

Music and Technology

By John Santos

How rapidly changing demographics and/or evolving technologies impact the ways in which artists and arts organizations across the region connect with audiences.

I had to move out of my hometown, San Francisco, almost 20 years ago. Why?

San Francisco, and to a slightly lesser extent, the greater San Francisco Bay Area, is a vivid example of rapidly changing demographics directly connected to the fact that it is one of the most expensive places to live in the world. The current economic crisis has us riding the edge of recession with record-breaking prices demanded for everything from food and housing to transportation, education and health care. This of course direly affects working class families and artists who increasingly find themselves marginalized to the point of forced migration. When considering the artists from communities of color, this financial crunch is multiplied, as gentrification brings folks who can afford the out of control economic onslaught while those who don't have the necessary resources are moving away at an increasing rate. Many are stuck in geographic areas where escalating violence and crime is a natural reaction to the price gouging.

The new residents bring their own tastes in what type of art they may or may not support, so the onus is on the community artists to try and make converts out of the newcomers. The traditional settings for certain forms of expression simply get moved out with the displaced communities. Some of these would be open-air festivals and celebrations in the street or in parks, certain venues and clubs, and social events specific to certain communities that take place in a variety of locales such as homes, community centers, and rented facilities. The repercussions of rampant escalation of costs while wages and income remain stagnant are many. The shrinking and eventual elimination of yearly monies normally set aside by families in communities of color and other working class folks for enjoying art, is an ongoing and quickly worsening dilemma. The costs associated with exposing children and youth to art as an audience and in terms of training in the arts has created a real emergency for these communities as the arts and the artists themselves are being phased out.

While this will undoubtedly cause a degree of creativity for some as the artists grapple to come up with new ideas and approaches, the overall effect is negative for the region and many who have lived here for generations. Artists are always enthusiastic about reaching and developing new audiences. But being forced to connect with a new audience for economic reasons, as traditional audiences nurtured over the decades are lost, is not a desirable position for most artists. Another by-product of this situation is that many artists find themselves connecting to their audiences by way of social services. This is a wonderful use for art, but not so much when it is the artist's only alternative. For those that do reach out to the new audiences created by changing demographics, new and evolving technologies, along with the artists' respective experience and creativity are the driving forces in making those connections and hopefully earning the support of the recently arrived.

Music is certainly a major area of the arts where evolving technologies impact nearly every aspect from the creative process and performance, to the manner in which the music is perceived and disseminated. Although the essence of the expression can remain as it has been for hundreds

and even thousands of years, the effect of certain technologies can completely alter the art, rendering it unrecognizable, where focus is displaced from ritual or the traditional composition to commercial exploitation either in part or in whole. Evolving technology increasingly plays an important role in this process and has in many instances created new ritual. Those affected include the artists, the audience/consumers, and the creators of the technology. There is, of course, much controversy. Depending on whom you talk to, this can be good or bad.

From my perspective, the computer is the biggest technological advance in modern music. Documentation and research are undoubtedly among the most important functions of computer technology in music. By nature the computer is an evolving technology, with new programs and software emerging every day for unlimited uses including storing data, composing and creating written scores, recording, editing, and performing. The computer allows us to alter the time, speed, rhythm, melody, harmony, and sonic qualities of any composition or idea. The notion of writing complex musical arrangements by hand is all but extinct. In this regard, as well as in the areas of recording and editing, it would seem clear that the computer has been a wonderful and generally positive addition, although there is an argument that it gives an untrue picture of the original artistic concept by allowing artificial manipulation and perfection. That power to manipulate and perfect is a welcome tool to the composers, arrangers, engineers, and performers who use it.

The computer as a musical instrument in live performance stirs up other questions. Is there a separation between musicians and computer programmers? Is the person a musician, who presses a few buttons in live performance or in the studio to produce the programmed sounds of any acoustic or electronic instrument as well as those of symphonies and big bands? Does it matter? What does it mean to the centuries-old traditions of lifelong apprenticeships in the study and mastering of acoustic instruments, that one can electronically reproduce those sounds without ever having played a note on the respective instrument? It is not uncommon, for example, to see a percussionist in performance with no percussive instruments in sight, using computers and/or other electronic devices to trigger the sounds of any percussive instrument, real or imagined.

Someone with a poor sense of time or tuning can record and electronically adjust the time and tuning to sound 100% accurate! Is this person a professional musician? These are simple questions with complex, overlapping answers that must take each individual case into consideration. There are computer programmers who know little or nothing about music yet work in the music field while there are still musicians who work entirely outside the area of computers. And there is every gradation between the two, with the computer playing a role in the creative and/or performance process from miniscule to major.

Being a percussionist in the field of Afro-Caribbean traditional music, I have mixed feelings about the electronic technology that has so profoundly affected the music. There is an ancient aspect of continuity in much of this music, with its African ritual roots and Caribbean/American adaptation/evolution. This includes the process of learning and transmitting playing techniques to develop sound and rhythmic/musical sense, and the study of countless specific rhythms as well as styles, context, and history. Thanks to the computer, all this can be side stepped and any sound, rhythm or ritual can be artificially reproduced for whatever commercial or non-commercial use, eliminating the need for experienced experts in the field. This is problematic where traditional art forms are endangered in terms of their existence and their human/spiritual nature.

Evolving technologies have actually given birth to entirely new forms of musical expression, much of which many musicians and composers of the not-so-distant past and even the present might hesitate to categorize as anything having to do with music at all. In the fields of Rock, Pop, and Jazz, a considerable percentage of the industry is predicated, promoted and administered using the latest technological advances. In my areas of experience, Latin Jazz and Afro-Caribbean folklore, this is also true, but to a lesser extent. While many of us strive to preserve traditional forms and styles, certain technological advances have allowed us to make a relatively small dent in the always-daunting tasks of gaining recognition and support, and reaching audiences, old and new.

In terms of performing, electronically reproduced sounds are generally preferred over traditional acoustic sounds and instruments for various reasons. A percussionist, or anyone for that matter, could bring in a digital library of unlimited range and scope, including all the sounds of nature, "industrial" sounds, traditional sounds from every corner of the world, and looped repetitive phrases constructed with these sounds that can be incorporated into any musical situation. It would be literally impossible to bring those natural elements and that number of acoustic instruments on the road or onto any stage. Additionally, the complexity of amplifying the natural sounds of acoustic instruments in many cases makes the electronic reproductions much more desirable from a practicality standpoint.

I have a friend who is an accomplished hand drummer of traditional Afro-Caribbean rhythms and instruments, and he stays busy taking in digital multi-track recordings through the internet for clients who have him record onto their tracks a variety of acoustic and electronic sounds in his home studio. He then returns the completed tracks to them once again using the internet.

Having been steeped in the traditions of acoustic music and its generally intimate settings, I developed neither the working knowledge, nor appreciation of electronics in performance. There is a certain organic magic in taking an acoustic instrument, sometimes centuries old, in one's hands and extracting natural, expressive sounds, rhythms, melodies and harmonies. Acoustic music is not stagnant, as the techniques of physically playing these instruments are constantly evolving and improving, and creativity inspires the interpreters to constantly add to the canon of music released for several centuries into the atmosphere, as well as that of the documented eras of the last few centuries.

In most traditional music of the world, there is a time-honored, apprentice/master relationship in teaching and learning. This certainly applies to the drumming traditions I've studied. Their foundation is the oral transmission of the history, practical function, techniques of playing, instrument construction and maintenance, and countless rhythms associated with myriad styles of African and African-derived drumming. Until relatively recently (the last thirty to forty years), it would be absolutely unheard of for a student of this music to learn through the use of recordings, video equipment, or any other electronic methods. As a matter of fact, it would be considered (and still is in most cases) disrespectful to attempt to circumvent the traditional methods in any way. Of course, there is a growing element among some teachers and students for immediate gratification and the generation of a fast dollar, thus as with most things in the world today, everything has its price.

Many are bridging both worlds, as technology seeps into every aspect of our lives. However, I remain through loyalty and/or stubbornness, unwilling to spend the requisite time trying to catch up with the technology that while perhaps increasing my possibilities as an employable musician,

would also take time away from the practice and preservation of the musical traditions I've embraced. Where I am attempting to compromise is in using computer technology for composing, promotional and documentation purposes, and for recording as explained previously. For me, there is no replacing the joy and honor of being part of the continuum of traditional and folkloric music, oral traditions, passing on the nuances, skills and secrets of playing acoustic instruments, and most importantly, the profound history and wealth of cultural information that is inextricably linked to the music.

As a composer lacking in extensive theoretical training, the computer has been a great aid in transmitting my musical ideas to fellow musicians, arrangers, and audiences despite being from a generation that did not grow up with computers and having little in the way of computer skills.

I don't know that our region is unique in the use of evolving technologies specific to the field of music, but I do believe it is probably more accurate to consider the greater national and international communities that embrace and support Latin Jazz and Afro-Caribbean folklore, in determining the impact of demographic and technological trends. Personally, I feel that the majority of community artists are clearly behind the curve, not having access to, or knowledge of, the latest technologies that could help us in myriad ways. But I am thankful for the basic technologies at my disposal that I have used for composing, recording, and outreach.

In an environment I would consider hostile to the arts, the panorama is indeed distinct from what it was 20 years ago, as the very survival of certain forms of artistic expression are seriously threatened. Rethinking of every aspect of musical expression is in order, in conjunction with, and inspired by evolving technologies, but also in anticipation of both the potential positive and negative aspects of the double-edged sword known as technology.