

Hourglass

**Hourglass** for string quartet and computer-generated sound track measures time both arbitrarily and fluidly (not unlike ALL music and hourglasses, for that matter).

A call-and-response between live quartet and "pre-fab" string sounds from software like Garage Band processed algorithmically, *Hourglass* is a composition of pre-recorded "grains" flowing in and out of sync with human action and is a meditation on mastery, time, youth, and the world they inherit.

//

When [Network for New Music](#) asked me to compose a short piece for string quartet and computer-generated sound, it was referred to in our conversation as a piece "for quartet and tape." I am old enough to know precisely what was meant by the term "tape": the piece was not to be interactive, but a pre-recorded track with which to perform.

I immediately agreed, but then I thought (gulp), "I only write interactive pieces when I use computers in music." Also, I do not tend to think in terms of a set time limit for a piece.

The constraints of time and timing became a looming presence in the process of composing piece, thus the title.

I decided on a compromise performance method resembling sound design in theater or dance.

Pre-composed fragments would be triggered according to cues given by

performers. A fifth musician on a laptop is required, but the flexibility gained allows for dramatic freedom.

I now believe this simple procedure will alter how I think of interactivity in future combinations of instruments and technology, particularly when most instruments are not amplified or "wired."

Time informs the work in another way. The instrumentalists are young people (principles from the [Philadelphia Sinfonia](#)) who've dedicated a large part of their young lives to learning to play a string instrument very well.

Searching for material, I was experimenting with coding music for physical models of string sounds in ChucK, a language for audio processing, when my ten-year-old showed me lovely synthesized string sounds jamming on his iPad.

So, I decided to make a piece about string sounds and how much time we spend fussing over them, what devices we struggle with to coax them out, and what kinds of choices we make (or not) given said device (iPad, coded text-based program, and/or beautiful wooden instrument).

Towards the end of the piece, I use a soundfile of me improvising on an iPad Garageband string sound. I apply a filter to make the file sound like it's being played on a vinyl disc.

The live quartet actually ends the work, but not after this "fake artifact" (rendered on very new technology) contrasts with the immediacy of the antique instruments!