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Interactivity/interpassivity and presence/absence in the Ntrallazzu cycle

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Abstract. Ntralllazzu is the title of a cycle of works based on interactive live scores, that reflects on the multifaceted philosophical concepts of liveness and interaction both from a creative point of view and in more critical terms. The work is based on a projected score that interacts in real time with the material played by the performer(s). While one of the performers plays, the sound is fed to and processed by patching software, and generates both electronic sounds and a score, which is to generally, but not necessarily, to be performed by a second player. In this paper, we discuss the ways in which subsequent versions of Ntrallazzu exist in between two fundamental sets of opposites, namely, interactivity/interpassivity and presence/absence.

1. Introduction

Ntrallazzu is the title of a cycle of works based on interactive live scores that reflects on the multifaceted philosophical concepts of liveness and interaction both from a creative point of view and in more critical terms. The work is a 5-/6-minute piece based on a projected score that interacts in real time with the material played by the performer(s). While one of the performers plays, the sound is fed to and processed by a patching software, and generates both electronic sounds and a score, which is generally, but not necessarily, to be performed by a second player. Both the live score and the electronics run on Max.

In this paper, we discuss the ways in which subsequent versions of *Ntrallazzu* exist in between two fundamental sets of opposites, namely, interactivity/interpassivity and presence/absence. In exploring these two dichotomies, *Ntrallazzu* dialogues with

the multiple modes of liveness examined by John Croft (2007) and situates itself in the broader rubric of "ubiquitous music" [Keller et al. 2010]. From a more critical point of view, the work intends to explore the implications of liveness in terms of possibilities of audience surveillance on the gestures of the performers that are not generally predicated within the concert hall situation. In terms of liveness as surveillance and as algorithmic replica, our main theoretical reference is the work of Joseph Pugliese (2014). The title *Ntrallazzu* is a Sicilian term borrowed from the practice of smuggling locally produced state rationed crops in World War II Sicily, as practice of resistance criminalised by the Italian authorities, that was aimed at contrasting indigence in the island. By establishing micro-patterns of interaction between themselves and with the live electronics, the performers symbolically reproduce the secret exchanges that disobeyed a violent regime of biopolitical¹ and necropolitical² state control on the lives and means of subsistence of the islanders.

Considering the common repartition of roles on which Euro-centred "art music" is predicated [Keller et al. 2010], in this paper we offer multiple perspectives on the work, both from the point of view of the composer Marcello Messina and that of the performer Leonardo Vieira Feichas, also taking on board the perspectives and testimonies of the other performers who have played the piece. In this sense, this work dialogues with and furthers the findings of previous work by Messina and Aliel (2018; 2019): in that case, the authors drew upon phenomenology and deconstructivism in order to turn *Ntrallazzu* into a collaborative comprovisation³ experience, resulting eventually in a literal "hijacking" of the original piece. A previous version of this paper was presented at NCMM18 in Lisbon [Messina and Feichas 2018].

Although not conceived as part of it, *Ntrallazzu* is a sort of continuation to The Digital Score [Feltham et al. 2014], a research project funded by AHRC – the Art and Humanities Research Council (UK) –, and hosted by the Goldsmiths College (University of London) and the University of Sussex, between 2013 and 2014. The project was aimed at the creation and development of scores/sets of instructions, which incorporated the creative use of technology within a research-orientated framework. There was also a general intention to use multiple strategies of live interaction with scores, and in fact, the compositions produced within the project involved web networks, live coding, graphic patches, etc.

¹ In Foucauldian terms, "biopolitics" is the rational preoccupation of a (self-proclaiming) liberal state for all "the problems posed to governmental practice by phenomena characteristic of a set of living beings forming a population: health, hygiene, birthrate, life expectancy, race …" [Foucault 2008: 317]. Essentially, biopolitics could be seen as a strategy of control that also legitimates the liberal state, which in turn appears to derive its sovereignty on the rational maintenance of the population and not on the use of violence.

² Drawing on Foucault (and also abundantly criticising him on various aspects), Achille Mbembe coins the term "necropolitics", arguing that "the ultimate expression of sovereignty resides, to a large degree, in the power and the capacity to dictate who may live and who must die" [Mbembe 2003: 11]. Furthermore, he adds that "the notion of necropolitics and necropower to account for the various ways in which, in our contemporary world, weapons are deployed in the interest of maximum destruction of persons and the creation of *death-worlds*, new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of *living dead*." [Mbembe 2003: 40]

³ On the concept of "comprovisation", cf. Aliel, Keller and Costa (2018).

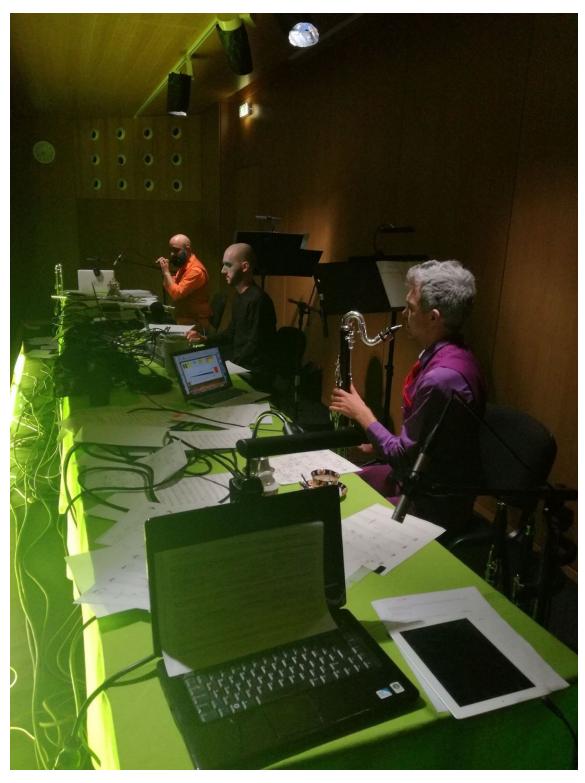


Figure 1: Ntrallazzu 1 in Strasbourg, France, June 2018.

The pieces that compose the cycle *Ntrallazzu* were composed between 2013 and 2018. The first piece was written and developed between 2013 and 2014, and called for an instrument of the flute family, plus one of the clarinet family. This first version of

Ntrallazzu, later renamed as Ntrallazzu 1, was premiered in June 2018 by the lovemusic collectif (Fig. 1).⁴ The huge gap between the development of the first piece and its first performance in 2018 was due to personal circumstances, such as relocation, that affected both the composer and the performers. This gap eventually led to the development of a new version for violin and piano, that was performed by Leonardo Feichas and Daniel Sanches, just one month before the Lovemusic version. The very first performance of the whole Ntrallazzu cycle, therefore, happened to be a premiere of the second piece of the cycle, Ntrallazzu 2, for violin and piano.⁵ Other pieces, numbered progressively, have followed since, and as of now, the piece has been performed by several performers in four different countries, namely, Brazil, France, the Netherlands and Portugal.

2 Interactivity, Interpassivity, and Interpassive Music

2.1 On live interaction

Max is a graphical programming environment, also called a patching software, essentially based on boxes and cables. The connections between these graphical objects produce musical mechanisms that are either triggered by calculations that are internal to the computer or interact with external devices such as a MIDI controller or a microphone – the latter happens in the case of *Ntrallazzu*.

The interaction with a microphone is, essentially, an interaction with the external environment — in this case with musical instruments (although the patch could interact with any type of sound). The instrument is, in turn, operated by a human being, therefore we are in the presence of a rudimentary form of interaction between human and machine. Now, we know that people have produced music with instruments for millennia – instrumental music is autonomous and does not need machine interaction, unless we think of the instrument itself as a machine. At the same time, nowadays we have at least one century of electronic music history behind us [Wilson 2017; Mooney, Schampaert and Boon 2017], and we know that machines can play pre-composed music autonomously [Risset and Van Duyne 1996], and they even compose music on their own [Mantaras and Arcos 2002]. In this sense, the use of live electronics in *Ntrallazzu* was not conceived as a groundbreaking characteristic of the composition — rather, it serves to reflect critically on interaction and liveness.

⁴ The first version of the piece ended up being premiered later than the second version, right a month afterwards. On 8 June 2018, in Strasbourg, France, at the Bibliothèque Nationale et Universitaire, *Ntrallazzu 1* was performed by Emiliano Gavito (piccolo) and Adam Starkie (bass clarinet), with Guido Pedicone operating the electronics (Figure 2). This version was characterised by the fact that the piccolo/flute part was a traditional score written on paper, with a fixed linear sequence that involved a predetermined, non-changing route from beginning to end. That differs dramatically from the aforementioned piano part of Ntrallazzu 2, as in that instance the fixed linear sequence was replaced by an aleatory sequence of musical fragments.

⁵ Ntrallazzu 2 was premiered in Lisbon on 9 May 2018, at the Universidade Nova de Lisboa. In this piece, the interaction was originally intended to happen via two different computers, with patches running and functioning as one independent score for each of the two performers. Due to technical limitations, this did not actually happen, and while the violinist Leonardo Feichas was able to follow the interactive score via his laptop, a printed-out version of the score was provided to pianist Daniel Sanches, who applied aleatoric methods to establish the order of the musical fragments. On this occasion, the live score was projected to the audience.

2.2 Responsorial/Proliferating liveness

Part of what John Croft suggests in his seminal essay entitled *Theses on Liveness* (2007) is that live interaction can challenge received ontologies of (Western) art music, where the interposition of the human body between the score and the final sound product is normally regarded as a nuisance or as an accident. Antithetically to this last point, we could add that we may produce live electronics in order to downsize and reconsider the role of human agency in the context of the final sound product. These two reasons, we argue, are both to be considered indispensable when talking about live electronics. The human body, in this context, is both *reclaimed* as a political space of self-determination and *questioned* as the primary, ultimate and sole *locus* of artistic/political agency. Reiteratively, we reclaim the human body not only from the alienation of automation: as suggested above, the musical score as a cultural practice also entails the cancellation of the body, that is literally treated as a disruption that hinders the transition between the score and the sonic product.

Another point on which Croft reflects regards the many types of live musical interaction that are possible. The type of live interaction that happens in *Ntrallazzu* is categorized by Croft as "*Responsorial/proliferating*" liveness, characterised by the fact that "its aesthetic pertinence is determined by the extent to which the response varies in a perceptible way with the noticeably 'accidental' characteristics of the performance" [Croft 2007: 62, original emphasis]. In the pieces of the *Ntrallazzu* cycle, then, the main parameters of the piece change dramatically, depending on minimal variations in the performance.

2.3 Interpassivity

While the interaction that characterises *Ntrallazzu* is, as mentioned above, *Responsorial/proliferating* liveness, the work also features important elements of interpassivity as well. The term "interpassivity" was coined as "*interpassivität*" by German cultural theorist Robert Pfaller (1996), and then abundantly used by Slovenian philosopher Slavoj Žižek, who describes it as referring "to a sense of being active through another subject that does the job for one" [Žižek 1998: 483]. Žižek claims that interpassivity, "in its opposition to interactivity", is "the feature that defines the most elementary level, the necessary minimum, of subjectivity" [Žižek 1997: 116]:

In order to be an active subject, I have to get rid of - and transpose onto the other - the inert passivity that contains the density of my substantial being. In this precise sense, the opposition signifier/object overlaps with the opposition interactivity/interpassivity: signifier is interactive, it is active on my behalf, in my place, while object is interpassive, it suffers for me. Transposing onto another my very passive experience is a much more uncanny phenomenon than that of being active through another: in interpassivity, I am decentered in a much more radical way than in interactivity, since interpassivity deprives me of the very kernel of my substantial identity [Žižek 1997: 116].

Considering Žižek's reflections on the idea of suffering on behalf of another subject, in most of the pieces that compose the *Ntrallazzu* cycle a relevant interpassive relationship happens between the performers and the audience. The audience appreciates the interaction but delegates action to the performers, while also participating and possibly

formulating opinions on the general dynamics of what is going on. An important element, in this sense, was the projection of the score to the audience (Fig. 2), which was not always possible.



Figure 2. the score being projected during the premiere of *Ntrallazzu 2*, in Lisbon, May 2018.

For example, on the occasion of the VIII UbiMus - Eighth Workshop on Ubiquitous Music, during Luzilei Aliel's performance of *Ntrallazzu 4*,⁶ a sound/video technician turned off the projection in the middle of the performance. Here the coercive and yet bona fide action of the technician operated precisely towards the disruption of the interpassive participation of the audience.⁷ *Ntrallazzu 5*, on the other hand, featured two operative live scores, both projected to the audience: arguably this increased performance anxiety dramatically, and encouraged public vigilance on the part of the audience.

⁶ Ntrallazzu 4 was performed by Luzilei Aliel on the fife, electric guitar and effects. The performance took place at the Universidade Federal de São João del Rei, in Brazil, during the VIII UbiMus - Eighth Workshop on Ubiquitous Music, on 14 September 2018 [Messina and Aliel 2018]. This version involves a single performer, although Aliel played both the fife and the electric guitar and, thanks to an intelligent use of effects, managed to maintain the feeling of an interaction between two instruments.

⁷ Just to clarify, disruptions such as this one are to be intended as an integral part of the "experimental" rubric that inscribes this piece as well as its technical preparation, compositional process and performance-oriented training. In this sense, the fact that the projection was arbitrarily interrupted does not represent a sort of "failure" of the piece – on the contrary, it reinforces and, basically, proves one of the fundamental points made by the piece itself. Furthermore, if on the one hand the interruption of the projection seems to undo precisely the philosophical premises on which ubiquitous music is predicated, on the other hand, as the deliberate intervention of an agent that exists outside the composer/performer dyad, it may also be categorised as a form of "breaking down" of the "social paraphernalia" that characterize traditional musical practices. In general, unexpected disruptions are a fundamental part of the whole *Ntrallazzu* cycle: reiteratively, by pointing this out we do not claim any originality, as Accidents during music performances where technology is included are normally on the agenda [Cf. Berweck 2012].

Drawing abundantly on Žižek's thought, Federico Reuben transposes the concept of interpassivity to the realm of musical creativity, composition and performance, coming up with the expression "interpassive music":

The notions of interpassive and interactive relationships as reflecting an opposition between active and passive roles may also be applied to the way in which a performer might relate to a technological object in a live electronic musical performance. The performer therefore might form interactive relationships with a technological object if s/he seems to remain passive while technology appears to be active: for instance, when a performer plays a note or presses a button that sets an active chain of sound, or the 'typical' laptop performer's role of sitting behind the computer appearing to be passive while triggering musical events that suggest activity. The performer might also form interpassive relationships with technology, when a technological object appears to remain passive while making the performer appear frantically active [Reuben 2011: 49].

Perhaps the best example of interpassive music in Reuben's creative production is the piece On Violence (2012), where pianist Rei Nakamura plays hecticly at the mercy of the live score and electronics, only to be able to occasionally enjoy some instants of relative tranquillity. Ntrallazzu is characterised by a similar alternation between passivity and activity, that characterises the relationship between the performers. In some moments, the score "waits" for an input from the performers, and vice versa. The performance of Ntrallazzu 5 in João Pessoa⁸ was by far the one when this tense set of interpassive relationships was most appreciable. The simultaneous operation of two different Max/Msp patches involved the presence of two live scores and the concurrent triggering of two different sets of live electronics, which happened to also interact between each other. Several tweaks were made in order to alleviate the huge disruptions that this complicated set of interactions involved. Nevertheless, during the performance, the cello part did not end when it was supposed to end. In fact, after the appearance of the "end of the piece" sign on the violin projection, the cello score continued to run ad infinitum. In this situation, cellist Tom Drummond perhaps interpreted Reuben's concept of "interpassive music" in its most literal sense: he visibly wanted the piece to end, but he continued to respond, almost mechanically, to the live score. This, in turn, created a palpable atmosphere of tension among the audience, with people distinctly wondering whether something was not working in the way it was supposed to work. Luckily, after some four minutes of interminable torment, the piece did end eventually (Fig. 3).

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⁸ Ntrallazzu 5, for violin and cello, was performed during an open rehearsal by Rayssa Melo (violin) and Tom Drummond (violoncello), at the Universidade Federal da Paraíba, in João Pessoa, Brazil. In this version, the original intention of playing two Max/Msp patches on two different computers was actually satisfied, so that a complex web of human vs. human, machine vs. machine, and human vs. machine interactions took place successfully.



Figure 2. Ntrallazzu 5, performed at the Universidade Federal da Paraíba

3 Ubiquitous music, presence and absence

3.1 Metaphysics of presence

This last anecdote might help introduce another important aspect of interaction, that is intrinsic to the patch algorithm, which in turn is very simply calibrated to detect instrumental sound and discard background noise coming from the room and the audience. In this way, through simple operations of calibration, the patch crystallises some of the very discursive binaries that, in other ways, *Ntrallazzu* intends to challenge and question. By calibrating the patch in order not to interact with the "accidental" sounds produced by the audience, the piece explicitly confirms the operativity of these binaries, namely, sound vs. silence and instrumental sound (wanted) vs. background noise (unwanted), hence reproducing the border between performers and audience.

Furthermore, the live score is triggered by sonic activity from the instrument(s), and ends once they stop playing. Now, this is a rudimentary form of biometric detection that boils down to a recognition of the "living presence" of the performers, as well as a detection of their disappearance once they stop playing. At the end of the performance of *Ntrallazzu 2* in Lisbon, for example, the performers resorted to a simulation of their absence, that entailed a theatrical gesture of immobility. Leonardo Feichas and Daniel Sanches simulated their disappearance in order to trick the biometrical detection incorporated in the patch into assuming that they were no longer present, and thus stopping the piece.

Joseph Pugliese, after Derrida, calls "metaphysics of presence" [Pugliese 2014] this algorithmic reliance on detectable traits in order to ascertain the presence or absence of a human subject. As Pugliese notes, this reliance is potentially very problematic, both theoretically and practically. How can one distinguish physical "presence" from "non-presence" if the detection is based on electronic impulses that

might well be simulating the two states? Is it not always already a simulation that is at stake? In this sense, how do we distinguish real simulation from fake simulation? All this, in practical terms, makes *Ntrallazzu* always vulnerable and somewhat unstable, a characteristic that is definitely a distinctive part of the piece.

As anticipated above, a moment from the Lisbon premiere of *Ntrallazzu 2* can be regarded as emblematic of these philosophical problems. Here the performers need to trick the software into assuming that they have become sonically inactive. This is obviously impossible in itself, as the concert hall is full of sounds in that very moment, coming from pretty much everywhere, the audience, the room, the very same performers, the very same program that runs the live score, etc. All the same, the performers managed to simulate their absence by stopping playing their instruments, also hoping that the program would not detect other environment noises and mistake them for instrumental sounds. Now, what happened next is that they excogitated an original way of replicating the simulation of absence in front of the audience, who was also watching them. They remained totally still as if waiting, ready to play the next fragment, which never came. All this theatrical arrangement was ultimately inspired by John Cage's 4' 33'' (1952).

3.2 Ubiquitous music

Ubiquitous music seeks to transcend the rigid separations of roles and social practices on which (Western) art music is predicated, through the use of technological devices that have the potential to grant universal access on the making and consumption of music. Keller et al. illustrate that

Previous musical practices provided the safe refuge of instruments as the physical support for all soundproducing actions. These actions could be encoded as a series of discrete symbols - a score - which would guide the performers through a finite set of possible interactions with their instruments. Performances would occur within a space especially designed for musical activities - the concert hall - guaranteeing acoustic characteristics compatible with instrumental sound source power and projection. Furthermore, a crisp separation between performers and public, following an established ritualized set of actions - play / listen, bow / applaud - reinforced by the physical separation between stage and audience seats, allowed for strictly predefined roles in music making: musicians play, spectators just listen. Most of this social paraphernalia breaks down in the context of ubiquitous musical practices [Keller et al. 2010, p. 320].

We claim that *Ntrallazzu* qualifies as "ubiquitous music", in that, primarily, it blurs the separation between performers and audience by projecting the score and letting spectators appreciate the interaction. In this way, the "mysterious" ritual of score following, that is normally negotiated among the performers, is opened to the general public. In turn, this allows for a mitigation of the strict protocol of ceremonial actions such as bowing and applauding, as the score flags the end of the piece, leaving no room for surprise awkward doubts. We have already mentioned Luzilei Aliel's premiere of *Ntrallazzu 4* and the fact that a sound/video technician decided to turn off the projection in the middle of the performance. Supposedly, even in that context, the "mystery" of score following was deemed to belong too exclusively to the performer, in a way that

any form of audience participation in the process was unmistakably categorized as an error.

Among other things, Ntrallazzu 4 has already been the object of research in ubiquitous music, due to the fact that Aliel layered effects generated by other patching programs (Pure Data) with the effects that were already taking place through the Ntrallazzu Max patch. This made the live interaction more complex and unpredictable. Messina and Aliel (2019) have sardonically described this process as a substantial "hijacking" of the original piece, that nevertheless had the merit of "opening a wide range of unforeseen possibilities" dialoguing "with ubiquitous music and with the transcendence of the rigid separation of roles (in particular, composer vs. performer) and social practices on which (Western) art music is predicated, through the use of technological devices that have the potential to grant universal access to the making and consumption of music" [Messina and Aliel 2019: 693]. This last sentence needs also to be read in light of the fact that in Ntrallazzu 4, a patch compiled in an open source environment such as Pure Data hijacks the original piece that runs on a proprietary software (Max), literally redeeming the piece and opening up new possibilities for its consumption [cf. Puckette 2004; Messina 2017]. The "hijacking" of the original piece was also signified critically through the Heideggerian concept of Gelassenheit [Messina and Aliel 2019], that has been abundantly used in the context of ecologically grounded creative work [Carson 2020; Aliel, Keller and Costa 2018].

During the conference Balance-Unbalance 2018, a standalone, unnumbered version of the piece was prepared for a constantly running installation, scheduled on a different time and venue than Leonardo Feichas's performance of *Ntrallazzu 3.*⁹ On that occasion, the audience was able to read and perform a text-based live score from a screen, based on discursive instructions. In this way, the participation in the creative process was extended to the general public, also exploring the potentialities of what Keller et al. (2020) and Keller and Feichas (2018) have described as Creative Semantic Anchoring (ASC). ASC is also relevant to another text-based piece of the cycle, namely, *Ntrallazzu 6*, where articulated sentences were meant to dialogue with the historical and philosophical premises of the cycle. In *Ntrallazzu 6*, the lack of interaction of the voice with any acoustic instrument was compensated by the insertion of a MIDI-Out keyboard plugged to the patch — arguably, this element further decentred the ecological balance of comprovisation away from the human being as the principal and exclusive agent of the creative process.

⁹ Again, *Ntrallazzu 3* was developed before *Ntrallazzu 4*, but happened to be performed a few days later by Leonardo Feichas (violin), at the Patching Zone, Rotterdam, Netherlands, as part of Balance-Unbalance 2018, and then again in Pelotas, at the Universidade Federal de Pelotas, as part of the 29th Congress of the National Association of Research and Postgraduate Studies in Music (ANPPOM). This particular version is, contrarily to the last one, characterised by one performer playing only one instrument. Therefore, there are no duets, but also no multiple instruments played by only one performer: this makes the interaction happen only between the performer and the program, with no human vs. human interaction and no instrument vs. instrument interaction.

¹⁰ Ntrallazzu 6 was performed by Marcello Messina in Marseille, on the occasion of the 14th International Symposium on Computer Music Multidisciplinary Research (CMMR), during the UbiMus workshop that took place on 18 October 2019.

4. Final remarks

Overall, in *Ntrallazzu* 2, as in most of the other pieces of the cycle, the performers found themselves tricking the program into assuming that they had become absent, while at the same time they were tricking the audience into thinking that the piece had not ended yet, and that they were preparing for the next move. As illustrated above, this has worked more or less successfully, depending on the specific performance. In any case, we are in the presence of a double simulation, that involves communicating one thing to the audience and the very opposite thing to the machine. This, again, complicates immensely the concept of "presence" as something that always already exists as a simulation.

In *Ntrallazzu*, the "biometric detection" of the presence and absence of the musicians is always at risk of either being disrupted by unpredictable circumstances, such as audience noise, etc., or of being deliberately simulated or dissimulated by the musicians. As we have seen above, the audience participates in the dialogue between the musicians and the machine, by playing an interpassive role, whereby it can surveil the gestures of the musicians while also disrupting their communication with the machine by altering sound detection. As seen above, the audience has to be taken seriously into account when simulating any status with the machine. This participative role granted to the audience certainly approximates Ntrallazzu to an experiment in ubiquitous music, whereby the common rituals associated with music performance are deliberately disrupted.

Finally, and taking another cue from Joseph Pugliese, we need to acknowledge that the bodies of the musicians have "already been technologised" [Pugliese 2014: 665] before the biometric detection operated by the patch. First, that is because the human/instrument combination is a fundamental interaction that is already technological, and that, in the narratives that inscribe (Western) art music, traces a fundamental border between musician and listener. The instrument, here, awards access to some subjects while simultaneously preventing everyone else from accessing music making. More in general, the a priori "technologisation" that marks the bodies of the musicians even before the addition of live electronics might be understood as part of what Pugliese and Stryker call "somatechnics" (2009), that is, the intersection between the body as a physical, natural object and the very same body as a discursive, biocultural artifact that is always determined socially. Somatechnics makes the task of detecting physical presence through physical sound even more problematic, and confirms that Ntrallazzu, as a work of art, remains a highly fragile and unstable construction.

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