

# Musings on the Status of Electronic Music Today

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## ABSTRACT

If contemporary electronic music is on par with acoustic music, why is there an imbalance between the two domains? This paper explores the question by examining ideas of early electronic music visionaries, and their relationship to what later has been termed Modernism, and scrutinizes the differences and commonalities between electronic and acoustic music, sound design and composition, scientism and humanism, and popular and contemporary music. Since divergences between acoustic and electronic music culture within the domain of contemporary music appear to be significant, speculation on strategies for achieving congruence between acoustic and electronic music in the future are proposed.

## 1. INTRODUCTION

Consider, for the sake of argument, that the music which composers typically have performed at an ICMC is categorized as part of the “art” or “serious” or “concert” or “contemporary” music world, somewhat apart from the sociology, business, and aesthetics of popular music. (Unfortunately, nomenclature continues to be a problem after more than 50 years of trying to avoid the misnomer “classical”, this article arbitrarily uses the label “contemporary”). If the level of sophistication of contemporary electronic music is approximately equal to the level of sophistication of contemporary acoustic music, and if the level of sophistication of the tools used to create electronic music appears to offer potential to enlarge the expressive possibilities of composers, why does the contemporary music world seem to view technology with suspicion? More specifically, why does the acoustic music world appear to maintain a certain distance and separateness from the electronic music world, and why does electronic music remain, to a degree, isolated and segregated, and, finally, why does acoustic music dominate the field of contemporary music?

## 2. PRE-1945 VISIONARIES

After re-reading a number of early visionary utopian texts about the future hopes of a wide array of composers, ranging from Busoni [1], Russolo [2], and Chavez [3] through Cowell [4], Cage [5], and Varese [6], for both

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electronic instruments and their potential to increase the expressive possibilities of composers, the following questions come to mind: have we attained a level of sophistication in the domain of electronic and computer music that more or less equals pre-electric possibilities? And, have we realized the pre-1945 hopes and dreams of these and other visionary composers?

While recognizing the contributions of Cahill, Theremin, Martenot, Trautwein and others, admittedly, much of the music produced with their instruments can be summed up by a quote from Cage [5] in 1937: “When Theremin provided an instrument with genuinely new possibilities, Thereminists did their utmost to make the instrument sound like some old instrument, giving it a sickeningly sweet vibrato, and performing upon it, with difficulty, masterpieces from the past...Thereminists act as censors, giving the public those sounds they think the public will like” [5]. Until we arrive at the more practical and realistic texts of Schaeffer [7] and Stockhausen [8], who, after 1945, had very clear, non-utopian ideas and theories, and made realizations (proofs) of these ideas directly in electronic music compositions, the pre-1945 writings of earlier composers might have been and still could be viewed as somewhat naive, particularly if we choose to ignore the fact that these composers felt acute limitations with acoustic music for the realization of some of their ideas, combined with a certain ambivalence towards the more conservative aspects of the music world. Rereading some of these writings 75 to 100 years later, it is quite clear that these composers were actually quite prescient about what the future would bring and their foresight, combined with their realistic attitudes on both technological and aesthetic levels, was far from naive.

## 3. MODERNISM

It should come as no surprise that these visionaries of the early Modernist era called for, and sometimes demanded, the development of electronic instruments. And it is no surprise that they followed the first three tenets of Georgina Born's [9] six characteristics of Modernism: (1) negation and reaction against Romanticism and Classicism, (2) fascination with new media, technology, and science, and (3) interest in the theoretical leading to practice. In other words, in their search for new modes of expression, technology seemed an obvious avenue for the exploration of new ideas, and these visionaries were quite comfortable theorizing on the possibilities that future developments could offer composers. While their hopes for elec-

tronic music might be seen as having less to do with the latter three of Born's characteristics of Modernism: (4) involvement in politics and/or political rhetoric, (5) dichotomy between rationalism and irrationalism, and (6) ambivalence towards popular culture, we can nonetheless trace the influence of these tenets in their writings. While most of them did not overtly leverage political rhetoric in their pleas for increased research and development in technology, a certain politicizing of the state of contemporary music was implicit in their texts, and their arguments were certainly biased towards a rational explication of the necessity for technological developments (even when overly idealizing new possibilities). Finally, we can assume that they had a certain ambivalence towards popular culture typical of Modernist thinking, although their strongest displays of ambivalence appear to have been directed towards the more commercial aspects of classical music culture (as can be clearly sensed in the quote above from Cage regarding Thereminists).

#### 4. ELECTRONIC AND ACOUSTIC MUSIC

Returning to my first question: have we attained a level of sophistication with electronic music that more or less equals pre-electric possibilities? (By electronic music, I mean music with an electronic component). Many practitioners of electronic music would answer this question positively, but it is unclear what the response would be from composers of purely instrumental music. It is quite possible that having little or no interest in or experience with electronic music, some might answer this question negatively. But, let us assume for a moment that the level of sophistication of electronic music approaches or equals acoustic music, aesthetically speaking, and that the tools of the discipline offer the potential to expand the expressive possibilities of composers. (Why should we assume this? For no other reason than because I, like many others, consider *Kontakte* to be one of the masterpieces of music since 1945.) So, why does the larger musical world seem to view technology and electronic music with suspicion? Why does the acoustic music world appear to maintain its distance and separateness from the non-acoustic world, and why does the electronic music world remain, to a certain degree, isolated and segregated? If anyone questions these statements, and without subtracting IRCAM and a couple of other well-supported institutions from the equation, solely the budgets for opera houses, symphonic orchestras, music festivals, ensembles, and composers predominately involved with acoustic music far outweigh financial support for electronic music activities. Of course, this comparison between the acoustic music world and the electronic music world is unfair since we have 300-600 years of acoustic repertory and lutherie to compete with, and a musical repertory for orchestras, opera houses, festivals, and ensembles that in large part is not even music of the 20th century, much less music since 1945. But, focusing just on music since 1945, one could argue, from a very narrow positivist point of view, that electronic music, which has been in

existence for less than 100 years, is healthy and thriving. In one sense, this is true; an example of this burgeoning field would be the 900 compositions submitted for this combined conference. But in an objective comparison with the acoustic music world, the isolation and segregation of electronic music is undeniable, as are the many artificial boundaries that exist between the electronic and acoustic music spheres of influence and practice. For instance, journals that are generally concerned with contemporary music, or are open to covering contemporary music, pay very little attention to electronic music, proportionally. Music critics write very little about electronic music concerts. Contemporary music ensembles perform much more acoustic music, and festivals of contemporary music clearly favor acoustic music. Finally, a significant number of composers write acoustic music exclusively. The reasons for these phenomena are multiple: preference plays a role in determining the medium in which a composer works, but there are clearly more opportunities in the acoustic domain, and education is a determining factor clearly biasing composers toward acoustic music.

#### 5. SOUND DESIGN AND COMPOSITION

Why does this separation between acoustic and electronic music exist? Obviously, Busoni, Chavez, Cowell, Cage, and Varese were all acoustic music composers. Many pioneers in the electronic music field came out of an acoustic music background, but oddly enough, quickly faded back into it after forays in the 1950s and early 1960s: Boulez, Berio, Ligeti, Maderna, Pousseur, and Kagel all experimented with and composed electronic etudes or pieces. Why did these composers stop making electronic music, while Stockhausen, Davidovsky, Xenakis, and others continued? (Admittedly, Boulez began anew 30 years later with *Repons*, for a variety reasons.) And why, ten years ago, did a major American composer of acoustic music write an acoustic opera that included a three minute electronic introduction which was created by a second composer who regularly writes electronic music, but was listed as a "sound designer" in the concert program? Is electronic music commensurate with sound effects and not real music in some circles of influence, and are creators of electronic music preferably categorized as sound designers rather than as composers for some reason? (Without question, sound design is an integral, and highly significant component of composition: in electronic music much of the lutherie of electronic instruments and sounds is virtual, but a similar concept of sound design exists in acoustic music when composers create new sounds based on unusual orchestrations, invent extended instrumental techniques, and develop new instruments.)

#### 6. SCIENTISM AND HUMANISM

Without naming names, foreshortening history, or oversimplifying this theme, the question remains: why is electronic music relegated a secondary significance in the larger contemporary musical landscape? Once we step beyond the issue of "taste" (which can mean anything

from judgment, to discrimination, to flavor, or preference) the possible answers to this question start to become objectionable very quickly. Does electronic music somehow threaten the purity of acoustic music? Is the technological and scientific knowledge necessary to make electronic music considered a lower form of knowledge, a knowledge used for practical purposes, for developing machinery and equipment in the applied sciences, and therefore, on an intellectual level less profound and significant than the rarified artistic, aesthetic, and philosophical discourse of humanistic knowledge? Is this merely an example of humanistic culture feeling threatened by technology? Is it a reflection of a vulnerable position of power, in which it would be unthinkable for someone with technological knowledge and skills to also have equivalent humanistic knowledge and skills, or, simply put, that someone skilled in the applied sciences could also be artistically skilled?

## 7. POPULAR AND CONTEMPORARY

The comparison between the relationship of theatre to film and between acoustic and electronic music is relatively obvious. This analogy works slightly better if we enlarge its scope to include popular music: practically all popular music today makes heavy use of technology, including sound reinforcement, amplification, pitch correction, automated digital mixing boards, computer controlled sequencers, samplers, synthesizers, lights, etc., both in the recording studio and in concert. Popular music listeners appear to accept technology as easily as anyone who watches a film or television program does. While popular music has become almost entirely technology-based, contemporary music has embraced modern production tools primarily for documentation purposes (recording). Indeed, in popular music circles the attitude towards technology and electronic sounds seems to be almost the reverse of the general attitude held in contemporary music. What does it mean when an electronic dance music (EDM) DJ can show up for a concert in Las Vegas with only a memory stick of music, and perform solo for a few hours, receiving \$100,000 dollars per hour in wages, quite possibly without playing a single sampled acoustic sound, and without any traditional-looking musical instruments or performers in sight? Casino owners in Las Vegas now make more money from EDM than from gambling [11]. What would Vito Corleone think about this? And what does this say about the cool relationship acoustic music has with technology?

## 8. TABOO

Is this a somewhat taboo subject? Of course, I am not suggesting that the hegemony of acoustic music in the contemporary music scene is some kind of plot, nor do I want to imply any kind of victimization, but it seems important to admit that this hegemony exists, and that exploring possible reasons for this imbalance might help to redress some of the disparity between electronic and

acoustic music. But a number of reasons come to mind for avoiding this subject: generally, most electronic music composers do not feel like victims, most do not want to alienate themselves, and some do not want to admit to themselves and others that the balance of influence and power is tilted, and therefore do not want to acknowledge that the playing field is not entirely level. Most of us are at least fairly content (and many of us feel very fortunate) just to be able to create our music, and do not feel that complaining about this issue would have a positive outcome. Since the majority of electronic music composers appear to be at least relatively liberal white males, probably most cannot easily identify with the concept of being part of a segregated, unequally treated minority. And frankly, anyone can see that based on the huge number of injustices that are perpetuated in the world, this issue is so far removed from life, death, and survival that it seems somewhat trivial to even point out such an inequality.

## 9. THE FUTURE

The relationship between acoustic and electronic music has oscillated over the past 75-100 years. Looking back, experimental and avant-garde composers during the 1950s and 1960s appear to have experienced a period of openness towards electronic music, in which there was a general sense that concepts based on the study of phonetics, acoustics, psychoacoustics, computer science, and engineering informed and influenced composition. There is a sense that these composers thought that the interplay between acoustic and electronic practice was mutually beneficial. The concept of the two disciplines existing as separate disciplines was not part of Modernist thinking, and there was a certain confluence of ideas as the two domains informed each other.

What kinds of things can be done to move contemporary electronic music to a more central, less peripheral position vis-à-vis acoustic music today? Clearly, the dedication, seriousness, intellectual conviction and responsible actions of pioneers who were instrumental in the development of the field of electronic music, such as Schaeffer, Stockhausen, Max Matthews, Xenakis, Chowning, Risset, Davidovsky, and others is unquestionable. Their open attitude towards information and their efforts to educate are highly significant aspects of their contributions to the field, and should not be underestimated in comparison with their discoveries, developments, and creative efforts. As electronic music tools have become valuable commodities, it is undeniable that market interests have contributed to the advancement of the field, but at the same time we have lost an earlier open attitude towards information. Within a business model, creating a black box is certainly an efficient way to package tools for electronic music production: things are cleaner and easier for the end user, and the product is clearly defined, delineated, and protected. But every plug-in, every stand-alone, and every well-packaged application concealing the inner workings of an algorithm, a concept, or a technique detracts from the body of knowledge early pioneers worked so hard to build. Locked up software, patents, and copyright arguably al-

low for a certain degree of advancement in the field, but in the long run perhaps cause more harm than good. Composers need a broad education if we want them to regard electronic music as having an equal importance with acoustic music. The tendency to offer composers complete technical support in the creation of works can only lead to a continued separation between composers and the tools they use. The IRCAM model might have been, arguably, one way to push the field forward 30 years ago, but unfortunately this system, in which primarily acoustic composers create “assisted” works, without the need for any specialized knowledge or experience with electronic music techniques or repertory, does not serve to build lasting bridges between acoustic and electronic music. In addition, this tendency continues to give credence to the idea that technical abilities represent a lower form of knowledge, and that acoustic music composers need not dirty their hands or clutter their brains in order to satisfy the occasional commission for a work with an electronic component since electronics can be relegated a secondary role in their compositional considerations.

It may come as a surprise to some that presently it is still possible for performers, musicologists, and composers to complete their secondary education through the Ph.D. without ever coming into contact with electronic music. Some might question why performers and musicologists should have any training in the field, but their contributions are fundamental to any effort to shift attitudes regarding electronic music. One reason that practically no one writes about electronic music in the music press is that critics know little about the field. Composers, musicologists and performers sometimes find work as critics, but also become ensemble managers, festival directors, etc. In addition, sound engineers need specialized knowledge in order to best present electronic music, particularly in the concert hall. How many concert halls use inadequate sound reinforcement systems? How many times must composers struggle with low quality technical support and equipment for concerts involving electronic music? For the culture to change, attitudes need to change. While many music schools today have music technology course requirements for every student, all too often these courses teach little more than notation, MIDI sequencing, and simple audio editing skills. Fortunately, some interesting and significant educational experiments exist involving electronic music, where conservatory-trained performers collaborate with engineers and composers, in a more holistic learning environment. As Stockhausen has written: “So the musician—for whom the question of research in sound had become acute for the first time—had to rely to a large extent on his own practical investigations. He had to enlarge his *métier* and study acoustics in order to get to know his material better. This will become indispensable for all those composers who wish to resist the dictatorship of the material and extend their own formal conceptions as far as possible into the sounds in order to arrive at a new concordance of material and form: of acoustical microstructure and musical macrostructure.” [10] There is every reason to be optimistic...

## 10. CONCLUSION

The early visionaries of electronic music imagined expanding, not replacing, existing musical possibilities. One hundred years of development has changed the way most of us think about, hear and create music. At the same time, a divide between acoustic and electronic music exists. Education and an open exchange of ideas can advance the inclusion of electronic music in the domain of contemporary music, eliminating the hegemony of acoustic music, and interconnecting electronic and acoustic music as Varese imagined [6].

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