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Doing It Wrong¹

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Culture is a cumulative and expansive phenomenon; creative communities are in constant flux as their members build on the past, conduct experiments, and fuse bits and pieces of the local and the exotic, the old and the new. Even ancient traditions, seemingly eternal, had precursors. No culture ever appears whole or finished; a culture is always the work of communities, which, consciously or not, shape it to fit their contemporary environment.

It can be tempting to frame conversations about art and music in terms of masterpieces, greatest hits, stars, creative genius, and so on. Works of art are seen as singular objects, the results of exceptional actions by heroic individuals. Masterpieces are somehow definitive, answering questions or offering lessons about creativity. But this is generally not only an inaccurate and unproductive way of thinking about what being creative means, but also a clear path to creative paralysis.

Cultural change, especially on long time scales, is unpredictable. Looking back, it may be tempting to draw curves connecting artists or movements to one another, to see particular works or traditions as signposts indicating changes to come or the last gasp of a movement or idea on the way out. But these are, at best, approximations. Hindsight gives the illusion of purposeful movement, of considered progress toward a desired result, and renown or endurance are often mistaken for markers of creative fitness.

¹Although this paper focuses on experimental music making, the ideas are equally applicable to other creative pursuits, such as visual art, dance, and writing. I believe there are useful analogies and metaphors that link experiments in the arts with topics in science and engineering, but I am not going to try to make those links explicit. Hopefully something here will be compelling to the reader in the context of her own work.

But consider this question: in what way does the ubiquitous presence of Mozart in elevators and dentists' offices provide meaningful guidance to a contemporary human being embarking on a creative life? No one can deny that Mozart reached a pinnacle of creative achievement, but to say that Mozart created works of musical genius says nothing about what we should do today, what music is, or how it can be made.

I take it as axiomatic that the value of a creative work is only partly determined by its material and perceptual qualities. Physiological responses, as well as cultural, social, and intellectual responses are all part of the equation. To paraphrase Brian Whitman of The Echo Nest, to think that a computational analysis of acoustic musical features leads to an understanding of the music sets the bar for "understanding" extremely low (Whitman, 2005). Examples abound: limited editions are valued more highly than unlimited editions; the paintings of Jackson Pollack-like robots are not acclaimed or collected by museums (Piquepaille, 2007); note-perfect Led Zeppelin cover bands do not fill Madison Square Garden with screaming fans; high-tech forensic techniques and boatloads of cash have been dispatched in an attempt to determine whether or not Leonardo drew a small sketch of a pretty young girl (Grann, 2010).

"Value" in these cases can usually be read, at least in part, as monetary value, but focusing exclusively on monetary value misses the point. We cannot know how a work will be valued in the future, what effect, if any, it will have on its own culture or on the culture that follows it.

Although musical innovators throughout history would have articulated these ideas differently, I believe they shared the central tenets that creative acts require deviations from the norm and that creative progress is born not of optimization but of variance. More explicit contemporary engagement with these ideas leads one to the concept of creative research, of music making with goals and priorities that are different from those of their traditional precursors—perhaps sonic friction, in addition to ear-pleasing consonances, for example, or "let's see what happens" rather than "I'm going to tell you a story."

The spirit of "let's see what happens" pervades much contemporary experimental music-making. Here's a very small, personal sample of works I find compelling in the context of musical research, of deviating from the norm, of "doing it wrong."

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"I am sitting in a room" by Alvin Lucier (1990)

This 1969 work on tape has been very influential for several generations of experimental musicians and composers. Lucier recorded himself reading a text describing what he's doing and why. He then played that recording into the room and re-recorded it, after which he played that re-recording into the room

and re-re-recorded it, and so on for many iterations. A simple, elegant idea with a surprisingly rich and lovely outcome. And for romantics, a note of poignancy is added to the relationship between reading and effect because Lucier has a slight stutter:

I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm, is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but more as a way to smooth out any irregularities my speech might have.

“I Am Sitting in a Different Room” by Stina Hasse (2010)

Stina Hasse, a Danish student in one of my classes last year, had access to an anechoic chamber (a room in which there is almost no echo or resonance). She decided to make a sort of inverted version of Lucier’s piece by translating the text into Danish and expanding it and then using the re-re-recording process to reproduce her own voice. She expected that the experiment would reveal flaws in the design of the anechoic chamber, small resonances that the room’s creators had been unable to extinguish. But what happened was both unexpected and wonderful. Instead of bringing out the resonant frequencies of the room (of which there are almost none), it brought out the technological resonances of the equipment she used (the electronic noise of the digital recorder, the acoustic coloration of the microphones, the inevitable hisses and clicks of the physical world).

“51 melodies” by Larry Polansky (1991)

For almost 30 years, Polansky has been playing with the idea of “morphological mutation functions,” techniques for smoothly changing musical parameters. In “51 Melodies,” a 12-minute composition for two guitars and rhythm section, various flavors of mutation have been applied to the two guitar melodies to bring them in and out of harmonic and rhythmic sync as they move from a source melody in unison at the beginning of the piece to a target melody in unison at the very end. One of the things I like most about this piece is that the guitar parts are very difficult, and the guitarists work hard to play them exactly as notated. They put a lot of hard work into playing precisely notated music that is completely bonkers and nearly incoherent. A work like “51 Melodies” is a classic target for “my six-year-old could do that”-type derision. Its surface features are not particularly “pretty,” and appreciation of the music is enhanced by an interest in the conceptual process behind its creation.

“Zero Waste” by Nick Didkovsky (2004)

This is a work for solo piano created on the fly, as the pianist plays. It starts by presenting two algorithmically generated measures of music to the pianist, who then proceeds to play the rather difficult music as accurately as possible. A computer system records the performance, translates it, as best as it can, into rational musical notation, and presents the new notation as the next two measures to be played. Similar to a live performance version of the Lucier piece, “Zero Waste” is a feedback loop that brings out resonances in a system. In this case, the system is the physiological makeup and sight-reading skills of the performer coupled with the performance capture and analysis capabilities of the computer. In performance the developing score is often projected behind the performer, allowing the audience to track the process visually as well as sonically.

“face shock/face copy” by Daito Manabe (2009)

Manabe has been exploring using electrical musical signals to stimulate facial muscles, facial muscle signals to create musical signals, and the transfer of facial gestures between performers via electrical stimulation. If your six-year-old is doing this, you are one lucky parent!

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