

# The Object of Performance: Aural Performativity in Contemporary Laptop Music

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## ABSTRACT

The use of the laptop in performance causes various negative responses from the audience who feel a loss of spectacle and performativity in the action. This occurs due to the lack of gesture and visual cues from the performer and the loss of focus from the audience who have no visual object to ground their aural experience. A shift in focus from an understanding of the visual spectacle in performance to that of aural performativity is needed. Once this is understood the audience can approach the performance with a shifted focus and come to new understandings of the aural object and contemporary digital audio.

**KEYWORDS:** laptop, computer music, digital audio, aurality, contemporary digital audio, performativity, Pimmon, Phil Niblock, Peter Rehberg, Dion Workman.

## INTRODUCTION

In the late 1990s laptops became commonly used as both studio and live instruments, especially in the electronic and experimental sound arts. As a live instrument the laptop has allowed musicians to gain access to a large number of files and also process audio live and in real-time. The power of the laptop has now advanced to the point where it can be used as an improvisational tool, and recent directions in new music, for example, place computers together with traditional instruments in electro-acoustic and improvisatory settings. With these developments, however, there has also been a cry for the loss of performance. This loss is perceived in the lack of action and visual and tactile interaction between the performer and their instrument and even in a lack of "aura", in the sense Walter Benjamin [2] uses it, around the live computer mediated performances. Many in the audience feel confused, lost, or even bored by the display of laptop virtuosity. Whilst we hear great leaps in sound in these performances, from screeching slabs of noise to fragile and tinkly droplets of high-end tones, the performer sits behind their screens with little or no

perceivable movement, lost in thought as they manipulate files and patches.

In this paper I will argue that we have not lost performativity but instead the audience needs to make a shift in their understanding of performance in the live computer mediated digital audio environment from a visual focus to that of aural performativity. This is not an actual change as music is after all an aural experience, but the audience has become caught up in the visual spectacle and physical gesture of musical performance. It is not that performance, gesture and movement are extra-musical, they are not, but that they are not the sole basis for music, nor are they necessary for the performance and reception of music and especially that of the sound and audio arts.

It is also important to note from the outset that the computer mediated digital music scene addressed here is experimental in nature and is followed by a small sub-culture. This sub-culture in the last few years has itself become comfortable with the nature of live performance and the computer as an instrument. The paper then looks to the scene itself for direction as to how a wider audience could come to understand the nature of laptop performance.

## THE LAPTOP IN PERFORMANCE

A typical situation in laptop performance is that of a solitary performer behind his laptop (the performer more often than not is a male, although there are a number of notable exceptions including Kaffe Matthews and Ikue Mori) looking deeply into the screen. The musician's face is illuminated by the blue light emanating from the laptop's screen. His eyes raise in surprise, followed by a frown and a slight tut before he is again lost in thought, his face blank. From the PA we hear numerous digital sounds, sweeping pitch bends blend into a vast array of static played at ear splitting volume. The slight finger movements of the performer cause the fragile pops and ticks to be displaced by a wall of sound seemingly made up of hundreds of layers of audio, which having freed themselves from the small black box and are now emanating from the walls and ceiling.

This sort of sight has become common over the past five to six years at independent underground venues through to large music festivals such as the Big Day Out. Developments in personal computers have made this real-time performance of computer mediated audio possible. The computer, with numerous applications and music tools, patches and files has become a versatile instrument and tool for the production of sound and music. Computers have invaded music making from all directions and experimentation with the possibilities created by the tools is rampant. While the use of computers in the studio is not a new thing at all, its use in live performance.

Artists have pushed the boundaries of live performance far beyond pre-recorded studio compositions still heard in the academic computer music community. An article in the *New York Times* by Ben Ratliff [4] makes this observation:

Because computer technology has radically changed what computers can do in real-time situations: with digital signal processing, someone controlling a laptop can take what someone else is playing, alter it and feed it back with all sorts of modifications in real-time. Getting music out of computers involves a process of writing and compiling codes, and people are doing that on stage; it's a new form of improvisation. Needless to say, the range of sounds one can get is wider, and this has made the new music more fluid, less dry, less dorky. But also, real-time signal processing gets someone working a laptop much closer to the condition of being a musician -- one who can immediately act or react and do so with an individual sound.

Ratliff points to the fact that improvisation with electronics is not new but what is new is the range of backgrounds of the musicians involved. This range of histories is injecting new life into the improvisation jazz/rock scene. It is also, however, creating friction with those who have made a life out of making computer music from within the academic institutes, the people who invented the possibilities and wrote the original codes. The friction is caused by the extremely productive and quick developments that have occurred after the tools were disseminated from the academy.

Computer music has undergone a huge shift since the advance of the personal computer. Academic music has a history of the near scientific teasing of sound from large and slow computers. Early computer music composers took months and years to make short pieces and worked from the ground up, often not just writing the programs but designing the code and inventing synthesis and processing techniques. In an article entitled *Letter to a 25-Year Old Electroacoustic Composer* Barry Truax [5] talks about his feelings toward the electroacoustic community and world. He states that early on the core of the energy in the community was based around the "interdisciplinary confluence of art, technology and research." The outcome of this work was "tape music." The computer literally could not play in a live manner and therefore at performances the compositions were simply played back from tape. The audience was conditioned in this situation to learn to deal with the sounds produced for them with no live performer nor the possibility of interaction between the tape performance, the space and audience. This

tradition has been accepted amongst a small audience - mostly practitioners - and needs to be seen as far apart from the current audiences for laptop musics. The audiences for laptop musics come mostly from a background in mainstream musical experience.

### THE LAPTOP AND PERFORMATIVITY

The issue caused by the laptop in live performance is one of loss in the face of non-theatrical spectacle and the perceived lack of performativity. The motionless performer behind the laptop does not allow for any display of how the sounds are being created for the audiences who are used to seeing performance, gesture, even theatre. For example, when a violin player is performing the audience can see him/her physically interacting with the instrument. The audience can connect what they see and what they hear. They can see the physicality of the performer, their movements and gestures and they can directly hear the outcome of those movements.

With the laptop there is no such connection. From the point of view of the audience the computer is an inanimate object, it sits there while the performer acts surreptitiously behind the screen. In most performances it is not possible to see the computer's desktop. The audience in general does not know exactly what it is that the performer is doing and most do not know how the sound is produced or with what. They have no visual object to ground what they hear, nor a perceived performative object to compare.<sup>1</sup>

Part of the problem is a distrust of the computer and performer's relationship [1]. For example, at the conclusion of a performance by Pimmon (Paul Gough) at the 2000 Big Day Out in Sydney the MC told the audience that during the performance Pimmon had lodged his tax return electronically and had instantly been refunded seventy five dollars. This is a slight twist on the now clichéd jibe that the performer has simply hit the space bar, hence started up an audio file, and all they are now doing is simply checking through their e-mail while they wait for the file to play through. While this may sometimes be the case – though in my final argument it is immaterial - the example shows the discomfort the audience has when it does not have a visual signifier to connect and explain their aural experience. They tend to want to see both work from the performer and know what it is they are doing.

Another argument against the laptop in performance is

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<sup>1</sup> It has been the case that some performers have projected their desktop onto a screen during the performance allowing the audience the chance to watch how the music is manipulated. While this is informative it detracts from the sound as the audience shifts from listening to viewing.

simply that it is not stimulating as an experience. This argument rests solely on the lack of visual entertainment. The audience does not feel comfortable when they have nothing to watch. They do not know how or on what they are meant to focus. This sense of loss might be found in their desire for the spectacle. The audience senses a loss of spectacle and a loss of aura in the laptop performance. The performer is seen as not interacting with them, not engaging with them in a performative manner. Kim Cascone [3] argues that this is partially due to the presentation of the laptop performer in a traditional theatrical environment, the proscenium arch and darkened setting. Cascone argues, "This frustrates the audience because they are unable to resolve the setting with a lack of spectacularized gestures... which signify 'performance'." Perhaps the short answer to this is that we are in a visually biased culture. The audience needs the visual more than or as much as it needs the aural, even in a musical performance. To displace this issue contemporary digital music is often performed in artspaces or warehouse environments. Here there is no stage and the performer is often on the same level as the audience who sit, lie or stand around the space while the performer sits on a low chair or even on cushions on the floor. There is no distance between performer and audience and the setting makes it clear that the performer is a listener as much as the audience. In the gallery space the audience has signifiers that this audio is meant to be attended to. They approach the sound as if it were a work on the wall; the audience then has a new sense of the aura lost through the lack of visual spectacle. The audience is happy to listen and attend to the work without the need of visual, performative spectacle and it is in this type of environment that the nature of the sound is given the space it needs to become physical, both in performance and in the experience of the listening audience.

#### **DIGITAL AUDIO AND CLOSE LISTENING**

The very nature of contemporary digital audio leads to a very active listening, simply due to the use of sound, dynamic frequencies and psychoacoustic effects. American composer Phil Niblock is a good example as he draws on pre-recorded tape and now computer files to perform his music. Niblock's compositions require the recording of numerous tones which have their attack and decay removed. These tones are joined to make impossibly long tones which are then layered. The slight discrepancies in pitch cause an array of overtones and beating patterns to be produced, so that the sounds play in a phantom space filled with microtones. The soundspace seems to include many pitches, textures and even rhythms, all in a complex relation as the audio comes to the listener seemingly from the architecture of the room and even in one's head. Beating drones take on a life of their own as they are let out into the acoustics of the space, which becomes immersive and extremely dense.

Originally Niblock's performances were played with tape, with the optional addition of a live performer. Now Niblock uses a PowerBook. In performance he sits behind the computer, possibly out of sight of the audience, even leaving it to wander around the space and experience the performance for himself. His position as composer/listener here is explicit. The works are played at such a volume as to become architectural and the work is only really heard when played through a good PA in the right conditions. Niblock is very particular about this and in fact took a very long time to release recordings of the work due to a lack of control over the listening environment. Without the live performance of Niblock's work it simply does not exist and yet these performances do not adhere to traditional modes of theatricality, nor performer-audience interaction. The modes of performance, the tape or computer, live or pre-recorded, are not relevant here as the audience needs the sound system to hear the work.

When listening to this work the audience is immersed in sound. The sound appears to be emanating from the walls and ceiling. At points it seems to be coming from inside the ear. If one moves their head slightly the sound field shifts with it. The ear entering the wave patterns at different angles changes the perceived sound of the piece. This is the aural performative. The act of listening, not seeing, creates the performativity of the piece. A receptive audience, listening with attention and concentration receives the performance not by watching Niblock play a piece of music but by listening to the compositions in space.

Another way to approach this argument is to look at the use of quiet and pure sounds. New Zealand musician Dion Workman makes sound out of audio produced at the breakdown of analogue and digital equipment. Taking the stressed tone of an unhappy mini-disc player he layers what are basically sinewaves. The sound played via a computer, with real-time interaction, fills the performance space, which becomes thick with the sounds. These sounds are not played loud and the audience is required to listen in silence and as closely as possible. As with Niblock the sounds change with slight head movement. The audience is asked to be attentive to the sounds themselves, talking or a similar disturbance would literally shift the aural experience which hangs from a most fragile thread.

Contemporary producers are thus using acoustic effect in performance, activating the space and allowing sound to surround and immerse the audience. The performance is not the same from sound system to sound system, venue to venue and audience to audience. Without a good PA in a correct setting the work simply cannot exist.

Another common approach in the “microsound” scene, which is heavily based on computer mediated audio, is to produce very complex sounds.<sup>2</sup> Computer generated effects are layered and layered upon each other. These effects are twisted and teased with applications such as MAX/MSP in the live setting. The work reaches a level of complexity well beyond the understanding of most of the audience, even those versed in computer applications and tools. Pimmon is a good example of this approach. His audio is saturated with layers of clicks, snaps and glitches, built into dense textures and sound spaces. In performance he sits behind his laptop staring into it for the duration of the performance. He rarely looks up, if at all. While the gesture and spectacle are all but absent from these performances his work is best experienced in these live environments. Complexities of sound and composition would generally not be perceivable on home stereo equipment and live the already full and dense sounds come to life and a fully immersive audio is heard.

The aural experience is physical, we can literally feel it surround us in some of these performances. A performance by Peter Rheberg, at the What is Music? festival in Sydney in 2000 for example, was played at such volume and density of sound that it literally felt like the body of the audience was raised. An extreme claustrophobia was felt as the audience was hemmed in by sound, trapped. At high volumes it is common to see the audience block their ears, as if to keep the sound out as the intensity is simply too much. This can also happen in performance where the musicians are using unusual tones, sounds that are not everyday. These might be played at low volumes and yet a number of the audience can be seen to plug their ears to keep the unfamiliar out. These are of course all physical reactions to an aural object.

#### **AURAL PERFORMATIVITY**

Performativity is directly linked to the body. We talk about the performance of the everyday in gender, sexuality, race and culture. In the performing arts and music the body is generally near the action, on display. The objection is that with laptop music the audience is not being given the visual stimulus of a body which they are used to. That is, the body of the musician is not directly and causally acting on an object physically to create a sound. The casual relationship between what we hear coming out of the speakers and the body of the performer is broken. The audience does not have anything to ground the listening experience in, to compare contrast or relate it to in regard to what they are hearing with their ears. We ask how is it that the near inanimate body of the laptop performer is making the sound we hear, and we ask how

is it that the small structure of the computer’s body can create the sounds being heard?

In this situation a jump in thinking is needed. We need to grasp that the audience are the receptors of the performance and in this music most importantly they are the listeners - the performer is also a listener. This is especially clear in psychoacoustic experimental music as the bodies of all individuals in the space are receiving different aural information based on their position. The audience and performer are in the act of listening and the sound itself is physical in nature. It can be loud and painful, quiet and fragile and so on (we describe these sounds in a physical language). So the sound itself is interacting on the bodies present in a physical manner. We are literally moved by the sound waves and react to them as such. The air being pushed around the room causes us to have a physical experience as we hear the unfamiliar tones which change with a slight movement of the head or we hear dense layers of audio which form complex relationships to each other. The performativity of the music is to be found in the act of listening and the performance of the audience in relationship to the sound they hear. There is no need then for us to see a performer physically interacting with an instrument to engage in this aural performativity, we need only listen and engage in the act of listening.

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<sup>2</sup> “Microsound” is a term used to describe a mostly computer mediated sub-genre in the electronic music scene. See <http://www.microsound.org> (1 February 2003).