LEMURS OVER LAPTOPIA:
WILL NEW PERFORMANCE INTERFACES REJUVENATE LIVE ELECTRONIC MUSIC?

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For roughly 160 years since Richard Wagner published his *Artwork of the Future,* Western audio culture has been forced to take sides on the issue of music and its relation to the other acknowledged art forms: should music be just one element in a fully-integrated artistic program, or should 'absolute music' unfettered by lyrics (let alone other sensory effects) run the show? Wagner's own contemporary conclusion, that 'absolute music' was a contemptible *Unding* [non-thing], seems odd in a text that vehemently attacks the operatic form. Then again, maybe it isn't so contradictory when Wagner proposes his new conception of integrated 'music drama' as an alternative to both the 'nothingness' of 'absolute music' and the opera of his time, which he viewed as facile entertainment with 'high art' pretensions.

At any rate, the 'total artwork vs. absolute music' debate has only accelerated in recent years, in which multi-functional and compact (yet visually bland) tools like laptops and digital samplers have muscled in on the territory previously commanded by ensembles of 'mono-functional,' yet visually arresting, acoustic instruments. It would seem, for the moment, that the champions of Wagner's *Gesamtkunstwerk* [total artwork] have won out over the supporters of 'absolute music', and this is reflected by the degree to which electronic sound equipment is being sculpted into more visually impressive forms. Following Wagner's suggestion for architecture to be built with music performance in mind, all the plastic arts have been mobilized to enhance the concert stage.

More recently, electronic instruments or control interfaces have also been designed to that end, rather than just working as efficient sound generators. Take, for example, the JazzMutant Lemur. This laptop-sized contraption, powered by a highly sophisticated multi-touch screen, makes it possible for live musicians to design or download customized GUIs that match the color schemes and 'mood' of any given performance program. JazzMutant's promotional web pages for the Lemur boast that the new breed of techno-stars "…not only use the Lemur for functionality, [but] actually [as] a part of the look and feel of their stage theme. The brilliant colorful interface fits in with any stage lighting and adds to the 'cool factor' of the audience experience."[i]

The synthesis of sight and sound that the Lemur provides is meant to re-introduce, like other new instruments of its ilk, the congruence of live action and audio result that is missing from much live electronic music. Meanwhile, sound laboratories like STEIM and IRCAM are continually engaged in efforts to make networks of strategically placed sensors

act as triggers for unique sounds, and to consequently bring vigorous body play back into performances. All these efforts address a problem outlined by techno-critic and sampling artist Bob Ostertag:

> *I think most musicians working with electronics are probably not very satisfied with the state of electronic music today, and the crucial missing element is the body. Many of us have been trying to solve this problem for years, but we have been notoriously unsuccessful at it. How to get your body into art that is as technologically mediated as electronic music, or anything with so much technology between your physical body and the final outcome, is a thorny problem.*[ii]

Of course, those who have studied fundamental acoustics know that sound is a physical phenomenon and that by merely experiencing it (especially at the high volumes and extreme frequencies that cause noticeable metabolic effects like nausea) our physical body *is* responding to it. This is proven by the fact that the neurologically deaf can still be affected by the sharp attacks of percussive instruments, occasionally even, in the case of Evelyn Glennie, composing for percussion ensembles. Still, concert audiences these days remain bound to the expectation of causal relationships between a performer's output and its physical effect. Therefore, receiving intense physical reactions from unseen agents still serves to alienate and annoy those who are new to the high-tech concert experience, and unused to its emphasis on automated / pre-programmed actions carried out by arcane 'black box' devices.

Flooding the performance space with innumerable, perceptibly discrete audio events over a relatively short period of time is no cure for this, doing little to silence the complaints that the computer performer is 'doing nothing.' For example, I have been in attendance at concerts of high-energy 'breakcore' music, with its focus on ruthlessly fast, asymmetrical rhythmic patterns and frenetic jump-cuts, where attendees would still find time to criticize the computer operator's lack of gestural activity behind his or her workstation. Exaggerated or pantomimed gestures of laborious action (wincing in "pain" while performing a simple knob twist, or making needlessly authoritative hand sweeps over a laptop's trackpad) were often met with even more audience hostility, since these actions were seen as a condescending and cynical mockery of the audience's desire for a Dionysian 'rock 'n roll'

exhibition. Ironically, though, said audiences would invariably keep their gaze riveted on the computer operators during the shows, in spite of already reaching the foregone conclusion that they were doing "nothing." This same scenario has held true for concerts of many other electronic music sub-genres, rhythm-based or no.

Personally, I see nothing wrong with exchanging money simply for the experience of hearing my favorite sounds projected from a large sound system, and, in a strange Warholian sense, any 'performance' that there needs to be is adequately supplied for me by the eclectic reactions of the listening audience. Yet I acknowledge that I am distinctly in the minority here, and that the fluctuating priorities of the music entertainment market are unlikely to cater to my whims anytime soon. The intensely visual culture of North America, barring some unprecedented crucible point of self-examination, is not going to transform *en masse* into adherents of acousmatic music (acousmatic music being named after Pythagoras's students - the *akusmatikoi* - who heard him lecture from behind a screen, otherwise undistracted by his physical presence.) Similarly, they will continue to rely upon distinct human movements as "metaphors for musical control." The simple grid-like interfaces of new instruments like the Monome 40h and Toshio Awai's Tenori-On, which can communicate to audiences using synesthetic 'translations' of light signals into audio data, seem like they were developed with this need in mind. Now, the action happening on their control surfaces needs to be projected somehow for audiences to fully perceive what's going on, but it provides them with significantly more closure than guessing what algorithms an artist's MacBook is currently parsing.

Unlike Laurie Anderson's MIDI 'talking stick' and tape-bow violin, the Tenori-On has already secured a number of high-profile adherents (some undoubtedly being paid to pitch the device), and has thus survived the awkward trial phase where it is a 'vanity instrument' solely identified with, and played by, its conceptual originator. Unlike the plethora of new 'circuit bent' devices, cobbled together from the discarded electronic playthings and educational gadgets of decades past, its clean slate appearance is too vague to have a 'message' or narrative precede any performance on the device- in the case of circuit bent machines, it's difficult to see them live without assuming the performance is an analogy for built-in obsolescence and the utilitarian struggle of "re-appropriation culture" against it. Meanwhile, the Tenori-On's easily intuited system of affordances and constraints, while not negating the possibility of 'wrong' actions, makes them easy to quickly correct. Like the

majority of electronic peripherals before it (joysticks, drawing tablets etc.) it can also be easily operated by anyone with hands, and the allure of even its random sonic output rewards continued use, so that dilettantes and professionals alike can integrate it into their performances. According to *Psychology for Musicians* author A.C. Lehmann, musicians typically need a decade to master a new instrument: an eternity in 'tech' years that could see that instrument being replaced or upgraded long before any mastery can occur. So, the Tenori-On's "out-of-the-box" accessibility and intuitive control surface is a major asset. Yet, with all these things working in its favor, even this piece of gear seems destined for early retirement and limited trans-generational appeal (one early warning sign is a gimmicky Japanese duo called the Tenorions, for whom the instrument is the very *raison d'être* of their music career.) To understand the skepticism regarding the Tenori-On, and functionally similar competitors like the JazzMutant Lemur, we need to briefly look back upon the one electronic instrument that has already garnered massive trans-generational appreciation.

Some of the earliest electronic instruments, such as the theremin, had already solved the problem of gesture-to-sound translation in a fairly engrossing way, and - given the relative difficulty of locating the points on the instrument that corresponded to exact pitches - it was one on which performing became a real exhibition of virtuosity. However, it suffered perhaps from the combined, radical novelty of its timbral quality and its appearance: had at least one these aspects referred back to an earlier mode of creative development, it might have come into wider use during its own trial phase.

By contrast, Bob Ostertag points to the electric guitar as one of the few examples of an electronic instrument that has consistently succeeded in captivating public imagination. Ostertag claims that the instrument really came into its own when wielded by Jimi Hendrix, noting that his "…crucial innovation was to notice that by playing at high volume and standing close to the speaker, he could get feedback that he could control in an extremely nuanced way with the position and angle of the guitar, the weight and position of his fingers on the strings, even the exact position of his entire body."[iii] Since that time, the electric guitar's ascendancy is owed probably as much to its perception as a shamanic wand or magical weapon as to its actual sound. Hendrix's infamous act of guitar immolation at the Monterey Pop Festival helped, rather than hindered, this perception by likening him to a Promethean figure stealing fire from the gods. Seeing this performer carry out an act fraught with risk and potentially grave consequences was something with which audiences could

easily identify: though Hendrix's sound was radically and controversially new, his guitar-enhanced antics hearkened back to an ages-old tradition of artists performing ritualized transgressions on behalf of their respective communities.

And maybe, just maybe, therein lies the secret to the wide-scale rejection of newer electronic interfaces (especially "guitar-like" controllers) by fans of the electric guitar. While adventurous remote keyboards like the Moog Liberation and Clavitar (and more recently, the 'retro-futuristic' USB/MIDI-enhanced Roland AX-Synth) grafted guitar necks and headstocks onto standard keyboard interfaces, I'd guess that the impression one received while watching these instruments was that the instruments had been totally domesticated. They were less prone to the exciting moments of serendipity and risk (e.g. unpredictable feedback, or the possibility of broken strings) that made the electric guitar a staple of modern performances. Upon realization of this fact, audiences were likely to reject them as anodyne stand-ins for 'the real thing' rather than as clever improvements upon that template. The performer's appearance of *total* control can be a disappointment for those who prefer the dramatic allure of crazed soloists grappling with their instruments, alternately convulsing and standing their ground in an epic, reciprocal struggle between flesh and electricity. This capacity for a live performance to appear like an elemental battle resonates deeply within audiences' collective psyche, and is arguably the reason why the rock 'n roll idiom has survived as long as it has, in both its normative and experimental varieties.

Having said all this, though, there is a growing faction of electronic music performers who believe the *akusmatikoi* were right: having had enough of leading audiences by the hand with the use of transitional or hybrid man-machine interfaces, these performers discard the human element almost completely: they will defiantly proceed with concerts held entirely in the dark, or in deliberately 'anti-human' environments where the musical interface looks no different than the work station of a typical administrative assistant. This stage setting is accompanied by a null level of facial and gestural expressiveness. In contrast to the audience reactions I mentioned above, these artists see the virtuoso performer as the true agent of inauthenticity: a musician whose desire for public acceptance trumps all other considerations.

One of the given reasons for this backlash against a human focal point in live performances is, in my humble opinion, justified: namely, that sound itself is becoming severely attenuated under less than optimal conditions in venues that have built themselves

to accommodate high-energy, physically exhausting, visually-oriented performances. The average mid-sized rock or dance venue, in any given North American city, is awash in humidity from the constant consumption of drinks and from the sheer number of excitable bodies being crammed into the limited amount of space - this in turn wreaks havoc with the absorption coefficient of mid-range and high-frequency sound in these spaces. Outdoor festivals also provide their own set of problems, as wind conditions cause audio refraction effects and the temperature of the summer air can cause listeners some distance from the concert to hear it with more clarity than those closer to it. All this begs the question: is the net sensory effect less satisfying than what it might be, had such heavy emphasis not been placed on the aforementioned "cool factor" of the live experience? Is 'absolute music' due for a 21st century revival? Until we universally agree on what the most important social functions of music are, these questions are not likely to be answered in a way that will satisfy everyone. With such an insurmountable task ahead of us, perhaps the best we can hope for is that the quarrel between sonic absolutists and defenders of *Gesamtkunstwerk* will force both sides of the conflict to produce increasingly rich, compelling art to better make their case.

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[i] Retrieved from http://www.jazzmutant.com/lemur_innovation.php
[ii] Bob Ostertag, *Creative Life,* p. 103. University of Illinois Press, 2008.
[iii] *Ibid.,* p. 108.