VEXATIONS OF EPHEMERALITY
EXTREME SIGHT-READING IN SITUATIVE SCORES - FOR MAKERS, PERFORMERS, AUDIENCES.

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ABSTRACT

What do we do when we subject musicians and audiences to music prompted by real-time scores? Such situative scores create a new kind of immanent relationship between performers and audiences, between composers and performers, composers and audiences – a relationship whose ingrained disregard of context, memory, and knowledge has often been ignored. The use of situative scores seems to inscribe itself into a more general societal trend that uses technology to ephemeralize our lives, to decouple presence from its history. While this immanence has often been perceived as a force for the emancipation of performers and spectators, it can also give rise to unaccountability. Do artistic practices that ephemeralize our artistic 'regime of perception, sensation and interpretation' (Rancière) - such as situative scores – foster abuses of immanence?. In this paper, I will look at such questions from the perspective of the performers, the audiences and the makers of such scores – the composers.

1. INTRODUCTION

> *Being "in the ephemeral' (Rimbaud) was the dream-come-true of a modernity that erased both the trace and the unconscious, leaving humans without protection or blanket within its transparent walls of glass.* [1]

This paper is an exploration of doubts that have plagued me for some time while working on situative scores of various kinds[1][2]– not without a modicum of success over the years, both technological and artistic. Situative scores create a new kind of relationship between performers and audiences, between composers and performers, composers and audiences – a relationship whose specificities, in the rush towards a workable technology, often been ignored, or shelved for future reflection. For me, that future is now. Especially as, in a broader context, the use of situative scores seems to inscribe itself into a more general societal trend that uses technology to ephemeralize our lives, to decouple presence from its history.

While this immanence has often been perceived as a force for the emancipation of performers and spectators, its inherent disregard of context, memory and knowledge can also give rise to irresponsibility, unaccountability and intolerance, especially in the political sphere - as the past year has so amply demonstrated. Do artistic practices that ephemeralize our artistic 'regime of perception, sensation and interpretation' [3] - such as situative scores – mirror or even foster such abuses of immanence?

Situative scores today, especially those relying on digital technology, are structurally oblivious to skill acquisition and training, to transparent perception and analysis, to comparison and re-reading (and, therefore, interpretation), to re-listening and its aesthetic interplay of familiarity and disturbance, to the social aesthetics and taxonomy of sounds, but also to their concrete, emotionally charged materiality. Does this obliviousness tend to abolish the very context that has made these scores arise? Or are such situative scoring practices essentially parasitical[2] [4] in nature - will they always rely on other art practices to provide them with skilled performers and aesthetic contexts of interpretation that they themselves are unable to generate?

In the following, I will look at such questions from the perspective of the performers, the audiences and the makers of such scores. The issues they encounter in contact with situative scores are different in each role. What kind of relationship does 'extreme sight-reading' [5] entertain with the inner dramaturgy and time of the performer? How can an audience understand, evaluate and connect with a performance of a situative score? How does the requirement to meta-compose a situative score, and thus the necessity for a primarily non-linear, conceptual (i.e. not concretely sonic and dramaturgical) approach to composition affect the score maker's musical imaginary? And, as all these roles are intertwined in the

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[1] In a previous paper, presented at TENOR 2016 [2], I proposed a taxonomy for <u>situative scores</u> – i.e. scores that, in my definition, do not build on linear, pre-existing and pre-sequenced information. Information in such situative scores is only available ephemerally, i.e. while it is displayed or accessed in a particular context. I proposed four different types of situative scores: 1) rule-based 2) reactional 3) interactive and 4) locative. While types 1) and 4) <u>may</u> be algorithmic in nature, but can also be non-algorithmic, scores of type 2) and 3) are usually not only algorithmic, but also <u>require</u> computer implementation. The subset of situative scores that I am concerned with in this paper are scores of all four types that use algorithms and computer technology to generate and display unforeseeable score information to the musician[s] in real time.

[2] The notion of the 'parasite' here is used as Michel Serres introduces it in his eponymous book [4]: namely that parasites (outcomes that are made possible by an act of communication but belong to neither sender nor receiver) are unavoidable in all communication. He, however, does not see this as unwelcome noise – rather, he reminds us that sometimes the parasites can be much more interesting than the purported focus of the communication. In other words: music academies train musicians for a fixed-score environment; but in the process, they also generate the very players and contexts that make real-time notation at all feasible. Music for situative scores thus is a parasite, feeding on skills which these performers would probably not have developed if situative scores were all that existed. Yet: How long can a performing art sustain itself if it does not educate its own performers?

process of musicking, how do these new demands and affordances, some of them quite categorical, influence each other in the co-emergence (or, possibly, co-effacement) of a new kind of musicking ?

2. EXTREME SIGHTREADING: PERFORMERS

"Does everything really have meaning? Aren't there some empty spaces remaining, whose emptiness is perhaps their only meaning? Isn't there a gap there, a hole, between the image produced and the meaning it supplies or dissimulates?" [6]

Jason Freeman introduced the term "Extreme Sightreading" [5] to characterize the performers' experience with real-time music scores – and to postulate a novel quality of music performance that these scores seem to demand. He discusses a variety of works that seem to highlight four basic generative strategies[3]:

a. ***permutational*** (e.g. Gerhard Winkler's scores where pre-notated elements are re-arranged on the fly, both in time and on the screen),
b. ***parametric*** (e.g. Karlheinz Essl's *Champ d'Action*, where musicians must combine several independently controlled parameters into a comprovisational performance),
c. ***auto-reflexive*** (e.g.Nick Didkovsky's feedback score *Zero Waste* where the pianist's valiant attempt at playing an unplayable score directly generates the next page of this score in an endless open loop)
d. ***co-creative*** (e.g. Jennifer Walshe's or Jason Freeman's works where audience (or conductor) interactions influence how the score appears to the musician)[4]

Most real-time scores, including those I have contributed to or designed (discussed in [2] and [7]), use one or more of these four strategies. While aesthetic concepts and performance strategies may differ, real-time scores all ask performers to subject their musicking to a series of inherently unrehearsable constraints. The comparison most often made here evokes the difference between reading / learning-by-heart the text for a theatre performance and - learning to speak a language.

When music notation is generated on the fly during live performance, musicians have no opportunity to practice and rehearse the score in advance... As musicians practice a composition, their increasing familiarity with the elements of the notation should help them to perform it more accurately. But that familiarity should also lead them to develop a richer, more personal musical language with which to interpret it. [5, p.34]

Composers and musicians quoted by Freeman share similar metaphors.

As musicians prepare to perform these kinds of pieces, Gerhard Winkler notes that the process "shifts from 'studying notes' to … [getting to know…'how

the system works'" … [Musicians] must not only play the score in front of them as it unfolds, but they must also "bring sense into this succession of un-expectable moments" to create a personal, coherent interpretation of that score. [5],[8]

Or, as a performer describes it:

"It would have been less interesting if we were totally at the mercy of the notation. But once we got familiar with the process and developed a common approach to the notation . . . then it became more musical" [5, p.35]

What is the interpretation (as Winkler calls it) that a performer can bring to the score? Or, to re-use Freeman's metaphor: once you speak the language of the score - what do you speak about?

'Interpretation' is a term used in the context of fixed scores to describe a process in which practise, repeated readings, analysis, comparisons with other scores, information about the musical or cultural context as well as non-musical concepts and imaginaries are condensed into the moment of performance. Can we really apply this term to situative scores, where neither repeated readings nor comparison are at all possible? While it may be an instance of a larger creative undertaking, each ephemeral performance stands uniquely for itself, is immanent to this particular moment and place. Except for a broad conceptual analysis of the performance context, the performer cannot enter into an interpretational discourse with the score – simply because there is no discursive, coherent or, simply, sequential score outside of the performance.

Whenever I raise such questions in discussions, someone invariably accuses me of underrating the capacity of performers to think on their feet, to analyze what they play as they play. The preferred analogy here are team players in football, rugby or hockey who have barely milliseconds to move their body in a way that will outwit their opponents – in order to perform successfully, they must read the game while it is played. Swordfights are another frequently cited example.

To which there are two types of answers: Firstly, team players can read the game because they know its framework so well, through years of training, that they can perceive and focus on the tiniest variants and aberrations. Most situative score players do not have this luxury, at least not yet. Secondly, in all these endeavours failure is possible (and discernible) - and the failure rate usually is higher than any musician or composer would deem acceptable in the performance of a score. One can either conclude that musicians are better at reading the opponent's (the score's) game than are swordfighters – or, as seems more likely, that they have about the same propensity for failure. Which means that most situative scores are wrongly interpreted most of the time – an appropriate and aesthetically coherent understanding to the elusive score must therefore be a rare and fortuitous event. If one takes this analogy to its logical conclusion, then a musician improvising without any score may have a better chance of making sense of his own performance than a musician performing a situative score.

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[3] Please note that the taxonomy offered here is not explicitly stated in Freeman's paper – it is my reading of his text.
[4] Any actual real-time score will obviously combine these four strategies to various degrees and on different levels – I set them out simply as workable analytical categories.

Music performance, by definition, is transient in nature. Sounds disappear, leaving their trace only within our bodies and our memories. Each live performance speaks of the fluidity of existence. In most musicking contexts, however, this ephemerality is counter-balanced by the kinds of immaterial mental architectures, compositions, songs, melodies, rhythms, that become inner entities, part of the software of the mind [9][5]. Usually, these architectures are inscribed in our minds and bodies through constant re-enactment. Repetition and repeatability are salient features of all musicking, and even the most ardent improvisers have their bag of tricks and their somatically and psychologically inscribed, well-rehearsed set of gestures, ideas, concepts.

In this perspective, the extreme sightreading of a continually mutating score implies a double ephemerality: not only must all sound soon die away - the mental architecture of the piece itself, the score and its aesthetic details, specific juxtapositions and inner relationships – all vanish into nothingness as soon as they appear. Is this double ephemerality of real-time score performance a strong artistic acknowledgement of life's general impermanence (as its proponents often claim) – or should it rather be seen as a musical implementation of the built-in obsolescence that underpins most capitalist production and consumption? And is this double ephemerality of performance conceivable as a self-contained aesthetic practice – or must it, structurally and by necessity, sit as a parasite on the simple ephemerality of current musical life? Finally, does this emergent practice demarcate the closing parenthesis of a millenial, eurological score-oriented art music tradition - or does it afford new avenues for critical and aesthetic discourse within this same tradition?

3. TRANSPARENCE & OPACITY: AUDIENCES

"Opacities can coexist and converge, weaving fabrics. To understand these truly, one must focus on the texture of the weave and not on the nature of its components. For the time being, perhaps, give up this old obsession with discovering what lies at the bottom of natures… The opaque is not the obscure…it is that which cannot be reduced ..." [10]

Are the above-mentioned critical challenges to the performer of a situative score perhaps compensated by an enhanced or intensified aesthetic listening experience? One could maintain, as indeed makers of situative scores often assert in discussions, that audiences may be afforded new kinds of aesthetic access, as well as new, more emancipated roles in creative musicking - whether they, in following the same score as the players, can aesthetically engage with the difference between score and realisation; or whether they, in actively or unconsciously providing data to the score algorithms, are able to per-

ceive themselves as aesthetic agents within the performance.

> Real-time notation systems, then, offer the opportunity to link the creative activities of listeners to conventional musical ensembles during live performance. This creates a feedback loop in which the audience influences the notation, the notation influences the performers, and the performers, in turn, influence the audience. [5, p.31]

Such co-creative, quasi-iterative loops[6], as well as the ability of the audience to keep comparative tabs on the performers' interpretation, however, introduce a number of novel non-musical factors into the aesthetic experience: like in many games, the interaction itself, its vagaries and rewards, may easily command more attention than the purely auditory experience.

> Some audience members have become so obsessed with the competitive elements emphasized by the animation that the music itself has been relegated to background listening for them." [5, p. 38]

The co-creative feedback loop between audience (or some sort of conductor) and player via sound and score evoked by Freeman, and exemplified in his works Glimmer (2004) and Flock (2007), but also by my own works Native Alien (2009-12) and Fragile Disequilibria (2015) rests on assumptions that invite scrutiny.

Firstly, Freeman himself already notes that a piece like Didkovsky's *Zero Waste* requires an audience of fluent score readers to fulfill its aesthetic goal. Any other listener would simply have no chance of "getting" this piece. Such expert audiences would be Theodor W. Adorno's ideal listeners [11][7]. To all others, the central premise of the piece will remain as opaque as a ritual of a secret sect. But even graphic real-time scores, which prima facie seem to be easier to follow, are not entirely transparent to the audience - not everyone moves between sonic and visual semantics with ease and familiarity. Moreover, traditions may differ in their visual culture as much as in their music.

Regardless of tradition, however, one aspect that characterizes those practices we call art music is their embrace of a sustained and critical discourse as an essential, intertwined strand of their musicking. For such a discourse to be at all feasible, musical utterances must rest on a modicum of convention. As a critic, or a cultured listener, you can only perceive what you already know (and have learned) to be relevant. Be they oral rules or written scores, the quality of a musical rendering within a tradition can only be ascertained by evaluating it against sonic conventions [12][8] that lay down that tradition's specific perceptual, formal and social predilections.

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[5] An allusion to Pauline Oliveros's term "Software for People" whose text scores are algorithmic scores open to situative input, but often non-algorithmic in nature.

[6] They are not truly iterative, because the transformation from input to output within at least one of the three stages (the audience) is neither repeatable nor algorithmic.

[7] In his *Introduction to Music Sociology* (1962), Adorno classifies listeners into expert listeners, adept listeners, cultured listeners, emotional listeners and prejudice listeners – the categories describe a decrease in musical expertise in inverse correlation to a rising influence of non-musical factors on the listeners' aesthetic enjoyment.

[8] Shin Yan Sheng calls them "cultural acoustics".

Moreover, in most such traditions, such conventions evolve in parallel with the music, reinforcing any given "style" in a process of autopoiesis - until it seems worth a new generation's while to depart from it, and thus define a new tradition.

Thus, secondly, what are the rules and traditions governing the reception and listening attitudes with regard to real-time scores? Given that this kind of musicking is new even in its comprovisational procedure, which aspect of a real-time score performance would offer inroads for aesthetic criticism and musical engagement? Most reactions that I heard to such a performance focus on the legitimacy of the approach in general. And once that is out of the way, the score-reading strategy, the virtuosity of the musicians interacting with the technology - as if the mere use of a specific technology, or its adequate employ, already conferred aesthetic significance to the resulting sound.

A critical engagement with the sonic content in itself seems rare. I do not remember reading a single *musical* analysis of a real-time score work, maybe for a lack of proper analytic tools. Is this lack of critical engagement with the music itself at all relevant to the practice - or not? Many kinds of music do not need analysis to thrive. Maybe real-time score performance is such a kind of music, upheld by social use, without a layer of critical reflection that would put it into same aesthetic orbit as art music in general? Is it a new apparatus-specific aesthetic sub-genre, similar perhaps to 'orchestra music' or 'electro-acoustic music' or "oil painting" - or does it enter its own, as yet perhaps unnamed and unclaimed, territory of musical styles?

Thirdly, what exactly is the nature of the interaction with the audience in Freeman's ideal feedback loop, where "the audience influences the notation, the notation influences the performers, and the performers, in turn, influence the audience"? Freeman describes a social situation that in itself is not entirely new. Turino [13] mentions village dances in Ghana where the audience 'dances its critique' of the drummers by dancing more or less engagedly, thereby inducing changes in the performance itself. Other traditions, such as Italian opera, khayal, techno, include audience feedback that can serve to guide and, in a limited way, co-create performances.

The innovation brought about by the co-creative score thus seems to reside in the fact that its audience has a more direct access not only to the surface structure of performance, but also to its inner constitutedness, its microstructure - through various interactive schemes and strategies, the audience members may, at least in theory, influence a variety of previously inaccessible musical parameters. But how valid can such a claim to audience co-creativity actually be - given the fact that, as we saw above, the audience, for lack of repeatable and thus inter-pretable feedback, does not really get the slightest chance to formulate a critical, aesthetically differentiated position vis-à-vis their live-experience.

Even more so in the cases where audiences are <u>not</u> privy to the real-time score, nor get a chance to shape its evolution: the knowledge that the music played by the performer is not the result of a performer's or composer's artistic decisions (whether made in the moment, as in free improvisation, or offline, as in mnemonic or written scores), but of their embodied reactions to a flux of changing circumstance beyond their ken, may significant-ly shift the import they attach to the aesthetic act of listening. As member of the audience, I sometimes ask myself: where has all the music gone? All I hear is a syntactically vaguely suggestive, sometimes mimetically comprehensible sequence of sounds - but, despite my best and sustained efforts at listening, I cannot engage with them in any critical or even analytic manner. Their very ephemerality seems to belie any message that would go deeper than their performative framing. All to often, I at some point will disengage my critical ear - and simply wallow in the surf of the sound. A different mode of listening, to be sure – but does not the composer's inten-tion, the work of many software engineers and the aes-thetic context of this presentation go to waste, if I can only listen to their music as a sonic meditation that max-imally offers me opportunities for highly subjective pat-tern recognition (or, better, pattern invention) ?

The best I can make of some real-time performances is to listen to them as a collateral outcome of an extremely absorbing relationship of the performer with the evolving score, where sonic events are treasured as traces of the body expressive – a perhaps co-creative but, to me, aes-thetically opaque loop to which I have very little possibil-ity of access. What do we gain, both in knowledge and in experience, when, instead of lifting the veil of sonic sur-face that hides musical understanding from us, all we can do is admire the texture of its weave?

4. META²-COMPOSING: MAKERS OF SCORES

The genius is the characteristic product of bourgeois culture…Today, in the period of the collapse of imperialism, any pretensions to artistic genius are a sham. [14]

Learned eurological composition[9] has largely been a quest for novel exercises in alienation.[15] The perceived need for creators to go beyond their limited selves, to transcend their own contingencies, to questions their instincts and preferences, to escape the strictures of socio-aesthetic conditioning, was a driving force behind the success of notation and many of the conceptual additions to the composer's toolbox that followed it - isorhythm, alpha-numerical coding, *Augenmusik,* serialism, modeling - to name but a few. All of these conceptual strategies abstract the compositional process from purely sonic or aural imagination, transport it to a visual domain, where it can be manipulated and then fed back (via an ever-refined and evolving notation) into the sonic/aural domain. [16] This process of coding and decoding the sonic liberates the composing imagination from sound's intrinsic fickleness and ephemerality, by

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[9] I prefer this term to denote what others call "eurogenetic" or, more simply "Western Art" music. "Eurological" encompasses these terms in that it targets all music composition that follows the conceptual logic of eurogenetic music composition – whether it is used by non-Western or even non-human composers, and whether it acknowledges any "genetic" link to Europe or not.

abstracting it from the immanence of the momentary and placing it on a nicely defined operation table. Eurological composition thus usually is a kind of meta-composition[10][17] - an offline intervention into sonic reality.

Its alienation strategies have since been seamlessly extended to provide a strong motivation for artificial intelligence in music and other digital explorations of the sonic. Situative scores, at first glance, seem to be driven by this same impulse: to prepare the elusive sonic for aesthetic consumption by manipulating its conceptual representations. Many situative scores seem to be designed to offer both composers and performers a clinical detachment from the vagaries of actual sound: once more, visual representations are used to describe and denote sonic realities. In fact, all that seems to have changed from the age-old tradition of written composition is a vastly speeded-up process of score generation.

But, of course, in a time-based art such as music, speed is of huge import. With fixed scores, those that offer the most productive resistance to immediate consumption, those that, as it were, slow down digestion, tend to be those that elicit the most sustained engagement. The necessity for practicing, for inscribing a score into the motoric body, becomes a significant factor of meaning production and aesthetic significance. The resistance of a score to both performer and listener is not, as one might surmise, proportional to its undecipherability, nor to the dexterity it demands, but rather to its conceptual complexity, the effort that performer and audiences must make to mentally engage with the multiple meanings afforded by the score: we could call this process "aesthetics-by-resistance".

An emergent score, destined to be ravenously consumed in an act of extreme sight-reading, must by necessity also be a score that offers less resistance (of any kind) to the player. As noted above, it is very likely that the player will skims the score, rather than actually decoding it. He will thus not be able to feel a critical, reflexive *differance* between the score and his sound. As Freeman seems to rejoice:

> "With real-time notation systems, the algorithm and human performer together create a single, merged sonic output." [5, p.36]

This, in turn, means that all the compositional thought that went into creating the ephemeral score will be lost in performance, as the usual 'channel' of musical communication between composer and audience is jammed by the algorithmic aesthetic 'noise' of the situative score. Like the audience that can only admire the texture of the sonic weave without understanding what lies beyond the momentary, composers must resign

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[10] This term is the same that Robert Rowe and others have used to describe aspects of interactive algorithmic composition. My contention here is that Rowe's "meta-composition" actually is what I would call "meta^2-composition" – the meta-level of a composition practice which in itself is already meta-composing.

themselves to being content with meta^2-composition: instead of being cook book writers, they must become cook book - designers. If, as argued above, conventional written composition indead already is a meta-artistic activity, one could label them as meta^2-composers. This embrace of an ever-increasing distance from sonic material sounds uncannily like the beginning gambit of one of those infamous infinite logical regressions, or like the famous ancient political paradox: "Quis custodiet ipse custodiam?"("Who guards the guardian himself?"). Indeed, in situative score performances, the question: "Who composes the real-time score composer?" is both relevant and irrelevant. Relevant, because a score design is indeed always a design decision – and irrelevant, because a better cook book layout does not always lead to the cooking of a tastier meal. And the problem is not that being a designer of cook book layouts, a composer of composers of scores that give rise to music is not an interesting position to be in. It obviously can be - the question is more: whether assuming that role also can be a satisfactory artistic decision. In another article [18], I have indeed argued for the rich artistic terrain that meta^2-composition can afford intrepid composers – and yet: sometimes, in listening to a performance of a situative score that I designed, I feel like an impassioned and successful inventor who went on to found a company based on his ideas - and now spends his all day in administrative and strategic meetings, in activities he would never have wanted to engage in when he started. Do composers of situational scores still have clandestine, torrid affairs with fixed score composition? Alone, at home, do they still tinker around to their heart's content with paper, pen, tablet, softly humming a snatch of music they are just about to write down to keep it from the fate of all things ephemeral – oblivion ?

5. CONCLUSION

"Words about music are like a painted dinner!"
Infamous quip among musicians

A strong sentiment "Against Interpretation" (as in Susan Sontag's eponymous book) [19], complemented by George Steiner's hunger for "Real Presences" [20], has, for the longest time, been a guiding star on my artistic and intellectual path. The joys of unexpected epiphanies, the interest in serendipitous harmonies between seemingly conflicting formal processes, the inexhaustible promises of opacity, the seemingly endless resources of human performers, as well as the speed and diligence of computers still are aspects of an almost childish excitement to be a composer of this century, of my personal now.

Yet recently, in the wake of recent alarming shifts in the political and social atmosphere of the Western world, I began to think about Cardew's contention that avantgarde music serves imperialism [14]. Indeed, the rise in social standing of free improvisation over the 1960s and 1970s has often been associated with the widespread

unstiffening of western society's spinal columns, and the concomitant, if gradual liberation that has since permeated so many social contracts, always in the direction towards a liberational ideology of ubiquitous individualization and customization of values and social contracts. [21] It is one of the ironies of our time that this inner liberalization requires the exoskeleton of hyper-formal, failure-intolerant systems to 'run'. [22, 23]

Are situative scores not technological incarnations of this ideology, embodying an increasing refusal by sensitive composers to be put on the spot, to be categorized and brought to account? Do they not offer a space of creative indecision for curious performers who mistrust both the know-it-all bullishness of much composed music and the get-it-or-get-out mentality of free improvisation?

If no rules apply, the loudest and strongest prevail. If music cannot be understood in an aesthetical way, other senses will occupy our attention: we will shut down our ears, and we will conceive of everything solely as something to be looked at, for a millisecond – to be instantly forgotten. Instead of all noise becoming music - the dream of the moderns - all music will become noise. It was our wish to make ourselves, and everyone who cares to listen, aware of the beauty, uniqueness and fragility of the ephemeral act. Instead, in an untimely reversal, the ephemeral score, enacting a denial of all musical signification, vexes us with its aggressive absence of meaning, of connection, and of sense: Instead of making our perception more and more aesthetic, its ubiquity of potential aesthetica seems to have created a rich domain for an-aesthetica [24].

I have not yet given up on conceiving a situative score that would allow performers, listeners and composers to collaborate in intellectually and emotionally engaging situative musicking. But I must first find some answers to the many questions raised here.

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