

The Emergence of an Ecstatic-materialist Perspective as a Cross-genre Tendency in Experimental Music

RICCARDO WANKE

Centre for the Study of the Sociology and Aesthetics of Music – CESEM, Faculdade de Ciências Sociais e Humanas, Universidade Nova de Lisboa, Av. de Berna, 26 C, 1069-061 Lisbon, Portugal
Email: riccardowanke@gmail.com

This article proposes a perspective on certain practices within experimental music based on a particular understanding of sonic materialism. By tracing correlations and marking divergences between post-spectralism, minimalism, electro-acoustic music, glitch and IDM's offshoots, this article reflects on *sound-in-itself*, the conception of space and time in music, poietics, perceptual and cultural factors, and suggests that there is a particular understanding of sonic materialism – which I term *ecstatic-materialism* – that is rooted in a synthesis of perception, theory and embodied actions.

This perspective explores a new expressivity of sound in which the sound itself is the point of convergence for creative impulses and perceptual motives, sound being the common territory between composer and listener. By developing the idea of an ecstatic-sonic-materialism, various works across different genres can be brought together according to this mutual convergence on sound that embodies acoustic properties, intimate traces, external and corporeal experiences.

1. INTRODUCTION

Compositional and perceptual studies have recently tended to absorb all conventional parameters of music, such as timbre, harmony, noise and spectrum, into a detailed but unified understanding of *sound* (Solomos 2013). Musical compositions are being conceived, performed and perceived by approaching the sound world as a complex whole rather than as an area having distinct and separately structured dimensions. A number of theoretical and creative works propose a description of a sonic materialism in which the attention moves towards *sound-in-itself*. Philosopher Christoph Cox has animated the debate on the materiality of sound, discussing a new theoretical stage capable of going beyond representation and signification (Cox 2011). The composer Fausto Romitelli has insisted on the need to include materiality in musical practices: these activities should be enriched by the contribution of practical experience in order to develop a complex organism with a metabolism, carnality, density, thickness and grain character (Romitelli 2001). Döbereiner, criticising the idea of a

living character of sound, claims that sound-in-itself is accessible only through composition, and that the materiality of sound belongs neither to the subject nor to the object but remains in compositional practices 'as material (re)configurings of the world' (Döbereiner 2014).

I recently proposed a sonic correlation between contemporary instrumental and post-spectralist pieces and several offshoots of glitch-electronic and IDM (Wanke 2015). I believe these convergences have to do with a common focus on the sound-in-itself, providing access to a sonic materialism from different directions. Correspondences between figures such as Georg Friedrich Haas, Giovanni Verrando and Bernhard Lang, and performers coming from independent scenes such as Pan Sonic, Autechre and Raime concern a common focus on the sound-in-itself and its intrinsic characteristics and show similar choices such as the use of complex spectra and periodic movements within globally rich and sculptural textures (Wanke 2015). The sound, continuous or discrete, is conceived as a dense, tactile and three-dimensional matter that is moulded as if it were a physical substance. This idea of sound, which recalls Scelsi's definition of spherical sound (Scelsi 2006), touches both stable materialist and unstable ecstatic concepts in an apparent self-contradiction. Scelsi's sound is profound and vibrant; it is typical of an exploration of the inner extent of sound itself, but is also characterised by its being intuitive and enigmatic as an almost mystical material. It behaves as if it were a living entity, typical of its nature, it is concrete (i.e. material) yet unstable (i.e. ecstatic).

This cross-genre viewpoint that I call the *ecstatic-materialist* (E-M) perspective is defined by specific musical characteristics. Some of them coincide with the main concepts expressed by spectralism, minimalism and *musique concrète*, while others emerge as typical only of this multi-genre perspective, marking it out within the variegated panorama of today's music. By discussing these characteristics, that is, the materialist approach to sound, the conception of time and

90 space, and the compositional and perceptual aspects,
 91 this article postulates the presence of an ecstatic-
 92 materialist domain by evidencing similarities among
 93 distant currents and disclosing crucial differences
 94 between contiguous styles.¹

95 **2. THE ECSTATIC-MATERIALIST**
 96 **PERSPECTIVE**

97 Abraham Moles, in his seminal book on information
 98 theory (Moles 1968), presents two different theories
 99 that describe our perception of the external world: the
 100 theory of scanning and the theory of form. The first
 101 asserts that perception derives a message from the
 102 scanning of various distinct elements, perceiving them
 103 as a collection of separate elements, while the theory of
 104 form states that the message arrives as a unified form –
 105 a series of elements perceived as a whole unit and not
 106 as a collection. Moles shows different possible syn-
 107 theses of these theories, but this dual representation is
 108 useful in making clear crucial aspects of the ecstatic-
 109 materialist perspective.

110 Certain practices within electroacoustic music²
 111 conceive the structuring of a piece in a way that
 112 appears comparable to the theory of scanning. These
 113 methods proceed from a conception of various
 114 elements, mainly differentiated by their morphology,
 115 to a *composing* of a complex combination. A theory of
 116 a morphology of sounds has been developed not only
 117 for academic studies but also within the fields of
 118 perception and composition (Smalley 1997). Typo-
 119 and spectro-morphologies open up to processes based
 120 on articulation and construction using distinct sonic
 121 elements in collections.

122 In contrast, the E-M approach embodies the theory
 123 of form. Compositional methods as well as perceptual
 124 approaches are integrated processes in which compo-
 125 ser and listener search for a unified sonic matter. The
 126 composer creates the sound as a single entity to be
 127 developed. There is often an intentional limitation of
 128 the sonic material and the music does not progress
 129 according to a functional design. Listeners approach
 130 the sound perceiving a single body that evolves. Sound
 131 is then a form conceived and appreciated as a whole
 132 and explored through its complex characteristics.

¹It is worth clarifying that the aesthetic and musical perspectives from various contexts examined in this article represent extreme cases of a panorama in which many more moderate stances exist. Taking polarised examples helps in demonstrating clear differences and key details.

²The term ‘electroacoustic’ is a flexible designation that covers an immense range of musical styles and includes in the range of 81 genres and categories (cf. EARS (www.ears.dmu.ac.uk)); however, in this article I use it as a label that spans acousmatic, sonic art, multichannel diffusions and mixed-sound compositions, and includes figures such as Horacio Vaggione, Jonathan Harvey and independent sound artists such as Robin Rimbaud and Steven Roden. When necessary, I specify whether I refer to the academic or the independent context.

In addition to this parallel with the theory of form,
 the dual vision of this *ecstatic-materialism* rests mainly
 on a particular conception of sound and its positioning
 as the locus of convergence of composer and listener
 within various frameworks and contexts.

It is a *materialism* because both author and listener
 within this perspective intend to explore the substance
 of sound-in-itself, its consistency and presence, to
 confront dense masses and examine the constitutive
 elements of raw sonic matter. Materialist sound serves
 itself, but in embracing subjective experiences and
 extra-musical elements as part of the listening and
 creative processes it calls to a reality and carnality
 that it conveys through the expressivity of pure sound.
 Furthermore, it is an *ecstatic* materialism: for the
 composer, this refers to the unstable, ephemeral and
 personal nature of sound, its liminal aural character-
 istics and its intimate relation with time and evolution;
 E-M sound is to be understood as not just a sonic
 substance but also as an unstable and transitory
 experience. For the listener, *ecstatic* concerns the
 liberty to move within the intrinsic characteristics of
 sound: to freely associate insights, fleeting impressions
 and to penetrate an author’s sense of sound.

Sound is the common ground between creator and
 recipient in which the vital impact of raw sound and its
 intimate temporality and spaciousness incorporate the
 extra-musical and bodily aspects. Therefore, sound is
 both tangible, as physical material, and volatile, due
 to its ephemeral behavior in perception.

With the E-M perspective, the vision of music that
 claims an impersonal and scientific investigation of
 and approach to sound, detached from everyday life
 and ‘purified’ from extra-sonic traits, is left behind.
 Composers that fall within the E-M perspective convey
 elements of practical experience (Romitelli, Pan Sonic)
 and intimate discovery (Grisey, Scelsi) through sonic
 possibilities so that their music, even if it is founded
 mainly on research into purely sonic aspects and
 maintains a dramaturgy and a personal touch. Listeners,
 each within their own context, are engaged in a rich
 listening experience, free in their interpretations and
 sensations: they are faced with pure aural stimuli and,
 as a result of a specific cultural and aesthetic frame-
 work of communication, they get involved in intuitions
 and personal exchanges. Perception is far from normal-
 ised and automated, it is a captivating and inclusive
 sonic engagement that unfolds as an open, personal,
 unique and thoroughly involved participation, as a
 synthesis of temporary feelings and sociocultural habits.

In presenting a series of examples from contemporary
 instrumental music, post-spectralism, minimalism
 and electronic-glitch, I delineate this cross-genre E-M
 perspective by focusing on musical perception and
 conception, aural references, and extra-musical content,
 showing that several details frequently overlap, being

133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189

essentially part of a single transversal vision of sound across several currents of today's music, and belonging to both composer and listener.

3. SOUND

Some practices within electroacoustic music, that is, those coming out of *musique concrète*, acousmatic music and sonic art, have started from the concept of *reduced listening* and have gradually moved towards the inclusion of several mimetic aspects (Emmerson 1986; Landy 2007) whilst still drawing on the Schaefferian definition of 'sound object'. Some composers and scholars have criticised and developed this concept into that of 'event' or 'image', enhancing the debate around phenomenology (Bayle 1989; Kim-Cohen 2009; Voegelin 2010; O'Callaghan 2010; Bonnet 2012), but still the legacy of *musique concrète* has led to a particular aesthetic and musical syntax. From a very general point of view, this aesthetic is grounded in the idea of *composing* the sound (*composer*, *développer*), creating a number of finite aural events combined together according to their morphology to constitute complex sonic arrangements. Horacio Vaggione states: '[t]he compositional, it seems to me, would be anything but articulable. ... *To compose is then equivalent to generating genuinely singular events and articulating them in larger and larger groups without losing the sense of these singularities*' (Vaggione 1998: 154; italics in original).³

The parallel with Moles's theory of scanning lies exactly in the 'sense of these singularities': pieces are built from units and elaborated through functional relationships that are operational within different domains (e.g. spectral, dynamic, temporal or spatial). This approach reaches a significant complexity of musical syntax that is intended to be perceived as an interconnected structure, a kind of language. Sound here is complex, elaborated, sometimes deceptive and ambiguous, multifaceted and to some extent functional and representational. Electroacoustic composers, such as Bernard Parmegiani and Denis Smalley, *compose* sonic events and arrange them in terms of relations, successions and differences.

On the other hand, within the E-M perspective I am considering, sound is not *composed* (*composé*, *développé*), it is *posed* (*posé*, *déployé*). I emphasise here the double parallelism, highlighted in the case of Scelsi and spectral music (cf. Murail and Bériachvili), between *composing* and *posing* (or *de-posing*) on the one hand, and between *developing* and *deploying* (arraying) on the other. Sound is created and left to

unfold: the author conceives a unique form and proceeds to discover and disclose it (Grisey 2008; Ferguson 2007: 117). Sound, then, evolves and assumes organic characteristics (Bériachvili 2008). Even in the case of electronic music, for instance in some pieces by Pan Sonic, sound is natural, primordial, ancestral and instinctive. Mika Vainio and Ilpo Väisänen's sound is raw, radical, textural and material, whether it is continuous or discrete. They shape a sound, manipulating its spectral range, partials and dynamics to achieve a sonic material that has a physical impact on the ear. They frequently exploit acoustic interferences based on the exploration of the auditory phenomenon of critical bands and, due to the pervasive effect of aural beatings, their sound gives the sensation that a concrete imprint has been left behind. These characteristics are typical of continuous musical episodes made up of sustained and overlapping tones that build as a kind of material thickening, layering up in perception.

When discrete sounds are employed, each piece (or episode) within the E-M perspective proceeds by developing families of sounds in such a way as to create an internal natural coherence in which each aspect is part of an integrated form. The tendency of *convergence* is often present: different sonic events balance each other, occasionally recur (periodically or not) and do not progress as a fast succession of many different sound types. It is common to find a couple of elements that are continuously repeated and that work as a support for other discrete elements, strengthening the musical flow, as in the case of IDM artists such as Pole (Stefan Betke) and Peder Mannenfeld. In general, the repetition of sound elements, both continuous and discrete, could be rhythmic (e.g. IDM, glitch), hypnotic, cyclic (e.g. drone music, spectralism) or sporadic (e.g. glitch).

The concept of sound in E-M pieces is far from being that of an immutable entity; sound could exist as continuous or discrete episodes, but as an organic substance it forms, thickens and changes even whilst being always present – sound is *posed* and its presence is almost atemporal, yet it continues to change. Sound could be absent but its essence could still be perceptible, expanding the present out to the horizons of linear perception (Bergson 1998), as Solomos perceptively describes in the case of Scelsi's String Quartet no 4 (1964): 'not only do I hear things at every listening, moreover, it is always difficult for me to know if what I hear (or believe to hear) is "there" (in the score or in the recording) or whether I imagine it' (Solomos 2013: 261).⁴ This appreciation of what I term the *ecstatic* combines the eternal and the temporary, an eternity contained in an instant with impressions that are temporary: 'the D chord appears set

³Le composable, à ce qu'il me semble, ne serait autre chose que l'articulable. ... *Composer équivaut donc à générer de véritables événements singuliers et à les articuler dans des ensembles de plus en plus grands sans perdre le sens de ces singularités*' (my translation).

⁴non seulement à chaque audition j'y entends des choses, en outre, il m'est toujours difficile de savoir si ce que j'entends (ou crois entendre) est "là" (dans la partition ou dans l'enregistrement) ou bien si je l'invente' (my translation).

293 for eternity. But it is a light eternity, as if suspended:
 294 some ears will never perceive this chord, because it is
 295 constantly subject to interference, worked upon by
 296 unfamiliar notes' (Solomos 2013: 263).⁵ Within this E-M
 297 perspective, sound is simultaneously permanent (i.e.
 298 material) and ephemeral (i.e. ecstatic).

299 The distinction I made earlier between *posing* and
 300 *composing* sound could be related to the epistemological
 301 debate between the intuitive and the axiomatic posi-
 302 tions, in which the former is generally ascribed to Cage's
 303 idea of 'leaving the sound to be' while the latter asserts
 304 the poietic intention to compose the sound (e.g.
 305 Xenakis) (Solomos 2013: 355). However, within the
 306 E-M outlook, the presence and the intention of the
 307 author are essential aspects; pieces such as the String
 308 Quartet no 2 of Haas or Pan Sonic's *Keskeisvoima* reflect
 309 this characteristic (Verrando 2012: 195; Wanke 2015):
 310 these composers impose embodied movements onto
 311 the music, such as attacks, contrasts, vibrations, inter-
 312 ferences; such that the impression given is of a material
 313 that is far from being autonomous or self-developing.

314 The sound artist Richard Chartier examines min-
 315 uscule, unprocessed, 'nonreferential and precultural'
 316 sonic elements (Demers 2010: 76) whose nature is
 317 so impersonal and neutral that they appear to some
 318 degree distant. In exploring the inaudible and *micro-*
 319 *sonic* world, Chartier sometimes appears to reach
 320 the coldness of scientific objectivity that sets his work
 321 slightly apart from the perspective that I propose.
 322 Within the E-M thinking, the author manipulates and
 323 engraves the sound, signalling its presence in a way that
 324 makes the sound vibrant and vivid even during slow
 325 evolutions. For example, in an apparently similar way
 326 to Chartier, Eliane Radigue, in *Trilogie De La Mort*,
 327 creates extremely gradual transformations of almost
 328 static blocks of sound that hold a sort of internal reso-
 329 nance and movement, describing linear and curved
 330 fluctuations that seem to mimic human breathing.

331 The authors that exemplify the E-M perspective
 332 forge a quasi-permanent sound; handling frequencies,
 333 noises, dynamic contrasts as well as fluctuating and
 334 enveloping textures, they explore the instability of
 335 sound from liminal aspects (spectralists) to inter-
 336 ferences and collisions (glitch music) in a way that
 337 allows the music to pass through transitory moments
 338 and explore imperceptible flaws and illusory rifts of
 339 sound, evolving within a personal time flow.

340 4. TIME

341 Time in music has always been a fundamental subject
 342 in compositional, perceptual and theoretical studies.
 343 This dimension has taken on a great importance in the

last century, during which some composers renewed
 the seemingly primordial role of sustained and
 continuous sounds (e.g. Xenakis, Ligeti, Scelsi,
 Grisey), and others studied the effect of repetitive
 structures (e.g. minimalists).

Temporality in spectralism and minimalism has
 been explored through the use of repetitive structures
 creating hypnotic reiterations, periodic profiles or
 continuous shapes. One could associate these figures
 with the idea of flat evolutions where, based on
 Kramer's definitions (Kramer 1988), the concepts of
 linearity and verticality of time lie more with the
 perception of music over time than with the shape
 of musical episodes themselves. He then associates
 minimalist and spectralist visions of time with the
 concept of 'verticality' (Kramer 1988: 55).

Kramer's definition is very useful for a general
 distinction, but some terms of his exposition do not
 work properly in many cases (Bériachvili 2010: 100). In
 particular, the parallel between the lack of teleology
 and the absence of organisation and hierarchy does not
 always hold. Many works of spectralism and minim-
 alism contain long musical passages that are sub-
 stantially undifferentiated, but their development
 follows a strong dramaturgy creating musical forms
 that are ordered and organised.

There is a substantial, continuous gradation from
 pure linearity to extreme examples of verticality in
 music.⁶ Within this range, many composers utilise
 repetition as a means of playing with a listener's
 perception, and so it seems important to reconsider the
 meaning of adjectives such as linear, narrative, cyclic
 or teleological. Scelsi's *Quattro Pezzi*, for example,
 shows a sense of dramatic construction (such as the
 'tension/resolution' schema) typical of the Western
 musical tradition together with unconventional sonic
 metres commonly found in Eastern practices
 (Menesson 2008). Despite Kramer's idea, there is in
 this piece a sort of expectation and structural hier-
 archy, the musical time is not linear but a progression
 of sound flow is discernible. There is a narrative but
 not a teleological profile (i.e. directionality): the lis-
 tener is absorbed (or immersed) into a sonic *discourse*.
 In the case of the more recent *in vain* by Georg
 Friedrich Haas, musical time (and consequently the
 listener) moves at different rates: the succession
 of episodes with diverse profiles (e.g. circular, flat,
 accelerating), each one composed of repeated motifs,
 opens up to different temporalities and therefore to
 different perceptual dimensions.

I argue that authors such as Grisey, Scelsi, Radigue
 and Haas belong to the E-M vision and explore an idea
 of time that is internal and organic, intimate and vital.

⁵'l'accord de ré semble se fixer pour l'éternité. Mais c'est une éternité légère, comme en suspens: certaines oreilles n'entendent jamais cet accord, car il est sans cesse parasité, travaillé par des notes étrangères' (my translation).

⁶The verticality of music is evoked also within the theory of Ernst Kurth as potential energy, in which –similar to Bergson's vision – the author proposes the simultaneous and static nature of 'impressionistic' perception (Kurth 2006).

Bériachvili talks about the breath and the vibration of Scelsi's sound, and Scelsi himself talked about the 'right sound' (*suono giusto*) that needs the right time to develop. Grisey founded his research on Bergson's notion of duration (*durée*), in which the music is an expression of time and the musical material is a manifestation of pure duration (*son-durée*). Music is an organic *process* in which the sound is an 'être vivant', not fixed but ever becoming (Solomos 2003). Bergson's inner time cannot be expressed as a line, and in Grisey's music this idea of innermost time is realised through a distortion of a sound's perspective (Hervé 2004) and through the *process* of revealing: from human dimension (microphonic) towards universal dimension (macrophonic).

In discussing these dualities, between personal/universal and subjective/objective, an interesting parallel between Xenakis and Grisey reveals that these two composers similarly capture the emergence of sound through 'fullness' and 'presence' (Solomos 2003). Their musical figures leave nothing behind; their compositions reject absence and are characterised by a continuity of matter and fusion of components (cf. Moles's theory of form) that achieves a unique presence ('*un art de la présence*'; Solomos 2003).

Sound in the music of Scelsi (from 1959) is concerned with a personal journey and an internal sense of time: the music of the Italian composer holds a sort of 'warm' and gravitational centre (Scelsi 2006: 145; Bériachvili 2008; Solomos 2012). This concept of Scelsi's intimate tension merges with the notion previously proposed of E-M sound as *organic* and *vital*. Solomos suggests a sort of bio-morphology for Grisey's and Scelsi's visions (Solomos 2013: 272): the former achieves the fusion of form and material through the *process*, while in the case of the latter this convergence is fulfilled as a private encounter at the centre of sound ('*au cœur du son*'; Solomos 2012). Both composers find this unification in the sound, the return to it through repetition, as an integral phenomenon in which sound is a living entity. Cyclic forms and repetition define several aspects of our life (e.g. reproductive cycles) and regular recurrences such as heartbeat, breathing, walking and sleeping. All these shapes encompass the idea of the return to the original state and constitute 'one of our most basic patterns for experiencing and understanding temporality' (Johnson 1987: 121).

Within the E-M perspective, time could be seen as vertical, cyclic, intimate, organic, vital: this sense of time *gives time* for sound to develop. Music is characterised by its permanent presence and movement towards the private dimensions of perception rather than by any linear correspondence to chronometric time.

On the other hand, time conception in early minimalism shares several aspects with the E-M perspective but differs in several essential points.

Structuralist minimalists (Reich, Glass) typically work with *linear* units (i.e. groups of notes) continuously reiterated and perceived *vertically* over time, exploring profiles more than textures. In contrast, materialist minimalists (Young, Tenney) use musical practices similar to those of spectralist and avant-garde artists, such as the minute exploration of sustained neighbouring frequencies (Corbett 2000). They achieve different results from the spectral composers in terms of how the notions of 'stasis', 'teleology' and 'directionality' are realised. But in some cases their aesthetic could be considered to be within E-M: figures such as Phill Niblock, Eliane Radigue and Alvin Lucier represent good examples of this correspondence.

Special attention should be taken when considering the notion of time in electroacoustic music. It is not possible to cover all typologies of this vast field of music, but it can be observed that the central focus within certain streams on *composing* sound directly affects musical syntax and temporal evolution. Sound is structured as interlaced events and, as previously mentioned, this functional arrangement could be created within the spectral domain as well as in spatial and temporal dimensions. For instance, a 360° multi-channel piece could construct a virtual scenery in which a sound reverberates with a specific delay defining the geometry of space. In this case, the listener is immersed in a simulated reality with a corresponding time-frame. When this temporal simulation is disturbed by sounds of a different nature, holding, for instance, different delay times, the perceiver is puzzled and moved towards different temporal dimensions. In some cases, listeners are immersed in a multi-dimensional sonic design in which temporality appears to progress at different rates. Horacio Vaggione, for instance, presents his granular synthesis by introducing different temporalities (micro- and macro-scale) that depend on the morphology of sound (Solomos 1998, 2013: 403–14). When the succession of different sonic events is very fast, a listener's immersion within a coherent sonic space is more difficult and the perception of the temporal flow becomes more confused. In these cases, a listener is not immersed in a unique aural landscape and the succession of finite events tends to bring temporal perception back to chronometric time. Sonic objects could be defined by their relationship with time (i.e. a sound that begins, develops and ends) such that their finiteness is part of their nature. Thus, their combination within a non-coherent simulation pushes the listener to perceive them in chronometric time: objects are arranged in mutual relations and they are perceived distinctly, finitely, pushing the listener out of an immersive virtual reconstruction.

The immense aural potential of electroacoustic music therefore leads some practices to touch on certain notions of E-M vision (e.g. verticality-duration, repetition, intimate time-frame), whereas

511 other movements move towards a completely opposite
512 aesthetic (e.g. narrative, figurative).

513 **5. SPACE**

514 Spatial features of music have been deeply developed
515 within electroacoustic music in which spatial aural
516 characteristics are studied from both internal and
517 external points of view: sounds are combined, overlap
518 and occupy discrete sections of both spectral and
519 physical space.

520 The E-M perspective instead concentrates
521 exclusively on the internal space of sound: spectral
522 space enlarges and reduces based on sound's
523 evolution, sound exists within a compact *space-matter*
524 (*espace-matière*) in which sound expresses 'its colors,
525 light effects, tactile sensations ... all properties of a
526 physical matter' (Bériachvili 2010: 12). Space-matter,
527 as one of many notions of musical space, is defined by
528 Bériachvili as the extent to which sound possesses a
529 quasi-objective presence and material nature: it is the
530 place of palpable qualities of sound, its volume, its
531 density and grain (2010: 32).

532 Historically, spatialisation has been developed in
533 various ways. On the one hand, Stockhausen elevated
534 it as a 'proper' parameter of music (together with pitch,
535 duration, timbre, dynamic) by integrating spatial
536 elements within combinatory and serial designs. On
537 the other hand, Xenakis used spatialisation to explore
538 architecture and enhance the impact of his pieces.
539 Figures such as Chion, Bayle and Parmegiani
540 introduced the design of virtual spaces: using a very
541 large sonic palette, they constructed complex sounds
542 and simulated aural spaces for perception.⁷

543 The E-M vision restricts its research to sound-in-
544 itself in a way that all external considerations are
545 reflected back into internal aspects of sound. The
546 *immersive listening* (Solomos 2013: 235–78) often
547 invoked in many manifestations of multichannel
548 diffusion here exists as a demand that listening move
549 into sound: the immersion arises primarily in a sonic
550 sense rather than a spatial sense. Pieces of the E-M
551 perspective do not necessarily ask for a multi-
552 directional experience (though it is not excluded, as in
553 the case of Haas's String Quartet no 3, in which the
554 performers are placed in the four corners of the room
555 with the audience in the centre), rather they solicit the
556 listener to descend or enter into the internal space of
557 sound (i.e. space-matter), simply by listening to a sonic
558 source (be it natural, stereo or multichannel). The
559 reification of space here occurs within the listener's
560 insight into the sound rather than the physical space. It
561 is hard to exactly locate this space-matter: is it within

our cochlea? Does it exist virtually as a synthesis of
infinite reflections of sound waves during listening? It is
not crucial for this study to identify the location of the
space-matter, however, it is important to perceive and
recognise it within music as a distinct manifestation
of space beyond the physical layout or location of
sound sources.

Some composers, such as Scelsi and Haas, focus on
the space-matter, developing a sort of aesthetic of the
consistency of sound. The exploration of space-matter
relates to the suspension of Kramer's temporal
linearity and moves towards the reality of the *instant*.
Space-matter is, in fact, where the inner characteristics
of sound and short-time phenomena occur during an
'apparent present' (Bériachvili 2010: 41; Solomos
2013: 250). The music that extends this present towards
a larger scale (i.e. an eternal instant) is actually based
on static constructions, such as the repetition of
elements, the use of sustained and interacting tones,
and slow progressions (Wanke 2015). Those genres of
music that use these practices enhance the exploration
of the inner characteristics of sound. For instance,
pieces such as Scelsi's *Okanagon* (1968) and Parmegiani's
Ondes Croisées (1976) show differences not only
in terms of material (i.e. acoustic and electronic)
and construction but also more fundamentally in a
different approach to sound.

Alvin Lucier's music – in particular the pieces
written for electronic and traditional instruments – is
of interest here as it expands on the behaviour of sound
waves within a physical space. But Lucier incorporates
this behaviour within the sound material of the piece
and not as a supplementary element of manipulation
concerning the external physical layout of perfor-
mance (Wanke 2016): the frequency interactions
between electronic and acoustic contours in *Two
Circles* (2012) act as veritable three-dimensional
explosions within the sonic space-matter and not in
the physical space. Lucier's approach is far from sound
design and his intention is not to re-create virtual sonic
environments, rather his music reveals characteristics
of the space through sound; it explores space within the
boundaries of sound, almost as a sonic phenomenon.

To summarise, while, in electroacoustic and
acousmatic music, space – be it physical, designed or
virtual – is an element of design, movement and recon-
struction, in the E-M perspective proposed here, the
concept of space converges on a unique dimension: the
inner spaciousness of sound. This domain is the realm of
intrinsic aural properties that occur out of time.

**6. MUSICAL COMMUNICATION: CREATION
AND PERCEPTION**

Musical communication is a multifaceted concept that
rests on different aspects of creation and per-
ception, and encompasses sociocultural systems and

⁷Cf. for example Michel Chion's relation between inner and outer musical space or Annette Vande Gorne's distinction between real, designed and virtual spaces (for an exhaustive description, refer to Solomos 2013; Chauvel and Solomos 1998).

technologies. Many currents of experimental music aim to engage the listener in an immersive listening experience that could be at times corporeal (e.g. noise, minimal techno), hypnotic (e.g. drone music), ecstatic (e.g. glitch, sound art, spectralism), visual and multidimensional (e.g. acousmatic).⁸ Listening as understood from the E-M perspective is a sort of grasping of the space-matter and the intrinsic characteristics of sound. However, this E-M perspective is cross-genre and encompasses pieces from post-spectralism and minimalism, as well as from glitch-electronic music, IDM and minimal techno, in which different aesthetics display divergent purposes and expectations. Thus, exploring the question of musical communication in this setting involves examining potential modes of creation and perception, defining movements and actions.

Artists included in the E-M perspective mainly operate within their own cultural environment: they use techniques typical of their context but do not necessarily expand on referential formulas; rather, they focus on the characteristics of sound.⁹ The presence of models typical of each genre could be seen as the means through which the authors lay claim to a vitality of musical experimentation beyond the canons of mainstream and institutional contexts, expanding the modalities and contexts of communication for experimental art forms.

On the other hand, cross-cultural influences abound in current musical scenes and so the importance of a firm distinction between musical contamination and metabolisation is crucial to avoid oversimplification (Romitelli and Denut 2005): Aphex Twin and Florian Hecker draw on Xenakian stochastic synthesis (Haworth 2010), and Romitelli and his colleagues have written music including interventions by Pan Sonic. These authors express themselves through their own musical language but are the proof of the vitality of genres: they are able to respond to stimuli from other contexts and elaborate on them in their own environments. The E-M perspective lives precisely in these connections as a sign of a shared sensitivity towards the sound-in-itself.

Moreover, the use of technology deeply impacts the nature of creative and perceptual practices. For instance, spectralists and electroacoustic sound artists explore the acoustics and psychoacoustics of sound

⁸The apparent paradox in associating acousmatic with a visual listening experience lies in the fact that the acousmatic, more than other genres, has developed a morphological syntax able, within certain practices, to reconstruct virtual sceneries and portraits, capturing listeners within a pictorial simulation.

⁹Accordingly, contacts and collaborations across these areas of the musical panorama (e.g. the collaborations among R. Sakamoto and Alva Noto with Ensemble Moderne; B. Lang and P. Jeck; R. Nova, Y. Maresz and PanSonic with AlterEgo ensemble; the work of Zeitkratzer and Ictus Ensembles) reflect a common interest in sound, its intrinsic characteristics and manipulations, whatever the differences in instrumentation, techniques and sociocultural motivations.

through spectral analysis, moving from the rules of physics towards elements of musical grammar (Verrando 2012). On this matter, Romitelli found that a crucial dilemma for a composer today is to make technology personal and functional for one's own creative requirements, avoiding the completely automated control of technology that leads to a uniformity in music (Romitelli 2001). Pieces belonging to the E-M aesthetic match this idea of music that tends not to be representative of the technical equipment used. Technology, be it a question of new lutherie techniques, electronic devices or software, is a tool used to achieve a result: it is handled and often treated as if it were a handcrafted object. For instance, Haas's *in vain* for 24 instruments shows quite well how careful orchestration can avoid revealing instrumental roles and can instead subordinate these to a global sonic result, in the same way that Pan Sonic's *Keskeisvoima* uses a limited analogue filtering and stereo spatialisation in a way that creates a coherence among scattered sonic elements towards a global idea of sound.

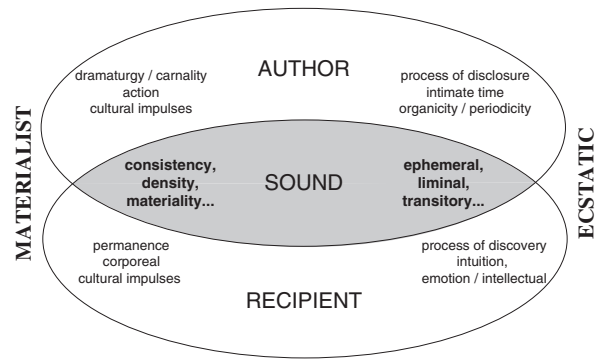
More generally, a simple principle governs these methods: the larger the palette used to compose, the greater the exploration of the relations between elements (i.e. horizontal development); limiting compositional material, reducing the degree of freedom, favours focusing on the intrinsic qualities of those elements. This simplification does not imply that many composers do not employ a variety of strategies to enquire into the intrinsic qualities of sound. Xenakis, for instance, has explored technological, spatial and sonic aspects; he borders on the E-M paradigm when he explores the consistency and density of sound masses, or in his conception of an almost physical sonic presence (*'plénitude sonore'*; Solomos 2003). On the other hand, his sound is complex, sometimes created through stochastic processes; even if it holds a sort of atemporal fullness, it is *composed* of sonic elements of different nature so as to achieve a global sound that reflects a non-organic naturalism (Solomos 2003; Bériachvili 2008).

The creative process within the E-M perspective is a movement towards sound as an act of discovery: creation is not a simple record of the conducts of sound previously tested but rather, as Grisey makes clear (2008: 84), it is an insight into sound, its disclosure and opening. Musical creation is a violent act aiming to set free the *latent* that is hidden in the sound (Manfrin and Piras 2003; Grisey 2008: 84). Romitelli has also claimed that musical practices must incorporate practical experience in order to repossess reality and matter and to reinstate the role of the author, their decisions, intentions and personal traits: all contribute in creating a living, corporeal, violent entity (Romitelli 2005a, 2005b). In other words, Romitelli tries to create a new efficacy in the expressivity of sound by incorporating *experience*. This concept relates to the notion

721 of the active and raw character of sound and expands
 722 into a new concept of ‘experience’, articulated by Mark
 723 Johnson, that includes ‘basic perceptual, motor-
 724 program, emotional, historical, social and linguistic
 725 dimensions’ (Johnson 1987: xvi). I would extend
 726 this definition of ‘*experi-ence*’ and its domains of
 727 pertinence to the adjective ‘*experi-mental*’, and
 728 associate this meaning to the ecstatic-materialism in
 729 *experimental* music: E-M music is *experimental* in
 730 terms of how it encompasses practical research, driving
 731 forces and choices that allow the inclusion of extra-
 732 musical aspects as imprints on the sound material.
 733 Music of this kind conveys these extra-sonic aspects
 734 through a return to sound-in-itself, its expressivity and
 735 physical presence.

736 Therefore, as in a circular process, pieces of the
 737 *experimental* E-M domain begin from the sound
 738 (material), evoke the external and converge on the
 739 real through sound. They focus on sound and
 740 stimulate materialist and ecstatic sonic potentials
 741 (e.g. consistency, density, graininess, sonic transients
 742 and apparent overtones at the threshold of audibility);
 743 further, sound recounts intentions, processes and
 744 discoveries that come from the *experience* of both
 745 creator and recipient, thus enlarging on intuitions,
 746 dramaturgy, movement-related and cultural stimuli.
 747 But sound continues to be the medium and locus
 748 of expression and contact, and so from this frame
 749 of external references sound recalls the material
 750 and embodies the real (Figure 1). *Sound* exists as a
 751 territory of convergence between author and
 752 listener and it reaffirms itself within its internal space,
 753 its time and the experience of it. In this way, the *sound*,
 754 viewed as the irreducible connection between creator
 755 and recipient within various contexts, is the key
 756 element for the cross-genres nature of the E-M
 757 perspective.

758 Concerning musical communication, one leading
 759 stance in the current debate on the materiality of sound
 760 revolves around the non-representativeness of sonic
 761 events (e.g. Cox 2011) that are directed towards the
 762 sound-in-itself. Within my proposition, sound-in-itself
 763 appears directly accessible when compositions are
 764 primarily developed using sound’s intrinsic properties,
 765 and I repeatedly observed that the presence of func-
 766 tional constructions, for instance, distance these pieces
 767 from the E-M perspective. Thus, it seems logical to
 768 favour an anti-representational premise in defining this
 769 ecstatic-materialism. Even so, E-M communication
 770 goes beyond the purely phenomenological and sen-
 771 sorial experience: the music of Georg Friedrich Haas,
 772 Riccardo Nova, Peder Mannerfelt or Mika Vainio
 773 defends a musical grammar typical of their genres, but
 774 each moves towards the sound-in-itself from different
 775 directions, making choices, using codes, ingraining
 776 personality, conveying subjectivity, intimacy, violence
 777 and practical motives.



778 **Figure 1.** Visual representation of the E-M model of
 779 communication.

780 In other words, E-M does not only inhabit the
 781 compositional process (Döbereiner 2014), but extends
 782 to the idea of a *potential* of sonic matter that is at times
 783 present as a transcendent character of sound (Scelsi),
 784 a process of disclosure through duration (Grisey),
 785 a physical substance concretely shaped (Pan Sonic), or
 786 a bloody organism with a metabolism, carnality and
 787 grain (Romitelli). However, as Döbereiner criticises
 788 the non-dialectical vision of sound that is exclusively
 789 seen as matter-energy, vital in itself, I also go further
 by picturing the *sound* as the convergence of the
 participants’ realities on a pure sonic matter.

790 **7. CONCLUSIONS**

791 The E-M approach focuses on sound-in-itself, the
 792 meeting *in sound* of composer and listener, the co-
 793 existence of the quasi-atemporal materiality and the
 794 fugitive perception of sound. It is a unified concept
 795 in which corporeal reactions, innermost discovery
 796 and personal *experience* come together within the pure
 797 sonic element.

798 Several movements or figures within today’s
 799 experimental music may come close to the E-M vision
 800 and match different characteristics of this perspective.
 801 There are no clear boundaries that limit this cross-
 802 genre proposition and the points discussed above work
 803 as parameters to evaluate a sort of degree of affiliation
 804 with ecstatic-materialism.

805 Ecstatic-materialism emerges from similarities
 806 (e.g. aural, poetic, perceptual) across several genres of
 807 music that go beyond techniques and instrumenta-
 808 tions, allowing us as listeners, musicians and scholars
 809 to approach compositions of G. Verrando, M. Momi,
 810 G. F. Haas, B. Lang and pieces of Pan Sonic, Miles
 811 Whittaker, Oscar Powell, Oren Ambarchi and Peder
 812 Mannerfelt from a fresh point of view: considering
 813 their common focus on inner qualities of sound and
 814 recognising cultural patterns as models of commu-
 815 nication. In presenting this transversal outlook, I hope
 to stimulate debates and connect didactic and

816 academic contexts in order to propose new strategies to
817 deal with the rapid changes in our musical culture.

818 REFERENCES

- 819 Bayle, F. 1989. Image-of-Sound, or I-Sound: Metaphor/
820 metaform. *Contemporary Music Review* 4(2): 165–70.
- 821 Bergson, H. 1998. *Durée Et Simultanéité a Propos de La*
822 *Théorie D'Einstein [1922]*. Paris: Presses Universitaires
823 de France.
- 824 Bériachvili, G. 2008. La Poétique Du Son Dans L'oeuvre de
825 Giacinto Scelsi (À Propos Del Quattro Pezzi per Orches-
826 tra et Au-Delà). In P. A. Castanet (ed.) *Giacinto Scelsi*
827 *Aujourd'hui*. Paris: Publication Cdmc.
- 828 Bériachvili, G. 2010. *L'espace Musical: Concept et Phénomène*
829 *à Travers L'avant-Garde Des Années 1950–60 (Stock-*
830 *hausen, Xenakis, Ligeti...)*. Rouen: Université de Rouen.
- 831 Bonnet, F. J. 2012. *Les Mots et Les Sons. Un Archipel*
832 *Sonore*. Paris: Éditions de l'éclat.
- 833 Chouvel, J.-M. and Solomos, M. 1998. *L'espace, Musiquel*
834 *philosophie*. Paris: L'Harmattan.
- 835 Corbett, J. 2000. Experimental Oriental: New Music and
836 Other Others. In G. Born and D. Hesmondhalgh (eds.)
837 *Western Music and Its Others: Difference, Representation,*
838 *and Appropriation in Music*. Berkeley: University of
839 California Press.
- 840 Cox, C. 2011. Beyond Representation and Signification:
841 Toward a Sonic Materialism. *Journal of Visual Culture*
842 10(2): 145–61.
- 843 Demers, J. 2010. *Listening Through Noise: The Aesthetics*
844 *of Experimental Electronic Music*. Oxford: Oxford
845 University Press.
- 846 Döbereiner, L. 2014. How to Think Sound in Itself? Towards
847 a Materialist Dialectic of Sound. *Proceedings of the*
848 *Electroacoustic Music Studies Network Conference*.
849 Berlin, Germany, 10–14 June.
- 850 Emmerson, S. 1986. *The Language of Electroacoustic Music*.
851 London: Macmillan.
- 852 Ferguson, S. 2007. Review of Models and Artifice: The
853 Collected Writings of Tristan Murail. *Circuit: Musiques*
854 *Contemporaines* 17(1): 115–20.
- 855 Grisey, G. 2008. *Écrits: Ou L'invention de La Musique*
856 *Spectrale*, ed. Guy Lelong (Paris: MF Éditions).
- 857 Haworth, C. 2010. Xenakian Sound Synthesis: Its Aesthetic
858 and Influence on 'Extreme' Computer Music. In
859 M. Goddard, B. Halligan and N. Spelman (eds.) *Resonances.*
860 *Noise and Contemporary Music*. London: Bloomsbury.
- 861 Hervé, J.-L. 2004. Formes et Temporalité Dans Les Der-
862 nières Oeuvres de Gérard Grisey. In D. Cohen-Levinas
863 (ed.) *Le Temps de l'Écoute. Gérard Grisey Ou La Beauté*
864 *Des Ombres Sonores*. Paris: L'Harmattan.
- 865 Johnson, M. 1987. *The Body in the Mind: The Bodily Basis of*
866 *Meaning, Imagination, and Reason*. Chicago: University
867 of Chicago Press.
- 868 Kim-Cohen, S. 2009. *In the Blink of an Ear. Towards a Non-*
869 *Cochlear Sonic Art*. New York: Continuum.
- 870 Kramer, J. D. 1988. *The Time of Music: New Meanings, New*
871 *Temporalities, New Listening Strategies*. Munich: Schirmer/
872 Mosel Verlag GmbH.
- 873 Kurth, E. 2006. *Ernst Kurth: Selected Writings*, ed.
874 L. A. Rothfarb, Cambridge: Cambridge University Press.
- Landy, L. 2007. *Understanding the Art of Sound Organiza-*
tion. Cambridge, MA: MIT Press. 875 876
- Manfrin, L. and Piras, M. 2003. Spettromorfologia, Durata
E Differenza: La Presenza Di Bergson Nel Pensiero
Musicale Di Gérard Grisey. *Rivista Italiana Di Musicolo-*
877 *gia* 38(1): 75–117. 878 879 880
- Menesson, C. 2008. Scelsi, Le Temps Ou La Respiration Du
Son. In P. A. Castanet (ed.) *Giacinto Scelsi Aujourd'hui*.
Paris: Publication Cdmc. 881 882 883
- Moles, A. 1968. *Information Theory and Esthetic Perception*.
Urbana, IL: University of Illinois Press. 884 885
- O'Callaghan, C. 2010. *Sounds: A Philosophical Theory*.
Oxford: Oxford University Press. 886 887
- Romitelli, F. 2001. Il Compositore Come Virus. *Milano*
Musica. In *Percorsi di musica d'oggi – Il pensiero e*
l'espressione. Aspetti del secondo Novecento musicale in
Italia. Milan: Teatro alla Scala, [www.milanomusica.org/](http://www.milanomusica.org/it/sezione-festival/presentazione/approfondimenti/10-non-categorizzato/festival/109-scritti.html)
[it/sezione-festival/presentazione/approfondimenti/10-non-](http://www.milanomusica.org/it/sezione-festival/presentazione/approfondimenti/10-non-categorizzato/festival/109-scritti.html)
888 [categorizzato/festival/109-scritti.html](http://www.milanomusica.org/it/sezione-festival/presentazione/approfondimenti/10-non-categorizzato/festival/109-scritti.html) (accessed 14
889 September 2017). 890 891 892 893 894
- Romitelli, F. 2005a. Pour Une Pratique Visionnaire: Entretien
Avec Danielle Cohen-Levinas. In A. Arbo (ed.) *Le*
Corps Électrique. Voyage Dans Le Son de Fausto Romi-
telli. Paris: L'Harmattan. 895 896 897 898
- Romitelli, F. 2005b. Résonances. In A. Arbo (ed.) *Le Corps*
Électrique. Voyage Dans Le Son de Fausto Romitelli.
Paris: L'Harmattan. 899 900 901
- Romitelli, F. and Denut, E. 2005. Produire Un écart.
Entretien Avec Eric Denut. In A. Arbo (ed.) *Le Corps*
Électrique. Voyage Dans Le Son de Fausto Romitelli.
Paris: L'Harmattan. 902 903 904 905
- Scelsi, G. 2006. *Les Anges Sont Ailleurs... Textes et Inédits*
Recueillis et Commentés Par Sharon Kanach. Arles: Actes Sud.
906 907
- Smalley, D. 1997. Spectromorphology: Explaining Sound-
shapes. *Organised Sound* 2: 107–26. 908 909
- Solomos, M. 1998. *L'Espace Composable. Essais Sur La*
Musique et La Pensée Musical d'Horacio Vaggione. Paris:
L'Harmattan. 910 911 912
- Solomos, M. 2003. Pour Une Filiation Xenakis-Grisey?. In
M. Solomos (ed.) *Iannis Xenakis, Gérard Grisey. La*
Métaphore Lumineuse. Paris: L'Harmattan. 913 914 915
- Solomos, M. 2012. Deux visions de la 'vie intérieure du son':
Scelsi et Xenakis. In M. Solomos and C. Pellegrini (eds.)
Scelsi Incombustible. Filigrane. Musique, esthétique,
sciences, société. [http://revues.mshparisnord.org/filigrane/](http://revues.mshparisnord.org/filigrane/index.php?id=504)
[index.php?id=504](http://revues.mshparisnord.org/filigrane/index.php?id=504) (accessed 14 September 2017). 916 917 918 919 920
- Solomos, M. 2013. *De La Musique Au Son. L'émergence Du*
Son Dans La Musique Des XX^e-XXI^e Siècles. Rennes:
Presse Universitaires de Rennes. 921 922 923
- Vaggione, H. 1998. L'Espace Composable. Sur Quelques
Catégories Opératoires Dans La Musique Electro-
acoustique. In M. Solomos and J.-M. Chouvel (eds.)
L'espace. MusiquelPhilosophie. Paris: L'Harmattan. 924 925 926 927
- Verrando, G. 2012. *La Nuova Liuteria. Orchestrazione,*
Grammatica, Estetica. Milan: Suvini Zerboni. 928 929
- Voegelin, S. 2010. *Listening to Noise and Silence: Towards A*
Philosophy of Sound Art: Toward a Philosophy of Sound
Art. New York: Continuum. 930 931 932
- Wanke, R. 2015. A Cross-Genre Study of the (Ec)Static
Perspective of Today's Music. *Organised Sound* 20: 331–39. 933 934
- Wanke, R. 2016. Program notes to *Alvin Lucier – Two*
Circles, performed by AlterEgo. CD. Mode Records. 935 936