Where Indeterminacy Meets Improvisation: Recording Cornelius Cardew’s Piece for Guitar

For Stella

By Jay M. Arms

Introduction

Interest in the music of the British composer Cornelius Cardew (1936-81) has increased dramatically in recent years. One reason for this change is the variety found in Cardew’s music and the seemingly limitless potential for unique performances of a relatively small number of works. However, one such piece is hardly ever discussed. For Stella (1961) is Cardew’s only experimental piece for solo classical guitar and represents, both in its musical content and the time of its composition, a period of radical change in Cardew’s compositional techniques and philosophical priorities. The piece makes use of a mobile form in sixteen parts, passages that are impossible to play on the guitar, and only the instructions: “Play with these pieces. Over and over. Change anything. Add and take away.” Close inspection of this piece reveals its intimate place in Cardew’s life by exemplifying Cardew’s associations with the composers Pierre Boulez, Karlheinz Stockhausen, John Cage, Stella Underwood, his second wife for whom the work is named, the guitarist Julian Bream, as well as Cardew’s affinity for questioning musical and social hierarchies, foreshadowing the revolutionary attitude of his later works. This project has two simple aims. The first is to situate

1 The score is made available by through the British Composers Project, it has not otherwise been published: <http://www.composer.co.uk/composers/cardew.html> accessed February 3, 2013.

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this important, but under performed and under discussed piece in its historical and biographical context. The second is a study of the work’s performance potential by constructing different methods for realizing the piece on the guitar to explore the supposed dichotomy of indeterminacy and improvisation in twentieth century music performance practice.

In order to accomplish the second goal, I began with the following questions: what is the difference between improvisation and indeterminacy? At what point does one become the other? How can one decide to act indeterminately or improvise? How can the two concepts interact and strengthen each other? In what way can a piece such as For Stella, with so much flexibility, be considered a piece? How far can one push that definition? To explore these questions, four realizations were designed and implemented to interesting results. The strictest realization utilizes chance operations and a fixed performance score inspired by the performance preparation methods of David Tudor. The second also uses a fixed performance score, but with an ordering of the parts deliberately chosen by me. The third features a live organization of the sections during the recording session, and the last is simply an improvisation using the sixteen parts as a point of inspiration, meditation, and focus. Through the act of creating these realizations, different aspects pertaining to above questions became apparent and new ones arose that will be discussed in the following pages.²

²I must express my sincerest gratitude to Louie Johnston, who dedicated much of his own time and energy to helping record, mix, and master the forthcoming recordings. All versions were recorded in the Electronic Music Studio at the University of California, Santa Cruz in March of 2013.
Part I: History and Context

The first question I had in my investigation of For Stella was the identity of its dedicatee. Cardew dedicated the piece to his partner (later wife) Stella Underwood (née Sargent, now Cardew). Underwood is a successful painter and teacher still working in the United Kingdom. Early in their relationship, in the summer of 1961, Cardew and Underwood lived briefly in Alba, in the south of France. Underwood worked in various teaching posts and Cardew took on domestic responsibilities, including taking care of Underwood’s two children, Emily and Gabriel, from her previous marriage. Cardew completed two works that summer: his Third Orchestral Piece and the guitar piece For Stella. It was a rare time of bliss for Cardew; he enjoyed domestic life and forged a strong bond with Underwood’s children. Pianist and Cardew biographer John Tilbury summarizes Cardew’s sentiment at this time: “The lure of America had receded, the extravagant project to emigrate laid to rest, and his restlessness abated; indeed, the new life he was about to embark upon was the antithesis of his life in Germany.”

The above allusion to Germany is in reference to Cardew’s strained relationship with composer Karlheinz Stockhausen. Upon discovering the European avant garde through the works of Stockhausen and Boulez in the late

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3 For clarity in the text, I refer to Stella as Underwood, the name of her first husband she used at the time this piece’s composition, though she continues to use Cardew as her last name.
5 Tilbury, 150.
1950s, Cardew broke away from his classical training at the Royal Academy of Music, which at the time neglected contemporary music. He received a Royal Academy of Music (RAM) scholarship in 1957-58 to study in Cologne, where he first met Stockhausen. Whatever his hopes had been, Cardew’s assistantship to the giant of the European avant garde turned out to be primarily menial, isolating work, rather than a mutually fruitful collaboration and mentorship. His principle task at this time was to realize Stockhausen’s work Carré, which was premiered on Radio Hamburg on October 28, 1960. Stockhausen worked out a process by which the piece would be realized, but the process itself did not necessitate Stockhausen’s efforts to produce the final score. He reduced the final steps of the work’s composition to a methodical process of chance operations and calculations; a kind of recipe an assistant could follow. Stockhausen entrusted Cardew to follow this tedious process and create a final performance score for the piece, a task that offered little artistic or intellectual satisfaction for the young assistant. The work was grueling and took weeks to finish, leading Cardew to question the concept of a composer’s ownership over the work. Could Carré really be considered Stockhausen’s work when Cardew devoted exponentially more time to its creation? This simple question would lead Cardew to question the role of composer in more intimate and radical ways as evidenced by nearly all of his later experimental works in which the performer is given some control over the character of the work. As if to rub salt in Cardew’s wounds, Stockhausen, along with the other conductors of the piece at its premiere, made

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6 Treatise (1963-67), one famous and extreme example, features one hundred and ninety three pages of graphics with no explanation on their interpretation. The performer(s) must decide basic information about the score.
extensive cuts, rendering much of Cardew’s work irrelevant. Cardew writes about the experience:

The ‘story’ of [Carré] is longer and more harrowing than the ‘story’ of any other piece I have written. Which says nothing about its value. Like the Viennese painter who remarked – very pleased with himself – to a critic, 'Yes, a lot of work went into that picture'. 'Well isn't that just too bad,' was the reply, 'because none of it is ever going to come out again.'

Clearly Cardew developed a deep dissatisfaction with the role of the composer in the process of creating music. In the case of Carré, he felt entitled to ownership over the work due to the hours he spent working on it; he says he wrote it, not Stockhausen. Yet according to the more or less traditional view of a work as a piece of property, Stockhausen had the final say and received credit and authority to make changes and omissions, something Cardew was never granted. Virginia Anderson notes that Cardew’s exposure and interest in the indeterminacy of the New York School fueled his growing displeasure with the authoritative composer, driving him towards other models of composition. For Stella’s open form and lack of definite direction stems directly from Cardew’s experience working on Carré, and from that standpoint, should be considered reactionary to his displeasure with this hierarchical framework for music composition.

Cardew was a pianist by training, and only started to play the guitar to perform in the London premier of Pierre Boulez’s Le Marteau Sans Maître in 1957. Tilbury suggests that For Stella bears some resemblance to this piece, but as a

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7 The other conductors were Michael Gielen, Andrez Markowski, and Mauricio Kagel.
guitarist, I find very few commonalities. Cardew got a cheap guitar for the performance and learned to play the very difficult part; no professional guitarist was available for the event. The quality of the guitar was so poor the guitar virtuoso Julian Bream, who was friends with Cardew and Underwood, insisted he dispose of it. Whether or not Cardew heeded Bream’s advice is unknown, but presumably it is this guitar on which Cardew composed For Stella. Tilbury and Alan Thomas corroborate the source materials for his piece: both correctly draw a connection to Cardew’s own First Movement for String Quartet (1961). This piece was completed at the end of 1961, and it ends with a chord progression almost exactly like that of motive P in For Stella. The relationship is clearly visible in that each chord contains an F, unifying the progression and some are exactly the same in both pieces. Anton Lukoszevieze incorrectly indicates the use of materials from the String Quartet in the guitar piece, but the reverse is more likely, the former being completed several months after For Stella as made evident by the inscription “Xmas 1961” in the score of First String Quartet. Tilbury also connects the piece’s open form to other performer-determined aspects found in Autumn 60 (1960), showing the general trajectory of Cardew’s work at this time, but the processes are quite distinct from one another. Despite similarities in ascribing a greater authority to performers, no other piece composed by Cardew at this time functions in the same manner as For Stella. It is

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10 Tilbury, 151.
12 Ibid.
13 Each measure of this piece has different factors determined, such as pitch, timbre, dynamics, etc. The performer is instructed to ignore two factors for each measure and the performers are not obligated to play anything at any time. A blank staff is given so the plays can write out what they will play.
also noteworthy that the structure of the piece is more or less unique in the
guitar’s repertoire.

One cannot help but ponder the connection between Julian Bream and *For Stella*. Besides his status as one of the great virtuosos of the century, Bream is most famous for his revitalization of lute repertory and the commissioning of dozens of works for classical guitar by non-guitarist composers such as Benjamin Britten, Hans Werner Henze, Peter Maxwell Davies, William Walton, Toru Takemitsu, Frank Martin, and even attempting to convince Igor Stravinsky to add to the instrument’s repertoir.\(^\text{14}\) Though there is no record that I’ve found of Bream commissioning the work from Cardew, it is possible and even likely that Cardew wrote the piece with Bream in mind. It is hard to imagine a composer writing a piece for solo guitar without thinking of his close friend who is one of the great masters of the instrument. Given the extensive performance enjoyed by all of Bream’s other commissions, establishing a connection to Cardew’s work would almost certainly add *For Stella* to the standard body of twentieth century works for classical guitarists almost immediately, drastically changing the face of that circle, as no similar piece exists.

\(^{14}\) Takemitsu did play the guitar, but came to the instrument later in life.
Part II: The Piece

Before discussing my realizations of For Stella it is useful to offer a brief analysis of the work, as these observations influenced my thinking in each version recorded. For Stella is presented as sixteen separate “pieces” over two pages lettered A-P. The score, given in appendix A, only exists in manuscript and facsimile versions and was never published. The performer is supposed to organize the parts in some way for performance; again the only instructions are: “Play with these pieces. Over & over. Change anything. Add & take away.” The first thing to do in performance, before exploring individual phrases, is to consider these simple, but loaded instructions. The first “Play with these pieces,” shows a subtle, but crucial phrasing: play with, not simply play. Cardew is encouraging the performer to experiment with different ways of playing the phrases. This note is coded language for Cardew’s overall questioning of musical conventions. Just as he gradually moved to shift control from composer to performer, most extremely in Treatise (1963-67), this simple note presents an ideology of music that involves critical thought, experimentation, and also enjoyment as opposed to one in which the performer simply follows the instructions of the score.15 The following three instructions simply elaborate on the extent to which the performer can take control. One could easily take these instructions to extremes, “change anything,” but in what way? What precisely can one add or take away without compromising the piece? Though some may take offense at extensive changes that render the motives and/or piece unrecognizable, one still cannot argue that unrelated material is still part of the

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15 One might consider play in the childish sense.
piece. Different degrees of recognizability in a performance reveal the values of
the performer. One who simply plays the motives verbatim (or as closely as
possible), which I am guilty of in some realizations, ascribes the very same
authority to the composer he was trying to disavow. Whereas a realization that
takes more liberties, adding new phrases, or breaking up the phrases, could be
viewed as more idiomatic to the works identity. Ironically, such a realization still
gives some authority to the composer, since he instructs the performer to do so.
A brief discussion of each phrase in turn will expose the salient characteristics of
the piece. While each phrase is separated, certain gestures recur across phrases. I
will discuss each phrase in letter order referencing back as commonalities occur.

The first phrase A shows two melodic ideas that recur: the major seventh
from E to D-sharp, and the neighbor note figure from B to C. The augmented
second in the middle returns as a minor third in other phrases, though is less
noticeable and less dramatic than the other two features.

Example 1: Phrase A

Phrase B is much longer and more difficult to play. The first figure involves
interpretation of the rhythm, of which the possibilities are vast, as well as the use
of right-hand artificial harmonics. The third gesture includes a double trill, which
if played as written involves one trill with hammer on-pull off with the pinky
and index fingers from A-Flat to F and the second performed with the right hand
across the third and fourth strings from G to F. This difficult gesture is followed
by a D, supposedly an open string, followed quickly by a harmonic D an octave
higher. While this figure could be played simply with two separate attacks, a
more interesting interpretation (and used by me almost invariably) is a hammer-
on harmonic, in which the open string is plucked and followed by the silencing
of the fundamental by touching the finger to the appropriate nodal point. An A-
Flat and F follow this figure and later occurs enharmonically in another phrase
that follows a different hammer-on harmonic.

Example 2: Phrase B

Phrase C gives infinite puzzlement. A simple four note chromatic figure with a
15 grouping mark above it and the note “any 22[or ZZ, perhaps] shape.” What a
“twenty-two” shape might be is unknown to those I consulted and myself.

Example 3: Phrase C
Phrase D marks the first impossibility in the work. The first five-note chord with octave Gs on top cannot be played simultaneously. An easy solutions is to treat them as successive events, since the chord is rolled anyway, using a harmonic for the high G. Cardew does indicate use of the right hand on the first string, and the note seems to be diamond shaped, which is a typical notation for harmonics. Since the rest of the chord is easily playable this seems to be the likely intention.

Example 4: Motive D

Phrase E is the first noticeably tonal phrase of the work. The first third implies C major, followed by a clear B dominant seventh chord with a low E in the middle, giving a sense of false resolution within the harmony. The tonality is obscured, however, with both D and D-sharp occurring. One might also argue the presence of E dominant seventh, because of the G-sharp leading to A. I hear this gesture as a lower neighbor without precedent.

Example 5: Motive E
Phrase F is long, complicated, and requires several decisions to be made even if the performer intends to play it as written. Connecting each figure is difficult unless one adds glissandi or plays in uncomfortable registers. In order to connect the slurred phrase A-flat – B – C to the longer phrase starting on G-flat, I use a right hand tap on C to give the left hand time to prepare the G-flat. The G to G-sharp neighbor figure recalls the figure in phrase A. The harmonics in parentheses imply that they are optional, and no direction is given as to their performance. Furthermore the final event is accompanied by the instruction “either/or” with regard to the B-Flat and F.

Example 6: Phrase F

Phrase G likewise requires similar decisions to be made. The two motives in parentheses are again optional (supposedly), with the E to D-sharp and minor second from C-sharp again indicative of Phrase A. The final cluster of the phrase is among the more puzzling aspects of the work. The numbers to the right seem to be fingering and string number, but the performance of the notes seems to be variable. I interpret a kind of clumsy slide of one finger at a time in a chordal formation at one point, and individual slides in another.
Example 7: Phrase G

Phrase H is among the more straightforward to play, referencing the major seventh motive, a minor third/augmented second, and a new chord built from a perfect fourth on top of a minor seventh that recurs in other phrases.

Example 8: Phrase H

Phrase I includes the instruction “flat finger” which I interpret as using the flesh of the i finger to strum the strings. One could also use the flat of the finger to strike the string in a tamburo-like fashion or use the flat of the nail in a ponticello gesture. The final two notes require use of the left hand thumb on D-flat to facilitate the stretch, since the notation suggests simultaneous sounding.

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16 I use standard guitar indications for right hand fingers derived from the Italian names for them, i = index, m = middle, a = annular (ring), e = pinky, and p = thumb.
Example 9: Phrase I

Phrase J is clearly related to phrase I with only slight differences in pitch content.

Example 10: Phrase J

Phrase K is another tonal phrase in the key of E major. Though many notes don’t fit within the key, the dualism of B7 and E is strong enough for the listener to hear it as a chromatic tonal phrase. It is also easy to play as written.
Example 11: Phrase K

Phrase L features another potential hammer-on harmonic, notably followed by a G-sharp/A-flat and F as in phrase B. Furthermore, the instruction “flat finger” returns on the final chord. The diamond shaped note heads are interpreted by me as a harmonics in all cases.

Example 12: Phrase L

Phrase M features the minor seventh/perfect fourth chord from phrase H. I interpret the arrows in this phrase in two ways: the first being bent as I slide up the string (using the right hand for the natural harmonics in parentheses), the second being a simple bend. It is not possible to play the octaves Fs as Cardew indicates, the top being a harmonic while the lower is bent.
Example 13: Phrase M

Phrase N is also straightforward and features a shortened version of the neighbor note motive, replacing the first note with a rest. This phrase requires quite a bit of drastic left hand shifts.

Example 14: Phrase N

Phrase O features interpretive issues to which I have no clear solution; therefore I take more freedom with its interpretation than any other phrase except phrase P. The first two events cannot be connected smoothly, so I often play the B as a harmonic on the sixth string (sounding an octave above written). The two G-Sharps seem deceptively simple and the intention eludes me. I play them as a cross string unison on the second and third strings. A simple B7 chord and a cluster, which can be played in a variety of ways using harmonics, octave transpositions, and arpeggiation, follow them.
Example 15: Phrase O

The final phrase P is by far the most challenging technically and requires the most decisions on the part of the performer, since most of it is either impossible to play on the guitar or too difficult to be done smoothly, though perhaps one might choose to play disconnectedly, as I do in my second version. The first, second, third, fourth, and fifth chords cannot be played effectively by one person. The first chord, for instance, could possibly be played with a painful use of the thumb and cumbersome stretch of the pinky to the point of being dangerous to attempt. In the occurrence of these chords in First Movement for String Quartet, they are unproblematic, since they are played by multiple instruments. From this perspective, it seems more likely that Cardew took the chords from the quartet to be used in For Stella, but as noted early the guitar piece proceeds the other by several months. The rest of the chords are easily performed with the creative addition of harmonics or simply as written. This phrase can be thought of as a dramatic contrast to every other phrase in the work; lacking the rhythmic characteristics and every salient motive found in the other phrases. Assuming one loosely interprets the constant notation of quarter notes, the result is a very slow progression of harmonies disparate from the more melodic and textural phrases previously given.
Example 16: Phrase P
Part II: The Four Realizations

My four versions of *For Stella* are presented on the accompanying CD from most indeterminate to most improvisatory. They were recorded in this same order intentionally. The first version I conducted was the most indeterminate with regards to the realization of a performance score. The indeterminacy produced a score that I practiced and recorded as a normal work. I chose to apply I-Ching chance operations for the simple reason that when Cardew wrote this piece he was highly interested in Cage’s ideas and methodologies. As mentioned earlier, it was not long before the composition of this piece that he discovered the music of Cage and his associates, so using the I-Ching to create an arrangement is a logical place to start an indeterminate organization of the parts. With this first realization I immediately noticed the fundamental irony of my project. My very premise of setting up a dichotomy of indeterminacy and improvisation was instantaneously challenged through the act of performing these chance operations, as will become apparent.

Since *For Stella* is conveniently arranged as sixteen individual phrases, lettered A through P, and I-Ching utilizes sixty-four positions, I simply arranged the parts over the tiles cyclically as shown in Figure 1 below. One cannot help but wonder if the mathematical proportionate distribution might have been intentional on Cardew’s part.
<table>
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</tr>
<tr>
<td>B</td>
<td>2, 18, 34, 50</td>
</tr>
<tr>
<td>C</td>
<td>3, 19, 35, 51</td>
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<td>F</td>
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<td>K</td>
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<tr>
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<td>15, 31, 47, 63</td>
</tr>
<tr>
<td>P</td>
<td>16, 32, 48, 64</td>
</tr>
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</table>

**Figure 1: Distribution of phrases over the tiles of the I-Ching**

The I-Ching procedure is simple, though time consuming. One throws three coins six times to create a hexagram, each toss generating one line. I continued the process until each phrase had occurred once. Naturally some phrases were repeated. I decided to repeat a phrase no more than twice to limit the length of the piece.\(^{17}\)

After conducting the chance operations over a few hours, the ordering for the performance was complete. Seven of the phrases were designated to repeat twice, ten repeat once, and six were to be played only once. The following chart shows the sequence arranged in three lines for clarity. An X denotes the first repetition, and X2 indicates the second repetition.

\(^{17}\)Interestingly, all four realizations came out to around seven and a half minutes, though this was not in any way intended. The first version timed in at ten minutes during practice sessions.
C, P, E, H, F, N, Px, Hx, D, K, Fx, Nx, Nx2,
Dx, M, L, Px2, Kx, I, J, Dx2, Kx2, Cx, Hx2, Lx,
A, O, Lx2, G, Gx, Cx2, Ox, B, Ix.

Figure 2: Ordering of Phrases for first version

It appears that through some supernatural force my worst fear had been realized. The final phrase P is not only to be repeated the maximum number of times, but it is also one of the first things to be played in the version. I feared this possibility for a number of reasons: First, it is by far the most difficult phrase to play as it is designed to be impossible and demanding on the performer, and I would sooner play the phrase as close as possible to what is written. Second, the phrase has obvious potential to function in a highly dramatic and shocking manner due to its slow, almost static movement and overall contrast to the other phrases. Immediate introduction and repetition of this phrase eliminates that possibility, forcing a new interpretation of the piece. Instead of using this phrase as a point of drama, I instead treated it as a kind of refrain using different rhythm and phrase groupings to provide interest.

Having generated this performance procedure, my next task was to develop a method to make the repetitions somehow different from their initial declaration. Not wishing to alter the written score too much by changing harmonic content or rhythm, ascribing excessive determination on timbre, dynamics, tone, or tempo (which would make performance unnecessarily cumbersome), I chose to simply re-order the individual events of each phrase.\textsuperscript{18} I also decided to use a different method of chance operations from the I-Ching procedures previously used; since my task was different, I chose a different tool.

\textsuperscript{18} See David Behrman, "What Indeterminate Notation Determines" Perspectives of New Music 3, No. 2 (Spring – Summer, 1965): 58-73., for a discussion of the pitfalls of hyper determinate notation.
Whenever a repetition was encountered, I divided the phrase into smaller motives (between 4 and 9, depending on the length of the phrase). I ordered these motives (or sometimes notes) by following a simple procedure. Starting with the first motive, I flipped a coin: heads would delineate the performance of that motive in the first slot, tails would indicate to pass to the next motive. The procedure is repeated until each motive has been assigned a position within the overall phrase. In some cases, the order did not change from the original. Thus each phrase retains its presumed identity, but its parts are reorganized giving it a subtly different character. Through this process, I discovered new ways of connecting musical ideas within the piece I would not have otherwise as they seem at first to be unnatural or improbable in some way.

The irony of this realization is that the indeterminate ordering of the parts did not result in a fully determinate performance, by which I mean it did not lack what might be called improvisation, interpretation, or spontaneous decision-making. Partially due to time constraints, and partially due to the nature of the piece, I did not practice the work as if it were a classical score, attempt to make smooth connections consistently each time, plan out my phrasing and tone quality, decide on larger formal decisions, etc. These elements were not completely absent, but the degree to which they were worked out consciously is less than what a performance of a piece by Fernando Sor or Mauro Giuliani might be. However, this lack does not necessarily condemn my recording as simplistic, arbitrary, or inadequate in any way. After all, the nature of this piece is not that of a coherent arch such as a classical work and my realization raises the question as to what degree is it the performer’s job to make such as piece coherent. To what degree do the chance operations inhibit this possibility? With
regard the latter question, the last several phrases seemed to lack any plausible connection, giving the last three minutes a disjointed, dragging quality. Given more time and engagement with the score, I might have been able to find a coherent way to play it. But why is coherency a prerequisite for a piece of music anyway? And who can say what coherence is or isn’t?\textsuperscript{19} Given my limited preparation time, the recording – the unedited best several takes – features a large degree of on-the-spot decisions in terms of dynamics, timing, the use of silence, and even choices of rhythmic nuance or pitch. Despite my best efforts, the nature of piece and my preparation period resulted in a realization that still includes some degree of improvisation. Though my performance of this realization may be criticized as underprepared, sloppy, awkward, or any number of arguably apt adjectives, I enjoy the notion of this recording as a process of learning something new. Just as Cardew was learning to play the guitar, learning about indeterminacy and chance operations, learning about mobile forms, graphic notations, and doing so on a subpar instrument seems indicative of an unpolished quality indicative of this piece. Even the score shows erased notes, sloppy handwriting, smudges, unclear notation, and faded print. Thus, I claim an aesthetic of learning and discovery for this initial realization such that would be lost given too much preparation time.

The next three versions were all recorded on the same night, one after another, and each with only one or two takes.\textsuperscript{20} In the second version I was freed from the constraints put upon me by the I-Ching, thereby enabling me to

\textsuperscript{19} One could make a Gestalt argument as discussed by James Tenney in \textit{Meta + Hodos and Meta Meta + Hodos}. Lebanon: Frog Peak Music, 2006. Written in 1961 as a Master's thesis.

\textsuperscript{20} One take had to be discarded due to an indeterminate coughing fit by the recording engineer.
organize the phrases by their motives similarities. I identified like phrases through various characteristic traits and grouped them together, hopefully creating some sort of cohesion. Motives featuring the melodic major seventh from E to D-sharp were included in the first section, and then other motives that shared other traits with these motives were gradually added. Other phrases were grouped together because of their similar chord structures, harmonics, rhythm patterns, and tonal relationships. Some motives were left in tact while others were cut up and pasted in different formations to emphasize certain relationships. I also designated larger sections or phrase groupings to focus my interpretation. The main obstacle in this arrangement came in the form of a bitter reminder that I find this kind of compositional work tedious and unrewarding. I found myself choosing certain arrangements arbitrarily rather than searching for meaningful connections within the material, for no other reason than to hasten the end of the chore. However, some of my arbitrary decisions engendered fascinating results. The most significant occurs towards the end of the piece. I simply took a fragment from motive F and turned it upside down on the page and read it normally. I chose to do this after showing my project to my grandmother, Evelyn Arms, who is a classical pianist and was fascinated by the open-ended structure of the piece. She asked me if I could read it upside down, and I realized that was completely possible; “Change anything.” I happened to be at this moment in my arrangement and flipped this fragment over to striking results. Overall, For Stella has a strange tonal quality that stems from the prevalent use of thirds and fifths, as shown by Example 17. When flipped, those fifths turn into fourths, and the basic pitch material is transposed unexpectedly, making the brief moment pop out of the sound texture.
Example 17: Fragment of Phrase F and that same fragment flipped.

For this realization, I was able to employ my initial interpretation of motive P: a long, stagnant progression from chord to chord, insisting upon its own differentiation from the rest of the piece. This interpretation of P resulted in it making up almost two minutes of the entire recording, even with my attempts to shorten the decay of certain chords. My initial intent was to go through all the material except for the rhythmic motives I and J, play phrase P with this interpretation, and conclude with rhythmic activity of I and J as a kind of coda. To my dismay, this intention did not avail much success in practice. Try as I might I could not find a way to make a musically sufficient connection, and I abandoned the idea by simply omitting I and J. Interestingly, when I came to the end of P in the studio, I went ahead and improvised a little coda on those two motives, cutting the fragments and reorganizing them in the moment, to my delight achieving precisely what I could not in my practice time.

The final two versions share a couple of things in common. First, they were both accomplished in one take. Second, they were both recorded with almost no preparation. Having spent several hours preparing the above

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21 Placing a right hand finger on the offending string behind the bridge and slowly moving the finger toward the sound hole can achieve this feat. This action must be done carefully in order not to suffocate the decay too quickly. I employed this technique typically when the tones of a given chord suffered from an inequitable decay period, such as low open strings paired with higher, fretted tones.
arrangements, I was confident in my ability to play each of the phrases, and I wanted to make sure I created an arrangement in real time with no contamination of preconceptions that might blur the distinct versions. The only decision I made before recording version three was to utilize phrase K as a kind of refrain, exploring different ways of approaching, leaving, or dividing the motive up in real time. This resulted in a somewhat incessant declamation of this passage, since it became a point of stability for me.

The final version is almost unrecognizable as For Stella and perhaps exemplifies Tilbury’s fear that “perverse reading [of the instructions] may well take the indication ‘change anything’ to extremes.”22 Before going into the studio to record this version, I had practiced the improvisation a grand total of once, about ten minutes before hand. Though no record exists to confirm my claim, I can assure the reader that my one practice session bears no similitude to what is found on the recording. Despite the lack of immediate resemblance to the score that inspired it, I stand by my claim that this recording is indeed a version of For Stella, and not an unrelated improvisation. I open with an excerpt from motive O, which I interpret as a cross string unison relationship. I develop this motive into an octave of F, also found in the score, from which point I bring in the idea from motive M when I bend the lower note up.

Example 18: Fragments developed early in my improvisation

22 Tilbury, 150.
Other ideas I chose to explore include the chord found in motives H and M. I develop this chord by playing it in different transposition, keeping the shape consistent on different string relations, and other strange deformations. The primary connection to the score that is audible is that of the work’s idiomatic relationship with the guitar. I play lots of natural, and pinch harmonics, indicative of the piece’s tonal quality, and I employ various special techniques not found in the score, but ones I think are consistent with work’s aims. While playing, I felt as if my choices were somehow too dull, related or unrelated to the piece, idiomatic to the guitar or my own playing, and any number of other doubts that constantly affected my performance. But when I listened to the result afterward, I could not explain how I managed to pull off what I did. To me, the realization seemed to work in ways I did not anticipate while recording it. I think the reason for this surprising success was my self-limitation through the score. Though I did not play anything precisely from the score (a few notes here and there), my attention to something I intended to emulate in some way led me to perform in a specific manner that resulted in a coherent improvisation. I am reminded of Anthony Braxton’s statement about his first solo improvisation concert: “I imagined I was just going to get up there and play for one hour from pure invention, but after ten minutes I’d run through all my ideas and started to repeat myself.” Braxton had to devise what he calls his Language Types and Sound Classifications to constrain his improvisations in some way. In a way, using

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23 Pinch harmonic is a term I am borrowing from popular guitar language. This technique involves plucking the string and immediately silencing the fundamental with the flesh of the finger, resulting in a kind of artificial harmonic.

Cardew’s score as a point of departure acts as a kind of language type in the Braxtonian sense. It is also worth noting that beyond private practicing, this is the first time I ever performed a solo improvisation in front of another person, let alone recorded it for potential distribution. It is also my favorite of the four versions.
Conclusion

Following the experience of creating these four realizations in which I directly and consciously questioned the differences, values, and processes of chance and improvisation, I came to the conclusion that both are intrinsically related, but distinct processes even if their use as descriptions by composers, musicians, and musicologists overlap and can be racially coded. The first realization used the most indeterminate process, but still required some improvisatory sensibility due to the time constraint on the project. Rather than justify it as “indeterminacy in performance” I call it improvisation, which I think is a more accurate word for spontaneous decision-making. But one should not overstate the improvisation that took place; it was merely present in the interpretation of connections and aspects of any music not defined in the score. In moving from one fragment to the next, I had to decide how best to enact the progression, i.e. dynamically, timbrally, temporally, etc., none of which was decided by the I-Ching. Even David Tudor must have made these kinds of decisions in the moment, despite his performance scores. Ironically, the second version perhaps utilizes the least amount of both indeterminacy and improvisation. Since I chose the order myself, I was more prepared to perform the connections between phrases, resulting in less need for in-the-moment problem solving. In both versions two and three, it is crucial to recognize the influence of version one. By performing the chance operations, I found new relationships I would not have otherwise, and could not help but employ these in later versions, even if their use was at times subconscious. The third version marks a drastic increase in improvisation. But this realization demands a new
question: should mistakes be considered part of improvisation? At several points, I wound up playing some things that are not part of the score, or that were in any way intentional. While this kind of feeling occurs through normal improvisation, this was improvisation with a very specific goal in mind, and events occurring outside of that goal I think could be considered mistakes. Had I been playing in a defined improvisational genre, such as bebop or Hindustani classical music, they would certainly be considered mistakes. But since this piece allows for material outside of itself to occur, these problems are more flexible. The final version stretches the definition of a “piece” as far as one can while maintaining that piece as a reference. Despite the differences between these four versions, it is worth noting that no two performances of any version will be quite the same, unless greater practice time and preparation is devoted to the first two. Even so, if I threw the I-Ching or tried to recreate my self-assigned version, I would produce different scores.

For Stella is a highly interesting challenge for the guitarist. Despite having created four completely unique versions of this piece and living with it/them for several months, I still feel as if I don’t quite know the piece as I know other works in my repertoire. I have developed habits of performing phrases that others might never consider, and each time I look at the score I reevaluate the decisions I’ve made. In this sense, there is no one correct way to perform this piece, which only enriches its vitality and intrigue. Even with my four arrangements, I cannot imagine every possible way of performing this peculiar work. Hopefully the growing interest in Cardew and new found availability of the score will incite new interpretations by a variety of guitarists, which will only give the piece new
life and demonstrate other ways of thinking about it and perhaps establish its
deserved role in guitar repertory.
Bibliography


______. *For Stella*. Unpublished manuscript facsimile attained through the British Composers Project: http://www.composer.co.uk/composers/cardew.html


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Childs, Barney, and Christopher Hobbs, eds. “Forum: Improvisation.”


