Interactive Sonic Arts
Reading Response 04
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There were some really interesting pieces of history in these two chapters. The early Tape Music Center days sound wonderfully chaotic and full of adventure. Some of it felt very relatable, too - Merce Cunningham's description of *Variations V* with "musicians and technicians… at numerous on a platform behind and above the dance space" (pg 82) certainly made me think back to being behind the scrim at the National Ballet School project. Other things were less relatable - like waiting two weeks to hear back a snippet of music! Reading that certainly gives me more appreciation for our current toolset. I was recently playing with the Flucoma library where some operations take a few seconds to complete - I was feeling frustrated by this, but feel a little silly for that frustration after reading about these long render times.

There were a few descriptions that I found particularly intriguing and potentially inspiring in terms of instrument/system design. First is Alvin Lucier's *Music For Solo Performer* (pg 96). I was familiar with the piece beforehand, but it was nice to come back to it while I'm in the middle of thinking about the possibilities in designing a performance system. The idea of using vibration and resonance from one source to excite another is what I found especially interesting. I wonder if there are ways to apply this idea computationally - not just by pinging resonating filters, for example, but can the qualities of one sound be used to trigger completely different sound or events? Can I use the qualities from a stream of grains to trigger a separate percussive gesture, for example? Maybe this is a patch towards being able to generate many streams of sound of sound with a singular input gesture.

Next is the description of David Tudor's *Bandoneon ! (Bandoneon Factorial)* (pg 106). Chadabe says "the sounds that Tudor played were transformed, but they also controlled how they were transformed and routed to the different loudspeakers." Coming back again to the idea of using sound qualities as control signals. The idea of using sound quality as *routing* control signal in particular is new to me. My approach to routing sounds to transformation processes has very much been in the DAW/mixing desk paradigm, with transformation processes set up on "auxiliary channels" with knobs or faders controlling send amounts to each individual channel. The idea of using sound qualities to control this seems like a good way to break from the DAW paradigm, and to potentially have a system that is more fluid, gestural, and performable.

Finally, I found Chadabe's description of Xavier Rodet's FORMES system (pg 126) inspiring for similar reasons as the above - "the evolution of a sound's loudness, for example, could be a process, and that process could be very different from the very quick evolution of the onset of the sound or from the very long evolution of the whole musical passage. Many processes, unfolding at different rates and applying to different aspects of the sound and music, could unfold together." Again, this idea of sound quality, and especially sound quality over time and at different time scales and interwoven, as control signals.