

Dustin Donahue

March 10, 2012

8pm – Conrad Prebys Music Center Concert Hall

Four Systems (1954)

for Vibraphone and Sine Tones

Earle Brown (1926-2002)

Four Systems (1954)

for Four Amplified Cymbals

Variations II (1961)

John Cage (1912 - 1992)

Nr. 9 Zyklus (1959)

Karlheinz Stockhausen (1928 - 2007)

The King of Denmark (1964)

Morton Feldman (1926 - 1987)

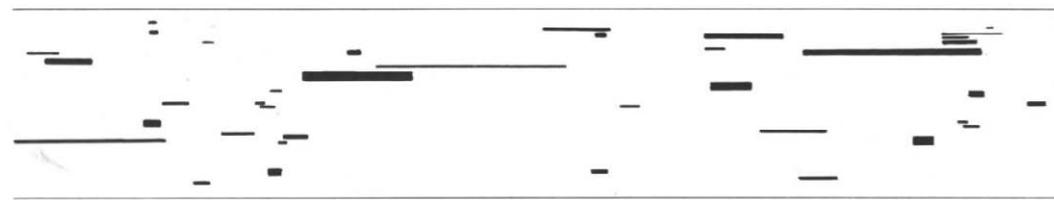
This concert would not be possible without the help and support of Rachel Beetz, Steven Schick, Red Fish Blue Fish, Scott Worthington, Paul Hembree, Andrew Allen, Jessica Flores, Brady Baker, and Nick Patin.

Brown *Four Systems for Vibraphone and Sine Tones*

Four Systems is not explicitly a percussion work. Written for pianist David Tudor on his birthday in 1954, the score consists of four systems containing lines of various lengths and thicknesses. The score can be read in any direction and orientation, and played on any instrument. In each system, two horizontal lines extend the width of the page which designate the range of the instrument.

My version, *Four Systems for Vibraphone and Sine Tones*, is a stubbornly precise realization of every line on the page. Vertical distances were precisely measured and divided in order to correspond to the 37 pitches of the vibraphone. In order to represent the horizontal lengths that define the range of the instrument, sine tones are employed tuned to the highest and lowest notes of the instrument.

Yet, I was fascinated with the idea that the title seems to imply not only four systems of music, but also four systems of reading the score. I wondered what Brown's patterns would sound like as the pitch space got smaller and smaller. As a result, the first system is heard mapped directly to the notes of the vibraphone. Yet for the second system, the pitch space is cut in half while the 37-note division remains. The result is a reading of the score which employs 19 vibraphone notes and all the quarter-tones in between (performed by the sine tones.) The third system goes further, shrinking the pitch space to a tritone and employing six tones per half-step. The final system takes place within a whole step using eighteen notes per half-step; the vibraphone has only one pitch left to play.



System 1 from Four Systems

Brown *Four Systems for Four Amplified Cymbals*

It would be misleading to give the impression that my realization detailed above is in any way a definitive version of *Four Systems*; a key characteristic of these open scores is their flexibility and their ability to reflect not only the performer but also the era of their realization. To demonstrate this, I chose to contrast my *Four Systems* with a realization designed by percussionist Max Neuhaus in 1964. In contrast to my exacting measurements, Neuhaus saw the patterns in *Four Systems* in a radically different way:

Rather than a strict interpretation of these patterns, during the performance I allowed my eye to pick out various combinations that seemed interesting or relevant to that particular moment in the realization's flow.

This produced an improvisation, but one with a very definite relationship to the score. (M.N.)

Neuhaus' choice to use only amplified cymbals has always struck me as a radical decision. Nearly all the repertoire for a solo percussionist through the 1960s employed a massive array of instruments (see, for example, *Zyklus*, *The King of Denmark*, and Lachenmann's *Interieur I*) seeking to capitalize on the enormous timbral palette of the percussion family. Neuhaus' *Four Systems* has a sense of focus and thorough exploration of a single sound not found again in percussion writing until the late 1980s.

Over years of playing cymbals, I had been struck by the difference of hearing them up close while playing them and their sound from a distance. Close, they are full of rich complex moving textures that get lost even a short distance away. The age of audio amplification was just dawning, and I was able to find a way to amplify these beautiful hidden sounds. (M.N.)

My reproduction of Max's realization seeks to place the ear of the audience as close to the instruments as possible, such that all of the details of these extremely complex instruments are made clearly audible.

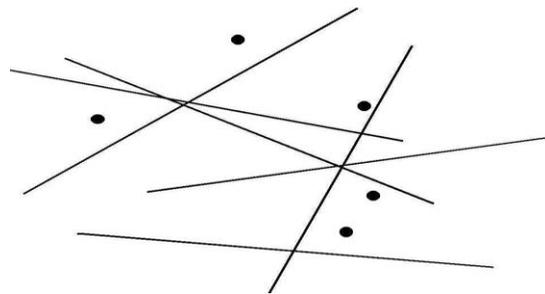
Cage *Variations II*

Variations II is based on an extremely simple idea: the distance from a point to a line yields a measurement that represents a musical parameter. The score consists of six lines and five points printed on transparencies. These transparent sheets are dropped and the distance from each point to each line is measured. The six lines represent frequency, amplitude, timbre, duration, point in time, and structure of event; the five points represent musical events. Given the open instrumentation ("for any number of players

and any sound producing means,") unspecified total duration, the lack of instruction on how to conduct and read the measurements, the possibility of an infinite number of readings to produce a single performance, Variations II is a score that represents infinite musical possibility. In my view, the flexibility of this system challenges the interpreter to create a realization that is perhaps just as unpredictable and infinite as the score itself.

Several factors led me to design the system that will produce a performance of Variations II tonight. The snare drum has always been at the center of my understanding of percussion. My grandmother gave me my first instrument as a Christmas gift when I was 10 (a classic 14" Ludwig aluminum shell drum, seen to your right on stage...) My first percussion lessons were centered on this instrument. My appreciation for various colors of noise can be traced to the stunning beauty of a snare drum roll. When asked to provide an instrument when "any sound producing means" are available, I very quickly chose the snare drum.

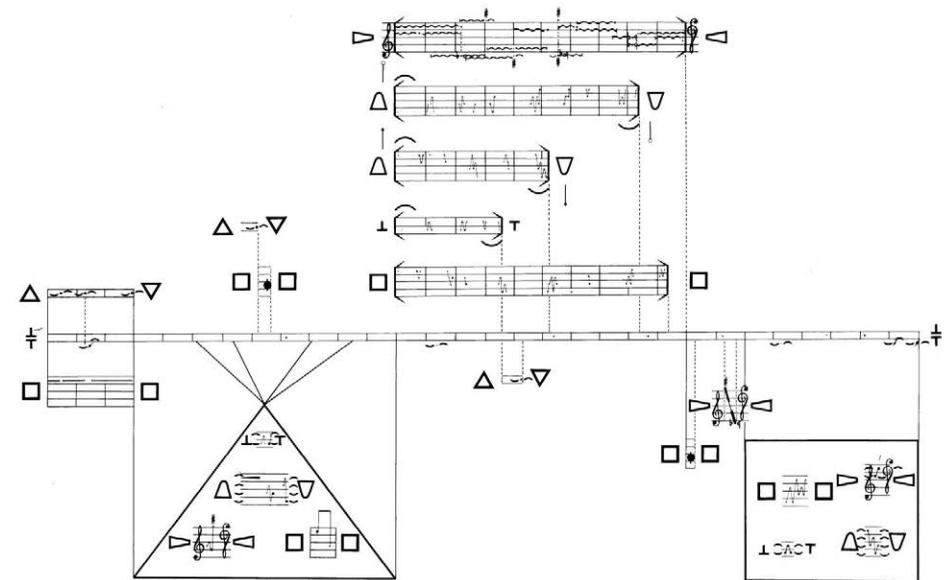
I have always been fascinated with pitches at the limits of human hearing, particularly by the point where pitch becomes so low that it begins to exhibit a clear rhythm (a frequency of 1 hertz will create one pulse per second, for example.) When several sub-audible oscillators are combined with one audible tone (in this instance, the resonant frequency of a snare drum,) a complex polyrhythmic web of beating results. When a sub-audible tone acts as a control for an exaggerated sawtooth wave, the oscillations are made clearly audible as single attacks. Using these oscillators as "mallets" allows me to bypass the act of striking inherent in all percussion playing, and creates a system of percussion playing in which there is a discontinuity between cause and effect.



A sample reading of the transparencies in Variations II

Stockhausen Zyklus

Given the scope of choices available to the performer in *Variations II*, *Zyklus* is in many ways conventional: any performance of the piece will utilize the same percussion setup, the performer will always complete a slow 360-degree rotation around this setup, and all of the material is precisely notated. What Stockhausen offers the interpreter is the choice of *which* material is played and *when* in time it is to be played. These types of choices range from the placement of single notes to the large-scale movement of the piece (given that the score is designed to be read upright or upside-down, a performance may proceed either clockwise or counter-clockwise around the setup.) Read in one direction, the score offers more and more choices to the performer as he moves forward in the score. In the opposite direction, the score becomes more and more precisely notated, culminating in a single page that is entirely fixed in notation. My version utilizes the latter route, but ends with the page containing the greatest freedoms for the performer.

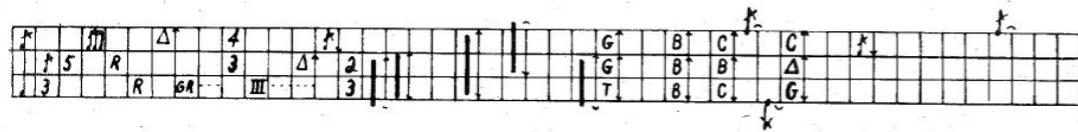


A page from Zyklus

Feldman *The King of Denmark*

Feldman's *The King of Denmark* attempts in many ways to subvert the idea of percussion. All sounds are to be made with the fingers and hands: no sticks or mallets. The score is arranged on a graph, in which a box equals a beat, yet no rhythmic profile is discernible. Through most of the piece, instruments are specified only as low, middle, and high. Only small phrases are specified as instrument types, "gongs," "skins," "cymbals," and so on. These phrases act as splashes of color in an otherwise continuous and ambiguous landscape.

My version tonight employs a vibraphone and glockenspiel (two instruments Feldman would return to again and again in his later works) to realize the unspecified portions of the piece. The use of a keyboard instrument allowed me to improvisationally access Feldman's three registers by sight and provides significant contrast to the precious moments of percussive color.



System 2, Page 3 of *The King of Denmark*

Feldman aims to contradict the bold gestures and heroic virtuosity of pieces like Stockhausen's *Zyklus*. By removing the percussionist's mallets, all strokes must be very small. Played quietly with the fingers, sounds disappear quickly, frustrating attempts at large-scale phrase construction. Rather, *The King of Denmark* quite deliberately remains still; as Feldman describes,

There was something about the wistfulness of things not lasting, of impermanence, and of being absolutely quiet. (M.F.)