Expectations of Virtuosity: Thoughts on Longevity in Electronic Instrument Design

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Abstract
When performing electronic instruments, audiences have little or no conception of difficulty levels because the instruments usually lack natural physics and acoustics. Because the standard of technical excellence in electronic music performance is not universally understood, an audience can not truly understand why a performance is engaging, and whether it has anything to do with proficiency and a progression to virtuosic mastery of artistic expression. This paper is an investigation of how one can increase the longevity of their instrument by giving the audience an expectation for virtuosity.

Introduction
Contrary to popular belief, Itzhak Perlman did not invent the violin. He did not even modify the violin in any physical way since it was first handed to him as a child. It probably took him only a few minutes to learn how to make sound on it, since the violin works by using transparent laws of physics and acoustics. Itzhak Perlman fills concert halls with his expressive interpretations and his technical mastery of the violin. Although he owns one of the most celebrated instruments in existence (the Soil Stradivarius of 1714) [1], the instrument itself does not make for a particularly engaging concert; rather, it is Perlman’s ability to play the violin on an unparalleled level that makes a concert exciting. No one questions how his violin works. Anyone can play the violin, but very few people can match Perlman’s mastery of the instrument.

Scores of instruments are being designed for the performance of electronic music. Whether they are laptop performances, wearable sensor controllers, existing instruments retro-fitted with electronic components, or any other technique of using technology to make sound, they all require an untrained audience to speculate how the performer is making music. Electronic instruments do not presuppose any natural physics or acoustics like the violin does. In addition, and in my opinion most importantly, the audience has little or no conception of how difficult it is to do what the performer is doing to alter the
sound. Unlike Itzhak Perlman, who has the benefit of physics and history, electronic instrumentalists need to prove that their instrument is capable of treatment by a virtuosic performer. In this paper, I will examine this problem, and investigate how one can increase the longevity of their instrument by giving the audience an expectation for virtuosity.

The word “virtuosity” has had more than a few treatments through history. The earliest definition is found in Sébastien de Brossard’s *Dictionnaire* (1703), and is described as an Italian word based on *virtu* (virtue):

> From this word (*virtu*), the Italians have formed the adjective *virtuoso* or *virtuoso* to designate or commend those on whom Providence has been pleased to bestow this excellence or this superiority [2].

The virtuosi of 17th Century Italy were considered to be given their talents from God, and therefore virtuous and righteous. This definition was not universal: the populous later began to consider a virtuoso as someone with a mastery of the technical skills of their instrument, devoid of artistry and expressivity. In his article, *Virtuosity and Music*, R.A. Harman notes [3]: “The word ‘virtuosity’ has always had, at any rate to serious-minded folk, derogatory associations, and, I believe, rightly so, for the term implies that technical excellence has become an end in itself.” For Harman, technical excellence is presumed: it should not be the only skill a performer has (an “end in itself”), rather it should be one aspect of what a performer is expected to be able to do. Once the technical excellence is achieved, one can progress to a mastery of artistry and expressivity. But in electronic music performance, the qualifications for technical mastery are not as clear. Because the standard of technical excellence in electronic music performance is not universally understood, an audience can not truly understand why a performance is engaging, and whether it has anything to do with proficiency and a progression to virtuosic mastery of artistic expression.

In order to fully understand the virtuosity of a performer, the audience needs to be able to understand the physics of the instrument (whether real or virtual), and they should be able to imagine themselves playing that instrument. It is very easy to understand how one plays the violin, but that does not mean the instrument is easy to play at an advanced level. Without the ability to imagine, and at times aspire, to be as masterful as the performer, an untrained audience will be skeptical of the performer’s professionalism. As Roland Barthes notes in his essay *Musica Practica*:

> The amateur, a role defined much more by a style than by a technical imperfection, is no longer anywhere to be found; the professionals, pure specialists whose training remains entirely esoteric for the public....never offer that style of the perfect amateur the great value of which could still be recognized in a Lipati or a Panzera, touching off in us not a satisfaction but desire, the desire to make music. [4]

Although Barthes is writing about the inaccessibility of 20th Century acoustic music, his point is well taken in the electronic instrument paradigm as well. Part of enjoying a performance is being able to relate to the creation of the music, and to be in awe of the performer’s talent.

In conclusion, It is my opinion that in order for electronic instruments to have longevity they must incorporate a more clearly defined expectation of virtuosity. Without it, each new performance and each new instrument runs the risk of being perceived as nothing more than a clever trick, reduced to a demonstration of the capabilities of the particular instrument. The excitement of going to see a soloist is in their technical talent, interpretation, and expressivity. If we can design electronic instruments that are capable of giving a performance that individuals can relate and aspire to, then we can create new instruments with the potential for longevity and musical durability.
References and notes


Author Biography

J. Anthony Allen (b. 1978) is a prolific composer of both acoustic and electronic music. He has worked with many forms of interactive media including audio, video, installation and dance. The Peabody, Aspen, and Minnesota Orchestras have performed Allen’s orchestra music. His works have reached wide audiences including the SEAMUS, ICMC, June in Buffalo, Electronic Music Midwest, Spark (Minneapolis), Music at the Anthology (New York City), Third Practice (Richmond), Centre de Création of Music Iannis Xenakis (CCMIX) (Paris) and Aspen music festivals, among others. Mr. Allen holds two masters degrees from the Peabody Conservatory of Music and is currently a PhD candidate at the University of Minnesota. For more information, please see: www.janthonyallen.com.

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