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# A Wind Ensemble Transcription of Part 1 (the First Movement) of Harmonielehre by John Adams with Commentary

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A Wind Ensemble Transcription of Part 1 (the First Movement) of

*Harmonielehre* by John Adams with Commentary

Richard Edward Wyman, DMA

University of Connecticut, 2014

John Adams, perhaps the most prominent American composer of the last twenty-five years (and reported to be the most frequently performed living composer), has created important repertoire for almost every major musical medium except the Wind Ensemble or Band. Published transcriptions exist of two shorter orchestral works, *Lollapalooza* (1995, six minutes long), transcribed by John Spinazzola, and *Short Ride in a Fast Machine* (1986, four minutes long), transcribed by Lawrence Odom, and both of these have become important works in the repertoire. By presenting a transcription of the seventeen-minute long first movement of Adams's large-scale symphonic work *Harmonielehre* (1984-1985), this project presents the possibility for wind ensemble performers and their audiences to experience John Adams's music on a larger scale. Also included is contextual commentary of value to conductors, performers, and scholars of John Adams; this discusses the historical background and the analysis of music relating to Minimalism, post-minimalism, John Adams, and *Harmonielehre*. Additional exploration of the transcription's creation includes commentary on issues of instrumentation and orchestration, with examples of representative musical challenges and their possible solutions.

A Wind Ensemble Transcription of Part 1 (the First Movement) of  
*Harmonielehre* by John Adams with Commentary

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Requirements for the Degree of

Doctor of Musical Arts

at the

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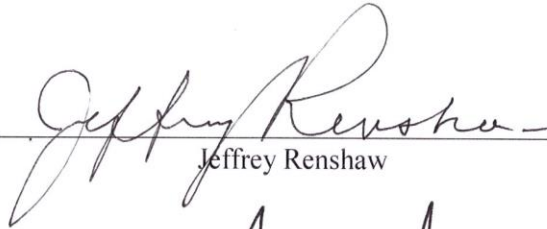
Doctor of Musical Arts Dissertation

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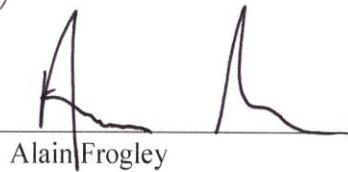
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2014

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It sometimes seems odd for a Grammy Award-style acknowledgement segment to appear in a scholarly document. However, any large-scale creative endeavor, whether it be a movie, recording, TV show, or research on an obscure aspect of academia, inevitably requires vast amounts of help from others, and extreme levels of patience from loved ones and friends. As such, my wife, Erin Wyman, deserves an incredible “thank you” for the loving support throughout this extended endeavor, and for picking up gigantic amounts of slack within our family life. Thanks also to my three wonderful boys, Conner, Avery, and Oliver, whose patience with their Father’s several (plus) years of high absenteeism throughout this project has been deeply appreciated. Deep thanks to my parents, Jane and David Wyman, for their support and for demonstrating and instilling a great love for learning and teaching. Dr. Alain Frogley, my advisor on this project, and overall good-natured Music History professor at the University of Connecticut, deserves incredible thanks for ushering me through every step of the process, going “above and beyond” in his helpfulness, dedication, and excellence. Thanks to Dr. Jeffrey Renshaw, Professor of Conducting, who for over 25 years has demonstrated to me excellence in musical taste, and helped me immensely in the ongoing process of cultivating my own. And thank you to Dr. Peter Kaminsky, whose dedicated passion for analysis and teaching has helped me to highly value the art of Music Theory. “Thank you” to Ken Megan, recently retired Director of the Coast Guard Band, for the many years of work flexibility which allowed me to pursue a degree. Special thanks to Associated Music Publishers/G. Schirmer for granting permission to create this transcription, and to reprint pages of the music in this dissertation. And finally, thanks to John Adams himself, who has dedicated his life to the creation of thought-

provoking and relevant works of art, and is able to continue creating even in the face of criticism or protest.

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## Chapter 1

### Introduction and Scope of Project

The past fifty years have seen great progress in the creation of substantive music for the Wind Band/Ensemble<sup>1</sup> by major composers, thanks in large part to the dedicated commissioning work of wind conductors and advocates like Frederick Fennell, Frank Battisti, and Jeffrey Renshaw. While these valiant efforts continue, there remain important living composers that have not yet written music for wind band/ensemble. Of particular note is John Adams, a major American musical voice of the late twentieth and early twenty-first centuries. Generally the “most frequently-performed living American composer,”<sup>2</sup> and a 2003 recipient of the Pulitzer Prize in Music for his *On the Transmigration of Souls*,<sup>3</sup> John Adams represents a major absence from the wind band/ensemble’s repertoire. While efforts are underway to commission a new ensemble-specific work, the only existing opportunities for wind bands/ensembles to perform the music of John Adams rest with two existing published transcriptions of shorter orchestral works, *Lollapalooza* (1995, six minutes long), transcribed by John Spinazzola, and *Short Ride in a Fast Machine* (1986, four minutes long), transcribed by Lawrence Odom. Both of these transcriptions have become important works in the repertoire, but as the wind band/ensemble seeks to

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1. Frank Battisti, in his book *The Winds of Change* (Galeville: MeredithMusic Publications, 2002), uses the phrase “Wind Band/Ensemble” to jointly refer to ensembles fitting the “band” category (often large groups with titles such as “symphonic band,” or “concert band,” and usually featuring multiple players per part) as well as “wind ensembles,” that generally feature solo players on each part.

2. Per the American Symphony Orchestra League’s annual *Orchestra Repertoire Reports* which often list John Adams as first in this category, as demonstrated in the most recent published report, “Orchestra Repertoire Report 2010-2011,” the American Symphony Orchestra League, 2011, Accessed November 10, 2014, <http://www.americanorchestras.org/knowledge-research-innovation/orr-survey/orr-current.html>.

3. “The 2003 Pulitzer Prize Winners: Music: John Adams: Biography,” The Pulitzer Prizes, 2003. Accessed October 20, 2014. <http://www.pulitzer.org/biography/2003-Music>.

increasingly become a “serious medium of artistic expression,”<sup>4</sup> works by Adams of larger scope (length) are needed. The creation of a wind ensemble transcription of the seventeen-minute first movement (“Part 1”) of *Harmonielehre* (1984-1985) offers a more “serious” work of John Adams.

This dissertation presents a transcription of *Part I* (the first movement) of *Harmonielehre*, discusses the transcription process, and offers contextual information as it relates to performance of the work. During the transcription’s development and editing, it was read through at two different points by a professional wind ensemble (The U.S. Coast Guard Band, LCDR Adam Williamson, Director). Ensemble members offered instrument-specific feedback that informed further alterations. The work’s wide-ranging emotional span is challenging for any ensemble, but it offers great variety and appeal to performers and listeners. The work was selected for transcription in part precisely because of its wide-ranging musical palette: long-span musical evolutions based on minimalist procedures, a seemingly neo-Romantic mid-section containing dramatic solo opportunities, and a final section which combines the two approaches.

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4. One of the stated goals of the World Association for Symphonic Bands and Ensembles, as documented on the “About WASBE” section of the website, accessed October 18, 2014. <http://www.wasbe.org/about/>.

## Chapter 2

### Conceptual and historical context: Minimalism, post-minimalism,

#### John Adams, and *Harmonielehre*

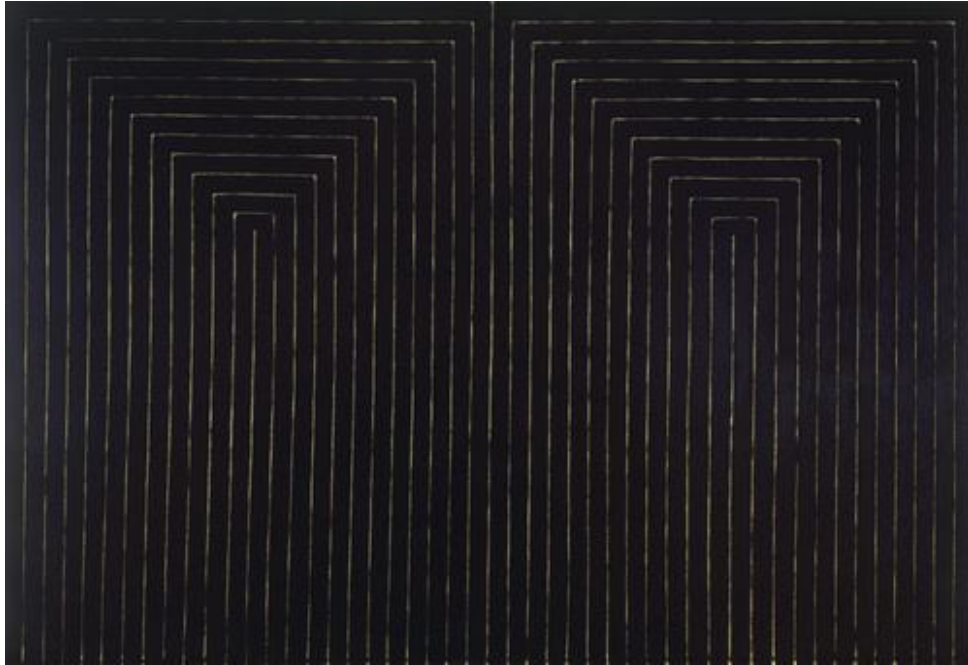
Is John Adams a “Minimalist?” It depends on who you ask, and how the term is applied.

Although written in passing to make another point, Adams refers to himself as a “...composer who’d found his voice in 1970s Minimalism.”<sup>5</sup> While an investigation of his musical output reveals a musical canon of wide-ranging ethos that extends well beyond the specific minimalist aesthetic, any study of the music of John Adams benefits from an overview of this movement and its musical foundations.

The early 1960s saw the severe stylizing of simplified, reductive art, particularly painting and sculpture. The term “minimalism” was later applied to the results. In very fundamental terms, paintings were often simple in means, perhaps consisting of a thin line, stripes, or a black canvas. The work of Frank Stella provides representative examples: see Figure 1. Sculpture might consist of a rectangular slab, such as *Slab (cloud)*, by Robert Morris: see Figure 2.

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5. John Adams, *Hallelujah Junction: Composing an American Life* (New York, NY: Farrar, Straus and Giroux, 2008), 219.



*Figure 1: Frank Stella, The Marriage of Reason and Squalor, II, 1959. Enamel on canvas*



*Figure 2: Robert Morris, Slab (cloud), 1963*

It is a “style distinguished by severity of means, clarity of form, and simplicity of structure and texture.”<sup>6</sup> The term is thought to have been first applied to music (indirectly) by Barbara Rose in a 1965 article entitled “ABC Art.” She refers specifically to La Monte Young’s “Dream Music.”<sup>7</sup> It was not until the 1970s (after, many feel, strict “minimalism” was dead) that the term began gaining application to music, as the public began gaining some awareness of a new musical movement. Michael Nyman is credited by many (Reich, Dan Warburton, Jonathan Bernard, K. Robert Schwarz) as coining the actual phrase “Minimal music” in the 1970s. Alternately, Tom Johnson receives credit from some (Philip Glass and others), in part with his 1972 article(s) referring to a “Hypnotic School” of music. Primarily performed in art galleries, lofts, clubs, and other non-traditional spaces, this flat/hypnotic/trance/pulse/space music gained the need for a clean title after the success of the 1976 Town Hall debut of Steve Reich’s *Music for 18 Musicians*. In effect, critics needed to know what to call this music, and record stores needed to know how to file it: it needed its own “-ism.” The late 1970s, however, found many claiming “minimalism” an inaccurate term for the evolving musical movement; a feeling best articulated by Joan La Barbara’s 1977 statement that “the term not only no longer applies, but is purely laughable to describe such rich and complex music.”<sup>8</sup> Applicable or not, the title became seemingly permanent in the 1980s when composers associated with the movement were crowned “minimalists” in major journalistic outlets. A 1981 *Time* magazine article on Philip Glass identified Reich and Riley as also “in the minimalist camp.” *Time* magazine’s “Best of 1982” issue listed Reich’s *Tehilim* as its representative for “the year of Minimalism.” *High*

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6. Edward Strickland, *Minimalism:Origins* (Bloomington, IN: Indiana University Press, 1993/2000), 4.

7. Strickland, *Minimalism*, 241.

8. Strickland, *Minimalism*, 245.

*Fidelity/Musical America* also featured articles that placed the term in headlines (including Nov. 1981, “Framing the River: A Minimalist Primer.”)<sup>9</sup>

Although the phrase “minimalist” became common-place, the term itself (and its level of appropriateness) seemingly has stirred more attention and scholarly debate than any other musical style label. As such, other more specific delineations have developed. The musical offspring, 1974 and beyond, of the original/official 1960s minimalist aesthetic (clarity and accessibility) is often better labeled “post-minimalism,” with that music’s increased drama, reduced emphasis on redundancy, and pretty harmonies and diatonic scales.

Most accounts of minimalism begin with La Monte Young, whose music is generally characterized by stasis. Philip Glass once said, in an interview, that Young “*is the Tortoise*.”<sup>10</sup> An early, but important representative work is his *Trio for Strings* (1958), characterized by extremely soft, sustained notes. Entrances are spaced extremely far apart. Another representative work is *The Well-Tuned Piano* (1964), where Young returned the piano to “just intonation.” Performances of the work, which are semi-improvised, last five to six hours. The work “could be likened to a slowly unfolding raga.”<sup>11</sup> It would seem logical then, that Young’s interest in slowly unfolding music would lead him to explore drones in subsequent works. Most listeners do not have that sort of patience, and as such, Young’s output has generally fallen below the radar. His place in American music history, however, is notable. Young essentially encouraged a flat-lining (pun intended) of music, music that was otherwise frenetically headed for heart-attack. He

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9. Strickland, *Minimalism*, 245.

10. Strickland, *Minimalism*, 204.

11. Robert K. Schwarz, *Minimalists* (London: Phaidon, 1996), 42.

provided a “wake up call” for music to calm down, seek inner peace and demonstrate extreme simplicity.

It is Terry Riley, however, who seems to have triggered a widespread musical chain-reaction of sorts, with his seminal work *In C* (1964). The work’s accessible, riff-based, communal music-making premise was “the answer” for many who had become disenfranchised with art music’s increasingly academic establishment, particularly serialism. The work can be performed by any number of performers (Riley suggests about thirty-five): the score consists of fifty-three melodic patterns that are repeated, with each performer determining how many times to play each pattern before moving on to the next. Seemingly every major composer associated with “minimalist” (or “post-minimalist”) music speaks of his/her encounter with the work as some sort of major epiphany. John Adams states it particularly well:

I had heard Terry Riley’s epochal *In C* while still living in Cambridge, probably in 1971. A friend, another composition student, invited me back to his flat with the promise of introducing me to something “like you’ve never heard before.” And he was right. What he played for me was the famous Columbia Masterworks LP of the landmark piece that announced a new style in contemporary music. Terry’s *In C* may have been to contemporary American music what Ginsberg’s *Howl* or Kerouac’s *On the Road* were to literature. With its insistent, unyielding pulse on the high C of a piano and the sunny, upbeat fragments of melodies recirculating over and over in a loose polyphony, *In C* captured the congenial hippie spirit of the West Coast while at the same time proposing a new, slowly evolving approach to musical form. It was also marvelously provocative, giving an R. Crumb middle finger to the crabbed, pedantic world of academic modernism.<sup>12</sup>

It is important to note that there was much “crossbreeding” in the ongoing development of this new musical movement. These early figures performed together, lived in the same areas

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12. Adams, *Hallelujah Junction*, 89.

(New York or West Coast), and shared the same developing philosophies and musical interests. Riley performed in Young's "Theatre of Eternal Music." They bathed in Indian music, John Coltrane's music/performances, and other similar endeavors. Steve Reich was the percussionist for the premiere of *In C*. During the work's rehearsals, when the musicians were having difficulty keeping it together, it was Reich who suggested Riley incorporate a pulse, resulting in that "insistent, unyielding pulse on the high C on the piano."

The repetitive structure of *In C*, coupled with its exploration of musicians slipping out of sync, inspired two hallmarks of Reich's musical vocabulary (particularly early on): looping and phasing. His first major composition was thus *It's Gonna Rain* (1965). The seventeen-minute work was created by placing identical recordings on two tape machines: as they played back looped portions of a street preacher, they started off in unison, but gradually slipped out of phase. Similarly, his thirteen-minute work *Come Out* (1966) loops and phases a portion (five words) of an interview from David Hamm, one of six African-American teenagers convicted of the murder of a white shop owner. *It's Gonna Rain* and *Come Out*, in conjunction with *In C*, represent major documents of American culture in the 1960s.<sup>13</sup> These two works are the impetus for an important aspect of Reich's (early) musical philosophy: process music. With each of his tape pieces, a process is established, and the piece runs through it. The interest is in the results of the process. His *Four Organs* (1970) certainly also demonstrates "music as process," not through phasing, but through the process of augmenting a single chord from a brief pulsation to an extended mass of sound. Reich's interest in African drumming was an important influence on the rhythmic aspects of his music, and was the inspiration for his *Drumming* (1971).

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13. Strickland, *Minimalism*, 190.



Reich's *Music for 18 Musicians* (1976) set a new course. "Minimalism," in a strict bare-bones sense, soon became dead. Incessant rhythmic pulse and constant repetition of brief melodic patterns are important aspects of the work, but minimalism's previously static harmonic language became expanded. The work is considered *the* major minimalist work of the 70s.

If Steve Reich brought music of this movement to the concert hall, then Philip Glass brought it mainstream. He continues to be probably the best known composer in the "minimalist" record bin. His music created during the mid and late 1960s perfectly exemplifies the minimalist aesthetic with its repeated segments that gradually expand or shrink, demonstrating Glass's trademark "additive" process. His music is unabashedly repetitive, more so than that of his predecessors. His *String Quartet #1* (1966) features modules that repeat particular musical phrases. His *Music in Fifths* (1969), *Music in Contrary Motion* (1969), and *Music in Similar Motion* (1969) —like the music of his minimalist counterparts— represent a rebellion of sorts against the structured teaching of the musical establishments, in this case Nadia Boulanger, with whom he studied in the early 1960s. These works are prime demonstrations of his "additive" process. His *Music in Twelve Parts* (1974) seems to coincide with Reich's *Music for 18 Musicians* in the way it represents a departure from the official minimalist aesthetic. *Music in Twelve Parts* incorporates a bouquet of his minimalist techniques and beyond: some parts use his additive technique, some feature counterpoint, some parts are very static, and some explore new realms in harmony. With this work, Glass joins Reich in officially launching post-minimalism. Further Glass works of note include a number of operas: *Satyagraha* (1979), inspired by Gandhi, was of particular importance in that it was written for an opera house (rather than an experimental venue). Glass composed a particularly expressive, quasi-Romantic score for the movie *Koyaniscatsi* (1981). His *Songs from Liquid Days* (1985) is a collection of pop songs. In

the *Low Symphony* (1992) he treats the music of David Bowie and Brian Eno with hallmark repetition and transformation, but in a symphonic way, complete with melodic development and climaxes. Glass continues to be regarded as the modern poster child for minimalism in its broad definition. His own statement of 1987 holds true now more than ever: “I started out being an experimental composer, but now I’m very much a populist composer.”<sup>14</sup> It is debatable whether the truth of his statement is a result of the public’s developed acceptance for minimalist music and its offspring, or changes in compositional style over his career – it seems likely to have been a combination of the two.

The term “minimalism” is used in two ways: first as a broad umbrella, which can be helpful if understood in that context, and secondly as a specific movement/style relating to a certain musical aesthetic and its associated techniques, developed and practiced from the 1960s until mid-1970s. Greater specificity is therefore best when trying to understand the wide range of music cast into the minimalist category. Jonathan Bernard proposes a worthwhile argument that the “post-minimalist” label be applied to a composer who fits into one of the following two criteria:

1. Began as a minimalist and is now writing music that, however different from those beginnings, can be plausibly traced back to them; or
2. Developed after minimalism's most abundant flowering, but principally in response (even if partly in opposition) to it.

In applying these standards, Bernard determines that Steve Reich and Philip Glass are post-minimalists under criteria #1, and Michael Torke and John Adams are post-minimalists under

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14. Schwarz, *Minimalism*, 168.

criteria #2.<sup>15</sup> While minimalism is classified as a ‘movement,’ post-minimalism is not. The term is more related to “matters of technique.” The term post-minimalism means something, but is a place-marker of sorts.<sup>16</sup> Most agree that post-minimalistic music generally features more harmonic variety and shorter forms than its minimalist predecessors. Critic and composer Kyle Gann feels that post-minimalism’s most worthwhile feature is the room it gives for a variety of personal expression.<sup>17</sup>

The music of John Adams clearly demonstrates this variety of personal expression characterized by Gann’s description of post-minimalism. Writing in his autobiography of his admiration for the early works of Reich and others, Adams goes on to express important reservations:

But as much as they enchanted me, these Minimalist compositions felt like latter-day descendants of Baroque compositions from the eighteenth-century. As musical organisms the pieces were largely monolithic, their expressive worlds more often than not confined to a single affect...That was both the brilliance of the style’s originality and the conundrum of how to make it evolve into a language of greater subtlety. As enchanted as I was by this marvelous new music, I missed the shock of the unexpected, the possibility of a sudden revolution in mood or coloration.<sup>18</sup>

Adams here clarifies his view of the term “minimalism,” its music, and the need for other developments in style and label. Even in his early compositions, Adams offers a synthesis of minimalism and post-Romanticism, exemplified by *Shaker Loops* (1978) and *Harmonium* (1981). These works feature typical repetitive motor rhythms that are often overshadowed by

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15. Jonathan Bernard, "Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music." *American Music* 21, no. 1 (Spring 2003): 127.

16. Bernard, "Minimalism, Postminimalism, and the Resurgence of Tonality," 130.

17. Kyle Gann, "Minimal Music, Maximal Impact: Minimalism's Immediate Legacy: Postminimalism," *newmusicbox*, November 1, 2001, accessed March 22, 2011, <http://www.newmusicbox.org/article.nmbx?id=1536>.

18. Adams, *Hallelujah Junction*, 93-94.

intense emotional lyricism. His groundbreaking opera *Nixon in China* (1987) also contains minimalist elements. The work features repetitive eighth note cells and a libretto peppered with repetitive text (“News, News, News.... Has a, Has a, Has a Kind of Mystery, Mystery”). However, infused into these minimalist hallmarks are a variety of styles and dramatic musical elements, including dance band-style “hits” and instrumentation (saxes), and shifting harmonic centers. In a similar vein is *Fearful Symmetries* (1988) for orchestra, a work that Edward Strickland names as a musical “high point” of the 1980s for composers associated with (or stemming from) minimalism, alongside *In C* of the 1960s and *Music for 18 Musicians* of the 1970s. *Fearful Symmetries* features motor rhythms, syncopated hits in the first violins, and shifting chords in the woodwinds, all of which become more complex as the work progresses. Strickland does qualify this inclusion of Adams’s piece in a list of seminal minimalist works: “It may be immediately objected that Adams’s piece goes beyond the boundaries of minimalism with its sophisticated orchestration and harmonic range, with shocking half-step modulations etc.”<sup>19</sup> Listeners will find recent works of John Adams at even further distance from stereotypical minimalist traits. His *City Noir* (2009) and *Saxophone Concerto* (2013) are prime examples, both offering a grand symphonic and cinematic lyricism under jazz influence.

The forty-minute symphony *Harmonielehre* (1985) also emphasizes the work of John Adams as a post-minimalist composer, as it offers a clear example of the aforementioned minimalism/post-Romanticism cocktail. The creation of the work followed an eighteen-month creative block for the composer. Praise had been heaped on his large-scale work *Harmonium* (1981) for orchestra and chorus, his first “major commission from an ‘establishment’ arts

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19. Strickland, *Minimalism*, 233.

organization to be premiered in a high-profile setting.”<sup>20</sup> However, the pressure of the ensuing attention and resulting major position as composer in residence with the San Francisco Symphony seemed to contribute to a “first-class funk.”<sup>21</sup> The terms of the residency included a provision that he was to produce a major symphony. After many months of fits and starts, and the work’s date of premiere seemingly in jeopardy, he eventually had a peculiar dream that provided the inspiration for the work’s opening. He saw himself

Driving across the...Bay Bridge, and looking out saw a huge tanker in the bay. It was an image of immense power and gravity and mass. And while I was observing the tanker, it suddenly took off like a rocket ship with an enormous force of levitation. As it rose out of the water, I could see a beautiful brownish-orange oxide on the bottom part of its hull. When I woke up the next morning, the image of those huge [E-minor chords with which the work begins] came to me, and the piece was off like an explosion.<sup>22</sup>

Over the next several months Adams worked incessantly, dispatching several pages at a time to Davies Symphony Hall.<sup>23</sup> The result was an exceptionally difficult three-movement work, with the first movement (labeled “Part 1”) representing almost half the entire work’s length.

Harmonielehre...was a statement of belief in the power of tonality at a time when I was uncertain about its future... The title of my work comes ironically from a treatise on tonal harmony that Schoenberg wrote and published at exactly the same time that his own compositions were, paradoxically, abandoning it. My decision to name my symphony Harmonielehre is almost impossible to explain. It was part whimsical, part an acknowledgment of my puzzling father-son relationship to the master (and by extension to my own teacher, Leon Kirchner). I also said at the time that the actual German word, roughly translated as the “theory of harmony”... might also imply a psychic quest for harmony. The shape and general expressive scenario of the piece does bear this out.<sup>24</sup>

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20. Adams, *Hallelujah Junction*, 110.

21. Adams, *Hallelujah Junction*, 128.

22. Michael Steinberg, “Harmonielehre (1984-1985),” in *San Francisco Symphony program book*, March 1985. In *The John Adams Reader*, edited by Thomas May (Pompton Plains: Amadeus Press, 2006), 101-105.

23. Steinberg, 102.

24. Adams, *Hallelujah Junction*, 129.

### Chapter 3

#### Theoretical Context: Minimalism, post-minimalism, John Adams, and *Harmonielehre*

An understanding of *Harmonielehre* benefits from the review of several key writings on the analysis of music associated with Minimalism, post-minimalism, and John Adams. Such a review yields two broadly-defined characteristics that are of particular pertinence to this current study of *Harmonielehre* and the music of John Adams: emphasis on layering/stratification, and transformational processes.

Jonathan Bernard, in a 1995 article on the “problem” of (analyzing) minimal music,<sup>25</sup> documents several important conceptual aspects of minimalist music, and suggests a link to the visual arts as a possible analytical solution. Bernard points to a 1968 writing of Steve Reich regarding “Music as a Gradual Process.”<sup>26</sup> As exemplified in Reich’s “phasing” works, he discusses the idea that music evolves or transforms gradually as a result of a particular process set into action. In post-minimal music, such as the music of John Adams, this “process” is often comparatively deemphasized in favor of “intuition,” where, for example, a composer’s personal sense of musical gesture or balance might guide him/her through a work’s creation.<sup>27</sup> Whether musical transformation(s) occur as a result of intuition or strict process set into action, Reich’s concept of “process in music” provides a valuable consideration for looking at minimalist

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25. Jonathan W. Bernard, “Theory, Analysis, and the ‘Problem’ of Minimal Music,” in *Concert Music, Rock, and Jazz since 1945: Essays and Analytical Studies*, ed. Elizabeth West Marvin and Richard Hermann (Rochester: University of Rochester Press, 1995), 259-284.

26. Steve Reich, “Music as a Gradual Process (1968),” in *Writings about Music, 1965-2000*, ed. Paul Hillier (Oxford and New York: Oxford University Press, 2002), Loc. 523-552, Kindle.

27. Further pertinent discussion can be found in K. Robert Schwarz, “Process vs. Intuition in the Recent Works of Steve Reich and John Adams.” *American Music* 8, no. 3 (Autumn 1990): 245-273.

(influenced) music, just as “process” is often an important aspect of discussions regarding modern art.

Bernard additionally writes that “Minimal music is not static.”<sup>28</sup> He argues that expectation can be created when repetition is then followed by shift. “The periodic accumulation of tension associated with such expectation and its corresponding release upon fulfillment, taken together, are anything but static.”<sup>29</sup> These and other qualities of minimalism lead to a general dictate from Bernard, that:

...the prospective investigator be willing, not to abandon quantitatively oriented methods, but to deemphasize them somewhat in favor of taking seriously the connections between minimal music and minimal art and treating them... as a way of “seeing” the music, or as if one could see it.<sup>30</sup>

A dissertation by Catherine Ann Pellegrino<sup>31</sup> articulates many conceptual aspects regarding the music of John Adams, offering important foundations for investigation of this idea of *transformational* processes. Through the course of reconciling structural analysis with the music of John Adams, including issues/analysis of “closure,” she also offers valuable insights through the analysis of *stratification*, with the following as possibilities for the delineation of strata: register, instrumentation/timbre, rhythm, texture/articulation, and melodic/rhythm patterns. Pellegrino clarifies stratification tendencies in the music of Adams as being along the lines of instrumental family, register, or differences in rhythmic setting. She also

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28. Bernard, *Theory, Analysis, and the "Problem" of Minimal Music*, 262.

29. Bernard, *Theory, Analysis, and the "Problem" of Minimal Music*, 262. Bernard here was writing on Steve Reich's *Piano Phase* (1967) as an example.

30. Bernard, *Theory, Analysis, and the "Problem" of Minimal Music*, 266.

31. Catherine Ann Pellegrino, "Formalist analysis in the context of postmodern aesthetics: The music of John Adams as a case study." (PhD diss., Yale University, 1999).

notes Adams' frequent use of [027] trichords (and relatives), minor 7th chords, and minor-third bass lines.

Pellegrino additionally offers a valuable observation regarding the coordination of stratification and transformative process in the music of John Adams as follows:

What we see most often in Adams' music, then, is not a dissociation between the layers of a given passage, but rather a deliberately crafted coordination toward some larger goal or transformation... where prior composers seemed to revel in tension and conflict for their own sake, Adams instead manipulates these factors both to move the musical direction forward, and also to create tonal structures that hold together large sections of music.<sup>32</sup>

An article of Timothy Johnson's (Ithaca College)<sup>33</sup> investigates the harmonic vocabulary of John Adams, from which certain tendencies can be inferred. Generally, Johnson views each individual musical passage in terms of a *complex*, containing a hierarchy of three sets:

1. Chord (strongly projected triad or seventh chord)
2. Sonority (all strongly presented pitch classes in the passage, encompassing the chord plus other strongly presented pitch-classes, if any)
3. Field (a complete diatonic collection plus strongly presented non-diatonic pitch-classes, if any, encompassing both the chord and the sonority).

Johnson makes another interesting observation regarding "one of Adams' most common compositional features, an alternation between two harmonic complexes in succession."<sup>34</sup>

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32. Pellegrino, "Formalist Analysis," 138.

33. Timothy A. Johnson, "Harmonic Vocabulary in the Music of John Adams: A Hierarchical Approach," *Journal of Music Theory* Vol. 31, no. 1 (Spring 1993): 117-156.

34. Johnson, "Harmonic Vocabulary," 150.



Johnson also, in a different document (dissertation),<sup>35</sup> mentions the preservation of common tones during these types of alternating complexes. Stasis is established by sounding these common tones as sustained tones.<sup>36</sup>

A possible cautionary view to Johnson's approach, however, can be perceived from Paul Barsom's 1998 study:

It is unnecessary and probably misleading to assume one predominant tonality for each portion of an Adams work. Much of the harmony in his polytonal transitions is articulated by texture, register, and orchestration, and these elements must figure significantly into any meaningful analysis of the music.<sup>37</sup>

Regardless of any differing views on how to "best" analyze the music of John Adams, matters of orchestration seem to recur as primary and essential factors in the way his music operates.

Therefore any transcriber or arranger of his music would do well to closely monitor and understand the role of each instrument, family, and/or strata at any given moment in the work.

Pertinent characteristics commonly found in the music of John Adams can be gleaned from a survey of his music, and the aforementioned researchers' work, as follows:

Common qualities/tendencies/devices in the music of John Adams

(Qualities particularly associated with minimalism are marked with (M))

- "Buzzing" repetition (M)
- Explicitly projected pulse (M)
- Pantonal sonorous profile (M)
- Alternations between two complexes in succession

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34. Timothy A. Johnson, "Harmony in the Music of John Adams: from 'Phrygian Gates' to 'Nixon in China'" (PhD diss., State University of New York Buffalo, 1991).

36. Johnson, "Harmony in the Music of John Adams," 280.

37. Paul Reed Barsom, "Large-scale tonal structure in selected orchestral works of John Adams, 1977--1987" (PhD diss., Eastman School of Music of the University of Rochester, 1998), 19.

- Stratification (such as in register, instrumentation, rhythm, texture, melodic/rhythmic patterns)
- Commonly used pitch material:
  - o [027] trichord & relatives
  - o minor 7<sup>th</sup> chord
  - o minor 3<sup>rd</sup> bass line
- Long periods of continuous, static texture (M)<sup>38</sup>
- Long periods of unchanging (or only superficially changing) dynamics (M)<sup>39</sup>
- Orchestration that groups instruments homogeneously, esp. at the level of motive<sup>40</sup>
- Unique processes of *transformation* that drive the music forward

On then, to the case at hand, *Part 1* of *Harmonielehre*. Listening and score study of the movement reveals a number of the outlined “common qualities” associated with the music of John Adams. Aside from the work’s central “post-Romantic” section, regular segments of “explicitly projected pulse” occur, often portrayed foundationally by timpani or bass instruments. These pulsations, however, are regularly interrupted by, or co-mingled with, moments of great rhythmic complexity. Regular spans of “buzzing repetition” occur as well, commencing soon after the work’s opening “oil tanker liftoff” in the woodwinds and marimbas. The flutes and oboes, beginning at bar 19, portray a typical Adams “melody” consisting of a repeated pitch (D) that, through rhythmic diminution, garners interest and propels the music forward. This “melodic” activity, of sorts, creates a “stratum,” or musical layer, that remains in the forefront until transforming itself into lower layers of perception. In this case, the rhythmic diminution helps the “melody” dissolve to the point where it matches the rhythmic activity of other strata. This sort of activity occurs on both shorter and longer-term spans throughout the work. It is apparent that the music relies on this type of interaction between strata, as spans of relatively

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38. Barsom, “Large-scale tonal structure,” 39.

39. Barsom, “Large-scale tonal structure,” 41.

40. Barsom, “Large-scale tonal structure,” 41.

clear strata delineation and peacefully buzzing repetition evolve or transform into spans of comparatively complex density and strata interaction, and vice-versa. These transformations are not dissimilar to those created by a club DJ or “mixmaster” who, with two turntables (one containing, for example the music of Philip Glass, the other with Stravinsky), is able to transform (over a gradual time period) the music from one “tune” to another. The best club DJ, perhaps, can draw out this transition while making it seem rather seamless -- even though there’s chaos (rhythmic and otherwise) during that time when both “tunes” are heard in the mix. Perhaps it helps when smoke fills the dance floor, multi-colored spot lights spin throughout the room, and incredibly flexible bodies “keep on” gyrating. So, perhaps then, “smokescreen” should be added to the subset list of transformative techniques defining the characteristics of the composer’s music.

Ultimately, it is these interactions between strata that provide the fodder for a 2005 analytical study of *Harmonielehre* by Forest Greenough.<sup>41</sup> In analyzing the “progressive density” of the work, Greenough essentially identifies the relative dissonances of given spans. More specifically, he analyzes the work based on a combination of five factors:

1. Harmony and relative dissonance (incorporating aspects of Johnson’s analytical approach)
2. Number of registers occupied
3. Dynamics and number of instruments; including study of “sound pressure levels” (measured in decibels)

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41. Forest Glen Greenough, "Progressive Density in John Adams' *Harmonielehre*: A Systematic Analytic Approach with Original Composition" (DA diss., University of Northern Colorado, 2005).

4. Background rhythmic configuration, falling into one of two subsets:
  - a. Complementary configurations, where multiple instrumental lines (usually from the same family) arpeggiate a chord in opposing directions, or where instrumental lines feature a similar arpeggio but with differing articulations.
  - b. Overlapping configurations that are constructed by having similar rhythmic repetitions, with linear breaks at different points, and can be scalar or linear.
5. Foreground rhythmic reiteration, much like the flute and oboe “melody” discussed above (measures 19-59).

Greenough’s density maps result in viable ways to “see” the music. Areas of clear form delineation evolve, dictated by the music’s largest points of release, or more specifically, by the areas of lowest density.<sup>42</sup> Beyond the “A” section, with its relatively high density areas (“liftoff” and strata interactions), measures 235-258 are shown as the first low density area of consequence. This span represents the culmination of an extended “wind down” in the music. Here, all strata have evaporated but for “background configurations” in soft overlapping strings.<sup>43</sup> Anticipation is created as other soft woodwind configurations weave in and out of the texture. Greenough appropriately labels this area (mm. 235-258) as “transition.” In measures 254-256, and again in measures 257-260, all brass instruments sustain chords (Eb minor and F minor) that announce the commencement of the “B” section at measure 259. Horn and Cellos launch a series of *espressivo* melodies in this “long, roaming ‘Sehnsucht’”<sup>44</sup> (yearning) section.

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42. Greenough, “Progressive Density,” 46.

43. Formal designations are Greenough’s work. Descriptive narrative of the music’s formal portrayal are Wyman’s.

44. “John Adams on Harmonielehre,” Earbox, accessed September 11, 2014, <http://www.earbox.com/orchestra/harmonielehre>.

Throughout the “B” section (measures 259-427), foreground melodies no longer rely on “rhythmic reiteration” as their primary means of propelling the music forward, but instead rely on a more traditional approach consisting of harmonic and dynamic changes, and register leaps.<sup>45</sup> These melodic characteristics, while still operating among other background figurations of similar ilk to those of the A section, suggest “post-Romantic” sensibilities to this mid-section. All romanticizing winds down beginning at measure 417 with descending, softly sustained *legatissimo* chords, under which harp, celeste, and piano begin the wind-up of repetitive chord arpeggiation. Measures 428-437 offer a transition characterized by anticipation-building woodwind flutter-tongue activity, short and dramatic oboe waves, and further wind up of the momentum-building arpeggiations. This anticipation is satisfied with the commencement of a woodwind and piano fanfare, and start of the “C (or A’)” section, at measure 438. This final section shares the “A” section’s emphasis on “foreground reiteration as melody.”<sup>46</sup> Density and strata activity increase considerably as the work speeds through this final section to its dramatic conclusion. Formal sections are therefore summarized as follows in Figure 3:

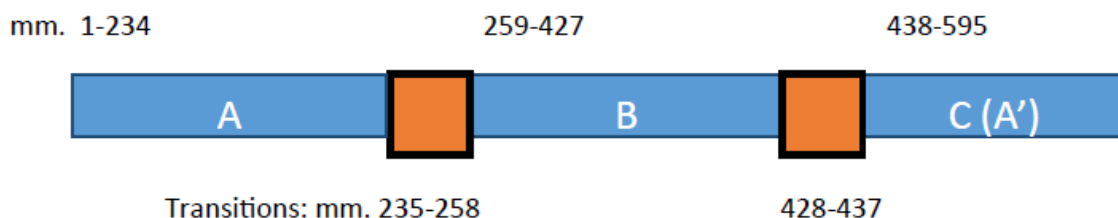


Figure 3. Formal layout of John Adams, *Harmonielehre*, I.

45. Greenough, “Progressive Density,” 70.

46. Greenough, “Progressive Density,” 68.

This formal outline provides a starting point for “seeing” *Harmonielehre*, but of course more detail is needed to aid the development of a convincing transcription. An “orchestration and strata” map is helpful, indicating instrumental activity bar by bar and instrument by instrument. Such an endeavor allows for an easy view of the music’s density and instrumental use. To visually represent various strata within the work, and to better inform the subsequent re-orchestration of these strata in the transcription, hierarchy levels are assigned to various figurations. These color-coded levels, indicating a hierarchy level ranging from one to five, are determined based on the perceived place each stratum holds on the “foreground-background” spectrum. See Figure 4 as follows:

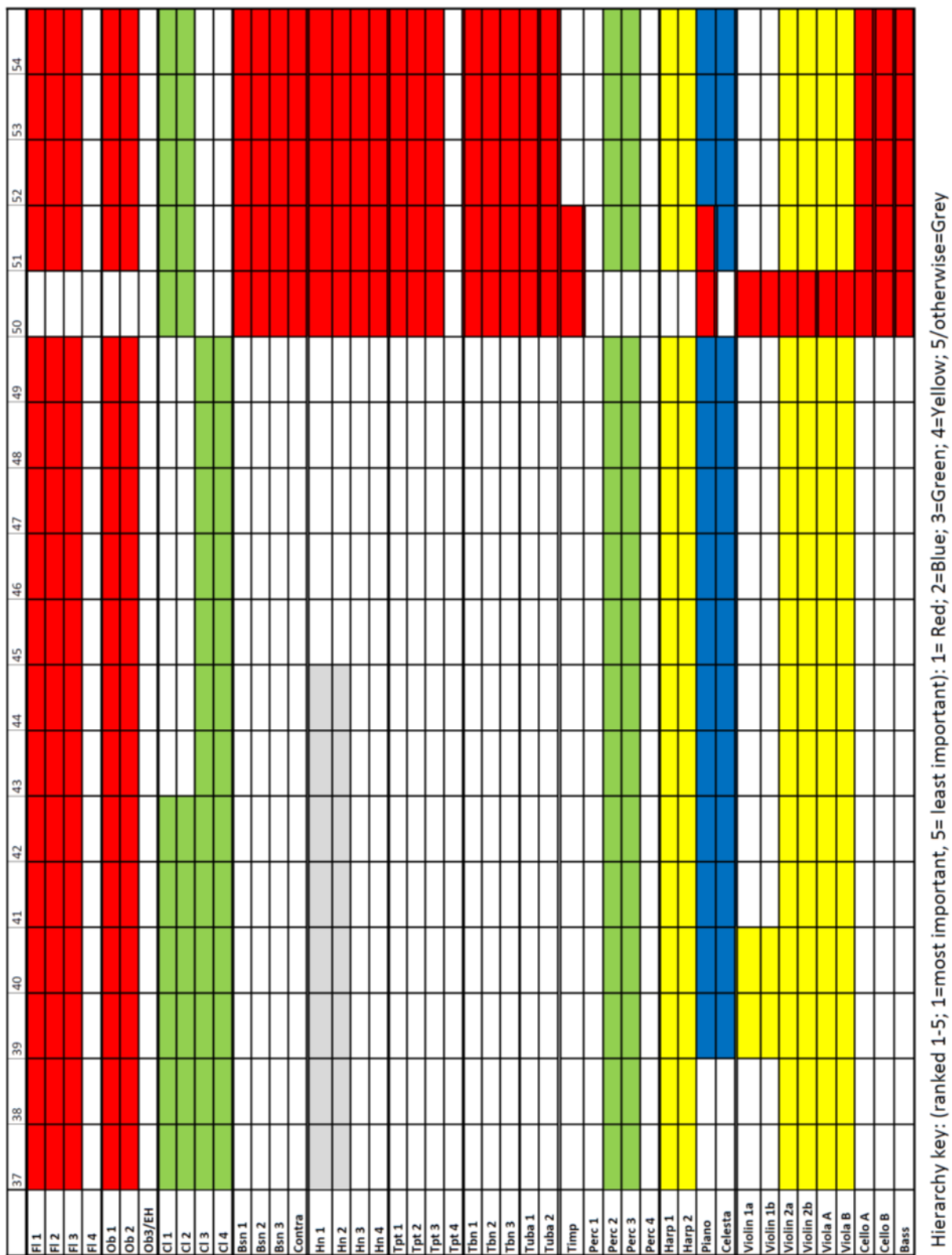


Figure 4. Instrumental activity and strata hierarchy in John Adams, *Harmonielehre* for Orchestra, I, mm. 37-54

## Chapter 4

### Preparing the Transcription

The successful adaptation and performance of any music for a medium other than that for which it was originally composed requires that a fundamental question be first addressed: Is the goal to create a “new” work that is inspired by the original? Or is the goal to adapt the work to a different instrumentation such that it resembles the original as closely as possible? Or, is the wish to create some sort of combination of the two?

Usually, when a musical work is titled in the same way as its source, the term *arrangement or transcription* applies, yet these phrases seem to be utilized indiscriminately or even interchangeably. On a fundamental level, for the purposes of this study, appropriate characterizations are as follows:

1. Transcription: The primary goal is to adapt the work so that a different instrument (or instruments or voice/voices) can perform it. Literally, to “translate.”<sup>47</sup> The idea is to preserve as many aspects of the original as possible: aesthetic, colors, densities, form, keys, instrumentation/orchestration, etc. During the translation process, each of these areas may provide “conflicts,” and therein rests the challenge/art of creating a good transcription. However, the good transcriber seeks not to demonstrate his or her own compositional prowess, but rather to represent the intent of the original work and its composer.

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47. Merriam-Webster Inc., *Webster's Ninth New Collegiate Dictionary* (Springfield: Merriam-Webster Inc, 1984), 1252.



2. Arrangement: The goal here, to varying degrees, is to create a new work based on the original. The scope of possibility is great, ranging from creative jazz charts/arrangements that perhaps match the original only in harmonic foundation and melodic inspiration, to projects that resemble their sources quite well, yet with intentional alterations in form, keys, or other fundamental elements.

Historically, the transcription (and/or arrangement) of music to allow performance by wind bands/ensembles has enjoyed (or suffered from) a wide variety of approaches and levels of artistic success. In part, variations in the wind band/ensemble mission, purpose, instrumentation, and performing spaces have complicated matters. Compared to the symphony orchestra, for example, which has seen a seemingly linear progression from regal courts to its current place as an esteemed concert hall/art music vehicle, the wind band/ensemble's comparatively short history includes not only the strong artistic goals of college wind ensembles and some premiere military bands, but requirements for outdoor performance, military functionality, circus music, etc. Further complicating matters of repertoire are the wind band/ensemble's current and historic variations in ensemble size and instrumentation, as demonstrated by the varying ensemble sizes seen in British military bands, American concert bands, symphonic bands, the Sousa and Gilmore bands, etc. The result has been a wide range of quality and approach to music for wind band/ensemble. Many transcriptions or arrangements feature significant compromises to composers' original artistic intents, to accommodate variations in performance settings, performer skill, ensemble size, etc. These arrangements may often be written in keys differing from their original versions (and thus "easier" to play), with liberal doublings, changes to form ("get right to the tune!"), and so on. This reality often makes it difficult for ensembles,

performers, and conductors who wish to perform artistic or authentic renditions of orchestral works.

This rendition of part 1 (the first movement) of *Harmonielehre* by John Adams seeks to be a faithful wind ensemble adaptation of the original orchestral version's intent, spirit, and aesthetic; in other words, a *transcription* for professional (or outstanding college) wind ensemble concert performance. In documenting this process, important areas for exploration are those of logistics, instrumentation, and orchestration.

Logistically, the process of selecting a particular work for transcription is not to be taken lightly, as not all works transcribe well. The odds of creating a successful wind transcription from an orchestral source are increased if, for example, the original features wind-heavy writing and doesn't emphasize string-specific techniques. In the initial planning for this current project, great interest was directed toward creating a transcription of *Slonimsky's Earbox* (1995). The fascinating melodic/scalar material inspired by Nicholas Slonimsky's *Thesaurus of Scales and Melodic Patterns* was thought to provide exciting possibilities for performance/study by wind performers and conductors. Following a 2009 lecture at Yale, the composer was approached regarding the subject:

Wyman: "Hi Mr. Adams. I'm Rick Wyman and I'm writing a dissertation on you and your work."

Adams: "Ohh. I'm sorry."

Wyman: "I'd love to create a wind ensemble transcription of *Slonimsky's Earbox*. What do you think?"

Adams: (sucking in air sound) “Ohhh. I don’t know. What are you going to do with all those string licks” (referring to rapid, soloistic sawing figures).

Wyman: “I guess the same as anyone else... Divide them up among the clarinets!”

Adams: “I’m not so sure. Maybe *The Chairman Dances* would be better.”

In the meantime, a similar project by another author yielded a transcription of *The Chairman Dances* (unpublished, as of yet). Mark Scatterday, director of the Eastman Wind ensemble, later commented to me that he always thought *Harmonielehre* would offer a wonderful wind transcription. In further reviewing the piece, the first movement’s fascinating mix of minimalist-type activity, neo-Romantic melody, and dramatic brass-heavy moments suggested that the idea was an attractive one.

Permission to arrange the work (and quote in a dissertation) was requested and granted via the print licensing manager at G. Schirmer (see Appendix). Lieutenant Commander Adam Williamson, director of the U.S. Coast Guard Band, agreed to provide two readings of the transcription; first of the draft edition, then again for a revised edition. The players of the band offered valuable instrument-specific feedback on a draft version of the transcription. While the original orchestral work is already difficult enough, the transcription is potentially even more difficult. Each professional performer’s feedback on the scope of possibility was essential.

A professional music copyist, Bryan Doughty of BVD Press, was retained to assist with music entry, and handle layout, part preparation, and printing. His vast experience with the preparation of music for a variety of ensembles and formats was invaluable.

The process of determining instrumentation for a wind work can be challenging. As outlined earlier, wind band/ensemble instrumentation is not particularly standardized. The

process of creating a transcription for “symphonic” or “concert” band (with typically a large numbers of clarinets, in particular) increases the potential resources for coverage of original string parts. However, an instrumentation more closely resembling that of a wind ensemble was determined for this project, primarily because the 49-instrumentalist U.S. Coast Guard Band was to read the transcription. Further considerations included the original work’s instrumentation (which was retained whenever possible, particularly in the brass). Details on the instrumentation of the original work, the U.S. Coast Guard Band, and this transcription are compared in Table 1 as follows:

*Table 1. Instrumentations of Harmonielehre for Orchestra, The U.S. Coast Guard Band, and Harmonielehre for Wind Ensemble.*

| Harmonielehre (orchestra)  | U.S. Coast Guard Band  | Harmonielehre (wind Ens)   |
|--|--|--|
| 4 Flutes (Fls. 2, 3 & 4 double picc)   | 3 Flutes (2 fls., 1 picc)                                    | 4 Flutes (Fls. 2, 3 & 4 double picc). Fl 4 heavily cued  |
| 3 Oboes (3 <sup>rd</sup> doubles English Horn)                               | 3 Oboes (3 <sup>rd</sup> doubles English Horn)               | 3 Oboes (3 <sup>rd</sup> doubles English Horn)   |
| 4 Clarinets (all double Clarinet in A, Cls. 3 & 4 also double Bass Clarinet) | 9 Clarinets (1 Eb Clarinet, 7 Bb Clarinets, 1 Bass Clarinet) | 8 Clarinets: Eb Cl., Bb Cls. 1a, 1b, 2a, 2b, 3a, 3b. Bass Cl.<br><br>No doubles. No A Clarinets. |
| 4 Bassoons<br>(3 Bassoons + 1 Contrabassoon)                                 | 2 Bassoons   | 3 Bassoons (3 <sup>rd</sup> doubles on Contrabassoon)  |
| 4 Horns in F   | 5 Horns (4 + 1 asst.)  | 4 Horns in F   |
| 4 Trumpets in C  | 6 Cornets/Trumpets (5 + 1 asst.)                             | 4 Trumpets in C  |
| 3 Trombones  | 4 Trombones (2 ten + 1 asst. tenor + 1 Bass Trombone)        | 3 Trombones  |
| 2 Tubas  | 3 Tubas  | 2 Tubas  |
| 5 Percussion (4 + Timp)  | 5 Percussion (4 + Timp)                                      | 5 Percussion (4 + Timp)  |
| 2 Harps  | 1 Harp   | 1 Harp   |
| 1 Piano  | 1 Piano  | 1 Piano  |
| 1 Celesta  | 0 Celesta  | 0 Celesta  |
| Strings (Violins, Violas, Cellos, Bases)                                     | 1 Bass, 0 other strings                                      | 1 Bass, 0 other strings  |
|  | 4 Saxophones   | 4 Saxophones (AATB)  |
|  | 2 Euphoniums   | 2 Euphoniums   |

Further details of particular challenges and decisions concerning instrumentation are addressed by instrumental category as follows.

### ***Flutes***

The prospect of eliminating a flute part (to allow for 3 flute parts instead of 4) provided challenges. Many moments of “stratification” rely on sets of intact instrumental groups, which Adams crafted based on a particular instrumentation (4 flutes, in this case). Breaking apart (or eliminating part of) those instrumental groups unravels the layers of that strata. Among the purposes of these strata:

1. Sonic layers that consist of several interlocking instrumental groups.
2. Buzzing “waves” that consist of paired instruments moving in opposing (or offset) directions.

It was decided to retain 4 flute parts, but to allow for the possibility of only 3 flute performers through a combination of several approaches:

1. When a flute line was deemed non-essential (appropriately doubled or re-assigned to another instrument), flute figures were re-ordered so that the non-essential line appeared in the flute 4 part. For example, in bars 417-428, the Flute 2 line is doubled in Violin 1 (to be played by Eb clarinet). Therefore, this Flute 2 line was re-assigned to Flute 4 (in case it wouldn't be played), then Picc 3 and Picc 4 lines were changed to the 2nd & 3<sup>rd</sup> parts.
2. Flute 4 cues were created in Eb clarinet, oboe, or an available Bb clarinet, while seeking to preserve the instrumental colors predominating particular spans of the piece. An example of this balancing act occurs from measures 288-330. Here the oboes are the

predominant timbre for a “smokescreen” from measures 288-310, which is then picked up by the flutes who continue the effect through 330. In the wind ensemble version, the 2<sup>nd</sup> oboe potentially does double duty, by filling in for an absent 4<sup>th</sup> flute during measures 310-330. This is an acceptable solution, as bar 310’s handoff between instrumental sections is immediate, and the intended color change is not drastic. This solution does, however, minimize the intended effect somewhat, as the presence of oboe in both the oboe and flute spans slightly neutralizes the color/timbre shift.

3. Cue Flute 4 figures in other flute parts. This, of course, makes the other flute parts more difficult (less time to rest, etc.). This is exemplified in bars 163-185, where wide-leaping harp arpeggio figures interact with similar, yet divided flute lines. In the wind ensemble version, 4<sup>th</sup> flute (picc) cues are placed into Flute 3 (picc).

The image shows a musical score for four flutes (Fl. 1, Fl. (Picc.) 2, Fl. (Picc.) 3, and Fl. (Picc.) 4) from measures 164 to 167 of John Adams' *Harmonielehre for Wind Ensemble, I*. The score is written in 4/4 time. Fl. 1 has a melodic line with slurs. Fl. (Picc.) 2 and 3 have arpeggiated figures. Fl. (Picc.) 4 has a Piccolo part. There are cues for Fl. (Picc.) 3 and 4 in measure 165.

Figure 5. John Adams (trans. Wyman), *Harmonielehre for Wind Ensemble, I*, mm. 164-167, flutes.

### **Harmonielehre**

By John Adams

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### **Clarinets**

The orchestral version is written for four clarinetists, all doubling A clarinet, with Clarinet 3 & 4 additionally doubling on Bass Clarinet. While this variety of clarinet activity was encouraging

for the prospect of a wind ensemble transcription, it suggested some logistical issues that took consideration and revision. Because wind ensembles often have more clarinetists than do orchestras, it made sense to create a dedicated Bass Clarinet part. When the music featured two separate bass clarinet lines, the second was re-assigned to (depending on availability, tessitura, and dynamic) Baritone Saxophone or Bassoon. Bars 180-191 provide an example where the second bass clarinet part was re-assigned to Baritone Saxophone. While this figure is difficult for Bari Sax with its slurred figures to and from low Cs at a *mp* dynamic, Bassoons were needed in that section to cover string lines engaged in a long, winding-down span.

The image shows a musical score for two parts: Bass Clarinet and Baritone Saxophone. Both parts are in treble clef with a key signature of two sharps (F# and C#). The Bass Clarinet part is marked with a 'sol' (solo) and a 'mp' (mezzo-piano) dynamic. The Baritone Saxophone part is also marked with a 'sol' and a 'mp' dynamic. Both parts feature a long, winding melodic line with many slurs and ties, indicating a continuous, flowing passage. The notation includes various accidentals and note values, typical of a complex modern composition.

Figure 6. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I, mm. 180-183, Bass Clarinet and Baritone Saxophone.

### **Harmonielehre**

By John Adams

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The use of four A clarinets in the original (primarily in the first 58 bars) suggested significant logistical consideration in adapting *Harmonielehre* to wind ensemble. While the ownership and use of an A clarinet is standard protocol for a professional orchestral clarinetist, use of the instrument is much less common in wind band/ensemble repertoire. The U.S. Coast Guard Band, for example, owns two A clarinets (probably keeping only one in decent repair at any given moment). While many of the USCG Band's clarinetists maintain side-careers as



orchestral musicians, and therefore personally own A clarinets, this may or may not be the case with other prospective ensembles that might perform this piece. It would likely provide a barrier, or certainly a hassle, for prospective college ensembles. A similar situation is presented in Lawrence T. Odom's transcription "for band" of *Short Ride in a Fast Machine*. In that case, in the orchestral version, Adams indicates Clarinet 3 & 4 parts as optional. Odom's band transcription therefore requires only 2 "Solo A Clarinet" parts, used throughout the work (rather than doubling on Bb clarinet as in the original), as well as (not necessarily solo?) Eb clarinet, 3 Bb clarinets (each occasionally splitting), Eb Alto Clarinet, and Bass Clarinet. Three possible solutions were considered for the A Clarinet situation in *Harmonielehere*'s transcription:

1. Eliminate use of A Clarinet. Ask clarinetists to perform these figures on Bb clarinet. The figure beginning at bar 15-- a repetitive, rapidly alternating figure between concert pitch E and G (mid staff)-- is feasible on A Clarinet (Bb to G), but extremely awkward/difficult on Bb Clarinet (A to F#).
2. Leave as-is. Ask wind ensemble conductors/performers/ensembles to ensure use of four A Clarinets. Musically this is an attractive option, as it most closely maintains the work's original conception. Logistically, however, it is a challenge as outlined above. Conversation with Coast Guard Band clarinetists suggested this would be difficult.
3. Re-orchestrate A Clarinet figures to another group of instruments. This was the decision made for this transcription. Generally, these A Clarinet passages (in the opening segments of the piece) were assigned to the saxophones. While aware that this solution altered the original color conception of the work, it maintains the aesthetic intent of these spans. In the minimalism-driven sections (in the traditional use of the word), where Adams creates spans of particular instrumental color, he specifically creates spans of

sparkly “chugging.” The important aesthetic in these sections is that there is *change* from one span to the next; in color, texture, or strata. Sometimes the intended change is drastic or sudden, more often the change is subtle or drawn out (as a sort of “process”). Other times these changes occur as shifting foci on various aspects or layers throughout a span. In the case of the opening fifty-nine bars, the (original) clarinet lines work in tandem with marimbas, and at various points bassoons and strings, to create the repetitive-eighth note aspect of this “chugging.” Certain of these instrumental colors, at various points, come to the foreground, for spans of sixteen bars or so. This can be viewed in a cinematic sense; like a steam train chugging through spans of the West, with the camera alternating its short-term views on the wheels, then the smoke stack, then the piston rods. Long term views show particular items coming into view, getting closer, then disappearing into the distance. Even longer-term spans show evolutions/changes in scenery, from perhaps areas of flat desert, to mountains, to the oceanside. Ultimately, by placing those A clarinet lines into the saxophones, we have, in a sense, painted the train’s piston rods gold instead of the intended black. This will change the look slightly, but it will allow for the same chugging aesthetic. Bb Clarinets would have maintained the color, but perhaps gummed up the works a bit, causing the train to stagger.

Eb clarinet is a standard inclusion in the wind ensemble and its works. Because the instrument’s availability suggested important possibilities for coverage of high string lines and the performance of flute cues, the inclusion of an Eb clarinet part was ensured for the transcription.

The number of Bb clarinet parts to include in the transcription required more extended consideration. In any orchestra to wind ensemble transcription, clarinets are a common and

primary resource for the reproduction of string figures. A good challenge is created in a work such as *Harmonielehre* where the original contains regularly occurring spans of 4 Bb clarinet lines. Transferring those 4 Bb clarinet lines “intact” to the transcription then significantly reduces the resources available for string coverage. It was decided, then, that the transcription needed more than 4 Bb clarinet parts (ideally 8), but a survey of typical wind ensemble instrumentation lists showed that this was unreasonable. The 1952 Eastman Wind Ensemble roster lists 8 Bb clarinets, but the 1994 roster lists only 7.<sup>48</sup> The U.S. Coast Guard Band’s membership consists of 7 Bb clarinetists. Practicality suggested that any more than 6 Bb clarinet parts would be unusual and not appropriate. Convention, as suggested by typical wind band/ensemble scores, suggests 3 Bb clarinet parts (often with the assumption that there are at least 2 performers per part). It was therefore decided that this transcription would feature parts, beyond the aforementioned Eb and Bass parts, for Bb clarinet 1a, 1b, 2a, 2b, 3a, and 3b. This transcription varies from the typical treatment of split clarinet parts in that there is considerable independence between each part. This is demonstrated, for example, in measures 164-167, where Bb Clarinets 1a and 1b perform original clarinet lines, while 2a rests, and 2b, 3a, and 3b all perform (former) string figures.

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48. Battisti, *The Winds of Change*, 347-354.

Figure 7. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I, m. 164-167, clarinets.

### Harmonielehre

By John Adams

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Part of the wind ensemble ethos, both artistically and educationally in such settings, is that a solo player performs each part. As such, no matter how the clarinets are labeled in this transcription, this approach to independent clarinet lines felt appropriate, and helped serve the integrity of the final result.

### Bassoons

The original work's use of 4 bassoon players (3 + contra) seemed at odds with what is typically found in wind band/ensembles. A survey of selected wind band, wind ensemble, concert band, and symphonic band instrumentations showed that only a select few ensembles regularly feature more than 3 bassoonists.<sup>49</sup> While the U.S. Coast Guard Band has only 2 bassoon positions, that

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49. Battisti, *The Winds of Change*, 347-357.

ensemble regularly performs music written for the medium without full bassoon coverage, as scores typically require 3 parts (often 2 bassoons plus contra). It was decided therefore to adapt to this semi-norm by featuring 3 parts in this transcription. To allow for some flexibility (to, for example, cover segments where the contrabassoon's line is liberally doubled elsewhere, but there are three distinct bassoon parts), it was determined that the 3<sup>rd</sup> bassoonist would double on bassoon and contrabassoon.

### ***Saxophones***

The primary consideration for saxophone instrumentation was whether to include parts for Soprano, Alto, Tenor and Baritone, or instead utilize the more common scoring of Alto, Alto, Tenor, and Baritone. Early determinations centered on utilizing Soprano, as it suggested possibilities for coverage of the first violin tessitura. Further work settled instead on Alto, as its range allows for coverage of a wider range of string figures, from violin through cello.

### ***Brass***

The brass instrumentation of the original work is easily replicated in wind ensemble. Both editions therefore match in brass instrumentation, but with the transcription's addition of two Euphoniums. Brass parts were primarily transferred from orchestra to wind ensemble intact. These original brass parts contain regular spans of rest, which suggests these instruments might have been prime resources for assignment of other important figures (string lines, etc.). However, the brass figures in *Harmonielehre* provide important moments of timbral contrast. It was determined that the original intent of the composer would be significantly diluted if brass carried other roles. As such, trombone and horn parts remained unchanged. The wind ensemble's availability of Euphoniums allowed for some flexibility with Tuba parts. At several points

(measures 303-313, for example), Tuba lines were assigned to Euphoniums so that Tubists could assist the Double Bass “section” (of one). Trumpet parts remain unchanged from orchestra to wind ensemble, with the exception of measures 26-40, where muted Trumpet 4 (otherwise resting) replicates a pizzicato string figure.



Figure 8. John Adams, *Harmonielehre* for Orchestra, I, mm. 25-30, Violin 1.

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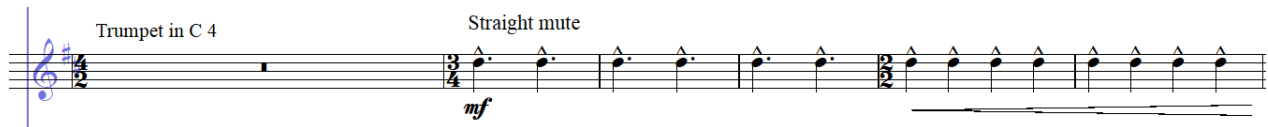


Figure 9. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I, mm. 25-30, trumpet 4.

## Percussion

Historically, approaches to percussion scoring have varied. Some scores (usually older ones) feature “instrument scoring,” where each percussion instrument gets its own staff.<sup>50</sup> Others utilize “performer” scoring, where each percussionist receives a line/staff notating all of his or her roles. This second approach makes it very clear as to how many performers are needed, and what each carries for responsibilities. In *Harmonielehre*, the first page of the orchestral score lists all percussion instruments to be utilized, and clearly indicates that 4 players (plus timpani, for a total of 5) are required. However, the musical score itself features staff lines for each

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50. Alfred Blatter, *Instrumentation and Orchestration* (New York: Schirmer Books, 1997), 373.

particular instrument as it becomes needed, but does not delineate which player should perform each. For the wind ensemble transcription, it was determined that “performer scoring” would be best. Great care was therefore taken in determining the most efficient ways to assign existing percussion lines to these 4 performers (beyond timpani), while also allowing for the coverage of other lines. When it came to the adaptation of long repetitive string figures, mallet percussion instruments represented attractive and necessary options, especially when considering those instruments’ lack of need for breath. In increasing the workload on percussion from original to transcription, it was essential to carefully monitor and track every performer’s activity. Luckily, the original version contains lengthy spans where percussion use is limited, allowing for needed percussion availability (particularly marimba use, assigned to Percussion 2 and 3). The disadvantage in this approach, however, was that the original work’s large spans of percussion inactivity allowed for greater color change, impact, and/or punctuation when the percussion instruments did eventually enter. These benefits are reduced or slightly neutralized when percussion use bleeds over elsewhere. This is exemplified in the orchestral version at bar 213, where, following an extended wind-down of chugging string eighth-notes and woodwind sustains, the marimbas enter with their own eighth-note chugging, articulated by crotales and glockenspiel. This marimba entrance is a fresh and soloistic timbral shift. This shift is enhanced by the fact that the marimbas last sounded 154 bars previously (at bar 59). In the wind ensemble version, marimbas are utilized almost continuously throughout this gap, serving an essential role in the portrayal of continuous eighth-note string figures. Therefore the marimbas’ entrance at bar 213 is likely not as “fresh” sounding in the wind ensemble version. The resulting compromise in this particular example was to allow for some (even if reduced) “freshness” by, beginning at bar 191, weaning the ensemble off the marimba’s (formerly viola’s) reliable chugging as the alto

saxophones assume these roles. As a result, all marimba responsibilities cease by bar 202, allowing for eleven bars of marimba-free airspace before their soloistic entrance at measure 213. Beyond this silence before re-entering, the marimbas' slight prominence here is further aided in other ways: a two-bar crescendo raises the marimba dynamic to *mp* by measure 215 (slightly above that of the *p* in the clarinet/former string figures), and the first marimba (Percussion 2) stands out by virtue of its repetitive scalar cells that differ from those of the “chugging” accompaniment.

The image displays a musical score for a wind ensemble, specifically focusing on Bb clarinets and percussion. The score is written for six Bb Clarinets (1a, 1b, 2a, 2b, 3a, 3b) and four Percussion parts (Percussion 1, Percussion 2 (Marimba), Percussion 3 (Marimba), and Percussion 4). The music is in 4/4 time and features a complex, rhythmic pattern. The Bb Clarinets play a continuous, flowing line, with dynamics marked *p* (piano) and *mp* (mezzo-piano). The Percussion parts include Glockenspiel and Crotale, with dynamics marked *p* and *mp*. The score is arranged in a system with six staves for the clarinets and four staves for the percussion.

Figure 10. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I, mm. 212-216, Bb clarinets and percussion.

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Instrument lists for each percussionist needed determination, balancing performance needs and efficiency. Efforts were made (and lines were shuffled around when possible) to minimize the sharing of instruments between players, but some sharing was nevertheless essential. The percussionists of the Coast Guard Band were consulted, and they agreed that both a “master list” of all needed instruments and separate instrumentation lists for each player were particularly helpful. The result is shown in Table 2 as follows:

Table 2. Percussion instrument lists (combined and individually) for John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I.

Timpani+ Percussion (4 players):

2 Marimbas, Vibraphone, Xylophone, Tubular Bells, Crotales, Glockenspiel, 2 Suspended Cymbals (High and Low), Sizzle Cymbal, Small Crash Cymbals, Bell Tree, Tamtam, 2 Triangles (Higher and lower), Bass Drum

Percussionist #1

Glock

Crotales (shared with Perc. 4)

Vibraphone

Small Crash Cymbals

Low Suspended Cymbal

High Suspended Cymbal

Percussionist #2

Marimba

Xylophone

Tubular Bells (share with Perc 4)

Sizzle Cymbal

Bell Tree

Percussionist #3

Marimba

Triangle (share with Perc 4)

Bass Drum

Percussionist #4

Crotales (shared with Perc 1)

Xylophone (shared with Perc 2)

Triangle (shared with Perc 3)

Low Triangle

Tubular Bells (shared with Perc 2)

Tam Tam

It should be noted that the use of two marimbas, while requested in both the orchestral and wind ensemble versions of *Harmonielehre*, is somewhat unusual in orchestral and/or band scores. However, particularly in the case of this wind ensemble version, both marimbas are

essential, and any ensemble wishing to perform the work should confirm the availability of both instruments on stage.

Another decision involved how each printed percussion part should appear. Should each performer receive a percussion “score,” showing all performers’ lines/staves? Or, should each simply receive his/her own part, containing only the information needed to perform his/her own responsibilities. The advantage of percussion “scores” is that each performer gains information that allows him/her to: a) assist others as needed, b) attempt to adapt the section’s performance for more or fewer performers, and c) gain greater security regarding entrances (the other parts serving as “cues”). In consulting with Robert McEwan, USCG Band principal percussionist (and percussionist with the Rhode Island Philharmonic, Hartford Symphony, and Springfield Symphony), it was agreed that single staff “performer” parts were best in this case. The parts are clear (containing no more information than needed) and the number of page turns are reduced. *Harmonielehre* has frequent time signature changes and compound meter segments, serving to aid performers in counting/keeping track of measures during rests and therefore effectively minimizing the additional security a performer might gain from a percussion score.

### ***Harp(s)***

It is rare for a wind ensemble/band to have two harpists. The US Coast Guard Band has one harp position. It was therefore determined that the wind ensemble version would contain one harp part. This decision created challenges that required creative solutions. At various times in the music, both harps carry seemingly important and independent roles. Other times, the two harps move in contrary motion, adding to the shimmer/smoke of a particular segment. Removing half of that pair seemingly disrupts that intent. A segment for consideration begins at bar 59, where Harp 1 plays continuous eighth notes, while Harp 2 plays quarter note chords every three beats.

No other instruments carry lines with similar shape or rhythm; these harp lines are important to propelling the music forward. For the wind ensemble version, it was determined that Clarinets 1a and 1b should perform the rhythm and selected pitches originally contained in the “Harp 2” lines, while the wind ensemble harpist should retain the original “Harp 1” line. Another example occurs at bar 70, where harps play continuous eighth note figures moving in contrary motion. Ideally, this activity would be retained in the wind ensemble version, yet a suitable substitute for Harp 2 was not available in that span. Continuous eighth note activity is featured at this section in other instruments (Violin 1/Clarinet 1), so the loss of this Harp 2 line seemed aesthetically manageable.

### *Celeste*

The orchestral version of *Harmonielehre* features parts for two keyboard players: piano and celeste. The use of Celeste is uncommon in wind ensemble scores. Locating an instrument itself, as well as a second keyboard player, seems prohibitive for most wind ensembles. The U.S. Coast Guard Band retains one pianist, and owns no celeste. It was therefore decided to not include a dedicated celeste part in the wind ensemble version, and to seek approximation of celeste figures elsewhere within the ensemble. The celeste, with its tone like a “refined and mellow glockenspiel”<sup>51</sup> suggests that percussion or piano could be acceptable substitutes. Although percussionists remain relatively busy (particularly in the wind ensemble edition), the piano is otherwise resting during many of the work’s moments that utilize celeste, and therefore presents itself as the prime substitution possibility. In measures 396-400 for example, the piano is an acceptable substitute, maintaining keyboard timbre and sensibility to this reflective and delicate

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51. Blatter, *Instrumentation*, 206.

moment. Other times, however, the celeste provides important timbral shifts that suggest substitutions other than piano. For example, in measures 251-300, continuous eighth notes are featured first in the celeste for thirty-six bars, then by the piano beginning at measure 288. Piano coverage of the full span would eliminate the intended timbral shift from celeste to piano. Therefore, in the wind ensemble version, vibraphone performs the celeste figure, allowing for contrast upon the piano's entrance.

### *Strings*

The Double Bass is the only member of the string section that remains in common between orchestra and wind ensemble. As such, the transcription saw the Bass part remain very similar to the original. An inherent reduction in low-frequency sound mass occurs when simply transferring bass lines conceived for the orchestra's large component (5-10 members)<sup>52</sup> of Double Bases to the single wind ensemble bassist. This reduction is potentially further emphasized with the "loss" of the cello section (6-12 performers)<sup>53</sup>. Careful consideration and adaptation was therefore essential in maintaining the composer's intended balances (or lack thereof) between various ranges of the ensemble. Tubas, Euphoniums, Baritone Saxophone, and Bass Clarinet were primary resources for this effort in augmenting bass figures. The treatment of other string figures therefore became the primary challenge in adapting *Harmonielehre* to wind ensemble.

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52. Blatter, *Instrumentation*, 418.

53. Blatter, *Instrumentation*, 418.

### *Managing Resources*

In considering ways to best transcribe each span of the work, it became difficult to track which instruments were available at any given moment (or recently used, or soon needed, or should remain silent for a few spans). It was determined that the best means of tracking these layers of instrumental use was to create orchestration charts: one demonstrating instrumental activity and strata in the original orchestral version (as discussed in the theoretical overview, see Figure 4) and another tracking wind ensemble instrument use. The wind ensemble chart additionally tracks/labels the orchestral source material for each instrument's resultant lines. These charts proved invaluable in the creation of the transcription. See Figure 11 below, which shows an example. Measure numbers are labeled along the top of the chart, and instruments in the wind ensemble edition are labeled along the left side. Source material, if different than the original part, is labeled within the colored instrumental activity boxes. It can be seen, for example, that saxophones are playing music originally written in the orchestral clarinet parts.

|            | 35 | 36 | 37         | 38 | 39 | 40 | 41      | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 |
|------------|----|----|------------|----|----|----|---------|----|----|----|----|----|----|----|----|----|----|
| Fl 1       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Fl 2       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Fl 3       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Fl 4 (opt) |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Ob 1       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Ob 2       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Ob 3/EH    |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| E♭ Clar    |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Cl 1a      |    |    |            |    |    |    | Vln. 2a |    |    |    |    |    |    |    |    |    |    |
| Cl 1b      |    |    |            |    |    |    | Vln. 2b |    |    |    |    |    |    |    |    |    |    |
| Cl 2a      |    |    | Vln. 2a    |    |    |    | Vln. 2c |    |    |    |    |    |    |    |    |    |    |
| Cl 2b      |    |    | Vln. 2b    |    |    |    | Vla. A  |    |    |    |    |    |    |    |    |    |    |
| Cl 3a      |    |    | Vla A      |    |    |    | Vla. B  |    |    |    |    |    |    |    |    |    |    |
| Cl 3b      |    |    | Vla B      |    |    |    | Vla. C  |    |    |    |    |    |    |    |    |    |    |
| Bs Cl      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Bsn 1      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Bsn 2      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Bsn3/ctra  |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Asx 1      |    |    | Cl. 1      |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Asx 2      |    |    | Cl. 2      |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tsx        |    |    | Cl. 3      |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Bsx        |    |    | Cl. 4      |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tpt 1      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tpt 2      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tpt 3      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tpt 4      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Vln 1      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Vln 2      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Vln 3      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Vln 4      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tbn 1      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tbn 2      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tbn 3      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Euph 1     |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Euph 2     |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tuba 1     |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Tuba 2     |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Timp       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Perc 1     |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Perc 2     |    |    | Mar.       |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Perc 3     |    |    | Mar.       |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Perc 4     |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Harp       |    |    | Harp 1 & 2 |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Piano      |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |
| Bass       |    |    |            |    |    |    |         |    |    |    |    |    |    |    |    |    |    |

Hierarchy key: (ranked 1-5; 1=most important, 5= least important): 1= Red; 2=Blue; 3=Green; 4=Yellow; 5/otherwise=Grey

Figure 11. Instrumental activity, substitutions, and strata hierarchy in John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I, mm. 35-51.

### ***Orchestration challenges***

In the planning/mapping of the wind ensemble chart and the transcription, several general, but important, areas were under continual consideration:

1. Preservation of *instrumental color* tendencies in each span.
2. Preservation of *strata* groupings in each span.
3. Preservation of *hierarchies* (each stratum's foreground vs. background role) for each span.
4. Preservation of *ranges*.

These considerations, plus issues of intentionally “thinning” instrumentation at some sections, and articulation choices, are touched upon through case studies as follows.

Beginning at measure 107, and leading through the transition (measure 258), the string section's lines feature long spans of predominantly un-slurred string figurations. In transcribing this material to wind ensemble, two marimba players help immensely, as they can (conceivably) perform such articulated figures for long spans without rest/breath. However, clarinets, saxophones, and oboes are needed as well, as large numbers of players are necessary to faithfully reproduce the many overlapping and complementary figures. In seeking to reproduce the original as closely as possible, the first rendition of this transcription transferred those figures intact (unslurred), and, when possible, extended passages were made to alternate between pairs of players. After the first reading, woodwind players commented that such long spans of rapid tonguing were “far too taxing.” While concerned about a possible reduction in the music's propelling nature (or “chug,”) the decision was made to add slurs to the woodwind lines, but not with uniformity. The idea was that, since the scalar/arpeggio patterns were primarily of the



“overlapping configuration” variety, perhaps a similar approach with newly-applied slurs would be in keeping with the aesthetic.

The image shows a page of a musical score for John Adams' *Harmonielehre for Orchestra, I*, measures 208-211. The score is written for a full orchestra. The instruments listed on the left are Tpt. (Trumpets), Hp. (Harp), Timp. (Timpani), Vln. (Violins), Vla. (Violas), and B. (Bass). The Tpt. part has three staves (1, 2, 3) and features a long, overlapping slur across measures 208 and 209, with the instruction "Mutes out" above it. The Hp. part has two staves (1, 2) and features a long, overlapping slur across measures 208 and 209, with the instruction "Mutes out" above it. The Timp. part has one staff and features a long, overlapping slur across measures 208 and 209, with the instruction "Mutes out" above it. The Vln. part has two staves (1, 2) and features a long, overlapping slur across measures 208 and 209, with the instruction "Mutes out" above it. The Vla. part has two staves (A, B) and features a long, overlapping slur across measures 208 and 209, with the instruction "Mutes out" above it. The B. part has one staff and features a long, overlapping slur across measures 208 and 209, with the instruction "Mutes out" above it. The score is written in a standard musical notation with a key signature of one flat and a time signature of 4/4.

Figure 12. John Adams, *Harmonielehre for Orchestra, I*, mm. 208-211.

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The image displays a musical score for a wind ensemble, specifically focusing on the Bb Clarinet and Alto Saxophone parts. The score is written for eight staves, each with a treble clef and a key signature of one sharp (F#). The parts are labeled as follows: Bb Clarinet 1a, Bb Clarinet 1b, Bb Clarinet 2a, Bb Clarinet 2b, Bb Clarinet 3a, Bb Clarinet 3b, Alto Sax 1, and Alto Sax 2. The notation includes various musical symbols such as notes, rests, and dynamic markings, indicating a complex and rhythmic piece of music.

Figure 13. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, I, mm. 208-211, clarinets and saxophones.

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In measures 121-154, Violin harmonics offer a related challenge. These high sustains help gather atmospheric momentum in this section, through gradual rhythmic diminution and increasing dynamics. The segment's high pitches are conceivably reproduced on clarinets, but not with the soft and light texture intended for the early segments of the span. The solution was to eliminate these harmonics during measures 121-137, then include the figures in the clarinets beginning at measure 138, with a reduced dynamic marking (*mp* vs. the original *f*). While high concert A is within reasonable range of the Eb clarinet, it is not for Bb clarinet. Because this note

passes itself around the violins during this section, the music was reworked to ensure that the note only occurred in the Eb clarinet part.



Figure 14. John Adams, *Harmonielehre* for Orchestra, mm. 144-147, violin harmonics.

This image shows a musical score for selected clarinets from John Adams' *Harmonielehre* for Wind Ensemble, measures 144-147. The score is written for five parts: Eb Clarinet, Bb Clarinet 2a, Bb Clarinet 2b, Bb Clarinet 3a, and Bb Clarinet 3b. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The music features a series of sustained notes with harmonics indicated by small 'h' symbols above the notes. The Eb Clarinet part is the most prominent, with a melodic line that is echoed by the other parts. The Bb Clarinet 2b part has a dynamic marking of *f* (forte) at the end of the section. The notation includes various musical symbols such as stems, beams, and slurs.

Figure 15. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, mm. 144-147, selected clarinets.

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*Harmonielehre*'s "B" Section was thinned out in the wind ensemble version, facilitating greater clarity for solo lines. A certain "lushness" in the original was achieved here in various passages where neo-Romantic melodies were cast in solo instruments and strings, accompanied by rapidly alternating harmonies. In the first draft of the transcription, attempts were made to

preserve and re-assign as many string parts as possible, even when they doubled existing wind lines. The result was that soloistic lines for, say flutes and violins in measures 334-372, ended up for flutes and Eb clarinet. Rather than the “lushness” of the original, the wind ensemble’s version resulted in a three-way intonation challenge, with reduced soloistic impact. The Eb clarinet (originally violins) doubling was therefore eliminated, similar string doublings were similarly eliminated elsewhere, and the opportunity to feature solo players throughout the “B” section was seized. Accompaniment to the solos, usually consisting of “rapidly alternating harmony”-like figures in the strings, was often re-assigned to piano or marimbas. While some minimalist-like rumblings occur throughout the B section, the partial objective was to allow for chamber-like moments (and the resulting musical flexibility) to flourish, as a reasonable portrayal of the composer’s intended “Sehnsucht” contrast to the A and C (A’) sections.

Figure 16. John Adams, *Harmonielehre for Orchestra, I*, mm. 337-341.

Figure 17. John Adams (trans. Wyman), *Harmonielehre for Wind Ensemble, I*, mm. 337-341.

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The work's final extended wind-up and conclusion presented challenges, particularly in regard to range and rapid articulation. As anticipation builds, string instruments rise in range while increasing the speed and intensity at which they "saw away." In attempting to transfer this activity to the wind ensemble, limits on wind instrument ranges did not allow for any sort of consistency in instrumentation, other than during shortened spans. The final seventy measures essentially required re-orchestration every eight measures or so. As throughout the work, attention was paid to the intended effects created by instruments performing in their extreme registers. A tuba playing at its highest extreme, for example, should not necessarily be portrayed by trumpet simply because the note falls logically in the trumpet's range. Similarly, a cello sawing away on upper treble clef pitches may not be best covered by oboe. Using measures 574-581 as an example, original attempts to re-cast upper-ranged "sawing" effects in the cellos were made by alternating short sixteenth note bursts between euphoniums (and saxes, bass clarinets, and bassoons). This proved too difficult to perform, and destructive to the intent, not to mention the drastically different volume and intensity represented by a euphonium in its extreme range compared to that of a cello. The revised transcription resulted in the reduction of string (now bassoons and saxes) subdivisions to eighth notes, matching other woodwind note lengths. See Figure 18 and Figure 19 to compare. While this change represented a possible reduction in intended anticipation-building busyness, the clarinets' slurred triplets offer hope for ample contrast and thus busyness, building anticipation for the work's dramatic conclusion, as perhaps a fitting conclusion to the dream by Adams that inspired the opening. Perhaps the oil tanker which, seventeen minutes earlier was dramatically launched into the sky, here descends back to earth and crashes into San Francisco Bay where it began.





The musical score for John Adams' *Harmonielehre* for Wind Ensemble, measures 574-580, is a complex orchestration for a large wind ensemble. The score is divided into measures 574 through 580. The instruments included are Flutes (Fl. 1, Fl. (Picc.) 2), Piccolos (Picc. 3, Picc. 4), Oboes (Ob. 1, Ob. 2), Clarinets (Bb Cl. 1a, Bb Cl. 1b, Bb Cl. 2a, Bb Cl. 2b, Bb Cl. 3a, Bb Cl. 3b), Bassoons (Bsn. 1, Bsn. 2), Saxophones (A Sax. 1, A Sax. 2, T. Sax., Bar. Sax.), Percussion (Perc. 1, Perc. 2, Perc. 3, Perc. 4), and Piano (Pno.). The score features a variety of dynamic markings, including *f*, *ff*, *p*, and *cresc.*, and includes a section marked "To Picc." for the Piccolo. The music is characterized by intricate rhythmic patterns, including triplets and sixteenth notes, and a dense, layered texture.

Figure 19. John Adams (trans. Wyman), *Harmonielehre* for Wind Ensemble, mm. 574-580.

### Harmonielehre

By John Adams

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## Bibliography

- Adams, John. *Hallelujah Junction: Composing an American Life*. New York, NY: Farrar, Straus and Giroux, 2008.
- . *Harmonielehre, for Orchestra (full score)*. New York, NY: Associated Music Publishers, Inc., 1985.
- . “Harmonielehre, Part 1.” *John Adams: Harmonielehre/ The Chairman Dances/ Tromba Lontana/ Short Ride in a Fast Machine*. Conducted by Simon Rattle. Recorded with the City of Birmingham Symphony Orchestra, 199. EMI Classics CDC 5550512, 1994, CD.
- . “Harmonielehre, Part 1.” *Adams: Harmonielehre, Doctor Atomic Symphony, Short Ride in a Fast Machine*. Conducted by Peter Oundjian. Recorded with the Royal Scottish National Orchestra, February 10-11, 2013. Chandos CHSA 5129, 2013, CD.
- . “Harmonielehre, Part 1.” *Adams: Harmonielehre, Short Ride in a Fast Machine*. Conducted by Michael Tilson Thomas. Recorded with the San Francisco Symphony, December 8-11, 2010. SFS Media SFS 0053, 2012, CD.
- . “John Adams on Harmonielehre.” *Earbox*. Accessed September 11, 2014.  
<http://www.earbox.com/orchestra/harmonielehre>.
- . *Lollapalooza, band score*. Arranged by James Spinazzola. Hendon Music/Boosey & Hawkes, 2006.
- . *Lollapalooza, orchestral score*. Hendon Music/Boosey & Hawkes, 1995.

- . *Short Ride in a Fast Machine, band score*. Arranged by Lawrence T. Odom. Hendon Music/Boosey & Hawkes, 1994.
- . *Two Fanfares for Orchestra: Tromba Lontana/Short Ride in a Fast Machine, orchestral score*. Hendon Music/Boosey & Hawkes, 1986.
- Barsom, Paul Reed. "Large-scale tonal structure in selected orchestral works of John Adams, 1977--1987." PhD diss., Eastman School of Music of the University of Rochester, 1998.
- Battisti, Frank. *The Winds of Change*. Galesville: Meredith Music Publications, 2002.
- Bernard, Jonathan W. "Minimalism, Postminimalism, and the Resurgence of Tonality in Recent American Music." *American Music* 21, no. 1 (Spring 2003): 112-133.
- Bernard, Jonathan W. "Theory, Analysis, and the 'Problem' of Minimal Music." In *Concert Music, Rock, and Jazz since 1945: Essays and Analytical Studies*, edited by Elizabeth West Marvin, & Richard Hermann, 259-284. Rochester, NY: University of Rochester Press, 1995.
- Bish, Douglas Eugene. "Transcription Techniques for the Concert Band, 1900-1950." DMA diss., Boston University, 1988.
- Blatter, Alfred. *Instrumentation and Orchestration*. New York: Schirmer Books, 1997.
- Gann, Kyle. "Minimal Music, Maximal Impact: Minimalism Gets Complex: Totalism." *newmusicbox*. November 1, 2001. Accessed March 22, 2011.  
<http://www.newmusicbox.org/article.nmbx?id=1538>.

- . "Minimal Music, Maximal Impact: Minimalism's Immediate Legacy: Postminimalism." *newmusicbox*. November 1, 2001. Accessed March 22, 2011.  
<http://www.newmusicbox.org/article.nmbx?id=1536>.
- . "Minimal Music, Maximal Impact: Thankless Attempts at a Definition of Minimalism." *newmusicbox*. November 1, 2001. Accessed March 21, 2011.  
<http://www.newmusicbox.org/page.nmbx?id=31to01>.
- Greenough, Forest Glen. "Progressive Density in John Adams' Harmonielehre: A Systematic Analytic Approach with Original Composition." DA diss., University of Northern Colorado, 2005.
- Heisinger, Brent. "American Minimalism in the 1980's." *American Music* 7, no. 4 (Winter 1989): 430-447.
- Johnson, Timothy A. "Harmonic Vocabulary in the Music of John Adams: A Hierarchical Approach." *Journal of Music Theory* Vol. 31, no. 1 (Spring 1993): 117-156.
- . "Harmony in the Music of John Adams: from 'Phrygian Gates' to 'Nixon in China'." PhD diss., State University of New York Buffalo, 1991.
- Kosman, Joshua. "Voice of America: Composer John Adams Speaks for the Nation." *San Francisco Chronicle*, May 18, 2003. In *The John Adams Reader*, edited by Thomas May, 59-62. Pompton Plains: Amadeus Press, 2006.
- League of American Orchestras. "Orchestra Repertoire Report, 2010-2011." 2011. Accessed November 10, 2014. <http://www.americanorchestras.org/knowledge-research-innovation/orr-survey/orr-current.html>.

- May, Thomas, ed. *The John Adams Reader*. Pompton Plains, NJ: Amadeus Press, 2006.
- Merriam-Webster Inc. *Webster's Ninth New Collegiate Dictionary*. Springfield: Merriam-Webster Inc, 1984.
- Pellegrino, Catherine Ann. "Formalist analysis in the context of postmodern aesthetics: The music of John Adams as a case study." PhD diss., Yale University, 1999.
- Reich, Steve. *Writings about Music, 1965-2000*. Edited by Paul Hillier. Oxford and New York: Oxford University Press, 2002. Kindle.
- Reich, Steve. "Music as a Gradual Process (1968)." In *Writing about Music, 1965-2000*, edited by Paul Hillier, Location 523-552. Oxford and New York: Oxford University Press, 2002. Kindle.
- Rich, Alan. "Life as Music: John Adams Goes Public." *LA Weekly*, October 3, 2003. In *The John Adams Reader*, edited by Thomas May, 63-66. Pompton Plains: Amadeus Press, 2006.
- Rockley, Collette Jeanine. "Guidelines for Effective Transcription for Wind Band: An Analysis of the Orchestration Techniques Used in Keith Wilson's Transcriptions of Hindemith's Symphonic Metamorphosis." DMA diss., University of Arizona, 1997.
- Sanchez-Behar, Alexander. "Counterpoint and Polyphony in Recent Instrumental Works of John Adams." PhD diss., Florida State University, 2008.
- Schwarz, K. Robert. *Minimalists*. London: Phaidon, 1996.
- Schwarz, K. Robert. "Process vs. Intuition in the Recent Works of Steve Reich and John Adams." *American Music* 8, no. 3 (Autumn, 1990): 245-273.
- Solomon, Samuel Z. *How to Write for Percussion*. New York: SZSolomon, 2002.

Steinberg, Michael. "Harmonielehre (1984-1985)." *San Francisco Symphony program book*. San Francisco: March 1985. In *The John Adams Reader*, edited by Thomas May, 101-105.

Pompton Plains: Amadeus Press, 2006.

Strickland, Edward. *Minimalism:Origins*. Bloomington: Indiana University Press, 1993/2000.

Swed, Mark. "On Top, but Ever the Risk-Taker." *Los Angeles Times*, January 28, 2001. In *The John Adams Reader*, edited by Thomas May, 45-52. Pompton Plains: Amadeus Press, 2006.

Taruskin, Richard. "Music's Dangers and the Case for Control." *The New York Times*, December 9, 2001. In *The John Adams Reader*, edited by Thomas May, 331-339. Pompton Plains: Amadeus Press, 2006.

The Pulitzer Prizes. "The 2003 Pulitzer Prize Winners: Music: John Adams: Biography." 2003. Accessed October 20, 2014. <http://www.pulitzer.org/biography/2003-Music>.

World Association for Symphonic Bands and Ensembles. "About WASBE." 2014. Accessed October 18, 2014. <http://www.wasbe.org/about/>.

## **Appendix A**

### **Letter of Permission to Arrange**

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August 8, 2013

Richard Wyman  
U.S. Coast Guard Band  
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- Movement I

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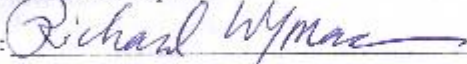
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