Are Luminous Devices Helping Musicians to Produce Better Aural Results, or Just Helping Audiences Not To Get Bored?

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Abstract: By the end of the 90's a new musical instrument entered the stage of all stages and since then, played a key role in the way music is created and produced, both in the studio and performing venues.

The aim of this paper is to discuss what we consider to be fundamental issues on how laptopers, as musicians, are dealing with the fact that they are not providing the 'usual' satisfaction of a 'typical' performance, where gesture is regarded as a fundamental element. Supported by a survey conducted with the collaboration of 46 artists, mostly professionals, we intend to address and discuss some concerns on the way laptop musicians are dealing with this subject, underlined by the fact that in these performances the absence of gestural information is almost a trademark.

1. Introduction

> Hearing represents the primary sense organ — hearing happens involuntarily. Listening is a voluntary process that through training and experience produces culture. All cultures develop through ways of listening[1].
>
> *Pauline Oliveros*

1. http://faculty.rpi.edu/node/857 accessed January 18, 2013.

Since the first moment a laptop appeared on stage, there is no musical genre that has not been influenced by it, in one way or another. It may have been a fundamental piece in the process, or the least important one, yet it is very difficult to ignore its vitality in the actual process (praxis) of making music. It may be in a studio while composing a music piece, drafting sounds on the road or processing a live performance for contemporary creators. It is already part of our days, nights, best dreams, and worst nightmares. The history of creativity in music performance has changed, not only because of the laptop, but also because of the laptop. The same happened with visuals in live contexts where fundamental burst of new talents are carrying and implying new ways of doing, new aesthetics results, and above all, new ways of production.

In 1934, Walter Benjamin wrote a text that would become central to the history of arts: *The Author as Producer* (Benjamin 1992). After 79 years, this text is still a fundamental object of reflection when we consider the role of the artist, simultaneously, as an artist-producer of himself.

Benjamin could not figure how much he would be reproduced and replicated among authors, journalists, naive writers in forums, essays, blogs, books, articles, etc.

Despite the sharpness and contemporaneity of the German author, we must say that it is not our intention to evaluate the global content of his work. From Benjamin, we would like to emphasize the role of the artist as producer, and the question of the reproducibility, to a certain point.

Thereby, following the dichotomy introduced by Benjamin (author/producer), we will try to create a framework of discussion around the laptoper, our subject of study, as an example of a model-no-model (creation versus production) wherein he is observed and examined as carrier of the subject raised by Benjamin, when he talks about the author as someone that in a certain circumstance, "has had revolutionary evolution, from the point of view of the convictions, without being at the same time, capable to reflect in a truly revolutionary way about his own work, their relationship to the means of production, or on their technique ". (Benjamin 1992, 143)

What we would like to emphasize, here, is the perception that we are living in a world in which the artist must face the implications of the perception that he is generating. Therefore, he should not turn his back to the world where he is producing his own artistic work.

2. Brief resonances from the laptop world of music

With electronic/digital media developments, especially in computer technology the possibility to control every parameter that modifies sound became possible. Yet, even today there is a tendency to recreate traditional music instruments interaction model which focus on pitch and dynamics. (Barbosa 2006, 93)

2.1. Flashbacking from academia

In 2000, Kim Cascone, an acknowledged composer and activist in the field of electronic music, released *The Aesthetics of Failure: "Post-Digital" Tendencies in Contemporary Computer Music* (Cascone 2000), an article that became one of the groundbreaking texts about failure in electronic music, with a brief chapter on glitch, back then a relatively recent line of action started around 1995, with great glow around Mego, a music label based in Vienna. Farmers Manual, General Magic, Peter Rehberg, Fennesz and Tina Frank on live visuals and graphics[2], are only a glimpse from what could be a long list of artists using the laptop, on and off stage.

Christian Fennesz reported September 1995, on Flex Club (Viena) as his first time with a laptop in a live performance. (Joaquim 2012/13).[3]

Least recognized on that article, is the relevance that Cascone applied to the idea of "Power Tools" in what concerns the proximity between creation and production. "For the first time in history" he wrote, "creative output and the means of its distribution have been inextricably linked." (Cascone 2000) From that time on, dozens of articles included the term 'laptop' on the header to invoke all kinds of qualifications and solutions around the systematic doubt raised from the absence of visual feedback and gestural information.

David Wessel and Matthew Wright, pointed out in an article from 2002, an observation from Zicarelli (1991) in which he would consider the association that office work computers may bring to the realm of electronic music made with computers (Wessel and Wright 2002).

2003, was probably one of the most prolific year of the decade with Glenn Bach writing about the laptop as "dwelling", as a "vessel" and as "loom" (Bach 2003). Tad Turner, Nick Collins, Caleb Stuart and Tara Rodgers are also on this year's list of authors writing specifically about the laptop and the relationship with the audience. It was a very productive year in terms of critical mass in the realms of the academia.

Sergi Jordà, who introduced the term "digital lutherie" (Jordà, Digital Lutherie Crafting musical computers for new musics performance and improvisation 2005) is probably one of the most consistent authors about this significant asset, with a long list of reflexive articles starting in 2001, in which he questioned the practice of electronic music, bringing to the upfront of the discussion some fundamental issues, pointing out at the same time, possible paths and practical solutions. One of those solutions emerged on the Music Technology Group of the Universitat Pompeu Fabra in Barcelona with the Reactable, a project started in 2003 with many goals in mind. He wrote: "The foremost goal was to design an attractive, intuitive and non-intimidating musical instrument for multi-user electronic music performance, suitable for everyone to start playing from the first minute

2. http://www.lovebytes.org. uk/2003/docs/pages/tina.htm

3. Sergi Jordà (b. 1961) reported 1989/90 in Vitoria, Spain, as his first concert with a laptop in live context, and Atau Tanaka (b.1963) pointed 1993 at Etablissement Phonographiques de l'Est, Paris, as his first live performance with a laptop. (Joaquim 2012/13)

and yet capable of the more subtle and the more complex." (Jordà, On stage: the reactable and other musical tangibles go real 2008).

What Reactable was also capable of, was to establish a visual relationship with the user in a way that it could simultaneously became interesting to the audience (listener-viewer) and by this way, induce a blurring in the problem of the visual feedback and the absence of gesture.

In recent years, we have observed a tremendous increase in the commercial production of visual solution for laptopers, and also a big investment from the scientific world in finding ways to make new approaches in human computer interaction (HCI), accompanied by big efforts in tangible user interfaces (TUI), and all imaginable ways to reduce or neutralize the *ghost-machine*, which prevents man to express himself gesturally in all its fullness and splendor (read: irony).

Marcelo Wanderley, recognized researcher in the field of gesture, on his article *Gestural Control of Music*, reveals the issue that became one of his central motivations for research in music field. He says:

> Digital musical instruments do not depend on physical constraints faced by their acoustic counterparts, such as characteristics of tubes, membranes, strings, etc. This fact permits a huge diversity of possibilities regarding sound production, but on the other hand strategies to design and perform these new instruments need to be devised in order to provide the same level of control subtlety available in acoustic instruments. (Wanderley 2001)

A few years later, in 2006, Mark Zadel pointed on his research, a solution that gave the name to his thesis: a *Software System for Laptop Performance and Improvisation*. The aim was "to bring a sense of active creation to laptop performance" (Zadel 2006a). Through the use of drawing, among other operations, the performer could imprint a sense of freshness and create an impression close to the experience that we have when attending a regular concert with regular musicians. Zadel expressed that quality of imprint as a process of "infusing the music".

Simultaneously to the attention dedicated in academia, there was also a myriad of events in which the laptop started to gain protagonism, like occasional concerts, festivals,[4] and publications. *The Wire Magazine*[5] documented in the cover, the arrival of new stars like Pole and Merzow in 2000, Oval and Kid 606 in 2001, Autchere, Matmos, Aphex Twin and Raster-Noton in 2003, Fennesz, Wilco and Ikue Mori in 2004, etc.

The web was also very active in the analyses of the laptop phenomenon, in 2006, Marc Weidenbaum, musical journalist, editor and publisher of Disquiet[6], wrote *Serial Port: A Brief History of Laptop Music*,[7] an article with approx. 6.600 words and a large number of pictures. It was an extensively and well documented report on the activity, mentioning the work of artists such as Joshua Kit Clayton, Matmos, Taylor Deupree, Fennesz, Kid 606, Monolake, Ikue Mori, Scanner and many more, exposing simultaneously some historical information about software and hardware, not leaving behind some historical perspectives about key role players like Leon Theremin and Pierre Schaeffer. The article, generated a series of reactions on the web, about what *does it mean being a laptop musician*. In reaction to those questions, Weidenbaum felt compelled to explain and justify in

4. Examples: www.emefestival.org, http://www.aec.at, http://www.transmediale.de, http://www.sonar.es

5. http://www.thewire.co.uk

6. http://disquiet.com

7. http://www.newmusicbox.org/articles/Serial-Port-A-Brief-History-of-Laptop-Music

another text[8], what was in consideration within the concept of the article. On his original text, Weidenbaum emphasized, among other aspects within the laptop performance, that laptop music "isn't really a genre, and since the laptop can run such a variety of music software, it may be inappropriate to simply call it an instrument". He stated as a "phenomenon". (Weidenbaum 2006)

Among others, Weidenbaum is referenced by Rebecca Fierbrink, Ge Wang and Perry R. Cook, in the article *D'ont Forget the laptop: Using Native Input Capabilities for Expressive Musical Control* (2007).

One year before, in 2005, on the same web page (New Music Box[9], a web page dedicated to the music of american composers and improvisers) , Roddy Schrock, dedicated also an article to the subject on Laptop Music for Beginners[10].

Miniaturization and increased performance render the personal computer portable, the desk environment (desktop) is now located in the lap (laptop) or in the palm (palmtop) of the user. (Grossmann 2008)

Throughout this brief overview that was not intended to be comprehensive, we may have observed that the generalization of the laptop in the musical scene, was accompanied with the problem of the visual feedback, lack of action and absence of gestural information in performances. This problem is extensively reported since the first moment of its appearance on stage, by the mid 1990's, when people like Oval, Pita, General Magic and Farmers Manual started to introduce laptops on stage. Has Peter Worth states on his Ph.D. thesis, "The release of the G3 PowerBook in 1997 was roughly the point at which it became possible (and affordable) to do the same kind of audio processing on something a fraction of the size and weight." (Worth, Technology and ontology in electronic music: Mego 1994-present 2011, 30).

Atau Tanaka pointed 1998 as the turning point with the arrival of the Powerbook G3, a portable computer that allowed "to do real time audio signal processing native on the laptop, and with that no longer needing hardware synthesizers and samplers" in consequence, it was also possible to "pass from Max to MaxMSP (then later to live visuals with NATO and Jitter)" (Joaquim 2012/13)[11]

2.2. Key strokes from laptop artists

Working with electronic music has come a long way: from the humble beginnings of the early frequency- / synthesizer-music pioneers to today's ubiquitous, ultra-flexible, emergent, personal audio production environments and customizable sandboxes. (Popp 2011)

Navigating in a completely different map from the academia, artists began to feel all the problems arising from the lack of visual information on their performances.

In 1995, General Magic (duo of Ramon Bauer and Andi Pieper, co-leaders of the *Mego* label at the time)[12] was already mapping a circuit of concerts *placing* the laptop in front of the stage, sharing audiences with Peter Rehberg producing sound, and in some occasions, with Tina Frank on visuals[13].

8. http://www.newmusicbox.org/articles/Upwardly-Mobile-What-we-talk-about-when-we-talk-about-laptop-music

9. NewMusicBox, is a multimedia publication from *New Music USA*, dedicated to the music of American composers and improvisers.

10. http://www.newmusicbox.org/articles/Laptop-Music-For-Beginners

11. Information retrieved from the surveys addressed to laptop practitioners.

12. http://www.discogs.com/search?q=General+Magic&type=all, accessed January, 17, 2013.

13. http://www.lovebytes.org.uk/2003/docs/pages/tina.htm accessed January, 17, 2013.

14. http://editionsmego.com/
release/eMEGO+029

15. http://florianhecker.blogspot.pt

16. Private conversation.

17. Private conversation.

18. http://www.annetteworks.com/
artist/worksmade/mimeo/
index.htm accessed January,
17, 2013.

In 1999, Mego released the second Pita album, *Get Out* (Mego 029), an album that was made "using an Apple Powerbook 1400cs/133"[14], "often considered a benchmark in the 'laptop' genre, evidenced by descriptions such as 'a milestone in early laptop music' (Sohns 2008) or 'the first major musical laptop statement' (Keenan 2008)." (Worth, Technology and ontology in electronic music: Mego 1994-present 2011, 30–31)

Florian Hecker[15], another laptop pioneer and Mego affiliated, referred also the Powerbook 1400cs/133 as his "first portable machine"[16]. During private correspondence, Hecker was very prudent in avoiding being identified as a laptop musician, while expressing deep concerns on the subject, despite all the public documentation showing him with hands on laptops. What Hecker may indicate with this concern, shared by other musicians, is probably what we have pointed out in our Introduction, as a concern reflex on the subject of the author as a producer of himself. Hecker explains: "I've always been critical about a coinage such as 'Laptop Music', an invented genre, where thinking beyond genre would be fruitful (…) In most of my performances since 2006 (…) with a few exceptions, I stepped back from working intuitively with real time DSP during a performance"[17].

Probably one of the most popular caricatures about the laptop performance started to rise in the turn of the millennium: the artist as someone that may be reading e-mails or playing files from the hard-drive, while everything looks meaningful to audience.

A common complaint about many electronic improvisers is the lack of obvious action on stage, the "they might as well be reading their e-mail up there" line of criticism.[18] (Abbey 2002)

In another level of production, moved by other forces, Brian Eno, when comparing past and 'present' of musical studio, wrote *The Revenge of the Intuitive — Turn off the options, and turn up the intimacy*, an article in which he stated:

(…) now I'm struck by the insidious, computer-driven tendency to take things out of the domain of muscular activity and put them into the domain of mental activity. This transfer is not paying off. Sure, muscles are unreliable, but they represent several million years of accumulated finesse. (Eno 1999)

We presume that when Eno invokes "several millions of years" as an argument *against* the "mental activity", he is in fact, trying to convey the idea that without gesture, musical performance is losing something that is innate since the beginnings of times. Transposed to the world of the laptop production, this premonition does not seem to prelude a great future for its proponents and practitioners. However, over the years, it seems that history has not given reason to Eno. On the contrary, laptops (*the machines with no gesture behind*) are now spread over the world, and it is hard to imagine a stage without a laptop, from one side to the other of the musical spectrum, considering all levels of production, from clubs to stadiums, from experimental to contemporary music. Laptops are around us, and behind each one, there is always someone making choices, whatever they might be.

In 2013, we are now on the verge of imagination, facing a multitude of options and reactions, where every artist is confronted with a myriad of opportunities. Ranging from commercial products to custom made patches of Synthesis Software, from hardware

solutions to plug-in miracles, the laptoper has many more options than he can imagine or afford. Eventually, part of those solutions, end up having a significant visual impact (and effect) on stage leaving on the background the main reason why a sonic solution has been implemented: help the musician to achieve a better aural result.

Madeon (b.1994) a very young star in the world of electro house and pop music, presented himself at the MTV EMA's, 2012 surrounded by 3 Launchpads (Ableton) a laptop and a Xone controller (A&H). The event was extensively advertised on the web and Madeon was promoting the concert with pictures of himself with the 192 pads (from the 3 controllers) blinking like luminescent lamps in a party. Obviously, it does not make sense to question the quality of his work, or the reasons for choosing this or that equipment. What is really important to investigate on Madeon, is: why is he positioning the controllers towards the audience and not towards himself? What we can infer is that he might be interested in deliver visual feedback from what he is doing, as a way to engage the audience in the process. In his field — the show business — that determination to please the crowd, is regularly recognized as an entertainment quality, and represents a heritage that may find its roots in the old Greek theater tradition, where artists, above all, should please the audience.

We must underline that one single video from Madeon called "*Pop Culture (live mash-up)*", with him pressing pads on the Launchpad, filmed with one single shot in close-up over the hands — no cuts! — is now, hitting over the 16 million plays in Youtube.[19]

19. http://www.youtube.com/watch?v=lTx3G6h2xyA accessed January, 17, 2013.

Not on the same artistic range, but with the same type of motivations, Sergi Jordà and all the pioneers of live coding, each one on his side, have arrived at another type of solution. According to their own points of view and aesthetic options, they choose to express themselves in different ways. However, they have in common the same motivation that compelled Madeon to the glamour of blinking lights (i.e. please themselves and the audience). The basic problem was/is persistently omnipresent, and what they opted to do, was/is only another variation on the angle of approach.

Jordà, opted to research and write about the subject, and also to develop his own "digital lutherie" (Jordà, Digital Lutherie Crafting musical computers for new musics performance and improvisation 2005) that culminates in the realization of the Reactable. Coders, on the other side, started to play everywhere, whenever and whatever possible delivering to the audience, via video projection, all the elements implied on the process of making their own music. Instead of generating entertainment for the masses, the live coder generates information in real time about the processes that are being carried throughout the performance. His goal is to turn the attention of the audience into the information generated on the moment, using code, the same way that a guitar player uses the strings: to generate sound.

To summarize, we can look into these facets, and observe three completely different types of reactions (solutions):

a) *Reactable* as a result of academic research
b) *live code* as a political statement
c) *triple dose of fancy luminous controllers*

Still, we may observe and conclude that the responses are, metaphorically speaking, like three sides of the same triangle. They are facing different directions, but they are reacting to the same *stimulus*. In this way, they behave like different parts of the same body.

As if one part was thinking, the other was pushing and the other was kicking.

Through the diversity of examples, we hope we have drawn attention to the fact that so many artists, working in all kinds of aesthetic fields, share this concern far beyond the limited area of compositional and aural motivations. It is a general concept that the stage is an immense space of exposure and for exposure, but we must keep in mind also, that every space has, by definition, boundaries circumscribed by the will of the author, as the fundamental drive of the event.

2.3. Resonances from the will

> Not only do different people listen differently, but also the very temporality of our presence in a place is a form of editing. (López 1998)

Affected by the prospect of a *boring* performance, some laptop artists introduced (and are still introducing) several types of solutions to keep audiences interested. One of these solutions, is observed with the use of luminous controllers to 'interact' directly with the software and, indirectly, with the audience. By this way, the artist can generate also a visual feedback that facilitates the momentum of the performance by turning the result into something much *more pleasant and communicative.*

Considering this option, we shall face all the elements of the equation (author's will, audience's desire, aims of the piece, space of the event, etc.) and raise one simple question: by this way, are controllers helping musicians to produce better aural results or 'just' entertaining the audience?

Throughout the years, we have listened and read a large amount of justification and arguments on this large field of speculation, but it is not easy to find a straight and common perspective that can be shared by the whole community implied on the process. That may happen, probably, because we are dealing with a high level of uncertainty in which a large number of ideas are not anchored on facts but on ideas, taken as facts. That confusion is determining in the end, a complex triangulation of facts, mutual expectations, and even fiction.

It is not easy to define and turn tangible what in general is not tangible.

So, let us rephrase the problem again, from another angle: are performers affecting or changing what they do live, because of the audience? Because they are concerned about what might be the correspondence to a certain model of 'delivering content'? Because they are afraid that they might be not accepted, or at least in a condition wherein they feel unsafe or unsecured about a satisfactory aural performance? And because of that, not so well accepted? And, in consequence, affecting all the work based in a preconception of what is the *right model*?

> What is behind that curtain?
> *Laurie Anderson*[20]

20. From "Born, Never Asked" from the album *Big Science* (Warner Bros. 1982)

3. Do laptopers have something in mind?

3.1. laptop artists under survey

> I can honestly say that I do not recall ever feeling better about the quality of a performance because of the presence of an audience. (Glenn Gould, Mach 1980)

If we look deep inside the universe of the performance space, recognized as stage, we must consider a general overview into the reasons why laptopers still want to perform, despite all the indicators pointing to the fact that "audiences can be unsatisfied with the apparent lack of activity and lack of visual cues it sometimes offers" (Zadel e Scavone, Different Strokes: a Prototype Software System for laptop Performance and Inprovisation 2006b)

Through knowledge of the reasons which remain at the option of each laptopers on playing live, no styles or categorizations included, we will find in all of them, a common ground that resonates in the deep desire to do it, to go on stage, and just do it. Deep analyses on the subject should turn in itself a research in the fields of the psychology, associated with all the performativity activities as common ground.

In the specific field of the laptop performance, what we can infer, and that is our point of departure in this article, is that we are in presence of a will to do it. That will, may be stronger in some cases than in others, but there is always a will, an energy that compels a normal person to become a communicator, and through this option go on stage.

The reason of the will, we believe, is different in every case, relatively impenetrable, and not necessarily associated with an obscure desire to be admired, or adored. In fact, just because someone likes to play live, it does not mean necessarily that the person likes to be on stage. It only means that the person goes on stage. All the rest are conjectures. It is possible that the person wants to show his or her own work in a live context instead of pressing a CD or uploading a file to the World Wide Web and chooses the stage as a way to do it. Or, the person is possibly seduced by the physical experience of hearing through a powerful and highly qualified sound system, something that we normally do not have at home.

So, in order to learn directly from musicians, and what they think about the experience of using a laptop in live performances, we conducted a survey, via direct enquiry, with six questions and an open item for observations. The survey targeted active practitioners of laptop and ex practitioners, both genders, ranging from 29 (José D. Correia (Re:Axis)) to 65 years (Carlos Zíngaro), with geographical origin in 15 different countries, from almost all continents (Australia not included).

On this list of practitioners, we include 6 visual artists (Alba G. Corral, Hugo Olim, Lia, Laetitia Morais, Sladzana Bogeska and Tina Frank) to enrich the information, gain perspective and wide open to other experiences.

Intentionally, because it was an open questionnaire, the issue of the absence of gesture was keep out of the frame. That was in fact, the primary reason to do the survey in a non-directed format, with open questions.

List of questions:

· Q1 — When did you first acquired your first laptop?

· Q2 — When and where did you first used a laptop in a live performance? Please, specify with all possible detail.

(Can you provide a picture/video-link of that first performance?)

- Q3 — What made you start using a laptop in live performance?
- Q4 — From your point of view, what are the qualities of a laptop? Please, try to specify your points in order. (10 points to fill)
- Q5 — From your point of view, as a user, what are the inconvenients of a laptop? Please, specify in order.
- Q6 — How many concerts you did since you started playing live with a laptop?
- Observations

3.2. Preliminary results and analysis (part 1)

A general evaluation is being conducted in a long term research project, but we would like to present some preliminary results, particularly connected with a few ideas shown in this paper. With special relevance: what is the idea that laptopers have of themselves and what are the critical insights that they have on the choices they make.

So, from the outcome of these 46 questionnaires we would like to highlight *20* individual allusions to descriptions that conveyed, directly or in similar meanings, the experience of the laptop performance as a "boring" experience. This result, represents 43,4% of total respondents, excluding repetitions of the same idea from the same responder. We should underline that the survey does not allude, in any way or moment, to this particular factor. Under evaluation, are *only* the "inconvenients" of the laptop (Question 5).

The responses are given within a frame that corresponds to the accumulated experience of the responders as practitioners but we must not forget that they have also the experience (not negligible) of attending concerts while they are touring. According to this possibility, we should consider the experience as a global experience, not only as a practitioner's point of view.

Considering the number of concerts performed with laptop, from the responses, we estimated an average of 133 concerts per each person — since the first concert with laptop until the last one. This average, excludes 2 extreme cases: one with an estimated number above 500 (Christian Fennesz) and the other with an estimated number above 800 (Julien Ottavi).

7 other subjects did not reply to that point. The tendency on these 7 elements for not responding was associated with lack of information ("countless", "don't remember anymore", "never counted"…).

This information, considering estimated values by the artists, corresponds to a global number of 6.582 performances.

From this block of information, grounded in the announced numbers, we can extrapolate that experienced laptopers, in general, are aware that there is in fact, a problem of perception derived from a problem of non-expression that is inherently to the nature of the *instrument*.

This conclusion, is consistent with the examples presented on 2.1 (academia) and 2.2 (laptopers), and raises a significant list of issues that are presented in our final part.

Not included on the list of 46 subjects who replied to the survey, 2 artists (L1, L2)[21] expressed in correspondence that they did not respond to the survey because they cannot identify with the idea of being laptopers, or their music associated with the concept of *laptop music* (we never used that term on the survey or in the correspondence leading to the survey)[22].

21. We will keep the identities under privacy.

22. Can we infer from this observation that they are reacting in a projective way? Anticipating and avoiding a possible coinage of their work as *laptop music*, thus consistent with the argument that we expose?

Two responders (L3, L4) from the group of 46, tried to avoid or skip the written format of the survey, and showed interest to approach the subject using personal contact or by the way of an interview, outside of the framework of this survey.

Going now into the 20 previously mentioned allusions (descriptions that conveyed, directly or in similar meanings, the experience of the laptop performance as a "boring" experience) we would like to emphasize some lines of thought presented autonomously by the responders.

3.3. Preliminary results and analysis (part 2)

Oswald Berthold, from Farmers Manual[23], one the first musicians to go on stage with a laptop, at least in a consistent way, mentioned that standing in front of a computer "(no matter what type) is not an attractive mode of performing."

As he mentioned:

I perceive it as somewhat shortsighted and pop-culture related to emphasize the *objectness* of the instrument too much. Use of a particular emblematic object (electric guitar, laptop, …) somehow is driven by pragmatic concerns, develops and intrinsic aesthetic and cultural dynamic, which is a feeback process with symbol (as in icon) iteration and discourse in culture. The question is rather, how much processing power can conveniently be put into one place (or some coherent perceptual domain) and how much of that is put to use for the generation of un-foreseen dynamics. Regardless of using a laptop or not, of doing an interactive or autonomous machine performance, the main item of interest is how well the intricacies of the processes involved are represented in the perceptual channels.

Oswald Berthold

(Joaquim 2012/13)

This association with perception was also highlighted by Marc Behrens[24], when observing the laptop computer as an object primarily designed to use "while seated", That is why, in Behrens words, "it can be a hermetic machine" and "not give any indication to an audience of what the 'performer' is doing." Thus, from his point of view, he likes to "over-emphasize the performative by repeatedly lifting the laptop around, moving its support, climb chairs and tables etc."

We believe that this challenge as stated is substantiated in the idea that this particular musician has about *laptop performance*, "a misleading term for a group of people who mostly "perform" in the way they would when typing." (Joaquim 2012/13)

André Aselmeier, from Incite[25], is very clear about this problem and what can be a possible *solution*. He says:

I think the Laptop should not be in the center of the show, the artist and his/her work should be. With Incite, we thus always cover the glowing apple-logo as it would be the brightest spot on stage and it carries a message that has no relation to the art involved.

André Aseilmeier

(Joaquim 2012/13)

23. http://web.fm/twiki/bin/view/Fmext/WebHome

24. http://www.mbehrens.com

25. http://www.incite.fragmentedmedia.org

26. http://endliche-automaten.de

Marek Brandt, member of the Endliche Automaten — Laptoporchester Berlin[26] regarding a certain impact on the performer and observing the performance from the inside, confesses that is "too much staring at the monitor (and) static (disconnected with the rest of the body — except hands and head) while live performing" (Joaquim 2012/13).

27. http://www.random-industries.com

Sebastian Meissner[27] man of multiple artistic personas (Autokontrast, Autopoieses, Bizz Circuits, Klimek, Open Source, Random Industries, Random Inc) expressed this generalized concern about what might be happening behind the screen with some humour: "you have to answer questions if you are playing solitaire…". Sense of humor, is in fact, a characteristic that we can find with some regularity in the replies. In another tone, Meissner emphasizes that it all depends on what kind of music you want to play. Also, "if you want to perform and entertain people (expose yourself in a physical way on stage) or if you want to play and present your work to audience which have the patience to listen to instrumental music." (Joaquim 2012/13).

By this way, underlining the act of listening (having a more attentive audience) Meissner introduced a shift in the perspective. In fact, audiences are also part of the equation and should not be left behind.

28. http://www.simonwhetham.co.uk

As Simon Whetham[28] said, "audience can be left feeling unengaged". That is why he makes the decision of changing his setup, contrary to the way how audiences usually attend concerts:

> I now tend to play either from behind or within the audience, (a) to control what they hear more accurately, and (b) so there are no expectations of my presence on a stage or in front of the audience.
> *Simon Whetham*
> (Joaquim 2012/13)

According to Whetham, there is no reason for regret or complain about the use of the laptop on stage; actually he finds the laptop "the perfect tool for performance and composition when using field recordings and pre-recorded material."

29. http://www.helenagough.net

In a very close position to Whetham, Helena Gough[29], admitting the absence of "physical or gestural aspect" mentions that "many audiences are unable to adjust their expectations to this and focus on listening alone". When referring to the audiences, she declares:

> They come to a concert with expectations that are still connected to the classical music tradition — they want to see the music and the 'performer'. The assumption from this perspective is that a laptop is lacking something because it doesn't offer this visual aspect.
> *Helena Gough*
> (Joaquim 2012/13)

Helena Gough, which has a great experience as violin player, noted that being behind a laptop, "involves tedium and discomfort", some problems with "posture" and "repetitive strain injuries". Despite the list of inconveniences, she sees the laptop as her own studio and place to compose, and does not give special credit to the expectations of the audiences. More, she has a response for that:

The response I have to this is quite simple: change your expectation and come to a performance involving a laptop open to the idea of listening and being absorbed in sound. From here you will realise that focusing on only one sense can be an intense and rich experience, and that when you close your eyes, you 'see' with the mind and the imagination. I consider my performances to be visual only in this particular manner.

Helena Gough
(Joaquim 2012/13)

Ramon Bauer from General Magic[30], another laptop pioneer with reported concerts starting in 1995, states that the problem is anchored in the fact that a laptop is "not a purpose-build instrument", resulting in a non-appropriate haptic interface to "play". Like other laptopers, he finds that the relation with the audience needs to be questioned and relocated in a proper context. In Bauer's words:

Keyboard and mouse are not adequate at all. Even with fancy external controllers, the laptop musician is still (often) stuck in a physical position that hampers the performer to actually perform (physically). This, in my opinion, hampers the communication with the audience, which (often) has no clue about cause and effect of what they hear (or/and see — in an (audio-)visual context).

Ramon Bauer
(Joaquim 2012/13)

Despite the general perception conveyed by the 46 laptopers and by 20 in particular, one specific case attracted our attention: Keiko Uenishi, did not conform to the rest of the inquiries, and introduced a contradictory argument. When asked about what made her "start using a laptop in live performance?" (Question 1) she replied: "to look boring, so audience may stop looking at me/performer on stage. (That's what I hoped for)"[31].

In this way, she derived the answers in a completely unexpected direction if we consider the average reactions from the other responders. Uenishi example became quite surprising, pointing to further discussion on how to find space for various personal tendencies in approach to performance. Later, on question number 4, when listing the "qualities" of the laptop, Uenishi stated on first place, (i.e. as a positive statement) the idea that the laptop is "boring to look at (unimpressive-looking plain machine)".

This idea is complemented and clarified when Uenishi (question number 5, about the inconvenients of a laptop) states that "people are 'still' trying to look at performers sitting in front of laptop on stage (and complain if they're not entertained by looking at them.)". On the same line of explanations, she stresses that "maybe, it's better to give up looking at them" or, otherwise, maybe "performers and/or organizers of the event may need to restructure different ways to present them (if they're interested to be seen…)". (Joaquim 2012/13)

We may infer from these examples that some artists are aware of the impact caused by a performance with no visual feedback, in which the gestural information is almost absent. But in practical terms, they tend to conform to the norm, even if we admit that they react in personal terms and in gradient ways.

30. www.metropop.eu

31. Part of the content correspondent to the survey answered by Keiko Uenishi (o.blaat).

Beyond this conclusion, we can recognise that each one is reacting to the issue in different ways but the vast majority tends to conform.

Thus, a possible speculation may arise: what are the necessary conditions to trigger a change in the way events are being conceived and produced?

As we have seen on chapter 2, academia tried to address the 'problem' by implementing 'new solutions'. We have seen also that artists have found ways to overcome and adjust themselves to the 'problem', but in this particular survey, we presented a case of a laptoper that where others see a flaw or a problem, she sees a virtue and an advantage.

For future work, we plan to select some individuals and conduct personal interviews with the objective of determining the specific ways how each one stands in particular contexts and situations.

The will, the will to do that...
coronel Kurtz (in *Apocalipse Now*)[32]

32. Coronel Kurtz, role played by Marlon Brando on the long feature film, Directed by Francis Ford Coppola (1979).

4. Conclusions

Going back to our top question, in accordance to the elements part of this article, we assume that there are strong indicators pointing to a positive answer. Yes, we believe that artists are too much concerned about the visual satisfaction of the audience, and leaving their own aural expectations being compromised by what can presumably be a desire of the viewer. Not the listener, but the viewer.

Besides, nobody proved until now that a flashing interface with 64 buttons in sync with the BPM of the track is bringing added value to the aural program. What we can prove with this is that there are more lights turning on and off on stage.

If the artist, as performer, is concerned with his aural impact on audiences, he or she should take into consideration, more than ever before, the fact that it is fundamental to think not only in artistic terms, but also in production terms. Like Walter Benjamin said:

> We all must bear in mind the vastness of the horizon, from which must be rethought forms and categories (...) consistent with the technical circumstances of our current situation, to get to the forms of expression. (Benjamin 1992, 141)

As we have seen through the examples, according to the model of conformity developed by B. Douglas Bernheim, the problem of interaction in groups exists and is recognized for a long time; therefore artists should keep in mind that audiences tend to conform to the norm despite what each person may think individually.

And because laptopers are also part of the population, they are also under pressure to keep on the same "homogeneous standard of behavior" (Bernheim 1994) of the audiences. Therefore, it is so difficult to establish and impose an operative model in the form of another format of performance in which the aural content is the center, and the only information to be perceived in the space.

For future work, we envisage a deeper debate around conformity in the frame of the electronic music en general, and in particular in recent genres and processes associated

with the laptop performance, with special emphasis on non-idiomatic genres like, glitch, drone, ambient, live coding, generative, etc.

We end by formulating and synthesizing 3 fundamental issues in the form of open questions.

One of the fundamental issues is: are we in presence of a phenomenon of conformity in which audience tends to replicate what is the average tendency of preferring a certain degree of visual entertainment (served mostly by the gestural information) in detriment to the *absolute* value of the aural performance?

Furthermore: Is this tendency to conforming occurring also with the laptoper, i.e. is he or she, also worried about the "social interaction" as a fundamental aspect of his "status as well as *intrinsic* utility (which refers to utility derived from consumption)"? (Bernheim 1994, 841).

In fact, as Bernheim puts it, "status is assumed to depend on public perceptions about individual's predispositions rather than on the individual's actions".

Third and finally: why have we not already implanted in our global model of performances, one *type* of performance that consists uniquely in an aural experience of content?

Some people would argue that is happening already at home, where many people enjoy listening music in the dark. But we argue that is not the same, at all. And is not the same, basically because sound is form in itself, manifested in SPL, and a private room and a home sound system are not comparable in any circumstance to a venue or a sound system with large speakers. Hearing is physics, not only, but firstly, and without pressure level there is no sound. The situation is a similar, but the experience is absolutely different. We may compare it with a picture from Guernica in a book, and the real Guernica in a wall.

Plus, where is the crowd, that fundamental element in all live performances?

We hope to have raised through this study, a broad debate on the issue that gathers in the same arena creators and audiences, observed under the microscope that represent the perceptions of both sides, as well as the perceptions on the perceptions of others.

As Walter Benjamin underlined about the artist, the laptop performer must imply him more on the production process and keep in mind that the production of his own work is a fundamental step towards a better aural result. Laptops do not need to turn themselves into luminous lamps and do not need more light. What they need is to satisfy their primary needs in terms of sound, if they work with sound; and on visuals, if that is what they do.

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