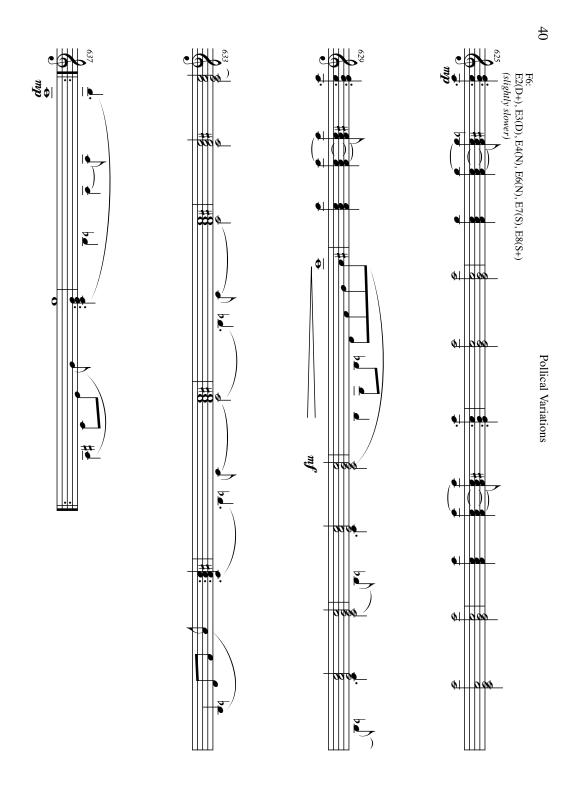


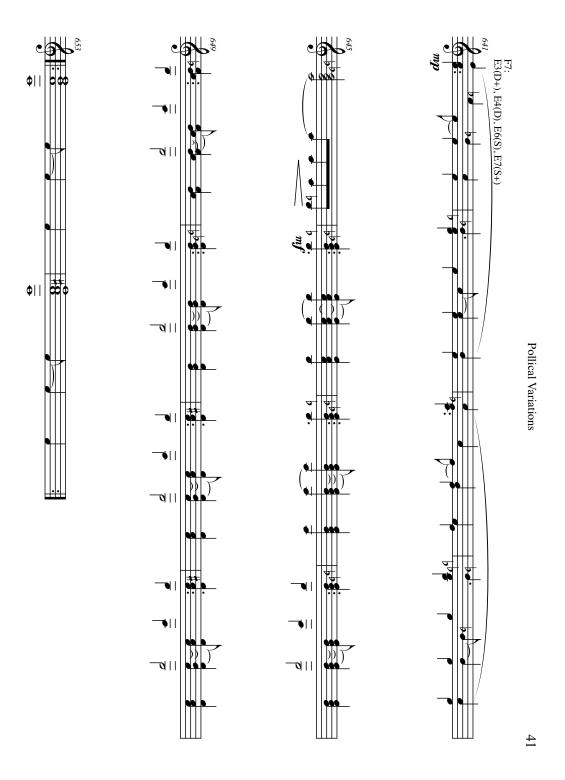


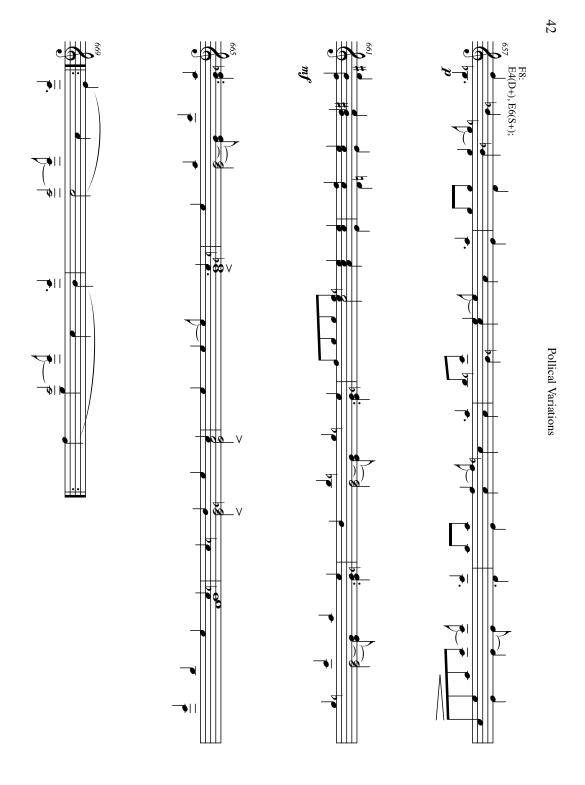


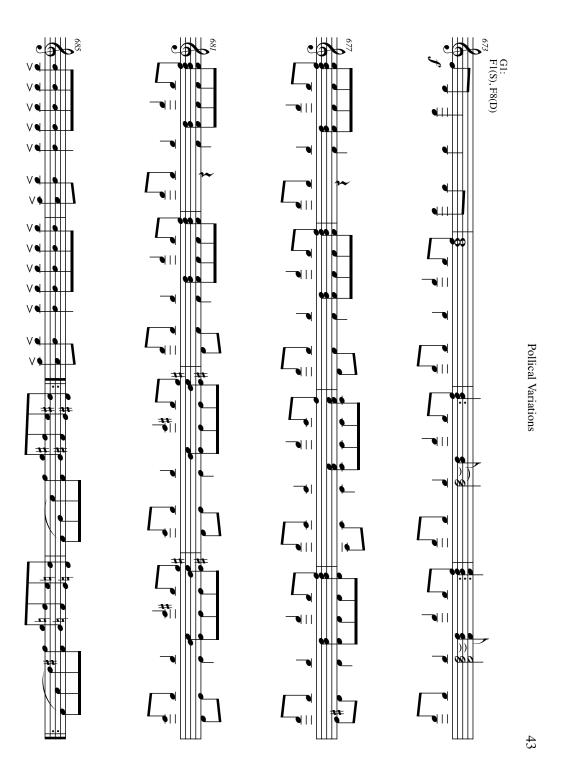


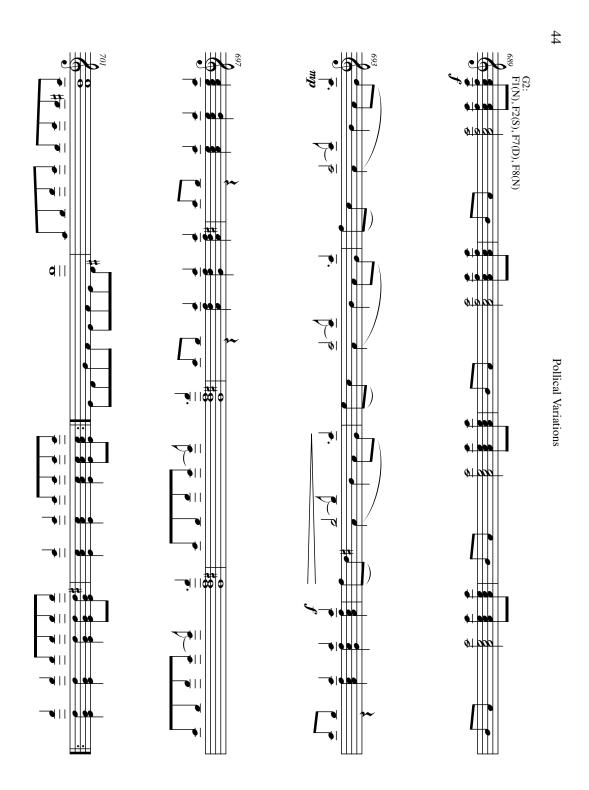


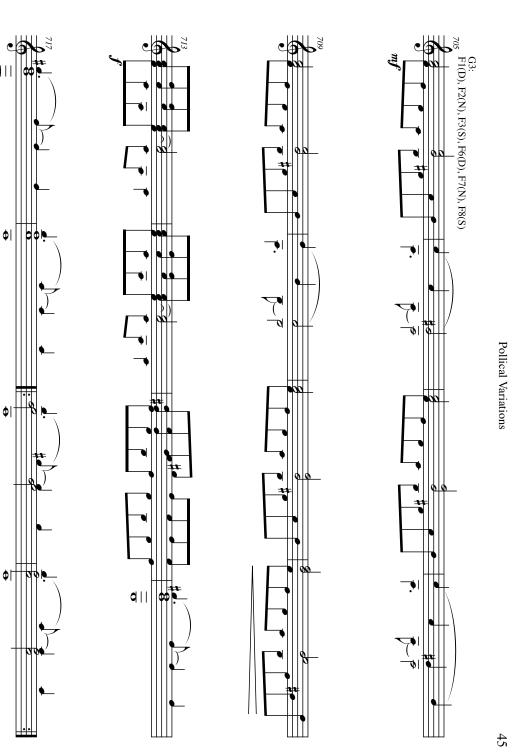


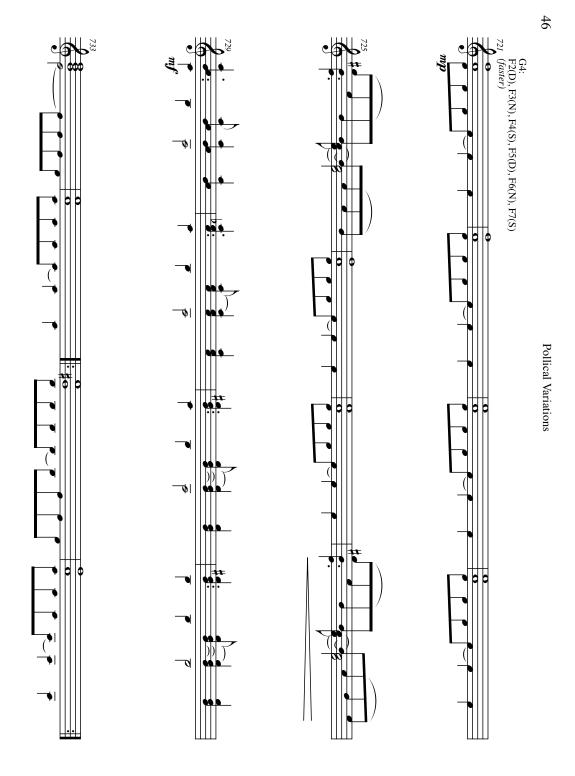


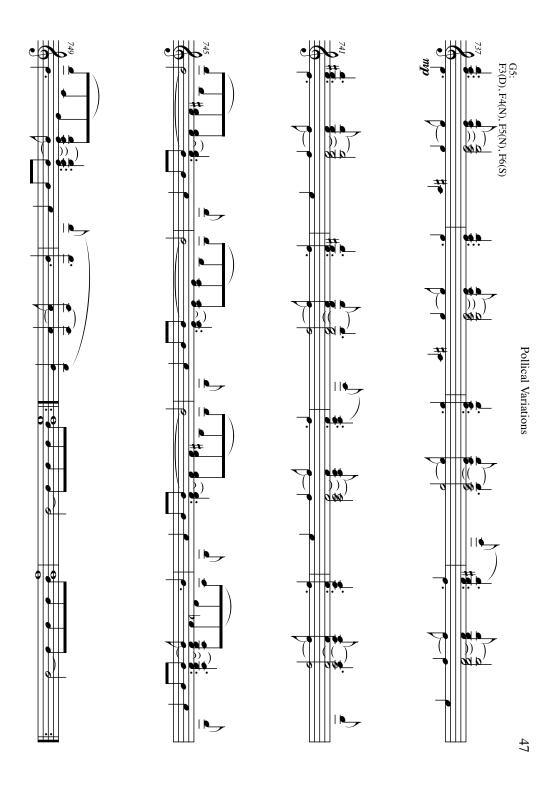


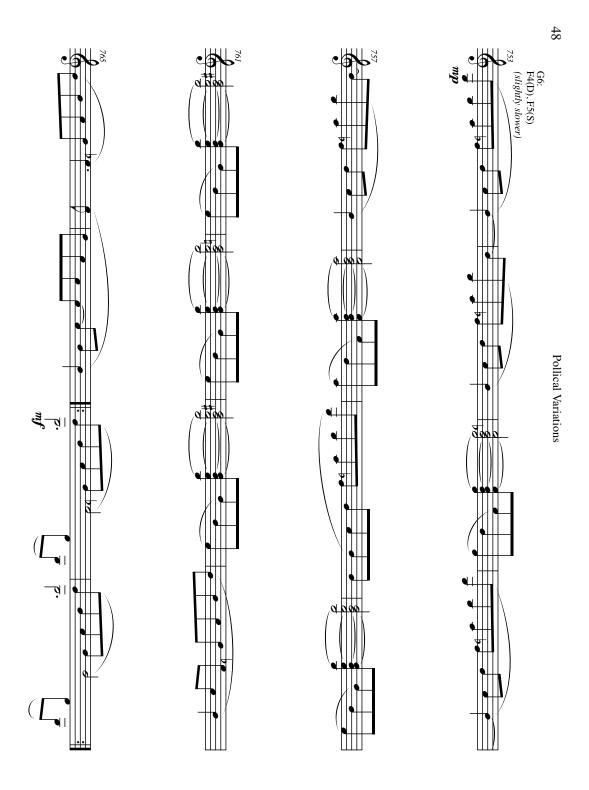


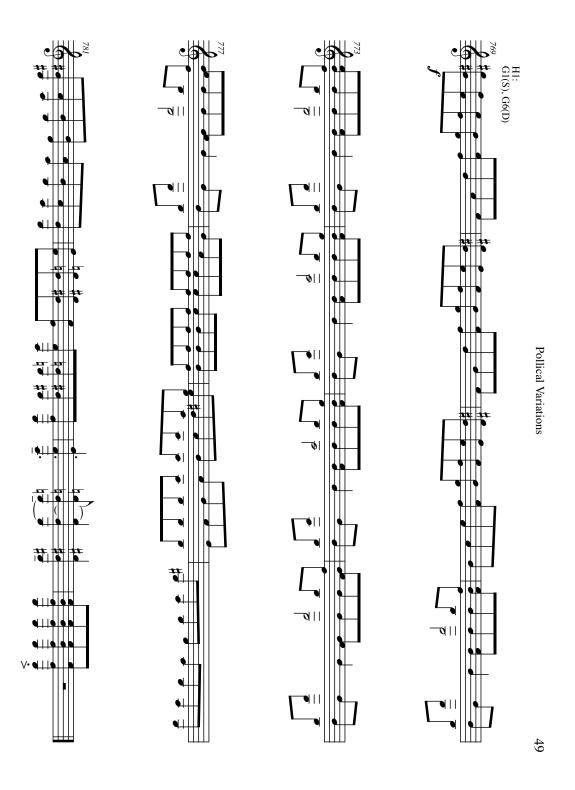


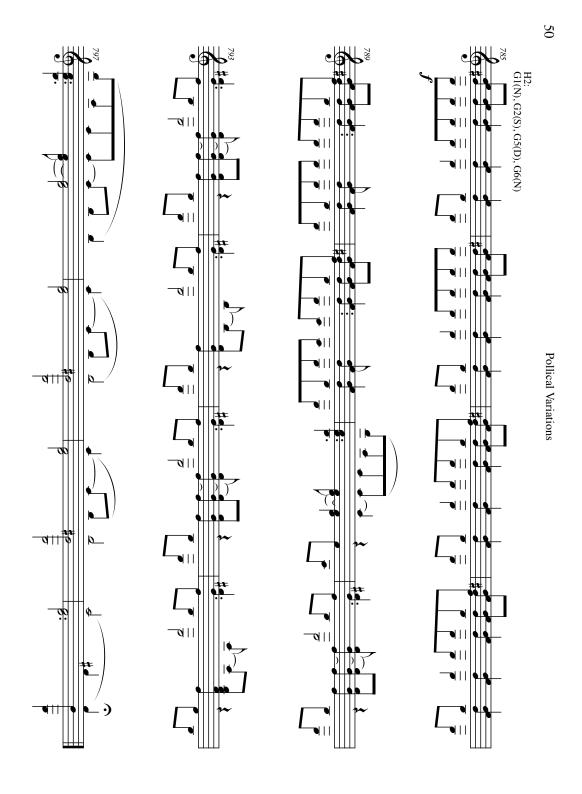


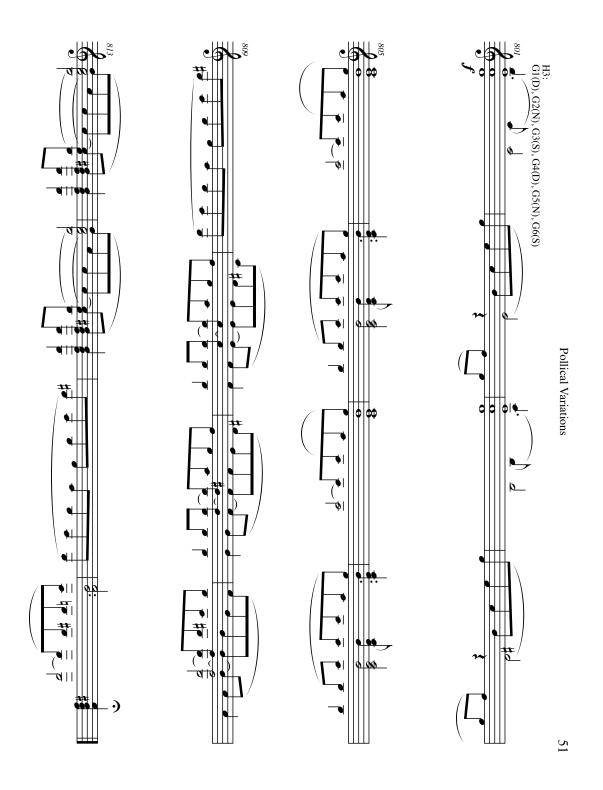


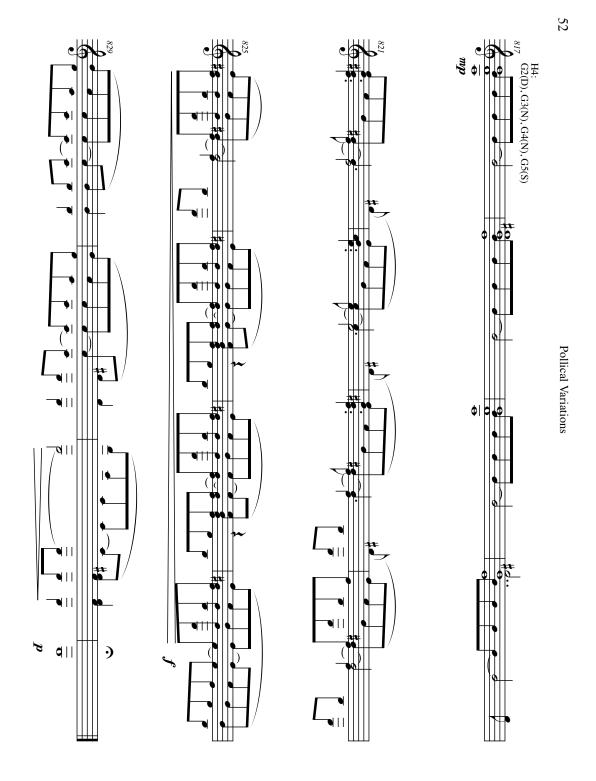


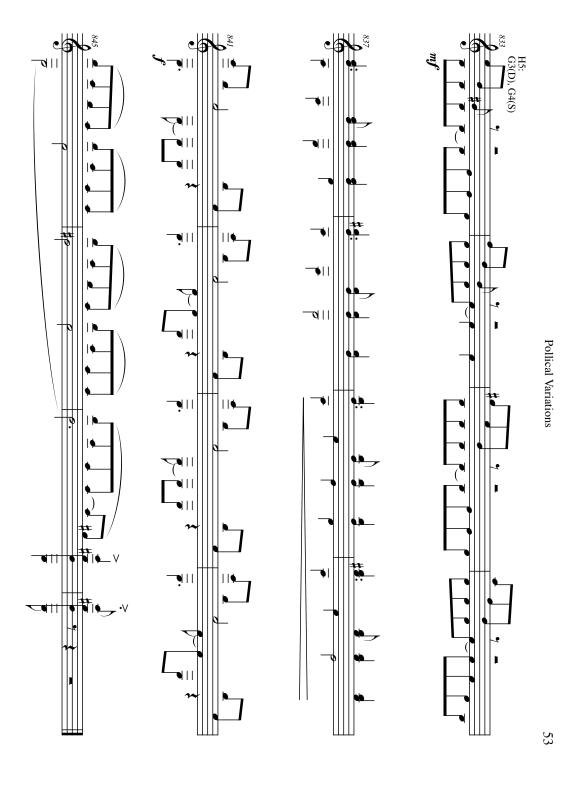












"Best to Wear Your Sweater"

for Clarinet in B, doubling on Bass Clarinet in B, Viola, and Cello

Lanier Sammons

"Best to Wear Your Sweater" Performance Notes

The material for this piece is loosely derived from the chorus of the Outkast song "ATLiens."

sections that will repeat until an audience member rasies his or her hand to indicate that the performers should move to the next section This piece involves audience participation. Before the piece is performed, the audience should be told that the piece consists of short

followed even if a hand is raised before a section has been fully stated for the first time. The only non-repeating section is the final two repeated until an audience member raises his or her hand. When this occurs, the conductor will cue the performers who will complete As indicated by the announcement to the audience, each of the numbered sections, which are enclosed by repeat signs, should be the next full measure (or more if necessary and agreed upon in rehearsal), then progress to the next section. This procedure should be They should be stated only once to conclude the piece.

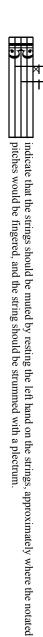
sides to the audience. One possible seating is: To grant the conductor a view of the audience and allow the instruments to project sufficiently, the performers should be seated with their



Clarinet and Bass Clarinet notes

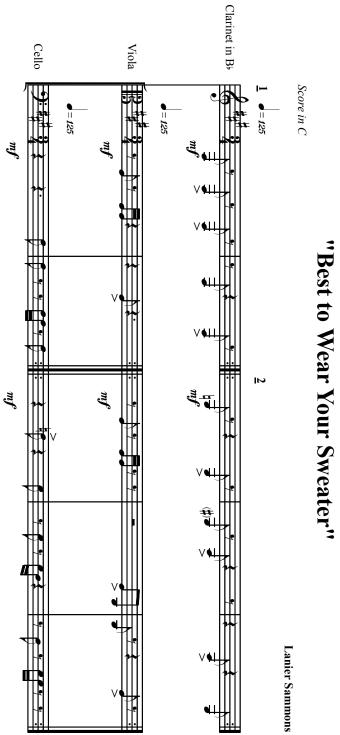
ease in indicating the sections to be played with the Bass Clarinet, the & clef has been used though no additional transposition is intended Both instruments are written on the same staff and in treble clef, with the bass clarinet sounding a major ninth lower than written. For accesible, hard object. indicates that the side of the pipe of the clarinet should be struck with a ring (if one is worn) or a similar readily

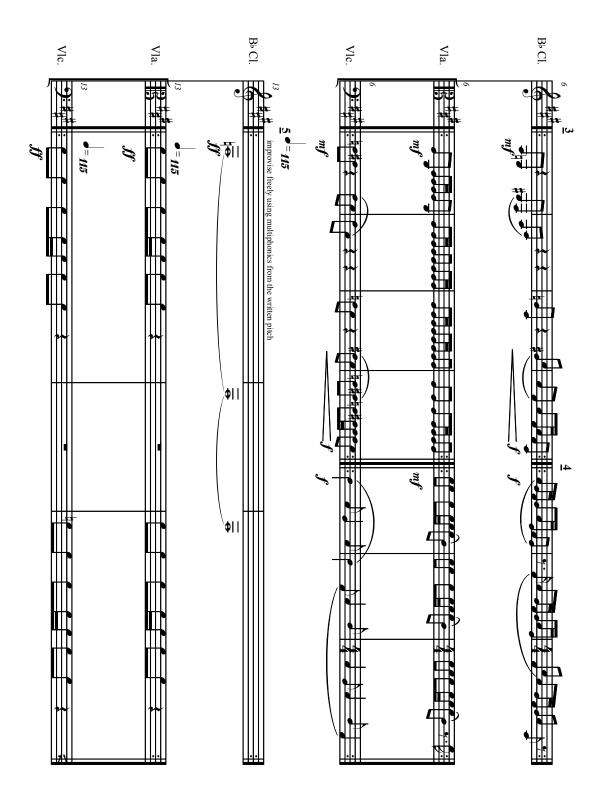
Viola notes:

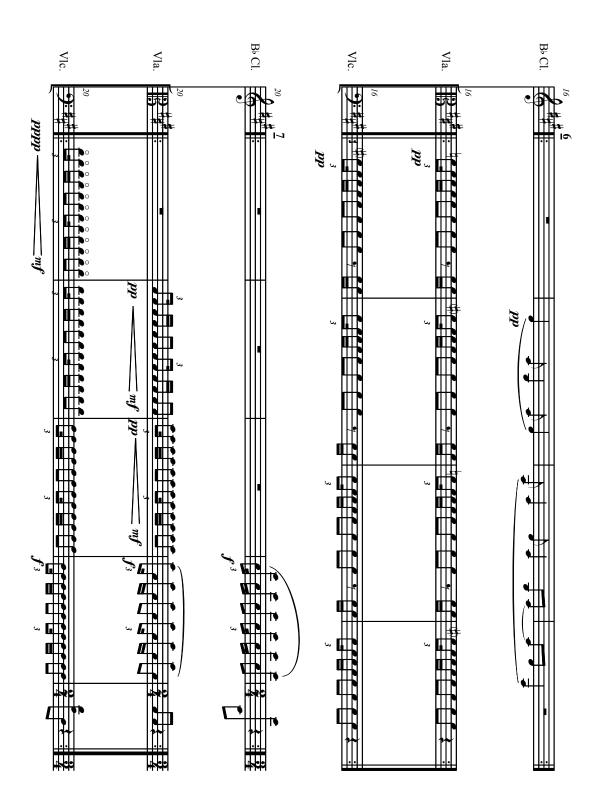


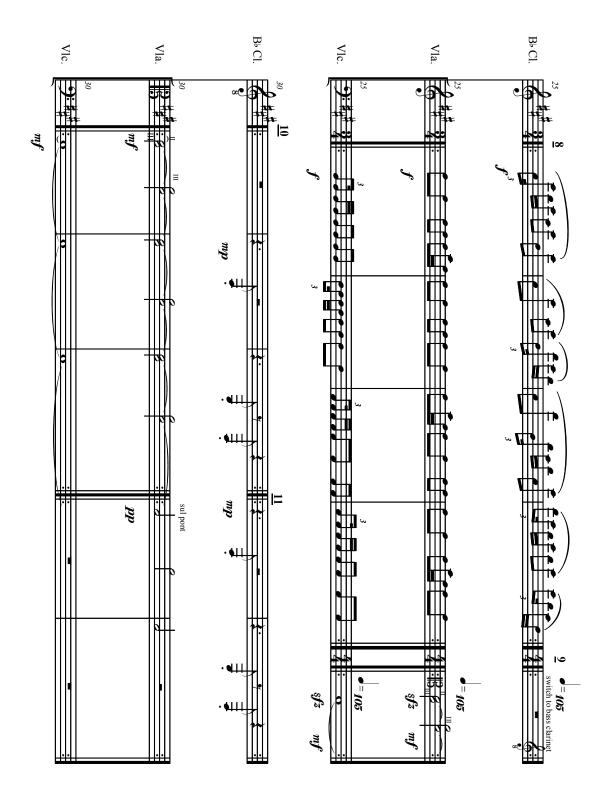
Cello notes:

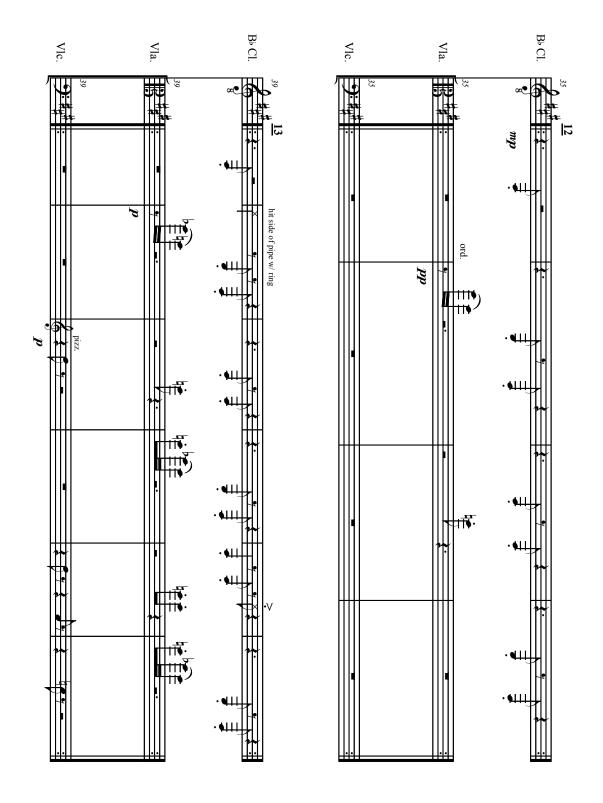
indicates that the body of the cello should be struck with the heel of the palm. If the cellist prefers not to strike his or her instrument, a wooden chair positioned next to the performer may be struck instead.

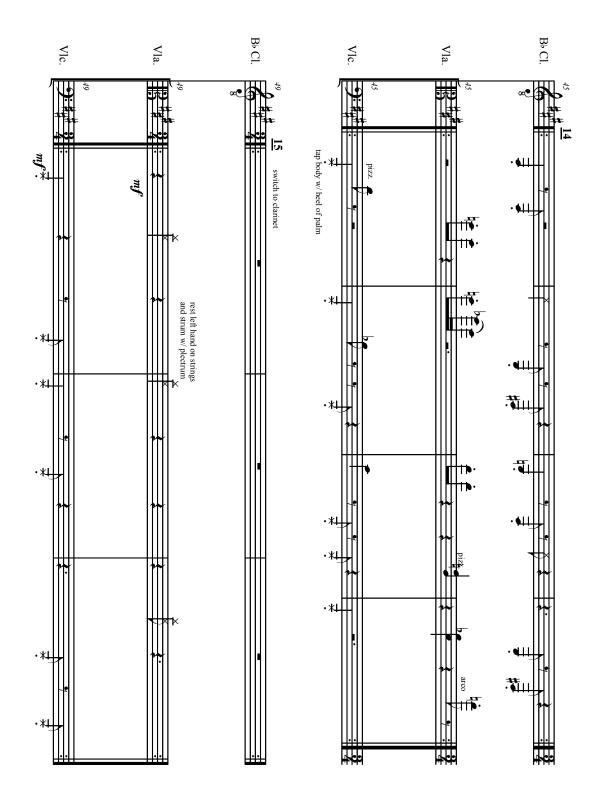


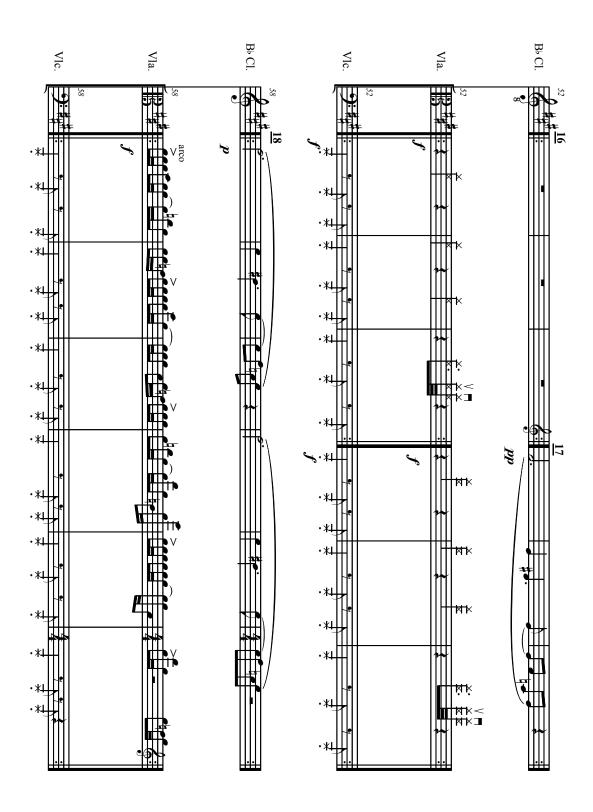


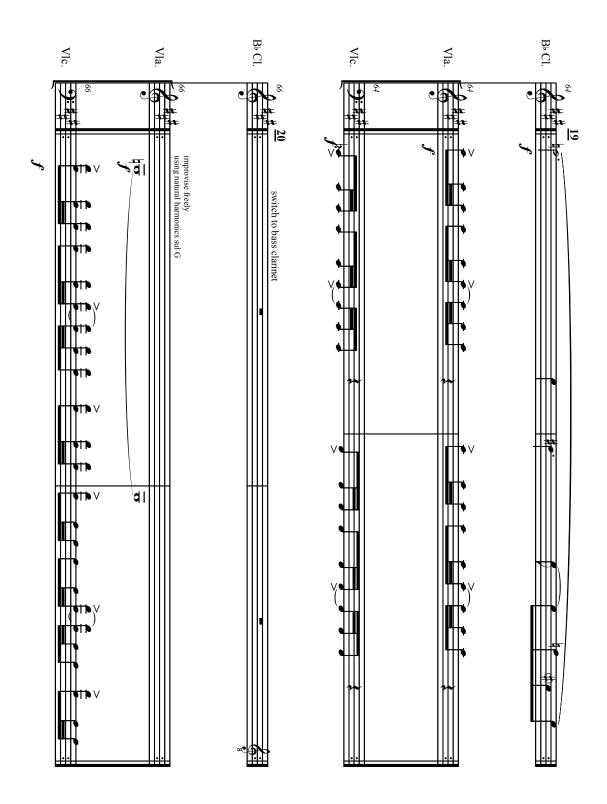


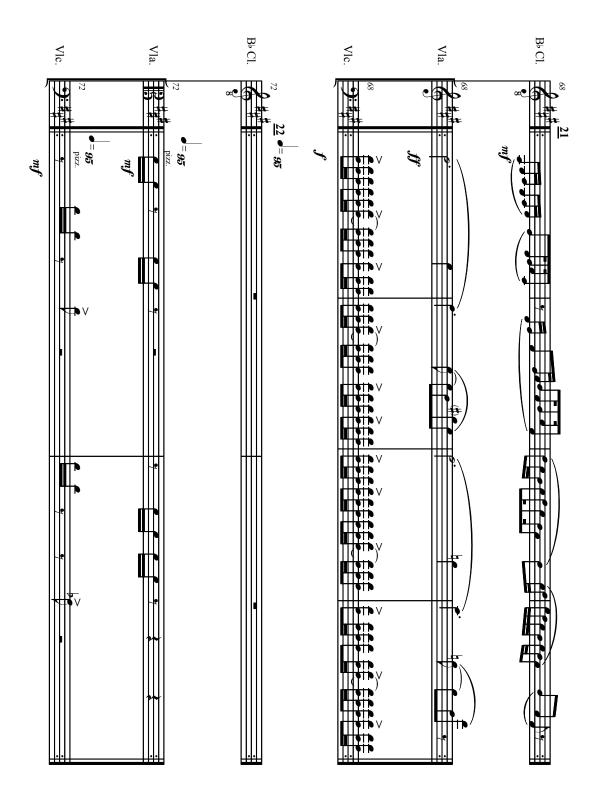


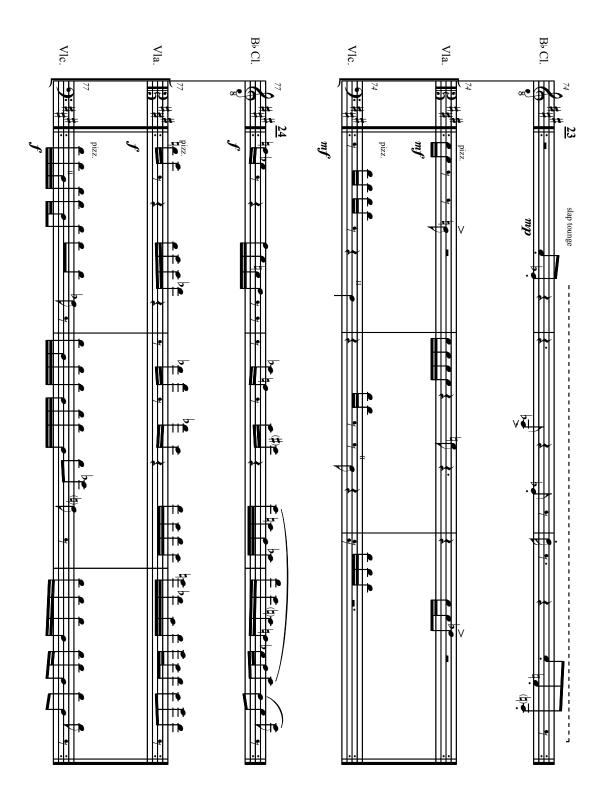


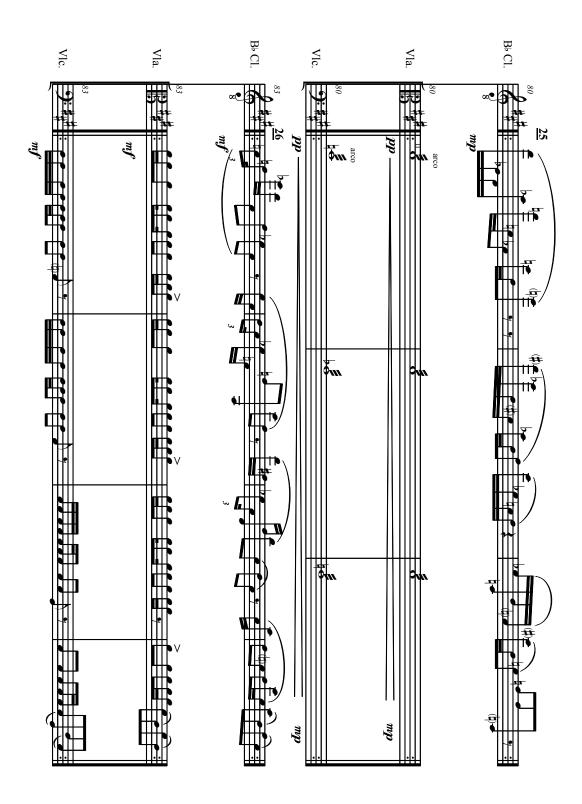


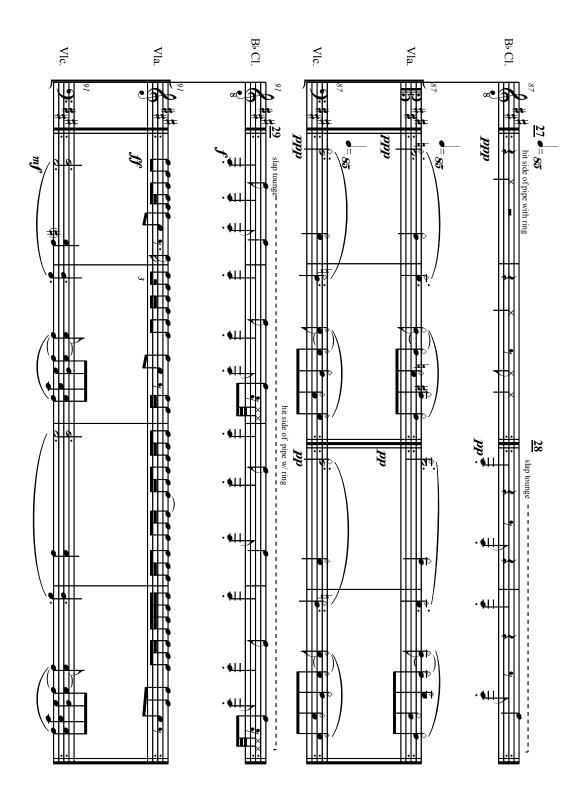


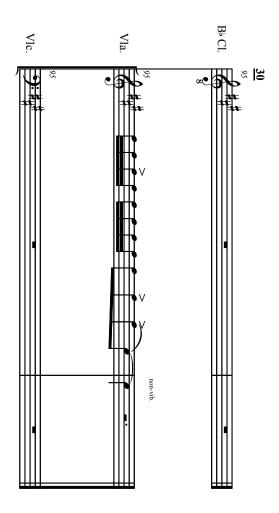












"I was looking back to see if you were looking back at me to see me looking back at you"

for violin, viola, cello, bass clarinet, and piano

Lanier Sammons

"I was looking back to see if you were looking back at me to see me looking back at you"

Notes

This piece consists of a series of cues to be played in response to audience actions and a ground, provided by the piano, upon which these cues will take place.

The four performers should each select a different quarter of the audience (though some overlap is fine), whose actions will trigger their cues. The performers should scan their portion of the audience and play the cue as soon as possible after they witness the action. Also, the performers should respond to any auditory cues regardless of the part of the audience from which they originate.

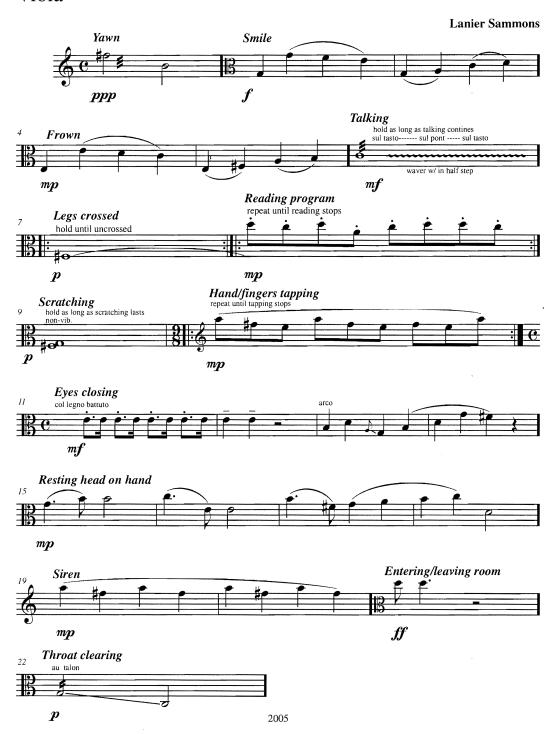
Tempos for the cues should be freely determined by the performers as they play, preferably without respect to the piano.

If in the midst of playing a repeating or held cue a performer sees an audience action that corresponds to a different cue, the performer may progress to the new cue or maintain the old cue at his or her discretion.

Once the final piano chord is sounded (it's the only time in the piece when the pianist will use pedal), the performers should complete any cue they are playing and not begin any new cues.



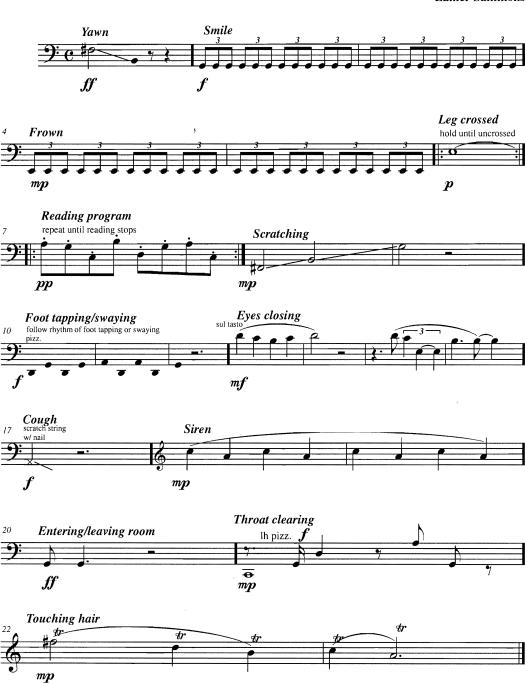
 $$^{\prime\prime}I was looking back at you to see if you were looking back at me Viola to see me looking back at you''



"I was looking back at you to see if you were looking back at me to see me looking back at you"

Cello

Lanier Sammons



2005

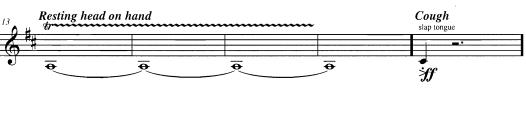
"I was looking back at you to see if you were looking back at me to see me looking back at you"

Yawn Smile Prown Reading program repeat until reading stops



mp

mp





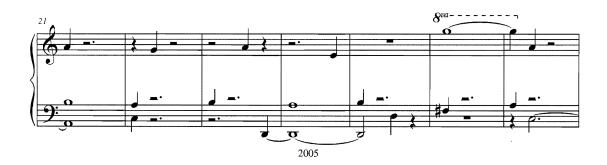
"I was looking back to see if you were looking back at me to see me looking back at you"

Lanier Sammons





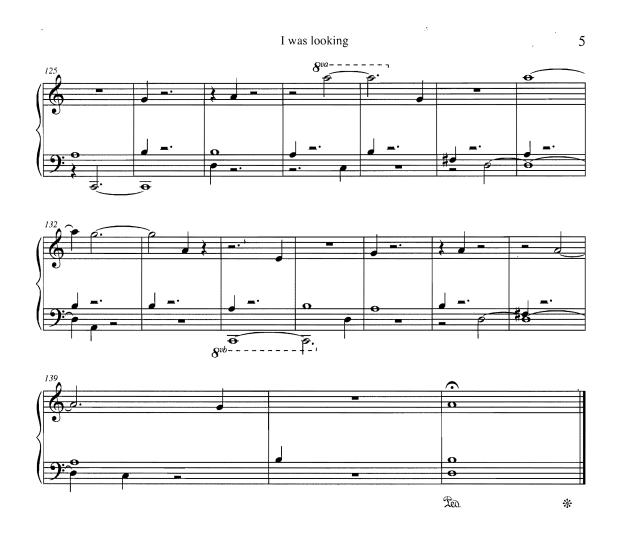








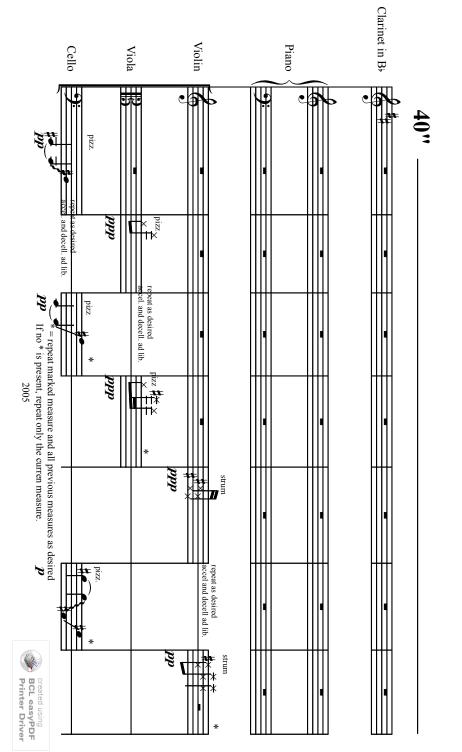


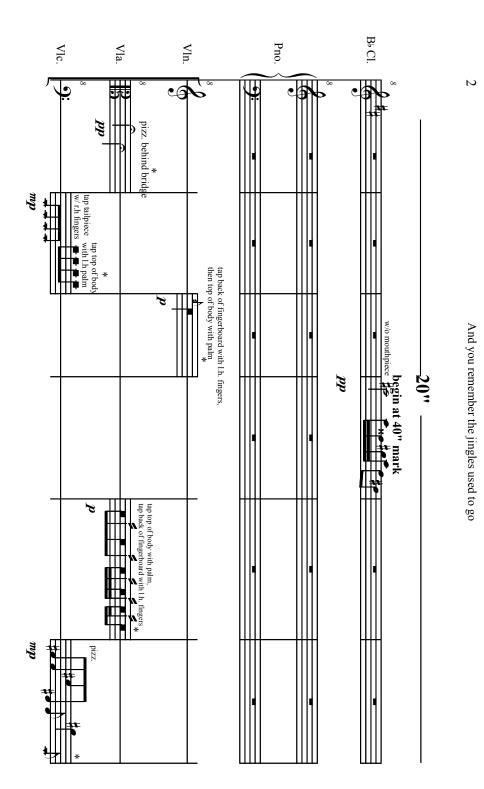


And you remember the jingles used to go

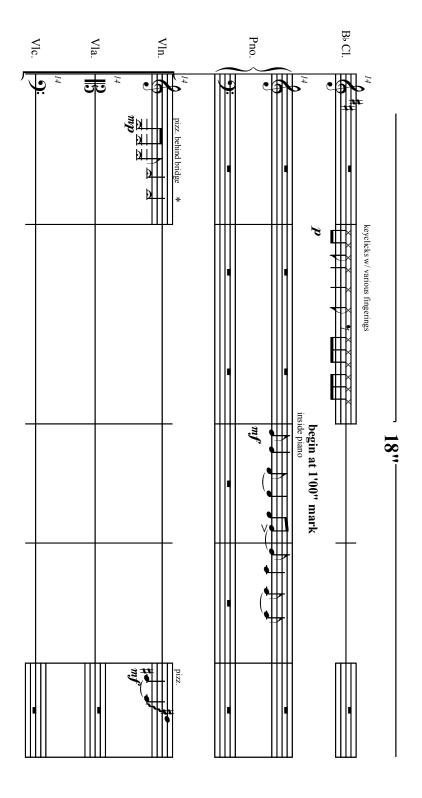
Lanier Sammons

All players enter freely in indicated orde except where time cues are provide. Measures are not metric.



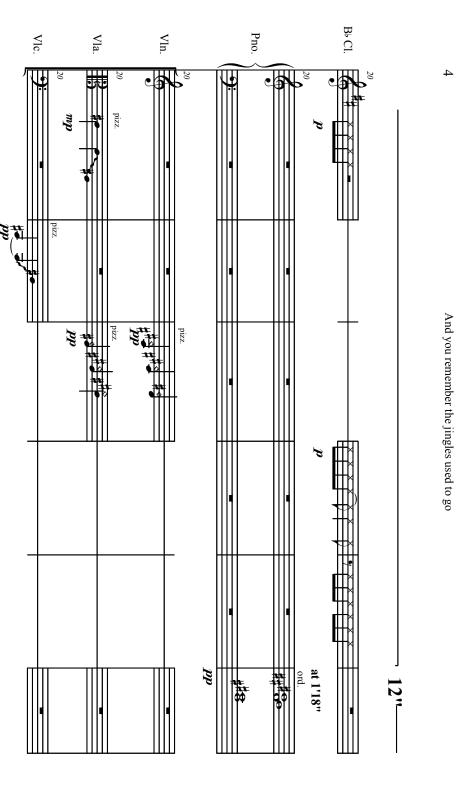




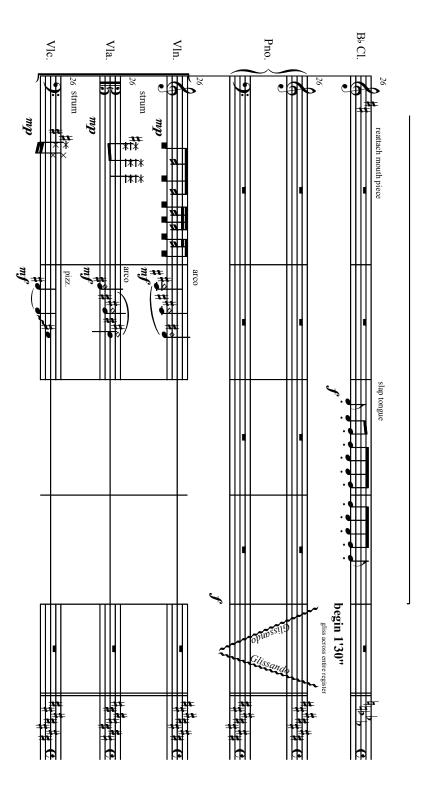




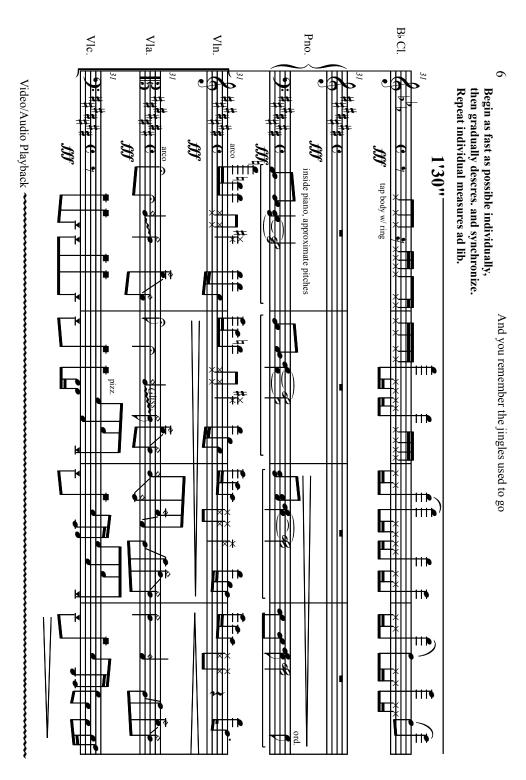
And you remember the jingles used to go



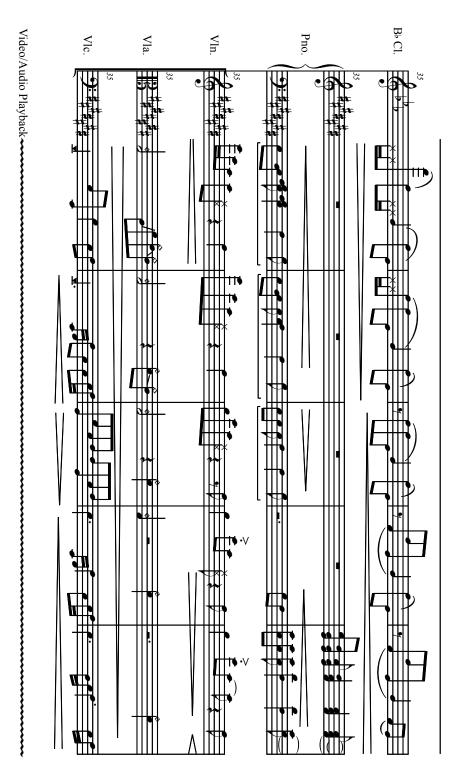








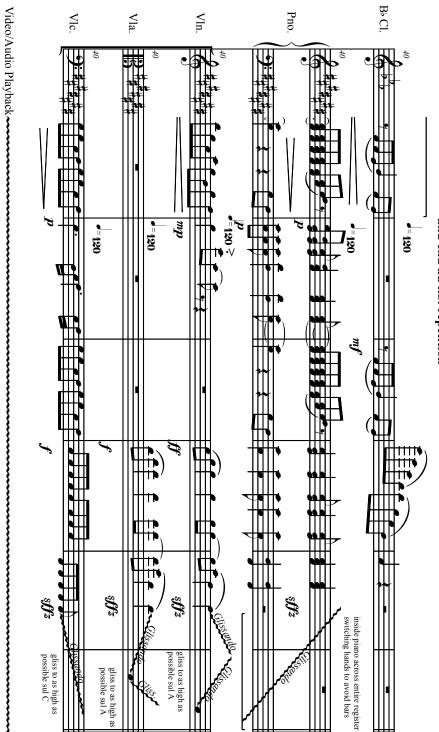






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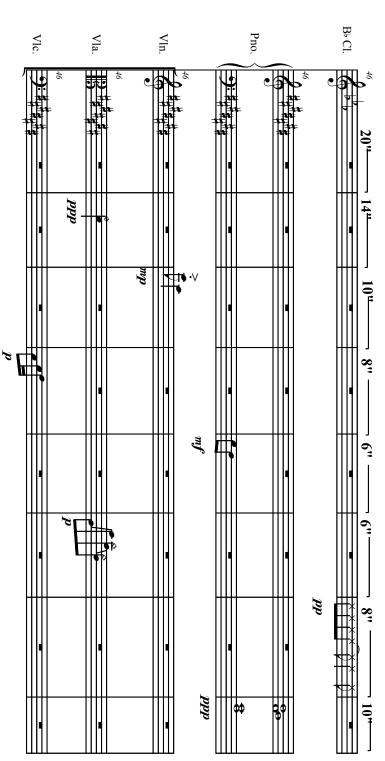
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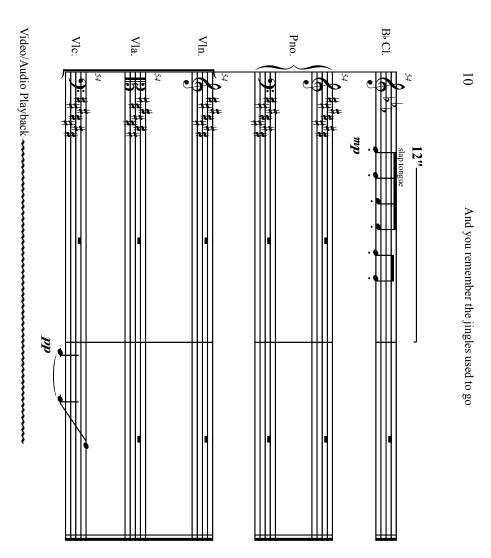
And you remember the jingles used to go Reset watches (at cue given by a member of the ensemble), and all players begin to mime playing. The tempo of notated measures is left to the performer.

After playing a notated measure once the performer should return to miming.





Video/Audio Playback





"Better Play the Note You Know" for any number of pitched instruments Lanier Sammons

Each performer should select one pitch and improvise freely using only this pitch.

Before the performance, the ensemble should select a member to cue the beginning of the performance. This step, of course, may be omitted if there will be only one performer.

Ideally, the piece should conclude once all performers have decided to stop playing. If a time limit is required, the performer who cued the beginning of the piece may also cue the end.

Possible variations:

The audience may be invited to participate.

If desired, the piece may be performed in multiple movements with performers simply selecting a new pitch for each movement.

Please maintain the quotation marks when referencing this piece as the title is taken from the last line of the English lyrics to "One Note Samba" by Antonio Carlos Jobim.

Appendix C: List of audience-interactive works for concert hall audiences

```
Adolphe, Bruce
      City Sounds (2010)
      Farmony (2006)
       Three Pieces for Kids in the Audience and Chamber Orchestra (1988)
      Urban Scenes for String Quartet and Kids (1993)
Andersen, Eric
      Please Leave (1985)
Ashley, Robert
      Public Opinion Descends Upon the Demonstrators (1961)
Ayers, Jesse
      Jericho (2005)
      Rahab (2010)
Ay-O
      Exit Nos. 1 – 8
Baird, K.
      No Clergy (2005)
Baker, David
      Concertino for Cellular Phones and Orchestra (2006)
Barnes, Larry
      Dreams of the Anti-City (1985)
Bedford, David
       With 100 Kazoos (1971)
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Belet, Brian
      Lobby Reforms (2006)
Bowyer, Don
      Time Zones
      Unity
Brecht, George
      Word Event, Fluxversion 1 (1961)
Britten, Benjamin
      Let's Make an Opera (1949)
      Saint Nicolas (1948)
Brucker-Cohen, Jonah, Tim Redfern, and Duncan Murphy
      SimpleTEXT (2003)
Burtner, Matthew
      Auksalaq: a Telematic Opera (2012)
      MICEtro (2008)
      Money MICE (2003)
Chafe, Chris
      Siren Cloud (2010)
Chénard, M.
      The Millenium Symphony (2000)
Crawford, Ben
      Checkmate (2008)
      A Cookbook for Life (2009)
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Morals (2007)
      Rules (2009)
      SuperCondcutors Beta (2010)
      "You don't understand – these boys killed my dog" (2007)
Dahl, Luke, Jorge Herrera, and Carr Wilkerson
      TweetDreams (2010)
DePue, Wallace
      The Wonderful Witch of Oz
Duffy, Thomas C.
      The Critic's Choice (1995)
Emergence Collective (Jonathan Zorn, Scott Barton, Yuri Spitzyn, Lanier Sammons,
Peter Traub and Matthew Burtner)
      Unity Groove (2008)
England, Megan
      Blip (2010)
Erb, Don
      Music for a Festive Occasion (1975)
      Prismatic Variations (1983)
      Souvenirs (1970)
Erion, Carol
      Humming and Whooping
Farwell, Arthur
      Symphonic Hymn on "March! March!" (1923)
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Symphonic Song on 'Old Black Joe' (1923)
Freeman, Jason
      Glimmer (2004)
      Flock (2007)
Friedman, Ken
      Cardmusic for Audience (1966)
      Fluxus Instant Theater (1966)
Harding, Tayloe and Brian Williams
      Grassroots 2008 (2008)
      Grassroots 2012 (2012)
Hasse, J.
      Moths (1986)
Heflin, Lee
      First Performance
      Ice Trick
Heinick, David
      Conversations (2008)
Higgins, Dick
      Anger Song #6 ("Smash") (1966)
Hindemith, Paul
      Ite, angeli veloces (1953)
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Chair Piece for George Brecht (1965)

Knowles, Alison

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Shoes of your choice (1963)
      String Piece (Variation on Braid) (1964)
Kojs, Juraj
      Urgent Assistance (2005)
Koplow, Philip
      Concerto for Piano and Public Consort (1978)
      Generations (1980)
      Hello Family (1993)
      Legacy: J. Ralph Corbett (1992)
      On Imagination (1976)
Levin, Golan, Scott Gibbons, Greg Shakar, Yasmin Sohrawardy, Jonathan Feinberg,
and Shelly Wynecoop
      Dialtones (A Telesymphony) II (2002)
Levin, Golan, Scott Gibbons, Greg Shakar, Yasmin Sohrawardy, Joris Gruber, Erich
Semlak, and Gunther Schmidl
      Dialtones (A Telesymphony) (2001)
Maxfield, Richard
      Mechanical Fluxconcert
McKay, Neil
       Variations on "Twinkle, Twinkle Little Star"
Milburn, Ellsworth
      A Day in the Life of Bingo (the Dog) (1991)
       Toys in the Audience (1988)
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Miller, Larry
      Bit Part for Audience (1969)
       Talk/Don't Talk (1977)
Nurock, Kirk
      Audience Oratorio (1975)
      Haunted Messages (1984)
Oliveros, Pauline
      Deep Listening Pieces (1971-1990)
      Sonic Meditations (1974)
Paik, Nam June
      Prelude
Rzewski, Fredric
      Zuppa (1968)
      Soundpool (1969)
Sammons, Lanier
      "_" or Underscore (2010)
      11 Measurements (2012)
       "And you remember the jingles used to go" (2005)
       "Best to wear your sweater" (2003)
       "Better play the note you know" (2002, rev. 2007)
      Contact (2012)
       "I was looking back to see if you were looking back at me to see me looking
      back at you" (2004)
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Loose Can(n)on (2012)
      Points (2011)
      Pollical Variations (2012)
       Your Move (2011)
Schafer, R. Murray
      Ra (1979-1980)
       The Wolf Shall Inherit the Moon
Schmit, Tomas
      Sanitas No. 35
      Sanitas No. 165
Schultz, Mark
      The Melon Patch (1996)
Schwartz, Elliott
      Music for Soloist and Audience (1970)
      Pentagonal Mobile (1978)
Schwartz, Francis
      Baudelaire's Uncle (1980)
      Cannibal-Caliban (1975)
      Daimon II: el Velorio (1986)
      Dali and Gala
       The Death of García-Lorca (2006)
      Flaming June (1998)
      Gestos (1984)
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The Grey Road (2007)
      Grimaces (1984)
       The Headless Glory of André Chénier (1989)
      Leaping Lenny: Homage to Bernstein (1993)
      The Madness of Robert Schumann (1980)
      Malebolge (2011)
      My Aleph: Homage to Borges (1999)
      On the State of Children (2004)
      Papageno's Dream (1991)
       The Raven: Literary Bagatelle #8
      Songs of Loneliness (1991)
      Un Sourire Festif (1979)
      El Sueño de Magroll (1999)
      Sweet Breath of Sound (2011)
      Le Temple de la Fleur (1978)
       Tenebrae (2011)
       Visions (1999)
       We've Got (Poly)Rhythm: Homage to Gershwin (1984)
       Wolfgang's Frolics
Tomasacci, David
      3'44" for Listener
Townshend, Pete
      Lifehouse (unrealized)
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Turner, Simon
       The New Ring Cycle (2002)
Vautier, Ben
      Audience Piece No. 1 (1964)
      Audience Piece No. 6 (1964)
      Audience Piece No. 7 (1965)
      Audience Piece No. 9 (1965)
      Audience Piece No. 10 (1965)
      Audience Variation No. 1
      Concerto for Audience by Audience (1965)
      Make Faces (1962)
      Orders (1964)
      Police (1961)
      Shower II (1962)
      Supper (1965)
       Tango (1964)
       Theft (1961)
       Three Pieces for Audiences (1964)
Ward-Steinman, David
      Improvisation on Five Notes from the Audience
Warshauer, Meira
      Beyond the Horizon (2000)
Weymouth, Dan
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Unexpected Things (2007)
       There are no...
Williams, Emmett
      Counting Songs (1962)
      Duet for Performer and Audience (1961)
      Supper (1965)
Williamson, Malcolm
      Genesis (1971)
      The Stone Wall (1971)
      The Terrain of Kings (1974)
      The Valley and the Hill (1977)
      The Winter Star (1973)
Wood, Henry
      Fantasia on British Sea Songs, arr.
Zarou, Richard
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One Night Only

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