

## The John Cage Complete Variations Project: Performed by Decibel

2012 marked the centenary of John Cage's birth. When Cage died in 1992 he left an incredible legacy to the world of music and art, as a composer, theorist, philosopher, performer and visual artist. A pioneer of indeterminacy in music, electroacoustic music, and non-standard use of musical instruments, Cage was one of the leading figures of the post-war avant-garde. Critics have lauded him as one of the most influential American composers of the Twentieth century. He was also instrumental in the development of modern dance, mostly through his association with choreographer Merce Cunningham. Cage's teachers included Henry Cowell and Arnold Schoenberg, known for their own radical innovations in music, but Cage's major influences lay in various East and South Asian cultures. Through his studies of Indian philosophy and Zen Buddhism in the late 1940s, Cage came to the idea of aleatoric or chance-controlled music, which he started composing in 1951. In a 1957 lecture, *Experimental Music*, he described music as "a purposeless play" which is "an affirmation of life – not an attempt to bring order out of chaos nor to suggest improvements in creation, but simply a way of waking up to the very life we're living".

John Cage's eight *Variations* (1958-67) occupy a unique position in the composer's output. By the late 1950s, Cage had made significant progress in exploring the use of indeterminate sound sources (such as radio and LP recordings), a range of chance procedures for generating notation and its' indeterminacy. His attention now turned towards the "flexibility" of formal structure itself, and the eight *Variations* were the principal vehicle for the exploration of this idea, constituting nearly a quarter of his compositional output during this period. In the *Variations*, Cage expanded his investigation of instrumentation, sonic materials, the performance space and the environment. The works chart an evolution from the "personal" sound-world of the performer and the score, to a vision potentially embracing the totality of sound on a global scale. After his orchestral work *Atlas Eclipticalis* (1961–62), a work based on star charts, which was fully notated, Cage gradually shifted to, in his own words, "music (not composition)." *Variations V* and *VII* are in fact "happenings", an art form established by Cage and his students in late 1950s, where the concept of passing time is arrested in some form.

This is the first time anyone has attempted to present the entire *Variations* in one program. Decibel undertook this ambitious project because there we found a particular affinity with the works – there was something of the group and its members interests in every one of the *Variations*. The materials called for in these works map Cage's - and Decibel's - interests in technology, spatialisation, multimedia, happenings and sounds 'of the air'. Preparing the works raises questions about 'authentic' or 'period' performance in technology driven artworks; when to apply new technologies and possibilities to works where the very idea of 'new' was in some ways integral to the works conception. Decibel have combined a variety of approaches within the program that include the incorporation of new technologies as well as maintaining period instruments, but always keeping the spirit of the works intact.

Key to Decibel's realization of these works has been the preparation of the instantaneous mobile screen scores for *Variations I, II* and *III* as well as the performance maps for *Variations VI* and *VI*. Here, the complex tasks involving measuring and mapping angles of cut out pieces of transparency are performed by the computer, generating a real-time outcome in a instantly performable notation or plan, informed by years of working with graphic score creation and interpretation. Decibel's networked computer system and experience with mobile screen score readers has offered a unique perspective on the possibilities for these scores, and has resulted in the development of an iPad App for the entire *Variations* set, in conjunction with Cage's publisher, Peters. This system eradicate the 'cheating' that can sometimes happen in such complex, aleatoric works, yet the 'chance process' so important in the preparation of the scores remains intact. The programming developed for the Decibel piece *The Talking Board* (Vickery & Hope, 2011) is used to facilitate the required reading of the astronomical map by musicians and dancers alike in *Variations V*. *Variations VII* is updated to benefit from new technologies in communications, and *Variation VIII* presents the perfect conclusion to Cage's exploration of the very basis of music.

The *Complete John Cage Variations* was premiered during Decibel's tour of Europe in February 2012 as part of Curva Minore's 'John Cage 100 Years' Festival, at the Geothe institute in Palermo, Italy. It has also been presented as part of the 'Cage in Us' Festival in Brisbane, Queensland and the Scale Variable Chamber Music Series in Perth, Western Australia.

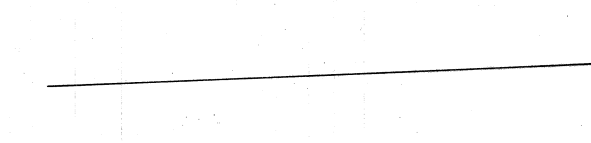
<http://decibel.waapamusic.com>

## PROGRAM DETAIL

**1. Variations I (1958)** This work is dedicated to David Tudor, Cage's long term collaborator. The score consists of six transparent square sheets of points and lines to be arranged by the performers prior to performance, whose relationships point to combinations of volume, pitch, timbre, duration and events. Decibel digitally generate 'versions' according to aleatoric algorithms which generates a mobile score, unique for each performer, networked over the score readers and performed on bass flute, bass clarinet and cello.

**2. Variations II (1961)** The score again consists of transparent sheets of lines and points yet develops the ideas in *Variations I* by giving the performers slightly more freedom in the way the arrangements are interpreted. Also generated by the computer, this work is performed by a larger group of musicians and includes subtle electronics as a 'sound producing means'.

**3. Variations III (1962)** was often performed solo by Cage himself. The score consists of two sheets of



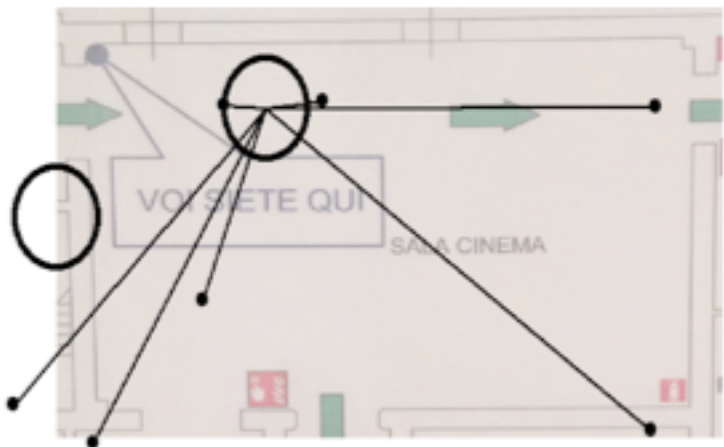
**Figure 1: one of the transparent sheets included with the score for Variations II**

transparent plastic: one is blank, the other has 42 identical circles on it which are to be cut out and dropped onto the blank page. The area where the most circles are linked is the score to be read, using the intercepting points on the circles as 'actions'. Again this process is automated on the

computer and the performer – on a snare drum and am radio in this case - may keep generating alternatives until they find one to settle on and perform.

**4. Variations IV (1963)** This is often described as the pivotal work in the variations series, where Cage begins to discuss the distribution of sounds in space as well as suggesting that the performer do "other activities" in addition to music. This score consists of seven points and two circles on transparent sheets which are to be used in conjunction with a map of the performance venue to create a kind of performance 'diagram' which explains where, not what, sounds happens during the work. Again, this is automated by the computer, and the performers choose which version to perform as they generate options in realtime.

**Figure 2 The performance map generated for Decibel's premiere performance of Variations IV, showing the map of the performance space in Palermo, Italy.**



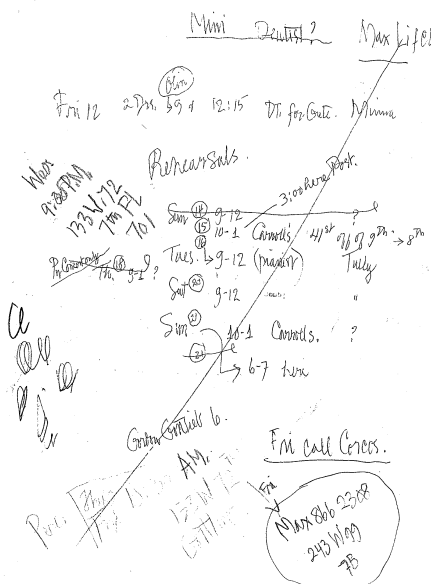
**5. Variations V (1965)** This work was created in collaboration with the Merce Cunningham Dance Company and can be thought of as one of the first mixed media performance works. It featured the construction of electronic devices made by number of prominent electronic musicians and designers of the time, such as Max Mathews, Robert Moog, David Tudor, Billy Kluver, Nam June Paik and with film made by Stan VanDerBeek. As in the first performance, Decibel uses short wave radios, oscillators and pre recorded tapes distributed over six speakers in the hall. These sounds are triggered and manipulated by dancer movement picked up by photocells, Theramin antennae, and live camera feeds. Decibel perform this piece with a group of dancers and adapted electronics, including purpose built proximity antennas (by Meg Travers) and light sensitive devices (by Karl Ford), with attention given to the detail of the original performance.

**INTERVAL**

**1. Variations VI (1966)** is an electro-centric work for as many sound sources and speakers as are chosen to be available, and returns to the transparency method of creating a kind of performance map. Selected shapes dictate the association of components to systems, and the direction of sound. Here, the shapes provided indicate performance 'styles' depending on how they drop on the page; namely 'continuous' or 'non continuous' approaches. Decibel present this Variation with a different approach to the original, which included an enormous collection of electronic circuitry, radios, tape and a television screens in a multi roomed venue. Using Cage's original calligraphy, the scores is generated immediately before the performance, having inputter the parameters available.

**2. Variations VII (1967)** returns to a 'retrospective' text score, as in *Variations V*, suggesting an electro acoustic system in which performers act in a free and unscripted manner, but using only sounds that are created during the performance in realtime, or found 'in the air'. The movements of the musicians trigger and interfere with sounds

through light sensors, and Skype is used to dial up people as Cage did with telephones in the original performances. Decibel 'contemporise' the sonic palette in this work, using contempory technologies to realise Cage's vision.



**Figure 3 - Cages notes for the first performance of Variations VII. New York Public Library.**

**Variations VIII (1968).** The published score consists of one page of almost illegible handwriting but the words "no music no recordings" are clearly legible. Performed by Decibel member Lindsay Vickers using his no input feedback system on bass clarinet, *Variations VIII* represents Cage's ultimate

statement addressing the very nature of sound in the world.

**Decibel** is a new music ensemble based in Perth, Western Australia devoted to performing works that explore the nexus of acoustic and electronic instruments. Pioneering unique electronic score formats and giving electronic music instruments a voice in the acoustic space, Decibel also arrange electronic works for live performance. Decibel are committed to Australian music and emerging Western Australian composers, as well as sharing important international works with Australian audiences.

Decibel's annual program 2009-2010 (their first) won the 2011 AMC/APRA Art Music Awards Inaugural Award for Excellence in Experimental Music, and have been nominated again this year. They have toured Australia and Europe, released a CD "Disintegration: Mutation" on hellosQuared records, an LP 'Stasis Ecstatic', a book "Audible Designs" on PICA Press, and 2013 sees the release of an album of the works of Alvin Lucier on New York label Pogus.

<http://decibel.waapamusic.com/subscribe/>

And our twitter feed @DecibelNewMusic

**Decibel are:**

Cat Hope - artistic director, flute, bass guitar, electronics.

Stuart James –piano, live video feed, network design, programming and electronics

Lindsay Vickery - reeds, programming, electronics

Louise Devenish - percussion and electronics

Tristen Parr – cello and electronics

Aaron Wyatt - violin, viola, programming and radios.