ORIGIN.

The Conscious Culture Magazine

JOHN CAGE:
APP+ART=RHYTHM MACHINE

PAUL D. MILLER/DJ SPOOKY

"When we separate music from life, we get art."
—John Cage

John Cage was one of the foremost composers of the 20th century. For many years, he looked to Eastern compositional methods in order to develop a bold and refreshing approach to how music could be generated.

Randomness has an incredibly powerful place in our culture. If you think about it, you can see it driving the algorithms that run our information economy, patterns that make up the traffic of our cities, and on over to the way the stars and galaxies formed. Reality itself is [made up of] chance processes linked to sets of rules—this is what drives the world, the universe, and just about anything a human being can imagine. Imagine if every moment we spend listening to Radio, Spotify, Turntable.fm etc., was a composed moment taken from an instrument? That's what the new John Cage app is about.

John Cage was one of the foremost composers of the 20th century. For many years, he looked to Eastern compositional methods in order to develop a bold and refreshing approach to how music could be generated. Throughout his life he used the I Ching to explore chance processes, taking the notations he made and coming up with new compositions.

To celebrate John Cage's 100th birthday, the John Cage Trust has commissioned a new app, which plays an iOS or Android mobile device with the actual materials used by John Cage in the preparations for his Sonatas and Interludes (1946-48).

One of Cage's many major achievements was his creation of the "prepared piano," in which he placed objects beneath and between the strings of a grand piano to create an entirely new instrument. Sample that! Similar to Marcel Duchamp's ready-made objects that had such a transformative impact on the artworld in the 20th century—but in instrumental form.

The idea of altering an instrument's timbre through the use of external objects has been applied to instruments other than the piano. See, for example, the turntable that we DJs use to produce beats that we select and mix. It's just another "chance operation." Cage first prepared a piano when he was commissioned to write music for "Bacchanale," a choreography by Sylvia Fort in 1938. Cage had been writing exclusively for a percussion ensemble—in fact, he arguably wrote the world's first composition for turntables in 1939, simply titled "Imaginary Landscape."

The story goes that the hall where Fort's dance was to be staged had no room for a percussion group. The only instrument available was a single grand piano. Cage improvised and made that become an instrument that could make any sound-noise. Cage said that he realized it was possible "to place in the hands of a single pianist the equivalent of an entire percussion orchestra...With just one musician, you can really do an unlimited number of things on the inside of the piano, if you have at your disposal an exploded keyboard." More recent composers, such as Jason Moran, have used prepared pianos. There are other composers, like Iannis Xenakis and Pierre Boulez, who have done "prepared works"—but none of these musicians have a commemorative app!

Whenever you play a song, you're basically playing with a lot of zeros and ones. These are Western compositional models that other cultures have explored in so many ways. John Cage was one of the few Western composers to approach music that was rooted in well-researched materials from China. If you look at other groups that have used the "Book of Changes," like Wu-Tang Clan, there are some interesting connections. An app is a series of zeros and ones, too. What happens if you take both concepts and make an app that can generate many combinations of samples? That's exactly what this app does. It takes permutations John Cage's most famous works, and makes a sample bank out of them.

The I Ching or "Yì Jīng", also known as the Classic of Changes, Book of Changes, or Zhouyi, is one of the oldest Chinese documents. The book contains a divination system that links chance process to actions—the equivalent of Western geomancy or the West African Ifá system. The text of the I Ching is a set of oracular statements represented by sixty-four sets of six lines each called hexagrams (guà). Each hexagram is a figure composed of six stacked horizontal lines (yáo). Each line is either Yang (an unbroken, solid line), or Yin (broken, an open line with a gap in the center). With six such lines stacked from bottom to top there are twenty-six or sixty-four possible combinations, and thus sixty-four hexagrams represented. Try doing that with an app or a keyboard!

The John Cage App points out that it's not just the mathematics of the world and universe that make life interesting—it's how we put the numbers together. As John Cage once said, "There is no such thing as an empty space or an empty time. There is always something to see, something to hear. In fact, try as we may to make a silence, we cannot."