JOHN CAGE’S *HPSCHD*

BY

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DISSERTATION

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ABSTRACT

From 1967-1969, John Cage (1912-1992) was an associate Member of the Center for Advanced Study at the University of Illinois. The appointment came about with the help of Lejaren Hiller, founder of the University of Illinois’ Experimental Music Studio and the co-composer of the first significant computer composition Illiac Suite (1957). Cage’s tenure in Urbana culminated in the production of the multimedia work HPSCHD which he produced in collaboration with Hiller, Calvin Sumsion, and Ron Nameth. Hiller oversaw much of the programming work and functioned as a sounding board for Cage’s compositional ideas. Sumsion supervised the static visual elements used in the performance and later collaborated with Cage on a series of lithographs and plexigrams called Not Wanting to Say Anything about Marcel. Nameth, a filmmaker from the Art Department, organized the motion picture films that were used for the performance. Initially, HPSCHD was a commission from the Swiss harpsichordist Antoinette Vischer who had requested from Cage “a harpsichord piece.” Vischer’s modest commission grew into a huge work that included seven harpsichords, 52 tapes of computer-produced tones, about 8,000 slides and over 40 motion picture films.

HPSCHD is an unusual work among Cage’s oeuvre for many reasons. Especially noteworthy is Cage’s large scale use of technology (specifically the computer), the use of historical musical quotations, the theatrical environment of the work, and, perhaps most surprisingly, Cage’s return to earlier compositional ideas. These noteworthy aspects open many avenues of inquiry about the piece, about Cage, and about our assumptions of the composer in the late 1960s. Since the details of the computer programs and the
history of the programming process have been thoroughly discussed\(^1\), my study will not
duplicate these efforts, but will draw on available sources to inform the compositional,
philosophical, visual, and contextual meanings of the work. In this study, I analyze the
production of *HPSCHD* ethnographically, as an event. I situate the event within the
context of postmodern philosophy, anarchic politics, the culture of the university campus
of the late 1960s, and the countercultural “summer of love.” Through this type of
contextual study, I bring some of the assumptions about Cage into question.

Cage intentionally couched his compositions in a wealth of political and
philosophical rhetoric. In the late 1960s Cage was highly influenced by his recent
rediscovery of Henry David Thoreau and his discovery of the American social
philosophy of Marshall McLuhan and Buckminster Fuller. Just as Cage used Asian
philosophies to bolster his turn to chance composition in the 1950s, Cage appropriated a
vocabulary from Thoreau, McLuhan, and Fuller to legitimize his new work with the
computer. Cage characterized *HPSCHD* as political work of art which was to
demonstrate the possibility of an anarchic utopia—a world which had come to terms with
its own history and its technology. Using David Patterson’s analysis of Cage’s
idiosyncratic use of South Asian philosophical terms\(^2\) as a methodological model, I
define and clarify terms that Cage used in connection to *HPSCHD* such as “abundance,”
“multiplicity,” “anarchy,” “chaos,” and “interpenetration.”

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\(^{1}\) Hiller wrote detailed technical reports (SUNY Buffalo archives, 1972) and an article
“Programming the *I Ching* Oracle,” *Computer Studies in the Humanities and Verbal
Behavior*, 3 (1970): 130-43. William Duckworth covered the programming details in his
Ph.D. dissertation *Expanding Notational Parameters in the Music of John Cage*,
(University of Illinois, 1972).

\(^{2}\) David Patterson, *Appraising the Catchwords, c. 1942-1959: John Cage's Asian-Derived
Rhetoric and the Historical Reference of Black Mountain College* (Ph. D. dissertation,
Columbia University, 1996).
For this study, I use a number of previously unpublished primary sources. Cage’s letters from this time period (housed in the John Cage Archives at Northwestern University) are an excellent source. I also draw heavily on the scores and sketches of HPSCHD that are part of the New York Public Library’s Music Collection. Peter Yates was a devoted friend to Cage and authored the liner notes to the HPSCHD recording released simultaneous to the 1969 event. The Peter Yates Papers, housed in the Mandeville Special Collections Library at the University of California, San Diego contain a wealth of information and correspondence between Yates and Cage. The poet and scholar Eric Mottram Papers wrote fairly extensively about Cage and his book Silence. The Eric Mottram Papers (King’s College, London) are valuable insights into Cage’s work simultaneous to the composition of HPSCHD. Personal interviews and e-mail correspondence with a number of “informants” has also proven to be essential to this study. This document includes quite a bit of oral history about Cage, the atmosphere at the University of Illinois in the late 1960s, and the 1969 HPSCHD event.

There is evidence that despite the chance operational selection of materials for the event, Cage had specific ideas about how one was to react to the work. Cage designed into the piece elements that were to cause a participatory reaction and were designed to create an atmosphere of inclusiveness for the mostly college-aged audience. Despite the traditional view and some evidence that Cage distanced himself from the countercultural movement, there is evidence that Cage panders to this population to a certain degree with the inclusion of visual elements that are iconic of the Summer of Love and the psychedelic age.

As of yet, no one has studied HPSCHD as an event, with equal emphasis on the
visual, the aural, and the participatory aspects of the work. A study of the visual elements of the performance draws on published interviews, unpublished letters, Calvin Sumsion’s graduate thesis from the University of Illinois, and oral accounts from the artists and participants. A study of the slides and films, and how they were produced and selected using consistent chance compositional methods, sheds light on Cage’s conception of HPSCHD as a theater piece.
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CHAPTER 1: INTRODUCTION: JOHN CAGE’S *HPSCHD* (1969)

In September 1967, John Cage began work on a large-scale composition that simultaneously fulfilled a commission from the Swiss harpsichordist Antoinette Vischer and Cage’s recent desire to do something with computers. Cage worked on this composition in collaboration with composer/computer engineer Lejaren Hiller at the University of Illinois in Urbana-Champaign where he had access to the University’s state-of-the-art computer facilities. Cage and Hiller named the resulting work *HPSCHD* (the six letter computer code for “harpsichord”) and completed it in 1969—an entire year behind schedule. The much-anticipated premiere took place in the University of Illinois Assembly Hall. This flying-saucer shaped arena was built in 1963 to accommodate up to eighteen thousand spectators, and is primarily used as the home stadium for the Illini men’s basketball team. *HPSCHD* was a multi-media spectacle that lasted four and a half hours and involved seven harpsichords, 51 tape players with power amplifiers, and loudspeakers playing multiple copies of 51 computer-generated tapes. The visual contributions to this event included 64 slide projectors which projected 6,400 slides, and eight film projectors which showed 40 films. The visual elements were an integral part of the work, and Cage named four collaborators as the “principals” in the genesis of this work. In addition to Cage and Hiller, who were responsible for the harpsichord parts, programming, and computer-generated tapes, Calvin Sumsion, a UIUC graduate student, created and organized the static visual elements, and filmmaker and intermedia artist,
Ron Nameth, was in charge of the films and created the lighting for the event. *TIME Magazine* estimated that about 7,000 people experienced the event.¹

By all accounts, the event was a visual and aural cacophony. The overwhelming sound was created by the computer-generated tapes, occasional ear-splitting bursts of feedback, and little snippets of harpsichord, which, according to Virgil Thompson, sounded like Mozart.² Cage and Hiller assembled the harpsichord parts from pieces of the keyboard canon drawn by chance operations inspired by the *Musikalisches Würfelspiel* KV 294d (attributed to Mozart).³ The computer-generated tapes were made of tones generated by a number of different divisions of the octave from five to 56. The musical elements were meant to be “microscopic” and the visual elements were to be “telescopic.”⁴ As Cage wrote in a letter to Visher March 9, 1969: “The concert will also include visual activity: projections, films related to telescope, stars, planets, etc. since the music is microtonal, microscopic, and all of this meets in the computer which has made it possible to explore the smaller and the larger, the distances.”⁵

³ There were a number of musical dice games published in the second half of the eighteenth century and several were falsely attributed to Mozart. This work, also numbered KV 516f, was written in 1787 and published by Simrock in Berlin in 1792. See Paul Löwenstein, “Mozart-Kuriosa,” *Zeitschrift für Musikwissenschaft* 12, no. 6 (March 1930), 342-46; Otto Erich Deutsch, “Miszellen,” *Zeitschrift für Musikwissenschaft* 12, no. 9/10 (June/July 1930), 595 (commentary on Löwenstein’s review); Herbert Gerigk, “Würfelmusik,” *Zeitschrift für Musikwissenschaft* 16, no. 7/8 (July/August 1934), 359-63.
⁵ John Cage to Antoinette Vischer, 9 March 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
*Times,* reported that “flashing on the outside under-walls of the huge double-saucer Assembly Hall…were an endless number of slides from 52 projectors.” Inside

in the middle of the circular sports arena were suspended several parallel sheets of semi-transparent material, each 100 by 400 feet; and from both sides were projected numerous films and slides whose collaged imagery passed through several sheets. Running around a circular ceiling was a continuous 340-foot screen, and from a hidden point inside were projected slides with imagery as various as outer-space scenes, pages of Mozart music, computer instructions, and nonrepresentational blotches.⁶

Kostelanetz described the sound of the event as “an atonal and structural chaos…continually in flux.”⁷

Nicholas Temperley, University of Illinois musicology professor, also attended the event and related this less enthusiastic assessment of the performance:

On entering the main auditorium we saw that the central circular area was full of (mostly) young people sitting or lounging. Rising from them was a fog of smoke, and the smell of pot was beginning to reach the outer spaces. Elsewhere, some people were sitting in conventional seats, others walking about. There was a continuous sound of talking voices, and some musical sounds, but the space was so

⁷ Ibid.
big that they did not produce a commanding effect.

As time went on, I think the volume of sound gradually increased. I certainly don’t remember any moment when one had a sense that a concert or a performance was “beginning.” After we had sat in our seats for a while, we got up and wandered around to see what there was to see. Several keyboard musicians were playing on raised podiums dotted around the space. I went as near as I could get to one of these podiums, perhaps six feet away. On it a slight, somewhat elderly lady was playing harpsichord music with great concentration. Although I could see her fingers moving rapidly over the keys, I could not hear her music at all; it was completely masked by the web of indeterminate sounds that were filling the air.

After a few more minutes, it seemed clear that nothing more was going to happen, so we took ourselves off. Frankly, the whole experience was a big disappointment!

These diametrically opposed reviews of the event point up the fact that there is something uniquely stimulating about this work. In all of Cage’s oeuvre HPSCHD is distinctively representative of larger art trends, especially representative of the postmodern, and yet simultaneously one-of-a-kind. This dissertation is an attempt to thoroughly address all aspects of HPSCHD—not only the “nuts and bolts” of the work’s construction, but also an analysis of the historical, philosophical, and social context of the piece. This study represents an attempt to address larger questions about this piece that have not yet been addressed in previous scholarship. Important and unique aspects of this piece include

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8 Nicholas Temperley, e-mail to the author, June 28 2006.
Cage’s integration of historical source materials, the fact that he used the computer as a compositional tool, and that he intentionally tied this piece to the philosophy of Henry David Thoreau, Buckminster Fuller, Marshall McLuhan, and others. The work exemplifies significant social, philosophical, and compositional trends in the late 1960s—better, perhaps, than any other work by Cage. Yet it is also important to address in which ways the piece departs from such trends. *HPSCHD* is an excellent starting point for an exploration into larger ideas present in Cage’s philosophy and politics. It is also a unique and significant example of a return to Cage’s ideas of “structure” and “form” from earlier periods. Finally, the visual and theatrical aspects of this work have been neglected in earlier scholarship, despite the fact that they were central to the event. This study draws on a wealth of previously unpublished primary sources—especially Cage’s letters and sketches—as well as oral histories from performers and participants involved with the 1969 *HPSCHD* event. The study also places Cage in a much broader context than previous studies, paying particular attention to Cage’s contemporaries in the humanities, philosophy, politics, and in theater theory.

1. **CAGE IN THE 1960s:**

Cage was certainly no stranger to the mixed reviews that were presented above; Kostelanetz viewed the event as one filled with exciting activity, the younger members of the audience viewed the evening as a countercultural event and acted accordingly, and Temperley was disappointed—especially that he couldn’t hear the harpsichord when he chose to listen it. In reply to the issue of choosing between the multiple sound sources, Cage made this remark to Kostelanetz:
You don’t have to choose, really, but to experience it. … As you go from one point of the hall to another, you experience changes; and here, too, each man determines what he hears. The situation relates to individuals differently, because attention isn’t focused in one direction. Freedom of movement, you see, is basic to both this art and this society. With all those parts and no conductor, you can see that even this populous a society can function without a conductor.  

Cage characterized *HPSCHD* as, “a political art which is not about politics but political itself.” By 1969, Cage described himself as an anarchist and was interested in “cooperation and things being made possible” and encouraging environments in which “any kind of living can take place.”  

Cage was disinterested in “power,” political and otherwise, and consequently much of the countercultural tendency toward “flower power” or “black power.” Cage was clear that in the creation of the *HPSCHD* event his aim was to create a model of the kind of world in which he wished to live: a world which allowed for personal freedom; a world of abundance; a world in which each perspective was different and all perspectives were equally valuable.

In many ways, *HPSCHD* is a departure from the kinds of works Cage produced immediately before its composition and even shortly afterward. Cage’s ideas about the social purpose of art, as well as the aesthetics of chance operations, were very much informed by his studies of Zen Buddhism throughout the 1950s, particularly his

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10 Ibid.
interactions with Daisetz Teitaro Suzuki. Works from the years immediately preceding
*HPSCHD* place an emphasis on *process,* and *activity,* over the production of sounds.

*0’00”* (1962), *Variations IV* (1963), and *Variations VI* (1966) are excellent examples of
works whose “notations refer to what is to be done, not to what is heard or to be heard.”\(^{11}\)

*Variations IV* is “for any number of players, any sounds or combinations of sounds
produced by any means, with or without other activities.”\(^ {12}\) David Nicholls pointed up
the fact that with *4’33”* Cage may have “liberated ambient sound,” but here he “in a
sense liberated *everything:* the materials that constitute the work’s score do not enable
the performers to specify substance (i.e. sonic material) but rather the means by which the
spatial *sources* of such substance may be determined.” According to Nicholls Cage
opened up “an infinite performative universe.”\(^ {13}\)

*HPSCHD,* in contrast to *Variations IV,* was to some extent a *work.* After the
extremely high degree of freedom in the scores immediately preceeding its composition,
*HPSCHD* has traditionally notated parts, as well as a space for indeterminate activity.
The use of historical source material was also new for Cage. Cage had used recordings
as source materials for earlier compositions, but for *HPSCHD,* not only did Cage rely on
other composer’s scores but even employed the Dice Game as a structural device.

*HPSCHD* is unusually *musical* for a Cage composition from that time. In his
contribution to the *Cambridge Companion to John Cage,* William Brooks wrote:

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In a variety of ways... *HPSCHD* marked the reintroduction of concepts and techniques that Cage had seemingly abandoned. It sounded fresh rather than reactionary both because it was so unexpected and because the sheer quantity of events mediated the character of each alone.\(^{14}\)

Part of why *HPSCHD* seems so disconnected from earlier works has to do with Cage’s career trajectory in the 1960s. Cage became relatively famous in the late fifties and early sixties and the pressure that accompanied his fame made it increasingly difficult for him to write as prolifically as he did in the fifties. In a 1967 letter to Peter Yates, Cage complained about having too much to do preparing *Sonatas and Interludes* and *Solo for Piano* for publication. “And now people telephone asking me to express immediately my views on this or that for publication. We don’t yet know how to live in this world, and much that I do is done in former time-consuming ways.”\(^ {15}\) Between 1962 and 1969 Cage wrote only fifteen pieces, compared to the more than forty works written during the seven previous years. Some of the works written in the 1960s, like *Musicircus* (1967), do not have a score at all. Works like *Electronic Music for Piano* (1964) and *0’00”* have scores of a single page of instructions. Others, such as *Collage of some “Studies for Player Piano”* (Conlon Nancarrow) (1964) and *Assemblage* (1968) are unpublished. The only work from this time period of any substantial size is *HPSCHD*.\(^ {16}\)


\(^{15}\) John Cage to Peter Yates, January 18, 1967, Cincinnati, OH, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.

struggled to fulfill this commission from Vischer for a harpsichord piece that was initiated in 1962. According to James Pritchett, in an attempt to reconcile schedule with composition, Cage made his life art. Pritchett explained, “where before he had attempted to make his musical works be more like life, he now turned to transforming his life into his work.” This is evident from a number of conceptualist works from this time period including the multiple Variations and 0′00. ’’ According to Pritchett, in the 1960s, Cage “moved from arranging things to facilitating processes.”

The mid to late sixties was a transitional time for Cage as well as for the rest of the western world. Part of the significance of HPSCHD lies in the way in which the work represents the best of Cage’s compositional output from this transitional time. Pritchett wrote, “Cage was aware that great changes were taking place in the world of the 1960s. As a result of this, he felt the need, in both society and his own work, to start over from scratch.” As Cage put it, he wanted to “begin again, assuming abundance, unemployment, a field situation, multiplicity, unpredictability, immediacy, the possibility of participation.” With abundance, multiplicity, unpredictability, immediacy, and participation in mind, Cage went to work on a piece that is necessarily anarchic, utopian, and to a great extent, a “total artwork” in the Wagnerian sense. Richard Taruskin’s well-known review of Cage, “No Ear for Music: The Scary Purity of John Cage,” included the following assessment of HPSCHD:

17 Ibid., 144, 46.
18 Ibid.
19 John Cage, “Diary: How to Improve the World (You Will Only Make Matters Worse) Continued 1966,” in A Year From Monday (Hanover, NH: Wesleyan University Press, 1969) 58-59. The word “unemployment” seems surprising in this list. However, Cage is using the term in the post-scarcity, anarchic sense. What he intends with the term is that he is beginning with the assumption that material needs are not an issue.
From the chary composer of Nothing, Cage had become the voracious composer of Everything. *HPSCHD* was a response not only to baroque science but also to sixties carnivalism, which caught Cage in its tide and, it seems, washed him out to sea.... He became a gourmandizing collagist.20

One of the important aspects of *HPSCHD* is that like other utopian artworks it functions to “mediate between two different cultural and social realities, between the world that is and that which is coming into being.”21 In many significant ways *HPSCHD* acts as a bridge between two different realms extending beyond Cage’s personal biography. It seems to bridge a gap between modernism and postmodernism; it was written at the end of the space race; and it appeared during a time when many, including Buckminster Fuller, thought that we were on the verge of solving the world’s problems with technology. Utopian artworks act as “cultural interventions that in retrospect appear at bridges over the ‘holes in time’ between different organizations of social life, and whose particular effectivity disappears once these transitions have been accomplished.”22 *HPSCHD* was written at exactly one of these “gap” times. In a 1967 critique of the development of chance operations, Leonard Meyer wrote, “underlying this new aesthetic is a conception of man and the universe, which is almost the opposite of the

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22 Ibid., 10.
view that has dominated Western thought since its beginnings." In this essay, “The End of the Renaissance?” Meyer pointed up the difference between music which is goal oriented and which creates expectations in the listener—which he called “teleological”—and chance composed music which “is simply there,” or, “anti-teleological.” For anti-teleological art to find an audience, “ways of perception, modes of organization, and philosophical attitudes” must be radically different. Cage agreed with Meyer that the world was at such a crossroads. In his Lecture on Something, Cage wrote: “When going from nothing towards something, we have all the European history of music and art we remember…. But now we are going from something towards nothing.” This was just as true of our physical reality with the excitement about technology and space exploration in the late sixties as it was metaphorically with the development of new means of creating art, including music composed through chance operations.

The late sixties was a time of physical transition as the realm of human influence extended into space. The issue of physical “space” once again had become problematic, just as it was in the early 16th century with the discovery of the New World. Just as Thomas More’s Utopia was written in the gap between the old world and the new, Cage created HPSCHD on the eve of yet another New World of space travel. One participant wrote to Cage on December 30, 1969, “I remember looking up within the Assembly Hall dome and feeling that we were deep inside a space ship voyaging to another galaxy

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24 Ibid., 72-73.
(perhaps celebrating the equivalent of crossing the line).” The late sixties were a time physical transition as realm of human influence was extended into space. It was also a time in which we also transgressed social boundaries with the rise of the Civil Rights, Feminist, and modern environmental movements. Most important, however, is how \textit{HPSCHD} mediates the gap between the modern and the postmodern.

\section*{2. LITERATURE REVIEW AND NEED FOR THIS STUDY:}

Considering the mammoth nature of \textit{HPSCHD}, the work has received relatively little attention from the academic community. Stephen Husarik’s article, “John Cage and LeJaren Hiller: HPSCHD, 1969,” published in \textit{American Music}, Summer 1983, is an excellent account of the event as told through interviews with Cage, Ben Johnston, and Jack McKenzie, and through the letters of Hiller, Nameth and Brooks. Husarik’s article is a strong overview of how the piece is constructed and how the event was received. Husarik did not attempt to wrestle with the philosophical aspects of the work in this short article, but rather he established a stable foundation for further research.

Subsequent work on the piece has not been as consistent. William Fetterman described \textit{HPSCHD} as a “large-scale \textit{Musicircus}” in his 1996 book, \textit{John Cage’s Theatre Pieces}.\footnote{27} By doing so he missed the significance of the use of the computer, the time and effort expended on the work, and the major philosophical differences between the two pieces. This comparison seems to miss the point of \textit{HPSCHD} as a utopian theater piece—a participatory, aesthetically charged, theatrical environment. \textit{HPSCHD} is often

\footnote{26} Author unknown to John Cage, 30 December 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois. \footnote{27} William Fetterman, \textit{John Cage’s Theatre Pieces} (Harwood Academic Publishers, 1996), 139.
featured in scholarly work on Cage’s politics. Richard Kostelanetz waxes poetic about HPSCHD as a “universe symphony,” a “masterpiece of Cagean abundance,” as a keystone of the Cagean canon, and the epitome of anarchist art. While Kostelanetz provided extravagant eyewitness accounts of the 1969 event, his subsequent work tends toward the hagiographic.

Other works that address Cage’s biography or comprehensive compositional output deal with HPSCHD as an important part of a larger study. James Pritchett’s indispensable The Music of John Cage includes two-and-a-half pages on HPSCHD. The description of the work here is accurate, but brief. David Revill includes a strong description of HPSCHD situated in his Cage biography The Roaring Silence. The strength of Revill’s story of the piece comes from its contextual and biographical handling. Revill reminds the reader that HPSCHD was composed during a growing fascination with electronic sounds and proliferation of electronic music studios. Additionally, Revill reminds the reader of important biographical events including the deaths of Cage’s mother, Crete Cage, in the spring of 1969 and of Marcel Duchamp on October 2, 1968. These studies provide a good starting point for a historically and contextually situated study of HPSCHD. What is needed, however, is to extend these studies that establish the “facts” of the work, to a study that is philosophically situated.

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In 1999, Johanne Rivest spent the spring semester at the University of Illinois at Urbana-Champaign researching Cage’s relationship to the university from 1952 to 1969. A significant portion of her work focused on the years 1967-1969 and the composition of *HPSCHD*. Rivest’s work was read for a musicology colloquia in Urbana April 22, 1999 and has since been included in the liner notes to EMF’s 2003 recording of *HPSCHD* and published on the EMF website. Rivest’s published work is a very strong description of the harpsichord parts and their construction. However rich these studies may be, they are quite brief and incomplete. Rivest’s work points the way toward the kind of deeper, philosophical study called for above and a study based on primary source documents. Laura Kuhn’s 1992 dissertation on Cage’s *Europeras 1 & 2* is a model for the kind of comprehensive treatment of a significant Cage work that I attempt with this current study.

3. CAGE, MODERNISM, AND POSTMODERNISM

In 1992, Northwestern University celebrated Cage’s approaching eightieth birthday with a week-long series of concerts, lectures, workshops, panels, and exhibits. After the opening concert Charles Hamm walked with Cage back to the hotel where they were both staying. “As we were saying goodbye at the elevator,” Hamm wrote, “I asked him, ‘What do you think about all this fuss people have been making over postmodernism?’ In his usual style, he thought for a while, before answering, ‘I think it’s wonderful when


people make a fuss over anything.” As accurate as his answer may be, it is unfortunate the Cage did not answer the question more directly. As Hamm was left wondering what Cage really thought about postmodernism in the early 1990s, we are left to wonder what Cage would think of the continued postmodern fuss, or what Cage would think of his position as a touted “founding father” of postmodern art along what Andreas Huyssen called the “Duchamp-Cage-Warhol axis.” Philosophers, architects, social theorists, and art historians repeatedly hold up Cage as an example of postmodernism, whereas musicologists seem equally divided on whether Cage is a modern or a postmodern composer. In his article, “Privileging the Moment: Cage, Jung, Synchronicity, Postmodernism” Hamm wrote,

To suggest that John Cage’s music from 1950 onwards was postmodern... is not just a game of playing with words but rather an attempt to articulate a fundamental difference between Cage and most of his contemporaries and to establish common ground with the literature on Cage’s visual art and poetry, most of which starts from the premise that he was a postmodernist.

Hamm’s assertion that Cage’s music from 1950 on is postmodernist is quite controversial and not quite tenable. Yet, his motivation to align musical postmodernism with parallel movements in the other arts seems rather erudite. If one is to make that case that Cage’s

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output is postmodernist at any point, or even more specifically that *HPSCHD* is a postmodern artwork, then one must have a clear understanding of the terms at hand and a good working definition of postmodernism—one which scholars can more or less agree upon. In the area of musicological research this has been an area of great difficulty to date. As Hamm suggested, a strong starting point may be to first understand what the broader cultural studies scholar may understand by the terms “postmodern” and “postmodernism.” Then we can study how musicologists have defined and applied the term, and finally, perhaps, one may be able to discuss whether or not the term can be accurately applied to Cage in the late 1960s.

**A. CULTURAL STUDIES DEFINITIONS OF “POSTMODERN”:**

Linda Hutcheon claimed that postmodernism is at once the most “over- and under-defined” term “bandied about… in current cultural theory.”35 The inherent contradictions embedded in the term and the overlap of the modern and postmodern make a clear definition and common practice style impossible to define. Architecture historian Charles Jencks, however, goes so far as to confidently date the end of the modern and the passage to the postmodern as precisely 3:32 pm July 15, 1972.36 This time and date mark the destruction of the Pruitt-Igoe housing project in St. Louis which “stood as the epitome of modernity itself in its goal of employing technology to create a utopian society for the

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benefit of all.”37 Dating the beginning of postmodernism with the destruction of the St. Louis housing project focuses on only one aspect of the postmodern—the realization that the Enlightenment’s faith in technology as the solution to humanity’s problems was misplaced.

The assumption of a number of literary critics has been that during the second half of the twentieth century we experienced a “death of our traditional Western concept of art and literature, a concept which defined ‘high culture’ as our most valuable repository of moral and spiritual wisdom.”38 Scholars such as Susan Sontag, Jean-Francois Lyotard and Deborah Clarke defined high culture as another kind of masculine imperialism,39 and George Steiner pointed up the contradictory early twentieth century German love of literature, of high culture, and dedication to an ideology that was essentially spiritual, while the Nazi regime simultaneously participated in systematic murder.40 Seeming to echo Adorno’s claim, “no more poetry after Auschwitz,” artists have generally distanced themselves from high art aesthetics as a way to step away from the old regime. Contemporaneous spiritual seekers turned from Christianity—as the religion of Imperialism—in favor of exotic, far Eastern, or alternative faiths. Art lost its moral authority and its claims to redemptive power in the second half of the twentieth century.

In Literature Against Itself: Literary Ideas in Modern Society, Gerald Graff described

postmodern art’s new role and new sensibility in place of modernist “authority” and “redemption”:

This new sensibility manifests itself in a variety of ways: in the refusal to take art “seriously” in the old sense; in the use of art itself as a vehicle for exploding its traditional pretensions and for showing the vulnerability and tenuousness of art and language; in the rejection of the dominant academic tradition of analytic, interpretive criticism, which by reducing art to abstractions tends to neutralize or domesticate its potentially liberating energies; in a less soberly rationalistic mode of consciousness, one that is more congenial to myth, tribal ritual, and visionary experience, grounded in a “protean,” fluid, and undifferentiated concept of the self as opposed to the repressed Western ego.41

It is tempting to label this new artistic sensibility as a “breakthrough” or as a reversal of the modern, as Fredric Jameson does in his writings.42 Like Jameson, Jencks’ pronouncement of the start of postmodernism with the destruction of the modern necessitates an anti-modern definition of the postmodern. However, there is a growing camp that views postmodernism not as a reversal of the modern, but rather as “a logical culmination of the premises of these earlier movements.”43 According to Huyssen,

Critics like Bell and Graff saw the rebellion of the late 1950s and the 1960s as

41 Graff, Literature against Itself: Literary Ideas in Modern Society, 32.
43 Daniel Bell quoted in Graff, Literature against Itself: Literary Ideas in Modern Society, 218.
continuous with modernism’s earlier nihilistic and anarchic strain; rather than seeing it as a postmodernist revolt against classical modernism, they interpreted it as a profusion of modernist impulses into everyday life.44

What needs to be made clear is that cultural movements are often labeled and defined not by their proponents, but by their critics, and as a result much of postmodern criticism is inherently negative, or at least biased toward the dismissive. This seems to be the case when one comes across definitions of postmodernism as a movement whose “stance towards cultural tradition is one of irreverent pastiche, and its contrived depthlessness undermines all metaphysical solemnities, sometimes by a brutal aesthetics of squalor and shock.”45 This stereotypical focus on pastiche and bricolage, and on the erosion of the boundaries between high and low art is not the point. These attributes are simply avenues to a larger goal; namely, the demolition of a single focal point, the erasure of a single subject, and the demolition of a single message.

B. MUSICOLOGICAL DEFINITIONS OF “POSTMODERN”: Musicologists in particular have struggled with a cohesive definition of postmodernism as a musical style particularly because of our penchant to conflate postmodernity with postmodernism, just as we often conflate modernity with modernism. We typically define modernity as the modes of social interactions that emerged in the

seventeenth century in Europe and became more or less worldwide. Modernism, on the other hand, when applied to music describes composition after about 1890 which relied on the idea of continual renewal, a commitment to creativity for creativity’s sake, and discontinuity with the past; an expression of the conviction that the “means of musical expression in the 20th century must be adequate to the unique and radical character of the age.” Hutcheon’s insistence that postmodernism “cannot simply be used as a synonym for the contemporary” is a useful reminder; just as we no longer use “modern music” to stand for “contemporary music,” we cannot label anything that is avant-garde “postmodern.”

Definitions of postmodern music have been as wide to include everything since the mid fifties and have been as narrow to include works that rely on specific compositional techniques. Jameson’s definition of postmodernism in music, which includes Cage, Philip Glass, Terry Riley, Talking Heads, Gang of Four, and the Clash, is so broad that while it may be useful for social or visual art theorists, it is hardly helpful to musicologists. Even the Oxford music dictionary definitions are overly broad, if not essentially contradictory. In the Oxford Companion to Music, Paul Griffiths posits that postmodern composers are those that contradicted their “revolutionary elders” by turning to the past for “styles, quotation, and other points of departure.” Griffiths admits that there is little to distinguish the work of someone like Corigliano with the work of

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Stravinsky or Shostakovich. He also admits that some “essentially modernist composers in the 1950s and 60s (e.g. Kagel and Ligeti) had looked at the past with skepticism and humour,” traits that seems essentially postmodern. Yet in the article for *Oxford Music Online*, Jann Pasler favors a revolutionary definition of musical postmodernism, in contrast to Griffith’s “anti-revolutionary” stance. Pasler asserts that postmodernism values “discontinuity over continuity, difference over similarity and indeterminacy over rational logic.” Pasler’s definition is one that stresses a break with the modern—indeed a break with all tradition, not just the preceeding generation.

Again, the problem seems to be one of conflation of the terms *postmodernism* and *postmodernity*. We need to be clear that *postmodernism* is, as Anthony Giddens put it, best kept to artistic styles or movements while *postmodernity* denotes a trajectory of social development that is “taking us away from the institutions of modernity towards a new and distinct type of social order.” *Postmodernism*, as an artistic movement or style, then, “might express an awareness of such a transition.” Giddens points out that those who favor a revolutionary definition of postmodernism (as does Pasler) or those who view postmodernity as a break with the modern immediately hit upon a number of difficulties, as we see in the definitions above. How is it possible to define a movement as “revolutionary” that has such strong precedents in the preceeding period? Giddens offers that it makes more sense to understand postmodernity as “modernity coming to understand itself” rather than “the overcoming of modernity as such.”

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52 Ibid.: 48.
have proposed using the term *metamodernity* in place of the “ideological contamination” *postmodernity*. Instead of thinking of this period as an *after*-modern, or of a period which is “negatively turned against modernity,” it is more instructive to think of the period as we do other autonomous meta-languages. According to Felix Torres, metamodernity is a second modernity, and time period that is “conscious of itself, that plays only with its own codes, and multiplies its own signs.” Using the prefix “meta” to navigate this concept gives us a larger conceptual umbrella under which we can comfortably place aesthetic and philosophical projects that on the surface are seemingly disparate. According to Wladimir Krysinski, theorizing postmodernity as a *metamodernity* “enables us to reaffirm the dialectical process of writing and of rewriting modernity at the the same time as it reveals the instability of canons or, to put it more precisely, the process of canonization.” This concept facilitates a discussion of Cage’s work which is simultaneously intended to be a criticism of the canon construct while it is functioning as part of an avant-garde canon.

Pasler wrote, “Cage appears postmodernist because he threw into question both the concept of artistic genius that developed during the Renaissance and the notion of music

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as organized sound.” While I agree that the first point seems quite postmodern, the second seems to stem from the modernist desire for ever-renewing novelty. Hamm pointed out that to say that Cage became a postmodernist “is not merely to suggest that he broke with Stravinsky, Schoenberg, Webern, Ives, and Bartók but more importantly with a tradition reaching back at least to Haydn and Mozart.” Here, however, I have to agree with Giddens and Griffiths. What is postmodern about Cage is not the most revolutionary or most novel aspects of his work, but rather the idea that he returns to earlier musical touchstones as starting points for works like *HPSCHD*. It is the self-referential in *HPSCHD*, the self-conscious play with modernist codes, and the multiplication of its own signs that makes the work postmodern.

Embracing the anti-postmodern tendency to label and define, I will attempt to categorize three broad approaches to postmodern composition that reflect a “metamodern” manifestation. Many of these postmodernist musical tendencies have modernist antecedents (Ives, the Dadaists, the futurists) and some postmodern compositional techniques have long, established histories (collage, juxtaposition, appropriation, quotation). The first approach is one that questions the modernist need for continued originality, increasingly difficult and a challenging intellectual approach to music. Composers in this loose category often return to tonality, traditional forms, simplicity, spiritualism, or reconnect to a past style that is readily accessible. Composers in the category include George Rochberg, Ellen Zwilich and Arvo Pärt. Equally postmodernist, however, is an approach to composition that questions and deconstructs the “master narratives of tonality, narrative structure, Western hegemony and male

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56 Pasler, “Postmodernism.”
57 Ibid.: 279.
dominance." Continued repetition in minimalist works, for example, serves to undermine the role of long-term memory in the perception of musical structure, and the very slow (or lack of) harmonic movement undermines functional tonality. Minimalist, non-narrative, composers include John Adams, Philip Glass, Terry Riley, and Steve Reich. A third approach to postmodern composition involved the juxtaposition of eclectic source materials, or “disparate discourses.” These works, “construct a sense of time as embodying many times, a self made of many memories.” Cage is often a member of this group, alongside Luciano Berio and Alfred Schnittke.

As scholars we struggle to place such disparate approaches under one umbrella term. Confusion arises when we focus too tightly on technical or specific stylistic tendencies instead of studying broader aesthetic motivations. This explains the tendency of some scholars to view only tonal music that incorporates world music elements as “postmodern,” and insist that Cage is firmly a modern composer. Musicologists generally agree, however, that postmodern music reflects a “crisis of cultural authority… a shift from imperialist centralization… to a decentralized world economy, supranational entities and relativism.” In essence, a postmodernist musical practice could be one that questions certain modernist assumptions about the social basis and objective of art—“faith in progress, absolute truth, emphasis on form and genre and the renunciation of or alienation from an explicit social function.” This music may, as Pasler asserts, value discontinuity over continuity and indeterminacy over structure and design, yet discontinuity is not necessary, nor is it central to the definition. Postmodern composers

58 Ibid.
59 Ibid.
generally question the internationalism of modernism, the dominance of European and Western “art music” as a “universal language,” and recognize the role of difference (especially of race, class, and gender). In an essential way, this is music that expresses the new and distinct social order emerging in the late twentieth century. All of the approaches identified above are metamodern in that they are all ways of struggling with modernism in a self-conscious manner. They are all ways of writing and rewriting the modern inside a closed system of self-referential materials.

C. CAGE AS POSTMODERN:

In his article, “Cage and Postmodernism,” Alastair Williams discusses the fact that one cannot simply draw a dividing line between the two periods based on over-arching or oversimplified categories such as “closed” v. “open,” or “structured” v. “indeterminate.” 61 Despite the surface features of Cage’s work and philosophy that may not seem postmodern, such as his insistence on the utopian, there is much about a study of HPSCHD in a postmodern context that is instructive, especially if we can view postmodernism as a “dialogue with modernism” as Williams and Giddens suggests. Such a dialog is one “in which Cage was a very active participant.” 62 Many aspects of the work including the emphasis on participation, the unique narrativity of the piece, the collage and pastiche compositional techniques, and the inherent multiplicity within the performance space strongly place the work alongside other postmodern artworks.

Despite the fact that Cage wrote prolifically on political and social subjects that

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62 Ibid., 241.
have been central to the postmodern program, he never used the term “postmodern” to describe his work in his writings and he seems to have had only a superficial exposure to postmodern philosophers. In an interview with Sweeney Turner in 1989, Cage was asked the following:

*Turner:* Have you come into contact with the work of Roland Barthes, Jacques Derrida, Jean François Lyotard, all these people?  
*Cage:* I’m not a great student of it, but I know there’s a connection.

*Turner:* Do you find a connection between, for instance, a text like Barthes’ *The Death of The Author* and your own work?  
*Cage:* I think there is, but I’m not a student of it.63

Despite the fact that Cage was not a student of postmodern authors like Barthes, Cage’s politics, aesthetics, his connection to Zen Buddhism and Hindu philosophy, his perception of the everyday as art, the sense of humor in his art, and his preoccupation with chance operations all seem quite postmodern. Hamm insists that in his writings and lectures of the time, Cage understood what he was doing as a “radical rupture,” not just with the high modernists of the early part of the twentieth century, but “with the entire extended Modern Era.” Hamm wrote, “Beethoven, not Stravinsky or any of his peers, became his favorite straw man.”64 But as Hamm points out, Beethoven is indeed a straw

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64 Hamm, “Privileging the Moment: Cage, Jung, Synchronicity, Postmodernism,” 279.
man, and the differences between Cage and Stravinsky, or indeed, Cage and Beethoven as time passes are not as radical as Cage would have liked us to believe.

In an effort to place Cage along the modern/postmodern timeline Hamm wrote,

Babbitt represents the end of modernism in his writing and his music. “Terminal modernism,” I call it. Cage, on the other hand, was a proto-postmodernist from the mid-1950s on, and is now constantly cited in writing on postmodernism, in the arts and more generally. 65

In response to Hamm’s assertion, Larry Solomon retorted, “Cage can only be called a proto-postmodernist after 1951, but even then he is only marginal, and he is still very much rooted in modernist thought.” To support his claim, Solomon cites Cage’s self-confessed elitism, his reverence for authority, “Dad, Schoenberg, Suzuki, Mao, Eckhart, etc.,” his utopian aesthetics, and his ambivalence to populist politics. 66 Critics of Cage point out that a work like 4’33” may turn traditional concert practices on their ear, but the trappings of the high culture scene are all still present: the stage, the audience, in short, the ritual of the performance space remained. Nancy Perloff wrote, “This de-centered, collaborative, and heterogeneous principle for musical performance seems very postmodern. Yet the decisive presence of Cage’s ego… as well as the value he attached to historical musical practice, steered a modernist course.” 67 Kyle Gann points out that 4’33” is divided into movements—three, to be exact—which is a “curiously

65 Charles Hamm, e-mail, July 11 1998.
66 Larry Solomon, e-mail, July 12 1998.
‘classicizing’ feature, unmistakably suggesting a sonata.\textsuperscript{68}

This kind of categorization is, of course, always problematic. It is similar to the debate about Beethoven’s position in musical history as either a classical or (proto) romantic composer. Such generalizations and abstractions are often weak, yet we continue to find them useful. Hutcheon wrote, “What I want to call postmodernism is fundamentally contradictory, resolutely historical, and inescapably political.”\textsuperscript{69} Despite the contradictions and definitional problems we cannot escape the construct. Since a clear definition of postmodernism is still essentially a fiction, it may be most helpful to analyze \textit{HPSCHD} and Cage’s position at the end of the 1960s in the context of postmodern tendencies, admitting that certain stylistic characteristics may not fit a strong definition.

\textbf{D. \textit{HPSCHD} AND POSTMODERNISM:}

While it seems impossible to define a single, consistent postmodern aesthetic, it is possible to identify postmodern “symptoms” that consistently appear in the philosophies and art works that are labeled postmodernist. The following “symptoms” serve as an excellent starting point from which to begin a study of \textit{HPSCHD}: 1) a sense of time that focuses on the future, rupture and discontinuity, and conflates the past into the present; 2) an optimism about technology, excitement about McLuhan’s cybernetic world and runaway media (television, video, computer), and a euphoric vision of post-industrial society; 3) a tendency to attack the highness of high art, to question art’s separation from


\textsuperscript{69} Hutcheon, “Theorising the Postmodern Towards a Poetics,” 76-77.
everyday life; 4) a tendency to question authoritarian voices and grand narratives; and 5) the denial of the legitimacy of a single focal point or a single unifying narrative. These symptoms are simply starting points for this study of HPSCHD, and each of the subsequent chapters of this work are centered on a specific postmodern symptom.

4. OVERVIEW OF THE DISSERTATION:

A. CHAPTER 2. The Past in the Present:

The temporal focus in postmodern art tends to be pluralistic, giving equal weight to the future and new frontiers, as to the past and the present. Postmodern artists tend to work with a sense of meta-historicity or meta-temporality, intentionally conscious of an artist’s own place in time. Historic source materials are often used in postmodern art, but not to give the work historic weight or a sense of cultural authority, but rather to represent a past that is equally important as the present or future. Indeed, the issue of time and signification in music is a difficult one. In a study of musical semiotics, Eero Tarasti claimed that

the “intricate” meaning of future/present/past develops and extends itself as soon as the music begins, by virtue of the co-presence of the “present” earthy element of timbre… and of the “absent” worldly dimensions of the work’s reference to its quasi-immemorial past and to its not yet encountered development.70

The more a composer relies on narrative structures and common practice forms, the more one may infer a sense of past/present/future within the music. Postmodern music, however, typically eschews narrative structures, and as a result, a postmodern view of musical time (as with a postmodern view of faith or other truth claims) is relativistic. This devaluation of time is part of a postmodern questioning of all authority and hierarchies. It is part of what Lyotard called a massive “delegitimation” of the “mastercodes in society.”\footnote{Jean-François Lyotard, \textit{The Postmodern Condition} (Paris: Les Éditions de Minuit, 1979). Quoted in Ihab Hassan, “Pluralism in Postmodern Perspective,” in \textit{The Postmodern Reader}, ed. Charles Jencks (New York: St Martin’s Press, 1992), 196.} From the derision of authority stems a desire to decanonize past masterpieces, or to go even further, to question the legitimacy of the existence of a musical canon.

The result of this postmodern attitude toward time and the decanonization of our musical tradition may be “the disappearance of a sense of history,” according to Jameson. The fact that our contemporary social system has “begun to lose its capacity to retain its own past,” has resulted in a perpetual present “that obliterates traditions of the kind which all earlier social formations have had in one way or another to preserve.”\footnote{Jameson, “Postmodernism and Consumer Society,” 125.} While this claim may seem counterintuitive in light of a continued concert tradition of historical “masterpieces” and the strong early-music movement, these traditions have a limited appeal and a limited function within a much broader context of cultural relativism.

This representation of time as relativistic and a meta-temporal proclivity is evident in \textit{HPSCHD}. The piece projects a hyper-awareness of its own place in time; it is \textit{about} the late 1960s, its own history, its own mythology. As we’ll see with subsequent performances, the piece carries that sense of the 1960s as a sentimental or nostalgic
longing for that utopian, imaginary time period. The use of the computer—in sound and imagery—and the focus on space travel gave the event a futuristic feel. Cage’s use of the computer and other technologies in HPSCHD certainly signified “future” for many participants, but Cage also, for the first time, used historical source material in this piece, drawing especially from Mozart. The issue of “time” is problematic here; some critics viewed Cage’s appropriation of historical sources as an intentional rupture of the canon, but upon closer analysis, one finds that Cage’s intentions were quite sympathetic. The postmodern tendency to decanonize past masterpieces, in Cage’s case especially, was motivated by a desire to hear the works in a fresh and new way, and to make them, once again, a part of everyday life. In addition to decanonizing past masterpieces, Cage also made a pointed critique of the “artist-as-genius” construct. By placing his own work on an equal footing with Mozart, Beethoven, Schumann, Schoenberg and other past “masters” he seems to simultaneously discount the cultural authority of these composers while writing himself into music history as one of the greats. This is the kind of contradiction that one finds throughout Cage’s work and thought. The use of historic source materials in HPSCHD does not result in a heightened sense of historical value, but rather in a sense that the past is simply conflated into a present, or, indeed, even into an imaginary future.

Chapter two is an analysis of the harpsichord parts and how they were constructed. I also describe the genesis of the HPSCHD project, discuss Cage vis-à-vis the musical canon, look at Cage and collage techniques, and conclude with a deeper discussion of the issue of time in HPSCHD.
B. CHAPTER 3. Technological Optimism: Cage and the computer

Many of the early advocates of postmodernism shared a technological optimism that mirrored segments of the 1920s modernist avant-garde. According to Huyssen, “What photography and film had been to Vertov and Tretyakov, Brecht, Heartfield and Benjamin in that period, television, video and the computer were for the prophets of a technological aesthetic in the 1960s.” McLuhan’s cybernetic and technocratic views of the future, his praise for boundless mass media, the idea that the computer could act as a substitute for consciousness, and the assertion that technology of all types created extensions of the human nervous system all combined to create euphoric visions of post-industrial society.

According to Dominique Richard, author of “Computer Music and the Post-modern: A Case of Schizophrenia,” postmodern music is dependent on contemporary technologies, especially those of computing and communications. Computer assisted composition seems especially postmodern, not only because of its dependence on technology in its creation and mass communication for its dissemination, but also because the use of a computer “reduces the synthesis of a sound and sometimes the logic of the composition into a mathematical algorithm.” This is a postmodern outcome because the act of reducing sound and musical notation into mathematical dimensions strips the music of the traditionally modern problems of authorship and value. The computer as a compositional tool does not differentiate between “high” and “low” art. Indeed, according to Richard, “there are no fundamental differences in the processes and techniques leading to Pink Floyd’s Dark Side of the Moon... a product of so-called low

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73 Huyssen, “Mapping the Postmodern,” 50.
culture, and Morton Subotnik’s Silver Apples of the Moon, recognized as a product of so-called high culture.”

Despite the postmodern realization that the Enlightenment project failed to solve humanity’s problems with technology and science, postmodern thinkers tended to share a sense of optimism in technology, or at least an enthusiasm for technology. In this context Cage is different from other postmoderns as his view that technology could solve the world’s problems seems part of the Enlightenment’s ideal of scientific progress. Most postmodernists after 1970 continued to maintain an enthusiasm for technology, but lost faith in technology’s ability to save humanity. Cage is very much influenced in this area by two important thinkers from the 1960s: Buckminster Fuller and Marshall McLuhan. In 1970, Cage told an interviewer,

You know my interest in the work of Buckminster Fuller. He is concerned with what he calls comprehensive design science, which is to solve the problems of the world, that’s to say, the distribution of world resources to all the people of the world. It’s he who says, that in 1972 it comes to the 50:50 point. And then, the curve goes up quickly to 100% having what they need. I think he is probably the most useful human being living right now.

Fuller’s ideas that technology could create abundance and eliminate poverty are

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retrospectively naive. However, Fuller’s utopian expectations of technology and the
distribution of resources facilitated by emerging technology were hugely influential.
Similarly, McLuhan’s prediction of a “global village” created through technology was
entirely prescient. McLuhan’s idea that technology is an extension of our bodies and
electronic devices an extension of our nervous systems, was particularly influential on
Cage. McLuhan predicted a change in society from being a literate and linear society to
becoming an aural society defined by simultaneity.\(^76\) In the article “The Agenbite of
Outwit,” which Cage praised, McLuhan described the terror involved in wearing your
nervous system on the outside of your body and the subsequent changes in society.\(^77\)
According to McLuhan, we became individuals when we became literate, but because of
the nature of the media and its “all-at-once-ness” we are again becoming a tribe—a
global tribe. Despite the fact that the promise of the “global tribe” has clearly failed,
Cage found this idea very compelling. He referred to his purpose as an artist was to
precipitate “mind change” which was only possible because of technology, media, and
this “global village.”\(^78\)

In his theoretical work on utopian artworks, Lewis Mumford made a distinction
between “utopias of escape” and “utopias of reconstruction.” According to Mumford, the
utopia of escape “seeks an immediate release from the difficulties or frustrations of our
lot,” whereas, the utopia of reconstruction “attempts to provide a condition for our release

\(^77\) John Cage, “McLuhan’s Influence,” in \textit{John Cage}, ed. Richard Kostelanetz,
The utopia of reconstruction attempts to change the world, and in this way, *HPSCHD* is a utopia of reconstruction, informed not only by Cage’s optimistic view of technology, but also by his Thoreauvian anarchist politics.

*HPSCHD* is a representation of this optimism in technology and a utopian construction designed to demonstrate the possibilities of technology. *HPSCHD* was a celebration of technology, and in some ways, a tribute to Buckminster Fuller’s faith that technology was the answer to an impending world crisis. In chapter three I document Cage’s relationship to the computer in the late 1960s and his collaboration with Hiller. The chapter briefly describes the programs that were designed in the creation of *HPSCHD*, the time and expense of the programming, and the creation of the tapes, and the Nonesuch recording of the piece that was released prior to the May 1969 event in Urbana. I end the chapter with a deeper discussion of Cage’s positive view of technology and how this view served his anarchic, utopian politics.

C. CHAPTER 4. The Participatory Politics of *HPSCHD*

There are a number of postmodern concerns and issues that seem to run parallel to what Cage was interested in addressing with *HPSCHD*, including a postmodern tendency toward anarchy. Derrida’s “metaphysics of presence” is particularly instructive as a basis for understanding postmodern approaches to politics. It describes how individuals understand our existence in the world. Historically, we have thought of ourselves as a kind of “centered being.” If this centered being is *present*, then a corresponding state of *absence* is also implied. This kind of thinking creates polarization and a number of

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dichotomies beyond present/absent including good/evil, mind/body, masculine/feminine, foreign/domestic, etc. Each system relies on a fixed center, and a fixed center, according to Derrida, relies on an excluded margin. The point of Derrida’s deconstructionism is to dissolve the boundaries separating the binary opposites. Derrida “doesn’t seek to reverse the hierarchies implied in binary pairs—to make evil favored over good, unconscious over consciousness, feminine over masculine.” Rather, with the boundaries between the binary oppositions attenuated, Derrida demonstrated “that the values and order implied by the opposition are also not rigid.”

His program is to show that these binaries are not polarized, systems are neither open nor closed, systems are not reliant on one center, and, perhaps most important, to point out that one is not a “centered being.” According to Derrida, our existence is based rather on a multiplicity of centers. This is precisely the kind of philosophical underpinning that anarchy, as a political construct, relies upon, and resultingly, “Anarchism is… a political philosophy which seems perfectly well suited to the postmodern world.”

In 1967 Cage was introduced to the writings of Thoreau and throughout the rest of the 1960s he started to form an attitude toward social structures, government and politics that stayed fairly consistent through the rest of this life. At the time of the discovery of Thoreau’s Journal, Cage was already writing about anarchy and the way in which art can work as an exemplar of this type of society. Cage designed HPSCHD as an event that would create opportunities for groups of people who could experience the event individually and the event itself would ideally serve as a model for a world “without a

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81 Lewis Call, Postmodern Anarchism (Lanham, MA: Lexington Books, 2002), 11.
As mentioned above, what has been criticized as an “an iconoclastic attack on... ‘institution art,’”82 with Cage is actually a effort to move art into life, and life into art. This movement to “sublate art into life” was in effect “done” by earlier Cage works and writings. Cage is no longer interested with *HPSCHD* in an attack on the autonomous artwork as much as he is in creating a model for a utopian, anarchic society. The way in which Cage made musical situations analogous to utopian, anarchic social circumstances has much to do with his employment of chance operations, but also in his insistence on *participation* within an artistically activated space. Performances of *HPSCHD* in which the audience was not able to move about freely created, as Cage put it, undesirable situations. In short, “The project [of postmodernism] aims at a differentiated relinking of modern culture with an everyday praxis that still depends on vital heritages, but would be impoverished through mere traditionalism.”83

Chapter four is a closer examination of Cage’s political views, especially his reading of Thoreau and his understanding of “anarchy.” I also address the social and historical significance of participation within the performance space and the role of the active participant as interpreter and even performer within the space of the work. Most significant, however, is a critique of Cage’s politics in chapter four, including a history of race relations at the University of Illinois in 1968, and how Cage’s utopian politics seem overly abstract and naive vis-à-vis serious racial tensions on campus, not only in Illinois, but across the country at that time.

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82. Huyssen, “Mapping the Postmodern,” 49.
D. CHAPTER 5. Cage mise-en-scène: Theater Theory and HPSCHD

As mentioned above, many of the techniques of postmodern art—especially the use of pastiche, collage, quotation, hybridization, and multiplicity—are not necessarily used as ends, but as a means to eliminate one focal point or one authoritarian voice in the work. With the dismissal of the authoritarian voice in art, as with the dismissal of the metanarrative in postmodern philosophy, comes a validation of all ways of hearing, seeing, experiencing and knowing. Cage’s attempt to remove the ego from the music-making process is the topic of a number of studies and is not the focus of this study. However, the concept of interpenetration is instructive in connection to HPSCHD. For many, the result of this kind of work was the creation of a chaotic atmosphere. Cage disagreed: “When you use the word ‘chaos,’ it means there is no chaos, because everything is equally related—there is an extremely complex interpenetration of an unknowable number of centers.”

The “unknowable number of centers” relates not only to an unknowable number of focal points in the work, but also to the unknowable number of participants and points of view. In order to create the myriad focal points in HPSCHD, Cage turned to a number of “tools” which he was accustomed to using from past projects, but utilized them in new ways for HPSCHD.

The most notable Cagean aspect of this event was its use of multimedia, and in order to create this sophisticated and elaborate spectacle Cage collaborated with three other “principals,” each in charge of a different medium—computer programming, static visual art, and lighting and film. Artists have often used collaboration in the twentieth

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84 Kostelanetz, “Environmental Abundance,” 175.
century as a means to creating works that are meant to demonstrate an alternative to the “genius/master” paradigm of the modern era. As such, some scholars refer to collaboration as a feminist statement.\(^8^5\) While it may be tempting to look at Cage’s collaborative work here as an alternative to the patriarchic “solitary genius” paradigm, it is difficult to support such a claim in light of the evidence that Cage was in a very real sense the “solitary genius” orchestrating the collaborative work. Generally, collaborations tend to “generate an aesthetic that is properly multiple, discontinuous, collaborative, oriented more to the idea of a system of group dynamic than to the expression of the individual.”\(^8^6\) While this is true of the Cage/Cunningham/Rauschenberg collaborations from the late fifties and early sixties, it is not necessarily true of *HPSCHD*. The aesthetic differences between the Cage/Cunningham/Rauschenberg collaborations and *HPSCHD* are significant. Instead of working independently before the performance and then participating in a kind of parallel play on the stage, as Cage did with Cunningham and Rauschenberg, *HPSCHD* was designed to be a singular, unified work—a Gesamtkunstwerk. As such the nature of the collaboration was different. According to Hiller, “It was a very different collaboration, according to John, from what he did with Lou Harrison on *Double Music*, for example, in the sense that we did meet—I wouldn’t say daily…but frequently—and we would hash these ideas

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out together.”\(^{87}\) Cage also met with Sumsion and Nameth. Cage was the center of the creative work and there was always a sense that this was Cage’s project. Despite the fact that Cage named the four “principals” equally in all of the posters and the program, and despite the fact that he arranged to share any profits from the publication of the score equally with Hiller, the piece continues to be Cage’s *HPSCHD*.

This kind of collaboration is not an unusual work method, even for the Romantic “solitary genius.” Howard Becker’s “art world” construct is simple, yet instructive. He asserts that works of art, like all human endeavors, involve the cooperative activity of a number of people. Indeed, this kind of cooperation is necessary, although, as Becker points out, “we conventionally select some one or a few of these as ‘the artist’ to whom responsibility for the work is attributed.”\(^{88}\) In fact, one might describe this kind of collaboration as a cooperating network that radiates out from the central creator.

Cage is clearly the central, creative force with *HPSCHD*. The next circle of artists cooperating closely with Cage, but not necessarily with each other, are Hiller, Nameth, and Sumsion. One could then extend the circle to the performers (Vischer, Brooks, et al.), to the computer programmers, those who worked to copy tapes, collect the equipment, those who set up the Assembly Hall, and so on. I have been careful throughout the dissertation to attribute creative ideas to the appropriate artists where appropriate. In some cases, compositional ideas do indeed belong to both Cage and Hiller, for example. I do not, as some do, always attribute *HPSCHD* to both Cage and

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Hiller. Hiller had a very specific role as co-composer and as computer programmer; however, Hiller did not contribute to the larger concept of the work as it took shape as a theater piece.

Despite the fact that we cannot point to Cage’s work with collaborators as a anti-patriarchal statement, the resulting artwork is a hybrid of music, theater, static and dynamic visual arts. As such, the work is analogous to the fictitious cyborg. Donna Haraway, author of “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century,” views the nature/machine hybrid as a model for feminists emerging in the late twentieth and early twenty-first centuries.\(^\text{89}\) Not only does this hybrid artwork act as a model for feminists, but the hybrid acts as a metaphor more broadly for the antipatriarchal.

Chapter five places *HPSCHD* within the context of theater and theater theory of the late 1960s. In this chapter I discuss how Antonin Artaud, the Living Theater, and “Happenings” influenced Cage, and I discuss how *HPSCHD* might be viewed within the larger context of counter-cultural theater. I address the theatrical issues involved in the use of multiple sound sources and the importance of the visual images (slides, films, banners, lighting, tunics, T-shirts and posters). Chapter five ends with a discussion of *HPSCHD* as a hybrid artwork and how as a hybrid it can act as an alternative to traditional arts and the patriarchal, even when the collaborative process employed in the creation of *HPSCHD* was typical of a modernist or avant-garde art world.

E. CHAPTER 6. Conclusion: The Afterlife of HPSCHD

Jameson has argued, among others, that there can be no more “works,” only “texts.” While some historical compositions seem to have retained a status as “works,” the early-music movement especially tends to treat scores not so much as “works” but as opportunities for a fresh reading of a particular text. The claim that late twentieth century compositions are “texts” rather than “works” seems especially true with HPSCHD. In many ways, HPSCHD was a singular event—despite the fact that Cage and Hiller produced a score and the fact that there have been a number of consequent performances. These performances have included varying degrees of aural, visual and physical activity and in this way we cannot write about the “work itself,” but rather multiple, different readings of the same “text.” Consequently, this chapter includes a brief overview of the “afterlife” of HPSCHD and I discuss several of the performances that took place after the original event. In chapter six I also discuss the “work” construct and how champions of HPSCHD still appeal to some idea of Werktreue, or at least Klangtreue, and how the work has ironically become part of the canon as Cage has become an increasingly canonical figure of the twentieth century. Chapter six ends with suggestions for further study.

5. CONCLUSION:

One last result of the interpenetrating artwork is the loss of a unified

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narrative. Postmodern artworks are typically “works that follow the logic of a kaleidoscope.” Composers of postmodern music are not interested in creating continuity or discontinuity with a work, nor are they interested in fulfilling or subverting goals, but rather in “suggesting connections within a synchronic situation.” The resulting works are not linear narratives, but rather like ecosystems in which each audience member physically participates. Postmodern artworks which allow for a diversity of experiences and understandings reflect Lyotard’s definition of postmodern knowledge: “Postmodern knowledge is not simply a tool of the authorities; it refines our sensitivity to differences and reinforces our ability to tolerate the incommensurable. Its principle is not the expert’s homology, but the inventor’s paralogy.” Cage’s pluralistic, nonhierarchical, multimedia construction is also similar to Roland Barthes’ description of the “ideal text”:

The networks are many and interact, without any one of them being able to surpass the rest; this text is a galaxy of signifiers, not a structure of signifieds; it has no beginning; it is reversible; we gain access to it by several entrances, none of which can be authoritatively declared to be the main one.

Cage’s intent in the construction of this large-scale, hybrid, non-narrative artwork was to create an alternative to hierarchal, traditional forms—forms which by necessity involved a conductor. His goal was to create an environment that could teach us what it would be

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like to live in an anarchic utopia.

The extent to which Cage succeeds through *HPSCHD* in the creation of an anarchic utopia—or perhaps even a Wagnerian *Gesamtkunstwerk*—is an issue that is addressed throughout this study. The strictly coded university of the late sixties is an uncomfortable setting for an “anarchic utopia.” Cage’s pretensions to anarchism within the context of the university are only part of the problem. Increasingly, Cage has been the subject of sharp criticism regarding the “a-culturalism” of his work and his disengagement from any cultural specificity. Philip Brophy complains about the “rarified domain of experimental practice;” specifically, Cage’s alignment with the art gallery, or in the case of *HPSCHD*, the university where, according to Brophy, “composer directive and artist statement overrode any socio-cultural framing of [artistic] outcomes.”

Brophy’s second complaint about Cage concerned “the reduction of ‘sound’ to a quasi-mystical zone where ‘sound itself’ speaks most eloquently of its substance and existence.” Brophy wrote,

> From the precious privilege born of the former to the vacuous view endeared by the latter, the appreciation of Cage seemed delineated by its own anechoic chamber which excluded the world and its cultural noise—all while deftly reducing it to an amorphous voluminous mass. It was as if all sound was to be celebrated—so long as it wasn’t labeled, categorized or named.

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94 For a thorough argument that *HPSCHD* is a *Gesamtkunstwerk* in the Wagnerian tradition, sharing the same utopian, political program, see Sara Heimbecker, “*HPSCHD, Gesamtkunstwerk*, and Utopia,” *American Music* 26 no. 4 (Winter 2008): 474-498.  
96 Ibid.
There is an apparent contradiction between Cage’s image as the ego-less Zen master, anarchic composer of chance, and the exacting control he exerted over this work. There is a similar inconsistency between Cage’s pretension to global political engagement and his failure to engage some of the most immediate political issues of his time. Many consider such critique of Cage as unfair given Cage’s financial circumstances, which necessitated cooperation with institutions such as the university. Yet, it is not beyond the scope of such a study to analyze the work in the context of the university setting, as “rarefied” as it may have been in 1967-69, as well as within the broader cultural context of student unrest during the late 1960s.

Despite the fact that Cage is known as the composer who successfully removed his own ego from his work through the use of chance operations, one must understand that he was able to draw on significant financial resources and media coverage because of his celebrity status. Despite the fact that he constantly promoted himself as an outsider, he was perhaps the most successful self-promoting composer of the twentieth century. The story of *HPSCHD* is also largely a story of Cage’s celebrity.

Brophy’s critique of Cage’s music as largely “a-cultural” and elitist extends somewhat to the existing scholarship on Cage as well. Brophy contends that much of this scholarship could be “excitingly recouped” by studying Cage’s works “not by returning to their mythological originations as artworks, but by considering them unpatronisingly in tandem with all other forms of sound and music happening in their time.”97 I would extend this exhortation to not only consider “sound and music” but to consider *HPSCHD*

97 Ibid.
as a theater work within a rich theater tradition, as an event during a year of significant
countercultural events, and to consider Cage’s philosophical utterances surrounding
HPSCHD within the larger context of contemporary postmodern philosophy.

The claim that the postmodern is a culmination and extension of the modern, as opposed to a reversal or breakthrough, is based on the fact that viewing the postmodern as a reversal places a chasm between the postmoderns and their predecessors that is not supported by a comparative study. In other words, Cage has more in common with his modern predecessors than not. Harry Levin identified the “ultimate quality” pervading the work of the moderns as “its uncompromising intellectuality.” 98 This study will be a study of the “uncompromising intellectuality” of HPSCHD, and a study of the rigorous philosophical architecture which not only supports the composition, but insures the work’s position as a pinnacle work of the postmodern.

CHAPTER 2: THE PAST IN THE PRESENT

“Tragic heroes, masterpieces and geniuses are false boundaries.”¹

—Eric Mottram, personal papers

“The masterpieces of Western music exemplify monarchies and dictatorships. Composer and conductor: king and prime minister. By making musical situations which are analogies to desirable social circumstances which we do not yet have, we make music suggestive and relevant to the serious questions which face Mankind.”²

—John Cage, Empty Words

In “Composition as Process” (1958) published in Silence, Cage wrote,

“Masterpieces and geniuses go together and when by running from one to the other we make life safer than it actually is we’re apt never to know the dangers of contemporary music or even to be able to drink a glass of water.”³ It is ironic, then, that Cage at once reinforced his own reputation as an “inventor of genius” while he simultaneously criticized the “genius” construct. The use of historic “masterpieces” written by musical “geniuses” of the past as source materials for HPSCHD, therefore, seems quite out of place considering the rest of Cage’s oeuvre from the 1960s and Cage’s typical hostility to the idea of a musical canon.

¹ Eric Mottram, “Silence Is a Compendium...” in Eric Mottram Papers, King’s College Library, London.
² John Cage, Empty Words (Wesleyan University Press, 1979), 183.
One of the posters created to advertise the 1969 performance of *HPSCHD* on the University of Illinois campus depicts John Cage a musical warrior. (See illustration 2.1.) Cage wears an Asian warrior’s breastplate, and nonchalantly slings a medieval battle-ax over his shoulder. He appears ready to slay the three-headed dragon of “traditional music” behind him, represented by the heads of Beethoven, Mozart, and Schumann whose works Cage “controls” in the composition. Cage’s pants, however, are those of an astronaut, complete with an umbilical cord that runs to a 3M reel-to-reel tape machine.

The mercurial wings on his feet indicate that Cage is the forerunner of avant-garde music, and the halo around his head indicates his position as a “patron saint” of the same, as well as a modern day St. George the dragon slayer. Cage is drawn with the familiar open-mouth laugh, while the “serious” composers scowl behind him. A harpsichord is tucked into the scene between Cage and the tape machine, completing the contrast between the old and the new. According to the artist, Gary Viskupic, he was given “free reign to come up with concepts,” but that Cage signed off on the posters.  

This ephemeral poster typifies the heroic, iconoclastic image that Cage and his acolytes were already creating for him—an image that would shape Cage scholarship for the next decades. When viewed critically, however, this seemingly inconsequential visual representation of Cage opens many avenues of inquiry about the piece, about our assumptions of the composer in the late 1960s, and especially about the use of historical source material in the creation of *HPSCHD*.

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4 Gary Viskupic, interview with the author, July 3, 2006. Viskupic studied graphic design at the University of Illinois 1967-1968. He also created posters to advertise the 1968 *Musicircus*. Immediately after finishing his graduate studies he took a position with Newsday and Doubleday. He recalled travelling back to Urbana at least once during the poster design process to consult with Cage.
In this chapter, I recount the history of the compositional work on *HPSCHD*, discuss the idea of the musical canon, and address the significance of each of the borrowed canonic source materials. Additionally, I attempt to place the composition of *HPSCHD* in the context of collage works from Ives to Cage’s contemporaries, and discuss the idea of collage as a kind of traditional deconstructionist trend in the late sixties. The philosophical implications of using source materials beg an analysis of the idea of *time* in utopian art, and in conclusion I demonstrate how Cage has written himself into the musical canon.

The inclusion of the quoted historic materials in *HPSCHD* warrants special attention, not only because it seems to be such an integral part of the composition and compositional process, but also because it seems to be an important part of many significant works from the same time period. Glenn Watkins commented that this trend toward collage in the late 1960s, “was audible along an expanded base of operations.”

The most superficial conclusion one could draw would be that Cage included historical quotations simply as a postmodern pastiche technique, similar to what Rauschenberg was doing with his art, and what Duchamp had done earlier with found objects. Upon further analysis the subject becomes far more complicated. In a study of the use of quotations in *HPSCHD*, it is necessary to ask *why* Cage chose the materials that are included, but also to ask *how* they function in the composition. The issue of *function* involves a closer analysis of the temporality of postmodern art as well as a discussion of how mass media has affected our perceptions of the past in the present, indeed, even our concept of *future*.

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1. GENESIS OF THE \textit{HPSCHD} PROJECT

When Cage first proposed working with computers at the University of Illinois with Hiller, he had two projects in mind.\textsuperscript{6} The first—and initially most important—was the so-called “thunderclap piece” (discussed in detail in Chapter 2); the second was “the idea of doing something with Mozart.” According to Hiller, Cage liked the clarity of Mozart and from the beginning the piece was “a kind of homage to Mozart.”\textsuperscript{7} In retrospect it seems convenient to link Cage and Mozart through the idea of indeterminacy due to the inaccurately ascribed “Musikalisches Würfelspiel” KV 516f. According to Hiller, however, “the idea [to incorporate] the Mozart dice-game came rather late.”\textsuperscript{8} In this 1982 interview, Hiller thought that perhaps the idea to use the dice game was his idea, but he couldn’t remember precisely. In a 1983 interview with Vincent Plush, Hiller remembered the collaborative nature of the work in this way:

\begin{quote}
The idea of actually using a musical dice game popped into my head one day, for example. I don’t know – I said, “Well here’s the obvious chance piece with which we start,” and he loved the idea, you see? And then the I Ching to make
\end{quote}

\begin{footnotes}
\item[6] Cage had originally planned to work on these projects at the University of Cincinnati spring semester, 1967. He wrote to Peter Yates, “Plans for composition at Cincinnati: Atlas Borealis (a Concert for String Sextet and Orchestra) with The Ten Thunderclaps (Joyce). Also a Book of Music for Harpsichord.” John Cage to Peter Yates, December 21, 1966, Stony Point, NY, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
\item[7] Tracy Caras and Cole Gagne, \textit{Soundpieces: Interviews with American Composers} (Metuchen, N.J.: Scarecrow Press, 1982), 236. Cage had originally planned work on these
\item[8] Ibid.
\end{footnotes}
substitutions was his idea, and so on and so forth. It just seesawed back and forth.9

It may be true that the idea was his, but Cage was aware of the piece at least by 1965.10

In a 1967 typed manuscript titled “MUSIC FOR HARPSICHORD” which was intended to clarify work that was to be done at the University of Illinois that year, Cage wrote:

My view of the music of Mozart is that it is distinguished by its tendency toward multiplicity rather than unity. He used, in a short time-space, scales of 12 tones, 7 tones and 3 tones: chromatic, diatonic, and “scales” made of thirds, major and minor.

I intend to use computer analysis to determine Mozart’s practices with regard to these scales: his “voice leading.” Then to apply these findings to other numbers of tones in other octave divisions, from say, five tones per octave to fifty-three tones per octave. Then to synthesize on tape a multiplicity of musical lines, giving all of them the sound of harpsichord.

The finished work will consist of these tapes (probably one to two hundred of them), any number of which could be performed together with or without a part for actual harpsichord, played live but amplified.11

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10 In an article on Cage, Morton Feldman, Christian Wolff and Pierre Boulez, Henry Cowell described various historical combinations of choice and chance, and referred to the Mozart dice game. Cage was well aware of this article as he quoted it in an April 5, 1965 letter to Arthur Schwarz, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
11 Cage deleted a line in reference to the number of divisions per octave which read: “(the upper limit will probably follow the work of Harry Partch.)” The significance of this deletion is discussed in Chapter 4. John Cage, “MUSIC FOR HARPSICHORD”
In an interview with Kostelanetz, Cage again recognized an affinity to Mozart due to the tendency toward “multiplicity,” as opposed to Bach who “moves toward unity.”\(^{12}\) The description of Mozart’s music involving “multiplicity” allowed Cage to elide this historical figure philosophically into the program of this large scale, multimedia work.

With this general plan in mind, Cage and Hiller began their work on *HPSCHD*. Instead of one harpsichord part, the collaborators settled on seven. Using the “Musikalisches Würfelspiel” as a model, Cage and Hiller designed a computer program that would mimic the rules of the musical dice game. The resulting program, DICEGAME, written by Laetitia Snow, facilitated the selection of musical materials for five of the seven harpsichord solos. Solo I is a transcription of the ICHING program computer output for the twelve-tone gamut tape and is graphically notated on a single staff.\(^{13}\) The duration of pitches is indicated by space on the page (five inches equal to one second) and each page was to last precisely 20 seconds. David Tudor was to play the Solo I chromatic computer output. Johanne Rivest reported that Tudor was to play this part, “maybe because, as the composer Udo Kasemets pointed out to me, Tudor didn’t like Mozart’s music and would have never accepted to play it.” Amplitude changes were written into this part which Tudor executed with the help of a special device which he ordered from Hugh Le Caine of the National Research Council of Canada, Ottawa. Tudor’s assistant, Rene Farley, made a pressure-sensitive amplitude control which was

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13 Cage and Hiller did not create a computer-generated tape for the twelve-tone gamut.
used with the Baldwin electric keyboard that Tudor used for the performance.\textsuperscript{14}

Solo VII is one page of instructions for the harpsichordist to play any Mozart composition of his or her choice. With the harpsichordist Antoinette Vischer in mind, Cage said that the performer may play “in either of two manners: as though she were at home without an audience, practicing and playing for her own pleasure, or as though she were in public, performing, or any combination of those.”\textsuperscript{15}

Solos II, III, and IV use Mozart keyboard works as source material. Hiller said,

John went through one of the regular editions of the Mozart piano sonatas and used the \textit{I Ching} to choose which sonata and which movement. The passages so chosen were labeled ‘Replacement Music 1,’ ‘Replacement Music 2,’ etc. … We set a limit of seven replacements so that we would end up with a fairly complete version of the terminal piece.\textsuperscript{16}

The Mozart “replacements” include: Sonata in D Major, K. 284, second movement, first 24 mm.; Sonata in C Major, K. 330, first movement, first 32 mm.; Sonata in G Major, K. 283, first movement, first 47 mm.; Fantasy in C minor, K. 475, first movement, first 10 mm.; Sonata in B flat Major, K. 281, second movement, first 32 mm.; Sonata in D Major, K. 284, first movement, first 32 mm. Solos III and IV are constructed along the same


\textsuperscript{16} Ibid.: 23.
lines, except that the replacements occur independently in each hand. Cage wrote to Vischer on June 3, 1968 regarding the parts: “The ‘pure’ dice-game will be circa 40 pages, and will have, I hope, the effect of Satie’s *Musique d’Ameublement*.”

He asked Vischer to play solos II (the “pure” dice game) and VII which was instructions to play any Mozart piece. Cage wrote to Vischer:

> All of the soloists are learning at least 2 solos. Since there will be such a great deal of sound (and I would like to keep the density high—at least 45 of the 59 channels in operation at any time) the soloists will be provided with headphones enabling them to hear what each one alone is playing. You will be able to rest when you plan or wish (a plan cd. be made by chance operations) but that you might play Solo II say 4 times during the evening (or more) and Solo VII an equivalent length of time. As for what Mozart, I will be delighted with your choice or choices.

Philip Corner is also playing Solo VII—some Concerto of Mozart I believe, with all the preparatory exercises.

The other harpsichordists were Ronald Peters, Yuji Takahashi, Neely Bruce and William Brooks.

While Solos II, III, and IV use Mozart as source material, Solos V and VI use “replacements” from the keyboard canon. Whose decision it was to include quotations from the other composers besides Mozart, or how that decision was reached, is unclear.

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17 John Cage, typed letter, 3 June 1968.
18 John Cage to Antoinette Vischer, 30 March 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
Hiller did not remember the circumstances: “we were probably out there in the trailer
telling anecdotes or something like that and it just happened. I really don’t remember.”
Joel Chadabe thinks it is likely that “Hiller probably played a major role” in the selection
of source materials. By March 3, 1968 Cage and Hiller had settled on the arrangement
of parts and the so-called “replacement” selections for Solo V and VI of the seven solo
harpsichord parts. Cage wrote to his publisher Walter Hinrichsen, president of C. F.
Peters, that the parts would include selections from “Beethoven, Chopin, Schumann,
Gottschalk, Ives, Schoenberg, and, with binary chance operation, Lejaren Hiller/John
Cage.” According to Charles Hamm, the Ives piece that Cage and Hiller selected was
the Three-Page Sonata, and the Schoenberg work was the Klavierstück Opus 11, No. 1.

There is no evidence of a discussion about any of the composers on the list. One
may only guess at Cage and Hiller’s motivations here. According to Cage, the selection
process sounds arbitrary: “We divided history from Mozart to the present time—that is,
to Hiller’s work and my own work—into roughly 25 year periods, making an historical
shift from the Dice Game through Beethoven” and the other composers. Cage referred
to these two parts as “going through history,” first with right and left hands together in
Solo V, and then with the hands separate in Solo VI. Cage wrote to Vischer in 1968
concerning the assignment of parts, that “a young musician here, Roger Shields, is
expecting to do the version going through history hands separately. I think we should let

19 Caras and Gagne, Soundpieces: Interviews with American Composers, 236.
20 E-mail to author July 22, 2008.
21 Cage to Hinrichsen, 3 March 1963, John Cage Collection, Music Library,
Northwestern University Library, Northwestern University, Evanston, Illinois.
22 Hamm, Putting Popular Music in Its Place, 92.
him do that. It is fiendishly difficult, involving superimpo[s]itions in translated tempi.”

The history of *HPSCHD* is a story of increasing complexity. Cage may have started with the idea to do “something with Mozart,” but the result was far more complex and difficult. While Cage struggled with copyists, time constraints, and computer issues, the difficulty of securing permission to use some of the source materials was a major obstacle.

## 2. COPYRIGHT ISSUES

Correspondence from the summer of 1968 mentioned that the “replacements” would be as listed above. But Cage was soon facing problems with copyrights, although he was confident the problems could be solved. Clearly frustrated by the delay, Cage carefully drafted a letter to the Theodore Presser Company making sure to emphasize how little of the *Three-Page Sonata* was actually used in the work. Cage wrote:

> This is a request that you grant permission. I am writing to request permission to make a special use of certain notes, intervals and chords to be found in C. E. Ives *Three Page Sonata* Copyright 1949 by you. [Description of the solos and list of borrowed sources follows.]

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24 Shields is mentioned in the Cage’s 1968 correspondence regarding the performers, but is not included as one of the performers for the 1969 event. Cage to Vischer, 3 June 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.

[…] In each case, the notation has been translated into that of the M. dicegame (dotted half = 64). Thus none of the pieces as used in our work looks as it does in its original form, and of course, appears only momentarily; it appears fragmented and preceded & followed by music of the other composers mentioned.

Hiller and I took a section of the Three Page Sonata towards including the end, = 1 minute, divided it into 64 parts and let these fall by chance [/] computer programming including chance into the collage.26

Cage went so far as to make an exact chart of where in Solo VI the Ives materials appear and exactly how many note, intervals, or chords were used in each measure.

It must have been very disappointing for Cage when Ives’s publisher set terms for the use of the Three-Page Sonata that were too expensive. Ives did not copyright any of his compositions as he wished them to be in the public domain and this situation would have been abhorrent to Ives.27 Vivian Perlis said that she was in touch with Cage in 1968 and talked to him about the Ives copyright issue. He knew that she was working on Ives at the time and she spoke with him about the fact that Ives would not have wanted his music under copyright.28 On October 15, Cage wrote that Theodore Presser Company

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27 In regard to the New Music publication of the Fourth Symphony, Ives is reported to have said: “EVERYBODY who wants a copy is to have one! If anyone wants to copy or reprint these pieces, that’s FINE! This music is not to make money but to be known and heard. Why should I interfere with its life by hanging on to some sort of personal legal right in it?” Henry Cowell, Charles Ives and His Music (London: Oxford University Press, 1955), 121.
Music Publishers, “will make some kind of deal re the Ives. I don’t know what yet.”

Cage received a letter from Presser dated November 11 which read,

Dear Mr. Cage:

Once again, we have discussed your permission request for the use of excerpts from the Ives’ Three-Page Sonata, in the piece composed by yourself and Lejaren Hiller. We feel that the terms that we requested for this use were not out of line and we must stand firm on these terms.

This entire problem could have been eliminated if this permission request had been cleared before you used these excerpts. Let me say, that our terms at that time would have been the same as we are requesting now. We would like you to be able to use the excerpts of Ives’ composition and we can not see why your publisher objects to the terms that we quoted. If Mr. Hinrichsen wishes to contact us we will gladly discuss this permission with him. We do not wish you to have to re-write your composition.

The terms that Presser quoted to Hinrichsen are not included in the correspondence to Cage. This specific correspondence took place between the two publishers and is not included in Cage’s correspondence housed at the Northwestern University archives.

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29 Cage to Richard Herbert Howe, 15 October 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
30 Nicholas Elsier, Jr. to John Cage, 11 November 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
Cage wrote to a HPSCHD copyist on October 12, 1968, “Also have heard from Presser that they will make some kind of deal re the Ives. I don’t know what yet.”\footnote{Cage wrote to Richard Herbert Howe, 15 October 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.}

By late November the issue was still not resolved. On November 24, Cage wrote, “I’m involved in 700 pages of ms., legal (copyright) problems, etc. in relation to a computer project that has already taken 16 months and shows no sign of concluding!”\footnote{Cage wrote to Mildred Baker, 24 November 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.}

Two days later it seems that the issue had been resolved unsuccessfully. Cage wrote the following to computer programmer Laetitia Snow: “there are copyright problems, and I have to remove all the measures using Ives and substitute God knows what. So I’m in tunnel and don’t see light.”\footnote{Cage wrote the following to Laetitia Snow, 26 November 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois. This seems to have been a problem for Cage at this time. He had made a two-piano arrangement of the second and third movements of Satie’s Socrate for Cunningham’s choreography in 1969 and Eschig refused permission. Cage said, “I’ve never known the details of why they refused, because they didn’t even wish to see the music, and it’s a faithful, if I do say so, and serious piece of work.” Richard Kostelanetz, Conversing With Cage, (New York: Limelight Editions, 1988), 79.}

Unable to use Ives as source material Cage and Hiller settled on the following works as the final source material: the spurious Mozart Dice Game; Beethoven’s Appassionata Sonata, first movement; Chopin’s Prelude in D Minor, opus 28; Schumann’s “Reconnaissance” from Carnaval; Gottschalk’s The Banjo; Busoni’s Sonatina no. 2, first movement; Schoenberg’s Sonata Op. 11 No. 1, first movement; Cage’s Winter Music; and Hiller’s Sonata no. 5.\footnote{Husarik lists neither the Mozart “Dice Game” nor the Schoenberg as source materials. The Mozart may have been omitted because Cage does not list it as source materials for these parts in his correspondence.}
3. CONSTRUCTION OF THE DICE GAME SOLOS

The harpsichord parts are indeed fascinating in their complexity and their scope. Certain decisions about the construction of the parts were made early on and informed by the fact that there was to be a recording of the piece. According to Rivest, during the autumn of 1967 Kenneth Gaburo, UIUC composer and faculty member, had invited representatives from Nonesuch to visit the campus. They chose Ben Johnston’s microtonal *String Quartet No. 2* and the work-in-progress *HPSCHD*.\(^{35}\) Cage received a letter from Teresa Sterne, coordinator at Nonesuch records on January 3, 1968 indicating a “positive interest in issuing a recording of your new microtonal/computer work.”\(^{36}\) Each tape and harpsichord part was designed to be 20 minutes long in order to fit on one side of an LP record.

According to Rivest, Solos II and VI were composed first. Solo II is made up of 20 different versions or “passes” of the dice game. The dice game Cage and Hiller used was published by B. Schott’s Söhne, Mainz, and is labeled “Notentafel.”\(^{37}\) The table consists of 176 numbered measures of music, equally divided into an “A” and a “B” section. The instructions for the dice game are to create a binary form with eight measures in each part. In order to “arrange” the dice game to align with the *I Ching* number 64, Cage and Hiller constructed the solos in the following form: AABBAABB, or eight sections of

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\(^{35}\) The recording featured Vischer, Tudor, and Neely Bruce as harpsichordists. They were recorded separately on different instruments (Vischer recorded in Switzerland before the debut performance). Johanne Rivest, “In Advance of the Avant Garde.”

\(^{36}\) Teresa Sterne to John Cage, 3 January 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.

\(^{37}\) A copy of the edition Cage and Hiller used can be found in the John Cage Collection, New York Public Library, New York, New York.
eight measures.

With Solos III to VI, the first “pass” through the form (eight times eight measures) was done using only the dice game. In each successive pass, a new piece was added to the range of possible source material; these parts eventually “erasing” the dice game. Cage explained:

solos [III and IV] start with the Dice Game but then substitute other pieces of Mozart, which are in other tempi but which have been translated into the notation of the dotted-half equals 64 mm. But in one of those, a second pass of sixty-four measures, still using the Dice Game, you move instead to another piece of Mozart still according to chance operations and on to a third, fourth, fifth, sixth, seventh, and eighth. In each pass I think twenty measures of new material comes in. It gets more and more complex, naturally, departs farther from the original Dice Game.38

In Solo III, the right and left hands played parts that were linked in the original source material, but in Solo IV the parts for the right and left hands were independent. In the same fashion, Cage and Hiller organized the source materials within Solos V and VI so that they begin with the earliest sources (the spurious Mozart and Beethoven) and end with the latest source materials (Busoni, Schoenberg, Cage and Hiller). Again, Solo V has the right and left hands linked, and Solo VI has the hands independent. The DICEGAME computer program, according to Rivest,

was programmed to select which of the 64 measures for each pass would be replaced. For Solos IV and VI, where hands are treated separately, the sub-routine was run twice to list two sets of numbers. The replacements were numbered from 2 to 8, number 1 corresponding to the Dicegame measures. The program would also select which excerpt had to serve as a replacement.\(^{39}\)

What is fascinating is that the replacements (pieces 2-8) do not randomly appear throughout the parts. Cage and Hiller constructed the parts so that they represent a “going through of history” and this decision is based on a great deal of “choice.” Chance operations were applied to the source materials, but the decisions about the source materials themselves, and the order in which they were to be presented within the parts were made with intention.

All of the source materials were transposed into \(\frac{3}{4}\) time with a tempo marking of dotted half note = 64. (See illustration 2.2) This allowed for each pass to equal one minute. Cage carefully worked out the math and made a chart containing the translation key for each part. (See table 2.1.) This did indeed create difficulties, not only for the performers, but also for the copyists.

There is quite a bit of correspondence between copyist Cage and Richard Herbert Howe. Howe suggested to Cage in a letter from October 8, 1968, that the parts should be constructed by simply cutting and pasting copies of the temporally-transposed source materials.\(^{39}\)

\(^{39}\) Rivest, “In Advance of the Avant Garde.”
selections onto the page. The beauty of this scheme, according to Howe, would be that the parts would be virtually mistake free. Howe was incredibly frustrated by the nature of the copying work, the rate of pay, and the attention to detail that Cage required. Howe wrote: “If I said something to Ben [Johnston] about thinking your demands re piece were unreasonable bear in mind that I think I’ve felt all possible emotions about the piece during the course of the work and that that would be just one of them.”

Cage had had trouble with earlier copyists’ poor work that had to be closely proof read and often re-written. On October 12, Cage replied to Howe that cutting and pasting was unacceptable because glued parts didn’t age well in his experience. Cage had used adhesive tape on his Music of Changes manuscript, and said that after the score had sat at Universal for several years he found it to be “a solid object, and it was [a] very painstaking job to separate and salvage the pages.”

As late as December 21, 1968, Cage was still experiencing problems with the copy work, some of which was too pale to print, and the pressure was evident in the following letter, again to Howe:

“This is not intended to be a cross letter, though I am nearly at my wits ends with this work. The 51 tapes will go together on the 22nd of Jan. in Chicago. They’ve been proof-read too: filtered to remove hums, etc. The recording with Solos I, II and VI should be in the hands of Nonesuch by March! The first performance (full

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40 Howe to Cage, 8 October 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
41 Cage to Howe, 12 October 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
58 channels) will be in the Assembly Hall here the big deal round May 16th!\textsuperscript{42}

This letter seems to be the last word on copy and part problems, at least among the \textit{HPSCHD} correspondence housed at the Northwestern University Music Archives.

The use of canonic historic source materials and collage compositional techniques presented Cage with a number of legal and compositional difficulties. It also presented him with the dilemma of returning to more traditional compositional methods. Cage said, “You might think that this is a step backwards, from ‘making,’ back to ‘writing’; and there are other things in this piece which one might think are returns to more conventional ways of producing music.”\textsuperscript{43} Certainly, working with notation and source materials was a step back to “writing” for Cage, and as students of this kind of composition, we must take a look at the philosophical implications of collage techniques, musical borrowings, and the canon.

\textbf{4. CAGE AND THE MUSICAL CANON}

In his article “Techniques of Appropriation in Music of John Cage” David W. Bernstein wrote, “It is not surprising that Cage would welcome ‘borrowings’ from the past, since for most of his career he had urged composers to make use of the ‘entire field

\textsuperscript{42} Cage to Howe, 21 December 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.

\textsuperscript{43} Austin, “An Interview with John Cage and Lejaren Hiller,” 18.
of sound." Bernstein bolsters this argument by quoting a 1965 interview in which Cage said,

> Our situation as artists is that we have all this work that was done before we came along. We have the opportunity to do work now. I would not present things from the past, but I would approach them as materials available to something else which we were going to do now. They could enter, in terms of collage, into any play. One extremely interesting theatrical thing that hasn’t been done is a collage made from various plays.\(^4^5\)

One must keep in mind, however, that Cage was specifically discussing theater practices in this interview, and elsewhere he seems to side with FLUXUS artists in that everything was appropriate subject matter except for “art.” In the foreword to *A Year From Monday* published in 1969 Cage wrote,

> The reason I am less and less interested in music is not only that I find environmental sounds and noises more useful aesthetically than the sounds produced by the world’s musical cultures, but that, when you get right down to it, a composer is simply someone who tells other people what to do. I find this an unattractive way of getting things done.\(^4^6\)

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Cage’s rejection of “music” is motivated not only by aesthetic considerations, but also by social and political ideologies.

It was indeed an odd decision for Cage to quote historic compositions when, in fact, Cage tended to outwardly reject the concept of the classical composer. Most notably, Cage included Beethoven in *HPSCHD*, a composer Cage was known to refer to as the prime example of what was wrong with music. In his famous 1948 Black Mountain College lecture, “In Defense of Satie,” Cage wrote about the organization of music in terms of units of time rather than harmony, and asked his listener whether Beethoven was correct in his use of harmony, or were Satie and Webern correct in their employment of time as an organizational structure. Cage concluded, “immediately and unequivocally,” that “Beethoven was in error, and his influence, which has been as extensive as it is lamentable, has been deadening to the art of music.” His denouncement of Beethoven went even further:

> Beethoven represents the most intense lurching of the boat away from its natural even keel. The derivation of musical thought from his procedures has served not only to put us at the mercy of the waves, but to practically shipwreck the art on an island of decadence.47

For Cage, Beethoven represented determinism, structuralism, egoism, and singularity. According to Alastair Williams, “This antipathy stems from Beethoven’s central position

in the culture of the masterpiece that served to provide models for what music should be.”\(^{48}\) Or as Peter Yates put it, “For Cage, as for Stravinsky, the name ‘Beethoven’ symbolizes all that is lumped together in misuse of the word \textit{genius}.\(^{49}\)

The exciting thing about using a broad spectrum of non-musical sounds for Cage was that these sounds were fresh and already freed from learned associations. It was difficult, frankly, to free borrowed historical source materials from a specific context, to “listen without thinking.” In “Composition as Process” (1958) Cage wrote,

Several other kinds of sound [in addition to radio] have been distasteful to me: the works of Beethoven, Italian \textit{bel canto}, jazz, and the vibraphone. I used Beethoven in the \textit{Williams Mix}, jazz in the \textit{Imaginary Landscape Number V}, \textit{bel canto} in the recent part for voice in the \textit{Concert for Piano and Orchestra}… Beethoven now is a surprise, as acceptable to the ear as a cowbell.\(^{50}\)

There is something different about these uses of source material, however, which still makes the wholesale use of historic source materials for \textit{HPSCHD} surprising. Cage had also suggested the use of a “classical recording” (Dvorak, Beethoven, Sibelius, or Shostakovich) in \textit{Credo in US} (1942). The use of the recording here is pointed, perhaps even sarcastic. The recording is meant to clash stylistically with the rest of the texture of the piece. In \textit{Williams Mix} and \textit{Imaginary Landscape Number V} the recorded source materials are buried in a dense cacophony. The thick superimpositions of unrelated sounds…

\(^{48}\) Williams, “Cage and Postmodernism,” 237.
\(^{50}\) Cage, “Composition as Process,” 30-31.
sound sources obscured the identity of these canonical source materials. Similarly, the source materials are equally obscured in the *Solo for Voice* if it is performed in the context of the *Concert for Piano and Orchestra*. The source materials are equally obscured in *HPSCHD*.

Although we don’t have direct evidence of this, one might be tempted to conclude that Cage chose the nineteenth century source material for these two parts for the same reason he chose to work with radios in other compositions—namely, as a way to get over his dislike of them. It may have worked. In a 1970 interview with Max Nyffeler, Cage admitted, “even though I have been opposed for a long time to Beethoven, every now and then when I hear something by him I discover that he is actually a very interesting composer.”

It is surprising that Cage turns to historical source materials not only as the content of the harpsichord parts, but also as the structural device for *HPSCHD* because up to that point he had been devoted to “more new sounds,” not existing sounds. However, Cage realized that in order to fully embrace the Zen Buddhist philosophy of acceptance, he had to find a way to make historical materials acceptable. Cage discussed this philosophical attitude explicitly in conversation with Kostelanetz in the late 1960s, around the same time that he was writing that he was “less and less interested in music”: “We must get ourselves into a situation where we can use our experience no matter what it is. We must take intentional material, like Beethoven, and turn it to non-intention.”

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51 Cage and Nyffeler, *You Must Take a Global Point of View: John Cage About Revolution, Welfare and Cultural Changes.*

52 The exact date of the conversation is difficult to ascertain as Kostelanetz often edited several interviews into a single document. This source uses excerpts from conversations
intentional material into non-intentional material required a kind of deconstruction of the sources. William Brooks argued that Cage could not just accept historical musics as source material, but he had to “strip them of exclusionary values… Simply accepting received material is insufficient; it must first be freed from learned associations.” In this context, it is instructive to study the connections between the canon and ideas of aesthetic and exclusionary value embedded in the canon.

5. THE CANON CONSTRUCT

Cage’s use of canonic historic source materials warrants a deeper analysis of the canon construct and how that construct informs our understanding of this piece. The idea that musical repertoires should have an extended longevity was reinforced in the nineteenth century, but what was it about the social context for music at the time that froze and extended repertoires into a concert canon? What was it about the “concert series and the virtuoso, the bourgeois as audience and amateur, the freelance composer and critic” that “exacted its ideology”? According to Joseph Kerman, the canon was a product of early Romanticism, was formed by critics who were in turn informed by literary models, and the canon was one of the “first precipitates of the post-Kantian revolution in music criticism and aesthetics.” Kerman claims that the canon was formed by critics like E.T.A. Hoffmann who claimed that Beethoven, Mozart, and Haydn are the “three great Romantic composers—though Beethoven was clearly primus inter pares.” Hoffman’s

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claim was “an idea that caught so much of the resonance of contemporary aesthetics itself resonated hugely into the future.” Richard Taruskin also ties the idea of the transcendent autonomous artwork to Kant and his definition of the brand-new concept of the aesthetic as “purposeless purposefulness” (Zweckmässigkeit ohne Zweck). In other words, the Kantian definition of the aesthetic was based on a quality of beauty wholly transcending utility. In the nineteenth century,

Musical works that were too closely allied with egotistical performance values, or that too grossly represented the personality of the composer, were regarded as sullied because they had a Zweck, a purpose that compromised their autonomy. The only truly artistic purpose was that of transcending purpose.

Musical compositions from the past by the “great masters” named by Hoffmann were easily considered as transcending purpose—despite the fact that these pieces were certainly associated with egotistical performance values, the personality of the composer, or were meant to please a specific audience. This concept of the transcendent, autonomous “classical” composition was reinforced, as Carl Dahlhaus pointed out, by the birth of German musicology as hermeneutics, not as a contextual, historical study.

55 Ibid., 181-2.
In his work on canon construction, William Weber makes a distinction between an intellectual canon, a pedagogical canon, and a performed canon.\(^5^8\) It seems that most of the works used in *HPSCHD* were drawn from a performed canon due to the nature of the published sources Cage and Hiller used as source material. As Ted Solís pointed out, “Canons, sometimes in a procrustean way, also fit paradigms we have constructed, often connected to some sort of charismatic hegemony, and are… often leavened with a measure of arbitrary happenstance.”\(^5^9\) The ideological quality, and the “constructedness” of the canon requires a study of “repertories, institutions, tastes, ideas, and political structures.”\(^6^0\) Since these works are part of a performing and pedagogical canon, it is necessary to consider for a moment the intellectual implications of “the canon.” Cage and Hiller’s selection of the eighteenth and nineteenth century pieces fit a specific, intellectual, canonic performance paradigm and the specific pieces chosen seem to have been selected due to their general availability. This seems to be particularly true with the selections by Mozart, Beethoven, Schumann and Chopin.

In a sense, Cage and Hiller opened up the proverbial piano bench and rifled through the scores they found there. The Mozart selections (Sonatas K. 281, K. 283, K. 284, K. 330, and Fantasy K. 475) were published together by Kalmus (1945) in an “Urtext” edition and were widely available.\(^6^1\) The Beethoven “Appassionata” Sonata No. 23 is one of Beethoven’s best known and widely performed sonatas, and the Chopin


\(^5^9\) Theodore Solís, “‘Wow’! Iconic Recordings Shape Our Careers,” in *Symposium, Canons in Musical Scholarship and Performance* (Urbana, IL: 2008), 1.


Preludes are standard fare for the average pianist. The Schumann *Carnaval* pieces are also part of the repertoire and all three composers are icons of pianistic Romanticism. One may be tempted to conclude that the source material selections were made due to economic considerations; i.e. use of these works would be free as they are all part of the public domain. However, since Cage discovered the copyright issues with the Ives piece so late in the compositional process, I do not think that the public domain concern was part of the decision making process. While the selection process was likely precipitated by happenstance, the intellectual implications of the music are significant.

Since these works are firmly a part of a privileged canon, embedded in this privilege is a sense that the music is ahistorical, and the essentially disinterested, qualities of the music are preferred over the music’s more temporal function and contingent qualities. Ideologically, in the nineteenth century a repertoire that was originally designed for a specific, temporal function was abstracted to “confirm the social position of a dominant group in society.” During the last few decades, the canon has been, as Jim Samson noted, “viewed increasingly as an instrument of exclusion, one which legitimates and reinforces the identities and values of those who exercise cultural power.”

Tom Turino wrote,

> The components included within a canon are meant to define the standard in a given field and perhaps the nature and very scope of the field itself; they are the works or styles one has to know to be deemed educated or competent in that field, and will include the first works or styles usually thought of or mentioned in relation

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to the field due to the dialectics of greater value and diffusion.\textsuperscript{63}

While the eighteenth and nineteenth century examples chosen for \textit{HPSCHD} clearly fit the definition above, it is helpful to remember that the idea of a performed canon is relatively new. For most of our western, musical history musicians thought it “absurd to only offer the music of our fathers, grandfathers, and great-grandfathers… music that had been stored away, like clothing that had gone out of fashion.”\textsuperscript{64} According to J. Peter Burkholder, the overwhelming popularity of virtuosic show-pieces in the mid nineteenth century which were, as Burkholder put it, “long on style and polish but short on brains”\textsuperscript{65} caused musical connoisseurs to turn back to Mozart, Beethoven and Haydn, and to, in a sense, deify them. In fact, Burkholder’s statement still reflects the bias constructed by German musicologists in the late nineteenth and early twentieth centuries as well as the exclusionary quality of the classical canon. In “Mass Culture and the Reshaping of European Musical Taste, 1770-1870” Weber described the establishment of a performance canon and the concept of the “old master” as a product of mass marketing, rising consumerism in the nineteenth century, and a product of mass culture in European


musical life. This shift also caused the polarization between “high art” and “popular art.” The publishing industry had a dramatic effect on canonization, and as Solís noted, the establishment of a performance canon may have happened out of convenience, perhaps even somewhat by accident. Certain pieces were published, were close at hand, easily disseminated, regularly performed, and this pattern repeated itself until the works were widely known and easily available.

This process of repeatedly grouping works, as happened in the nineteenth century with the performance canon, is described by Turino in semiotic terms as “indexical clustering.” According to Turino, “Indexical clusters involve the redundant grouping of preexisting signs such that they come to be indexically associated with each other through repeated co-occurrence in a person’s experience.” In the case of this specific performance canon, this association could be extended beyond an individual’s experience to a kind of “institutional memory.” Evidence of this kind of indexical clustering is present in concert programs, reviews, and specifically in this account from a Viennese reporter remarking on the backlash against virtuosity in 1866: “individual concert-givers now scarcely dare any longer present themselves to the public without Beethoven, Chopin, or Schumann.”

The compelling nature of the indexical cluster is that “indexical clusters come to be felt as true and do not tend to elicit the analytical assessment inspired by symbolic propositions and arguments.” Turino suggested that as scholars we consider the “force of

indexical clusters and the reality function of indexical signs as key points of departure for explaining the ‘naturalness’ of the fit among a canon’s components.”

Mozart, Beethoven, Schumann and Chopin are not only the first composers who come to mind when one thinks of keyboard literature, but there seems to be no argument about their position in the canon. Indeed, there was not any question about the inclusion of their compositions in *HPSCHD.*

These “classics” play a significant role in the construction of authority that stands outside of time, above interpretation, beyond fad and fashion, or any other relative considerations. In *The Classic: Literary Images of Permanence and Change,* Frank Kermode called the domain of the classics an empire in its own sense, “a perpetuity, a transcendent entity, however remote its provinces, however extraordinary its temporal vicissitudes.” While great artists may “interpret” the classics, as a listener one does not; they stand above the listener, aloof, unchanging. According to Kermode, “Canons... negate the distinction between knowledge and opinion... are instruments of survival built to be time-proof, not reason proof.” This “truth factor” functions prominently in *HPSCHD,* and Cage and Hiller seem to be exploiting the intellectual authority of these works while turning on its ear the musical function of these works and the social expectations these pieces engender. These works seem to be regarded as “transcendent entities.”

More important, perhaps, these “old masters” are sacred cows; that is why it

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seemed so radical in 1968-69 to “cut up” the works of the masters. In the 1965 interview with Kirby about new theater practices, Cage addressed this canonic attitude toward art:

Let me explain to you why I think of past literature as material rather than art. There are oodles of people who are going to think of the past as a museum and be faithful to it, but that’s not my attitude. Now as material it can be put together with other things. They could be things that don’t connect with art as we conventionally understand it. Ordinary occurrences in a city, or ordinary occurrences in the country, or technological occurrences—things that are now practical simply because techniques have changed. This is altering the nature of music and I’m sure it’s altering your theatre.72

Gottschalk’s “The Banjo” (1855) had earned a peripheral place in the piano repertoire due to the efforts of John Kirkpatrick and Jeanne Behrend73 who championed the work through the 1950s. “The Banjo” was recorded by Eugene List on Vanguard Records in 195774 and by the mid 1960s the piece represented what could be thought of as a rudimentary American keyboard canon. In the comprehensive Cambridge History of

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73 “Miss Behrend’s edition of Gottschalk’s piano music is scheduled for imminent publication, and her recording of selections from the Gottschalk oeuvre will follow on its heels.” Irving Lowens, “Gottschalk: The Banjo (Fantaisie Grotesque), Op. 15; the Dying Poet (a Meditation); Souvenir De Porto Rico (Marche Des Gibaros); Le Bananier (Chanson Nègre), Op. 5; Ojos Criollos (Danse Cubaine), Op. 37; La Bamboula (Danse Des Nègres), Op. 2; the Maiden’s Blush (Grand Valse De Concert); the Last Hope (Méditation Rélégieuse), Op. 16; Suis-Moi! (Caprice); Pasquinade (Caprice), Op. 59; La Savane (Ballade Créole), Op. 3; Tournament Galop by Eugene List; Louis Moreau Gottschalk,” Musical Quarterly 43, no. 2 (1957): 271.
74 Vanguard VRS-485
Nineteenth-Century Music, edited by Jim Samson (2002), Gottschalk is mentioned as a footnote in the history of romantic piano literature, listed among the virtuosic descendents of Sigismund Thalberg. However, Alfred Einstein’s 1947 Music in the Romantic Era includes an excellent biography of Gottschalk. In 1957, Musical Quarterly printed a review of the List recording, specifically noting that “[a] rebirth of interest in the work of this petit maître is now evidently upon us.” In 2009, Burkholder described Gottschalk as “the first American composer with an international reputation” and claimed that “his combination of virtuoso pianism with New World sounds and rhythms parallels Chopin’s Polish-style mazurkas or Liszt’s Hungarian rhapsodies.”

“The Banjo” is one of Gottschalk’s best-known works, yet it is still somewhat of an odd choice for this composition precisely because of the American content of the work. “The Banjo” quotes Stephen Foster’s “Camptown Races” and the negro spiritual “Roll, Jordan, Roll.” In an interview with the author, Brooks said that the choice of Gottschalk’s “The Banjo” was likely influenced by the fact that Cage was playing poker with Charles Hamm whose research interests included Gottschalk’s music. However,

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77 Lowens, “Gottschalk: The Banjo (Fantaisie Grotesque), Op. 15; the Dying Poet (a Meditation); Souvenir De Porto Rico (Marche Des Gibaros); Le Bananier (Chanson Nègre), Op. 5; Ojos Criollos (Danse Cubaine), Op. 37; La Bamboula (Danse Des Nègres), Op. 2; the Maiden’s Blush (Grand Valse De Concert); the Last Hope (Méditation Religieuse), Op. 16; Suis-Moi! (Caprice); Pasquinade (Caprice), Op. 59; La Savane (Ballade Créole), Op. 3; Tournament Galop by Eugene List; Louis Moreau Gottschalk,” 271.
pianist Stephen Drury insists that the suggestion must have come from David Tudor who had been playing Gottschalk compositions for some time.\(^{80}\)

One more thing that must be mentioned in connection to these existing musical sources is the fact that all of these pieces—from Mozart to Cage—were used as source material for *harpsichord* parts. Cage and Hiller were working during the advent of the “authentic performance practice” movement that gained strength and recognition in the 1970s.\(^{81}\) Despite the fact that most of the musical source material came from Mozart, it is nearly anachronistic to perform even the Mozart works on harpsichord. It was during Mozart’s lifetime that the harpsichord faded from use and the piano rose to prominence. Some time was spent rewriting sections of the harpsichord parts that exceeded the range of the instrument.\(^{82}\) (See illustration 2.3) In an interview, Cage told Larry Austin,

> In all of this movement through history, we’ve had, in some cases, to slightly change the music to fit into the five octave gamut which we limit ourselves to, so that the Chopin runs start up, but as they reach the limit of the gamut, we have them running back down the same way.\(^ {83}\)

Of course, part of the necessity to use harpsichord was due to the fact that the work was commissioned by Vischer who was a champion of new music for the instrument. We cannot explain away, however, the significance or function of the

\(^{80}\) Stephen Drury, interview with the author, April 10, 2009, Greeley, Colorado.
\(^{81}\) For example, David Munrow and Christopher Hogwood’s Early Music Consort was founded in 1967, and Hogwood’s Academy of Ancient Music was founded in 1973.
\(^{83}\) Austin, “An Interview with John Cage and Lejaren Hiller,” 12.
instrument within the work by simply tying it to the commission. In all of Cage’s
descriptions of the work he mentions the harpsichord parts V and VI as “going through
history.” Perhaps the harpsichord, in juxtaposition to the computer-generated tape
parts, simply reinforced the contrast between the past and the future. In his Diary, 1967
Cage wrote, “In music it was hopeless to think in terms of the old structure (tonality), to
do things following old methods (counterpoint, harmony), to use the old materials
(orchestral instruments). We started from scratch: sound, silence, time, activity.”
Perhaps the use of the harpsichord in specifically this kind of theatrical work was an
embodiment of Antonin Artaud’s theater theory that called for ancient instruments to be
returned to the stage. Or perhaps the harpsichord was one more representation of “the
canon”—a visual as well as aural representation presented as part the mis-en-scene.

It seems that consciously or unconsciously Cage and Hiller used the existing
keyboard canon and the harpsichord to lend legitimacy to the piece, and by extension to
themselves as composers. Given that indexically clustered signs function as true it is
interesting to note that no one questioned the works included in the piece, beyond the
publisher who held the copyright to Ives’s work. In every interview and in each
subsequent analysis of the work, no one has asked why Hiller and Cage chose the works
included in HPSCHD. It seemed a natural grouping, and a “given” that these works
represented the historical keyboard canon. This collection of composers seemed natural

84 John Cage to Antoinette Visher, June 3, 1968, John Cage Collection, Music Library,
Northwestern University Library, Northwestern University, Evanston, Illinois.
85 John Cage, Diary: How to Improve the World (You Will Only Make Matters Worse), A
86 Antonin Artaud, The Theater and Its Double, trans. Mary Caroline Richards (New
York: Grove Press Inc., 1958), 95. Cage’s reading of Artaud is discussed in chapter three
in a closer examination of HPSCHD, theater theory and the role of the harpsichord as part
of the mis-en-scene.
and obvious to the Viennese music critic in 1866, and was equally comfortable a century later in the United States.

6. A TWENTIETH CENTURY CANON?

As arbitrarily as Cage seems to represent the source selections—as a simple tour through keyboard history—the process seems to reflect careful attention and a great deal of personal preference. Unlike the eighteenth and nineteenth century European works included in *HPSCHD*, which are clearly part of an accepted performance canon, Cage’s American and/or twentieth century selections do not seem to fit a neat, intellectual, hegemonic paradigm. In the case of the twentieth century selections, each requires individual attention.

While some of the inclusions, such as the Beethoven Sonata, may have been selected based on a *dislike* of the materials, Cage also included two composers whose legacy was especially important to him as a composer—namely, Schoenberg and Ives. In order to include both Schoenberg and Ives, Cage had to be very lenient with the “25 year period” rule. Both composers were born in 1874 and both died in the early 1950s. The 1960 Kirkpatrick catalog of Ives’s compositions dated the *Three-Page Sonata* from 1905\(^87\), and Schoenberg’s Op. 11 is dated only four years later. The attribute that may have recommended the *Three-Page Sonata* over other more notable Ives piano works, like the *Concord Sonata*, may have been its brevity. Cage may have been familiar with

the *Three-Page Sonata* simply because the 1949 Mercury Music Corporation publication was edited by Henry Cowell, Cage’s former teacher and mentor. The premiere recording was made in 1962 and released in 1963 on Cambridge Records with Luise Vosgerchain, and Alan Mandel recorded the work in 1967 and it was released in 1968 on Desto records. The *Three-Page Sonata* remains one of Ives’s least known works and is not part of a performance canon.

The Schoenberg Op. 11, on the other hand, is widely assumed to be the “first atonal masterpiece” and if it is not the first completely atonal work that Schoenberg wrote, it is among the very first published. The Op. 11 pieces, among other atonal works, are the subject of Philip Friedheim’s study in a 1966 issue of the *Journal of the American Musicological Society*. A quick survey of textbooks on twentieth century music published in the 1960s confirms that the Op. 11 pieces were part of a pedagogical canon—if not a performance canon. The Op. 11 No. 1 is used to demonstrate contrapuntal devices in Welton Marquis’s *Twentieth Century Music Idioms* (1964), nontonal motivic chromaticism in Eric Salzman’s *Twentieth-Century Music: An Introduction*

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(1967)\(^92\), and octave displacement and quartal harmonies in Leon Dallin’s *Techniques of Twentieth Century Composition* (1957, 1964)\(^93\).

The inclusion of both composers in *HPSCHD* would have been very important to Cage, whom Kyle Gann describes as “one of the great name-droppers in twentieth-century music.”\(^94\) To even the minimally informed Cage enthusiast, Schoenberg is a reminder of Cage’s pedagogical lineage, as well as a reminder of Cage’s connection to high modernism and, therefore, to legitimacy. In an interview with William Duckworth Cage famously said, “I didn’t study music with just anybody; I studied with Schoenberg. I didn’t study Zen with just anybody; I studied with Suzuki. I’ve always gone, insofar as I could, to the president of the company.”\(^95\) There is also something very important about Cage’s repeated insistence that he is connected to historically important composers such as Satie, Ives, and Schoenberg—however real or imaginary the connection may be. In his article “Cage and America” David Nicholls wrote,

> In later years Cage strongly emphasized the importance of his Schoenbergian tutelage... and often related stories emanating from his lessons with him. For instance, five of the anecdotes in “Indeterminacy” are concerned with Schoenberg, most famously that in which Cage determines to devote his life to beating his head against the “wall” of harmonic incomprehension. On other occasions, Cage

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\(^94\) Gann, *No Such Thing as Silence: John Cage’s 4’33”*, 72.  
proudly repeated Schoenberg’s supposed opinion that he was “Not a composer, but an inventor of genius.” Yet in reality, Cage’s aesthetic locus was probably influenced to a far greater extent by Cowell than by Schoenberg.\(^\text{96}\)

Jann Pasler in “Inventing a Tradition” points up the purpose of Cage’s overemphasis of some sources, ideas, and forerunners: “Cage is seeking not the assertion of power, but... a ‘suitable past’ from which to invent a tradition of which he was the next logical heir, the next voice.”\(^\text{97}\) These connections to the past, and the repeated “name dropping” of not only Schoenberg and Satie, but also Duchamp, Thoreau, Meister Eckhart and others insinuates a presence of the past in Cage’s present.

Cage’s connection to Schoenberg is perhaps the most interesting in this context. Despite the fact that Schoenberg’s serial compositional technique had very little influence on Cage’s mature music, Cage rarely lost an opportunity to mention that he studied with Schoenberg. It seems initially contradictory that Cage, as a proto-postmodernist, would be so closely associated to the father of academic high modernism. This is once again strong evidence that the postmodern is not necessarily a break with the modern, but rather metamodern—a continuation of certain modernist tendencies.

In the same Duckworth interview in which Cage compared studying with Schoenberg as going to the president of the company, Cage spoke of his connection to Ives. For Cage, Ives represented a different side of his inherited tradition; namely, the


very American attribute of invention, self-reliance, and what Cage considered as a
collection to Thoreau and Transcendentalism.\textsuperscript{98} Cage said that Tudor did not play Ives
because it was “too difficult.” The difficulty, Cage explained, wasn’t a technical issue,
but rather a philosophical one: “he would have had to change his mind over into that of a
Transcendentalist, which he didn’t wish to do.”\textsuperscript{99} With this statement Cage made the
classic error of portraying all of Ives’s works as Transcendentalist, which they are not.\textsuperscript{100}
Nevertheless, Cage regarded Ives as a seminal figure in American musical history. In the
“Two Statements on Ives” Cage wrote, “Now that we have a music that doesn’t depend
on European musical history, Ives seems like the beginning of it.”\textsuperscript{101} While this view of
Ives as the starting point of a uniquely American musical tradition has been substantially
revised in the past few decades, this was the dominate view in the late 1960s, and Cage
was intentionally linking himself to this tradition.

What Cage attempted to do with \textit{HPSCHD} is reminiscent of Ives’s mythological
“Universe Symphony.” According to Ives biographer Henry Cowell, this is the last large
piece that Ives worked on and it was intentionally left unfinished in 1951. Cowell
described it as “the culminating expression of Ives’s “music of the Idea”—so gigantic, so
inclusive and so exalted that he feels its complete realization is beyond any single

\textsuperscript{98} See Christopher Shultis, \textit{Silencing the Sounded Self: John Cage and the American
\textsuperscript{99} Duckworth, \textit{Talking Music: Conversations with John Cage, Philip Glass, Laurie
Anderson, and Five Generations of American Experimental Composers}, 20-21. See also
14-28.
\textsuperscript{100} See J. Peter Burkholder, \textit{Charles Ives: The Ideas Behind the Music} (New Haven, CT:
\textsuperscript{101} Cage, \textit{A Year from Monday}, 38.
Ives described the piece in cosmological terms as

A striving to present and to contemplate in tones rather than in music as such, that is—not exactly within the general term or meaning as it is understood—to paint the creation, the mysterious beginnings of all things, known through God to man, to trace with tonal imprints the vastness, the evolution of all life, in nature of humanity from the great roots of life to the spiritual eternities from the great inknown to the great unknown.\(^{103}\)

Like Cage, Ives was interested in temporal as well as spatial relationships. Not only did he want to cast the creation in its vastness, but also “to cast eternal history, the physical universe of all humanity past, present and future, physical and spiritual.”\(^{104}\) Philip Lambert connects Ives’s interest in the cosmological to a specifically American intellectual tradition including Emerson, Thoreau, and Whitman. These were authors who were consistently interested in “universal themes,” and whose writings can be considered “romantic gospels.” Emerson and Thoreau (like Ives and Cage) attempted through their individuality to “proclaim a new world.”\(^{105}\)

Taruskin affectionately labels Ives the “Great Anticipator” and claims that “Ives’s

\(^{102}\) Cowell, *Charles Ives and His Music*, 203. Austin and other dispute the claim that the work was intentionally left unfinished. See Zachary Lyman, “Completing Ives’s Universe Symphony: An Interview with Larry Austin,” *American Music* 26, no. 4 (2008): 443.

\(^{103}\) Manuscript f1843 in Ibid., 185.

\(^{104}\) Description of manuscript f1852 in Ibid., 186.

omnivorous ‘Universe,’... foreshadows today’s musical scene in all its polymorphous perversity, its rejection of stingy theorizing and its re-opening to universal possibility.”

Kostelanetz identified a specific link between the *Universe Symphony* and *HPSCHD*:

*HPSCHD* is a Universe Symphony in the distinctly American tradition dating back to Charles Ives, who spent the last forty years of his life on a similarly all-inclusive but unfinished work... However, thanks to technological progress, Cage and Hiller can use facilities Ives never had—tape recorders, amplifiers, motion-picture and slide projectors—to distribute their chaotic art all over an enormous space; and, in the increased quantity, was a particular kind of quality never before experienced in either art or life.  

Kostelanetz hoped that *HPSCHD* could “turn on even larger spaces, like Madison Square Garden, the Astrodome, or even the Buckminster Fuller dome that someday ought to be constructed over midtown Manhattan.” Perhaps this fascination with large spaces—Ives’s countryside hilltops and Cage’s UIUC Assembly Hall—is what makes these pieces truly American. It is important to remember, however, that Cage’s reference to Ives in *HPSCHD* pointed more toward an American compositional heritage that Cage wanted to highlight to his audience rather than a compositional or philosophical affinity to Ives. The same is true of Cage’s use of the *The Banjo*.

The decision to replace the Ives piece with Ferruccio Busoni (1866-1924) is

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106 Ibid.
108 Ibid.
interesting and noteworthy. Busoni is certainly not as well known as the other composers included in this piece—with the possible exception of Gottschalk—and the Sonatina No. 2 is by far the most obscure piece among these selections. Among Cage’s notes for *HPSCHD* in the New York Public Library archives is a handwritten sheet with a timeline from 1750 to 1970. This timeline was used to facilitate the decision making process after Cage learned that he must replace all of the Ives excerpts in the part. Cage indicated on this timeline Mozart, Beethoven, Chopin, Schumann, Gottschalk, Schoenberg, Hiller’s and his own approximate birth and, where applicable, death dates. Below the timeline is a list of composers, their birth and death dates, and evidence of deliberation as composers were either highlighted on the list with an “X” next to the name, or crossed off the list. Cage (and presumably Hiller) considered replacing the Ives *Three-Page Sonata* with works by Debussy, MacDowell, Fauré, Satie, Mussorsky, Rimsky-Korsakov, Massenet, Delius, Grechaninov, Grieg, Tchaikovsky, and Saint-Saens.

(See illustration 2.4.)

The obvious choice on the list seems to have been Satie who was born the same year as Busoni and died one year earlier. Cage had written to Vischer in 1968 that he hoped *HPSCHD* would have the same effect as Satie’s *Furniture Music*, and Satie was also an important touchstone within Cage’s mythology. Cage had arrived on the UIUC campus with a manuscript of Satie’s *Furniture Music*, and according to Cage:

> I came here bearing gifts to this university. I brought three pieces of Satie’s
> *Furniture Music*. That I had with difficulty found. And I went straight to John

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109 John Cage to Antoinette Vischer, 3 June 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
Garvey who has in general been interested in music. Chapters are written in any book on Satie about his Furniture Music. None of it is published and I had it right there. I gave it to him. It was of no interest to him. He returned it to me. There was no interest here.\textsuperscript{110}

Satie’s \textit{Socrate} was included in Cage’s \textit{Notations}, published in 1968, and Satie’s name is frequently found in the \textit{Diaries} from that time. It seems that a work like Satie’s neo-classical \textit{Sonatine bureaucratique} (1917) would have been perfect source material for \textit{HPSCHD}. The work is one of six “Progressive Pianoforte Sonatas” published by Stéphane Chapelier in 1917 and again in 1954 by Philippo.\textsuperscript{111} Cage had not yet had trouble obtaining rights to arrange the two piano version of \textit{Socrate} for a Cunningham performance. It was a year later, in December of 1969, that Satie’s publisher, Éditions Max Eschig, denied Cage permission to use \textit{Socrate}—Eschig did not even request to see the transcription.\textsuperscript{112} This second copyright issue inspired Cage to write \textit{Cheap Imitation}. Perhaps he was fearful of even attempting to negotiate publishing rights with European publishers under such critical time pressures. This could have been why Cage dismissed the possibility of using Debussy’s works as well. Debussy was likely \textit{too} canonical (resultingly, too closely guarded by French publishers) ironically, for inclusion in \textit{HPSCHD}.

\textsuperscript{110} John Cage, “Things to Do,” \textit{North American Review} 254, no. 4 (1969): 16. Cage was clearly hurt by the general disinterest he encountered at the University of Illinois in Satie and in new music in general. Elsewhere he complained about the complacency of the students and being snubbed by some members of the music faculty. See Cage, “Things to Do,” 14.


\textsuperscript{112} Kostelanetz, \textit{Conversing with Cage}, 83.
The Busoni *Sonatina No. 2* was written and published in 1912, which meant that it was without a doubt out of copyright at the time Cage and Hiller were choosing a replacement. The Ives *Three-Page Sonata*, on the other hand, was first published in 1949, which meant that the work was still under the original copyright rule (publication date plus 28 years). The Busoni composition would have gone out of copyright in 1940, and even if Breitkopf und Härtel renewed the copyright in 1940 (which was not likely during World War II) it would have been out of copyright permanently in 1968.

It is possible that Cage’s introduction to Busoni’s music may have come from Schoenberg. Drury suggested, however, that Busoni may have been suggested as a replacement for Ives by the collection of essays *Three Classics in the Aesthetic of Music: Monsieur Croche the Dilettante Hater, by Claude Debussy; Sketch of a New Esthetic of Music, by Ferruccio Busoni; Essays before a Sonata, by Charles E. Ives*. The popular edition was published by Dover in 1962. In any case, Busoni seems to be a kindred spirit to Cage. Busoni was champion of anything new in music, especially new instruments and tuning systems. He was a particular fan of the Telharmonium (also known as the “Dynamophone”), a primitive forerunner of the synthesizer, which was invented by Thaddeus Cahill in the 1890s. The possibility of machines that could make music was very exciting to Busoni who had become frustrated with existing instruments. Busoni was also interested in alternative scales, increasing numbers of microtonal

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113 Schoenberg’s Nachlass housed in the Arnold Schoenberg Center in Vienna, Austria, includes several documents about Busoni, Busoni’s music, and Busoni’s musical aesthetics. See http://www.schoenberg.at/6_archiv/texts/texts.htm.

divisions of the octave, and music that included alternative sound sources. Busoni’s description of the role of the composer is similar to Cage’s:

The creator should take over no traditional law in blind belief, which would make him view his own creative endeavor, from the outset, as an exception contrasting with that law. For his individual case he should seek out and formulate a fitting individual law, which, after the first complete realization, he should annul, that he himself may not be drawn into repetitions when his next work shall be in the making.\footnote{Ferruccio Busoni, \textit{Sketch of a New Esthetic of Music} (New York: Schirmer, 1911), 22.}

Busoni’s avoidance of repetition seems reminiscent of Schoenberg, more so than Cage, and Cage would have described his compositional process as one of “asking questions” instead of “making laws.” However, the philosophical starting point is the same—Busoni was formulating new laws, Schoenberg was starting each composition with a new row, and Cage began each composition with a new set of questions. Each attempted to avoid repetition in his own manner. Edgard Varèse wrote of Busoni, “All through his writings one finds over and over again predictions about the music of the future which have since come true. In fact, there is hardly a development that he did not foresee.”\footnote{Louise Varèse, \textit{Varèse: A Looking-Glass Diary} (New York: Norton, 1972), 50, quoted in Della Couling, \textit{Ferruccio Busoni: A Musical Ishmael} (Lanham, MD: Scarecrow Press, 2005), 203.} Busoni’s prescience about the future of music places him alongside Ives as well as Cage, both of whom foresaw significant advancements in musical composition and technology.
7. CAGE AND COLLAGE

It was not unusual for composers in the mid 1960s to use borrowed music, but it was unusual for Cage. In his “Lecture on Something” (early 1951) published in "Silence," Cage described his newly acquired compositional philosophy influenced by Morton Feldman. According to Cage, Feldman “speaks of no sounds, and takes within broad limits the first ones that come along. He has changed the responsibility of the composer from making to accepting.”117 If the responsibility of the composer, then, is to accept the sounds that come along, why not use found music objects as well as found sound objects?118 David Bernstein argued that “It is not surprising that Cage would welcome ‘borrowings’ from the past, since for most of his career he had urged composers to make use of the ‘entire field of sound.’”119 One must not forget that in Cage’s campaign for an openness to “sounds”120 or the use of the “entire field of sound”121 that he was urging composers to move away from simple consonance and dissonance and clearly came down on the side of what most of us would call noise. Frankly, it is indeed surprising that in 1968 Cage turned to historic music as source materials. Cage had not been interested in found music as source material because, frankly, he was simply “less and less interested

117 Cage, “Lecture on Something,” 129.
118 This distinction between found sound and found music objects is made by Stockhausen in the notes to Hymnen für elektronische und konkrete Klänge, DGG 139421-2. See Glenn Watkins in “Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists,” 407.
119 Bernstein, “Techniques of Appropriation in Music of John Cage,” 71. Bernstein also wrote, “Cage never hesitated to draw from the work of others.” (Ibid, 74.) This seems to be a conflation of a number of ideas about influence, borrowing, and using found objects.
in music.” In the foreword to *A Year From Monday*, Cage wrote, “I find environmental sounds and noises more useful aesthetically than the sounds produced by the world’s cultures.” He was also less interested in music for political reasons: “When you get right down to it, a composer is simply someone who tells other people what to do. I find this an unattractive way of getting things done.” Of course, we understand that telling people what to do was precisely what Cage did during the construction of *HPSCHD*. He was very precise with his instructions, exacting as an employer, and demanded complete and quality work. As much as possible, however, Cage masked this aspect of his personality to the public, promoting instead an image of a politically engaged Zen devotee. His contemporary *Diaries* and other writings indicate an increased interest in science, social structures, and setting processes in motion, but evidence of engagement with *music* is largely missing. In the “Lecture on Something” Cage indicated that he was intentionally moving away from tradition and historical music: “When going from nothing towards something, we have all the European history of music and art we remember…. But now we are going from something towards nothing.”

Cage was instead interested in indeterminacy, non-traditional notation, and compositional systems that were not fixed. Working with historical musical source materials seems to be more or less a departure from these interests—a move toward *something* rather than *nothing*. Glenn Watkins recognized in Cage’s refusal of source material, as well as his interest in Asian philosophy and European dada, the basis of “the

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122 Cage, *A Year from Monday*, ix.
123 Cage, “Lecture on Something,” 143.
international view of the possibility of a music of American origins for the first time.”

In other words, it is precisely Cage’s departure from Ives’s work, and ironically an embrace of a more internationally informed artistic sensibility, that signified to Cage’s European colleagues the beginning of an American avant-garde.

While Cage saw himself as part of an American experimental compositional lineage descending from Ives, Ives’s work stands as a model for Cage both in terms of how to (or more precisely how to not) use source material in a composition, and as a hermeneutic model for what it means to refer to scraps of “found music.” Eric Salzman’s 1968 article, “Charles Ives, American” is illustrative of how Ives was perceived during the composition of *HPSCHD*: “Ives turned away from narrative and hierarchical process” so that “tonal events, bits of Beethoven, hymn tunes, and band marches appear, not as parts of a process, but as musical objects, as kinds of experience.” Salzman’s statement points up the fact that for Cage, Ives’s collage techniques—to a certain degree—served as a negative model. Cage was disinterested in musical objects, but was very much interested in *process*. This becomes clear in his “Two Statements on Ives” which is critical of Ives’s use of historic source materials. Cage wrote,

> The American aspects of his music strike me as—endearing and touching and sentimental as they are—they strike me as the part of his work that is not basically interesting. If one is going to have referential material like that I would be happier

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if it was global in extent rather than specific to one country as is the referential material of Ives’ music.\textsuperscript{126}

In his monograph, \textit{Silencing The Sounded Self: John Cage and the American Experimental Tradition}, Shultis explained that “Both Cage and [Elliot] Carter object to Ives’s quotations as involving content rather than form.” Additionally, both “see Ives’s quotations as borrowed from outside experiences, as if they were examples of a representational approach to artmaking,”\textsuperscript{127} therefore, not examples from the Transcendental tradition.

If Cage was critical of the “American aspects” of Ives’s collages, then what did Cage learn from Ives’s compositional example? First, Ives models for Cage the importance of separating performers in the performance space, allowing for freedom for the performer. Cage also valued what he called the “mud” of Ives: “the possibility of not knowing what’s happening... I think this experience of non-knowledge is more useful and more important to us than the Renaissance notion of knowing A B C D E F what you were doing.”\textsuperscript{128} While Cage admired Ives’s concern for the spatial positioning of sound sources, he was critical about the way the audience for Ives’s music remained stationary and passive. According to Shultis, “He did not appreciate… the way in which the complexity of Ives’s music ‘emerges’ (everyone hearing the same thing) instead of simply allowing the audience to ‘enter in’.” In short, “Cage’s agreement with Ives moves toward multiplicity and non-intention. His disagreement centers upon issues of

\textsuperscript{126} Cage, \textit{A Year from Monday}, 41.
\textsuperscript{128} Cage, \textit{A Year from Monday}, 42.
symbolism and control.”

In an interview with Michael Zwerin in 1966, Cage suggested that Ives was much more important than jazz. The important thing about Ives was the complexity of the music and that “everything is happening at the same time.” Cage insisted in this interview that jazz is uninteresting. He said that he could enjoy jazz if there was “a great deal of it [happening] at one time,” and gave the example of twelve different records playing simultaneously. Cage’s criticisms of jazz seem to be part of a larger aversion to popular and commercial music in general, despite the fact that elsewhere Cage claims an affinity to certain aspects of rock and roll. In a June 8, 1968 letter to Margaret Brenker, Cage wrote:

I notice among friends who listen a great deal to rock and roll that their attention is to the rhythm, the melody and the words. Though there are connections betw. this music and electronic music, it is largely in the common use of new technological possibilities. Unless you go to the ? of content: i.e. revolution—change from competition to cooperation.

Cage’s attempts here and elsewhere to find connections to the “revolutionary” or the “noisy” aspects of rock seem disingenuous and couched within a general dislike of the more representational aspects of the music—i.e. the rhythm, the melody, and the words.

131 John Cage, typed letter, 8 June 1968.
Taruskin noted, “Though Cage liked to promote himself as the champion of the excluded, he upheld many traditional categories and boundaries as zealously and as rigidly as any mid-century elitist.” This aversion to pop culture stands in sharp contrast to Ives who loved certain forms of popular music such as ragtime.

While Ives may have served by and large as a negative model for Cage, several aspects of the collage technique employed in the composition of *HPSCHD* resembles much of what Ives was doing with borrowed materials earlier in the century. In order to understand the compositional environment in which Cage and Hiller created *HPSCHD*, as well as to understand how the use of source materials in this work both resembles and departs from predominant collage techniques, it is necessary to quickly review not only Ives’s work with borrowed materials, but also contemporary works based on source materials. To aid such a study, J. Peter Burkholder created a typology of the uses of existing music. The typology is based on his work with Ives, but Burkholder hoped his work could be extended to all music across genres and times. Burkholder’s typology is instructive as it forces the analyst to precisely identify how the source materials are used within the new piece and how borrowing techniques have developed over time. According to Burkholder,

> What may appear to be a unique procedure or an unusual reliance on borrowed material in the music of one composer, repertoire, or genre may only represent an extreme case of a more widely shared procedure or tendency to use existing music.

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Despite the fact that the HPSCHD parts are modeled on the “Mozart” dice game, the work is, by Burkholder’s definition a collage, in which a “swirl of quoted and paraphrased tunes is added to a musical structure based on modeling, paraphrase.”

Burkholder explained:

Collage is a kind of musical stream-of-consciousness, in which anywhere from a handful to upwards of two-dozen quoted and paraphrased tunes and fragments are superimposed over a musical structure that would already be coherent without them.\(^{133}\)

One could argue, in the case of HPSCHD, the “coherent musical structure” is the computer-generated tape parts that can stand alone as a complete composition. Just as Burkholder suggested understanding Ives and his use of musical borrowing within the tradition of borrowing methods from the Renaissance, Händel, Mahler and others, we have to look at Cage within the avant-garde tradition—even while he attempts in some ways to function outside of the tradition, or to at least appear as if that were the case.

8. AVANT-GARDE COLLAGE

A number of early twentieth century composers were inspired by historic music both as compositional models and as source materials. The late 1960s, however, seem to represent a culmination of quotation and collage techniques. Source material for the early twentieth century composer was typically early music—Gesualdo and Bach seem to

be common favorites. Composers of the 1960s and 1970s, however, were likely to be seen, according to Watkins, “rifling the pages of the nineteenth century as well.”

For many of these composers, collage and quotation techniques were a way to return to tonality, the triad, and expressivity after the orthodoxy of serialism without losing face, or, as David Schiff put it, capitulating to the “tyranny of the audience.” Using historic source materials allowed composers to write tonal music and yet to retain a “veneer of irony.”

Despite the fact that Ives was employing collage techniques with existing musical sources in the earliest decades of the twentieth century, pieces such as the Concord Sonata (c. 1915), Washington’s Birthday (c. 1915-17), Putnam’s Camp (1914-20), and Three Places in New England (c. 1916-23) function much differently than collage works from the 1960s. Specifically, the musical sources when juxtaposed in Ives tend to evoke the experience of memory or dream. Through association, the juxtaposed works can point the listener to remembered or imagined events or places. In the 1960s, composers started to employ collage techniques for much different reasons and to much different ends. Composer Alvin Curran paradoxically named this tendency to draw from a “virtually infinite spectrum of transhistorical and transcultural artifacts” a “New Common Practice.” Bernd Alois Zimmermann employed existing musical sources from

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136 Ibid., 219.
a vast historical and stylistic spectrum in *Die Soldaten* (1957-65) in order to “to suggest the simultaneity of past, present and future.” George Rochberg juxtaposed his own music with excerpts from Boulez, Berio, Varèse and Ives in *Contra mortem et tempus* (1965) and in *Music for the Magic Theater* (1965) he used Mozart, Beethoven, Mahler, Webern, Varèse and Stockhausen as source material. For Rochberg, using source materials was an alternative in the 1960s to his earlier Schoenberian dodecaphony.

The closest correlates to *HPSHCD* in a discussion of canon and musical borrowing are specific works by Mauricio Kagel, Karlheinz Stockhausen, and Luciano Berio. In his work *Ludwig van* (1969-70) Kagel

extracts individual lines from Beethoven’s works and reassembles them in new temporal combinations, destroying their original syntax and raising questions about composition, authorship, style, expression, musical continuity and the musical work itself. Kagel’s film *Ludwig van* makes the critical stance of the musical composition explicit. According to Paul Griffiths, the film “is a critical examination of Beethoven’s place in the musical world of the present.” While the composition and film both seem to be quite sympathetic to Beethoven and Beethoven’s music, both are designed to incite

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139 Ibid.
questions of the “genius” construct.\textsuperscript{141} Neither Cage nor Kagel were New Romanticists; neither composer used collage or quotation techniques as a way to return to tonality.

By combining electronic elements with historic source materials in \textit{Hymnen} (1966-67), Stockhausen hoped to make the point that his music was different from the collage works of his predecessors—Berg, Stravinsky, and Varèse, in particular—and that his music “attempted to remove all the glaring dualisms of time and culture in a new synthesis.”\textsuperscript{142} Stockhausen’s work on \textit{Telemusik} (1969) seems to further this artistic and philosophical stance. He stated that he was attempting to write “not my music, but a music of the whole world”; that the piece is based on “a vision of sounds . . . technical processes, pictures of notation, human relationships—all at once . . . in one logical process.”\textsuperscript{143} He goes on to say that the piece is “not a collage; rather, through the process of intermodulation . . . old objets trouvés and new sounds . . . are combined into a higher unity.”\textsuperscript{144} As with Cage, Stockhausen takes for granted the idea that “one-ness” is “aesthetically (and even socially) desirable.”\textsuperscript{145}

The third movement of Berio’s \textit{Sinfonia} (1968) is a seminal work that makes extensive use of collage and quotation. The third movement of Mahler’s \textit{Second Symphony} is not quoted by Berio, but rather it is the skeleton of the work upon which Berio layers quotations from Bach, Berlioz, Brahms, Strauss, Schoenberg, Stravinsky,

\textsuperscript{141} An excerpt is available on-line UbuWeb. http://www.ubu.com/film/kagel.html
\textsuperscript{142} Watkins, \textit{Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists}, 407.
\textsuperscript{143} Karlheinz Stockhausen, \textit{Karlheinz Stockhausen: Telemusik, Mixtur} (Deutsche Grammophon 137012, 1969), LP Recording.
Stockhausen, and Boulez. These materials were meant to function as semiotic markers that “signal the harmonic countries that are traversed on his journey.” According to Berio they are “little flags in different colours stuck into a map to indicate salient points during an expedition full of surprises.” Berio also urged his audience to not think of the work as collage *per se*, but rather as consisting of cues which reference the “history of music.”

Cage, Kagel, Stockhausen and Berio used source materials as a way to make a point about historicity within atonal works. In each of these works, the composers seem to be occupied with the tradition they have individually and collectively inherited, the dilemma of the musical canon, and *time*. In each case, it seems that the salient aspect of each piece used as source material was not the work itself, but rather its author. Each of these composers that worked with collage in the late 1960s were demonstrating a connection to a tradition, a craft, and were generally respectful of the master composer or existing tradition. In the case of *HPSCHD*, Cage was not revisiting the past with irony. The composers quoted are metropolitan, cosmopolitan, and *en masse* the grouping is somewhat evocative of Schumann’s *Davidsbund*. Just as Schumann placed himself in the middle of an imaginary compositional fraternity, Cage and Hiller were suggesting their own membership in a historical canon by including their own works as “contemporary classics.”

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146 See Watkins, *Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists*, 416.
147 Ibid.
148 Stockhausen’s work with source materials seems to be an exception from this generalization, and Berio’s use of Mahler’s *Second Symphony* seems to integrate the “program” of the symphony into the new work. The *Second Symphony*’s content seems to be as important in this case as the biography or reputation of Mahler.
Bernstein pointed up that this turn in the late 1960s to source materials “came about following a crucial period within [Cage’s] compositional career.” Cage had taken indeterminacy “to the limits of generalization and abstraction in such pieces as Variations V (1965), VI (1966), and VII (1966).” The compositions that follow including HPSCHD, Cheap Imitation, and the later Europeras start to include borrowed materials, and other works such as the Songbooks use methods developed earlier in his career. Cage seemed to be returning to earlier ideas of “form” and “content” in these works. Bernstein also noted that intention played a larger role in the compositional process. These works represent a continued development of Cage’s ideals, but also unmistakably parallel larger artistic and philosophical movements of the late twentieth century.149

9. “TEMPORAL SIMULTANEITY”: The Issue of Time in HPSCHD

This collage technique employed by Cage, Stockhausen, Berio and others, created a new tradition that is labeled by later historians, philosophers and artists as “postmodern.” According to Ihab Hassan, this new postmodern tradition is a tradition in which “continuity and discontinuity, high and low culture, mingle not to imitate but to expand the past in the present.”150 In these works, there is a plurality in the present—all styles are equally available and the past is not suppressed in favor of the present. In these works, “the listener’s memory is activated and cannot be prevented from forming its own

150 Hassan, “Pluralism in Postmodern Perspective,” 197.
fantasy discourse.” Watkins argued that works that use historical source materials, not only provoke an expanded awareness of the time-space factor on the technical front but invite, even demand, multiple assessments without claim to priority from the interpretive angle. The plurality of materials in the original assemblage exacts a critical explosion.

This line of analysis leads to a discussion of time (past, present and future), and how one conceives of time, which seems to be central to most postmodern thinkers. The vast majority of postmodern philosophers agree with Elizabeth Grosz that “The past and the present are not two modalities of the present, the past a receded or former present, a present that has moved out of the limelight. Rather, the past and present fundamentally coexist; they function in simultaneity.” The only way that we experience the past is through the present, through a virtual experience that the present carries with it. But this doesn’t seem to be the point of HPSCHD; it is not meant to be a tour into a virtual past; the focus is rather on a potential future imagined through a utopian space. Grosz argues that this kind of utopian space “grants a precedence of the future over the past and present.” This is clear in HPSCHD as the source material for the harpsichord parts includes not only composers from the past, but also the present (Cage and Hiller);

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151 Watkins, Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists, 409.
152 Ibid.
154 Ibid., 269.
however, for many audience members, such as Temperley, the overwhelming impression of the work was created not by the live harpsichord performances, but rather by the futuristic computer-generated sounds. This aural impression was reinforced visually by the futuristic images and focus on space. This is not, however, a real future, but an imagined future and this distinction becomes increasingly important as we look at the role of time in utopian constructs.

Utopias are typically conceived of as places that are closed and isolated, despite the fact that the word literally means “no-place” (a place that does not exist). Grosz argues that if U-topia means “no-place” then it is also “no-time.” The temporal nature of theater, however, lets us start to conceive of the utopia as a time as well as a place. The focus is on process within the utopian theater. Cage highlighted the temporality of the utopian performance by leaving the start and stop times open-ended. (As Temperley put it, “I certainly don’t remember any moment when one had a sense that a concert or a performance was ‘beginning.’”)

The issue of time is also eschewed by the simultaneity of events during the performance. Cage explained this idea to Daniel Charles during a discussion of determinacy and indeterminacy:

Don’t think of the work outside time. Instead of controlling possibilities, instead of letting them emerge only in succession, break their linearity and run them simultaneously, immediately and all at once. As in HPSCHD or the Musicircus, you should let all the various orderings emerge and connect freely: non-linearity

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155 Ibid.
156 Temperley.
makes them cancel each other out. Then all you have to do is to maintain that non-linearity… Tyranny and violence fall under the heading of linearity.

Indeterminacy, as I conceive it, is a leap into non-linearity. Or into abundance.¹⁵⁷

William Brooks also recognizes a salient social aspect in Cage’s conception of time. He wrote that for Cage, time is “not a continuum, in which past flows into future through the present, but three distinct conditions: past / present / future. The self is poised in the nothingness between these, so that they interpenetrate without obstruction.”¹⁵⁸ An understanding of the utopian as “no time” as well as “no place” points toward an understanding of *HPSCHD* as representing a possible, anarchic future, and not a prescriptive future. Perhaps the role of the utopian is not to bring the future into focus, but rather to make us aware of the limits of our present—physical as well as conceptual. The utopian artwork highlights the limits of our imagination. The future depicted in the utopian narrative is not a fixed, determined “should be;” but rather a flexible, multiple “what if.” The “embodied utopia”—if such a thing existed—would be a place where time would stop. Problems would be solved, goals would have been achieved, structures would be complete. Utopia, “is the image of an ideal society in which time stops.”¹⁵⁹

It seems to be that Cage’s intention with the inclusion of the historic materials was to make it clear that this utopian future was not divorced from the past, but rather had internalized its own history. Although some may claim that the past and the present (or

even future, in this case) may “float beside each other without any sort of interaction or tension” in postmodern art, this kind of use of historic sources, argues Metzer, represents a “continue[d]… engagement between past and present undertaken in modernism.” Like Rauschenberg, or even Ives, Cage is encountering the past in a challenging way. This kind of temporal engagement with the past has social ramifications, according to Metzer: “The utopian compositions view the past not as pressing down upon the present but rather as dovetailing with it, the two being interconnected,” or as Cage would have said, “interpenetrated.” When this happens, as Cage would have it, art becomes life. Arthur Danto, however, disagrees. Danto wrote, “When art… becomes self-conscious of its history… so that its consciousness of its history forms part of its nature, it is perhaps unavoidable that it should turn into philosophy at last.”

In the case of HPSCHD, a piece which brings the past into the present and which is conscious of its own history, art does not become life, nor does it become philosophy. Art, in this case, becomes autobiography. According to Pasler, “Quoting from the past is a way to assert one’s own priority, power, and strength. An obsession with the past can reflect an obsession with one’s own place in history.” The use of these historic source materials represents a kind of “writing through” technique similar to technique Cage used

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161 Ibid.
162 Ibid., 73.
to create the mesostics, most famously based on James Joyce’s *Finnegan’s Wake*. In a discussion of the mesostics, Cage wrote, “It is possible to imagine that the artists whose work we live with constitute not a vocabulary but an alphabet by means of which we spell our lives.” Cage is using these pieces as an alphabet (vocabulary would denote communication), but he is not necessarily doing so in order to “spell his life” as much as he is spelling out his authority—simultaneously as forerunner of the avant-garde and heir to the American music legacy begun by Ives. By placing his own work among the historic source materials Cage also makes it clear that he has a significant place in the larger story of music history.

10. “NO ‘TRADITIONS’ AT ALL”: Cage and the Musical Canon

Ironically, from a broader perspective Cage is seen as a proponent of a postmodern skepticism vis-à-vis the historical canon. Not only do some scholars view him as a major example of a composer with this kind of canon-busting attitude (as he is depicted in the dragon-slayer poster) but he is also a pathfinder for others who share this postmodern sensibility. Burkholder summed up the hegemonic view of Cage and tradition in his 1983 *Journal of Musicology* article:

There is no connection between this music and historicism; in fact, there is a conscious disconnection, clear in the writings of Cage and Boulez among many others…. The more radical, like Cage, break not only with historicism but with the

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This academic attitude of Cage and tradition is now starting to change, especially as Cage scholarship has increasingly contextualized Cage’s work within a larger tradition. However, part of the popular appeal of Cage continues to be the idea that Cage was a musical rebel—one who had the nerve to stand up to Bach, Beethoven and the stale symphonic concert repertoire. In his contribution to the Cambridge Companion to John Cage, “Cage and the Postmodern,” Alastair Williams wrote,

> In the first half of Cage’s career, his attitude to the canon would have been unusual for a professional composer. In later years, however, as the canon lost its institutional grip, his sense of its dwindling cultural authority would have been more widely shared.\(^\text{167}\)

Cage did address the problem of the canon in conversation with Roger Reynolds: “If the audience, if any of us, feel that what is being played at that time can be played at any other time, and result in the same experience, then a kind of deadliness falls over everyone.”\(^\text{168}\) Although this comment was couched in a discussion of musical recordings, Reynolds recognized during the interview that this aesthetic stance holds true for a canon

\(^{166}\) Burkholder, “Museum Pieces: The Historicist Mainstream in Music of the Last Hundred Years,” 131.
\(^{167}\) Williams, “Cage and Postmodernism,” 237. The assertion that the canon has “lost its institutional grip” is clearly false. The performance and pedagogical canons remain as healthy as ever, especially in light of reduced state and private funding for symphonies, opera companies, and chamber music ensembles.
of concert works as well as for recordings, and Cage agreed.\textsuperscript{169}

It seemed to some that Cage was attempting to destroy the idea of a musical canon by chopping these works to bits for inclusion in his work, as depicted in the Viskupic poster. For others, this kind of quotation represented an embrace of history. Both stances are not mutually exclusive, of course. The first issue that seems central to a discussion of this work is a discussion of how \textit{HPSCHD} simultaneously discounts the idea of “canon” while embracing history. The second issue is one that involves how the inclusion of historic references function in a work that points to a utopian future.

It is instructive to compare Cage’s work with historic sources to a very important visual artwork from a decade earlier. In 1953 Robert Rauschenberg nervously asked the elder Willem de Kooning for a drawing that he could erase and consequently exhibit as his own artwork. Rauschenberg didn’t hate de Kooning or despise his artwork, but rather wanted to pay homage to the artist. In 1953, de Kooning was a famous proponent of “Action Painting.” Action painters, like de Kooning and Jackson Pollock, used the canvas as a space within which an event would take place. The focus was on \textit{process}, and with the lack of representation in these works, the “meaning” of the painting became inseparable from the biography of the artist. According to Ed Krcma, the artist then “became fetishized,” mythologized as “authentic, heroic, rugged and romantic figures, bravely searching for radical new means of self-discovery, unconstrained by politics or

\textsuperscript{169} R.R.: When you can hear Beethoven’s Fifth Symphony on any one of forty different recordings, how strong is the need to listen carefully at a concert? [……]
J.C.: In this connection, David Tudor and I were discussing on our way from New York, the possibility of his resolving not to make any records in the future, unless they result in actions which could not possibly be made otherwise. Ibid.
Rauschenberg’s “Erased de Kooning” seemed to many to be a neo-Dada attack on the dominant artist of the day, or in Oedipal terms as a “youthful act of destruction against a patriarchal older artist.” Rauschenberg did not see his work with the drawing as destructive. In fact, it took him three weeks to erase the heavily worked drawing. (See Illustration 2.5) Rauschenberg was not intentionally attacking de Kooning, but perhaps because de Kooning was the most important artist of the day, he was attacking or attempting to “erase” the concepts of “masterpiece” and “genius.” Rauschenberg was also clearly making a larger statement about the temporality and canonization of art. Rauschenberg was not alone in his attitude of the masterpiece and was also not the first to dismiss the idea of an artistic canon. According to Allan Kaprow, “Pissarro and later Futurists considered the idea of burning down museums, not out of perversity, but to express a longing to be unencumbered by a seductive past that blinded them to the present.” These artists, like Cage, were not hostile to their respective traditions, but rather desired to be unencumbered by the weight and sterility of tradition and the burden of canonization.

Composers such as Igor Stravinsky reacted to Cage much in the same way as establishment artists and critics reacted to Rauschenberg. Those who dismissed Cage and his work did so partially because they viewed Cage as not only divorced from tradition, but hostile to tradition. According to Kostelanetz, Stravinsky wrote, with much sarcasm,

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171 Ibid.
Whatever the answers, no sleight of hand, no trap-doors, are ever discovered in his performances; in other words, no “traditions” at all, and not only no Bach and no Beethoven, but also no Schoenberg and no Webern either. This is impressive, and no wonder the man on your left keeps saying *sehr interessant.*

Karl Worner’s assessment of Cage is even more explicit. Worner wrote in his biography on Stockhausen published in 1973, that Cage is “at the extreme antipode of the European tradition,” and that his “work is a protest against our tradition such as is probably only conceivable on American soil…. He has no continuity of ‘language,’ in contrast to the continuity of development usual in Europe.” Yet in the middle of this critique of Cage, Worner wrote: “Cage demands of everyone a reappraisal of his own situation and his own world.”

Cage, I believe, would have been delighted by this last assessment of his work and the key to understanding how Cage was using this historic source material lies within this critique.

Much of European avant-garde art was intended as an attack on the highness of high art, on “institution art,” and art’s separation from everyday life. As Andreas Huyssen, author of *After the Great Divide* wrote, the avant-garde was an attack on “nineteenth-century aestheticism and its repudiation of realism,” and that the art movements that were working to overcome the art/life dichotomy were the dadists,

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175 Huyssen, “Mapping the Postmodern,” 49.
surrealists, futurists, constructivists and productivists. Despite the fact that Huyssen identifies Schoenberg’s work as representing a “radical break tradition,” the composer’s connection to tradition seems extraordinary: “I venture to credit myself with having written truly new music which, being based on tradition, is destined to become tradition.” Schoenberg reinforced the “highness of high art” and art’s separation from everyday life through his work. As a life-long member of the academic world his compositional style became “institutional art” and serialism became the orthodox musical language of the mid century. It is Schoenberg’s exceptional status among avant-garde artists, however, that makes him so useful to Cage as he established his compositional lineage. Cage was fond of repeating the story about having “no ear for music” and even told an interviewer “The whole pitch aspect of music eludes me.” Richard Taruskin pointed out that “Any success that such a musician might enjoy would devalue legitimacy. Which is scary, especially to those who traded on ever more exigent and exclusionary standards of legitimation.” In a sense, Cage is eager to have it both ways: as blissfully ignorant Zen guru and as legitimate heir to the modernist throne. Yet, while Cage was eager to validate and legitimize his music through this lineage, he was not interested in a continuation of the thinking associated with high modernism and particularly with serialism. In a letter to Peter Yates, 1 January 1966, Cage wrote, “I worked with S[choenberg] for two years in counterpoint, analysis etc. [...] I denied the

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177 Huyssen, “Adorno in Reverse,” in ibid, 32.
180 Ibid.
structural value of the tone row insisting ‘it’s a method etc.’”181 The importance of this distinction is clarified by Cage’s 45’ for a Speaker published in *Silence*:

> The highest purpose is to have no purpose at all. This puts one in accord with nature in her manner of operation. If someone comes along and asks why?, there are answers. However there is a story I have found very helpful. What’s so interesting about technique anyway? *What if there are twelve tones in a row?* What row? This seeing of cause and effect is not emphasized but instead one makes an identification with what is here and now.182

Cage seemed eager to be connected with Schoenberg as a kind of pedigree, but not too closely. Schoenberg represented technique, while Cage was more interested in *process*. In short, Cage’s relationship to the modernist tradition is one of continuation and resistance.

Nor was Cage fully on board with Allan Kaprow, members of FLUXUS, and other artists who questioned the authority of the autonomous artwork. Cage was not interested in attacking high art, but was interested in sublating art into everyday life. The kind of musical “reappraisal” Cage demanded was clear with 4’33”; Cage forced the audience to ponder the question, “Where are the boundaries between art and life?” Cage believed that when music and life are separated the result is *art*, as in, “a compendium of

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181 The letter continues: “I have recently praised Ives. Must admit though it’s taken me a long time.” John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
masterpieces.” The element necessary to make a masterpiece, according to Cage, is time. The immediacy of contemporary music keeps it from suffering the fate of canonization, because it “is not so much art as it is life and any one making it no sooner finishes one of it than he begins making another just as people keep on washing dishes, brushing their teeth, getting sleepy, and so on.” By including works from “the canon” Cage metaphorically rescued them from the dusty museum shelves and placed them in an atmosphere of immediacy. This is an atmosphere in which, according to Cage, “all you can do is suddenly listen in the same way that when you catch a cold all you can do is suddenly sneeze.”

Cage was simultaneously dismissive of the canon construct, and yet sympathetic to this music, enough so to try to make it part of life. Cage wrote:

If there were a part of life dark enough to keep out of it a light from art, I would want to be in that darkness, fumbling around if necessary, but alive. And I rather think that contemporary music would be there in the dark too, bumping into things, knocking others over and in general adding to the disorder that characterizes life (if it is opposed to art) rather than adding to the order and stabilized truth beauty and power that characterize a masterpiece (if it is opposed to life). And is it? Yes it is.

What Cage was doing in HPSCHD, and other works that use historical source materials from the late sixties on, was to “dissociate received musics from an inherited value

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184 Ibid., 45.
system.” It seems that Cage’s motivations may be similar to contemporaneous canon-busting movements, especially in the field of ethnomusicology. Scholars who are skeptical of the authority of the canon typically are interested in re-situating even canonical works into a more historically informed value system.

What Cage seems to be doing with source materials, however, is more akin to the deconstruction of literary critics. In *Pyramids at the Louvre*, Watkins explained this connection:

Modernism’s purported effort to escape the dominant culture and to promote artistic autonomy has now been declared an illusion by the Postmodernists. In such a critical stance, deconstruction was born... This loss of constructive power leads inevitably to the disappearance of the category of the masterpiece.

Like other postmodernists, Cage found that the thinking associated with this historical music was “worn out,” but when one was able to listen without thinking, that “suddenly they are fresh and new.” By selecting very short excerpts from these works, Cage

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188 Cage, “Lecture on Nothing,” 117.
“deconstructs” each work of its identity, and as a result, its “value”; the excerpts are turned into what deconstructionists call “non-work.”\(^{189}\)

In the following 1969 interview, Cage spoke directly to the issue of art and value:

I think [art is] going in many directions, and that these directions are not the be evaluated but rather to be experienced… And give up first of all a sense of values; yet this is so dear to academic discussions—the notion of value. But how can we speak of value in this day and age when we are now, for the first time, really aware of people who—if they do have values—have values quite other than ours? So can we not see from that, that any clinging to our values will only continue the divisiveness of the world which has made it so good at killing and so poor at living?\(^{190}\)

Essentially, the process of “decanonizing”—or even further, “deconstructing”—these works was the means to stripping them of the value that Cage found so divisive, and yet it was also a means of hearing the works as fresh material, as possible source materials. The materials were freed from the burden of value. Virgil Thompson recognized an affirmational quality in Cage’s deconstructive use of historic sources. For Thompson, “Cage is less a destroyer than a typical California creator.”\(^{191}\)

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\(^{191}\) Thomson, “Cage and the Collage of Noises.”
Seen in the context of other composers using source materials in the late 1960s, Cage’s work is certainly individual, but not necessarily extraordinary. Nor is Cage’s attitude to the canon extraordinary. Composers working with this kind of deconstruction established a tradition of their own; or at least, like serialism, deconstruction became the next logical step in the history of the western avant garde tradition. Just as Burkholder recognized in Ives’s use of historical source materials a connection to a long tradition, Cage and Hiller’s work can be seen as “building on rich precedent, rather than breaking radically with the past.”

Like his contemporaries in the visual arts, Cage discovered in *HPSCHD* that he could incorporate historic sources into his art without sacrificing the immediacy of the music. Through the use of the empty Dice Game structure, these sources could be selected through non-intention. Brooks made the excellent point that “In both *HPSCHD* and *Cheap Imitation*, then, Cage embraced the past, not only by recalling and reusing historical artifacts but by accepting repetition and resemblance as properties of the resulting music.” This new attitude of acceptance gives rise to a “family” of similar compositions, and in many ways, *HPSCHD* prefigured later work that Cage did with source materials, especially the five *Europeras* from the late 1980s. The *Europeras* bear a remarkable resemblance to *HPSCHD* in how they are composed of borrowed sources, also drawn from a “canon.” The *Europeras* have also been described as anarchic *Gesamtkunstwerke.* One of the projects of this kind of postmodern artwork—whether it was a raucous simultaneity or a quietly meditative work—was to relink the high

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modern with the everyday. This relinking can include, as in the case of these works, incorporation of a rich tradition, but in a way that is vital. Cage’s work with source materials was not a matter of mere traditionalism. What Cage does with *HPSCHD* is to go all the way, so to speak, with “deconstruction” while simultaneously leaving the idea of a “canon” more or less intact. Perhaps the strength of *HPSCHD* lies in Cage’s desire with this work to have it both ways. In fact, it is *because* of the canon, (not in spite of the canon) that the avant garde exists and in turn becomes “canonical.”

### 11. CONCLUSION

Perhaps Cage was a bit too successful in writing himself into the historical canon. By the last years of his life Cage had become—as Kenneth Goldsmith put it—”classical.” Goldsmith went to see Cage read in New York for a “small withering, aging congregation, albeit faithful, who came to hear Cage preach.” Goldsmith reported that

> His presence, words, and manner all impressed me. His lecture had a compelling open, ethical underpinning that seemed particularly timely. I couldn’t help but wonder, why did Cage no longer have the cultural power and pull that he had in his heyday of the 1960’s and 1970’s? Twenty-five years ago, thousands flocked to his concerts… and he was regarded somewhat as a wizened older guru (both in the “art” sense and as a Pop culture icon) to the seething youth culture.

The youth culture grew up and was not replaced by a new generation of radical utopian thinkers. With time Cage became “a museum relic… an important, historical artifact… a
piece of living history.”  Those who were most interested in Cage’s utopian thinking were not American, but more likely Central Europeans like Gordana Crnkovic who wrote “Utopian America and The Language of Silence,” for *John Cage: Composed in America* (1994).  By the 1990s Cage was part of the historicist mainstream and perhaps always had been part of an American 20th century tradition of common concerns, if not a common compositional style. While Cage sometimes challenged the boundaries of art, for the most part he was part of what Burkholder described as “an intellectual tradition in the widest sense rather than a stylistic tradition.” Burkholder explained:

The mainstream of the past one hundred years consists of music written for an audience familiar with the art music of the 18th and 19th centuries, by composers who were or are themselves highly informed members of that audience, who wrote or write music with a concern both for continuing the tradition of European art music, particularly its aesthetic assumptions and its understanding of the relationship between artist and audience, and for distinguishing their own work stylistically from other composers, both predecessors and contemporaries. In a word, the mainstream is *historicist*: these composers are writing music for a museum, for that is what the concert hall has become.  

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Similarly, the prescient Michael Steinberg wrote a 1962 article called “Tradition and Responsibility” published in *Perspectives of New Music*. Steinberg—even in 1962—was suspicious of composers who would later be labeled “postmodern”:

> It is certainly not new—is, in fact “traditional”—for artists to be hailed or condemned for the completeness of their break with tradition. Yet it never seems long before a new generation wonders what the disturbance, now in the past, was all about, as the historical links come to seem unmistakably clear.\(^{198}\)

Taruskin also found that Cage’s “ties to the traditional esthetic of the West that he claimed and strove to break were never broken,”\(^{199}\) and sees Cage’s notion of “purposeful purposelessness” as a variation (or musically, an inversion) of Kant’s definition of autonomous aesthetics as “purposeless purposefulness.” “And how,” Taruskin asks, “does that differ from what Cage called ‘Zen’?” In some ways Cage was working in reaction to this Romantic concept of the autonomous artwork; questioning the role of the creator as genius, the conductor as dictator, the performer as slave, and the audience as innocent bystander. But in many other ways, Cage was still reinforcing this notion. With *HPSCHD* Cage still created the “the perdurable esthetic object” and the performer was still an “ephemeral mediator.”\(^{200}\)

Today it seems almost inevitable that Cage—one of the most important twentieth century composers—would occupy himself in the mid sixties with Mozart. It seems as if

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\(^{200}\) Ibid., 273.
the commission to write a work for harpsichord was the stimulus he needed to start thinking about the issues of time and tradition. Cage used *HPSCHD* as a vehicle for working through a number of big ideas, and the idea of “tradition” and the “canon” seems central to the work of the most compelling composers of the late sixties. Even though these composers by and large are turning to the past, tradition, and found music as compositional materials, their temporal focus extends far beyond the past. Each composer seems to be pointing also to the future. For Cage and Hiller, there was no better way to balance the historic and traditional aspects of *HPSCHD* than with the instrument that best represented the future of music in the late sixties: the computer.
(dotted half note) = 64

Beethoven pg. 93 12/8 = 144
   upbeat g 3rd beat [dotted quarter note] of 36th measure
   2 ¾ beats = 1 measure of Dice Game

Chopin pg. 58 6/8 [dotted quarter] = 72
   36 meas. 1/8 = 1 measure of Dice Game

Schumann 2/4 1 = 96 (Reconnaissance) 48 meas.
   1 ½ beats = 1 measure of Dice Game

Gottschalk 2/4 1 = 104
   52 meas. 1 5/8 beats = 1 measure of Dice Game

Ives pg. 11 to end changes metre [quarter note] = 96 [eighth note] + last 32 meas.
   1 ½ beats = 1 measure of Dice Game

Schoenberg ¾ [quarter note] = 64
   21 meas. + 1 beat (use silent [rest] in 1st meas.)
   1 [beat?] = 1 measure of Dice Game

Hiller Cage binary choice
   [quarter note] = 168
   2 5/8 beats = 1 meas. 119 beats
   [quarter note] = 192
   3 beats = 1 meas. 35 beats
   [quarter note] = 208
   3 ¼ beats = 1 meas. 55 beats

Begin Allegro Vivace pg. 28

Table 2.1. Tempi translation chart. Transcription of original, handwritten by Cage. Ives is listed as source materials here as the compositional work was completed before the copyright issues became apparent. Original document is from the John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
Illustration 2.3. Page 83 of Solo V. Measure 2 is Busoni (replacing Ives) and measure 5 is an example of how Cage decided to wrap runs that exceeded the range of the instrument back down. John Cage Collection, New York Public library, New York, New York.
Illustration 2.4. Timeline of composers used in *HPSCHD*, their birth and death dates, and list of possible replacements for Ives. Manuscript from the John Cage Collection, New York Public Library, New York, New York.
CHAPTER 3: THE COMPUTER IN *HPSCHD*

Since automated technology promises more abundant leisure, if not the possibility of endless environmental pleasure, and the obsolescence of most social and esthetic hierarchies, Cage wants to install a psychology that will allow every man to appreciate constantly the “art” around him all the time; thus do the pedagogic purposes of his musical theater link his optimistic visions of the future.¹


When asked by Daniel Charles if he saw a contradiction in using harpsichords and tape recorders together, Cage replied that “the important thing about *HPSCHD* is the use of the computer.”² As with so many of his cryptic utterances, Cage unfortunately did not explain what he meant by the statement. We have a few clues, however, as to why Cage was motivated to explore computer composition in the late 1960s. In a 1967 letter to Peter Yates, Cage wrote, “We don’t yet know how to live in this world, and much that I do is done in former time-consuming ways.”³ Working with the computer initially seemed like an exciting, potentially time-saving device for Cage. There is also an interesting connection between the binary language used in programming and the binary nature of the *I Ching*. Both systems are based on series of on/off or yes/no possibilities. Cage was likely aware of this connection that had been made four hundred years earlier

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² Charles, *For the Birds*, 141.
by Leibniz after he created the first binary logical number system.\textsuperscript{4} In a 1969 letter to Yates, Cage wrote that the \textit{I Ching} is interesting, in “that its mechanism is ‘digital’ like that of the computer, straight and broken lines.”\textsuperscript{5}

Cage also wrote specifically about the importance of using the computer in art. In 1966 he wrote on “Audience” in his \textit{Diary}:

> Are we an audience for computer art? The answer’s not No; it’s Yes. What we need is a computer that isn’t labor-saving but which increases the work for us to do, that puns (this is McLuhan’s idea) as well as Joyce revealing bridges (this is [Norman O.] Brown’s idea) where we thought there weren’t any, turns us (my idea) not “on” but into artists.\textsuperscript{6}

Cage demonstrates to his reader with this quote that he has his hand on the pulse of contemporary, North American thought and culture. He makes it clear that he is not only familiar with McLuhan’s writings on media, but also the philosophy of Brown and the contemporary psychedelic culture—responding to and paraphrasing Timothy Leary who urged young people to “turn on” that same year. Cage, like other artists and composers in the late sixties, was fascinated not only by mass media and anarchic thought, but also by

\textsuperscript{4} Leibniz believed that logic could be described by an absolute mathematical condition instead of written language which is inevitably imprecise. This mathematical, binary language was to be “a sort of universal language or script, but infinitely different from all those projected hitherto, for the symbols and even words in it would direct the reason, and errors, except for those of fact, would be mere mistakes in calculation.” E.T. Bell, \textit{Men of Mathematics} (New York: Simon and Schuster, 1937), 123.
\textsuperscript{5} John Cage to Peter Yates, 4 March 1969, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
computer technology. The computer holds a significant and interesting space within postmodern art, and for some scholars, the computer is a necessary component of the postmodern. The general attitude toward technology in general and the computer specifically changed, however, from a very idealistic point of view in the 1960s, to a critical, or at least ambiguous posture later in the 1970s and 1980s.

In this chapter I briefly describe Cage’s relationship to the computer as a compositional tool, recount the history of the computer project, and describe Cage’s relationship to Hiller. I also give an account of the work involved in programming the I-Ching, in the creation of the tapes, programming the Dice Game, and other subroutines. Finally, I describe the Nonesuch recording that was made of HPSCHD and conclude with a discussion of what it meant to Cage—philosophically and politically—to use the computer as a compositional tool.

Postmodernism of the 1960s depicted the computer in a very bright, shiny, optimistic light, an optimism shared in popular culture as well. HPSCHD shared the optimism toward technology depicted in television shows such as the 1960s animated series The Jetsons in which computer capabilities seem limitless. Stanley Kubrick’s film 2001: A Space Odyssey was released in April, 1968 and played in theaters through the summer of that year in the United States. Like HPSCHD, 2001: A Space Odyssey addressed issues of technology and humanity, and to what extent the biological and technological can co-exist. The film features a computer (University of Illinois’ HAL) as a central character, and casts the computer as the Cyclops of this mythological Space Odyssey. Despite the fact that the film centers on “human ruptures” and “HAL’s own

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7 See, for example, Richard, “Computer Music and the Post-Modern: A Case of Schizophrenia,” 26-34.
mechanical malfunctions\textsuperscript{8} it is also in many ways a celebration of human and technological achievement.

This excitement over computer technology prevailed during the decade, even if the immediate results produced by computers were less than perfect. Yates wrote,

\begin{quote}
The development of the computer, enabling a composer to explore and learn to control all possibilities of audible sound, should be for composers of the near future what the organ became for composers of the 16th century, one means to a new and more amply elaborated art.\textsuperscript{9}
\end{quote}

Later in the 1970s and 1980s, optimism surrounding the computer faded away and films like Terry Gilliam’s dystopian \textit{Brazil} (1985) feature the computer in a central way, but as a tool whose functionality is terribly flawed. \textit{HPSCHD} represented a very optimistic view of technology in general, and of the computer specifically. It is important to understand \textit{how} Cage and Hiller used the computer in the creation of \textit{HPSCHD}, as well as to understand \textit{why} Cage was interested in the computer and computer aided composition. For Cage, technology was central to his utopian project.

\section*{1. CAGE’S RELATIONSHIP TO THE COMPUTER:}

Cage’s connection to the computer was always tenuous—even in 1983 when he


\textsuperscript{9} Peter Yates, “A Sampling of John Cage,” manuscript (undated), Peter Yates Papers, Mss 14, Box 21, Folder 22, Mandeville Special Collections Library, University of California, San Diego.
decided to buy a computer, he told Andrew Culver that he didn’t want to operate it himself.\textsuperscript{10} Despite the fact that he was not interested in devoting time to learning how to operate a computer, he was excited by the possibilities that computers presented in composition. In 1969, Cage said,

> What the computer seems to me to be helping with is several things: one, it’s helping us to know how we think... It’s also allowing us to do larger projects than we would ever have set out upon previously because we would have foreseen that we wouldn’t have had time to do them, but once the programming is accomplished, the computer works very quickly and enables one to think in physically larger, quantitative terms.\textsuperscript{11}

For Cage, the computer seemed to represent “abundance,” exuberance, and to a certain extent, excess. While he viewed the time it took to program the computer as excessive, the results were abundant, and in Cage’s mind, they were meant to be shared freely.

Cage was quite guarded in interviews when discussing the inspiration for computer-assisted compositions. When asked about how he came to make a piece like \textit{HPSCHD}, Cage told Kostelanetz that the project was “more or less tailor-made for computers,” by which he meant that the project was enormous in detail and time consumption. Cage explained that \textit{HPSCHD} involved “so many details... that, were one to sit down with pen, ink, and paper, it would be a project exceeding the time one could


\textsuperscript{11} Cage, “Choosing Abundance,” 15.
spend at a desk.”12 It seems that Cage was interested in using computers as a means of producing music or assisting the compositional process at least since the Diary entry quoted above. Cage actively sought a situation in which he would be able to work with computers, and was indeed interested in using the computer to produce large-scale works.

2. HISTORY OF THE COMPUTER PROJECT:

In an interview with Daniel Charles published in For the Birds, Cage indicated that he was invited by Hiller to the University of Illinois to work on a computer project. The evidence, however, suggests that Cage actively pursued university appointments in the late 1960s. Cage had been denied a visiting composer appointment at SUNY Buffalo in 1966,13 but had secured an appointment in Cincinnati for the 1966-67 school year. According to Hiller, Cage phoned him about collaborating on a computer music project14 and in 1967-68 Cage was appointed Associate Member of the Center for Advanced Study, Visiting Professor of Music, with a proposed annual salary of $14,000.15 He extended his appointment in 1968 as Visiting Research Professor in the School of Music

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13 Allen Sapp, Chairman Department of Music, SUNY at Buffalo, to John Cage, 13 April 1966, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
14 Caras and Gagne, Soundpieces: Interviews with American Composers, 235.
15 Cage’s employment contract, H. R. Snyder, “Recommendation for appointment to or change in instructional or administrative staff” (Urbana, IL, 1967) John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
for the following academic year. In a 1967 letter, Cage indicated his excitement to work again at the University of Illinois, as “they know my work there.”

It was also exciting for Cage to work with Hiller, who was already known in the late 1960s as a pioneer in algorithmic composition. Hiller’s *Iliac Suite* (1955–1956) is widely accepted as the first musical work composed with a computer. Hiller had been a member of the University of Illinois faculty since 1952. He established the Experimental Music Studio, and in 1953 organized the “first international electronic music concert in North America,” presented as part of the existing Festival of Contemporary Arts. This concert included a premiere of Cage’s *Williams Mix*, the first “octophonic electronic music composition, composed entirely with *I Ching*-determined chance operations.”

Hiller was also well known in Europe and participated in the Darmstadt Internationale Ferienkurse für Neue Musik (IFNM) in 1963, 1965 and 1969. Cage had enjoyed a Darmstadt residency in 1958 when he taught in place of Boulez who had withdrawn from the schedule with late notice. After 1958 there was an unofficial ban against Cage and the New York School at Darmstadt. According to Amy Beal, once Cage was shunned by Ernst Thomas, IFNM director from 1962 to 1980, they just invited

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16 Daniel Alpert, Dean of the Graduate School, to John Cage, 5 April 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
Hiller was one of the academics alongside Milton Babbitt from Princeton University, who taught there in 1964. An enthusiastic reviewer wrote of Hiller’s presence: “[This] indicates that perhaps an important stimulus for the future is originating in America,” and “as a result, it may be necessary for young European composers henceforth to complete their musical education in the United States” to “escape from their own stagnation.”

In addition to his relationship with Hiller, Cage’s work was known at the University of Illinois due to subsequent performances of his music at the Festival of Contemporary Arts. According to Johanne Rivest, “It is… possible that David Tudor… played some of Cage’s scores during his Lecture-Demonstration in April 1961, titled ‘The Realization of Graphic Music Material.’” In 1963, three singers and four phonograph cartridge players from the University of Illinois performed Solo for Voice 2 with Cartridge Music. Cage was not present for these performances.

In the spring of 1965, Ben Johnston invited Cage to lecture during the Festival. In addition to the lecture, Max Neuhaus performed an electronic live version of 27’10.554” for a Percussionist and there was a “very sensational performance” of the Concert for Piano and Orchestra, conducted by Charles Hamm. Cage’s “lecture” was a performance of 45’ for a Speaker, immediately followed by 0’00”. Cage’s performance of 0’00” consisted of the composer chopping and juicing vegetables, and then drinking the juice.

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21 Johanne Rivest, “In Advance of the Avant Garde.”
with contact microphones on his throat and likely on the chopping board and juicer.\textsuperscript{22} Cage’s audience and collaborators would have understood from these performances that theater was an important element of these recent compositions.

In 1967, Cage organized a \textit{Musicircus} at UIUC, an eight-hour long musical, theatrical marathon that was held in the Stock Pavillion. The participants included (among many others): Salvatore Martirano, Jocy de Oliveira (Carvalho), Lejaren Hiller, Herbert Brün, James Cuomo (and his band), David Tudor, Gordon Mumma. Norma Marder (vocalist), Ruth Emerson (dancer), Claude Kipnis (mime), Ronald Nameth (made a play of slides and films) and Jack McKenzie (coordinator).\textsuperscript{23} The event received wide press coverage and cemented Cage’s reputation as a kind of exuberant leader of the avant garde. Many of these participants were also involved in the \textit{HPSCHD} performance two years later.

In the letter quoted above, Cage hinted that working conditions in Cincinnati were not ideal: despite an appointment without obligations, Cage wrote, “they ask for things done and I agree.”\textsuperscript{24} After successfully securing the appointment at UIUC, Cage coyly wrote to Peter Yates, “Have been appointed to U. of Illinois for next academic year—no obligations, assistant and access to computer! What in Heavens Name will I do with it?”\textsuperscript{25} Cage’s comments to Yates belied the fact that he had already given the idea of

\begin{thebibliography}{99}
\bibitem{22} Ibid.
\bibitem{24} John Cage to J. R. de la Torre Bueno, 9 March 1967, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
\bibitem{25} John Cage to Peter Yates, 10 March 1967, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
\end{thebibliography}
computer composition thought, and shortly afterward had firm ideas for two projects that he intended to complete during that first year at the University of Illinois.

When Cage told Kostelanetz that the original idea was to create an “enormous project” he may have been making light of the true magnitude of the work which culminated in the *HPSCHD* event. *HPSCHD* was indeed enormous and Cage wildly underestimated the time it would take to finish the project. In hindsight it is surprising that he originally planned to finish two large projects in just one year. When Cage accepted the appointment at the University of Illinois, not only did he plan to write *HPSCHD*, but also a piece he called *Atlas Borealis with the Ten Thunderclaps*. In 1965, Cage had accepted a commission from Koussevitsky to write a work for string sextet and orchestra which would include a choral piece. This piece was referred to as the “thunderclap piece” in Cage’s correspondence and was to have been a piece in which Cage morphed thunderclap sounds with voices “reading-singing” the ten “thunderclaps” in James Joyce’s *Finnegans Wake*. In a description of the work Cage planned to do while at the University of Illinois, he made an analogy between an “egg taken out of shell, wax and string put in. Shell comes off and you have a candle.” Cage described the work for “orchestral instruments (strings only?)” that were to be “modulated some way so that the sound resembles rain (dropping on water only?)” Cage wanted to employ “various modulation means” so that the resulting work would sound like a “variety of kinds of surfaces rain falls on—parameasured of course.” The desired result for Cage was a piece that sounded like “rain with thunder (a storm).”

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26 John Cage to Alan Sapp, 5 April 1966, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
27 John Cage to Lejaren Hiller, 12 June 1967, John Cage Collection, Music Library,
The idea for this piece came from Marshall McLuhan’s son who had just finished a book titled *What the Thunder Said at Finnegans Wake*. McLuhan wrote to Cage:

He has deciphered the ten thunder claps. They are carefully coded information concerning major cultural change… The thunder is the unheeded noise made by massive accumulations of change unaccompanied by lightning (levin-leaven). Looking at your *Silence* yesterday I realized that the ten thunder claps of *Finnegans Wake* would provide a superb basis for a composition and choreography by yourself.²⁸

Cage was clearly excited by the idea and requested and received a number of taped recordings and oscillograms of thunder from meteorologists. Cage struggled, however, with the execution of the concept and also solicited advice on how to create the sounds he had in mind. A. J. Dessler, Department of Space Science at Rice University, sent Cage a description of an electronic device that might be able to make a human voice sound like thunder.²⁹ Steve Smoliar suggested using a Moog ring modulator to multiply the high-frequency sound waves of a voice and reproduce them as low-frequencies.³⁰ Neither suggestion seemed productive and the sound envelope of thunder turned out to be far too complicated to pin down with a simple “parameasurement.” In the end, it became clear

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²⁹ Department of Space Science A. J. Dessler, Rice University to John Cage, 31 January 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
³⁰ Steve Smoliar to John Cage, 1 March 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
that Cage’s vision had far outstripped the technological resources available and he was unable to complete the Thunderclap piece.

The second work Cage planned to work on while in Urbana became *HPSCHD*. In a letter to Lejaren Hiller, 12 June, 1967 Cage wrote:

2nd idea. A piece for harpsichord following a parameasurement of Mozart, then this measurement applied to a multiplicity of octave divisions (e.g. 5-43 or whatever division it was that Partch settled on), all overtone structures to be harpsichord-like. Piece to be playable on harpsichord with or without tapes, or on tapes with or without harpsichord: many tapes—at least one for each octave division. Parameasurement of Mozart concerns only melodic habits, i.e. directions, etc.31

The idea that one could create a “parameasurement” of compositional traits may have come directly from Hiller. In 1959, Hiller published an article in *Scientific American* called “Computer Music” in which he explains the kind of computer-assisted parameasurement Cage briefly described above. Hiller wrote, “From the analytical standpoint, the aesthetic content of music can be treated in terms of fluctuations between the two extremes of total randomness and total redundancy.”32 Fluctuation and redundancy in melodic materials seemed to Hiller to be mathematic attributes that could be measured by a computer along with other “structural devices characterizing various

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historical styles,” such as types and frequencies of modulations.

It would not be surprising to learn that Cage had prepared himself to work with Hiller by reading the *Scientific American* article. In the article Hiller quoted Leonard B. Meyer’s observation that “Some of the greatest music is great precisely because the composer has not feared to let his music tremble on the brink of chaos.” Cage’s aesthetic intentions with *HPSCHD* echoed Meyer’s statement. In a June 8, 1968 letter describing his latest work as he wrote “I’m willing to let the effect be chaotic.”

3. COLLABORATION WITH HILLER:

Hiller, on the other hand, was clearly familiar with Cage’s work. In a review of *Silence* from 1962, Hiller wrote for the *The Quarterly Journal of Speech*:

Cage... has always refused to do the routine and respectable, to write the

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33 Hiller, “Computer Music.”
36 John Cage to Margaret Brenker, 8 June 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
uncontroversial kind of music that gets a composer ahead. Yet, underlying the sometimes circusy and bizarre aspects of his work, there exist substantial and valuable musical ideas and innovations.  

In the review, Hiller listed aspects of Cage’s works that he found interesting, noting in particular Cage’s interest in new sound sources (emphasis on percussion, noise, prepared piano, found objects, radios, etc.); interest in new forms; “an interest in new technical means such as electronic music;” drama (scores for dance, theater, lectures, etc.); and lastly, “he is one of the few composers around today with a sense of humor. Some of his music is simply funny.”

Originally, Hiller did not anticipate collaborating with Cage during the 1967-68 school year; rather, Cage was to work with “our best programmer,” a Master’s student whose work with Cage was to “constitute his M.A.” The student was for some reason unavailable, and Hiller ended up working with Cage himself. (See illustration 3.1) The collaboration was a very happy one. Hiller recognized an affinity between what Cage had been doing with chance operations and his own “investigations of techniques of music composition by means of digital computers.” These experiments, according to Hiller, “have almost always been strongly oriented toward if not directly dependent upon

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38 Ibid.
chance procedures that in turn are implemented by random integer generating routines.”

Where Cage and Hiller’s aesthetics parted ways was in the notion of expression. Hiller wrote, “The constraints, the limits and the distributions that are imposed subsequent to random integer generation are the crucial determinants that the composer finds interesting to investigate and to manipulate for his expressive purposes.” This is an important distinction in compositional philosophy that could have been insurmountable. It seems, however, that while Hiller contributed a great deal of expertise in terms of programming and creating the tapes, the overall aesthetic of the piece is Cagean. Neely Bruce, harpsichordist for the performance, gave a talk at Atlantic Christian College in 1969 during which he discussed the similarities between Cage and Hiller:

both have a penchant for creating gigantic pieces, of great length and using enormous forces; both are not interested in improvisation, but are very interested in various types of indeterminism; both have very broad interests, which occasionally overlap; both are attracted to the harpsichord, Hiller because he likes it and has written for it before, Cage because he never liked it and he tries to come to grips with things he does not like in a positive manner; both are pioneers in experimental music; both are interested in technology; both men are well aware of the enormous

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41 Ibid.: 142.
changes technology is making on our way of life, in particular, on our art.\textsuperscript{42}

Bruce found the personal differences between Cage and Hiller much more interesting than the similarities. These differences included the fact that “Hiller likes the Romantic keyboard style while Cage dislikes Romantic music...; Hiller likes obvious, broad gestures while Cage dislikes polemics; and Hiller is marginally interested in philosophy and religion while Cage is intensely interested in them.”\textsuperscript{43} There is no evidence that these aesthetic and philosophical points of view caused any problems between the two, despite Bruce’s assessment that \textit{HPSCHD} “is the work of people with strong artistic convictions and unique personal styles.”\textsuperscript{44} In fact, in addition to the great amount of time that the two spent together in the computer lab, they seemed to enjoy each other’s company socially. Hiller claimed that the element that made this collaboration work was humor:

\begin{quote}
I found with various people, particularly with a person with as strong a personality as John’s, it would have been impossible if both of us didn’t have a good sense of humor. That makes an enormous difference. Although we were and have been different in many ways in the way we write, we find a big degree of overlap in terms of – of humor, personality, and also, really our ideas are not that far different
\end{quote}

\textsuperscript{43} Ibid.
\textsuperscript{44} Ibid.
Cage’s handmade 1967 Christmas card to the Hillers is evidence of this kind of sense of humor, but also of a true affinity for his collaborator. (See illustration 3.2)

4. PROGRAMMING THE ICHING:

After Cage’s arrival in Urbana his letters about the composition and computer work were enthusiastic. Cage included a handwritten note at the bottom of a letter to Raymond Grimalia, October 1, 1967: “Am now working with computers! Will never have to toss pennies again!” In a letter to Marshall and Enid Ginsberg, 2 October, 1967 Cage gave an update on his work in Illinois:

No mushrooms yet but lots of programming (computer): so far there are still bugs in the first program which is called ICHING: it’ll do all my chance operations, i.e. 18,000 penny tossings in a matter of seconds, interpret them as hexagrams and then analyze the distribution so that we’ll know the difference betw. it and other random processes. (!)

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46 John Cage to Raymond Grimalia, 1 October 1967, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
Although Cage was very excited about the results of the programming and was always present during the programming, he did not learn to program himself. In public interviews Cage represented himself as quite naive about the process. He joked that he had “learned absolutely nothing” except, “I learned to punch cards.” Surely Cage must have had a more sophisticated understanding of binary language, but told the interviewer that programming “apparently deals with a screen that either has some information on it or not, and if it has some then that has to go away before any more can come on it.” He seemed to find the idea fascinating and compared it to our own thought process: “I think that must happen in our heads. And we don’t know that. Because we leap from one thing to another. We make connections and forget that we go to zero before we come to the next idea.”

In his personal correspondence from Champaign-Urbana, however, Cage boasted about what little he had actually learned about programming. In a letter to Van Meter and Betty Ames, 12 January, 1968, Cage wrote “[Hiller] does all the programming for me, but I sit by and try to learn (I can now multiply 5 x 5 and get 25 in binary numbers).”

The first task that Cage and Hiller set to work on was the programming of the *I Ching* oracle. Hiller published a very detailed account of how the *I Ching* divination system works through the construction of hexagrams and how he programmed his approximation which was known as ICHING. Hiller described the mathematical complexity of the *I Ching* as “idiosyncratic,” but managed to program a “fairly literal transcription” using the assembly language SCATRE which operated on the IBM-7094.

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48 Cage, “Things to Do,” 16.
computer at the university. Hiller stressed that the *I Ching* did not produce random numbers. If it did so, “it would be pointless to program it.” The program, rather, produced integers that corresponded to the *I Ching* hexagrams, and according to Stephen Husarik, the first operation of the program produced 6,000 hexagrams, equal to 18,000 coin tosses. Husarik reported that “Cage asked the *I Ching* (manually) how it felt being subjected to a computer program and the response was enthusiastic. (Indicating abundance.)”

Ron Resch, former professor of Art, Architecture and Computer Science at the University of Illinois, Champaign/Urbana campus met Cage and became good friends with him during Cage’s tenure at the university. Resch said that for a long time he didn’t know what it was that Cage did, he just enjoyed frequent conversations with Cage on campus about art and technology. Cage enjoyed Resch’s art, which at the time included computer-generated films, geometry studies, folded paper, and metal sculptures. According to Resch, “He liked my work and said that he was telling people about me and my work in his lectures.” Resch said that he slowly learned that Cage was a composer when Cage began to ask him about computer programming. Cage asked Resch to look at the code for a program that would make “random numbers” that “was not working correctly.” Resch relates the story as follows:

I looked at the code for some long time trying to find the “error” which had brought him to my office that day… Yet it seemed to me that the random number

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50 Hiller, “Programming the *I Ching* Oracle,” 133, 37, 42.
52 Ron Resch, e-mail correspondence, March 7 2008.
generator of his program was doing exactly what it is supposed to do. It was
generating random numbers. But after some further discussion with him as to what
he was trying to accomplish, I started laughing and laughing. I was not laughing at
him as much as the whole situation struck me as a totally hilarious
misunderstanding. Who wouldn’t think that a random number generator will, in
fact, produce random numbers?

The problem, however, was that the program was producing the same set of numbers
every time he ran it. “I explained to him that if the program was started with the same
input values then it will produce the same list of ‘random’ numbers every time.” Resch’s
solution was to start with different numbers. He suggested the following:

The next time you go to the computer center to give them this program, note what
time it is; add that number to what you think is the age of the person next to you;
divide it by the parking meter number; multiply it by your estimate of the room
temperature etc. etc. Use this number as the starting point of the random number
generator and I guarantee the results will be different every time.

Resch said that Cage seemed particularly pleased by this idea and went off excitedly to
try it out.\(^{53}\)

While it would be easy to assume that the program under discussion was the
ICHING program, I find it unlikely that Cage would have referred to it as a “random

\(^{53}\) Ibid.
number generator” since elsewhere he is insistent about not working with random
numbers, consistently preferring the I Ching over other chance methods, including
printed books of random numbers which were available. Other friends/students of Cage
often used random number books, including Jackson MacLow. Resch, however,
remembers the program as a “random number generator.”

Cage used the oracle to select musical parameters according to specific questions
that Cage would ask of the material. Hiller explained: “For example, the field of 64
integers [produced by the “coin oracle”] might be split into 8 different ranges in order to
select one of eight defined choices.”54 The ICHING computer printouts were used to
make decisions about octave divisions—from five to 56 pitches per octave—as well as
the duration and pitch of each note on the computer generated tapes. According to a May
10, 1969 Chicago Daily News article, the ICHING derived divisions of the octave
“results in a potential reservoir for HPSCHD of approximately 885,000 pitches.”55 The
ICHING printouts were also used in the selection of historic sources to be used in the
solo harpsichord parts as well as in the creation and selection of visual art sources for the
performance.56 (See illustration 3.3)

5. CREATING THE TAPES:

54 Hiller, “Programming the I Ching Oracle,” 142.
56 For a thorough description of the programming, please see one of a number of
technical reports that Hiller published including “Some Compositional Techniques
Involving the Use of Computers” in Music by Computers, Heinz von Foerster and James
Beauchamp, eds. (New York: John Wiley and Sons, Inc., 1969) 71-83; an unpublished
technical report is also in the Lejaren Hiller Archives at the University at Buffalo. See
also the Duckworth dissertation.
The second task was to produce the microtonal tapes. The resulting general program was called HPSCHD and was programmed in FORTRAN by Hiller. According to Cage, HPSCHD utilized “eight to twelve” subroutines programmed by others including Laetitia Snow. Cage had very specific ideas about what he wanted the computer tapes to sound like. He explained that he wanted the tape sounds to, in some way, mimic the sound of the harpsichord, and that the harpsichord sound “included a very brief attack, followed by a decay which was itself characterized by a curve.” Cage and Hiller tried to program what he described as a “coincidence between this decay and a secondary attack of lesser intensity, followed by a weaker, second delay,” but they were unable to program the synchronization between the two attacks. Cage again mentioned time and computer expenses as limiting factors. Cage described how they approached working to produce tones with the simple curve of the first delay:

We inscribed it into one of the I Ching charts… But the curve would only fit into a part of the chart, and when the I Ching gave other numbers in other parts of that chart, we had to ignore them. On the other hand, any number appearing at the bottom of the diagram would have an effect on the variations. We could thus end up with very different versions of the same attack. It was interesting.57

The variation on the attack gave Cage and Hiller the idea to try and program ornaments, that would “improve the connected sounds,” but despite considerable effort, they were unable to do so. In 1968, Cage told Austin, “It ought to be, in the end—and as I told you

57 Charles, For the Birds, 142, 43.
today, we haven’t heard a single sound—not only micro-tonal and micro-durational but micro-timbral. A micro-\textit{Klangfarben} melody, huh? (laughter).”\textsuperscript{58} When Cage and Hiller tried to combine these preliminary programs with the programs that controlled the sound production onto the actual tape, they exceeded the processing capacity of the computer and they had to abandon these early plans. Cage explained, “All in all, we could only integrate a very few chance operations—much less than you would believe.” On the other hand, he continued, “we achieved a higher level of complexity than had ever been reached. I doubt that anyone had ever heard the result of 52 different divisions of the octave simultaneously.”\textsuperscript{59} The final tapes were made from various sawtooth waveforms, which according to Husarik is “the basic waveform of plucked strings and thus the closest thing to a harpsichord-like sound.” The Illiac II output tapes were three minutes long and were later spliced together to make the twenty-minute long tapes.

Another level of complexity that exceeded the ability of the computer was the production of simultaneous or overlapping sounds. Cage said, “Rather than having a line of sounds which would go from one sound to the next, one could have a series of sounds which would overlap in various ways.” Despite the fact that Cage would have preferred the multiplicity of sounds created by the computer in each tape, “this would bring about complexities in programming,” Cage explained, which “seem excessive.” The solution was to let each tape consist of a succession of tones and to let the overlapping take place in “the natural overlapping of one tape on another.” The issue of multiple, simultaneous sounds in the tape parts was significant to Cage: “it is this fact of sounds overlapping that was, in the case of fine harpsichord playing, productive of a musical experience.

\begin{itemize}
  \item \textsuperscript{58} Austin, “An Interview with John Cage and Lejaren Hiller,” 17.
  \item \textsuperscript{59} Charles, \textit{For the Birds}, 143.
\end{itemize}
What is productive of a mechanical experience is the absence of overlapping.”\(^{60}\) This kind of artistic compromise necessitated by the limits of computer technology was typical of Cage and Hiller’s work on the HPSCHD project. In short, the history of programming for HPSCHD is a history of Cage and Hiller having to constantly amend and simplify their creative ideas to fit the limits of the computer, especially the computer’s limited processing ability and memory available.

In order to shape the melodic lines of the tape parts, goals were chosen, and a separate subroutine was written for this task. Cage explained in his interview with Austin that one must start on a given note, but then, “once you’re on that note, where is it that you’re going?” \(I\) Ching processes were employed to decide how many notes were to be included between goal notes. These goals were not to be confused with cadence points. Cage emphasized that goals were not established in order to be stressed, as in a full or half cadence, but rather “the goal was there simply in order to get the machine to work.”\(^{61}\)

(See illustration 3.4)

Yates was hired to write the jacket notes for the Nonesuch recording which paired HPSCHD with Ben Johnston’s String Quartet No. 2. Drafts of Yates’s work and Cage’s corrections clarify much of the construction of the tape parts. In an early draft, Yates wrote that the tapes are, “equal-tempered scales of successively 5 tones in the octave to 56 tones in the octave...”\(^{62}\) Cage explained that the tapes are not equal-tempered, and wanted the following clarification to be included in the jacket notes:

\(^{60}\) Husarik, “John Cage and Lejaren Hiller: Hpschd, 1969,” 11. All quotations in this paragraph have been taken from this source.


\(^{62}\) Peter Yates, \(HSPCHD\) liner notes, manuscript, Peter Yates Papers, Mss 14, Box 23, Folder 5, Mandeville Special Collections Library, University of California, San Diego.
In order not to have equal temperament, we made a sub-routine DEVIA. This takes the “field” of a single tone (i.e. 1/2 way up to the next tone, divides it by 64; 1/2 way down to the next note, divides it by 64) and lets I Ching decide which of the 129 (the equal temperament is 0, the deviations 128) is to be used.\(^\text{63}\)

In a reply to Cage’s corrections, Yates wrote: “The DEVIA routine, though of interest to specialists, does not alter the essential difference between HPSCHD & [Ben Johnston’s String Quartet], that one is directly related to the overtone series, the other not.” Yates decided to omit such information in the liner notes because, “the description, however curtailed, is not brief, and the listening effect probably undetectable.\(^\text{64}\) Yet, Hiller and Cage both claimed that the \textit{HPSCHD} parts were indeed related to the overtone series, in a very loose sense. In his research for the notes, Hiller told Yates that “the piece is, in a vague sense, in F.” Cage clarified this statement by saying that the tapes are “in F (vaguely) since that is the lowest tone we called for.” The reason for using F as the fundamental of the computer generated tapes was because the lowest note on the Hubbard double (harpichord) was an F. “The dice-game parts of the solos,” Cage clarified, “are of course in G.”\(^\text{65}\)

Yates described the composite sound-image of harpsichord parts and computer tapes as follows:

\(^{63}\) John Cage to Peter Yates, 4 March 1969, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
\(^{64}\) Peter Yates to John Cage, 8 March 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
\(^{65}\) John Cage to Peter Yates, 4 March 1969, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
The patterns continually change, the more redundant being more clearly differentiated in listening, the effect rather like individual trees merging into a forest. Other computer-formalized programs, for note sequence, time (in units), successive events, melodic “goals” and types (diatonic, chromatic, chordal arpeggiation), volume, and dynamics, are similarly intermixed.\footnote{Peter Yates, notes for \textit{HSPCHD} liner notes, undated [1969] Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.}

This also, according to Cage was not an accurate description. Cage wrote that in the harpsichord parts, “the melodic ‘goals’ have no cadences or half cadences. They are therefore not emphasized or easily perceived.” The goals seemed necessary “in order to give the computer something to do,”\footnote{John Cage to Peter Yates, 4 March 1969, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.} but do not function to shape phrases as we would expect of music from the common practice period.

Despite the fact that the resulting computer tapes were far from Cage’s initial aural concept, the results were still quite exciting for the late 1960s. Computer programmer Laetitia Snow described her reaction to these tapes in a letter to Cage October 28, 1968. She opened her letter with the question, “What has happened to \textit{HPSCHD}?” When she had left Jim Cuomo and others were very busily preparing the tapes and she thought that the few of them she heard “sounded great by themselves.” Snow added, “it was most thrilling, as a matter of fact, to hear real sounds coming out of the end of that long process—I don’t think I’ve ever been quite so thrilled with any of my
various computer projects.” William Brooks wrote that the tape sounds have a “remarkable homogeneity,” and that “they all intersect with the live music both timbrally, structurally—based as they are in repetition—and physically (solo I is a tape part).”

While the programs ICHING and HPSCHD are the most easily identifiable and central to the piece, there were a large number of other programs and subroutines that were necessary to make the project work.

6. PROGRAMMING “DICEGAME” AND MISCELLANEOUS SUBROUTINES:

Snow was hired in December 1967 by the University to assist Cage for 200 hours worth of work at $5.00 an hour. She wrote the DICEGAME subroutine in FORTRAN, again using the computer facilities on campus. It was Hiller’s idea to employ the Musikalisches Würfelspiel in this work, although it was Cage’s original intent to use the computers to analyze Mozart. Hiller had been familiar with the Dice Game for some time as one of his colleagues, D. A. Caplin, had programmed the Dice Game in the 1950s and described his work in a letter to Hiller in 1960. DICEGAME generated the material for five of the seven harpsichord solos, based on the spurious Mozart Musikalisches Würfelspiel (K. 294d/K. Anh. C 30.01). The Musikalisches Würfelspiel (musical dice game) is constructed in such a way that by rolling dice, one can piece together a minuet,

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68 Laetitia Snow to John Cage, 28 October 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
measure by measure. The DICEGAME program was a variation of the game that was informed by the *I Ching* and produced a piece that was 64 measures long and was to last one minute. For each of the harpsichord parts composed in this way, the DICEGAME was repeated 20 times in order to match the length of the computer generated tapes.

7. NONESUCH RECORDING:

One final computer program, KNOBS, was created in connection to *HPSCHD*. (See illustration 3.5) KNOBS was designed to produce a printout to accompany the Nonesuch recording of *HPSCHD* released simultaneous with the performance. This printout is a set of instructions to manipulate the controls on the listener’s home stereo in order to create a unique and interactive listening experience. (See illustration 3.6) According to Cage, each record was to be accompanied by a unique KNOBS printout “which will permit a listener to manipulate a stereo playback in twenty different ways (altering volume, tone controls, and channels)”\(^{72}\) on their own personal record player. The idea behind the KNOBS program and the resulting printout was to add a performance element to the recording that would be unique to each listener and listening experience. Cage’s attitude toward recordings to a certain extent mirror those of Glenn Gould who was contemporaneously writing about the unique possibilities presented in recording technology. As an artist, Gould would allow the technology itself to influence his musical interpretations, and is one of the first artists to think critically about deferring

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\(^{72}\) John Cage to Daniel Alpert, 26 September 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
As a listener, Gould believed in flexibility and control. B. W. Powe wrote in connection to Gould, “In a room (anywhere, in any city or town), with a stereo hi-fi, speakers, the controlling volume and balance on an amplifier and receiver, we can find place to move.” There is evidence that Cage, like Gould, had been struggling with the issue of recordings and the difficulty of electronic music in general as early as 1962.

The following interview with experimental, computer music composer Roger Reynolds is instructive. Cage told Reynolds that the most important thing to do with electronic music was to “somehow make it theatrical, and not through such means as turning the lights out, but rather through introducing live performance elements. That is to say, people actually doing things.” Reynolds asked if encroaching the “traditionally ritualistic atmosphere” of the public concert would help, by which he meant doing away with the separation between audience and sound sources, set seating arrangements, formal clothing, and so on. Cage agreed, but clarified that he also meant that there should be “actual, visible manipulation of the machines… the distinct giving to the audience of the impression that something is happening then which is unique to that

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73 “Technology, in my view, is not primarily a conveyor belt for the dissemination of information; it is not primarily an instantaneous relay system; it is not primarily a memory bank in whose vaults are deposited the achievements and shortcomings, the creative credits and documented deficits, of man. It is, of course, or can be, any of those things, if required, and perhaps you will remind me that ‘the camera does not lie,’ to which I can only respond, ‘Then the camera must be taught to forthwith.’ For technology should not, in my view, be treated as a noncommittal, noncommitted voyeur… I believe in ‘the intrusion’ of technology because, essentially, that intrusion imposes upon art a notion of morality which transcends the idea of art itself.” Glenn Gould, “Music and Technology,” in The Glenn Gould Reader, ed. Tim Page (New York: Alfred A. Knopf, 1984), 354-55.

particular experience.” Cage explained, “If the audience, if any of us, feel that what is being played at that time can be played at any other time, and result in the same experience, then a kind of *deadliness* falls over everyone.” In an effort to avoid that kind of musical experience, Cage and David Tudor discussed the possibility of “resolving not to make any records in the future, unless they result in actions which could not possibly be made otherwise.”

Cage’s issue with records was that they “make people think that they’re engaging in a musical activity when they’re actually not.” Cage’s antipathy to recordings is thoroughly discussed in David Grubb’s dissertation *Records Ruin the Landscape: John Cage, The Sixties, and Sound Recording*. Grubb’s title came from the following exchange:

Daniel Charles: “Records, according to you, are nothing more than postcards . . . “

John Cage: “Which ruin the landscape.”

It seems that the KNOBS program was an attempt to encourage people to actively engage in the listening experience.

The instructions on each KNOBS printout include the following:

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75 Cage and Reynolds, “Interview with Roger Reynolds,” 49.
The unique set of results given below were generated by means of a program run on the CDC-6400 computer located at the State University of New York at Buffalo in April, 1969. The values listed in the column labeled (time) represent 5 second increments in elapsed duration from the beginning of the composition. The numbers in the six other columns are randomly generated settings of the volume control and the treble and bass controls for the left and right channels, respectively, of your preamplifier, whenever 0 appears, turn the knob in question full left. Whenever 4 appears, turn the knob full right. Whenever 1, 2 or 3 appears, select the appropriate intermediate position. These three intermediate positions should be equally spaced between the extremes. If your preamplifier has only one volume control and balance control, interpret (ch. 1) as the volume control and (ch. 2) as the balance control. Good luck. – – – John Cage and Lejaren Hiller

At the time of the record release, the interactive feature of the KNOBS printout was hailed as a “quite extraordinary feature.” Record reviewer, Eric Salzman, elatedly reported that “Right in the safety and comfort of your own living room you can “perform” *HPSCHD* by altering the levels, balances, basses, and trebles of both channels. I would say not only that you *can*, but you *must*.” Salzman added that the recording “really only makes sense as a participation piece—the first of its kind!” He noted that not only controlling the knobs “produces a sense of involvement,” but that the random, constant shifts that your amplifier can contribute are absolutely necessary.” Salzman

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summed up by writing that each KNOBS printout is different and that if you are terribly clever you can try to follow yours to the second. “Or, for a change, borrow your neighbor’s. Or just improvise; Cage wouldn’t mind, I’m sure… The essential performance of the Cage-Hiller is, of course, your own.”

The KNOBS printouts created the impression that each listening experience was unique, but there was another aspect to the recording process that Cage appreciated beyond the “performability” of the record, namely, the ability to overlap sounds in the studio. Despite the fact that overlapping sounds were impossible to produce on the computer-generated tapes, it was possible to overlap the individual tapes in the recording studio. In an interview with Husarik, Cage said that he was very pleased with the superimposition of parts that made up the recording. Cage found the process of adding layers of tapes fascinating and claimed that he heard the piece progress through “what seemed like chamber music and then what seemed like orchestra music, and then evolve into something with which you are completely unfamiliar.”
The KNOBS printout seemed to enable Cage to overcome a philosophical difficulty he had with the uniformity of the listening experience, and the ability to superimpose parts on the recording seemed to be a way to overcome the inability of the computer to produce more sophisticated tapes.

According to David Eisenman, by the time the record was released, Hiller had run off at least 12,000 different printouts after it was decided that each HPSCHD record was to have its own unique set of control instructions created by the KNOBS program. Each

79 Ibid.
of the printouts has a number at the top, and according to Eisenman, Nonesuch created a “great scandal” by making “thousands” of copies of printout number 10929. Eisenman said,

What happened quite clearly is that it sold better than anyone had ever guessed…. clearly Jerry [Hiller] produced several runs of the computer printout, but on the same computer programmed the same way. Between returns and everything else they gradually ran out of original printouts and, you know, the equipment was changing and... my guess is they went ahead and xeroxed one and then stuffed it into many [records.] That’s clearly what happened.81

This “scandal” is little known, and Cage enthusiasts still enjoy the idea that one can “perform” the recording.82 In fact, it was perhaps the advent of Ebay that allowed Cage enthusiasts and scholars like Eisenman to notice this discrepancy. Occasionally, these recordings are listed on Ebay, and an important part of the description is that the “KNOBS” printout is included with the number of the printout.

8. CAGE’S POSITIVE VIEW OF TECHNOLOGY:

In March of 1969, Cage was busily organizing tape players, amplifiers, harpsichord shipping, slide projectors and all of the other equipment needed for the May performance. HPSCHD was a piece that had taken him longer than he had ever expected and had personally cost him a great deal of money. Cage and Hiller had grossly

81 David Eisenman, interview with the author, 29 June 2006, Champaign, IL.
82 Ibid.
underestimated the amount of time it would take to finish the project. In September of 1967 Cage wrote that “Jerry Hiller’s estimate of the computer time I will need is ten hours,” and that the cost for computer time was $130 an hour. The estimate was far short of the actual time needed to complete the work. (See illustration 3.7) In a letter to his publisher, Cage wrote that upon delivery of the parts and tapes—an entire year after the expected completion date—that he had already spent $5,000 from his personal funds and expected to spend another $5,000 on performance expenses; the University had spent several thousand dollars for computer use. In 1968 Cage mentioned that he had spent ten months working on HPSCHD, which was not yet operational, “which is one month longer than I spent on the Music of Changes, or on Williams Mix, or any other piece that took me a long period of time.” According to Eisenman, Cage continued to pay off HPSCHD expenses for quite a while after the event was over. Eisenman recalled Cage mentioning half a year later that he was still paying off the costs of the event. Even with private contributions to off-set the expenses not covered by the University of Illinois, the

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83 Letter to Dr. David Pines, Physics Department at the University of Illinois, and Cage adds after the description of the expense: “I’d be very grateful if some arrangements could be made to pay for this.” 28 September, 1967, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.

84 John Cage to Walter Hinrichsen, President C. F. Peters Corporation, 24 March 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois. In a draft of a letter to Dean Alpert [undated, but likely spring of 1969] Cage indicated that he had spent over $4,000 of his own personal funds to pay student workers and other expenses before the HPSCHD performance, and that the final performance expenses were as yet still unknown. He requested that monies earmarked for HPSCHD work by the Research Board be transferred to a separate fund created to cover performance fees and expenses. John Cage Music Manuscript Collection, Music Division, New York Public Library, New York, New York.

85 Kostelanetz, Conversing with Cage, 77.
performance did not break even. Eisenman said, “Cage felt personally responsible for that. So he quietly was paying it off.”

In an early draft of the Nonesuch jacket notes, Yates insinuated that the computer did the bulk of the work. Cage’s reaction seems to indicate that he was deeply hurt by this:

I have never spent so many months on a single piece. I am still working on Solo IV. I am also working on the assembling of all the instruments and equipment. My shock of a week or so ago came from the fact that I was nearly blind with work on something that had already been presented easily, so to speak without lifting a finger. I think you would have sympathized a bit had you known what I was doing. Or, well, let’s forget it.

Despite Cage’s amazement over the amount of time it took to complete the work and his frustrations over costs, problems with copyists, poorly translated parts, and copyright problems, Cage maintained his optimism regarding the possibilities of computer technology. In a letter to Antoinette Vischer March 9, 1969 Cage wrote that all of the elements of the piece, including the visual, meet “in the computer which has made it possible to explore the smaller and the larger, the distances.”

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86 Eisenman interview.
87 John Cage to Peter Yates, 4 March 1969, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
There was something compelling for Cage about the time involved in the creation of *HPSCHD*, as opposed to conceptualist works such as *Variations IV* (1965). The precise nature of programming and the meticulous attention to detail fascinated the composer who had become used to using chance operations. Cage explained in a letter of 18 January, 1968:

> Quite a change from indeterminacy. The computer is like that princess in the story who was sensitive to a pea under the mattress. Everything has to be specified exactly, and there are a number of ways of annoying the machine: it replies with Fatal Error, or Protect violation (this is = to No Trespassing). This occupation for me is opposite to indeterminacy in the sense that fungi were opposite to chance operations.\(^8^9\)

Not only was the amount of time that it took to produce such a subroutine interesting to Cage, but the nature of the program as a reusable product was fascinating, and in the same interview he waxed poetic about the nature of the computer subroutine. Cage said that the “work that goes into subroutines gives it the character that, I think, chords had for composers in the past.” He meant this in terms of identity and property, in that chords do not belong “to one person and not to another.” So a computer routine, once written, is “like an accomplishment on the part of society, rather than on the part of a single individual.” Like a chord it can be slightly varied, just as chords can be altered, to produce widely varied results. Cage theorized that the logic of a routine, once

understood, would generate other ideas beyond the one embodied in the original
programming. “This will lead, more and more,” Cage surmised, “to multiplication of
music for everybody’s use rather than for the private use of one person.”

The creation of something utilitarian and universal was, of course, central to Cage’s
utopian, anarchic philosophy, influenced particularly by his friends Buckminster Fuller
and Marshall McLuhan. Cage clearly viewed the computer as a neutral tool—not
belonging to anyone—and the subroutine as an empty structure. In a 1969 interview with
Richard Friedman, Cage envisioned “some utopia that I hope we’re going to that we
would have all the advantages of technology with seemingly no presence of it.” This
prescient view of Cage’s was important partially because of the optimism he inherited
from Fuller about technology’s ability to redistribute wealth and tackle ecological issues.
The anarchistic utopia that Cage envisioned was impossible without technology and his
thinking in this direction is influenced particularly by Fuller’s very optimistic about the
potential of technology in the distribution of the world’s resources. This is a somewhat
ironic view in light of the enormous programming expenses that *HPSCHD* accrued.

Even more important than his optimism, however, was Cage’s view that technology was
an essential element in societal “enlightenment” in the Zen Buddhist sense, and general
“mind change” in Cagean terms. This is what Cage meant in his 1969 article, “Art &
Technology,” when he wrote, “The purpose of art is not separate from the purpose of

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90 Kostelanetz, *Conversing with Cage*, 77-78.
Archives Preservation & Access Project* (1969); www.pacificaradioarchives.org/pdf/
92 According to Cage, Fuller thought that the current distribution of goods between the
“haves” and the “have nots,” which was “nearly fifty-fifty” in 1970, would by the year
2000 be completely evened out. See Cage and Nyffeler, *You Must Take a Global Point
of View: John Cage About Revolution, Welfare and Cultural Changes*. 
Cage’s purpose for art and technology was in alignment with classical anarchist thought. To borrow the words of Bakunin, the goal of the classical anarchist was the “full and definitive abolition of classes, the unification of society, the economic and social equalization of all human beings on earth.” Anarchic thinkers since the nineteenth century were concerned with the problem of necessity, and like Fuller and Cage, anarchist Murray Bookchin imagined that society’s potential to fulfill human needs lies in the potential of technology. In his work, *Post-Scarcity Anarchism*, Bookchin called this a “technology of abundance.” While postmodern thinkers tend to be clearer about the negative aspects of technology—especially the vast potential for manipulation through mass media—Cage (along with Bookchin and pre-1970 Fuller) emphasized the liberatory possibilities of technology. Bookchin’s work attempted to specifically address questions concerning the material and spiritual potentials of technology, as well as the ecological, organic and humanist issues that were central to utopian/anarchic thought in the 1960s.

Cage shared these concerns and preoccupations with anarchy and technology, and these are the questions that Cage seems to imbed in *HPSCHD* with the use of the computer as a sound source and with the foregrounding of visual images evocative of

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95 This point of view was far from doxic in the 1960s; other contemporary writers subscribed to a dystopic vision of a technological future. Jacques Ellul, for example, in his work *The Technological Society*, (1964) wrote about technology’s potential to enslave and dehumanize.
technology. With *HPSCHD*, Cage attempted to depict a future “when technology would eliminate the realm of necessity entirely.”\(^{97}\) In the 1969 Friedman interview noted above, Cage asserted that societal change was possible. According to Cage, this change is only possible “through changing the global mind, which is a mind because of the technology, because of the central-nervous-system extension.” The result would be what “one might call the equivalent of ‘enlightenment utopia.’ And in the past, we have thought that ‘utopia’ was a lovely dream but impractical, and I think our technology is now making it practical.”\(^{98}\)

Cage and Fuller were not alone in their rose-colored vision of a technological future of abundance. Bookchin wrote, “After thousands of years of torturous development, the countries of the Western world (and potentially all countries) are confronted by the possibility of a materially abundant, almost workless era in which most of the means of life can be provided by machines.”\(^{99}\) Bookchin, Fuller, and Cage were among a number of thinkers excited about the liberatory potential of technology—not only in terms of our physical needs and well being, but also politically and spiritually.\(^{100}\) In regards to political liberation specifically, Kostelanetz coined the term “technoanarchism” to describe the use of technology to advance anarchistic ideals. For Kostelanetz, Cage, McLuhan, Fuller and others, the answer to the current issues—pollution, overpopulation, dehumanization, poverty—was not less technology, but more.

Cage was eager to stress the potential of technology and global welfare in each of his interviews that promoted the Illinois *HPSCHD* performance. In fact, Cage was more

\(^{97}\) Ibid., 92.  
\(^{98}\) Cage and Friedman, “A Conversation with John Cage.”  
\(^{100}\) Ibid., 86.
likely to discuss Fuller and McLuhan than he was the compositional techniques used to create the piece. In a 1967 *Newsweek Magazine* article on Cage and his work in progress at the University of Illinois, global politics and technology are at the heart of the discussion. Cage told *Newsweek*, “Our proper work now if we love mankind and the world we live in… is revolution.” The reporter found it necessary, in the light of American casualties in Vietnam and the burgeoning counter culture, to clarify Cage’s statement:

> Cage’s revolution is the core of a new humanism and social concern that is coming out of the esthetic avant-garde. This revolution has nothing to do with guns or even ideology—it has to do with the proper use of the vast technologies that make it possible to analyze a thunderclap or a faulty society.\(^{101}\)

Cage’s techno-anarchism was not a radical assault on the foundations of our society as much as an extension of the emancipation movement started in the Enlightenment period. Following McLuhan’s assertion that we are no longer separate from our environment, Cage claimed that “new art and music do not communicate an individual’s conceptions in ordered structures, but they implement processes which are, as are our daily lives, opportunities for perception (observation and listening).” This is the revolutionary,

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liberatory, and empowering aspect of this new art. According to Cage it is a “shift from life done for us to life that we do for ourselves.”\textsuperscript{102}

In short, Cage’s interest in technology is humanistic, and the use of technology in his art was designed to enhance a human experience. In his personal notes on Cage, Eric Mottram wrote,

\begin{quote}
Now we have the technical means for producing this music, to produce the music of the Zen adept: the life of no possessions and process: life as composition of and participation in group or solitary games which make us aware of the process... and this is the image of the viable city.\textsuperscript{103}
\end{quote}

After decades of computer science and astonishing leaps in technology, the utopian ideals of Fuller and Cage, and the optimistic description of Mottram’s “viable city” seem sadly naive. Michael Eldred agrees, and in fact asserts that in light of Cage’s deep understanding of Eastern philosophies, “it comes as a surprise and disappointment to find him, later in life, naively believing in technological progress as a cure-all for the ills of humankind.” Eldred claims that Cage’s “adherence to the viewpoints of the American technological Utopian, Buckminster Fuller,” amounts to nothing less than “an irrepressible optimism bordering on simple-mindedness.”\textsuperscript{104}

9. CONCLUSION:

\textsuperscript{102} Cage, “McLuhan’s Influence,” 170.
\textsuperscript{103} Manuscript, Eric Mottram Papers, King’s College Library, London.
Cage successfully created in *HPSCHD* what he admired in the philosophy of McLuhan and Fuller. *HPSCHD* was a picture of the potential abundance connected to technology, and an illustration of a techno-anarchic society. Yates described *HPSCHD* as perhaps “the most elaborately defined sound composite so far achieved by deliberate formal composition.” He went on to say that the work is neither “classic” nor “romantic.” Rather it is “as free of the conventional indices for analysis as of the customary signals for emotion: the esthetic equivalent of an experiment in pure research.”

The translation of the technology from the utopian art space to a utopian social order has clearly been less successful. While Cage’s prediction of a future with increasingly invisible technology has come true, the distribution of resources that Fuller imagined would accompany such technological progress has become, if anything, less equitable since the late 1960s. Cage also foretold technology that would be increasingly essential to everyday life, but did not imagine that this reliance on technology would fail to create a general social order of individuals devoted to living “without a conductor.”

Cage had mentioned in a 1967 letter to Hiller, “What I hope to discover while at [Urbana] is how to get the computer to make my work more difficult, take more time to accomplish.” It’s hard to know exactly what Cage meant by this cryptic line. Perhaps he is reacting in part to certain critics who found his compositional work as lacking in

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105 Peter Yates, notes for *HSPCHD* liner notes, undated [1969] Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
106 Cage and Friedman, “A Conversation With John Cage.”
real “work.” In a review of *Silence*, John Hollander wrote that Cage’s career as a composer lacked “a certain kind of hard work.” He clarified that the work he meant was “not the unbelievably elaborate effort, merely, of planning, arranging, constructing, rationalizing (however playfully or dubiously); not the great pains of carrying off a production, but something else.” What Hollander desired to see in Cage’s work was “that peculiar labor of art itself, the incredible agony of the real artist in his struggles with lethargy and with misplaced zeal, with despair and with the temptations of his recent successes, *to get better*.\(^{108}\)

It is doubtful, however, that Cage would be responding to this kind of critique with a piece like *HPSCHD*. Perhaps the following is a more reasonable explanation of Cage’s motivations to take on such a huge project: Cage understood that there is value in the struggle, value in overcoming the difficulty, and working patiently through large units of time (in this case, years!). While his letters from this time may coyly boast of being able to “multiply 5 x 5 and get 25 in binary numbers,” there was something deeper about the patient work associated with the programming that stretched Cage. In fact, when asked about Cage’s influence, composer William Duckworth replied that Cage’s real influence was “the instilling of an understanding that dedication, and that commitment of time to what you believe in, is of the utmost importance.”\(^{109}\) Although Cage stayed dedicated to the *HPSCHD* project to the bitter end—two long years after his wish that computers would make his work “harder”—the work did not convince him of the value of working

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with computers. The experience was clearly frustrating and stressful. Hiller told Austin in a June 20, 1968 interview that they still had to make all of the tapes before September 1, as ILLIAC II, the computer with which they generated sound, was scheduled for dismantling.\textsuperscript{\textit{110}} Cage said, “The experience of making \textit{HPSCHD} was so time and energy consuming that I have since steered clear of institutions and the use of comparable technology.”\textsuperscript{\textit{111}} Working with the computer made this piece “difficult” to such a degree that Cage did not use the computer as a compositional tool for another sixteen years.\textsuperscript{\textit{112}}


Illustration 3.1. Hiller and Cage working on *HPSCHD* with the ILLIAC II system (1968). The *Experimental Music Studio at the University of Illinois*, http://ems.music.uiuc.edu/ems/articles/battisti.html
Illustration 3.2. “HOW TO CUT SOMEONE IN HALF AND THEN PUT HIM BACK TOGETHER AGAIN,” John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
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Illustration 3.6. “Program (KNOBS) for the Listener Output Sheet No. 311.” Author's collection.
Illustration 3.7. John Cage “Note-O-Gram” to David Eisenman, January 18, 1968, indicating that HPSCHD would not be ready in time for the March 11, 1968 concert for which it was originally intended. Private collection of David Eisenman.
CHAPTER 4: THE PARTICIPATORY POLITICS OF *HPSCHD*

Society, not being a process a king sets in motion, becomes an impersonal place understood and made useful so that no matter what each individual does his actions enliven the total picture. Anarchy (no laws or conventions) in a place that works. Society’s individualized.¹

—John Cage, in *Diary: How to Improve the World (You Will Only Make Matters Worse)* 1967

In “Composition as Process” (1958) Cage wrote about changing the “technology of the place where audience and players meet, or the interaction of performer and audience.” He wanted to create a situation that highlighted “their mutuality as a single participatory action.”² Since Cage viewed the use of technology in *HPSCHD* as facilitating a coming together of performers and participants within a utopian space, a discussion of the politics of *HPSCHD* is necessary. The technology functioned partially to facilitate a separation of performers and sound sources within the space, and this idea is central to Cage’s program. In “Composition as Process” Cage wrote:

This separation allows the sounds to issue from their own centers and to interpenetrate in a way which is not obstructed by the conventions of European

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¹ Cage, *Diary: How to Improve the World (You Will Only Make Matters Worse)*, 14.
² Cage, “Composition as Process,” 39.
harmony and theory about relationships and interferences of sounds…. The musical recognition of the necessity of space is tardy with respect to the recognition of space on the part of the other arts, not to mention scientific awareness. It is indeed astonishing that music as an art has kept performing musicians so consistently huddled together in a group…. the further separation of performer and audience will facilitate the independent action of each person, which will include mobility on the part of all.³

The idea of “interpenetration” and multiple centers is central not only to the philosophy of deconstructionists such as Derrida, but also to the tenets of Zen Buddhism and anarchic political theory. Cage’s claim that *HPSCHD* creates an opportunity for multiple centers to “interpenetrate” is one of the elements that seems to secure the work’s position as anarchic as well as postmodern. Indeed, the postmodern and the anarchic seem to go hand-in-hand. Both rely on a profound questioning of authority, whether that authority is the “grand narrative,” the government, the authority of the signifier/signified relationship, or the stability of the centered Being. Cage seemed to understand anarchism as a *doctrine*, but was not part of a “movement.”⁴ Anarchism as a political philosophy has a certain flexibility that lends itself to addressing a number of global and social ills and Cage exploited this flexibility. Yet, its lack of definition and its malleability to suit almost any situation is also its downfall. Anarchy has never failed because it has never been tried. It has never been tried because it just isn’t practical.

In this chapter, I address the issue of the participatory politics embedded in the

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³ Ibid., 39-40.
⁴ See Brooks, “Music and Society,” 214.
First, it is important to understand the specifically American anarchic thought of the 1960s and Cage’s connection to thinkers such as Thoreau; second, an analysis of participation as central to the creation of an anarchic art work is necessary to an understanding of HPSCHD; and finally, it is important to understand the contemporary critique of Cage’s social philosophy as naive and self-serving in light of significant social unrest in the late 1960s, especially on university campuses across American.

Increasingly, Cage has been the subject of a number of excellent studies on music and politics. Rob Haskins clarified Cage’s understanding of “anarchy” in his 2006 paper read at the American Musicological Society meeting in Los Angeles, “‘Living Within Discipline’: John Cage’s Music in the Context of Anarchism.” Haskins’s work on Cage and anarchy is especially useful because he narrows the wide conglomeration of contingent beliefs that are often lumped under the label “anarchy” to a definition with which Cage would have been comfortable. Haskins based this study on a reading of the anarchic works that Cage knew. Anarchy, for Cage, was not necessarily “political disorder” or only “absence of government” but, according to Haskins, best explained by the Oxford English Dictionary’s second definition of the word: “A theoretical social state in which there is no governing person or body of persons, but each individual has absolute liberty (without implication of disorder).” The idea that the individual in Cage’s anarchy is disciplined and non-obstructive separates his definition of anarchy from the pop culture, punk definition which focused on obstruction and disorderly conduct.

William Brooks’s chapter in *The Cambridge Companion to John Cage*, “Music and Society,” discusses Cage compositions that can be viewed as anarchic “agit-prop,” focusing specifically on *Credo in Us* (1942) and *Lecture on the Weather* (1975). Both of these pieces employ a text and both are theatrical. In *Credo in Us*, Cage scored for a phonograph record of “some classic: e.g. Dvorak, Beethoven, Sibelius, or Shostakovich,” and Brooks pointed out that Cage is interested here “not in sound *per se*, but in parody.”*Lecture on the Weather* uses a text that is unambiguously critical of the United States government. Brooks noted the obvious differences between these pieces and “the open Cage, the joyous observer of all around him, defender of the unexpected.” Yet, Brooks continues to draw connections between these overtly political works and others that are connected to anarchic thought (*Song Books*, 1970), the anarchic ideals of “non-obstruction” and “interpenetration” (*Concerto for Prepared Piano and Orchestra*, 1951-52), and works that model an anarchic environment (*Musicircus*, 1968).

Ian Pace’s article “‘The Best Form of Government…’: Cage’s Laissez-faire Anarchism and Capitalism” points up a number of alarming inconsistencies in Cage’s political philosophy. Pace is writing in reaction to scholars such as J. Peter Burkholder who think that Cage’s music “is far more talked about or written about than played, and for good reason: his thinking is far more interesting than his music, which (by and large) need never be repeated, once played.”* Pace’s point is to convince his reader that Cage is *not* more interesting as a philosopher than as a composer: “his philosophies, political and aesthetic or otherwise, are relatively half-formed, woolly, riddled with contradictions and

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rather self-serving, whereas his compositional work is of major significance.”

Pace contends, perhaps rightly so, that Cage’s anarchism is a bankrupt ideology. Yet, despite these excellent studies, there is still much to say about Cage’s politics and how his politics informed the multivalent spectacle *HPSCHD.*

1. ANARCHY IN THE U.S.A.: Cage and Thoreau

In the important survey of Cage’s politics, “John Cage in a New Key,” Natalie Crohn Schmitt identified a shift in Cage’s approach to politics starting with his 1969 book *A Year From Monday,* and culminating in *Empty Words* from 1979. Crohn Schmitt’s first-of-its-kind article is an excellent starting point for an understanding of how the nature of Cage’s work changed from revealing “nature in its manner of operation” to art as social activity. Without dismissing the content of Crohn Schmitt’s work, one might argue, however, that this political shift starts to happen at least a few years earlier and is precipitated by Cage’s investigations of the writings of Thoreau, as well as his familiarity with the writings of, and friendships with, both Marshall McLuhan and Buckminster Fuller.

Haskins marks Cage’s turn to concern with social issues as opposed to musical problems in his compositions as early as 1958. In reaction to a performance of his *Concert for Piano and Orchestra* in which the orchestral members performed any sounds they wished, Cage wrote: “I must find a way to let people be free without their becoming

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foolish. So that their freedom will make them noble... My problems have become social rather than musical.”¹¹ These concerns with social issues, alongside his readings of Thoreau, McLuhan, and Fuller, caused Cage’s thinking to become increasingly anarchic as well as optimistic about the potential of technology. With this political shift came an aesthetic change to creating works that were “the vision of an ideal society.”¹²

In 1967 Cage was introduced to the writings of Thoreau and throughout the rest of the 1960s he started to form an attitude toward social structures, government, and politics that stayed fairly consistent through the rest of this life. At the time of his discovery of Thoreau’s Journal, Cage was already writing about anarchy and the way in which art can work as an exemplar of this type of society. In his Diary from 1967, Cage wrote:

Art instead of being an object made by one person is a process set in motion by a group of people. Art’s socialized. It isn’t someone saying something, but people doing things, giving everyone (including those involved) the opportunity to have experiences he would not otherwise have had.¹³

By the time HPSCHD was performed in 1969, Cage referred to himself not just as an anarchist, but as a “Thoreauvian anarchist.” There are a number of interviews with Cage that discuss Thoreau and the idea of anarchy that shed light on this appellation. One of these interviews was with Joseph Haas of the Chicago Daily News, printed on May 10,

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¹³ Cage, Diary: How to Improve the World (You Will Only Make Matters Worse), 6.
1969, just a few days before the *HPSCHD* event at the University of Illinois. Haas asked Cage about his suggestion to reject value systems, whether he proposed to “eliminate values in human behavior, too, or do you limit it to art?” Cage answered that he would extend this idea “to life” as well as to art. Haas objected, “But aren’t standards of behavior necessary to civilization?” Here, Cage reaches to Thoreau as an authority to bolster his argument:

> Thoreau wouldn’t have agreed. He said we have all this government and law and business simply to keep two Irishmen from fighting in the streets. He also went on to say that people will have, when they’re ready for it, no government at all. That is to say, there will be no value judgments whatsoever.

Haas argued back that people simply aren’t ready for such a system and that in the mean time ethical systems are necessary. Cage agreed, but countered that “if we wait until that time, that time will never come. Therefore we begin with… the fields where it is possible to do without such standards, such value judgments, to prepare the way—and art is one of them.”

In a June 8, 1968 letter to Margaret Brenker wrote that there seemed to be a connection between rock and roll and electronic music that went beyond the obvious use of “new technological possibilities.” He referred specifically to the question of content in both rock and experimental electronic music: “i.e. revolution—change from competition to cooperation.” Cage explained that in his current work he was “diminishing in so far as

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I can the role of conductor, director, etc., preferring that this quality become inherent in each person: I’m willing to let the effect be chaotic. I let my music live its own life.”

Cage’s understanding of anarchy as a freedom from someone else’s value judgments or ethical standards is particularly American, and as such, focused on the individual. European anarchists tended to view the movement as collective and socialized. According to Haskins, Cage was aware of this distinction as he had read James Martin’s history of American anarchism, *Men Against the State*, published in 1953.

In many ways, Cage’s understanding of anarchy is typical of what George Woodcock called the “new anarchists” in the 1960s. The anarchists of the 1940s were “bellicose barricaders, dreaming inoffensively of the violent overthrow of the state,” whereas the anarchists of the 1960s were “militant pacifists.” In short, according to Woodcock, the “old revolutionary sect has not been resurrected, but in its place has appeared a moral-political movement typical of the age.”

Cage, and other new anarchists of the sixties, still spoke of “revolution,” but their revolution was not a radical assault on the foundations of our society, but rather a humanistic extension of the emancipatory trend set in motion during the Enlightenment. Cage’s revolution did not involve a violent overthrow of the state, but rather a radical overthrow of patterns of thought. Cage did not offer practical or specific advice on how our new “golden age”

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15 John Cage to Margaret Brenker, 8 June1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
18 Ibid.: 55.
would come; he was not interested in “fixing society,” but “changing it so it works.”

Virtually all utopian and anarchic theories are plagued with the problem of necessity—how to distribute wealth and material needs to a general public. According to Murray Bookchin, the answer to the problem of want and work “was shot through with ambiguity. The realm of necessity was brutally present; it could not be conjured away by mere theory and speculation.” For Cage, however, his utopian anarchy was centered on the abundance of technology, strongly influenced in this area by the thinking of Fuller. Cage simply believed that technology was the answer, and the issue of “want and work” for Cage changed to a question of what to do with the leisure time that future technology promised. McLuhan shared this view as well. In his article “The Agenbite of Outwit” he wrote, “Man in the future will not work—automation will work for him—but he may be totally involved as a painter is, or as a thinker is, or as a poet is. Man works when he is partially involved. When he is totally involved, he is at play or at leisure.” Technology was to solve the problem of necessity, and “man’s” true work was to create. Peter Yates scribbled on a draft for the HPSCHD Nonesuch liner notes that, “Cage speaks of a change ‘from the influences of scarcity or economy to the influences of abundance.’”

Outside of references to mind change and the promise of technology, Cage’s faith in anarchy lay in the creation of artworks which would act as schoolmasters—teaching us how it might be to live in a world “without a conductor.”

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19 Cage, *Diary: How to Improve the World (You Will Only Make Matters Worse).* In *Cage, A Year from Monday*, 158.
22 Draft for HPSCHD liner notes, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
social transformation” is overtly present in a number of early and late works—as described by Brooks in “Music and Society,” but also especially in *HPSCHD*. In a 1965 interview with Michael Kirby and Richard Schechner, Cage admitted that “we all realize that anarchy is not practical.” However, Cage asserted that the moments in our lives that are unregulated are the most salient: “We look at our lives, at the anarchist moments, or spaces, or times, or whatever you want to call them, and there these things that I’m so interested in—awareness, curiosity, etc.—have play.” It is not during organized or policed moments that these things happen, Cage claimed. Therefore, his goal as an artist was to move away from intention and regulation, and to create anarchic spaces that facilitated these experiences.

Crohn Schmitt pointed out that “the change to an aesthetic based not on nature but on the vision of an ideal society, not surprisingly effects some other changes in the aesthetic.” The most immediate change had to do with participation, breaking down the barrier between performer and audience member, and opening the performance space. Alongside the ideal of “participation” Cage was interested in *noninterference*. Cage intended for the performance space to facilitate independent, parallel activity, not necessarily communal cooperation. Junkerman wrote, “As a political principle, noninterference has long been a staple of the anarchic disposition of western liberalism.

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But Cage went further, elevating it to something of an ontological principle.” For Cage, noninterference was not just a delightful result of these kinds of anarchic, open performance spaces, but a necessary attitude for performer and participant. Cage supported this idea with Fuller’s scientific notion that everyone and everything is surrounded by a buffer of emptiness. Cage said that Fuller “describes the world to us as an ensemble of spheres between which there is a void, a necessary space. We have a tendency to forget that space.” Cage believed that it is exactly this noninterference that allows us to experience one another most fully. Our presence in the world should be simultaneously “nonobstructive” and “interpenetrating,” by which Cage meant open to experience all things. “It is this condition of poised autonomy… that Cage calls ‘anarchy.’”

2. PARTICIPATION AND HPSCHD:

Filmmaker Andrew Norman wrote the following letter to Cage after the Urbana HPSCHD performance:

*HPSCHD* is really a triumph, a carnival and a celebration, as you said, and the opening of a new door of perception. I don’t think very many people went away unchanged.

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28 Charles, *For the Birds*, 93.

29 Junkerman, “‘New/Forms of Living Together’: The Model of the Musicircus,” 58.
An incident: I tried to locate you at the time, and then forgot to tell you at the Johnstons: A girl student started blowing soap bubbles into the west-side projector beams—which fortuitously happened to coincide quite closely with an airstream from the exit ramp under the projector. Thus the bubbles tended to move from beam to beam for quite a distance until they popped. It was a lovely contribution.  

Norman had worked closely with Cage preparing a film of *HPSCHD* based on chance aesthetics and knew that this example of audience participation—or better yet, audience performance—would have delighted Cage. This type of participation facilitated by the performance environment is an example of Mikhail Bakhtin’s *carnival* construct. According to Bakhtin, to understand his use of the term *carnival*, one must first do away with the common definition of the word. For Bakhtin, “Carnival is past millennia’s way of sensing the world as one great communal performance . . . . there is not a grain of nihilism in it, nor a grain of empty frivolity or vulgar bohemian individualism.” Bakhtin’s concept of *carnivalization* stands in contrast to *canonization*, or *totalization*. His emphasis is on heteroglossia and multiplicity, and the carnival scene is most likely to facilitate a plurality of experiences with this broad inclusion of the high and low. For Bakhtin, the carnival was also the revolutionary tool for overturning the “official discourse” in favor of a folk-based diversity.

Like the student blowing bubbles into the light of one of the projectors, the crowd

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30 Andrew Norman to John Cage, 27 May 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
31 Unfortunately, the film was lost in a fire.
was creative and as much a part of the performance as the harpsichord players or those operating the tape machines. This is because the crowd created sounds and visuals that would not be possible without a large number of people. The audience not only acted creatively, but was expected to bring to the event a certain measure of creative interpretation. By activating the spatial dimension of the performance environment, Cage essentially invited people to participate in the performance, either being present in the space or assuming an active role. According to Giulio Jacucci and Ina Wagner, authors of “Performative Uses of Space in Mixed Media Environments,” this type of participation “problematises the notion of authorship since spectators can turn into performers.”

Husarik makes much of the “unique audience circumstances” in his 1983 description of *HPSCHD*: “All aspects of the event were meticulously and systematically randomized so that it was left to the spectators to fill in the space between sound and image with their random noises and movements.” Many audience members felt uncomfortable in such an active role. Alan Johnson, a university professor in accounting, said of the event,

> The first half-hour, I felt quite confused. I could detach no goal, purpose or objective. I saw no logical arrangement of subject matter or sound which held my attention. I failed to see any apparent interrelationship of the many types of presentations. Toward the end of my observation, I came to the realization that the whole, seemingly confused affair, probably had much in common with the world

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around us and could, in fact, have been a simulated model of it. After this became clear I felt a purpose in my being there.  

For some, the creative gestures of the audience were the most compelling moments of the event. The Chicago Tribune review of HPSCHD mentioned a “play group” that formed in order to bat around waded up balls of paper during the event. Cage also commented on the importance of the audience participation: “The crowd moved around in complete freedom, and at times people spontaneously started to dance, thus adding their own theater to the whole global theater they had been given.”

Frances Ott Allen wrote a detailed account of her experiences that is included in William Fetterman’s book John Cage’s Theater Pieces. She wrote that a number of people started “performing” for the film crew. One of the “performances” she described as a Happening:

Many people had been sitting in the center on the concrete floor under the sheets, watching the projections. A small, slightly built fellow with dark shoulder-length hair, a blue shirt and dark jeans whistled on a leaf and danced in and around. He disappeared, then sometime later danced in again whistling. Now he danced mainly with his arms, swaying, reaching toward people—trying to get them to respond, to reach toward him in the same rhythm, never touching, and hands reached toward

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37 Charles, For the Birds, 194.
him... Then he began whistling again in rhythm—many of the people in the center clapped along—it grew in intensity, finally he threw up his arms with a scream and disappeared out of the crowd.  

Pianist and pedagogue Errol Haun, who had been studying at the University of Illinois and who helped Cage prepare the tapes for the performance, was working as a foster parent at a children’s home in 1969. He invited three teenage boys from the foster home to attend the performance, but they weren’t sure they wanted to attend a concert at the university, thinking perhaps “it would be too high brow for them.” Haun recalled, however, that “as soon as we got in the door, we didn’t see the kids until we rounded them up to go home.” What appealed to these boys, according to Haun, was an understanding that “each participant was as much a part of the piece as the people who were paid to perform.” According to Haun,

They knew that if they went and listened to this harpsichord and then went and listened to that harpsichord, and then went up and listened to some of the electronic music that they were in control of the performance. It is very… what’s the word… free, you weren’t just sitting in one place and getting only one perspective of the performance.  

Haun was thrilled that the boys had really understood the purpose of the event and had embraced that freedom. Charles Hamm agreed that “each person made what he wanted

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38 Fetterman, John Cage’s Theatre Pieces, 254.
of the piece” and it was a different event for everyone who attended. Hamm wrote,

Each saw and heard it from the standpoint of when he was there, where he was in the hall, how long he stayed, whom he saw and talked with while there, what mood he was in, and what attitudes he had about such events.40

The importance of this kind of physical freedom for the audience is clear from a 1974 interview with Cage after two performances of HPSCHD in England. Interviewer Eric Mottram described the Roundhouse performance on August 13, 1972, in which the audience was free to move about the space. As Mottram put it, “You had to keep moving so that you could both see and hear the performances as a whole, making your own environment as audience within the controls of the composer.” Cage took umbrage with the word “controls” and insisted that a better word would be “provisions,” “or rather, utilities: to see a piece of music as something that could be used.” Mottram immediately recognized that this distinction illuminated the politics of the work—the substitution of authoritarian control, for “something that can be used.”41

The second performance in Albert Hall on May 22 was very different in many obvious ways from the Roundhouse performance, especially, according to Cage, “because of the architecture.” In the Albert Hall, the audience was seated with Cage and Tudor on the stage and ten loudspeakers at the back of the auditorium. Cage described how he was forced to accept that the audience was seated, but at least wanted the loudspeakers to surround the audience, “so that people sitting on one side could later

40 Hamm, Putting Popular Music in Its Place, 93.
converse with people who had been sitting on the other and discover that they had heard something different.” Unfortunately, Cage said, “That too was not possible.”

Cage viewed his role as a composer was in the creation of events that facilitated life experiences, but he was certainly not in the business of telling someone what to do, what to think, or how to interpret. “When I say, for instance, that I’m not interested in telling people what to do,” Cage said, “I mean that as a social statement.” The audience, then, was put in the position of responsibility to make something out of the experience. Cage’s stance is an example of the postmodern insistence that “knowing is interpretive” and that “perception is a creative act, not simply the apprehension of absolute givens.” Jann Pasler uses the idea of a “memory palace” to describe works like HPSCHD which use non-traditional, open forms that rely on the participation of the listener. The density of signs in HPSCHD may act as triggers for each audience member to engage memories or to recall connections to other signs. The fact that Cage used historic sources is significant in this respect, and Cage’s work with quotations is similar to other works that evoke the idea of a “memory palace,” including works by Pauline Oliveros and Pierre Boulez. Pasler wrote:

The works at issue here… are not only texts about other texts; neither is the image they reflect merely the creator’s or perceiver’s cultural knowledge or cultivated tastes. In response to their sounds, images, words, and gestures, postmodernists

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42 Ibid.
with this perspective expect the perceiver to recall experiences, and not only those of an aesthetic nature.\textsuperscript{46}

In the case of \textit{HPSCHD}, the density of signs potentially evoked high art, aesthetic associations (Kostelanetz said \textit{HPSCHD} occasionally “sounds like Mozart…”), and yet the countercultural associations (the tunics silk screened with florescent day glow images of constellations, the use of black light in the space, audience drug use, etc.) must have been iconic of popular culture experiences for many of the participants.

Cage spoke specifically to the issue of the burden of interpretation at an IUBS/UNESCO Symposium in Edinburgh in 1972 called \textit{Biology and the History of the Future}. The participants included Cage, Carl-Goeran Hede, Margaret Mead, John Papaioannou, John Platt, Ruth Sager, and Gunther Stent. Cage was speaking to the chair and editor of the symposium proceedings, C. H. Waddington, when he noted that art is no longer an object, but an “overall situation—an experience which is not imposed by the painter on the observer, but rather is created by the observer in his use of the painting.” Cage then stressed the importance of what he called “inter-media” in the arts and the common practice of simultaneous events and lack of a single focal point. “In a theatrical or musical or any such situation, the centre of interest is nowhere to be observed, it is interesting all over.” Cage found that this had a profound effect on how we perceive our world. “This means that the basic notion of an agreed-upon language is being given up.” Cage noted that the central characteristic of these intermedia events whether “serious art” or “in rock and roll performances with films and stroboscopic lights, with dark light and

\textsuperscript{46} Ibid.: 19.
all these things” is the diversity of the experience. “After two people have experienced it they would be able to converse and exchange their experiences, which have been different.” In such cases, Cage said, “I don’t think syntax or language in a conventional sense took place. It is something far more all-pervasive which took place… And that is our life experience.”

The lack of syntax or lack of communication in terms of a consistent sender/receiver message is essential to Cage. Simultaneity and lack of syntax is central not simply to “break the laws of art,” but rather, they are central “in order to introduce us to the life we are leading, so that we can, as you say, participate in it.”\(^{47}\) With an agreed-upon language being “given up” and the ousting of “syntax” in these intermedia events, how is it possible for an audience member to enter into an encompassing artistic environment like *HPSCHD*, which many described as “chaos,” and come away with some understanding of the piece? Several participants, and some of the collaborators, described this interpretive process in terms of Gestalt psychology.

3. *HPSCHD* AND GESTALT PSYCHOLOGY:

Indeed, Gestalt psychology is the topic of Sumsion’s Master’s thesis inspired by his work with Cage on *HPSCHD*. In his introduction Sumsion wrote,

I want to show that a configuration of images based on chance operation can be integrated to “constitute a functional unit with properties not derivable from its

parts in summation.” The function of this visual totality is to act as a complement to an original musical event by John Cage… As a designer, it is my task to unify this new presentation both in form and content. This is an effort to show how form does communicate.  

Cage did not agree that the signs integrated to form a functional unit, despite the fact that at the event a participant may have been able to focus on one aspect of the work at a time. “But what you discovered,” Cage said, “was not the unity of a fixed figure, but that of a tremulous ‘non-figure.’ That is what I call multiple unity.” He was clear that what is perceived is not “the unity of a multiplicity or diversity,” but rather that each perceiver hangs somewhere between unity and plurality, between singularity and multiplicity, or between figure and ground. In Jerrold Levinson’s work on hybrid artforms he wrote that as audience members “we are on the watch for sparks of similarity and contrast to be struck from events in different realms occurring simultaneously.”

Cage asserts that while we may be looking for similarity and contrast, we don’t make a single unity out of the experience: “You remain between one and two. You can’t choose, because everything comes at once—there is temporal simultaneity. That’s what [Daisetz] Suzuki calls non-dualism.” The importance of “non-dualism” is related to interpenetration, anarchy, as well as deconstructionist philosophy. One of the outcomes of this kind of

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49 Charles, For the Birds, 198.


51 Charles, For the Birds, 198.
artwork was to be an experience of inter- and intra-personal integration, a discovery of how “the disparate parts of our lives [are] fundamentally related,” and, ultimately, this burden of interpretation was on the participant.

Cornelius Cardew recognized a social implication in Cage’s insistence that the audience was part of the performance. Cardew was initially drawn to Cage’s idea that we are all musical, that “anybody can play it.” All this, at least, in theory. Serial music, on the other hand, was definitely elitist, uncompromisingly bourgeois, and anti-people. From the first, music was considered an experience which might include other media.

Cage’s idea that art is socialized, an opportunity for new experiences, and yet individualized, elides neatly with Richard Wagner’s notion of the role of art. In *Art and Revolution* Wagner wrote:

> Art and the institutions of art, whose ideal organization could only be briefly discussed here, could become the forerunners and patterns for all future communal organizations. The spirit which brings together an artistic community working for the achievement of a true goal, should also be found in every other social organization which sets before itself an honorable purpose. Then indeed all of our future social conduct can and should be of a pure artistic nature, when we do what

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is proper, as is only fitting of our noble abilities.\textsuperscript{54}

Compare Wagner’s desire for a community of artists, to Cage’s: “Art instead of being an object made by one person is a process set in motion by a group of people. Art’s socialized.”\textsuperscript{55} And compare Wagner’s goal that this artwork should be a model for all other social interactions, to Cage’s desire for life to model art:

I think that there are many functions for Art now, and that among those functions is to indicate changes in society…. I think we need more and more a society without government. And that we can give examples of its practicality in Art, and those can be imitated in society. We can make our concerts, as we more and more do, instances of the practicality of anarchy.\textsuperscript{56}

Granted, Cage and Wagner did not share political ideologies (Wagner’s socialism was communal, Cage’s anarchy more individual and non-obstructive). However, both shared the idea that artists would lead the revolution. Cage clearly thought of \textit{HPSCHD} and

\textsuperscript{55} Cage, \textit{Diary: How to Improve the World (You Will Only Make Matters Worse)}, 6.
\textsuperscript{56} Cage and Friedman, “A Conversation With John Cage.”
other artworks that embraced non-hierarchal structures, elements of indeterminacy, and audience participation as providing a model for an anarchic social structure. Art was to be the means by which we learned how to live together.

4. CRITIQUE OF CAGE:

Cardew and others appreciated the social implications of Cage’s “Here Comes Everybody” aesthetic, but were critical of Cage in that his rhetoric and his music did not clearly align to make a strong social statement or affect social change. In Stockhausen Serves Imperialism (1974), Cardew famously accused Cage of being a “bourgeois ideologist” who had earned “the title ‘genius’ by going to extreme lengths of intellectual corruption and dishonesty.” Cardew supported this accusation by observing that Cage concerts had become society affairs for the most elite elements of society. The truly revolutionary students boycotted Cage concerts due to “the complete irrelevance of the music to the various liberation struggles raging in the world.” Cardew continued, “And if [the music] does not support those struggles, then it is opposing them and serving the cause of exploitation and oppression. There is no middle course.”

Although Norman O. Brown was a close friend of Cage’s (Cage called him “Nobby”), Brown was increasingly critical of Cage’s Zen-anarchist politics. In his 1988 tribute to Cage published in John Cage at Seventy-Five, Brown pointed up the inconsistencies between Cage’s anarchism and his ontological insistence on “non-

57 Cardew, Stockhausen Serves Imperialism, 33.
58 Ibid., 35.
59 In a letter to Yates, Cage wrote, “Nobby too is magnificent.... He too insists upon Utopia. And he is beating another track to it. For which I’m endlessly grateful.” John Cage to Peter Yates, 23 May 1966, Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego.
interference.” Cage was portrayed by the popular and music press as a kind of avant-garde Dionysus, and Cage seems to have promoted that kind of understanding of his works. Yet, Brown argues that according to Nietzsche,

the word Dionysian means the urge to unity, a reaching out beyond personality, a passionate-painful overflowing; the great pantheistic principle of solidarity and sharing; the eternal will to procreation, fertility, recurrence; the assertion of the necessary unity of creation and destruction.

Brown argued that Cage was not a Dionysian, but rather an Apollonian. Brown asserted that as an Apollonian one has “the urge to perfect the separate life of the individual, to compensate for the pain of separate individuality with the seductive pleasures of aesthetic enjoyment.” Brown wrote,

Chance operations are an Apollonian procedure
a perfectly sober procedure
the Apollonian “I” remains in control
“I asks the questions”

Despite Cage’s attempt to “remove the ego” from his music through the use of chance

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61 Ibid.
procedures, and despite the rhetoric about “anarchy,” the music is ultimately controlled and measured. As an anarchic, revolutionary event HPSCHD also falls short. Brown said that Cage was ultimately “Not disruptive. Cheerful. Not Dionysian. Apollonian.”

In a 1970 interview, Max Nyffeler asked Cage specifically about the revolutionary potential of music. Nyffeler questioned the effectiveness of art as a means of revolution, as opposed to physical force. Cage answered that we should not expect “one thing to bring about a revolution.” Instead, we must use every means possible. Cage said, “For some people, words will be effective, for some people, even violence will be effective, for some people, music will be effective.” Cage wanted to be clear, however, that what he meant by revolution was not the same as protest: “I don’t believe in protest actions. I don’t think anything is accomplished by protest… Many people are protesting… But I don’t see anything being accomplished.”

The idea of revolution is also central to a conversation Cage had with a Newsweek Magazine reporter while promoting the 1969 HPSCHD performance. Newsweek reported:

Cage’s revolution is the core of a new humanism and social concern that is coming out of the esthetic avant-garde…. “Wars,” says Cage, are “part of dying political-economic structures… City planning’s obsolete. What’s needed is global planning so [the] Earth may stop stepping like [an] octopus on its own feet.”

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62 Ibid., 107.
63 Cage and Nyffeler, You Must Take a Global Point of View: John Cage About Revolution, Welfare and Cultural Changes.
64 “Sound, Silence, Time,” 50.
Cage’s view of political art did not include action against existing social or political structures. It did not include protest or resistance. In addition to being non-hierarchal and participatory, Cage’s political art was process, and as such, “it can suggest the possibility of change in society.” Art, according to Cage, “can make us aware of our human energy resources which can be put intelligently to work: it can exemplify the overcoming of difficulties, the doing of the impossible.”

Cage’s revolution was about mind change, not radical action.

For Cardew and others, the suggestion of the possibility of change was just not enough. This lack of direct action angered Cardew who claimed that in Cage’s work, “Randomness is glorified as a multi-coloured kaleidoscope of perceptions to which we are ‘omniattentive.’” For Cardew, there was not enough substance underneath the simultaneity and intermedia. “Cage’s music presents the surface dynamism of modern society; he ignores the underlying tensions and contradictions that produce that surface.”

In Stockhausen Serves Imperialism, Cardew specifically discussed HPSCHD as one of the works guilty of this kind of superficiality:

*HPSCHD* (for 7 harpsichords, 52 tracks of tape, and a whole lot of audible and visible extras) is due for performance on 13 August. I have been engaged to play one of the harpsichords. I’ve heard that the part is complex and difficult, but I wasn’t asked whether I could play the instrument—and I know why: because it makes not the slightest difference what I play, or how I play it or how I feel about it. On the same degrading terms many talented and intelligent people will

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participate in that concert. Basically—judging from comments on an earlier performance: “It was ensured that no order can be perceived” (Ben Johnston); “One of the great artistic environments of the decade” (Kostelanetz)—it will be a king-size electronic multi-media freak-out, and I don’t recommend anyone to go to it.⁶⁷

Critics, like Cardew, recognized that Cage was largely supported by an elite, intellectual cadre and some claimed that the composer did not go far enough to distance himself from the upper class, bourgeois, cultural hegemony. This was the case in this interview in which Nyffeler noted that people referred to Cage as “the jester of the bourgeois society”.⁶⁸

Nyffeler: It is a fact that your music, like all relevant art of today, reaches only an extremely small group of the population because of the privilege of education, which the dominant class tries to keep by all means, not at last by high entrance fees like here at the St. Paul-de-Vence Festival.

Cage: In the fifties, when I gave a concert, I would advertise it, and at the most, 125 people would come. When I gave HPSCHD in Illinois last year, somewhere between 7000 and 9000 people came, and they came from all over the country—they came even from Europe. I gave a Music Circus in Illinois the year before and

⁶⁷ Ibid., 39-40.
⁶⁸ Cage and Nyffeler, You Must Take a Global Point of View: John Cage About Revolution, Welfare and Cultural Changes.
5000 people came, and the concert was free. I gave the one in Minneapolis this year and another 3000 people came and it was free. Things are changing.\textsuperscript{69}

Things may have been changing in terms of Cage’s ability to draw a large audience due to his increasing popularity—or for many, notoriety—but in terms of cultural change, the situation is not so clear. Later in the interview Cage admitted that he found his audience in America at the university, and saw himself as existing, not in the European tradition of the court as “jester,” but rather in the American intellectual tradition which included poets like Thoreau and Emerson:

Cage: [Thoreau and Emerson] form part of the university life much more than they do of the adult life of the US. What is the average person in the US when he is grown up and he has a job and makes his living and pays his bills? He spends his evenings looking at TV. The TV would not let me on a program. Therefore I’m not a court jester, I’m more a teacher.\textsuperscript{70}

The American university functioned, for Cage, somewhat like Wagner’s Bayreuth. The university provided Cage with funding, the latest state-of-the-art technology, performance spaces, and a ready-made audience. The university was also perhaps something of a shelter from the “real” world—the “TV culture” that Cage described above—and a haven for the intellectual and social elite. There is a certain amount of

\textsuperscript{69} Ibid.
\textsuperscript{70} Ibid. What is ironic is that Cage did appear on television a few times. One notable appearance was a performance of “Water Walk” for the popular show “I’ve Got a Secret” in January, 1960.
ambiguity here; staging an event that is to model a utopian, egalitarian society in one of the most elitist arenas of American life is problematic.

Cage’s pretensions to anarchism within the context of the university is only part of the problem. The Cage as dragon-slayer poster discussed in chapter one illustrates the apparent contradiction between the self-touted anarchic composer of chance and his actual role as mastermind. There is similarly a dissonance between Cage’s pretension to global political engagement while he failed to engage some of the most salient political facts of his immediate environment. Take as an example the racial unrest at the University of Illinois in 1968.

5. RACE RELATIONS AT THE UNIVERSITY OF ILLINOIS IN 1968:

One of the most compelling examples of Cage’s non-engagement is the problem the American university had at the time with racial equality. In 1967 only about 1 percent of undergraduates at University of Illinois Urbana-Champaign were African American. After the assassination of Martin Luther King Jr., university Chancellor Jack Peltason pledged to enroll 500 new minority students for a Special Educational Opportunities Program that became known as Project 500. Clarence Shelley was hired in the summer of 1968 to oversee the program, and Stan Levy was brought in the same year as Associate Dean of Students. According to Levy, “in mid August 1968, we were attending a meeting at the financial aid office. By that time a record, but indeterminate, number of new African-American students was due to enroll about September 15th… in actuality

When these students showed up on campus they were met with inadequate housing and insufficient financial aid. The night before classes started, these students marched to the Student Union in protest, claiming that the assignment of inadequate housing was racially motivated. Many stayed in the union until after midnight and those who did so were arrested for trespassing and spent the night in jail. The Chicago Tribune reported that the students had caused over $50,000 in damage by vandalizing the building—a claim that was unfounded. An editorial printed in the same paper described the students as “slum products on scholarships” who “went ape” and “swung from the chandeliers.” Nathaniel Banks was one of the freshmen that year and he understandably described the campus in 1968 as “a hostile environment.” According to Michael Fultz, the specific focus of the protest may have been housing arrangements and financial aid packages, but “the subtext was the politics of social change in American society in the late 1960s.” Joy Ann Williamson, author of Black Power on Campus: The University of Illinois 1965-1975, described the 1968 university environment as one of

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73 Gleason, “Integration Creates More Diverse Campus at U. Illinois.”
74 Levy, “Award Presentations from the Annual Meeting, April 18, 2004: Introductory Remarks by Stan Levy in Presenting the Victor J. Stone Award for Lifetime Service to Clarence Shelley.” According to David Eisenman, most of the damage was caused by non-students who saw the protest as an opportunity to gain access to the student union from which they were regularly turned away by campus police. Eisenman claimed that the damage costs totaled about $2,000. Interview with the author, July 5, 2007, Champaign, Illinois.
75 “The Universities Are Asking for It,” Chicago Tribune, September 11 1968.
76 Gleason, “Integration Creates More Diverse Campus at U. Illinois.”

Cage seems to be ignorant of, if not almost dismissive of, these students’ struggles, despite the fact that he was on campus during most of the 1968-69 academic year. In the 1970 interview with Nyffeler, Cage was asked to comment on the “black people’s culture”:

Well, when I began musically with interest in noises, the reason was, that the noises were free of the laws of harmony and counterpoint. Now the exciting thing about the blacks is, that they are going to be free of the laws, which were made by the whites to protect them from the blacks, among other things, and to keep the blacks in slavery and to keep the white people more powerful. Now, it won’t be good for the blacks to become powerful like the whites—in the same sense; anymore than it would be good for the noises to become as harmonious and as devoted to counterpoint as the musical sounds. We need rather—as we have already done in music—to identify ourselves with the noises and to start from a situation without those laws of the whites or of the musical tones. I think that a very few blacks understand that. They mostly think they would like to be just as powerful as the whites. That’s not the proper way.\footnote{Cage and Nyffeler, \textit{You Must Take a Global Point of View: John Cage About Revolution, Welfare and Cultural Changes}.}

While superficially supportive of blacks, Cage’s remarks do not reflect a real or sympathetic understanding of the African-American student’s struggles on campus.
Power is not necessarily about wielding control over others; Black Power, rather, is closely related to the *creation of opportunities*, a tenet central to Cage’s philosophy. According to Williamson, *power*, in the sense that Cage seemed to understand it, is not central to the idea of Black Power:

Black Power became a widely popular ideology. It included political, economic, cultural, and psychological components. Black political power meant Black police officers, tax assessors, mayors, and legislators. Black economic power meant equality of the standard of living of African-Americans and the development of community institutions. Black cultural power meant self-determination and self-definition.\(^{80}\)

The race issue does not appear to be one of the central problems of the time for Cage, as was poverty and the distribution of resources. David Patterson has argued that viewing Cage in such a critical light is somewhat unfair, given that the vast majority of contemporary composers were also largely silent on the race issue.\(^{81}\) Additionally, Patterson pointed out that Cage did not deal with specific, local level political issues—”anti-war protests, race issues at any given time, GLBT issues for that matter.” Cage chose instead to focus on “certain meta-issues that he discovered through Marshall McLuhan” including the “dissemination of information, the implications of mass media, etc.” According to Patterson, Cage and others were “involved in a very abstract kind of

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\(^{81}\) David Patterson e-mail to author, 10 July 2007.
social revolution that could serve as an umbrella for all sorts of sub-issues.”

6. CRITIQUE OF CAGE’S UTOPIAN POLITICS:

There are three problems with excusing Cage from an accusation of hypocrisy based on the argument that no other composers were representing the Civil Rights movement in their music or actively writing about Civil Rights. The first is that Cage claimed that what he was doing with his art was remarkably different from what his contemporaries were doing—socially and politically, as well as compositionally. Cage wrote in *Empty Words*, “Some politically concerned composers do not so much exemplify in their work the desired changes in society as they use their music as propaganda for such changes or as criticism of the society as it continues insufficiently changed.” The implication here is that Cage thought of his own work indeed as exemplifying desired changes in society. The second problem with excusing Cage from this kind of criticism is that the race issue was a “meta issue” in late 1960s and certainly an issue that would have been difficult to ignore. The Civil Rights movement was just as important and visible as poverty, the distribution of goods, the use of modern technology, and the control of media—topics that Cage wrote and spoke on frequently.

The third problem is that, in the case of *HPSCHD*, Cage’s contemporaries were not necessarily composers, but rather artists active in theater. We are accustomed to viewing Cage’s work in the context of mid century high modernism. As Henry Flint put it, by the late Fifties, “Babbitt, Xenakis, Stockhausen, Cage, and their colleagues were engaged in a frantic race to field the most radical music—rather like the race to the

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82 David Patterson e-mail to author, 17 July 2007.
83 Cage, *Empty Words*, 183-84.
Perhaps we cannot hold Cage to a higher standard than these contemporaries, but in the case of \textit{HPSCHD}, Cage’s colleagues were not necessarily Boulez, Stockhausen, Ligeti, Brown and Babbitt, but rather those active with the Living Theater, FLUXUS, and other theater movements. These theater artists were indeed exemplifying the desired changes in society through their work in avant-garde theater and this is the context in which we should evaluate Cage’s work with \textit{HPSCHD} and gauge its social and political efficacy. In the 1969 interview with Friedman, Cage said that “sitting in rows… watching a performance by a few others… [is] a luxury we can do without.”\textsuperscript{85} Cage preferred the theater, especially Happenings and performances by the Living Theater. Cage found like-minded compatriots in the theater, especially the Living Theatre artists Judith Malina, Julian Beck and Hanon Reznikov who also “give first place to humanity’s utopian desires, want theater to express these desires and prefigure utopia, and are convinced that social structures thwart or deform our needs. They have always coupled rebellion and creation, and are open to a multiplicity of means.”\textsuperscript{86} While avant-garde composers may not have had this kind of immediate, social content at the center of their work, it was an important part of many theater works from the mid-sixties. For example, a Living Theater performance was presented at the Roundhouse in July of 1967,

\textsuperscript{85} Cage and Friedman, “A Conversation With John Cage.”  
alongside lectures by Marcuse, a reading of mantras by Allan Ginsberg, and a call for Black Power from Stokely Carmichael.\(^{87}\)

One may argue, as Patterson does, that Cage was addressing the race issue implicitly on a global level, although he does not address the issue explicitly on the local level. The problem with this argument, at least in this case, is that the representation of all kinds of people at the concert—which would have been a sign of “health” and “access”—was severely lacking. According to Nancy Perloff, because Cage did not “engage in social and political satire or attack,” he did not “appropriate and combine fragments of social and cultural history, philosophy, or composition to create multiple voices and simulacra.”\(^{88}\) He instead created, for Perloff, works that seem far more modernist than postmodern or anarchic. More likely tests of the practicality of anarchy may have been the somewhat peaceful Woodstock a few months after \textit{HPSCHD}, or the hellish Altamont concert organized by the Rolling Stones that December.

Cage’s disinterest in addressing specific social content within a work like \textit{HPSCHD} may be evidence that he bought into the idea of “terminal prestige” as Susan McClary put it. She explained that “the claim that one’s music is valuable precisely because of its autonomy from social function is itself precariously dependent on particular social definitions of prestige.” The definition of prestige in America in the 1960s seemed to be the ivory towers of the university and the “who cares if you listen” attitude of Schoenberg, Babbitt, Boulez and others. McClary again: “For a while, avant-

\(^{88}\) Perloff, “John Cage,” 68.
garde music’s glory lay in the illusion that it had transcended social context altogether,“89 or, at least in the case of Cage, specific social context. Christian Wolff said that “there was indeed something strange about Cage’s politics.” Wolff explained that Cage was “quite surprised by young people who questioned his work with regard to its political relevance. He felt that he had always been at the cutting edge politically and was surprised to find by the late sixties that he had been left behind.”90

Most of the analysis of HPSCHD to this point has been of Cage’s compositional concept and his philosophical and aesthetic intentions. It is necessary in the context of this kind of critique to contrast Cage’s intentions with the actual outcome. Cage intended HPSCHD to be a utopian, anarchic event defined in terms of heteroglossia and carnivalization, and perhaps some enlightened participants conceived of it as such. Others, however, perceived the resulting event as a uniformly chaotic space, undifferentiated, which catered to a homogenous, elite audience. Although the work was intended to be anarchic, it took place on a university campus; and although certain aspects of the work seem uniquely American, it drew on other distinctly European forms and constructs.

Cage’s inability to address race and other specific social issues may be centered precisely in the employment of Euro-centric materials and forms. George Lewis identifies Cage as a composer who located his work as “an integral part of a sociomusical art world that explicitly bonded with the intellectual and musical traditions of Europe.” While Cage and others may seem at times to critique the European, contemporary art culture, he

is “explicitly concerned with continuing to develop this ‘Western’ tradition on the American continent.”\(^{91}\) David Nicholls agrees: Cage chose to stress his lineage to Schoenberg over Cowell, or qualified Cowell’s influence by “linking him with a figure rather more representative of European values.” According to Nicholls, it was Cage, rather than Cowell, Harrison, or Partch, “who was drawn to the music and ideas of Pierre Boulez in the late 1940s and early 1950s,” and that Cage’s early “early awareness of transethnic possibilities” were almost completely, “tempered by an innate Eurocentricism.”\(^{92}\)

In choosing to create a *Gesamtkunstwerk*,\(^ {93}\) Cage created a work of art that is very European and does not readily allow for immediate American social content, nor does it really allow for a multiplicity of voices. Wagner and Cage seem to be separated by a philosophical divide based on ego-driven intention vs. non-intention. Yet the result of such a huge work as *HPSCHD* is much like Wagner’s *Ring*. *HPSCHD* is made up of “an impenetrable web of undifferentiated events set in motion by and referring back to the original flamboyant artist-gesture,” which ultimately is a “manifestation of yet one more Artist as Transcendental Ego.”\(^ {94}\) Again, Perloff:

> This de-centered, collaborative, and heterogeneous principle for musical performance seems very postmodern. Yet the decisive presence of Cage’s ego..., as

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well as the value he attached to historical musical practice, steered a modernist course. He designed and determined the performance situation, no matter how many participants were involved, and relied on his invention of chosen tradition from the past.\textsuperscript{95}

Cage did an excellent job of selling himself to the public as a kind of musical, egoless Zen guru; but the evidence suggests that the control he exercised over the composition and production of \textit{HPSCHD} resembled a Wagner to a greater extent than a Zen master. Alex Ross pointed out this contradiction by retelling Carolyn Brown’s experience performing “Theatre Piece” in 1960. According to Ross, for this particular performance, Brown “put a tuba on her head, Cunningham slapped the strings of a piano with a dead fish, and David Tudor made tea.” After the performance, however, “Brown was reprimanded for rendering her part ‘improperly.’”\textsuperscript{96}

Additionally, Cage is constrained by the utopian nature of the work. Cage is caught in an ironic double-bind: in order to represent an anarchic narrative, an artwork must allow for diversity; and yet, the problem with utopian constructs is that in the end they inevitably become totalitarian. Elizabeth Grosz argues that utopias, by their very nature, “involve the fragile negotiation between an ideal mode of social and political regulation and the cost of this that must be borne by the individuals thus regulated.”\textsuperscript{97} Unity, order, and the necessity of consistent, moral conduct inevitably restricts some expressions of individuality; there is a price to be paid for order and stability. “Because utopias

\textsuperscript{95} Perloff, “John Cage,” 62-63.  
\textsuperscript{96} Alex Ross, “Searching for Silence,” \textit{The New Yorker}, October 4 2010, 52.  
\textsuperscript{97} Grosz, “The Time of Architecture,” 269.
concretize ideals about the full range of earthly life into a comprehensive description of society, the totalistic quality of utopias leads many to accuse the genre of totalitarianism.”

The result is likely that the individual which was intended to act creatively in the carnival atmosphere, aware of multiple centers interpenetrating, empowered by a freedom to coexist independently is rather quashed in the chaos. Cardew described it as follows:

\[HPSCHD\] creates an image of society as a jumble of sense stimuli, flashing lights and tinkling sounds, in which the individual is reduced to the position of a mere spectator. These negative, pessimistic effects created by Cage’s music reflect the surface character of the capitalist world, they do not reflect its essence. They don’t indicate the direction of its change and development and worst of all they deny the positive contribution that individuals are capable of making towards this change.

It is interesting to note here that Cardew’s most damning critique of Cage is that the individual is subsumed into the event and, to a certain extent, silenced by the multiplicity. Eric Mottram, who is typically a staunch Cage supporter, voices the same critique: “We may all be Joyce’s ‘Here Comes Everybody,’ to which John Cage refers… but there is a

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98 Peter Stillman, “Recent Studies in the History of Utopian Thought,” *Utopian Studies* 1, no. 1 (1990): 107. See also J. C. Davis, *Utopia and the Ideal Society: A Study of English Utopian Writing, 1516-1700*, (Cambridge: Cambridge University Press, 1981). According to Davis, utopia is always totalitarian: “All ideal societies must solve the problem of relating the existing and changing supply of satisfactions, some of which are by nature limited in supply to the wants of a heterogenial group, the desires of which will be, in some respects, unlimited.” 19.

danger of reducing a man to a common denominator in the Void, rather than a variety of events and environments for pleasure.”

An interesting comparison can be made here between Cage’s utopian *HPSCHD* event (or Wagner’s Bayreuth for that matter) to Thomas More’s Utopia. By design, More’s Utopia is a self-contained location, society and economy; an island, surrounded by calm seas but a rocky harbor; and access by foreigners is difficult. Access to the university community was equally difficult, and the university was equally self-contained and homogenous. The *HPSCHD* event did not explicitly deny access to certain individuals, but the implicit racism of the university environment (as well as the avant garde art world) was transferred to the event. Grosz wrote, “No utopia has been framed to take account of not only the diversity of subjects, but the diversity of their utopic visions.”

Yvonne Rainer levels precisely this same critique at Cage, and specifically in reference to works like *HPSCHD* which function without narrative, but are composed rather of a succession of “nonsignifying signifiers.” The meaning of such a work, Rainer claimed, is set by the artist—not the audience, as participatory as that audience may be—“just as surely as any monolithic, unassailable, and properly validated masterpiece.”

This seems to strongly suggest that the creation of an anarchic utopia is impossible, despite Cage’s claims to the contrary. In *Empty Words* (1979) Cage wrote,

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100 Manuscript, in Eric Mottram Papers, King’s College Library, London.
We now have many musical examples of the practicality of anarchy… By making musical situations which are analogies to desirable social circumstances which we do not yet have, we make music suggestive and relevant to the serious questions which face Mankind.\textsuperscript{103}

Yet, \textit{HPSCHD} does not seem to be suggestive nor relevant to this serious question, nor does the staging of an “anarchic” event in the university environment—an environment of strictly coded behavior—seem realistic. Haskins clarified Cage’s understanding of anarchy by pointing out that

Classic anarchistic thought describes the important distinction between living within discipline and living under discipline. In the former, people agree upon the terms of the discipline and act in accord with it, just as they do in the \textit{Musicircus}. In the latter, participants have little to no agency in the exact nature of the disciplinary system under which they abide; they are coerced to comply through the threat of surveillance and punishment.\textsuperscript{104}

The university setting that hosted \textit{HPSCHD} in 1969, one may argue, was a setting of strictly coded behavior, in which the threat of surveillance and punishment was real. It seems that no one suffered disciplinary action for smoking marijuana during the

\textsuperscript{103} Cage, \textit{Empty Words}, 184.
\textsuperscript{104} Haskins, ““Living within Discipline”: John Cage’s Music in the Context of Anarchism,” 14.
performance, but such action was possible, despite Cage’s efforts to create an anarchic environment without such controls.

7. CONCLUSION:

In 1992, Norman O. Brown criticized Cage’s philosophy as a “a lullaby saying it’s going to be alright”\(^{105}\) and Rainer described it as “goofy naiveté.”\(^{106}\) The criticism of Cage here is more pointed even than Arnold Whittall’s flip assessment that Cage has, as yet, failed to advance the cause of anarchism in existing political and social institutions.\(^{107}\) The issue is that Cage is guilty, as Rainer put it, of totally ignoring “worldwide struggles for liberation and the realities of imperialist politics.”\(^{108}\) Taken to an extreme, Cage’s silence on the race issue, among other issues, could be interpreted as an endorsement of the status quo.

In retrospect, Cage does seem to be astonishingly naive. His understanding of the Black Power movement was so limited that it reduced the struggle to a single idea, resulting in a kind of “romantic version of racism,” as in Norman Mailer’s essay “The White Negro.” Ingrid Monson’s article, “The Problem with White Hipness: Race, Gender, and Cultural Conceptions in Jazz Historical Discourse,” points up the “historical legacy that informs the American cultural tendency to reduce African American cultural


values to caricature.” This is precisely what Cage has done with his statement on Black Power: he has reduced the idea to caricature.

In the end, despite Cage’s best intentions, the story of *HPSCHD* is not a story of an anarchic utopia. The audience participated in the event the way that they thought they should participate during a “Midwest Woodstock.” Most of the audience members were aware of the “Happenings” art world and participated accordingly. According to almost all accounts, the overwhelming density of sense stimuli failed to clearly represent “abundance,” “interpenetration,” and “non-obstruction.” The story of *HPSCHD*, rather, is a story of celebrity, namely Cage’s celebrity. His celebrity status in the late 1960s is what afforded him the university resources to work with the computers, to collaborate with the other artists, to stage the event in the Assembly Hall, and ultimately his celebrity is what drew the crowd of thousands.

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CHAPTER 5: CAGE MISE-EN-SCÈNE: THEATER THEORY AND HPSCHD

Where do we go from here? Towards theatre. That art more than music resembles nature. We have eyes as well as ears, and it is our business while we are alive to use them.\(^1\)

—John Cage, “Experimental Music,”1957

Throughout his career, Cage’s works became increasingly theatrical. While most scholars point to the Black Mountain Piece (1952) as the first “Happening,” and Water Music (1952) as the first of his overtly theatrical works,\(^2\) I would argue, like Natalie Crohn Schmitt, that theater is a significant aspect of almost all of his work, from early percussion pieces like Living Room Music (1940) to the most overtly theatrical five Europeras (1985-1991)\(^3\). In “Experimental Music: Doctrine” (1955) published in Silence Cage wrote,

Relevant action is theatrical (music—imaginary separation of hearing from the other senses—does not exist), inclusive and intentionally purposeless. Theater is continually becoming that it is becoming; each human being is at the best point for reception.\(^4\)

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2 Fetterman, John Cage’s Theatre Pieces, xiv, xviii.
Cage is certainly not alone among mid-century composers interested in theater and passionate about the social significance of the form.

In this chapter, I discuss the theater theory that would have influenced Cage’s work with *HPSCHD*—Antonin Artaud’s “Total Theater,” the work of the Living Theater, and “Happenings.” I discuss whether or not one could identify the *HPSCHD* event as a “Happening,” especially in light of the use of multiple sound sources, as well as all the visual components of the performance. I end with a discussion of *HPSCHD* as a hybrid artform, drawing on the theory of Jerrold Levinson and Donna Haraway.

It is not unusual for a significant avant-garde composer of the mid twentieth century to be increasingly drawn to incorporating theatrical elements in their music. Important examples of this trend include Harry Partch’s *Oedipus: Dance-Drama* (1951), *The Bewitched: A Dance Satire* (1955), *Revelation in the Courthouse Park* (1960), and *Delusion of the Fury: A Ritual of Dream and Delusion* (1967). These Partch works are scored for invented instruments and are microtonal. According to Gilbert Chase, “Even the musical instruments and their performers are part of the *mise en scène*: they are not in the pit but on stage, contributing to the *mise en scène* visually, plastically, dynamically, symbolically, as well as sonorously.”\(^5\) Also belonging to this genre is Larry Austin’s work “The Maze” (1966), a “Theater Piece in Open Style” for three percussionists, dancer, tapes, machines, and projections. Lejaren Hiller also wrote theater works prior to 1967: “A Triptych for Hieronymous,” for actors, dancers, acrobats, projections, tape and antiphonal instrumental groups (1966), and during Cage’s tenure at the University of Illinois, Hiller wrote “An Avalanche” (1968) for prima donna, pitchman, player piano,

percussionist, and prerecorded voices. According to Hiller, Cage knew and appreciated this work: “He had seen some of my theater pieces, including ‘Avalanche.’ He was at the premiere of that, and I think he was impressed with its humor, among other things.”

In addition to these contemporary examples of composers interested in theater, there are significant examples from much earlier in the century. An excellent example is Virgil Thompson’s *Four Saints in Three Acts* (1928) with libretto by Gertrude Stein. Chase claims that it is the first opera to completely break with the European tradition. “It discarded plot, conventional characterization, realism, discursive speech, temporal sequence, and linear development, in favor of a truly theatrical presentation.” Most important for Chase, in Thompson’s work “the *mise en scène* [is] considered as a language in space and in movement.”

Cage’s tendency to move toward theater, using movement and the space of the stage, is significantly informed by these contemporaries, but also philosophically influenced by his studies of Zen Buddhism, his motivation to write didactic works about the everyday and the experiential as art, his anarchic politics, and his utopian social theory. On a more concrete basis, this tendency to move toward theater is influenced by the theater theory of Antonin Artaud, by his relationship with the Living Theater ensemble, by the FLUXUS group and “Happenings”, but perhaps most significantly by a desire to collaborate on large scale art works with likeminded artists, dancers, and musicians. The result of the collaborative effort is a hybrid artwork, and the nature of the hybridization has significant implications on how the work is consumed, received, and interpreted, especially on a college campus during the Summer of Love.

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7 Chase, “Toward a Total Musical Theatre,” 27.
1. THEATER THEORY

A. ANTONIN ARTAUD:

In *The Artwork of the Future*, Wagner wrote, “The artistic person steps onto the architect’s and painter’s stage as the natural person steps into Nature’s theater.”

Whereas Wagner meant to demonstrate that the theater should move toward a more natural, realistic presentation, (art should resemble life), Cage desired that not only should art resemble life, but life should resemble art; indeed, there should be no difference. This idea seems to be present at Cage’s first “Happening” at Black Mountain College. Mary Emma Harris, in conversation about the event, asked Cage, “*What were you trying to do?*”

Cage: Well, M.C. [Richards] had translated *The Theater and Its Double* of Artaud, and we got the idea from Artaud that theater could take place free of a text, that if a text were in it, that it needn’t determine the other actions, that sounds, that activities, and so forth, could all be free rather than tied together; so that rather than the dance expressing the music or the music expressing the dance, that the two could go together independently, neither one controlling the other.

And this was extended on this occasion not only to music and dance, but to poetry.

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and painting, and so forth, and to the audience. So that the audience was not focused in one particular direction.⁹

Cage read in Artaud’s seminal work, The Theater and Its Double, that the theater must make itself the equal of life. Artaud was not speaking of an individual life, or even an individual aspect of life in which characters triumph, “but the sort of liberated life which sweeps away human individuality.”¹⁰ Cage was familiar with Artaud’s work and in a 1965 interview for the Tulane Drama Review he told Michael Kirby and Richard Schechner, to “refer back to Artaud’s thinking about theatre. He made lists that could give ideas about what goes into theatre. And one should search constantly to see if something that could take place in theatre has escaped one’s notice.”¹¹

Artaud was very specific about how the new theater should be created. Most important for Artaud, the new theater should give rise to a “metaphysics of speech, gesture, and expression” in order to avoid psychology and “human interest.” In order to do this, one must 1) demolish language in favor of the “concrete” language of the mise en scène; 2) treat instruments as part of the drama, and not subservient to it; instruments will be part of the set, part of the “action”; 3) lighting must be reworked so that it takes on “musical” attributes: “thinness, density, and opaqueness, with a view to producing the sensations of heat, cold, anger, fear, etc.”; 4) abolish the stage, the separation of actor and audience, and “make space speak”; and 5) include an element of cruelty. By “cruelty”

⁹ Kostelanetz, Conversing with Cage, 104.
Artaud did not intend “torture” but rather “difficulty.” This new theater should be difficult, uncomfortable, or challenging for the participants. According to Artaud, “Without an element of cruelty at the root of every spectacle, the theater is not possible. In our present state of degeneration it is through the skin that metaphysics must be made to re-enter our minds.”

Artaud’s call to theatrical arms must have resonated with Cage. Around 1930 Artaud wrote that the new theater must act directly on the sense organs—“through the skin,” so to speak—by using new sounds from invented instruments, or by reviving ancient or forgotten instruments. Partch is likely the first musician to create a total musical theater based on “the supremacy of the mise en scène,” and HPSCHD seems to follow Partch in a number of ways. The microtonal divisions employed in HPSCHD follow Partch and seem to be a way to act directly on the sense organs. The use of microtonal computer-generated tapes certainly adds a degree of “difficulty” to the composition. Cage referred to Partch during the early stages of his work at UIUC; once in a letter to Hiller, and once in a draft description of HPSCHD labeled “MUSIC FOR HARPSICHORD.” In the draft, Cage described the microtonal nature of the work, but then deleted a line from the description that read “(the upper limit will probably follow the work of Harry Partch).” Why Cage found it necessary to mask the microtonal

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14 “2nd idea. A piece for harpsichord following a parameasurement of Mozart, then this measurement applied to a multiplicity of octave divisions (e.g. 5-43 or whatever division it was that Partch settled on), all overtone structures to be harpsichord-like.” John Cage to Lejaren Hiller, 12 June, 1967, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
influences on this piece is a mystery. Partch was not part of the mythology Cage created around this work.

The use of the harpsichord was not necessarily the literal revival of an ancient or forgotten instrument, but was certainly unexpected in new music of the time. The harpsichord was experiencing, however, its own kind of revival with the creation of the early music movement in the late 1960s. Cage had quite a bit of trouble finding seven harpsichords for the performance, and Joel Chadabe claims that finding seven harpsichords “is still a problem.”16 In desperation Cage sent a letter to “Mrs. R. Buckminster Fuller” in Carbondale, IL requesting her help in this project. Despite her efforts, she was unable to secure a harpsichord for him. Several were loaned or rented from private individuals, Baldwin Piano in Champaign loaned an electronic harpsichord,17 and one harpsichord was rented from Neupert Harpsichords and Clavichords in Benton Harbor, Michigan.18 The presence of seven harpsichords at one concert must have seemed very unique in 1969, although this is not stressed in any of the reviews of the event. The fact that the tapes were computer generated was a much more interesting phenomenon for reviewers.

While Cage did not “invent” the computer as a sound source, he and Hiller were working on the cutting edge of computer music with this composition. The multiple divisions of the octave, the cut-up source materials, and the general noise of the crowd created new sounds that eschewed lyricism, just as incantation functioned as a

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16 Joel Chadabe, Personal Interview, July 24 2008.
17 John Cage to Mrs. R. Buckminster Fuller, 20 February 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
“deformation of speech” with Artaud. The general chaos and noise of HPSCHD would have constituted a “theater of cruelty” in its difficulty and sheer abundance of sense stimuli. *TIME Magazine* reported that the work is “an eye-boggling and ear-boggling kinetic phantasmagoria,” and the arts critic for the *Minneapolis Star* described it as a “chaotic overload.”

**B. THE LIVING THEATER:**

The Living Theater was the physical expression of Artaud’s theory in mid-century America. The goal was to confront the audience with its own impotence in order to force a rebellion outside of the theater. Judith Malina, cofounder of The Living Theater, wrote: “The energy to change the unbearable situation mounts in the theater. Then we will go out and destroy the outer law and the inner chains: the state’s yoke and the spirit’s harness.”

Cage met Judith Malina in 1951 and Cunningham shared studio space with the Living Theater. Malina and theater cofounder Julian Beck often visited Cage in Stoney Point. Cage and Cunningham were regularly in the theater for performances which frequently included immediate American social content, such as in *The Connection*, about a junkie waiting for his “connection” in a small apartment, and *The Brig*, which is an anti-authoritarian examination of a marine brig. Living Theater works from the 1960s were anarchic, pacifist, and “clearly deep in the fabric of student protest.”

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21 “59-channel happening turns the critics on,” *Minneapolis Star*, June 16, 1969, 1B.
works performed in 1968-69 became darker in tone because of the student unrest: “the theater of rage became that of despair.”

C. “HAPPENINGS”:

The Living Theater was better known in New York and in Europe than in the Midwest, and accordingly the 1969 Urbana audience and press expected HPSCHD to be a “Happening” rather than avant-garde theater. Some college campuses in North America had hosted significant countercultural “Happenings” during this time period. Most significant, perhaps, was Andy Warhol’s Exploding Plastic Inevitable (E.P.I.) staged on the campus of McMaster University in Hamilton, Ontario on November 12, 1966. The E.P.I. was part concert, part art installation, and part cinema. E.P.I. featured one film on two screens by Warhol colleague Gerard Malanga, who also danced during the production; the Velvet Underground played; props were used (including a spoon for the number “Heroin”); and strobe lights flashed. The film showed Malanga dancing, exercising, becoming aggressive, and then shows Malanga “beaten, striped to the waist, and bound to a chair with his head encased in a black vinyl hood covered with metal studs.”

The event was characterized by distorted visual images and sounds, repetition, creation of an artistically charged environment, and collaborative creation. In a review of E.P.I. in the journal Arts/Canada Barry Lord wrote,

The final half-hour song created an environment in time as well as place, so that it began to seem to at least some of the McMaster audience as if life had always

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23 Ibid., 53.
been this way. To others, it had been a confusing, noisy, probably frightening experience.\textsuperscript{25}

When the lights came up after the performance, it became clear that a large part of the audience had already left.

UIUC students who followed the rock music press and the then nascent psychedelic scene would have known about events like the \textit{E.P.I.} The local Champaign-Urbana audience had some exposure to other “Happenings” and many attended Cage’s \textit{Musicircus} in 1967 held in the University of Illinois Stock Pavillions. In the 1960s, Urbana was also home to composers Herbert Brün and Salvatore Martirano, and new music followers would have known electronic multi-media works composed at the University of Illinois, and works like Martirano’s \textit{LsGA} from 1968. \textit{LsGA} is a mixed-media music/theater/film piece “for gas-masked politico, helium bomb, three 16mm. movie projectors, and two-channel tape.”\textsuperscript{26} Also a collaboration, \textit{LsGA} highlighted Martirano’s electronic tape compositions, Nameth’s ability to work simultaneously with a number of films, and poetry by M. C. Holloway. In 1969, Charles Whittenberg, Music Director at the University of Connecticut, described \textit{LsGA} as “Martirano’s savage, tender and elegantly crafted work.” He went on to say,

If one is shocked, stunned and, in the conclusion, edified by this powerful experiential statement, one is then made aware, through art, of a very creative

\textsuperscript{25} Ibid. \\
exposition of today’s *Weltanschauung*. This work goes far beyond the possible “campy” interpretation of its title (a wrong interpretation) into regions of terrifying violence and equally vivifying hope.\(^{27}\)

Other works from Martirano’s catalog from time period include *The Malmstadt-Enke Blues* (1967) for “real-time performance system using the Heathkit Analog/Digital Designer and custom hardware”; *The Proposal* (1968) for 2 channel tape recorder and slide projector (slides by Ronald Nameth); *Action Analysis* (1968) for “12 musicians, Bunny, and Controller”; and *Marvil Construction* (1968) which was a “real-time performance system.”\(^{28}\) The extent to which these performances could be called “Happenings” is somewhat beside the point; the audience and media perceived them as such and “Happenings” were part of the university atmosphere in the late 1960s.\(^{29}\)

Despite the fact that the *Black Mountain Piece* is considered the first “Happening” and Cage the father of “Happenings,” Cage only occasionally used that term, and to some extent defined his own theater works away from the label. However, it is instructive to understand “Happenings,” as these theater works—like the Living Theater and Artaud—had a significant influence on Cage. This influence was both positive and negative. The “Happening” construct also sheds light on the connection that the *HPSCHD* event had to the late sixties counterculture.


\(^{28}\) Salvatore Martirano, “Salvatore Martirano: Compositions.”

2. *HPSCHD* AS A “HAPPENING?”:

In many ways *HPSCHD* resembled a “Happening”: it had a flexible “frame” in terms of the physical space as well as a time frame. There was little distinction between audience and performer. Most significantly, the purpose of the “Happening” was also Cage’s purpose. “Happening” creator and theorist, Allan Kaprow, was clear that the “Happening” was to promote awareness and to open one’s eyes to “life.”\(^30\) Marsha Kuhn promoted the work in a *Daily Illini* article as a “extravaganza light-sound happening” and in one of his rare uses of the term, Cage told *TIME Magazine* that “when I produce a happening… I try my best to remove intention.”\(^31\)

In many ways, however, *HPSCHD* is *not* a “Happening.” Instead of blurring the line between daily life and art as much as possible, Cage created a virtual reality space. Cage was also referencing a specific high culture musical tradition and used historic source materials. According to Kaprow, the themes, materials, actions, and the associations evoked by “Happenings” “are to be gotten from anywhere except from the arts, their derivatives, and their milieu.”\(^32\) This is certainly not the case with *HPSCHD*’s Gesamtkunstwerk structure and emphasis on Mozart. Again, Kaprow:

> Happenings are not a composite or “total” art, as Wagnerian opera wished to be; nor are they even a synthesis of the arts. Unlike most of the standard arts, their source of energy is not art, and the quasi-art that results always contains something

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\(^31\) “Of Dice and Din,” 86.

of this uncertain identity. A U.S. Marines’ manual on jungle fighting tactics, a tour of a laboratory where polyethylene kidneys are made, a traffic jam on the Long Island Expressway are more useful than Beethoven, Racine, or Michelangelo.33

Not only is “art” off the table as source material or inspiration for a “Happening,” but the composition, actions, images are to be executed in as artless a way as possible. The “Happening” is to be unrehearsed and performed by nonprofessionals. In short, there is too much art and skill in HPSCHD for it to be considered a “Happening” by Kaprow and others. For some, these distinctions were incredibly important and central to their artistic philosophy. For others, these distinctions were meaningless. Douglas Davis put it best: “Unfortunately, the present status of the term ‘happening,’ which might serve as a verbal umbrella, irritates everyone.”34

In an article by Kaprow in which he detailed a compendium of “Happenings” he described the type of event he called the “Extravaganza” Happening:

Presented on stages and in arenas to large audiences, it takes the form of a fairly lavish compendium of the modern arts—with dancers, actors, poets, painters, musicians, etc., all contributing talents. In basic concept (probably unconsciously) the Extravaganza is an updated Wagnerian opera, a Gesamtkunstwerk. Its character and methods, however, are usually (though not

33 Ibid.
always) more lighthearted, resembling three-ring circuses and vaudeville reviews in the way that these were developed by Dada and Surrealist antecedents.\textsuperscript{35}

He described this “Happening” as the only kind with which the public had any familiarity and, “incidentally, with which it feels some degree of comfort.”\textsuperscript{36} For Kaprow, the “Extravaganza” was “watered-down,” and had more in common with the discotheque and psychedelic scene than with the revolutionary, socially-conscious “Happenings” that took place in cramped lofts or on the streets of New York.

Kaprow’s dismissal of the “Extravaganza” as belonging more to the disco or the psychedelic scene is an interesting observation. We must not forget that a description of a mirrored disco ball at \textit{HPSCHD} is featured prominently in many accounts of the event, and for many Cage is seen as an “advance man for the psychedelic ‘60s.”\textsuperscript{37} There are also other interesting iconic connections to the counterculture that Cage and collaborators seem to have built into the performance.

3. \textbf{MULTIPLE SOUND SOURCES:}

For Cage, the idea that \textit{HPSCHD} was to be presented aurally through multiple sound sources was of great importance. In the 1965 \textit{Tulane Drama Review} interview cited above, Cage said, “The assumption is that people will see \textit{it} if they all look in one direction… [but] consciousness is structuring the experience differently from anybody

\textsuperscript{36} Ibid.
\textsuperscript{37} Gann, \textit{No Such Thing as Silence: John Cage’s 4’\textsuperscript{33}}”, 69.
else’s in the audience.”

Cage wanted his music to exaggerate the elements that tended to promote individual perceptual experiences. This kind of experience was especially facilitated with the use of multiple sound sources. He continued,

One thing makes everyday life far more fascinating and special than, say, concert life. That is the variety of sound with respect to all the other things, including space. When we make electronic music, we have to flood the hall with sound from a few loudspeakers. But in our everyday life sounds are popping up, just as visual things and moving things are popping up, everywhere around us. I would like to imitate that—to present fantastic architectural and technical problems. That’s how the theatre will be.

Cage may have been influenced by his studies of Zen Buddhism to incorporate sound from all directions in order to mirror the experiential and the everyday.

Cage was also likely exposed to the idea of a theater that incorporated a variety of sound sources from his familiarity with the Bauhaus artists. Cage visited the Dessau Bauhaus in 1930, and brought back a collection of books and magazines about the Bauhaus and Bauhaus aesthetics when he returned to the United States in 1931. Shultis asserts that while Cage had begun to be interested in modern art and music while still in college “it was the Bauhaus that made the most powerful aesthetic impact on Cage’s later

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38 Kirby and Schechner, “An Interview with John Cage,” 51, 55.
39 Ibid.: 65.
Cage became reacquainted with Moholy-Nagy at Mills College in the early 1940s and was invited to come teach a course in experimental music at Moholy-Nagy’s New Bauhaus School in Chicago, renamed the Institute of Design. Part of Moholy-Nagy’s influence was precisely in the area of theater design and the use of multiple sound sources. Moholy-Nagy described a theater that included “multiple and unexpected sound sources,” as well as a theater “filled with light and color; moveable apparatus including film, reflective surfaces, optical instruments and machinery.” Another likely influence in this direction would have been Edgard Varèse’s *Poème électronique* written for the 1958 Brussels World’s Fair. The piece was designed for 425 loudspeakers placed at specific points in Le Corbusier’s Philips Pavilion. Because of the spatial discrepancy between sound sources within the architecture of the space, the performance experience was unique to any specific location.

Cage’s direct predecessors in this kind of work aside, the idea of multiple sound sources mirrored Cage’s philosophy of “interpenetration.” Cage learned this concept from his studies with Suzuki and described it as follows: “each being, whether sentient or non-sentient, is at the centre of the universe and that these centres are in a state of interpenetration and non-obstruction.”

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40 Shultis, “Cage and Europe,” 22. See also Beal, *New Music, New Allies: American Experimental Music in West Germany from the Zero Hour to Reunification*. Beal points up throughout her book that Cage was very well-known in Germany, and that he had a larger presence there than commonly realized. These European, especially German, influences are downplayed in Cage’s autobiographical writings.


42 See also chapter 3.
Challenging his audiences with a multiplicity of competing images and sounds was important; Cage wanted the audience to overcome the western tendency to “search for the best among a multiplicity of things,” and to promote the Buddhist point of view that considers “each one at the centre and these centres in a state of interpenetration.” Cage described the resulting situation as *theater*. “And what else is it?” Cage asked rhetorically, “It is new theatre.”

Cage and Hiller designed *HPSCHD* so that each computer-generated tape would have its own sound source; each tape had its own channel, amplifier, and loudspeaker. Cage originally wanted the sounds to overlap on the tapes, but the computers were unable to produce this kind of aural complexity. In addition to the tapes, each harpsichord was amplified on its own channel as well. Cage described the effect to Charles:

> The sound of the seven harpsichords, projected into space by the seven loudspeakers in a way criss-crossed this interplay of image and light. The crowd moved around in complete freedom, and at times people spontaneously started to dance, thus adding their own theater to the whole global theater they had been given.

This freedom of movement among the multiple sound sources were meant to facilitate what Gilbert Chase described in 1969 as a transition from closed to open form. Ott Allen described the effect of “random sounds… from hundreds of places” as similar to

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43 Cage and Mottram, “The Pleasure of Chaos,” 2. All quotations in this paragraph are from this source.
44 Charles, *For the Birds*, 194.
45 Chase, “Toward a Total Musical Theatre,” 27.
“the random sounds of civilization and all through it there is a tinkling hint of harpsichord—a humanity to cling to.” She wrote: “The sounds went on forever—like the universe—the stars and the planets and the sounds of someone somewhere.”

4. THE “TELESCOPIC” VISUAL IMAGES IN *HPSCHD*:

For this 1969 audience of mostly college students, perhaps the most important sign vehicles were visual, and it was the visual in *HPSCHD*, much more than the aural, that gave the impression that this event was like a counter-cultural “Happening.” According to Kostelanetz, the students certainly participated in the event as if it were a “Happening”:

All over the place were people, some of them supine, their eyes closed, grooving on the multiple stereophony. A few people at times broke into dance, creating a show within a show that simply added more to the mix. Some painted their faces with Dayglo colors, while, off on the side, several students had a process for implanting on white shirt a red picture of Beethoven wearing a sweatshirt emblazoned with John Cage’s smiling face. As in the Central Park be-ins, I met friends from various places I had not seen in ages.

The idea to include a significant visual element in the work seems to have come relatively late in the compositional process. According to a May 15, 1969 Champaign-Urbana *Courier* article, the Assembly Hall was viewed by both composers as a “unique

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theatrical space” the immensity of which suggested “the use of multiple projections.” In other words, the suggestion to incorporate significant visual elements simply may have been related to the size of the hall\textsuperscript{48}. The earliest mention of “visuals” in the Northwestern University Cage Archives is a letter to William Kluver at E.A.T. from December 12, 1968: “I am just now beginning to see some light on \textit{HPSCHD}. It will be performed here on May 16 in the big Assembly Hall (circular) using 58 channels plus I hope some ‘visuals.’”\textsuperscript{49} A few months later the plans for the inclusion of visual elements seemed to be fairly firm. Cage wrote the following letter March 21, 1969 to Minna and Mell Daniel: “Am busy implementing performance of HPSCHD which is no simple matter. … It will also be elaborate visually: stars, planets, travel through space. Trying to get coop of NASA! (through Bucky Fuller).”\textsuperscript{50}

The computer was featured heavily in the creation and representation of visual elements for the performance as well. Sumision wrote extensively on the visual elements in the performance for his Master’s thesis in art and described how he used the same ICHING printouts for the selection and creation of visual materials as Cage and Hiller used for the musical components. The visual images in the performance primarily came from four different sources: slides, printed banners, films, and silk-screened tunics for the audience. Cage clearly desired the same kind of multiplicity of visual sources as in the aural sources. In an attempt to depict the “telescopic”\textsuperscript{51} in the visual materials, Cage and his collaborators overwhelmingly chose images of planets, stars, constellations, and

\textsuperscript{48}“Decade of Computer Music Study Culminating in Hpschd,” \textit{Courier}, May 15 1969, 8.
\textsuperscript{49}John Cage to William Kluver, 12 December 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
\textsuperscript{50}John Cage to Minna and Mell Daniel, 21 March 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
space travel.

A. SLIDES:

Slides were borrowed from Adler Planetarium in Chicago, from Mount Wilson Observatory in California, (UIUC has a “guest institution” agreement with Mount Wilson to operate facilities on the observatory grounds), Palomar Observatory (which is part of the California Institute of Technology), and NASA.\(^{52}\) In addition to these borrowed slides, Cage, Sumsion, and others created about 1,600 additional slides by hand using Nameth’s personal “repertoire”\(^{53}\) of 26 different inks. Cage described the process in an interview with Sumsion in 1969:

We simply made a chart relating the 26 [inks] and 64 and then through hexigrams we were able to discover what inks to be used. Then we divided the total number that we needed by 64 and found out how many of each recipe or each I Ching determination of colors was needed, and then we worked.\(^{54}\)

The different inks consisted of different chemical properties and each slide was uniquely created from a combination of inks that were variously thick, or floated easily, or crystallized. According to Cage, “they interacted interestingly.”\(^{55}\) These slides were then separated by color into 64 groups, then combined with the borrowed slides. Cage said,

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\(^{52}\) Sumsion, “The Integration of Visual Elements by I-Ching Philosophy and Gestalt Psychology, Showing the Communicative Value of Form”, 8.

\(^{53}\) Ibid.

\(^{54}\) Interview with John Cage on Thursday, May 15, 1969, by Sumsion at his studio, Champaign, Illinois. Ibid.

\(^{55}\) Ibid.
“One person would then read the ICHING numbers, another one translating them into the categories of the slides, and then there was simply the work of putting the slides in the proper slot, in the proper [projector] tray.”\(^{56}\) According to Husarik, Cage did not want a single slide repeated during the entire evening. Nameth wrote in a letter to Husarik,

> During the last days we were still painting away, and a bit rushed to complete all 8,400 slides. Everyone joined in when they could. Merce Cunningham came in [on a flight from New York] and—arriving late, he sat down and started painting too.—All the while discussing his adventures on the journey, which had us laughing at his humorous anecdotes. Finally, we had all the slides ready.\(^{57}\)

A third type of slide featured representational and found images. Kostelanetz recalled slides of “pages of Mozart music [and] computer instructions.”\(^{58}\) According to Husarik, Cage also solicited the help of the University of Illinois art department in the selection of “primarily technographic photographs from two encyclopedias.”\(^{59}\)

The size, position, and amount of overlap were determined by ICHING numbers. The images were then converted to slides, and during the performance were projected onto “a large circle of semitransparent plastic suspended from the central rigging of the

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\(^{56}\) Ibid.


\(^{58}\) Kostelanetz quoted in Thomson, “Cage and the Collage of Noises.”

University Assembly Hall.”\(^{60}\) In total, there were 8,400 slides—100 each for 84 slide projectors.

The GAF corporation loaned the slide projectors and a letter to Cage from product manager Allan Rodd on April 30, 1969 confirmed the loan of 80 Rotomatic 707 AQ Slide Projectors from Sawyer’s Slide Projectors. Rodd also indicated that he hoped to be in attendance at the performance.\(^{61}\) According to Eisenman, Cage wished to give credit to the companies that assisted. 3M’s cooperation had been assured when the Viskupic poster was designed and Cage had told Viskupic to include 3M’s corporate logo in the poster. But GAF’s cooperation had not yet been confirmed. The solution was “a rubber stamp that Cage either got from GAF or had made. John himself carefully put the GAF image on every poster.”\(^{62}\)

**B. BANNERS:**

In addition to the 48 screens in the outer windows of the Assembly Hall, and eleven semi-transparent screens hanging in the main hall, thirty 30-foot streamers displayed harmonograph images created by Ron Resch. Resch was a pioneer in the field of computer generated visual art. In 1968, his work was included in the international “Cybernetic Serendipity” exhibit in London, England which explored and demonstrated relationships between technology and creativity. In 1969, his work was part of the Fall Joint Computer Conference in Las Vegas, Nevada. Resch has also since then worked for NASA, designed a spacecraft for *Star Trek: The Motion Picture* (1979), and is perhaps

\(^{60}\) Ibid.: 12.

\(^{61}\) Allan Rodd to John Cage, 30 April 1969, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.

\(^{62}\) David Eisenman interview with the author, 29 June 2006.
best known for his giant pysanka Easter egg in Vegreville, Alberta, Canada.\textsuperscript{63} The egg is “considered the first-ever physical structure to be constructed entirely based on computer-aided geometry.”\textsuperscript{64} Given Resch’s biography of working with computers, it is ironic that the images he loaned for \textit{HPSCHD} were not created with the computer, but rather were mechanically produced. Resch explained that these were “physical drawings… [done] with pendulums and weighted swinging oak doors as table tops with felt tip pens recording the movements.”\textsuperscript{65} (See illustration 5.1.) To the uninitiated, however, they looked very similar to early attempts at computer-generated art. The number of images on each banner and the placement of each image was determined by ICHING operations.\textsuperscript{66} (See illustration 5.2.)

C. LIGHTING AND FILMS:

To extend the “telescopic” even further, Cage enrolled Nameth in the project to program the slides, organize the films, and to light the Assembly Hall. The Assembly Hall had existing ranks of colored lights, to which Nameth added blacklights. The final touch was a mirrored disco ball. “A piercing, narrow spotlight reflecting off this sprayed patches of light across the ceiling.” According to Nameth, Cage gave instructions to change the lighting at will. Audience member, Frances Ott Allen, described the effects of the lighting:

\begin{itemize}
\item Ron Resch e-mail to author, March 7, 2008.
\item Sumsion, “The Integration of Visual Elements by I-Ching Philosophy and Gestalt Psychology, Showing the Communicative Value of Form”, 9-10.
\end{itemize}
Sometimes in the center under the lights (especially the yellow) the dark corners of
the stadium seemed like outer space—so black and far away. It was like being on a
small planet sitting in space. You could get a feeling too of being in space and
seeing a planet from high in the seats… Then again the center reminded me of a
city and the seats outside of suburbs—it especially seemed that way under the blue
light from the seats.67

The colored lighting produced particular effects familiar to the theater, but the black
lights were especially affective. Husarik reported that, “Now and then black lights came
on and set the HPSCHD banners and smocks to glow.”68 (See illustration 5.3.)

Nameth had worked with Cage preparing for the Musicircus, for which he had
created a play of slides and films. This project, however, was on a much larger scale.
Nameth designed the screens and banners, and engineered the projector and light
placement. According to Gene Youngblood,

The university’s 16,000-seat Assembly Hall in which the event was staged is an
architectural analogue of the planetary system: concentric circular promenades and
long radial aisles stretching from the central arena to the eaves of the domed
ceiling. Each of the forty-eight huge windows, which surrounded the outside of the
building, was covered with opaque polyethylene upon which slides and films were
projected: thus people blocks away could see the entire structure glowing and

67 Fetterman, John Cage’s Theatre Pieces, 254.
pulsing like some mammoth magic lantern.⁶⁹

Nameth wrote to Husarik that “finding suitable projection surfaces for the visuals posed a major problem.” After experimenting with various translucent/transparent materials, Nameth decided to project images through eleven parallel screens. He wrote that the “images were intended to fade away step by step through this grid of screens.” The forty-five foot-long parallel plastic screens were attached to the central rigging, “raised just high enough off the floor so that participants could not reach them by standing on one another’s shoulders.”⁷⁰ (See illustrations 5.4 and 5.5.)

Nameth wrote to Husarik that the selection of films was given careful consideration. They decided to use “films of ‘outer space’ in contrast to the music’s introspection into microtones.” They chose films that depicted not only a scientific understanding of space, “but also revealed space from a metaphysical viewpoint—and showed mankind’s conception and experience of space subjectivity and intuitively.” They included films on Stonehenge and other ancient sites from around the world, which “revealed the earth’s long-standing contact with the universe.”⁷¹ Most notably, showed Mélié’s *Trip to the Moon*, one of the first films ever made on space and space travel. (See illustrations 5.6)

In addition to the films which referenced space or humankind’s relationship to the universe, Nameth also selected experimental films created by computers:

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We also had some of the latest examples of experimental and computer films, among them John Whitney’s computer-graphic films. In addition, I had prepared quite a lot of electronically generated film material exploring space as energy… film segments made electronically through synthesis, put up on a scope, and then filmed with color filters… Other visual segments were made by optical printing, superimposing realistic material in various symmetrical arrangements. One segment showed a face turning 360 degrees, from left to right, and the same face turning again from right to left.72

Nameth’s description of the images in an interview with Youngblood, indicated that they “began the succession of images with prehistoric cave drawings, man’s earliest ideas of the universe, and proceeded through ancient astronomy to the present, including NASA movies of space walks.”73 Nameth indicated that the selection of images was analogous to the musical source materials used in the harpsichord parts, i.e. a “tour” through “man’s ideas of the universe.” If this was indeed the case, it was not apparent to the audience as no one present at the event reported being aware of such an arrangement of the materials.

D. SILK-SCREENED TUNICS AND T-SHIRTS:

In addition to the slides, films and banners, about 4,000 smocks were printed with images of Greek constellations. (See illustrations 5.7.) According to Sumsion, eight images were selected from 88 different constellations (although he does not mention the source from which the images were taken) and were printed in fluorescent inks.

72 Ibid.
Eisenman said that the University of Illinois Press made tunics from butcher paper, “cut to a length that allowed them to run from your navel over your head and down your back and there was a diamond cut for the head… But talk about ephemera! They were done on this thin paper.”

The intention was to illuminate the fluorescent inks with black lights at the performance. Sumsion wrote, “It is hoped that as the black light selects individuals at random they will feel some involvement and individual participation in HPSCHD.”

At least one audience member was conscious of the effect. Ott Allen reported that she felt as if she “assumed a new identity” while wearing her smock. “People look at each other’s bright pictures. I am a goatherd with two goats, Roy a warrior fighting a hydra. The black spotlight catches people at the edge of the circle and in the seats, and playfully and at random shows a beautiful color here, another there.”

Cage and Sumson, then, extended the concept of the “telescopic” to include the audience and to foster audience participation. The fact that the tunics were silk screened in fluorescent day-glow colors with images of constellations made them look quite countercultural—as if they belonged more to a “Summer of Love” concert event than an avant-garde performance.

Not only were the tunics “participatory,” but the actual act of silk screening during the event became an important part of the experience. According to Eisenman, “I was the one who proposed that we have silk screening going on during the event.” He claimed making the posters was inspiring.

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74 Ibid.
75 Sumson, “The Integration of Visual Elements by I-Ching Philosophy and Gestalt Psychology, Showing the Communicative Value of Form”, 33.
76 Fetterman, John Cage’s Theatre Pieces, 254.
I found the process so wonderful, you know, as we made the posters, that I said, “You know, it could be a little dull in there, visually, I know you’ve got all this stuff projected. But the posters are wonderful, why not show people what silk screening looks like.” So I volunteered to screen all night and they said, “Oh well if you’re going to do that then we could have people wear this and wear that” and so I screened all night and I had a crew of people assisting me.77

The image that was silk screened on to tunics and T-shirts during the event was an image of Beethoven wearing a University of Illinois sweatshirt with Cage’s image where the university seal would typically appear. (See illustration 5.8.) The graphic was drawn by Viskupic and was not only eye-catching and humorous, but also made a statement about the canon-busting nature of the event. Eisenman recalled this humorous incident that took place during the performance:

Antoinette Vischer was playing her harpsichord maybe 35 feet from me, so at one point she took a break and came over. Her English wasn’t awfully good. Some people had brought clothing. They knew in advance that screening was going on, just friends who were involved, and they brought pieces of clothing to be silk screened. So my friend David Fitzgerald brought a yellow sweatshirt. It was for his grandmother of all things. He brought that, and Antoinette saw it being screened, so she came over and said, “Would it be possible for me to obtain one of those,” she said, “I need it for a large man about this size. Well, she was a

77 David Eisenman interview with the author, 29 June 2006, Champaign, Illinois.
short woman, but rather stout and it was quite clear that she was talking about herself. So I don’t remember if David graciously gave her one of his yellow sweatshirts or not, but she certainly wanted one, I distinctly remember that. As the evening went on we ran out of paper and people then started bringing us anything they might have. People took off their t-shirts and we screened them. I remember at one point someone handed me a giant pair of women’s bloomers and I managed to screen it on the ass, you know.\(^\text{78}\)

The tunics were mentioned in the *Daily Illini* preview of the event published May 6,\(^\text{79}\) and Kostelanetz mentions the T-shirts as an important part of the experience. (See illustration 5.9.)

### E. ADVERTISING POSTERS:

Not only were the *HPSCHD* participants met with visual images that resembled a “Happening” when they crossed the threshold into the event, most had such expectations based on the advertising for the concert. The Gary Viskupic poster with Cage and the three headed (Mozart, Beethoven, Schumann) dragon was already quite a visual representation of the countercultural. In addition to this poster, Cage and Sumson created three posters, two by means of chance operations. David Eisenman assisted with the posters and described the compositional process. According to Eisenman, University of Illinois art and design faculty members recommended the images to be included in the

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\(^{78}\) Ibid.

posters. Design faculty member Alvin Dolye Moore recommended “a diagonal line that extends all the way through the poster, even into the border.” This element appears on poster number two. (See illustration 5.10.) Doyle had recommended this element because it “would destroy any composition,” and according to Eisenman, his intentions were malicious. The bar does not, however, destroy the composition of the poster, and this was due to Sumsion’s insight. “Well yes,” Eisenman said, “you know now, Sumsion’s no dope.” Eisenman described the rest of the process as following:

Now here’s the fun part: after collecting 64 or maybe 128 or maybe even 256 such suggestions, they were organized on an eight by eight grid, coins were thrown and elements were chosen. Then the position, orientation, size and color of each element was also determined by chance operations, hence the blue strawberry oriented sideways and actually coming off the edge, but you see it’s wonderful what does show up. A mushroom. There’s a mushroom. And the butterfly.  

In the third poster, everything was subjected to chance operations, even the location, sizes, and fonts of the text. Eisenman explained, “when names started going off the border, Cal [Sumsion’s] conclusion was, well you should just continue them on the other side as if it was a Möbius strip wrapped around, or at least a cylinder.” For the text “general admission” the type font chosen was Greek. “Another amusing thing about this

80 David Eisenman, June 29 2006.
“one,” according to Eisenman, “is it says ‘7:30 pm to midnight’ unlike the other posters.”

All of the posters were silk screened by hand using volunteers, and for some of the posters there were as many as seven or eight passes under the silk screens. “In any case, getting the registration to work with so many different passes through the screens, was so difficult that very few good copies of this poster were ever made.” Eisenman remembered having a hundred sheets of paper for each design, but some were so poorly silk screened that they were thrown away. Eisenman explained,

The concept was that these would be put around campus on very large protected bulletin boards and used to advertise the event. But as soon as any of them were put up they were instantly stolen. So in the end we quickly cobbled together some other smaller posters... which were mostly seen.

According to Eisenman, most people did not know about the posters and they “disappeared into history for a very long time.” Kostelanetz who came from New York specifically to review the event never knew about these posters.

In 2003, Eisenman discovered that he had several copies of the posters still in his possession. He called David Patterson at the University of Illinois and together they arranged for the sale of the posters to various archives and museums including the Northwestern University John Cage Archives, the Krannert Center, and the University at

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81 Ibid.
82 Ibid.
83 Ibid.
Buffalo SUNY Music Library. According to Eisenman, the posters were also sold in 1969, and he had made up an *I Ching*-inspired chart to determine the price each person paid for the poster. “You flipped coins and the price you paid was determined by chance operations… The paper was a dollar a sheet in those days that was good paper, but I think that the range that people paid for the posters was 68 cents through 10 dollars.”84 (See illustration 5.12.)

In 2003 Eisenman wanted to continue the chance-inspired spirit connected to the posters as he insured that the posters were distributed to archives and museums:

What I’ve done is that David [Patterson] and other scholars and people with very strong Cagean connections get the posters for, you know, a couple hundred dollars. The archives, University of Illinois and Northwestern were asked to pay $1,500 for a set of three, and they did. And in fact in both cases they made the decision within a half hour… I think the Getty set is the only set ever sold at arm’s length and they asked me to estimate a price. I said $7,500 for a set of three and they simply paid the bill, so, God knows what they would actually bring if you put them up at Sothebys or something. But I have no interest in doing that.85

Eisenman quickly found individuals, libraries, museums, and archives to house the posters.

5. *NOT WANTING TO SAY ANYTHING ABOUT MARCEL:*

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84 Ibid.
85 Eisenman.
The chance methods used to create the posters had been worked out by Cage and Sumsion on a visual art project that they completed in 1968 called *Not Wanting to Say Anything About Marcel*. The project was in memory of Duchamp, who had recently passed away. The title was inspired by Jasper Johns who told the *North American Review*, “I don’t want to say anything about Marcel.”\(^8\) Cage used Johns’ response as the title for these lithographs, two of which were published in the fall edition of the magazine in 1969. The larger work consists of silk-screened Plexiglas panels which Cage called “Plexigrams.” According to Kathan Brown, “Cage started his graphic work with imitation: the Plexigrams look a lot like a Rauschenberg edition called *Shades*, 1964, and also relate to a larger mechanized work (*Revolver*) on plastic panels that Rauschenberg did in 1967.”\(^7\) (See illustrations 5.13.)

The Cage/Sumsion “Plexigrams” are different from Rauschenberg’s works in that they were composed by chance, and are widely accepted as the first visual artworks composed by chance operations. Cage used the *Random House Dictionary* and the New York Public Library’s Picture Collection\(^8\) as source material. By chance operations, Cage selected a word. If an illustration was present in the book, he used it. If no image was present, he then asked if the word should substituted with a Picture Collection

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\(^8\) “The Picture Collection, [established 1915] a unit of the Branch Libraries of the New York Public Library, is an indexed and organized collection of picture documents for fact-finding use, historical research, comparison, display, and study. The collection contains over 2,000,000 pictures classified under approximately 8,000 major subject headings. It includes all types of pictorial representation--photographs, postcards, prints, posters, clippings from books and magazines--and covers the entire panorama of world history, architecture, science, apparel, sports, news events, and the contemporary scene.” Sam P. Williams, *Guide to the Research Collections of the New York Public Library* (Chicago: American Library Association, 1975), 134.
illustration. According to Brown, “Every operation in Cage’s work process was discrete, with coin-throwing for each tiny step. Carl Solway, who with Alice Weston published the Plexigrams, reports that among the receipts for bills paid is one to an assistant for throwing coins.”\(^{89}\) It is a mystery why Sumsion and Cage were not using the ICHING printouts for the process. Perhaps the program was still not quite functional while Cage was working on the “Plexigrams.” In a letter to Marshall and Enid Ginsberg October 2, 1967, Cage wrote:

So far there are still bugs in the first program which is called ICHING: it’ll do all my chance operations, i.e. 18,000 penny tossings in a matter of seconds, interpret them as hexagrams and then analyze the distribution so that we’ll know the difference betw. it and other random processes. (!)\(^{90}\)

But by 1968, the ICHING program \textit{should} have been functional. Hiller had accepted a new position at University at Buffalo, SUNY in 1968. Perhaps Cage was still more comfortable with tossing coins, especially if an assistant was paid to do so for him.

It seems that Cage was certainly the creative force behind this project, and Sumsion provided the artistic paste-up of the images and prepared the images for transfer to silk screens. According to Cage,

\(^{89}\) Brown, \textit{John Cage Visual Art: To Sober and Quiet the Mind}, 52.

I composed the graphs for work and he executed it, just as I would write a piece for a pianist and she would play it, or he would play it. In other words, in moving from music to graphic work, I took with me the social habits of musicians, hmm? The division of labor, so to speak.\textsuperscript{91}

The most important thing about the “Plexigrams,” according to Brown, was the way in which the images were located on the page. Cage used a grid, and through chance operations located coordinates on the grid. Then using a protractor he turned the image a number of degrees indicated through \textit{I Ching} processes. Brown noted, “He used this method, with or without the protractor, for most of his graphic works and some of his music over the rest of his life.”\textsuperscript{92} Eisenman summed up Cage’s work by saying, “I think that Cage’s discovery that chance operations very often lead to wonderful compositions is one of the central moments of his career. And God knows it works in the graphics.”\textsuperscript{93}

The poster graphics which used the same chance-selection methods “worked” for the 1969 college audience not necessarily because of the chance-composed imagery, but largely because they were by design to be viewed under a black light. The colors were iconic of other pop culture movements afoot between 1967 and 1969, and Viscupic’s poster was especially evocative of the aesthetic of the youth movement. In short, the posters looked countercultural.

\begin{flushleft}
6. \textit{HPSCHD} AS HYBRID ART FORM:
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\textsuperscript{91} Joan Retallack, ed., \textit{Musicage: Cage Muses on Words, Art, Music} (Hanover, NH: Wesleyan University Press, 1996), 93.
\textsuperscript{92} Brown, \textit{John Cage Visual Art: To Sober and Quiet the Mind}, 54.
\textsuperscript{93} Eisenman.
In joining with Hiller and others on *HPSCHD*, Cage departed radically from his earlier collaborative style. He started in this aesthetic direction two years earlier with the collaborative sound, art, and dance installation *Variations V* (1965). Gordon Mumma said, “I hope John will forgive me in heaven, or wherever he is, when I say that *Variations V* was the first Wagnerian thing he did. It was the beginning of an enormous operation of interaction between creative artists and engineers.”

*Variations V* premiered as part of the French-American Festival at Lincoln Center. Cage and Cunningham created a large electronic installation on the stage through which dancers moved in order to trigger sounds. Additional sound sources accompanied the performance alongside distorted video images created by Nam June Paik and film collages by Stan VanDerBeek. Due to the complexity of the sound installation on the stage, Cage and Cunningham collaborated to a much greater degree than they had been accustomed to. This work was followed by *Variations VII* (1966), one of “9 Evenings: Theatre and Engineering” sponsored by Experiments in Art and Technology (E.A.T.). According to the E.A.T. prospectus, the organization was created to promote “the possibility of a work which is not the preoccupation of either the engineer, the artist, or industry, but the result of the exploration of the human interaction between these three areas.”

Cage followed up and expanded on this new type of collaboration with *HPSCHD*. This work represents a dramatic aesthetic shift for Cage from the independent, parallel collaborative effort, to a more traditional kind of collaboration in which all the elements

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94 Gordon Mumma in interview with Leta Miller, quoted in Miller, “Cage’s Collaborations,” 160.
are, in a sense, “fused.” The collaborative effort, in the case of *HPSCHD*, was designed to add richness to the texture, but within a given aesthetic. *HPSCHD* involved “multiplicity,” in terms of the use of visual images, slides, films, and sounds sources, but was not a “willful collision of media,” as in the “combines” of Rauschenberg or the earlier collaborations. Cage selected everything in *HPSCHD*, albeit through chance processes, severely limiting the range of selections by both the kinds of questions he asked and the nature of the materials. Cage consistently applied the same compositional processes to all the media present in the work. The hexagram printouts generated by the ICHING program governed the choice of slides, tapes and films. The images all centered on the common themes of technology and outer space—which, of course, were very hot topics in 1969—and the sound sources were equally limited and thematic, including only the computer generated tapes and the harpsichord parts. Cage was aware of the aesthetic difference of *HPSCHD* when compared with earlier multimedia extravaganzas. In an interview with Husarik Cage said, “I think *HPSCHD* was more like a work of art than *MUSICIRCUS*. . . . The reason I say this is because all the parts were made for each other.” Kostelanetz wrote, “For all its diffusion... *HPSCHD* was an indubitably organic piece, where every element contributed its bit to the whole and which successfully established a unique and coherent ensemble of interrelated parts.”

With artists like Martirano, Warhol, the Velvet Underground, and Kaprow setting the scene and receiving quite a bit of media attention, it is not surprising that the *HPSCHD* audience expected a large scale “Happening,” or least another *Musicircus*.

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98 Kostelanetz, “Environmental Abundance,” 175.
Architecture student Bert Mautz said of the event: “I approached HPSCHD anticipating a bigger and better ‘Musicircus.’ Suffice it to say that the unintelligible din was a disappointment.” Some attendees expected a Midwest Woodstock. A blogger by the name of “Brian” recently wrote that the original event “lasted five hours and was attended by about 5,000 hippies. It was accompanied by the full regalia of 60’s psychedelia. We all dropped acid and had a great time.” Virgil Thomson wrote in regard to HPSCHD in the New York Review of Books:

Whether the youths and maiden gather 300,000 strong in fields near Woodstock, New York, merely to be together while rock artists, even amplified, cannot combat the distances, or whether they mill around inside an auditorium built for a mere 18,000 souls while a thoroughly prepared electronic happening (accompanied by visuals and swirling lights) is served up, along with allusions to Mozart, under the highest academic auspices and the authorship of two famous masters, for the life of me, I cannot see much difference, though Woodstock, by report, was far more fun.

So what is HPSCHD if it is informed by the theater theory of Artaud, but not a “Happening,” and yet—Thomson is surely writing tongue-in-cheek—not much different than a countercultural event like Woodstock? For the answer to this question, it is instructive to look at Jerrold Levinson’s work on hybrid art forms.

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101 Thomson, “Cage and the Collage of Noises.”
In his book *Music, Art, and Metaphysics: Essays in Philosophical Aesthetics*, Levinson identifies a number of artworks that are indeed “hybrids,” and this seems to Levinson to be of “creative and critical significance.” It is not enough for Levinson to call an artwork a hybrid simply because it is complex, or contains a number of different structural elements. Nor is it enough for the artwork to contain distinct and separate strands of different arts.

Rather, hybrid status is primarily a *historical* thing, as is, in a way, being a biological hybrid. An art form is a hybrid one in virtue of its development and origin, in virtue of its emergence out of a field of previously existing artistic activities and concerns, two or more of which it in some sense combines. ¹⁰²

Thus, a hybrid art form is an art form with a “past,” and “it is its miscegenetic history that makes it a hybrid, not just the complex ‘face’ it presents.” ¹⁰³ Levinson identified three different types of artistic hybrids. There are hybrids of *juxtaposition* (or addition), *synthesis* (or fusion), and *transformation* (or alteration). An example of a hybrid of juxtaposition would be the Cage/Cunningham/Rauschenberg collaborations in which all three artists prepared separately and performed parallel to each other. These collaborations formed a whole in performance “by summation and not by merging or dissolution of individual boundaries.” ¹⁰⁴

¹⁰³ Ibid., 29-30.
¹⁰⁴ Ibid., 31.
In hybrids of synthesis or fusion, however, the objects, actions, and sounds of the different arts lose their original identities to some extent and how they are perceived within the hybrid artwork is significantly different from how they would be perceived individually. “In both synthetic and transformational cases, some essential or defining feature of one or both arts is challenged, modified, or withdrawn.” 105 Levinson, I believe, would describe HPSCHD as an integrative, synthetic, multiple hybrid. In these types of works there is a certain resistance in the combination: Mozart and computers? Harpsichords and NASA films? Clearly, hybrid artworks such as HPSCHD can signify in a number of ways depending on their specific content. Cage was clear that he hoped HPSCHD could communicate an understanding of existence within an anarchic utopia. For Levinson, hybrid artworks signify in a much broader sense in that they “tend to be symbols of creativity itself, of forcefully and purposively putting things together, of welding items previously disparate and unconnected into new and more complex unities.” 106 This type of hybridization in art is best achieved when working collaboratively.

Jean-Fraçois Lyotard and translator/co-author Deborah Clarke wrote an important feminist article, “One of the Things at Stake in Women’s Struggles” published by the journal SubStance in 1978. Lyotard and Clark identified a number of factors separating women from men and the feminine from the masculine. First, “virility claims to establish order and femininity is the compulsion to deride order. There is chattering in the gynaeceum and silence among the troops.” Second, “the ruse of reason (masculine)

105 Ibid., 33.
106 Ibid., 34.
differs from the snares of sensitivity (feminine).”¹⁰⁷ The chaos of the *HPSCHD*
performance space and the use of chance operations in the work’s creation would have
signified “feminine” for these authors. More important, however, the open performance
space, the mobility of the audience, and necessity of audience participation created a
work that lacked a single subject. This, for many social theorists—including Lyotard and
Clark—meant that the work eschewed the phallogocentrism of modern art and music.

Lyotard and Clark assert that the question of relationships between the sexes, and I
would extend that to include those of different sexual orientations, can only be posed in
the *metalanguage* of philosophy, which is “already the language of masculinity.” The
authors explained, “The complicity between political phallocracy and philosophical
metalanguage is made here: the activity men reserve for themselves arbitrarily as *fact* is
posited legally as the *right* to decide meaning.”¹⁰⁸ It is the destruction of metalanguages
and grand narratives that is at the heart of any anti-patriarchal struggle. Even our
Western reliance on a single, definitive signifier/signified relationship seems to be part of
the phallogocentric problem:

Women [and others] are discovering something that could cause the greatest
revolution in the West, something that (masculine) domination has never ceased to
stifle: there is no signifier; or else, the class above all classes is just one among
many; or again, we Westerners must rework our space-time and all our logic on the
basis of non-centralism, non-finality, non-truth.¹⁰⁹

¹⁰⁷ Lyotard and Clarke, “One of the Things at Stake in Women’s Struggles,” 10.
¹⁰⁹ Ibid.: 16.
In short, binary and exclusive sex roles don’t function “without a signifier,” and the result of the non-narrative, multiple, interpenetrating sign vehicle is a realization that traditional, heterosexual masculinity is just one identity among a patchwork of possibilities. Although Cage never expressed through his writings or in interviews a desire to create an art space that can serve to undermine Western masculine narratives, he does make it clear that these spaces were to demonstrate an alternative to such narratives. In an interview with Eric Mottram, Cage explained that he learned this from Zen Buddhism, and specifically in regard to the idea of interpenetration and non-obstruction. This Eastern idea, according to Cage, “is quite different from the western point of view which sets up a means of measurement, a grid, and then attempts to define the position of an object with respect to something other than itself.” Cage explained that the result of such a point of view is that in the west, a situation of competition exists: “one would search for the best among a multiplicity of things, whether living or non-living, sentient or non-sentient.” Whereas with the Buddhist point of view, “you would see each one at the center and these centers in a state of interpenetration.” Cage then makes the remarkable statement that this Buddhist point of view, the non-competitive situation, is theater.

Just as the non-narrative structure represents an alternative to hegemonic metanarratives, the fact that *HPSCHD* is a combination of distinct art forms signifies “anti-patriarchal.” *HPSCHD* is a hybrid; a combination of the natural and the man-made,

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110 Ibid.: 10.
112 Ibid.
the harpsichord and the computer, the corporal and the mechanized. As a hybrid art form it resembles a cybernetic organism. Donna Haraway, professor of feminist theory and technoscience at the European Graduate School in Saas-Fee, Switzerland, wrote the influential article “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century.” In this work, Haraway claimed that the model for future feminism is the cyborg—a creature which exists in the post-gender world, and according to Haraway, “our most important political construction.” According to Haraway,

The cyborg is resolutely committed to partiality, irony, intimacy, and perversity. It is oppositional, utopian, and completely without innocence. No longer structured by the polarity of public and private, the cyborg defines a technological polis based partly on a revolution of social relations in the oikos, the household. Nature and culture are reworked; the one can no longer be the resource for appropriation or incorporation by the other. According to Haraway, the importance of the cyborg lies partially in its ability to blur boundaries. For Haraway, “The cyborg is a kind of disassembled and reassembled, postmodern collective and personal self.” It is thoroughly ambiguous. Like Haraway’s cyborg, boundaries in HPSCHD are unclear, and/or transgressed. The boundaries between natural and artificial, past and present, public and private, primitive and civilized, mind and body, and art and life are all intentionally blurred. Haraway claims that her cyborg myth “is about transgressed boundaries, potent fusions, and dangerous possibilities which progressive

114 Ibid., 569.
people might explore as one part of needed political work.” Haraway seems suspicious of collective action, in terms of group identity, but rather promotes a realization that all unity is a fiction and that “no construction is whole.” Haraway explained, “It is important to note that the effort to construct revolutionary stand-points, epistemologies as achievements of people committed to changing the world, has been part of the process showing the limits of identification.” Haraway continued,

This is a dream not of a common language, but of a powerful infidel heteroglossia. It is an imagination of a feminist speaking in tongues to strike fear into the circuits of the supersavers of the new right. It means both building and destroying machines, identities, categories, relationships, space stories.

Cage, similarly didn’t necessarily want participants to “identify” with each other, or even to interact with each other; but rather to exist without interference in the kind of heteroglossia described above. Cage also insisted that the performers limit their interaction with each other and identity as a group. Cage wrote,

There is the possibility when people are crowded together that they will act like sheep rather nobly. That is why separation in space is spoken of as facilitating independent action on the part of each performer. Sounds will then arise from actions, which will then arise from their own centers rather than as motor or

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115 Ibid., 571.
116 Ibid., 573.
117 Ibid., 592.
psychological effects of other actions and sounds in the environment.\textsuperscript{118}

Cage desired that the crowd function as a kind of “emancipatory solution, dissolving structures and organizations that immobilize people,” in favor of what Cage called “process,” “openness,” “the circus situation,” or simply, “being.”\textsuperscript{119} Haraway and Cage are both suspicious of collectivity, and the idea of “noninterference” was central to his anarchic philosophy. Haraway’s feminist cyborg gospel mirrors Cage’s message of multiplicity. Haraway wrote, “The home, workplace, market, public arena, the body itself—all can be dispersed and interfaced in nearly infinite, polymorphous ways, with large consequences for women and others.”\textsuperscript{120} Like the cyborg feminist who no longer cares to be “integrated/exploited into a world system of production/reproduction and com-munication,” Cage believed that our presence in the world should be simultaneously “nonobstructive” and “interpenetrating,” individual, and open to all kinds of experiences.

7. CONCLUSION:

In significant ways, Cage’s multimedia, hybrid, collaborative effort is an excellent example of Artaud’s “total theater” as well as an example of Haraway’s feminist cyborg. This movement toward an integrated, transgressive, open, total theater is also Gilbert Chase’s “call-to-arms” in 1969:

\begin{itemize}
  \item \textsuperscript{118} Cage, “Composition as Process,” 39-40.
  \item \textsuperscript{119} Junkerman, “‘New/Forms of Living Together’: The Model of the Musicircus,” 47.
  \item \textsuperscript{120} Haraway, “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century,” 578.
\end{itemize}
A musical time-space extravaganza? And why not—in an age when men are preparing to travel to the moon?... If music, and particularly the musical theatre, is to make the transition from closed to open form, then perhaps we could do worse than to think of it as a time-space extravaganza—a synthesis of the theater of the absurd, the theater of cruelty (as defined by Artaud), the theater of happenings, of events, of activities, of environments—the “total theater” of intermedia, crossing all boundaries, transcending all categories.\(^{121}\)

This is what Cage set out to do with his team of artists and artisans. It seems that he had taken notes from Artaud’s Total Theater, as well as his colleagues working at the Living Theater and with “Happenings.” With HPSCHD he created a theater that acted directly on the senses through new sounds and new sound sources; through light that acted in counterpoint to the sound sources; and visuals that allowed for the audience to experience a metamorphosis of colors and images. The nature of the piece as a hybrid artform acted as a metaphor for an alternative gender identity, or at least as a new artistic identity, even if Cage remains for many the solitary, male, patriarchal genius.

\(^{121}\) Chase, “Toward a Total Musical Theatre,” 27.
Illustration 5.1. Harmonograph images by Ronald Resch, courtesy of Ronald Resch.

Illustration 5.2. Image of the banners before the start of the event. University of Illinois archives, courtesy of David Eisenman.

Illustrations 5.6. Images from Mélié’s *Trip to the Moon*. 
Illustration 5.11. Cage-Sumsion *HPSCHD* poster #3. David Eisenman’s private collection.
CHAPTER 6: CONCLUSION: AFTERLIFE OF HPSCHD

“I don’t think we’re really interested in the validity of compositions any more. We’re interested in the experiences of things.”

—John Cage, “Of Dice and Din” 1969

Forty years after Cage and Hiller were busily programming the I Ching for the first HPSCHD performance, the piece was presented in Toronto at Soundaxis ‘08 and advertised with the following press release:

The start was Antoinette Vischer commissioning a piece for solo harpsichord from John Cage. The end was the wildest, biggest, most chaotic composition of the 20th century, the ultimate discotheque of exuberance in unsynchronized simultaneities of sound and image. […] Hiller’s sounds are like trumpets blaring out a musical charge. The visual environment, consisting of abstract shapes and space imagery, fills the space with joyful exuberance.

My advice is to come to this concert… you may never have another chance to see as well as hear HPSCHD. Will it change your life? I think so.  

1 “Of Dice and Din,” 86.
That *HPSCHD* is still part of the avant-garde concert repertoire is remarkable. What other large-scale intermedia works from the late 1960s are still performed? The vast majority of these works were designed for a single performance, a single tour, or at the most, a very short lifespan. In this chapter, I describe a selection of *HPSCHD* performances after the original event in Urbana, paying particular attention to how the performers and audience members approached the performance with the idea of a certain “correct” way to present and/or receive the work. In light of an emerging Cagean “performance practice,” I discuss how a composition such as *HPSCHD* can be viewed in light of an increasing skepticism vis-à-vis the “work concept.” I end the chapter with topics for further study.

The fact that multimedia extravaganzas like *HPSCHD* were in a real sense *temporary* phenomena was hailed both as a terrific artistic (and political) asset and strength, and as a naive shortcoming. In *Modern Music and After*, Paul Griffiths wrote that Cage’s *Variations V* (1963), *HPSCHD*, and *Musicircus* “were temporary—as temporary as the balloons and the hamburgers.” Griffiths pointedly claimed that “To revive those works now could only be an exercise in 1960s nostalgia; anarchy—as Cage’s subsequent output so magnificently demonstrated—constantly has to be reinvented, for otherwise it is form and custom.”³ While Griffiths seems to suggest that these works are not only as temporary as the balloons and hamburgers, but also as trivial, he also makes an excellent observation about the role of nostalgia in recent performances of *HPSCHD*. In an interview with the author, David Eisenman said that audiences both young and old approach the piece with a great sense of nostalgia for the 1960s. He said,

“It is like something happened once and we want to touch it, we want to be part of it. This was the sixties and we want to know what it was like really.”

During preparations for a 1975 performance of *HPSCHD*, John Rockwell of *The New York Times* wrote that Cage seemed to be “full of fatherly feelings about the present effort.” However, when Rockwell asked him if he took part in any of the preparations, Cage replied, “No, no... I wouldn’t dream of doing it now.” Instead of viewing the ephemeral nature of these works as a shortcoming, as Griffiths seems to suggest, others found it a great asset. Kaprow viewed the fact that one must constantly reinvent the Happening as its main strength. In his essay, “The Happening is Dead: Long Live the Happenings!” Kaprow wrote,

The Happenings are the one art activity which can escape the inevitable death-by-publicity to which all other art is condemned, because, designed for a brief life, they can never be overexposed; they are dead, quite literally, every time they happen. At first unconsciously, then deliberately, they [Happenings] played the game of planned obsolescence.

**HPSCHD** in this sense, however, is not a Happening. There is a score, the computer-

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generated tapes were designed for multiple uses, and Cage and Hiller planned from the beginning for multiple performances. To the radical artists devoted to “pure” Happenings, certain members of the FLUXUS crowd, and other radically experimental artists, Cage did suffer from “death-by-publicity.” For these artists, Cage seemed too “mainstream.” At the same time, Cage was heralded as a kind of godfather, a forerunner, and pathfinder.

This interesting dilemma concerning to what extent a huge multi-media event like \textit{HPSCHD} is repeatable brings up a number of questions about the nature of these “works”; indeed, it calls into question the work-concept itself. Stockhausen repeated Jameson’s sentiment that there are no longer “works,” but only “texts” with his assertion that, “the questing of others for autonomous works just seems to me so much clamour and vapour.”\footnote{Worner, \textit{Stockhausen, Life and Work}, 111.} While some avant-garde compositions may continue to exist as “autonomous artworks,” an event like \textit{HPSCHD}, however, does not. We can no longer discuss the “work itself,” rather only multiple, different performances of the same “text.” This is the reason throughout this dissertation for the emphasis on the original 1969 \textit{HPSCHD} event, and, in this chapter, what I call the “afterlife” of the original event. \textit{HPSCHD} is not a “work” in the modernist, high art sense of the word.

1. \textbf{\textit{HPSCHD} Performances After Urbana:}

There seems to have been an immediate clamor for multiple performances of \textit{HPSCHD}, even before the work was finished in Urbana. Roger Reynolds was living in Tokyo in 1968 and had proposed a performance in Japan with the cooperation of SONY,
which was to supply the electronic equipment. In early January 1968, Cage wrote that he “would have the piece for May 6.” At this point in the compositional process, Cage still had only vague ideas of the harpsichord parts: “Besides the 50 tapes there’ll be a part for live harpsichord, and there’ll probably be several versions of the live part (only one to be used at a given performance.”

On January 15, 1968, however, Cage realized that his completion date was too optimistic and cancelled the performance plans. Cage wrote that it was necessary to “take the attitude that when the piece is actually finished, then, and then only can plans be made for its performance.”

It seems that Francesco Agnello experienced the same disappointment as Reynolds. Agnello, il segretario generale of the Orchestra Sinfonia Siciliana was very much interested in including HPSCHD in a festival in late December 1968. In a June 5, 1968 letter, Cage wrote that the work was not finished and that he felt uncomfortable promising the work before it was completed. “If it is performed in Sicily in December, and I did come to Palermo,” Cage wrote, “I would have Hiller come also.” Agnello replied that the festival could not afford to bring both Cage and Hiller, but that perhaps Hiller’s expenses could be covered by other performances in Europe. The point was moot, however, as the work was still not complete by the end of the summer. On

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8 John Cage to Roger Reynolds, 8 January 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
10 John Cage to Francesco Agnello, 5 June 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
11 Francesco Agnello to John Cage, 18 June 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
September 29, 1968, Cage replied to Agnello and suggested *Winter Music* (1958) or *The Seasons* (1947) instead of *HPSCHD*.

Two of the young harpsichordists involved in the Urbana event organized performances of their own shortly after the premiere. The first to do so was Neely Bruce who staged a much-reduced version of *HPSCHD* as part of the Contemporary Arts Festival at Atlantic Christian College on Nov. 5, 1969. The performance featured harpsichordist Bruce and, according to the *Wilson Daily Times*, “about 10 tape recorders, an urn of coffee and two trays of cookies.” Reporter Otto Henry described the concert:

In his preliminary remarks, Mr. Bruce urged the audience to move about Howard Chapel freely to partake of the refreshments and to join him on the stage and read the score with him. They complied with gusto, and, it seemed to me, with some relief. “HPSCHD” soon developed into a delightful music gallery as people strolled about talking and inspecting the equipment.

Bruce’s performance was only part of the concert; also on the program was Douglas Leedy’s “Usable Music I” (1967), William Hellermann’s “Ariel” (1967) and William Duckworth’s “Western Exit” (1969). Henry mentioned graphics that accompanied the Duckworth piece, but none for *HPSCHD*.

Bill Brooks staged a very small production of *HPSCHD* in Smith Hall on the University of Illinois Urbana-Champaign campus in 1973. He and a few other students,

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12 John Cage to Francesco Agnello, 29 September 1968, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
including Neely Bruce, had successfully raised funds for a modest contemporary music festival that featured a visit by La Monte Young, among others. For his performance of *HPSCHD*, Brooks decided to use only two tapes, chosen at random, and he played Solo II. In an interview with the author, Brooks said, “I wondered what it would be like, basically.” He said that the audience was a modest house of about 150, but it included several friends of his who were dancers, including one particular friend who was “a wonderful dancer, [and] a completely unpredictable thinker.” He remembered the audience getting quite restless after about ten minutes. After all, they were “sitting down in Smith Hall looking at two speakers and this guy playing [sings Minuet excerpts] over and over and over again, seemingly never ever ending.” At this point Brooks remembered that “this dancer got up and just started walking around the perimeter of the seats. Then two or three other people got up and started walked around the perimeter of the seats. And the next thing you know, I look up and there was this kind of dance!” Brooks joked that it looked like “A kind of procession! Something in between a processional and a conga dance, or a chorus line! I don’t know!” Brooks said that at the end of the performance “there was a huge eruption of applause which was half sarcastic, I’m sure, and half genuinely appreciative.” He estimated that about a third of the audience had gotten out of their seats. Brooks said,

Now, the circumstances, of course, were exceptional, and the people were exceptional, and it was Illinois, and it was 1973, so it’s not fair to conclude what I have concluded, but nevertheless, I have concluded that the festivity that is intrinsic in that music, and those timbres, especially with the wonky tape stuff
going on, it’s just very hard to not get up and do something. Leave is one possibility! But if you’re not going to leave just sitting in your seat just doesn’t seem right.

Brooks remembers it as “one of the best performances I’ve ever given, even though there was nothing to doing it.”

*HPSCHD* has had a number of champions including Brooks and Bruce, but none has been as devoted to the work, nor as active, as Joel Chadabe. Chadabe has produced the piece “eight or nine times.” In 1971, Cage wrote to Harold Hersch of the San Francisco Conservatory of Music that Chadabe was “the last person to solve the technical problems for a performance of *HPSCHD*.” Hersch planned two evenings of *HPSCHD* for April 14 and 15, 1972, and Cage suggested that he contact Chadabe as he “might save you some time and worries.” Whether Hersch took Cage’s advice or not, the piece was indeed staged in spring of 1972 in the San Francisco Museum of Art. On May 21, Hersch wrote a comprehensive report of the event back to Cage:

> It was fine and wonderful doing *HPSCHD = Thank you!* Of course, there were never many stretches of time when I forgot your words of caution from our Chinese lunch last summer… and the truth of your concern made me laugh inside because you were so right! So many impossible moments and so often a helplessness = watching the swaying of an imbalanced skyscraper! Praying that it

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15 Chadabe, interview with the author.
continues to stand! Of course it did!  

The room in the museum was not very big, but the performance included six harpsichords of various sizes and types (including a Baldwin electric), 30 channels of tape playback, a number of amplifiers and speakers placed around the perimeter of the room, manned by nine people. Hersch had a scaffolding tower erected in the center of the room which housed four 35mm slide projectors and four 16mm film projectors. As in the Urbana performance, the images included NASA slides and films, the Méliès *A Trip to the Moon*, and the 1936 *Flash Gordon: Rocketship*. According to Hersch, “Images were projected on two levels around the room, some on large screens, some onto the walls, some into curved surfaces… it worked.” The event was crowded and some participants came prepared “with blankets and pillows” so that they could lie down in the middle of the room. The harpsichordists prepared for the performance by reading the interviews Larry Austin conducted with Cage and Hiller published in *Source: Music of the Avant-Garde* (1968).

The correspondence between Cage and Hersch, as well as Hersch’s reference to their lunch together, indicates that they spent a significant amount of energy getting the concept of the work straight. Hersch initially wanted to include *HPSCHD* as part of a formal concert program, but Cage convinced him that it was not that kind of piece. It seems that despite Hersch’s exuberance over the fact that the event seemed to come off

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17 Harold Hersch to John Cage, 21 May 1972, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
18 Ibid.
well, not all of the audience members were as enthusiastic. The poet Jim Rosenberg, who was in his early twenties at the time, wrote Cage the following review of the performance:

I found the performance very disappointing for a number of reasons. For one thing the visuals seemed to disrupt the music. The music imposed on one a global sense of time, definitely non-real-time. The films, however, were real-time. Perhaps this discord was just what you were after. (I just thought of that.) In any event the visuals give a rhythm which is present along with the musical rhythm, and obviously the composer must count this as part of his purview.

Rosenberg complained that the hall was too small to accommodate the equipment and the crowds, and this impeded his ability to move about the room. Rosenberg wanted a sense of “indeterminacy on the part of the listener,” so that he could, in effect, create his own piece. “For this to work,” he explained, “the different areas of the space have to have a certain amount of predictability to the kind of sound coming from that one place; or somehow the listener must be able to hear what is in each place, so he can make the decision for himself. This was not possible.” He complained that the general volume was nearly constant, and that no idea emerged as to what was happening musically in any one place. “So almost everyone either lay down in the middle of the room and stayed in one place, wandered aimlessly or watched Flash Gordon & Buck Rogers as if in front of
One thing that is clear from Rosenberg’s account is that he was clearly well versed in Cage’s aesthetics. He seems to understand the idea that the piece was to be “about” time, that physical mobility was important, and that the auditor was responsible for interacting with the environment in order to create some kind of meaning from the experience. Both Hersch’s account of the performance and Rosenberg’s critique demonstrate a passion for the aesthetic and indicate that both had done their homework prior to the *HPSCHD* performance.

The two London performances of *HPSCHD* followed shortly after the San Francisco event. These two performances (Albert Hall, May 22, 1972 and Roundhouse, August 13, 1972) are discussed in Chapter 4 in the context of audience participation.

In July, 1972, Berlin hosted the *Woche der Avantgardistischen Musik* organized by Walter Bachauer. Cage attended part of the festival and performed *Mureau* with David Tudor. Cornelius Cardew, Morton Feldman, Frederic Rzewski, Cage, and Tudor participated in the first performance of Feldman’s *Five Pianos (Pianos and Voices)* and Tudor, Rzewski, Cardew and Vischer performed *HPSCHD* in the Berliner Philharmonie large hall and foyer. This was the performance that inspired the scathing critique of Cage’s politics delivered by Cardew quoted in chapter 4. Amy Beal wrote that “Bachauer’s Berlin festival in 1972 set the standard for his Metamusik festivals” which followed in 1974, 1976, and 1978. Cage’s influence was immediately palpable. Beal reported that following his 1972 event, Bachauer organized a four-hour “Musical Multimedia Workshop” at a RIAS studio for the spring of 1973. The concert featured

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20 Jim Rosenberg to John Cage, 6 November 1972, John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.
electronic music by German, Japanese, and American composers, live electronic improvisation, modern dance, multi-media actions and film. Beal wrote,

The audience lounged on 250 pillows scattered on the floor and were encouraged by Bachauer’s program notes to understand his Multimedia Workshop as a “mobile concert form” in which the public possessed the freedoms they had in a private listening space—the freedom to move, to converse, to take responsibility for their own listening and viewing capacity, a concept directly influenced by Cage’s works like *HPSCHD.*

Cage’s influence on multimedia art in Germany continues today where one is much more likely to encounter a *HPSCHD*-like event than in North America.

The Berlin 1972 performance also impacted a young graduate student who published his journal from his year abroad as a Rotary Club International fellow 36 years later as a blog. John Maryn wrote, “If I never saw a ‘happening,’ I never saw a happening—but this was a happening!” He found the audience participation remarkable: “It is certainly an environment and the audience is free to do anything around the area. One person felt free enough to throw up.” Like other participants, Maryn complained of a lack of variety. He wrote, “After three hours, I was really out of it. The only time the pace was altered was in the Big Salle with concert piano—because here, only one thing

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was going on. The other room [foyer] was too much.” Reflecting on the event 36 years later, Maryn wrote: “I actually love the idea of these multimedia events and their intent and effect. The idea of walking within a composition intrigues me. The music and visuals are like a giant texture that is changing and evolving (like much of music).” He remembered enjoying the fact that “contemporary art was everywhere. Music was everywhere. It was a true ‘soundscape.’ I liked that. Sort of like a ‘living musical texture.’” Even in retrospect, years later, Maryn still noted a “lack of direction and focus, with little movement or dramatic tension-release” which resulted in a sense of “sameness.” He attributed this critique—what he described as his “mild youthful complaining”—to a “desire for some type of emotion within music.”

Maryn also remembered working up the courage to talk to Cage and asking him what he thought of the audience participation. According to Maryn, Cage said something to the effect of, “It could have been better.” Maryn wrote, “I had thought that the improvisations of the audience were not so good, or perhaps that some participants were abusing the ability to contribute to the piece (perhaps goofing off, and not being serious about improvising).” Interestingly, Maryn was influenced by the event to such an extent that as a middle school teacher in 1976, he encouraged his students to organize a “mini-happening” for the entire school. The one-hour concert included “abstract and historical slides, student-made movies, modern dance, electronic and musique concrète student

compositions, and historical narrative based on the U.S. Bicentennial.” Maryn wrote that the student-body audience was “amazed and quiet.”

By the mid-1970s, it became increasingly difficult to stage an event like *HPSCHD*. As Rockwell put it, these multimedia events have “fallen victim to both post-sixties economic recession and a recession of the ebullient, anarchistic spirit of those times.”

Subsequent performances of *HPSCHD* during the 1970s include a May 3, 1975 performance in Brooklyn, New York, by the Brooklyn Philharmonia, organized by Joel Chadabe and Lukas Foss. Foss described *HPSCHD* as “the ‘Ring’ of multimedia events... not necessarily in terms of quality, but in terms of expense and difficulty to produce.” According to Foss, the 1975 production cost close to $10,000.

In 1979, the *Tage Neuer Musik* in Bonn hosted a John Cage Festival. Festival organizers included *HPSCHD* alongside other standards of the Cagean canon—*The Perilous Night, Sixteen Dances, Atlas Eclipticalis, Winter Music, Sonatas and Interludes* and *Renga* with *Apartment House 1776*, among other works.

Two notable North American performances of *HPSCHD* took place in Buffalo, New York, March 22-23, 1980, and at North Texas State University, November 6, 1981. The Buffalo performance took place at the Albright-Knox Art Gallery, presented with the Center for the Creative and Performing Arts. (See illustration 6.1.) Hiller and Feldman attended, and the harpsichordists included Neely Bruce, David Fuller, Yvar Mikhashoff, Aki Takahashi, and David Tudor. Joel Chadabe took charge of the technical issues and alongside the multiplicity of slides and films, John Toth created dramatic fabric sculpture

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26 Ibid.
installations for the performance. The fabric served as the projection surfaces for the slides and films. (See illustration 6.2.)

The North Texas State University performance was organized as part of the International Computer Music Conference, November 6, 1981. Priscilla McLean reported that the four-hour performance included the expected combination of harpsichords, electronics and visuals. “The milling crowd was joyous, if often mystified.” Hiller was present and he said that the audience was “the largest and most boisterous that he had seen since the 1960s.” Like Rosenberg, McLean was “at first disappointed by the lack of textural interaction, due to the distances between harpsichords, their inability to project, and the noise of the crowd.” Yet, again, McLean appealed to a Cagean aesthetic or philosophy to reconcile her discomfort with the piece:

I recalled the philosophy of Cage that all sounds comprise music and a statement that Cage made at his lecture-slide presentation that “the principle underlying all solutions lies in the question that is asked.” After altering my question, the gestalt became more satisfying—it was indeed an impressive and powerful work.

McLean reported that audience reactions ranged from “Only Cage could get away with this!” to Larry Austin’s comment of “happy anarchy.”

HPSCHD was performed a second time for the International Computer Music Conference, this time in Berlin, August 30, 2000. This performance was produced by

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28 Ibid.
Martin Supper. Reviewer Thomas Gerwin made it clear that *HPSCHD* was one of three historic pieces that opened the concert. For this performance, seven harpsichordists, 51 tape machines, and 58 loudspeakers were placed in the large foyers of the Philharmonic Hall, as well as dispersed throughout its several levels and in the Chamber Music Hall. Additionally, “the concert venue continued through an open passage up to the Museum of Musical Instruments where some of the loudspeakers and keyboard players were more concentrated.” Gerwin continued,

> The concept of this performance was different from others I have experienced because the harpsichord sounds were spread over a large area. It was a kind of “mobile” concert, impossible to hear everything at the same time or as a unity. Thus, textural density was given up and the musical operations were exposed clearly as chance operations, but the “Spirit of John Cage” pervaded the whole area that evening.\(^{29}\)

Chadabe was less kind: “I didn’t particularly like it because it was very soft and disperse, and I think it should be raucous.”\(^{30}\) A third reviewer, Eric Lyon, complained that the work lacked “the sense of a powerful compositional personality” and clearly preferred a newer aesthetic over what he referred to as the “classical tradition… in most of the music heard at the ICMC.”\(^{31}\) It is interesting that both Gerwin and Lyon stressed the “historic”

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\(^{30}\) Joel Chadabe, interview with the author, July 24, 2008.

or “classical” nature of the work, and forty years after its composition, *HPSCHD* seems to have truly entered the “classic” repertoire.

Two important events marking *HPSCHD*’s informal fortieth anniversary, and its entry into the classical canon were the EMF recording of *HPSCHD* released in December, 2003, and subsequent performances at the Chelsea Museum in New York (2004) and in Toronto (2008). Part of the canonization process for the piece has been connected to simplifying the live performance production process. Chadabe, who was the latest to figure out the technical issues in 1971, has continued to tackle the difficult production issues connected to *HPSCHD*. In an interview with the author, Chadabe indicated that “Everything having to do with *HPSCHD* is difficult.” However, two of the most difficult aspects of the piece were first organizing and presenting the slides, and second managing the large number of tapes and necessary playback equipment. Chadabe said that in the 1970s, it was “a major job to organize all the slide projectors.” It was important to have the room “filled with imagery, constantly shifting imagery,” but this required “50 or maybe more [slide projectors] projecting against the walls.” Chadabe explained that “about 5 years ago, it became impossible to organize 50 slide projectors as well as film projectors.” The solution was to digitize the slides and reformat them into QuickTime movies:

We digitized the slides and programmed their shifting and changing so that it seemed random. I got it down to six to seven data projectors so that we could play these dynamic files. You could use as many or as few as you liked. One of
the problems with *HPSCHD* is the amount of electricity it requires. Data projectors cut down on this.

Digitizing the tapes also greatly reduced the issue of finding reel-to-reel tape deck machines and power amplifiers. Chadabe re-recorded and remastered each tape and saved each individual tape on CDs. He also, however, made mixes of several tapes on a single CD that he recommends using for performance “so that you would use only a few playback units,” and yet, it would hopefully sound like many different sound sources. Chadabe explained the advantage of these simplified collections of both images and sounds:

> The original slides were returned to C.F. Peters, and as a courtesy, I gave Peters CDs of the QuickTime movies, so that if you wanted to do *HPSCHD* now, you could get the files from Peters. Instead of renting all of the tapes, you just rent a few CDs.  

In the press release for the 2008 Toronto performance of *HPSCHD*, Chadabe wrote, “We digitized the sounds and images and programmed the randomness. The results are stunning. Bright sounds and vivid, interesting imagery.”  

I asked Chadabe about whether or not he used some kind of chance operations in organizing the images or mixing the tapes, and he said that he had not employed any kind of systematic chance

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32 Chadabe, interview with the author.
operations for the selection of materials. “It was sort of by choice,” Chadabe said. The effect, Chadabe claimed, is still random. Employing chance operations or maintaining a sense of chance didn’t seem to be a central concern for Chadabe. Indeed, Chadabe clearly was interested in carefully and intentionally orchestrating the aural landscape:

Once you get that all together, and get Jerry Hiller’s sounds all together, the problem isn’t how to organize the material, it is how to get the sound… One of the hard parts is getting everything mixed so that it sounds right, balanced, so that it all seems part of the same sound world.34

Chadabe digitized the tapes with the help of William Blakeney. Blakeney, is not a full-time engineer, but rather is one of Canada’s top insurance litigation lawyers. He has been legal counsel on many of Canada’s high profile property, institutional sexual abuse, and environmental cases, and is a partner in the Toronto firm Blakeney Henneberry Baksh Murphy. Blakeney often spends nights and weekends at the Hamilton, Ontario Grant Avenue Studio with engineer Bob Doidge painstakingly remastering works of the early electronic avant-garde. In addition to HPSCHD, Blakeney has restored works by Luc Ferrari, Iannis Xenakis and Hugh LeCaine for release on EMF.

34 Chadabe, interview with the author. In 1996, however, Chadabe wrote, “When one seeks to establish order, control and justice, words such as ‘chance,’ ‘randomness’ and ‘indeterminacy’ can be disturbing. When there is no continuity between past and future and no just desserts, basic values may come into doubt. When time and musical form move toward an unpredictable future, a musical composition as a whole can be known only retrospectively, after the parts have been made. Structure, proportion and balance cannot exist. It is true that indeterministic music lacks these qualities.” Yet, he seems in performances of HPSCHD to be very much interested in structure, proportion, and balance—at least in the creation of the soundscape. See “The History of Electronic Music as a Reflection of Structural Paradigms,” Leonardo Music Journal 6 (1996): 43.
Blakeney connected with Chadabe in 1995 via e-mail correspondence. He told the Toronto Sun, “We had a common complaint, that a lot of the classics of electronic music were completely unavailable, except as long-outdated phonograph records.” Eventually, Blakeney convinced Chadabe to commission himself and Doidge to rectify the situation. Blakeney worked with the original HPSCHD tapes, cleaning up the noise from the aging analog tapes, while struggling to maintain the analog sound in the new digital format. “We’re trying to keep them true to the analog originals,” which, Blakeney reported, isn’t easy.35

The digitized versions not only made live performances of the work much more manageable, but also simplified the 2003 recording of HPSCHD released by EMF. According to Chadabe, the recording is not an attempt to “capture the dynamics of a performance.” However, the recording is an attempt to capture the sound of HPSCHD, which “Bill Blakeney and I believed… cannot be preserved through any conceivable musical notation.” According to Chadabe, “it must be documented.”36

For the original 1969 recording, all three harpsichordists (Vischer, Bruce, and Tudor) recorded their parts on different instruments and in different studios. Vischer actually recorded her part in Switzerland before arriving in Illinois for rehearsals. For the 2003 recording, all seven parts were performed and recorded by Robert Conant. The original recording was limited to twenty minutes—the length of one side of an LP; the 2003 CD has a total duration of 65’27”. The longer version, according to Austin, is “closer in spirit to the extended temporal scope of the original and the subsequent live

performances through the years.” Austin described the new recording as “an epiphany.”

His overwhelmingly positive review of the CD concluded that, “The sonic impact is startling, compelling from beginning to end: the rich hybrid mixture of Mozartean harpsichord musics and their incessant, antithetical, micro-tuned, synthetic, pulsating, computer-generated, timbral imitators.”

Despite the fact that co-producers Chadabe and Blakeney did not intend for the recording to capture the dynamics of a performance, the CD is packaged with rich visual extras: there are extensive notes on the composition of HPSCHD, the original event, and the new recording written by Johanne Rivest, Bill Brooks, David Eisenman, Robert Conant, and Chadabe. The notes are printed on cardstock, the verso of each features a colorful collage of day-glo images taken from the original posters and slides printed on black. Chadabe emphasized the importance of the visual material in live performance in his notes. He wrote,

*HPSCHD,* in my view, should be extravagant, exuberant, and wild… a landscape filled with thousands of flashing and swirling overlaid projections of color, form, and space imagery on the ceilings and walls and, as on occasion, on special screens placed throughout the space.

Austin closed his review of the CD with an appeal to the visual and historic nature of the recording: “you can close your eyes, immerse yourself in its sounds, and your senses

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37 Ibid.: 85.
take you back to 16 May 1969.\textsuperscript{39}

On May 8, 2004, Chadabe produced a performance of \textit{HPSCHD} hosted by EMF at the Chelsea Art Museum. The performance was billed as a “version for the 21st century,” since they used keyboard synthesizers instead of harpsichords, data projectors and computers instead of slide projectors, and compact discs instead of reel-to-reel tape machines. The three harpsichordists in this performance were Joseph Kubera, Anthony Di Mare, and Robert Conant. Visual artists featured were Christin Wildbolz, Elzbieta Sikora, Jean Claude Risset, Frances Marie Uitti, and Mari Kimura. Before the performance, Chadabe, showed images from a 1994 production in Amsterdam that he directed and gave the audience a pre-concert lecture about the work.\textsuperscript{40}

Chadabe’s latest production was staged in Toronto, June 11, 2008 at the Ontario College of Art and Design Auditorium alongside Cage’s 1971 piece \textit{Birdcage}.

Collaborators for this performance included Eisenman (who provided visual materials), Donald Gillies, Eve Egoyan, Marc Couroux, Casey Sokol, Tania Gill, Gregory Oh, Gayle Young, George Boski, William Blakeney, Robert Wheeler (Pere Ubu), Bob Doidge, and Amy King. The performance celebrated the 30th Anniversary of \textit{Musicworks Magazine}, and served as a fundraiser for the publication, “Canada’s only experimental music and sound art publication.”\textsuperscript{41}

Despite Chadabe’s insistence in the liner notes to the CD that \textit{HPSCHD} be “extravagant, exuberant, and wild” with “thousands of flashing and swirling overlaid

\textsuperscript{39} Austin, “Review: John Cage/Lejaren Hiller: Hpschd,” 85.
\textsuperscript{40} \textit{EMF @ Chelsea Art Museum} (2004), accessed August 11, 2008, \url{http://www.emf.org/aboutus/productions.html}.
projections of color, form, and space imagery,” in Toronto they used only one data
projector and one of the QuickTime files with slide images. Chadabe said in interview
that “getting the screens overlaid so that it creates the right environment,” was a major
concern. Multiple visual sources, however, were not a part of the 2008 event. Chadabe
explained that this recent Toronto performance was different in that there was “one
projection screen, the lighting was higher, but the result was that it was extremely
friendly with people stepping out to get drinks, as is expected.”

The Toronto performance had a strong historical aspect to it as well. The gallery
next door hosted an exhibit of historic FLUXUS posters and the artwork created for the
debut performance. Eisenman brought most of the historic visual materials for the
display which included posters from 1969, graphics related to Cage and the two pieces,
 writings about HPSCHD, copies of a 1968 Saturday Evening Post article featuring Cage
and Cunningham in Champaign-Urbana, one of the original typed letters from Cage to
Eisenman (what Eisenman called a “Cage-o-Gram”), and t-shirts silkscreened with the
image of Beethoven wearing the Cage sweatshirt.

2. **HPSCHD AND THE WORK-CONCEPT:**

In all of these accounts there seems to be some appeal to a modernist idea of
Werktreue, or at least Klangtreue: each listener had an idea of how “the work” should
sound or be experienced. Many appealed to the “spirit of Cage” or quoted Cagean
philosophy (“happy anarchy”) as if what they were consuming was not so much some

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42 Chadabe.
kind of aesthetic experience, but rather some kind of contact with the genius-creator.

Lydia Goehr addressed this reception phenomenon specifically:

Cage’s “real” and “random” sounds have not stayed real or random. The “real” sounds of “his” “work” have been made subject to all the traditional, temporal, presentational, organizational constraints associated with any concert hall performance.\(^4^4\)

Goehr argued that instead of challenging the work-concept by taking the music from the institution to the streets, Cage was more likely to try to bring “outside” music “back to the institution.” With its computer-generated sounds and amplified harpsichords \textit{HPSCHD} hardly represented “outside” or “street” music. This work is just as institutional and academic as any other. Even if Cage’s work here with historic source materials resembled somewhat the work Duchamp did with found art objects, a Duchamp placed in the museum becomes yet another autonomous artwork. Yates even described the sound of \textit{HPSCHD} in 1969 as “the esthetic equivalent of an experiment in pure research,”\(^4^5\) indicating the work’s affinity to an academic setting.

What we have with \textit{HPSCHD} is a composition that was designed to challenge the work-concept, to challenge the idea of the autonomous “masterpiece,” and yet is received according to a \textit{Werktreue} ideal. How are we, today, to understand this challenge?

\(^4^5\) Manuscript, Peter Yates, “[Notes for Hspchd Liner Notes],” in \textit{Peter Yates Papers, Mandeville Special Collections Library, University of California, San Diego} (San Diego: undated [1969]).
Increasingly, philosophical musicologists such as Goehr question the work-construct altogether. Goehr asserts that “speaking about music in terms of works is neither an obvious nor a necessary mode of speech, despite the lack of ability we presently seem to have to speak about music in any other way.”\(^\text{46}\) Despite the fact that the work concept emerges much earlier than the nineteenth century, it is the application of the concept to nineteenth century compositions to which Cage is responding. According to Goehr, the work-concept is a result of a “specific and complicated confluence of aesthetic, social, and historical conditions.” Goehr explained that the Romantics saw “musical masterpieces as transcending temporal and spatial barriers.” Compositions were not to be thought about as “expressive or representative of concrete historical moments,” but rather as “valuable in their own right as transcending all considerations other than those of an aesthetic/spiritual nature.”\(^\text{47}\) The concept is so comfortable for us that we are tempted to understand a diversity of different musical styles, genres, and traditions as “involving the production of works.”\(^\text{48}\) Consequently, the work-concept has a regulative role in how we perceive of, and consume a musical performance.

In the case of Cage and \textit{HPSCHD}, the establishment of the work-concept goes hand-in-hand with the establishment of an avant-garde canon and the canonization of Cage. In chapter one I assert that the reconstruction or rewriting of the past into \textit{HPSCHD} was a powerful tool for Cage to legitimize his present and to place himself among the great canonical composers. Similarly, Cage, like other avant-garde composers, felt a need to justify himself to his critics by showing some willingness for

\(^\text{47}\) Ibid., 246.
\(^\text{48}\) Ibid., 245.
his music to “meet the conditions of work-production.” Paradoxically, the myth still persists that Cage “forbade above all else the consideration of music as an object.”

There are a number of ways in which HPSCHD resembles a work: first, the harpsichord parts are published by Peters, with instructions regarding the distribution of royalties, and the tapes and slides are available for performance rentals; second, the piece was recorded before the premiere, undermining the idea that the May 19 event was singular; and third, in interviews regarding the piece Cage speaks of HPSCHD as much more musical than other recent compositions. HPSCHD, unlike other works from the 1960s, is fully composed. The behavior of the performers was pre-determined, including limited freedom to take breaks, repeat parts, switch parts, and visit with the audience. The orchestration of the visual elements was tightly controlled through chance processes. Even the behavior of the crowd was somewhat planned and controlled through instructions to move about, come and go as necessary, and by the participatory elements such as the smocks and silk-screened T-shirts. While Cage was publicly suggesting that composers should “give up the desire to control sound,” and overtly challenging the idea that a composer’s job is to determine a work’s sound-structure prior to its performance, he was privately doing exactly the opposite. Publicly, Cage made an impressive effort to promote the 1969 event as a Happening, as anarchic, and as a unique experience; behind the scenes he was establishing himself as a canonic composer, operating within the safety of the academic setting, and creating what he hoped, perhaps, was a great “work.”

Carl Dahlhaus, among others, finds this stance conflicted and hypocritical:

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49 Ibid., 250.
The fact that the sounds and noises which Cage presents or allows to happen were prised out of their original pragmatic context, so that they do not, as in everyday life, function as signs and symptoms for events in the outside world but form an acoustical “world of their own,” means of course that Cage’s anti-art has at least the element of “aesthetic abstraction” in common with the art at whose destruction it is aiming. Acoustical events are, to use the catchphrases, “depragmatised” and thus “aestheticised.”51

As time has gone on since 1969, and as Cage has become increasingly canonical, works like HPSCHD have become increasingly “aestheticized.” To champions of Cage and electronic music such as Chadabe, HPSCHD is an important “work” whose sound world cannot be notated, but that must be preserved.

Just as Cage and Hiller imported music of the past into HPSCHD, thereby stripping the source materials of their original, local and extra-musical associations, a contemporary production of HPSCHD loses its own extra-musical and social/political context. It has become, for the most part, functionless—outside of its aesthetic function—just like the rest of the concert canon. Just as performers in the nineteenth and early twentieth century romanticized the works of Bach and Mozart, Cage has become similarly resituated in a contemporary context. By severing the original extra-musical connections, especially to anarchy and utopia, contemporary performers have imposed musical meanings appropriate for our contemporary aesthetic; namely, a reverential, historic aesthetic appropriate for a work of the canon.

The process of making *HPSCHD* an important historical work was initiated even before the premiere of the work with the release of the Nonesuch recording. At that time, Cage promoted, or at least facilitated, the canonization of the work through the making of the recording. Even though Cage spoke publicly on what he perceived of as the evil of recordings, he did not take a strong stance against *making* recordings. In a 1983 television documentary directed by Peter Greenaway, Cage said that recordings “are not useful at all,” and that a recording

merely destroys one’s need for real music. It substitutes artificial music for real music, and it makes people think that they’re engaging in a musical activity when they’re actually not. And it has completely distorted and turned upside down the function of music in anyone’s experience.\(^{52}\)

Perhaps Cage considered the making of recordings a financial necessity and felt bound by that necessity. Other composers, including Max Neuhaus, did, however, take a strong stance against recordings of their own music. Neuhaus said, “It’s a very deliberate step of mine... not to record the pieces. These pieces are not musical products; they’re meant to be activities.”\(^{53}\) Despite the fact that Cage also spoke about “experiences” vs. “compositions,” and clearly thought of *HPSCHD* as an “event,” he simultaneously planned for the composition to be a “work.” In light of other composer’s strong stance

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against recordings, Cage’s KNOBS printout could be seen as a thinly-veiled trick
designed to mask this conceptual and philosophical paradox.

While Schoenberg may have described Cage as “an inventor of genius,” I assert
that Cage was also a genius of self-promotion. As a result of Cage’s efforts, HPSCHD
has become absolute music—music that is fitting for any use, not just a sign vehicle for
the anarchic or the utopian. Goehr wrote that, “The phrase ‘musical work,’ like ‘work of
art,’ is used with evaluative as well as classificatory sense.”\(^{54}\) There is something
valuable that is lost when viewing HPSCHD under this imperialistic influence. We seem
to have alienated the piece from its original socio-cultural context; a contemporary
HPSCHD event has lost its immediacy, its importance, its Dionysian, chaotic
atmosphere. As Norman O. Brown put it, Cage has become “Apollonian” for today’s
audience.\(^ {55}\)

While some of Cage’s music seemed to be a deliberate attack on “opus or concert
hall aesthetics, on bourgeois and commodity aesthetics” and even perhaps an attack on
“elitist ideology,” Cage found himself in the 1960s and after “paradoxically situated in
the practice that is regulated by the very concept he wanted to challenge.”\(^ {56}\) Whatever it
was that was challenged by Cage, Cardew, Neuhaus and others in the 1960s, it has not
affected how we view new music as “works.” We still speak of concert music as
“works” and are so comfortable doing so that we have extended the concept to cover all
sorts of different musical traditions. This tendency is increasingly challenged in

\(^{54}\) Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of
Music*, 249.

\(^{55}\) Brown, “John Cage: A Lecture by Norman O. Brown at Wesleyan University,

\(^{56}\) Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of
Music*, 260.
ethnomusicological literature, and even performers such as Alfred Brendel argue that the Werktreue ideal remains one of the most autocratic, antiquated, and imperialistic of ideals. According to Brendel, “Werktreue smacks of credulous, parade-ground solemnity.” It has, he continues, the connotations of “Viennese Classical Training” and “Nazi slave mentality.”

This kind of authoritarian and imperialistic attitude has certainly permeated the Cage world. There continue to be arguments regarding the Klangideal of Cage performances. Chadabe was critical of the 1980 Berlin performance of HPSCHD because it did not, in his opinion, represent an accurate understanding of the sound-world of HPSCHD. According to Chadabe, it was inappropriately quiet and subdued.

Letting go of this modernist construction of a Klangideal or Werktreue and embracing a postmodernist mentality demands a new criticism. Instead of slavishly holding to a narrow, or historically accurate interpretation of Cage, “multiple readings are now forwarded not as a luxury or a footnote but as a necessity,” and “texts” like HPSCHD are

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59 Chadabe, interview with the author.
only understandable through, and in a sense are completed by, a number of different interpretations.\textsuperscript{60}

3. TOPICS FOR FURTHER STUDY:

A. Art and Utopia

The study of artworks that claim a utopian project are numerous, and a study of such works seems rich and important, as well as timely. Richard Taruskin’s \textit{The Danger of Music and Other Anti-Utopian Essays} (September 2010) is a collection of writings which “consider contemporary composition and performance, the role of critics and historians in the life of the arts, and the fraught terrain where ethics and aesthetics interact and at times conflict.” He strongly argues that art is not a utopian escape, nor can works like \textit{HPSCHD} model a utopian future.\textsuperscript{61} Dahlhaus claims that a never-ending string of works that claimed a utopian project through the 1960s were not only incredibly divergent in terms of aesthetics, but they also failed to produce the desired utopian outcome.\textsuperscript{62}

Given these philosophical and critical models, we can extend the kind of analysis I have done here with \textit{HPSCHD} to other works from the same time period and after. Further work can place musical compositions by Cage and his contemporaries within this larger history of utopian narratives, taking into consideration the intricate political environment of the second half of the twentieth century. Composers whose work is

\textsuperscript{60} Watkins, \textit{Pyramids at the Louvre: Music, Culture, and Collage from Stravinsky to the Postmodernists}, 416.


\textsuperscript{62} Dahlhaus, \textit{Schoenberg and the New Music}, 284.
written with a utopian, political aim include most directly Christian Wolff, Corneliu Cardew, and Frederic Rzewski; however, this kind of study could be extended to include composers such as Luigi Nono, Helmut Lachenmann, Karlheinz Stockhausen, Iannis Xenakis, Mauricio Kagel, Andrew Culver and others.

B. The Thunderclap piece:

The “thunderclap” piece Cage wished to pursue while at the University of Illinois in 1967-68 is also worthy of further study. According to Cage biographer David Revill, despite the fact that Cage worked at IRCAM for Roaratorio (1979) and at the Brooklyn Center for Essay (1988), “He no longer wished to deal with the institutional setup which would be necessary for such a large work.” With the development of sampling and the ability to manipulate live sounds digitally, it would be relatively easy to realize the work today, given the proper computer soft- and hardware and live sound reinforcement system. A reconstruction of the work and a study of Cage’s compositional notes and letters might be quite interesting.

C. Theory of hybrid/collage art forms:

Combining the work that J. Peter Burkholder has done with the typology of collage works, with the work that Laura Kuhn has done with Cage’s Europeras I and II, and some of the approaches I have presented here, we have a better theory of hybrid art forms. Hybrid artworks are becoming more and more prevalent with the addition of virtual reality computer technologies and on-line delivery systems. These kinds of artworks rely particularly on the concept of interactivity—interactivity between the
artwork and the viewer as well as an interactivity between the different and often disparate art forms.

Whether directly or indirectly, Cage’s influence is felt in the work of a number of musicians who are creating hybrid forms. An excellent example is William Duckworth’s *Cathedral*—an on-going, interactive composition designed specifically for the web.63 Gann wrote that “postminimalism—though hardly a style John Cage would have envisioned—is the language Cage called for in *Silence*, a new language freed from dialectical antithesis, and founded on rhythm rather than pitch.”64 For works like *Cathedral*, Duckworth has expanded Cage’s “Here Comes Everybody” approach to music making to include everyone who has access to the World Wide Web.

A second interesting application of a theory of hybrid artworks could be in the analysis of music composed for gaming environments. Like film music, game music is never meant to stand alone, but is designed to guide the gamer’s emotional and physical response to the game. A thorough study of this music would be a significant contribution considering how powerfully the music functions for a very large audience, and how computer video-game composers such as James Hannigan are gaining significant recognition.

D. Theater Theory:

Cage has increasingly been recognized as an outstanding visual artist through a number of recent retrospective shows, especially the 2009-2010 touring exhibit, “John Cage: Everyday is a Good Day,” and his inclusion in the Guggenheim Museum’s

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63 *Cathedral* can be found here: http://cathedral.monroestreet.com/index.php.
exhibition, “The Third Mind: American Artists Contemplate Asia 1860-1989.” A better understanding of how Cage’s compositions functioned as theater and how this aesthetic has crossed over into a more traditional theater world has yet to be fully researched.

Scholars such as Crohn Schmitt claim that “Cage’s aesthetic does continue to describe much of contemporary American experimental theatre.” Crohn Schmitt finds the works of performance artists like Laurie Anderson, Spalding Gray, the productions of Robert Wilson, Richard Foreman, Mabou Mines, and the Wooster Group are “representations of Cage’s aesthetic.” Crohn Schmitt makes this claim, “not because they are all alike—far from it—but because Cage has provided an aesthetic of interest and abundance beyond measure.”

Cage may have provided an aesthetic space in which these diverse artists operate, but how this influence was established and how it plays itself out would be a rich subject of study.

E. **Gesamtkunstwerk:**

The application of the *Gesamtkunstwerk* construct to Cage is nascent in Laura Kuhn’s dissertation on the *Europeras 1 and 2*. Kuhn comes to the conclusion that these postmodern theater pieces are indeed *dramas*, but ones in which the burden of intention and interpretation is transferred from the composer to the perceiver: “the drama that emerges [is] not out of the composer’s conceptions but out of the perceiver’s insights and responses, which find expression, in part, through musically-defining terms.”

Kuhn also situates the *Europeras 1 & 2* in Cage’s desire to create utopian spaces and his

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65 Crohn Schmitt, “‘So Many Things Can Go Together’: The Theatricality of John Cage,” 78.
66 Ibid., 298.
anarchic politics. She also has to account for the use of borrowed materials and the collage form. Given the work in postmodern music that has been written since Kuhn’s dissertation in 1992, one can elaborate on the excellent foundational work she has done with these pieces.

4. CONCLUSION:

Current music critics continue to portray Cage largely as a composer at odds with tradition. Terry Teachout, chief culture critic for the Wall Street Journal, wrote a truculent article, “Plenty of Nothing: How the Composer John Cage Killed Musical Modernism” for Commentary Magazine, October, 2010. Teachout mentions both Gann’s recent book, No Such Thing as Silence: John Cage’s 4’33,” and Kenneth Silverman’s, Begin Again: A Biography of John Cage as examples of misplaced admiration and misguided scholarship. Teachout quoted Virgil Thompson’s well-known statement that Cage’s aim with music has long been clearly destructive and goes on to explain that Thomson’s point was to “warn that Cage wrote such seemingly frivolous works as 4’33” in order to undermine the foundational principles of Western classical music—and he was right.” Teachout concludes his review with the following:

[Cage] longed above all things to pull Beethoven down from his pedestal and convert the world of classical music to the antinomian gospels of noise and chance. Eighteen years after Cage’s death, Beethoven is as popular as ever—but musical modernism is dead beyond recall, killed off by the chronic inability of its
practitioners, John Cage foremost among them, to write pieces that audiences cared to hear.\textsuperscript{67}

It may be easy to dismiss Teachout’s criticism with an understanding of the neoconservative \textit{Commentary Magazine’s} mission: “the preservation of high culture in an age of political correctness and the collapse of critical standards.”\textsuperscript{68} What we cannot dismiss is the passion Cage continues to inspire in his fiercest critics, as well as in his staunchest supporters.

Unfortunately, this view of Cage as primarily anti-historical is not just present in the voices of his detractors, but in the writings of his devotees. Silverman wrote that Cage was “driven by an ideal of nonmythic listening and seeing, of perceptual innocence”; his goal was to compose “a prelapsarian music untainted by history.”\textsuperscript{69} In his review of Silverman’s biography recently published in the \textit{New York Times Sunday Book Review}, composer John Adams describes Cage as “stubbornly unconventional,” and “absurdly creative”; having a “‘maverick’ mind,” and a “Leonardo-like curiosity.” There is a definite foregrounding of Cage’s more revolutionary attributes. He recognizes that writings on Cage have swung from those which “unfairly considered [Cage] a fool and a charlatan,” to those that bestow on him “an equally unreasonable status as sacred cow.” Yet, it is clear that for Adams, Gann, Duckworth, Silverman and many others, Cage is indeed untouchable. Both his critics and the disciples claim that Cage is anti-historical;

the former use this argument to dismiss him, the latter to justify Cage’s prominent position in twentieth-century music.

Both portrayals of Cage obscure the real impact the composer and his music seemed to have had on audiences, especially in the 1950s and 1960s. Today, the sophisticated concert-goer has no difficulty in hearing Cage’s music as sublime, so we are likely to feel superior to the outraged audience member or the vitriolic critic. If we approach Cage with too much reverence, as if he is a composer whose place is firmly established in the canon of Western music, then we’re likely to miss the revolutionary content that is embodied in his work. Conversely, if we see Cage as only a revolutionary figure, whose primary goal was to destroy the canon, then we miss his engagement with high modern traditions, such as the *Gesamtkunstwerk*, and his modernist utopian aesthetics.

My contribution to Cage scholarship has been to place an important work—*HPSCHD*—in a much larger musical, historical, philosophical, and social context for study than in earlier scholarship. Cage’s use of historical source material must be understood in the context of earlier composers working with borrowed source materials. The assumption that Cage’s cutting-up of historical music was simply a defiant and destructive act misses his role in a much larger history of musical borrowing. The fact that the computer was an important tool for composition and in the production of sonic material for this piece is a fact that must be understood within the broader context of technology in the late 1960s. One must understand what it meant to compose with the computer at that time—in terms of sheer work effort as well as in terms of the philosophical and political meaning such work held. Increasingly, musicologists are
tackling the issue of political engagement and subjecting works written with political intent like *HPSCHD* to scrutiny. My contribution in this area is to find a balance between the revolutionary and anarchic, and to address the hypocritical. It is now necessary to not only fully analyze and understand Cage’s political program in these kinds of works, but to point up how they fall short. The fact that *HPSCHD* was designed as a theatrical and artistic installation is just as important as the fact that the work includes sonic material. An analysis of *HPSCHD* as theater—*mise-en-scene* (sets, props, lighting and costumes) as well as a narrative, has until now not been fully documented and analyzed. Finally, this study places Cage into a much broader context of music history, teasing out the connections that can be made between a work like *HPSCHD* and high-modernist traditions.

*HPSCHD* seems to teeter in a balance between the revolutionary and the canonic; between the anarchist and the utopian; and between the futuristic and the high modernist. This is what secures the work’s position as a prime example of postmodern art. The piece is fundamentally contradictory, inescapably political, boldly technological, resolutely historical, and unerringly intellectual.
APPENDIX: SELECTED HPSCHD PERFORMANCES AFTER URBANA:

DATE: Nov. 5, 1969
LOCATION: Contemporary Arts Festival, Howard Chapel, Atlantic Christian College
ORGANIZER: Neely Bruce
PERFORMERS: Bruce, tapes
VISUAL ELEMENTS: None, but audience moved about freely

DATE: June 5-11, 1970
LOCATION: Théâtre de France, Paris

DATE: 1973
LOCATION: Smith Hall, University of Illinois Urbana-Champaign
ORGANIZER: Bill Brooks
PERFORMERS: Brooks, Solo II; two tapes
VISUAL ELEMENTS: None, but audience participated.

MISC. NOTES: Source is Brooks interview with the author.

DATE: April 14-15, 1972

LOCATION: San Francisco Museum of Art

ORGANIZER: Harold Hersch, San Francisco Conservatory of Music

PERFORMERS: six harpsichords, 30 channels of tape playback

VISUAL ELEMENTS: four 35mm slide projectors, four 16mm film projectors; images included NASA slides and films, Méliès *A Trip to the Moon*, *Flash Gordon*: *Rocketship* (1936).

REVIEWS: Hersch letter to Cage, May 21, 1972; Jim Rosenberg to Cage, November 6, 1972; John Cage Collection, Music Library, Northwestern University Library, Northwestern University, Evanston, Illinois.

DATE: May 22, 1972

LOCATION: Albert Hall, London

ORGANIZER: Cage

PERFORMERS: Cage, Tudor

VISUAL ELEMENTS: No.


MISC. NOTES: In a handwritten letter to Cage: “Have you had any new ideas about the production of HPSCHD? I’ve been speaking to Mt. Swarsenski at Peters about performing it in London in ’71. A major problem is the lack of an auditorium that
would contribute a pleasing environment. It would be somewhat incongruous (and perhaps impossible) to show the films and slides in the Royal Albert Hall so we might just play the music. Perhaps the Lennons will build a geodesic peace pavillion in one of the parks.” The signature is illegible, although the author was writing from Worcester College, Oxford, England. Northwestern University Archives.

DATE: August 13, 1972
LOCATION: BBC Proms, International Carnival of Experimental Sound, Roundhouse, Chalk Farm
ORGANIZER: Harvey Matusow
PERFORMERS: David Tudor, Richard Bernas, Cornelius Cardew, Annea Lockwood, Frederick Page, John Tilbury and Roger Woodward
VISUAL ELEMENTS: no

DATE: July 18, 1972
LOCATION: Berliner Philharmonie, Berlin, *Woche der Avantgardistischen Musik*
ORGANIZER: Walter Bachauer
PERFORMERS: Tudor, Rzewski, Cardew and Vischer
VISUAL ELEMENTS: no.
editor), 10.


MISC. NOTES: See Beal, New Music, New Allies: American Experimental Music in West Germany from the Zero Hour to Reunification, 204.

DATE: May 3, 1975
LOCATION: Festival of Modern Combos, Brooklyn Philharmonia, Brooklyn, New York
ORGANIZER: Joel Chadabe and Lukas Foss
VISUAL ELEMENTS: Yes

DATE: June 8, 1979
LOCATION: Tage Neuer Musik in Bonn, John Cage Festival
PERFORMERS: Giancarlo Cardini, Lorenzo Ferrero, Gérard Frémy, Stephen Montague, Frederic Rzewski, Dieter Schnebel (harpsichords), David Tudor (electric harpsichord)
VISUAL ELEMENTS: Josef Anton Riedl
DATE: March 22-23, 1980

LOCATION: Albright-Knox Art Gallery, Buffalo, New York

ORGANIZER: Center for the Creative and Performing Arts

PERFORMERS: Neely Bruce, David Fuller, Yvar Mikhashoff, Aki Takahashi, and David Tudor.

VISUAL ELEMENTS: Joel Chadabe (technical issues, slides and films); John Toth created fabric sculpture installations which served as the projection surfaces.


MISC. NOTES: Hiller and Feldman attended

DATE: November 6, 1981

LOCATION: International Computer Music Conference, North Texas State University, Denton, Texas

ORGANIZER: Larry Austin and Bruce Balentine

PERFORMERS: Tim Beard, Charles Brown, Susan Ferre, Janet Hunt, Joe Kimbel, Dale Peters, Thom Whitaker

VISUAL ELEMENTS AND SOUND PRODUCTION: David Bradfield, Jon Meinecke, Robert Van Stryland, Columbus


MISC. NOTES: Larry Austin and Hiller attended

DATE: April 3, 1994

LOCATION: Klavecimbelweek, Westergasfabriek, Amsterdam

ORGANIZER: Chadabe

PERFORMERS: Guus Janssen, Thora Johansen, Annelie de Man, Kristian Nyquist, Jacques Ogg, Vivienne Spiteri and Jukka Tiensuu


DATE: August 30, 2000
LOCATION: International Computer Music Conference, Philharmonic Hall, Berlin
ORGANIZER: Martin Supper
PERFORMERS: seven harpsichordists, 51 tape machines, and 58 loudspeakers
VISUAL ELEMENTS:
Joel Chadabe, interview with the author, July 24, 2008.

DATE: May 8, 2004
LOCATION: Chelsea Art Museum, New York
ORGANIZER: Chadabe
PERFORMERS: Joseph Kubera, Anthony Di Mare, and Robert Conant
DATE: June 11, 2008

LOCATION: Ontario College of Art and Design Auditorium, Toronto

ORGANIZER: Chadabe

PERFORMERS AND ARTISTS: Donald Gillies, Eve Egoyan, Marc Couroux, Casey Sokol, Tania Gill, Gregory Oh, Gayle Young, George Boski, William Blakeney, Robert Wheeler (Pere Ubu), Bob Doidge, and Amy King.

VISUAL ELEMENTS: David Eisenman brought historic visual art pieces which were displayed in a gallery next door to the sound installation; limited projections (one data projector and one QuickTime file with slide images).


Joel Chadabe, interview with the author, July 24, 2008.


DATE: Aug 11, 2010 MA-festival

LOCATION: Brugge Concertgebouw
ORGANIZER: Frank Agsteribbe

PERFORMERS: Goska Isphording, Luk Vaes, and others?

VISUAL ELEMENTS: Yes

REVIEWS: “Hedendaags klavecimbelfeestje op MA-festival,” 13 augustus 2010,


   QR2TUTAF&word=MAfestival

MISC. NOTES: video is available here: http://wn.com/HPSCHD, film by Frank Theys
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