
Some Reflections of Borrowing in Acousmatic Music

FRANCO DEGRASSI

'Umberto Giordano' Conservatory of Music, Foggia, Italy
Email: degrassi@tin.it

This article begins with an outline of the Manovich general definition of borrowing followed by an introduction to the theme of borrowing in music, particularly within the context of acousmatic music. Two scenarios proposed by Navas in his taxonomy of borrowing are used to further the discussion in relation to material sampling and cultural citation. With reference to material sampling, some examples of remix, appropriation and quoting/sampling taking place within acousmatic music are highlighted. With regards to cultural citation, two levels of reference will be considered: cultural citation from sound arts, that is, intertextuality, and cultural citation from other media, that is, intermediality. The article closes with some reflections a posteriori about my own composition, *Variation of Evan Parker's Saxophone Solos*, and how this relates to wider notions of musical borrowing.

1. INTRODUCTION

Most human cultures developed by borrowing and reworking forms and styles from other cultures; the resulting 'remixes' were to be incorporated into other cultures. Ancient Rome remixed Ancient Greece; Renaissance remixed antiquity; nineteenth century European architecture remixed many historical periods including the Renaissance; and today graphic and fashion designers remix together numerous historical and local cultural forms, from Japanese Manga to traditional Indian clothing. (Manovich 2005: 2)

From this anthropological perspective, some examples from ethnic music, popular music and classical music can be considered. In ethnic music, as Merriam said, 'taking parts of old songs and putting them together to make new ones' (Merriam 1964: 78) or copying them is very common. The Basongye, people of Zaïre (now the Democratic Republic of Congo),

are sanguine about borrowing, and can indicate through some few formal devices of music structure which songs in the current repertoire have been borrowed. These are attributed almost exclusively to the Batetela, the Basongye's nearest neighbours to the north, and they make up but a small recognised proportion of the total repertoire. It seems likely that these borrowed songs are more frequent than the Basongye conceive them to be, but that they tend to lose their foreign identity through time. (ibid.)

In electronic music prevalent within the popular domain, borrowing is dominant nowadays: pop musicians not only practise it but also encourage other musicians to do it. In fact, 'the electronic musicians now often conceive their works beforehand as something that will be remixed, sampled, taken apart and modified' (Manovich 2007: 5).

In classical music, it is evident that all types of theme and variations are 'socially permitted' forms of borrowing. The case of transcription is of particular interest because the transcribed work can, in some cases, become more famous than the original one, and the author of transcription may unwittingly become regarded as the fully fledged author of an original work.

In many musical styles and genres, borrowing has been carried out at various levels of stylistic pertinence (Nattiez 1990). This is not only true for single pieces, as in transcription or in popular music covers, but also for the specific style of a period of a composer's life or the composer's style in general, as in the 'à la manière de', or for the style of a genre or a time, up to the borrowing of a global musical reference system (tonal or modal music, etc.).

In an experimental context, a notable project of global borrowing is described by Pousseur (1989). He reported that, since the 1960s, he and Stockhausen no longer conceived their works as a search for a new musical vocabulary, as composers did in the early 1900s, but as an effort to open a space big enough to contain all the music in the world, a space in which different music cultures and genres may meet, match, dialogue, unite, cross and then make a sort of global metalanguage of connected subsystems.

A basic taxonomy of borrowing and its applicability to acousmatic composition will be considered. This specifically addresses the ideas of material sampling and cultural citation proposed by Navas (2018) as a helpful aid in this pursuit.

2. A TAXONOMY: MATERIAL SAMPLING

Material Sampling consists of taking an object or part of an object to repurpose it in a new context. A material sample holds value because it is recognized as a pre-existing

thing, or a fragment of a pre-existing object that appears exactly as it was initially produced. (Navas 2018: 31)

2.1. Material sampling: remix

A first example of material sampling is the remix.

Remixing originally had a precise and a narrow meaning that gradually became diffused. Although precedents of remixing can be found earlier, it was the introduction of multi-track mixers that made remixing a standard practice. With each element of a song – vocals, drums, etc. – available for separate manipulation, it became possible to ‘remix’ the song: change the volume of some tracks or substitute new tracks for the old ones. Gradually the term became more and more broad, today referring to any reworking of already existing cultural work(s). (Manovich 2007: 2)

There are many acousmatic works based on the concept of remix nowadays, and Pierre Henry’s *Beethoven’s Tenth Symphony* could be viewed as the progenitor of all of them. In this work from 1979, Henry used fragments taken from recordings of Beethoven’s nine symphonies and remixed them in nine movements. The sounds are altered moderately, enabling the Beethoven fragments (or variations of Beethoven’s fragments) to remain recognisable. In 1998 Henry composed another remix of the nine symphonies entitled *The 10th remix*, in which he provides more radical transformation of the Beethoven materials. Henry’s programme notes for this work emphasise that ‘Remix, for me, starts, with the necessary force, a new radical sound project. It is a new adventure that brings some meaning to the current function of the composer in society’ (Henry 1998: 26).

In the 1980s and 1990s, Henry, as noted by Michel Chion (2003: 180), composed other works that are based on ‘tribute-appropriation’. Some of these works were written on commission. For example, Henry participated in a CD (*Replay Debussy* 2003) that hosts other Debussy remixes (by Alvin Lucier, Ryuichi Sakamoto amongst others) with *Par les grèves* a remix of *Prélude à l’après-midi d’un faune*. Henry’s other compositions were produced on his own independent initiative, *Dracula, ou la musique trouve le ciel* (2003), being one of them in which Henry remixes some long fragments of Wagner’s Ring Cycle with some of his own fragments. Chion wrote:

As the notes of Henry recite: ‘It is Wagner that I have chosen to support the building of my Dracula’ ... Wagner is cited for often long periods, since the principle is to use purely orchestral passages of Tetralogy (often taken from the preludes and from the transitions between one scene and another) ... Often one gets the impression that Pierre Henry lets two tapes turn at the same time, one containing a recording of the Wagner orchestra, the other containing his sounds. In fact, there is a montage since we travel from Wagner’s moment to another

... According to the composer’s habit, nobody sings: only brief fragments of screams are perceived, borrowed from Wagner himself, like the cry of Hagen after killing Sigrido, or the collective one of the Nibelungs. It is difficult for a passionate Wagnerian who knows almost all the moments taken from Tetralogy not to automatically remember their dramatic context, as well as not to greet certain sonorous characters of Pierre Henry. In short, the ideal listener of this work should hypothetically ignore both Wagner and Pierre Henry, and this is asking too much. (Chion 2003: 215)

In 2002, a double CD was released containing Xenakis’s *Persepolis* (1971). The first CD contained the re-issue of the the stereo mix of using the original Xenakis tapes, while the second CD ‘contained nine remixes of Persepolis by an international cast of avant-garde musicians (like Ryoji Ikeda, Francisco Lopez, Antimatter and others), transforming Xenakis’ original in [an] entirely distinct context, imbuing it with compellingly new meanings’ (Xenakis 2002). Regarding this remix, we can anticipate the issue of recognising a material sampling operation, which will be dealt with later. It is evident that some remixes maintain a perceptual relationship with the original (Untitled by O. Yoshihide, *Untitled 113 for Iannis Xenakis* by F. Lopez, *Whorl* by Laminar, Untitled by U.Langheinrich), and others do not (*Per se* by R.Ikeda, *Doing by not doing* by Z.Karkowski, *Glitchè* by Construction Kit, Untitled by Merzbow).

Thus, one should wonder whether a piece can be still called remix even when the original material is so much transformed to be unrecognisable in listening. This is the case of those pieces in which the link to the original source can be only derived by the name of the piece and its placement in the context of a collection of remixes.

2.2. Material Sampling: Appropriation

A second example of Material Sampling is appropriation.

The term was first used to refer to certain New York-based post-modern artists of the early 1980s who re-worked older photographic images ... But the term ‘appropriation’ never achieved the same wide use as ‘remixing’. In fact, in contrast to ‘remix’, ‘appropriation’ never completely left its original art world context where it was coined. I think that ‘remixing’ is a better term anyway because it suggests a systematic reworking of a source, the meaning which ‘appropriation’ does not have. And indeed, the original ‘appropriation artists’ ... simply copied the existing image as a whole rather than re-mixing it. (Manovich 2007: 3)

Appropriation may be viewed as a copying and transferring of a cultural sign form one sphere to

another. The following two works are made by taking classical or popular works from recordings and including them on a new recording piece without any particular transformation, but only by using a simple editing. The first work is Luc Ferrari's *Strathoven* (2005) showcasing: 'how Beethoven meets Stravinsky and end of story' (Castenet, Gayou, Teruggi and Zanesi 2007: 105). The three-minute piece presents an editing of Beethoven's and Stravinsky's music. In the first part, Ferrari appears to practice juxtaposition of borrowed music (0–0'43"), while in the second part he adds editing to overlaps both works together (0'43"–2'54"). The third part composed with anecdotal sounds (2'55"–3'21").

The second work is John Cage's *Imaginary Landscape no.5* (1952). This was made from 42 recordings of jazz music on eight tracks that were mixed in studio using a timeline presented in a score (created as result of applications of the I Ching). The score itself offers only a few modifications of dynamics. Cage did not love jazz music – 'when I listen to jazz I do not find it as interesting as it is said to be' (Konstelanz 1987: 307) – and this appropriation may have been a way to choose the musical materials, putting aside personal tastes.

2.3. Material Sampling: Quoting/Sampling

A third example of material sampling is known as quoting/sampling.

The other older term commonly used across media is 'quoting' but I see it as describing a very different logic than remixing. If remixing implies systematically rearranging the whole text, quoting refers inserting some fragments from old text(s) into the new one. Thus, I think we should not see quoting as a historical precedent for remixing. Rather, we can think of it as a precedent for another new practice of authorship practice that, like remixing, was made possible by electronic and digital technology – sampling. (Manovich 2007: 4)

2.3.1 Quoting/Sampling examples

In an interview, Marino Zuccheri (sound engineer at the Studio di Fonologia Musicale of the Rai, Milan) spoke of Bruno Maderna who 'had got some pieces of electronics material from Cologne (he used to call them "cascami" [dropping]; he would come in and say, "I've brought some dropping", tapes that they didn't need and that he would edit' (De Benedictis 2000: 182). It is probable that, according to the testimony of Piero Santi (1985: 157), Maderna has used these materials in the realisation of *Ritratto di città. Studio per una rappresentazione radiofonica*, composed together with Berio, and *Sequenze e strutture* (1954).

The idea of an organised borrowing of basic material appears in the project *Concert Collectif* of the GRM (Paris, 1958–63). Starting with nine sequences

(taken from recordings carried out by Eimcp, an instrumental ensemble) and shared by a group of composers (including Bayle, Ferrari, Malec and Parmegiani), a collective work was created in which each single composition lasted about ten minutes (Gayou 2007: 116). Pietro Grossi's idea that 'When somebody sends me a tape, they are sending me not only one of their works, but also a work that could be used as basis to produce others and different ones' (Grossi 2008).

Finally the French acousmatic composer Denis Dufour composed a piece in 2007, *PH 27-80*, using 80 sounds or short sound sequences taken from 27 works of Pierre Henry (on the occasion of Henry's eightieth birthday) to create 'a sort of prolongation of Henry's work, both oneiric and "philological"' (Brando 2008).

2.4. Recognisability, the key issue of the borrowing?

All borrowings raise an important question about the recognisability of the Material sampling (remix, citation, quotation/sampling) in new pieces. Each composer processes a part of the original piece by varying the values of one or more sound parameters. It is well known that modifications make the variation more or less 'similar' to the original work, depending on the degree of the perceptual changes that are produced by the modifications parameters. When two sound entities are recognised as 'similar', there are two extreme situations amongst a broad range of possibilities: an immediate identification of the relationship Variation–Original; a halfway point where there is some difficulty in finding an explainable connection between the two, even if there is something, like a hidden thread; the remix is not recognised as a 'variation' of the original because the sound's transformations have broken any perceptual similarity.

Stockhausen's *Telemusik* (1966) presents an example of the latter possibility, where excerpts of traditional music recordings from Africa, Japan and other countries of the world are used throughout. The excerpts are not simply assembled in a collage, but instead are transformed by rhythmic, harmonic and dynamic modulations. These transformations – realised by transposing pitch, amplitude modulator, ring modulator, octave filter – make the original recordings almost always unrecognisable. Pousseur said that *Telemusik* 'reigns against a desire to dissimulate, to hide' (Pousseur 1989), even though in *Hymnen* (1967) the masks have come off. Stockhausen wrote that

national anthems, are the most popular music there is. They are sound signs, sound objects familiar to many people. Actually, everyone is familiar with two or three of these anthems, at least the beginning of the melodies if not the texts. Due to television and radio broadcasts of official occasions, more and more people know the

national anthems as the musical decoration for political or sport events ranging in nature from serious, sad to cheerful, happy. What these anthems represent are nations of people. National anthems are musical recognition signs of peoples, thus something generally accepted. In my composition *HYMNEN*, I wanted – in connection with my composition *TELEMUSIK* and after the preceding works *KONTAKTE* and *GESANG DER JÜNGLICHE* – to use a recognisable material the most general that exists. If there had been anything on this Earth more generally musically recognisable – musical objects familiar to as many people as possible – then I would have chosen it. (Stockhausen 1995)

Like *Telemusik*, *Hymnen* is not a collage.

Numerous compositional processes of intermodulation were employed in *HYMNEN*. For example, the rhythm of one anthem is modulated with the harmony of another; the result of this is in turn modulated with the timbral constellation and melodic contour of electronic sounds: finally such an event is given a specific spatial movement. Sometimes part of anthems are allowed to enter the environment of electronic sounds in raw, almost unmodulated form; sometimes modulations lead almost to the point of unrecognisability. There are many degrees in between, many levels of recognisability. (ibid.)

Cases of unrecognisability, of course, exist. If the entire ‘remix’ is totally unrecognisable as the remix of an original piece, it is difficult to define the relation required to use the category ‘variation’ and the category ‘remix’. Stockhausen imagined such a situation:

Suppose you take a recording of a Beethoven Symphony on tape and speed it up, but in such a way that you do not at the same time transpose the pitch. And you speed it up until a particular colour of timbre, a particular shape or dynamic evolution, and an inner life which is what Beethoven has composed, highly compressed in time. And it is a very characteristic sound, compared let’s say to a piece of Gagaku music from Japan if it were similarly compressed. On the other hand, if we were to take any given sound and stretch it out in time to such an extent that it lasted twenty minutes instead of one second, then what we have is a musical piece whose large-scale form in time is the expansion of the microacoustic time-structure of the original sound. (Stockhausen 1989: 91)

One perspective here is that this might not be borrowing as such, but perhaps the simple use of materials that remain anonymous.

3. A TAXONOMY: CULTURAL CITATION

Cultural citation is much more nuanced than material sampling because at times it may be an abstract idea, or a premise that is recycled. If the way the idea is presented is different enough, then it is considered an independent and even innovative creation. Cultural citation is defined by intertextuality, which is commonly found in literature ... there is no direct taking of actual

words configured in the same exact order, but rather a general or implicit reference to a previous cultural object that in turn validates the object a reader experiences. Intertextuality can be vague, particularly when it moves beyond written texts on to all media. It consists of embedding or repurposing a concept, idea, style, or general aesthetic within another form not by taking directly something that is already produced, but by producing something that makes reference to pre-existent material. It can be a distant or indirect reference by way of paraphrasing; it may be a close emulation often in terms of mimetic reference of forms. The intertextual process in these cases makes the works by the respective authors important contributions to culture. And for this reason, this type of cultural citation can also be called intertextual citation. (Navas 2018: 31)

At this point it is useful to look at two levels belonging to the Cultural citation process: 1) a level of references of well-known concepts originating from sound arts and 2) a level of reference of something originating from other media.

3.1. Cultural citation from sound arts: Intertextuality

In acousmatic pieces there are infinite references to concepts, ideas, styles or general aesthetics that can originate from classical or popular music.

Two examples relating to the Italian electroacoustic composer Luigi Ceccarelli will be mentioned. In the first, *Exultet* (1996), Ceccarelli borrowed Gregorian Chant, and this encounter

brings to light certain unsuspected affinities and analogies between the chronological extremities of western music’s long journey from the depths of the Middle Ages until today. It is as if this whole process were closed in a circle, linking the sparse monodic vocality of the Christian hymnody at the origins of western music to the most sophisticated modern compositional techniques and the digital elaboration of timbre and musical structure. But it is not a question of technique alone as much as of a whole ethos and an attitude towards the qualities of sounds themselves (which also include the word) and this reception. (Masotti 2005)

The second example, an acousmatic work for theatre,

The Hand, is an emblematic history of rock music ... The solo instruments – vocals, guitar, bass and battery, as in any self-respecting rock band – are recorded, assembled and spatialized by computer. Their nature is thus continuously exasperated by electronic processing that transforms timbres and rhythms into complex and disorienting sounds ... The music of the show is made up of nine parts, each of which ideally embraces all the rock culture. Important ... references are heavy metal, dark rock, hard rock and punk, including all the endless currents that came from it, and even the blues, symphonic rock and funky inspired part of work. However, the most important reference is to the rock of the seventies,

in which the concert focused mainly on musical performance and not on spectacular superstructures. This is why it is considered *The Hand* a concert tout court. (Ceccarelli 2006: 10)

These two examples show that intertextuality is not the only sort of linear process from a composer A to a composer B; it is essential to introduce a third element X, just as Eco stated (Bernardelli 2010: 39). This third element is constituted by a set of chains of former influences between the infinite A and B; that is, ‘the universe of the Encyclopedia’, the overall human culture. In this way the model of the process of appropriation becomes more complex. It is possible, according to Eco, to identify three different situations (ibid.). First, author B decides to use something that he has identified in the works of A and he does not know that in reality he is appropriating a universal cultural element X. Second, author B decides to use something he has identified in A’s works and, starting from this discovery, he realises that in reality he is appropriating a universal cultural element X. Third, author B refers to something he has identified in culture X without noticing that A had already done the same operation. To exemplify, in the first case considered, one can think of an acousmatic composer B who decides to appropriate Stockhausen’s *Study I* (1953), adopting the model in full or in part and thinking that he has ‘cited’ only that work ignoring the whole historical course which led to integral serialism, the scientific model of sound and composition in vogue at the time, the dominant scientism in the ‘electronic school’ etc. In the second case, instead, we can hypothesise that composer B, after having assimilated the themes inherent in Stockhausen’s *Study I*, realises that Cologne and Darmstadt are the ‘broth of culture’ in which the conception of this Study has proliferated and therefore widens the range of its possible appropriations also to the works of Pousseur or other composers like him. Finally, in the third case, it may be thought that he starts from the full awareness of the overall poetics of ‘electronic music’ of those years and considers individual authors only as partial, individual exponents of a larger universe, a definite portion of the cultural encyclopedia. He will no longer think of placing himself in the orbit of an author, Stockhausen, but of inheriting overall themes from the school of Cologne and his era. The quality of appropriation, in conclusion, will depend on the competence of the person who practises it, that is, from the portion of the encyclopedia that he owns. In this perspective the model defined by Emmerson (1986) – a two-dimensional space constructed starting from the syntactical (abstract and extrapolated) and discursive (auditory and mimetic) dimensions of the languages of electro-acoustic music – may appear as a sort of ‘reasoned guide to appropriation’ through cultural

citation as it provides a sort of encyclopedic compendium of possible poetics, as he himself writes, ‘available to the composer’. Another tool to understand the process of appropriation is the application to the acousmatic music of Bloom’s theory (Bernardelli 2010: 31), born in the literary field. According to this theory every author would live, in his creative journey, a conflictual relationship with the previous authors, in particular the most important ones that constitute the canon of the discipline, a sort of ‘strong thoughts’, sometimes antagonists sometimes complementary to one another, with which it is necessary to confront. According to Bloom every author would fight

with the imposing and oppressive figure of a precursor or ‘poetic father’. The author therefore writes his work with a constant eye on the series of figures that constitute the great tradition ... of his time and his own culture. The consequence of this attitude, based on the necessity of ‘overcoming’ the precursor, is what Bloom defines a debt on the part of the author towards the chosen model. The great precursors ... thus exercise a strong psychological power on the new author. Through the act of appropriation and rewriting of the work of those who preceded him, the author finds himself facing what Bloom calls ‘anguish of influence’. The author in the course of his creative journey feels he is engaged in the task of freeing himself from the weight of the model, making evident the anxiety to distinguish himself from this figure of reference through the ways in which he misunderstands or ‘mis-reads’ the message and expressive forms. Thus each new author is obliged to look for his own space of affirmation in the ... tradition by struggling with those authorial figures that he himself has chosen as his precursors, and at the same time suffering the anguished weight of the creative debt contracted towards them. (ibid.)

Bloom was referring to a centuries-old literary tradition, but also to the ten-year tradition of acousmatic music, as seems evident here from the presence of powerful reference figures who have conditioned the current poetics and the processes of appropriation. Pierre Schaeffer is one of the reference figures that a whole generation of GRM musicians dealt with, mostly in the first 20 years of life of concrete music.

It is the case, for example of Luc Ferrari, for years Schaeffer’s close collaborator. Ferrari appropriates the patrimony of ideas and practices of concrete music, to which sedimentation, moreover, he himself participates. Then, at a certain point in his creative journey, he decided to violate a basic principle of the Schaefferian paradigm: he introduced in one of his pieces, *Hétérozygote* (1963–4), explicitly referential sound materials (animal bleating, fragments of conversations, etc.).

‘Pierre Schaeffer’, as Ferrari noted, ‘did not love *Hétérozygote*: this surprised me a lot. I simply wanted to escape the conventional style of music produced for

concerts, exactly as sculptors try to get out of a conventional idea of painting, linked to paintings that are exhibited in museums. I was looking for another model and the best proof is that *Hétérozygote* took five or six years to take place in a concert by the GRM. (Gayou 2001)

In turn, the work of Ferrari becomes a possible canon which 'starting from the years 1999–2000, many young people of the techno generation who are looking for aesthetic roots' (Gayou 2007: 138) will confront. A second example related to the conditioning ability of the canon can be found in the events of acousmatic music in Italy during the advent of digital technologies. The Italian acousmatic of those times, called computer music in some other countries, is dominated by a paradigm that fuses the scientist spirit of integral serialism of the early years of the Cologne Study (later superseded by Stockhausen in other directions) with the strong technological impact of imported audio programming languages such as Music V from the USA. The centrality of sound synthesis, especially additive synthesis popular at the 'Cologne School' in its early years, finds the ideal operative tool in 'Music-N'¹ programming languages. The Italian acousmatic composition resort to the Fourier model and to acoustic and psychoacoustic knowledge as an ideal foundation to support compositional creativity, usually denying the possibility of other approaches. With difficulty, especially in the 1990s and in the presence of a vertical collapse of acousmatic productions, the composers try to get out of the additive synthesis canon often referring to alternative paths indicated by Xenakis or the developments of concrete music.

3.2. Cultural citation from other media: intermediality

Finally, it is also possible to practise borrowing by means of undertaking cultural citation of the whole media. Botler and Grusin introduced the concept of remediation starting from the famous comment by McLuhan: 'The content of any medium is always another medium. The content of writing is the speech, just as the written word is the content of print, and print is the content of the telegraph' to suggest a 'kind of borrowing in which one medium is itself incorporated or represented in another medium'. They 'call the representation of one medium in another medium remediation' (Botler and Grusin 1999: 45).

¹In 1957 Max Mathews wrote the Music program at Bell Labs. This program generated sound files through digital synthesis. Later, other software was designed on the Music model and they constitute the Music-N family whose most famous exponent is Csound (written in 1986 at Boston MIT) still used all over the world.

The question of borrowing could be then reformulated in this way: what does the acousmatic remediate, that is, in which way does the acousmatic medium represent other media inside of it?

A famous note of Stockhausen about *Hymen* could assist in this line of enquiry:

I created a situation which one experiences time and again when driving in a car at night and listening to the car radio, or when at home at night searching for a programme on a short-wave receiver. Especially around midnight one hears many fragments of national anthems, which mark the end of the day. I have left the short wave sounds as they are, with all the crackling and interference and intermodulation, shreds of Morse code, etc. (Stockhausen 1995b)

Stockhausen did not refer to radio drama, namely a remediation of the theatre by the radio, which was a very frequent practice of experimental composers (Maderna, Berio, Ferrari, Henry, etc.). He just refers to an almost 'primitive' step of borrowing, that is, the borrowing of one of the most known stereotypes (the moment of basic interaction of all the listeners of the old analog receiver). He borrows this kind of media relation from acousmatics. In fact, according to Botler and Grusin, 'A medium is that which remediates. It is that which appropriates the techniques, forms and social significance of other media and attempts to rival or refashion them in the name of the real. A medium in our culture can never operate in isolation, because it must enter into relationship of respect and rivalry with order media' (Botler and Grusin 1999: 65). How does the acousmatic medium compare with other media? What relationships exist between the acousmatic and other fixed media?

Ferrari, for example in *Chantal* (2009), often incorporates a language typical of the radio reportage based on shots, musical breaks and a structure similar to an interview or a reportage, in particular, one that contains a portrait.

Moving away from a realistic scene, acousmatics could borrow the typical cinema approach to the sound. Diegetic sounds are the sounds of the actors' voices or of all the environmental movie elements that are visible or invisible (including music products in the represented story).

Extradiegetic sounds are those sounds that are not within the action, like the voice of a narrator and all the 'composed' sounds such as soundtracks and sound effects. In Favre's *L'Athanor* (1980) this scheme is respected very clearly: there are sounds of narrative action that reveal human actions and presence and, suddenly, a 'musical sound'; for example, a very traditional sound of a guitar that assumes the role of 'soundtrack'. 'Cinema for the ears', on the other hand, is one of the names of acousmatics.

4. MY EXPERIENCES OF BORROWING IN THE ACOUSMATIC COMPOSITION

It is perhaps inevitable that a composer who has studied the processes of appropriation is motivated to consider, from this point of view, his own works. This can be considered a sort of self-analysis aimed at discovering the sources of one's inspiration and at rationalising what is hidden or implicit.

For some years I have been working on mixed music projects (music combining acoustic instruments and fixed-media electronics) together with composers of instrumental music. We present in concert first the instrumental composition and then the acousmatic remix, which therefore becomes a pre-programmed borrowing. The instrumental piece and the acousmatic piece overlap only for a few seconds. Therefore, the mixed work actually presents itself with a sort of mirror in which the second part (the remix) constitutes a 'double' of the first. Starting from these experiences, I also began to remix recordings of instrumental works of other authors from their CDs or from Internet. One example of such is a composition of Fausto Romitelli, *Nell'alto dei giorni immobili* for six performers (1990): from this work I have composed *Nell'altro. Remix Romitelli* (2011). Later I also remixed fragments and entire acousmatic works of my own compositions. This intense activity has encouraged reflection on the subject of borrowing for practical needs, questioning both the theoretical thinking and the works of our classics together with personal practice. I posed two basic questions during this reflection. First, why should a composer start from the sounds of other authors or in any case from sounds and/or sequences (even of my composition) already 'formed'? Second, what insight or new knowledge has been gained as a result of these experiences?

I will try to give an initial answer to these questions by analysing the compositional process of the *Variations of Evan Parker's Saxophone Solos* (Sound example 1) a posteriori.

4.1. Material sampling and cultural citation in the *Variations*: remix, performative sequences

In *Variations of Evan Parker's Saxophone Solos* (Degrassi 2018) I used and remixed all the solos contained in the CD *Saxophone Solos* (Parker, vinyl 1976, CD 2009).

These solos constitute examples of improvisational sequences. I used these sequences as a basis for making my *Variations*, because I found similar analogies between Parker's solos and the performative sequences (*séquences-jeu*) of the French concrete music that I have been using for years in my compositional and didactic work. Dufour wrote 'a performative sequence is a musical phrase lasting between one and a half

minutes and three minutes, obtained spontaneously starting from a way of playing a single sound body and whose always new development respects the "natural" characteristics of the device' (Dufour 2015). These sequences contain in themselves many elements of the future acousmatic composition and even if they may be subjected to transformations and mixing, they will retain an important trace of the author's expressive research. From this, one derives an obvious logical consequence: in the acousmatic composition the author does not create 'abstract' scores that others will transform into sound, he directly records 'his' sound performances or, as in the case of my *Variations*, the composer directly uses other people's sounds. In the composition, traces coming from the basic sequences are indelible and influence the whole the compositional development; in the case of *Variations* it is the traces of Evan Parker's poetics.

Naturally this presupposes that the sequences are not altered by electroacoustic manipulations until they are totally unrecognisable. As mentioned above, a minimum threshold of recognisability is the key to my idea of borrowing procedures. If recognisability is consistently impossible, I believe we can speak of the simple use of sound but not as appropriation.

4.2. Material sampling and cultural citation in *Variations*: computer programming, loop, accumulation

Continuing the a posteriori examination of my compositional process, I have to point out the importance of the operating environment hardware and software that is not aesthetically neutral but is, in my opinion, part of the context of a cultural citation as it is a technical-cultural model that we often assume uncritically. In this case, I set up an environment that allowed me to play the Parker pieces then determining moments of starting the reading and/or inverting the reading and/or decreasing or increasing the duration of the sounds without altering their pitch. This is the classical a priori setting allowed by the midi control of any workstation that I have resumed and reused in anticipation of not significantly altering Parker sounds. Yet, from the first moment I realised that this environment, which I thought I was controlling, was actually shaping me because it offered me unexpected aesthetic solutions that I immediately accepted. First of all, Parker pieces were read continuously thus creating a loop since I had not programmed a stop of the reading at the end of each of Parker's sound.

I enhanced this suggestion that the technological stereotype gave me and therefore the loop became the dominant feature of the compositional construction. Normally I do not use the loop in my pieces, but this technical potential has evoked the possibility

of working ‘a la manière de’, in the style of traditional composers of concrete music, such as Pierre Henry. I also sensed that that single improvisation could, through technological elaboration, multiply itself in a collective improvisation, creating some kind of ‘digital double’ of Parker’s. Multiplying the reading of the Parker solos, I realised that the sounds, which appeared one after the other, generated a feeling of progressive accumulation, another stereotype widespread in the acousmatic composition and also in instrumental music. The use of a pervasive loop and a continuous and predictable accumulation has become the cornerstones of my project. Thus, the compositional project has taken shape in a dialectic relationship between cultural stereotypes, both technological and specifically musical, on the one hand, and creative instances, on the other.

4.3. Cultural citations form other media in the *Variations*: remediation processes

A further reflection investigates the topic of remediation. As already mentioned, remediation is the representation of an artistic medium through another medium. This is the case of a work, such as the *Variations*, whose compositional process starts from a recording of a live performance.

The first remediation (realised by Parker) took place at the time of recording the performance. This is the recording of a specific performance, held on 17 June 1975 at the Unity Theatre (London) and 9 September 1975 at the Fmp Studio (Berlin) and not the product of sessions in the studio realised at different times. It is possible that Parker has re-edited the recordings but, in any case, that does not change their nature of testimony of an event, of that precise event, an improvisation session. It is necessary to distinguish, in fact, ‘two ways of understanding musical recording. The first way consists of conceiving it as a document of a musical event, while the second in conceiving it as an artefact resulting from the assembly of fragments of sound reality – the “phonomontage”’ (Arbo 2004: 178).

The second remediation consists in the passage, realised by me, from testimonial musical recordings of an event to the composition of an acousmatic work. The primary element that testifies to this passage is constituted by the construction of a space of the acousmatic work, which profoundly modifies the sensation of space present in the testimonial recordings, that is, the sensation of more or less aseptic and static space of the concert hall. The internal space of the acousmatic work, as in the case of *Variations*, becomes dynamic and can be varied by the composer in a gradual or sudden way. In this way, the perception of the recording of a performance can be transformed, progressively, into something structurally different. The recognisability

of instrumental fragments is maintained, but they are inserted in a clearly virtual and no longer ‘realistic’ context.

4.4. Cultural citations in the *Variations*: improvisation, randomness and John Cage’s idea of improvisation

In analysing the compositional process of *Variations*, it can be seen that the idea of improvisation, was, first of all, borrowing: the basic structures of the piece were produced by electroacoustic improvisation. Therefore, it is about improvisation on improvisation. Yet, improvisation is not randomisations. And then, second, sometimes an ‘idiomatic’ improvisation idea was used (respecting, or at least trying to respect Parker’s language); at other times we relied on randomness, renouncing (by means of programming of electroacoustic devices) to control the sounds produced by electroacoustic improvisation. This idea is borrowed from John Cage’s indications about improvisation: play an instrument on which you do not exercise any control, or in any case, a control of a lower degree than what we are used to (Kostelanetz 1987: 302). In the final editing, it was decided to use sounding results to conserve the energy of Parker’s recordings.

The whole work, in conclusion, is the result of appropriation, not only of sounds but also of ideas, approaches and techniques sometimes contradicting each other: the compositional work becomes in this context a metacompositional work.

5. CONCLUSION

At the end of this path a need emerges for future developments to consider the practice of borrowing as the natural logic of development of a new artistic medium through cultural quotations and material sampling. This also applies to the acousmatic medium, where it would be interesting to trace the genesis and the development in a systematic way.

To give just an example, looking for the musical roots of concrete music (and therefore of acousmatic music) Gayou (2007: 48) identifies Italian Futurism, the advent of techniques on fixed sounds and images from Russian Futurists, Satie and Dadaists, Surrealism, modern music with particular reference to Debussy, Messiaen and Varèse, Lettrism, Cage’s teaching etc. as sources from which acousmatics have gained appropriating techniques, ways of signification and so on. Instead of looking for the medial roots, Gayou considers the important influence on the genesis of concrete music on the part of radioplay, and in general experimental radio practices.

In 1936, Schaeffer, during a study trip in Germany, encountered for the first time the Hörspiel. Entering the RTF (French Radio) in 1942 'he already carries the idea of a research study in which artists and technicians tried, together, to develop a new dramatisation adapted to the radio, probably a little model of what he had seen in Germany before the war' (ibid.: 24). Starting from this solicitation, Schaeffer organised a training course for new radio arts in which the actor, director and playwright Jacques Copeau taught some young actors how to speak on the microphone and in general how to translate a written poetic text into sound. We can think that in this experience Schaeffer takes possession of a wealth of ideas and techniques that are reused in the theoretical definition and in the practical invention of concrete music. In fact, as Gayou still points out, that experience remained for Schaeffer 'a successful model of symbiosis between art and technique, between research and creation; interdisciplinarity is very productive. Later, throughout his career, he will only improve this model' (ibid.: 24). Cinema is of similar importance to Schaeffer. 'According to him, cinema and radio have many points in common: in both cases the object is transformed into an image – visual in the cinema, auditory on the radio – the manufacturing techniques are similar: capture, editing, special effects, mixing, projection/diffusion' (ibid.: 31). In conclusion, paraphrasing Manovich (2001: 36), it can be said that it is necessary to study the language of acousmatic art by placing it into the history of modern musical and media cultures. We need to look for the affinities and differences between the languages of fixed music and cultural forms and the previous languages, both musical and otherwise. One must wonder what makes the unique way in which acousmatic works create their virtual spaces, they turn to the listener and represent space and time. Basically, we need to understand how acousmatic art has appropriated the practices of other disciplines, whether musicals or not. It will be necessary to continue along this 'research paradigm'.

SUPPLEMENTARY MATERIALS

To view supplementary material for this article, please visit <https://doi.org/10.1017/S1355771819000232>

REFERENCES

- Arbo, A. 2004. Qu'est-ce qu'un enregistrement musical (ement) véridique? In P. H. Frangne and H. Lacombe (eds.) *Musique et enregistrement*. Rennes: Presses Universitaires.
- Bernardelli, A. 2010. Il concetto di intertestualità. In A. Bernardelli (ed.) *La rete intertestuale. Percorsi tra tesi, discorsi e immagini*. Perugia: Morlacchi.
- Bolter, J. D. and Grusin, R. 1999. *Remediation. Understanding New Media*. Cambridge, MA: MIT Press.
- Brando, S. 2008. Booklet notes to *Ph 27-80* by D. Dufour. CD, EAP Records, EAPR01.
- Ceccarelli, L. 2006. *La mano. Quel che resta del rock in Teatro della Albe Lamano*. De profundis rock. Rome: Luca Sossella.
- Chion, M. 2003. *Pierre Henry*. Paris: Fayard.
- De Benedictis, A. 2000. ... at the Time of the Tubes ... A Conversation with Marino Zuccheri. In V. Rizzardi and A. I. De Benedictis (eds.) *New Music on the Radio. Experiences at the Studio di Fonologia of the Rai, Milan 1954–1959*. Rome: Cidim-Rai.
- Dufour, D. 2015. Tout l'art est d'entendre, pédagogie de la composition acousmatique. In *Musique et technologie*. Paris: Institut National de l'Audiovisuel.
- Emmerson, S. 1986. The relation of language to materials. In S. Emmerson (ed.) *The language of electroacoustic music*. London: MacMillian Press.
- Gayou, É. 2001. Avec, de, sur. Entre. In D. Teruggi (ed.) *Luc Ferrari Portraits Polychromes*. Paris: Ina.
- Gayou, É. 2007. *Le Grm Groupe de recherches musicales*. Paris: Fayard.
- Grossi, P. 2008. CD booklet notes to *Musicaautomatica*. Milan: Die Schachtel, DS16.
- Henry, P. 1998. *La 10eme Remix*. Schedule of 1998 Futura Festival at Crest, Drôme, France.
- Kostelanetz, R. 1987. *Conversing with Cage*. New York: Limelight Edition. Reprinted 1996, trans. F. Masotti. Rome: Edizioni Socrates.
- Manovich, L. 2001. *The Language of New Media*. Cambridge, MA: MIT.
- Manovich, L. 2005. Remixability and Modularity. manovich.net/content/04-projects/046-remixability-and-modularity/43_article_2005.pdf (accessed 29 may 2019)
- Manovich, L. 2007. What comes after remix? manovich.net/content/04-projects/057-what-comes-after-remix/54_article_2007.pdf (accessed 29 may 2019)
- Masotti, F. 2005. Booklet notes to *Exsultet*. Rai Trade, Cd Rtc 006.
- Merriam, A. P. 1964. *The anthropology of music*. Evanston: Northwestern University Press.
- Nattiez, J. J. 1990. *Music and Discourse: Toward a Semiology of Music*. Princeton: Princeton University Press.
- Navas, E. 2018. *Art, Media Design, and Postproduction: Open Guidelines on Appropriation and Remix*. New York: Routledge.
- Pousseur, H. 1989. *Composer (avec) des identités culturelles*. Paris: Institut de pédagogie musicale et choréographique. inagrm.com/var/inagrm/storage/original/application/8df310919839c4dec33cd836850031b4.pdf
- Santi, P. 1985. *Le nuove tecnologie: musica elettronica e radiodrammi*. In M. Baroni and R. Dalmonte (eds.) *Bruno Maderna documenti*. Milan: Suvini e Zerboni.
- Stockhausen, K. 1989. *Four criteria of electronic music*. London: Marion Boyars.
- Stockhausen, K. 1995. Booklet notes to *Hymnen on Stockhausen Complete Edition*, CD n.10. Stockhausen Verlag
- Xenakis, I. 2002. CD booklet notes to *Persepolis+ Remix*. Asphodel.

DISCOGRAPHY

- Cage, J. 1995. *Imaginary Landscape n.5* (1952). *On Imaginary Landscapes*. Hat ART, CD 6179.
- Ceccarelli, L. 2004. *Exsultet*. Rai Trade, Cd Rtc 006.

- Degrassi, F. 2018. *Variation of Evan Parker's Saxophone Solos*. francodegrassi.bandcamp.com/track/fourth-study-for-antiphonies-variations-on-a-solo-of-evan-parker
- Degrassi, F. 2011. *Nell'altro. Remix Romitelli*. <https://francodegrassi.bandcamp.com/track/nellaltro-remix-romitelli>
- Dufour, D. 2013. *Ph 27-80 (2008)*. EAP Records, EAPR01.
- Favre, M. 1994. *L'Athanor* (1980). On *L'Illusion Acoustique*. Gmvl, CD 14/015.
- Ferrari, L. 2005. *Strathoven* (1985). On *Petite Symphonie / Strathoven / Presque Rien Avec Filles / Hétérozygote*. BV Haast Records, BVHaast 9009.
- Ferrari, L. 2009. *Chantal ou le portrait d'une villageoise (1977-1978)*. Ohm éditions, Qc 051.
- Henry, P. 1988. *La Dixième Symphonie de Beethoven* (1979). Philips, 420 636-2.
- Henry, P. 1998. *Remixe Sa Dixième Symphonie* (1998). Philips, 462 821-2.
- Henry, P. 2003. *Par les grèves* (2001). On *Various Replay Debussy*. AURATON, 472 801-2.
- Henry, P. 2003. *Dracula* (2003). Philips, 476 114-5.
- Parker, E. 2009. *Saxophone Solos* (1976). Psi, 09.01.
- Stockhausen, K. 1995. *Telemusik* (1966). On *Stockhausen Complete Edition*. CD n.9. Stockhausen Verlag.
- Stockhausen, K. 1995. *Hymnen* (1967). On *Stockhausen Complete Edition*. CD n.10. Stockhausen Verlag.
- Xenakis, I. 2002. *Persepolis + Remixes Edition I* (1971). Asphodel, ASP2005.