

# From Boethian Harmony to a Dry Riverbed: *El sonido recobrado*

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**The article takes Boethius's theory of musical harmony as a starting point, in particular studying the collective dimension embedded in this concept. The dynamics of contact and interdetermination, between humans and other-than-human, are explored and understood as factors co-involved in the possibility of common living. The role of the notions of ecology and economy in rereading the concept of harmony provided by Boethius's theory is also reviewed. The text then explores a site-specific work that experiments with these issues through the creation of an acousmatic patch that is superimposed onto a broken ecology, showing how this serves as an agent for a reharmonisation of a drought-ravaged river. The article concludes by addressing the implications that a territorially situated musical approach might represent for recovery of the broken link between humans and the other-than-human.**

## 1. INTRODUCTION

Musical harmony is a prolific construction in simultaneous coexistences; resonant bodies co-form systems on the basis of complementarities that involve a play of tensions/distensions between their components. This expresses content that can be read through multiple lenses.

In the musical context, the theoretical and practical corpus that constitutes Western understandings, as well as their social and political correlates, contained the concept of harmony. This was initially encountered in Antiquity as an ethical imperative whose cultivation would determine the possibility and subsistence of community life. Then, from the Middle Ages onwards, Cartesian determinations made through writing, appealed to a separation between fundamental harmony – of the cosmos – and everyday life, in a shift that would favour consolidation of the absolute unity of the individual (Carreres 2018). This transition found, in the passage from Late Antiquity to the Middle Ages, the opportunity for a theoretical recovery of Platonic-Aristotelian thought, both of music and of existence itself. Mathematical, spiritual and philosophical aspects were combined, their resonance extending into the twentieth century (Spitzer 1944).

For an understanding of the concept of harmony as a synthesis of the life of celestial bodies, its subsequent

assimilation into the human world, and its reconceptualisation in the creation of the sound installation *El sonido recobrado*, we use a hybrid methodology consigned by musical and aesthetic aspects. This allows us to understand the mechanisms that operate in the understanding of harmony as a common perspective, bringing together the social experience between humans and the other-than-human. It also accommodates the drifts exemplified by a sound practice anchored in the concept of harmony, implemented in the dry riverbed of the Petorca River in Chile. This approach allows us to meditate on the role of a key concept in the understanding of the world, since the first philosophical-musical observations of the cosmos, and on the possibilities of its contemporary resignifications. This article reviews a fundamental milestone in the history of the concept of harmony: the treatise *De institutione musica* written by Boethius in Late Antiquity (Boethius 1491–92). This text constitutes one of the paradigmatic elaborations of later musicology, and above all a legacy that is projected into the classrooms of young university students. It provides the main foundations for the theoretical corpus of Western musical language. The article aims to trace the concept of musical harmony in Boethius, verifying the possibility of its reintegration into the social dynamics which served as its starting point. To do so, I study the Boethian concept of harmony, review the role of listening, and show how these elements are reintegrated into the world through a work of sound art centred on the reharmonisation of the landscape.

The work *El sonido recobrado* consists of the installation of the Baker River soundscape – located in the Chilean Patagonia – into the dry riverbed of the Petorca River, located in the far north of Chile (Muñoz-Farida 2013). It is a site-specific sound and experimental work that mediates discussion about the relationship between the human and the other-than-human. The work functions as an acousmatic patch that attempts to repair relationships that do not seem to be resolved except by imbricating themselves in the sensibility of the land. Revisiting this work allows us to think about the dimension, beyond music, of the

concept of harmony and its function in the relationship that sustains the cosmos-world pair, understood as the political, metaphorical, and poetic space of reciprocities from which the bases of the Boethian conception emerge.

The main constituents of harmony in Boethius's treatise are reviewed in the following section. Specifically, the review addresses the role of the ear in the author's musical configuration, and shows how the relations of tension/distension between opposing and simultaneous pairs configure a harmonic totality. Other harmonic perspectives reviewed include David Abram's experience, which also dialogues with the Mapuche concept of *küme mungen*, as well as the role of the concept of ecology in Michael Marder and communication in Lisbeth Lipari. The review explores the ways sound, dealt with artistically, exercises agency in creating harmony that enhances recovery of the communicative and communitarian potential evoked by the preceding authors.

## 2. HARMONY AND WORLD

*De institutione musica*, written by Boethius in Late Antiquity, discerns and speculates about the musical elements constitutive of the harmony of nature. The treatise is oriented towards the systematisation of certain aspects of music by means of materialising in the human perspective a set of relationships observed in the cosmos. It is a sort of transposition in which the social dimension of the human is a fundamental topic.

On the one hand, this theoretical ensemble points to a musical harmony constitutive of both the individual and the social dimension of human life and, consequently, the safeguarding of the state (Boethius 1491–92). On the other hand, this harmony is understood as a musical 'covenant' between the human and the cosmos, which constitutes the 'soul of the world'.<sup>1</sup> In fact, Boethius holds that the human soul is 'conjunct' because it has been created in the image and likeness of a universal harmony:

From here we can also recognise what Plato not in vain said: that the soul of the world is put together on the basis of a musical arrangement. When, in fact, through what is in us, which is harmonised and suitably assembled, we grasp that which in sounds is harmonised and suitably assembled, and delight in it, we realise that we ourselves are configured in our own image and likeness. (Boethius 1491–92: 62)

<sup>1</sup>Spitzer (1944) points out that the myth of Apollo provided a place of identification between harmony and that disembodied horizon described as the 'soul of the world'. Harmony between the elements of bodies could only be found through numbers. This series of Boethian arithmetical calculations goes in the same direction, affirming numbers as the way to their comprehension and assimilation, and then music as their corporeal and sensible manifestation.

Boethius systematised a concept of musical harmony based on the reciprocal relationship between the human and its others. His treatise became fundamental to the development of what we know as musical harmony. Boethius thought of a way by which this musical, harmonic covenant of the cosmos could be realised. That way is listening.

The concept of musical harmony that Boethius systematises, and on which a whole Western tradition of music is founded, emphasises a perspective of a life in common. Paradigmatically embedded in the Boethian treatise, life in common is constituted as a corpus of calculations and proportions by which the human constructs its own surrounding spaces in conjunction with the other of itself. In the fundamental substratum of the Boethian harmonic structure, there is a constitutive tension; it elaborates a more or less tense sonorous, vibrational concentration, whose conjunction, or concord of different voices, we call consonance (Boethius 1491–92: 12). In this order of things, the human is materialised through the sense of listening that in Boethius is the *sine qua non* of coexistence; the way by which contact is materialised as conjunction (ibid.: 1–9).

Indeed, in his treatise, listening presupposes a human disposition to openness that allows us to enter into contact with other bodies. Listening leads not only to an external harmony but also to the idea that all harmonious exteriority is harmonious insofar as we are internally inhabiting these harmonious relations. That is to say that both dimensions, external and internal to the human being, are in a relationship of reciprocity that fundamentally determines them. This is the materialisation of a vision that sustains a permanent transfer of harmonic relations between humanity and the cosmos.

This implies understanding that we listen to that which resonates in harmony both with our own internal configuration and in the relationships we form with others. Sound enters through listening, amplifying a field of harmonic relations that come into contact with one's own field, in such a way that listening constitutes the possibility of harmony and this is the foundation of a sustainable world.

We find a similar relationship in David Abram, in particular the possibility of listening to this intertermination between humans and other-than-human through a different kind of listening. This is not only an auscultation, that is, an examination of the aural order that is at stake here, but the contact of a sense that opens up the disposition of the body and, with it, that of the world. In Abram we find listening understood as the sensitivity and disposition of the body to the otherness of itself. He recounts various episodes in his life that allow him to become aware of this conjunctive relationship between himself and that

which surrounds him, human or otherwise. His consciousness is such that there is an otherness that determines him; that is to say, it is the entry of the other into the order of human discernment. In this sense, consciousness only attests to the other as an imponderable and determining presence. Indeed, Abram recognises the existence of an instinctive empathy, that is, an unmediated relation by which the body and its senses are in permanent contact with the external world (Abram 2010: 7, 34, 42, 71).

The relationship introduced by Abram is based on a dynamic of contact. This produces an exchange, even a silent one, that shapes every habitat from the simplest to the most complex. Similar relationships are found in Boethius who describes this as a musical harmony of the world that organises an exchange of measures and proportions between the cosmos and humanity. A transfer which, in turn, founds not only a harmony on Earth but also one between Earth, humanity and the cosmos (Boethius 1491–92: 79–83). In this sense, Boethius suggests an exchange, constituted at least by these three elements, which makes the scaffolding of parts and of the whole sustainable (ibid.: 9–10, 11). Consonance, understood as an interdetermined sounding, necessarily implies diverse impulses, coming from the environment as well as from elsewhere, distinct from itself.

Consonance, which governs all setting out of pitches, cannot be made without sound; sound is not produced without some pulsation and percussion; and pulsation and percussion cannot exist by any means unless motion precedes them. If all things were immobile, one thing could not run into another, so one thing should not be moved by another; but if all things remained still and motion was absent, it would be a necessary consequence that no sound would be made. For this reason, sound is defined as a percussion of air remaining undissolved all the way to the hearing (ibid.: 11).

Following the musical perspective of harmony proposed by Boethius, harmony is a system composed of relations of empathy that constitute a musical covenant from which the other of the cosmos, the human and other-than-human earth, receives its own organicity, configuring itself in its own image and likeness. The Boethian treatise is situated around these so-called ‘harmonic’ relations precisely because they function as the foundation that makes coexistence possible. Boethius works on their cultivation. Through the formalisation of measures, metaphors, calculations and musical operations, his aim is the musical formalisation of social coexistence. According to Boethius, people cohabit, come together in ensembles or villages, and shape, and struggle to preserve, harmonious relations, that is, to maintain the common

elements that constitute the resonances of their own internal relations (ibid.: 63).

For both Abram and Boethius, exchange constitutes an agency of the one with the other, a harmony that is fundamental to the multiple organisations and ways of inhabiting the planet. The agential contact of meaning and exchange produces countless harmonic musical relations between the human and the other-than-human. More than sound or audible relations, these are relations that operate across and through bodies, thickets, air; in their agency, the earth as human and cosmos interdetermine each other, generating planetary sustainability. This is what Abram and Boethius clearly demonstrate. In short, taking their perspectives into account, we can say that a harmonious relationship is one in which two or more elements are brought together through a contact that enables a vital transfer between them, and whose effect is equilibrium.

This harmonious vision of the world is also described in the Mapuche cosmivision.<sup>2</sup> They recognise it as *küme mogen* (good living) and it consists of a relationship of balance between the human (*che*) and nature: ‘*che* is a complement for the harmonious development of nature, where obtaining *what is right* is key to achieving health’ (Meza-Calfunao et al., 2018: 380). There, the concept of balance between humans and nature configures an organicity or community that is fundamental to achieve a harmonious transfer. This is then fundamental for life as it sustains the good health of the surrounding world, nature and the human. For the Mapuche people, the rupture of the balance between the human and its environment gives rise to a disease that ‘spreads to the community or the environment’ causing scarcity (ibid.). It is contact that harmonises, bringing together the exterior with the interior, favouring healthy, peaceful, common relations, which are nothing more than wefts that underlie and sustain the totalities of meaning that we represent to ourselves as a world or cosmos. In a contact of sensitivities, even silent ones, harmony configures links that make new contacts possible and sustainable.

While these reflections convey diverse cultural perspectives, they share the idea of a constitutive interdetermination between the human and the other-than-human: harmonic relationships are projected that constitute the fundamental basis of both. Whereas for Boethius the meaning of the movement of the stars is transposed by instrumental music, for Abram the Earth is the cosmos of interactions between humans and other-than-human. Similarly, the Mapuche people recognise the concept of equilibrium in a co-determined structure of the world. These three

<sup>2</sup>Native people of Chile and Argentina. Their vital union with nature has allowed them to resist the hegemonic force of the Spanish and Chileans.

visions thus express a conjunctive relationship between the human and the non-human as constitutive of their worldview.

For the past decade, I have conceived of my own artistic experience as a field of experimentation around these issues. The site-specific work I called *El sonido recobrado* brings together the fractured elements of a river and a flow, that is, a territory with sound. It is a field of harmonic musical conjunctions that is experienced in the territory itself, it 'situates' the problem of a fracture of contact. Thus, from the dry riverbed arises the questions: How can one be in contact with these earthly and cosmic forms even if they have disappeared from our senses? How can one inhabit a world of fractured relations or broken contacts that break, in turn, the harmonic fields that sustain any existence? How can one inhabit the broken harmony?

### 3. EL SONIDO RECOBRADO

*El sonido recobrado* was the experiment of moving sound from one river to another: from the Baker River to the Petorca River, as if the landscape could be transplanted to patch, heal or remedy a broken ecology (Nieto et al.). One and the other reconfigured each other, thereby bringing to the surface the critical state of their condition.

At the time of creating the installation, the Baker River was threatened by the construction of a large-scale mega-hydroelectric dam to supply the country with electricity. The project was part of a wide network of concessions that the Chilean State was carrying out to meet the country's diverse energy supply needs. While this was happening, the Petorca River, located to the north of the Baker, had dried up due to the concession and sale of water rights that Chilean legislation allowed. A form of tragic complementarity brought the two scenarios together. In the first, the water market implied a potential destruction of the river, while the second scenario testifies to the tangible effect of the operation of the water market on the river.

Moving or transplanting sound from one river to another was not an exercise in implementing high or low technology and neither was there any question of bringing commercial electricity to the installation site. On the contrary, the aim was to experiment with a reconfiguration of the landscape to generate an experience linking music and the possible world, in line with the political path that mobilises the concept of musical harmony in Boethius. Therefore, the technology used in the project had to be arranged in accordance with this critical perspective. To this end, I designed and built a kind of site-specific sound amplification kit consisting of a set of low-cost

loudspeakers and sound recordings from the Baker River. The kit was powered by a car battery, which gave it energy autonomy and allowed it to be easily moved.

An important factor in the emergence of the drought was what we could recognise as a sort of Chilean waterway, created during Pinochet's military dictatorship. His regime instituted a series of neoliberal reforms formulated on the basis of the ideas of University of Chicago economist Milton Friedman. These promoted a new economic worldview that rapidly eroded the economies and ecologies of rural communities. Indeed, the drought, prolonged in the country since the late 1990s, is the result of an understanding of nature as a set of available resources. In other words, nature is represented as the present and/or potential depletion of the bond between humans and other-than-human.

How can these bonds be regained?

If the possibility of making the world appear layer upon layer (water, memories, sounds, affections, birds, animals, insects, among so many other simultaneous agents) disappears, we have to conceive of human perspectivism as devoid of a harmonious dimension in which the various components that make up the territory, even the silent ones, appear together in equilibrium. In Petorca it is possible to perceive the absence of the river as the loss of an organ without which a community has become hollow. It is also a crack that breaks the conjunction of the human, the earth and a cosmos of interactions.

The preceding ideas flow from Abram's thought. Through an analogy that he elaborates on the basis of his shadow, Abrams proposes a fundamental conjunction: my shadow is more than the projection of my flat figure on the pavement, it is a multidimensional body in which other bodies enter and leave, giving it volume and thickness, making my own body a part of something else (Abram 2010: 13–24). It is a cut-out that happens in simultaneity with the Earth and the cosmos. The shadow joins the human with other humans; it harmonises the relations between entities in a common neighbourhood: 'a zone of alliances and reciprocities' (ibid.: 21). Abram's shadow proposes an acousmatic turn in the understanding of one's own body in the world. It suggests that the shadow makes new relations appear, by hiding the body, that something is hidden in the shadow: the body or a part of it. Also, a change in the direction of light makes new relations appear by hiding others. The point of light makes the shadow a negative that reveals new relationships which appear by changing the point of light or perspective.

The term 'acousmatic' comes from the Greek *akousma*, meaning to perceive with the ears without seeing the generative source of the sounds (Bayle 1993;



**Figure 1.** A loudspeaker on a dry bed from *El sonido recobrado*.

Chion 1994). In an acousmatic twist on the story of Abram's shadow, which would imply conceiving of acousmatics as a shadow or concealment, the loudspeaker in the river is its own acousmatic presence: it is the river and its own negative. The loudspeaker of the Petorca River (Figure 1), which reproduces one river in another, conceals the totality, making new layers of meaning emerge. This is what Battier, quoting Epstein (Battier 2007), highlights through the process of transduction of sound and which Pierre Schaeffer, in turn, takes up with his concept of acousmatic music and which unfolds in a process of transposition of sound (Schaeffer 1959). For both authors, the concepts of transduction and acousmatics probe an electronic conception of sound based on its transmission from one place to another.

In short, this movement of transposition, operated by cuts, replacement of the body of sound and an electrical transmission that gives rise to transductive operations, generates a system of communicating flows that transcend spatial and temporal coordinates to give rise to new relationships: 'the microphone and the loudspeaker transmit accents with an unsupportable shamelessness, where all is revealed: the naivety of false pride, the sharp bitterness' (Epstein quoted in Battier 2007: 191).

It is precisely this perspective of the autonomy of the components of representation, present in film montage, which has not only created the space for acousmatic music, but also strengthened the concept of reduced listening (Schaeffer 1952). Schaeffer's reduced listening might equally be described as focal listening, which concentrates on a masking or concealment of the totality of meaning. This makes

it possible to concentrate on a part or on new parts that appear in the concealment, precisely because a given phenomenon is abstracted and converted into an object available for a specialised or informed listening whereby the inaudible is revealed, beyond a more general listening.

The acousmatic patch on the Petorca River – a kind of bandage or prosthesis – reveals what remained obscured: it displaces the literal source and focuses the listener on a situated object. It is a sonic cut-out that hides its origin to appear as part of another body; its origin is its function. Under the patch, a suture makes an absolute tension appear, without balance: that of the river devoid of its water. It is precisely this total and absolute tension, without antagonism, that Boethius defines as the opposite of the concept of harmony. There is no harmony where the equilibrium has been broken.

#### 4. A BROKEN ECOLOGY

The sound installation in the river was configured by means of the acousmatic transposition of the landscape through the loudspeaker. It aimed at reharmonisation by means of an acousmatic patch. In other words, I tried to experiment with the ways that sound is able to configure and reconfigure reality, and with how this transposition could reconfigure the symbolic space that constitutes a landscape for a community. Cognate references regarding sound installations and site-specific art include the work of Bill Fontana, particularly *Distant Trains* (1984):

This sound sculpture was installed in the large empty field of what had been one of the busiest train stations in

Europe before the war, the Anhalter Bahnhof. Loudspeakers were buried in the field and played sounds of the Köln Hauptbahnhof, the busiest contemporary European train station. Live microphones were placed in 8 different locations in the Köln Hauptbahnhof, so that the acoustic space of this large station was reconstructed in Berlin.<sup>3</sup>

Fontana suggests a relationship between musical harmony and ecology that resonates with the Boethian concept:

The concept of ecology is used to describe the harmonious relationships existing between living species in natural habitats that enables them to mutually survive together. In these natural habitats, ecology can also be understood as being successful design relationships between the various aspects of environment.<sup>4</sup>

From this understanding, Fontana conceives his ‘sound sculptures’ for installation in public spaces. Fontana works with the perspective provided by listening to the environment in shared contexts of circulation and conceives it in a time dilated by the drift of a specific site. In *Distant Trains*, Fontana experiments with a kind of re-enabling of public space. This is not a patch, but a sculpture that brings together elements dispersed in its surroundings as a new node of representation of ecology. What Fontana calls sound sculpture is inserted into the space, conceived as music in which various acoustic forms are expressed, such as buildings, birds, humans, among many others that come together in his sculpture.

The Petorca River installation mobilises similar conditions, although using different kinds of coordinates. There I explore a resonorisation in order to express a reharmonisation. The key question does not address the spatiotemporal volume of the object, but rather how its presence/hiding brings out a paradox. The goal is to make perceptible a condition whose relations – political, ecological, economic – were previously hidden.

In the case of the installation on the Petorca River, as in Fontana’s work, I conceive of musical harmony as the underlying activity of the space. It is the Boethian premise of a harmony that intertwines the state and its habitats. In keeping with Abram’s insistence: there is contact and reciprocity at work everywhere, unfolding its effects even silently. In the dry riverbed of the Petorca River, an acousmatic patch brings with it the shadow of another river, the Baker, bringing forth the economic ruin, global and local, of our political, ecological and social integrity. The patching loudspeakers are but the effect of the rupture

of the harmonic axes that sustain the ecology, that is to say, the political, economic and affective relations that arise from the relationship between humans and other planetary inhabitants. Therefore, if harmony is configured, as Boethius explains, by a reciprocal and proportional relationship between tension and distension, the drought represents a broken ecology where the various tensions have weakened until they disappear.

This is what Marder (2023) articulates in discussing ecology and its analogical relationship with the economy, understood as the articulation of the dwelling. That is, how the coordinates converge to maintain an equilibrium. This terminology can be dated back to Ernst Haeckel (1834–1919), for whom ecology is a branch of biology that studies the relations of living beings with their environment (Inda 2000; Eagerton 2013). Marder, however, defines ecology through an analogical relationship with economics that flows from its Greek origin; it is what he recognises as the *logos* of *oikos*, the articulation of a dwelling (Marder 2023: 1). A linkage that interweaves a logic of living and movements related to dwelling, human or otherwise.

The discursive construction of ecology, then, begins in the nineteenth century, at the time when dwelling or abiding is no longer possible for large numbers of people due to their massive displacement from the countryside and concentration in rapidly growing urban centres by the forces of industrial capital. And, the discourse of ecology peaks now in the twenty-first century, when whatever remains of the planetary dwelling is further threatened by the lingering and accumulating material legacies of industrial capitalism, chief among them catastrophic climate change, spawning enormous populations of climate refugees, whether human or not. It is this existential threat that brings the issue of ecological dwelling out of obscurity – the obscurity associated with the intimacy, familiarity and habituality of a lived relation to places – and into the limelight. So much so that ecology becomes an issue, if not the issue, once everything it connotes is eroded, flooded, set on fire and otherwise devastated (ibid.).

The correspondence between crisis and ecology is described by Marder as ‘the crisis of disarticulation and non-dwelling’ (ibid.). A crisis that can be seen in ‘the desperate attempt to escape’ from the disarticulation of the *status quo*. Escape which, in turn, functions as the deployment of the ego in the face of insufficient natural resources. The ‘crisis’ then operates as a pivot or point of no return that declares that the dwelling of inhabitation is at a limit point. It is at this critical crossroads of ecology that the set of small loudspeakers on the river Petorca unite the dry land and

<sup>3</sup>See [www.resoundings.info/distant-trains-berlin-1984](http://www.resoundings.info/distant-trains-berlin-1984) (accessed 14 April 2024).

<sup>4</sup>See <https://resoundings.org/Pages/musical%20resource.html> (accessed 14 April 2024).

the sound of water like a patch, as if one could elude the destiny of disarticulation.

The installation carries an image that whispers an intention to reinhabit and rehabilitate, but far from amortising the disaster, it exposes the permanent movement of the place of the human and the other than human, the permanent crisis of the logics that constitute sedentarism. This is what Marder calls 'exilic ecologies' that 'elaborate on dwelling in exile-of place, of dwelling, of climate, of life'. In the age of climate change 'even if one stays put, even if one seems to stay in place, the place does not stay in place but is on the move' (ibid.: 3).

In the installation in the dry riverbed of the Petorca River, the aural reharmonisation of the landscape, that is, the experiment of superimposing a harmonic structure on the broken economy of the landscape, is related to the operation of conjoining one order with another, one sense with another, making the verisimilitude of the territory reappear. Following Marder, it implies understanding landscape as a political construction that entails a permanent human crisis, that of its displacement. If ecology is the intersection between dwelling and its articulation, as the crossroads of dwelling and articulation, to reharmonise the landscape is also to reconnect, to reharmonise, the human both with its own mobility and with that which takes place outside itself. The acousmatic patch reveals the conditions of the place: to discover its negative is the beginning of the process of re-conjunction of the broken ecology, its reharmonisation.

Reharmonisation occurs by discovering and rendering immediacy to hidden substrates, by bringing together what was hitherto dispersed or dislocated. This is how the various elements of the environment and the body itself appear. In other words, it becomes impossible not to listen to what resonates there, even silently.

## 5. INTERLISTENING

From a human perspective, Boethius discusses the function of hearing. This, together with discernment, makes coexistence possible among the constituents of the state: their communities share common customs and perceptions both of the world they inhabit and of those around them, and it is for this reason that listening, as a union of hearing and discernment, should be cultivated as a condition for the peaceful, harmonious subsistence of the state and its inhabitants.

In this way, materialisation of the harmony of universal sound as music does not only point to the musical notation of a sound in the world of human things, or the possibility of a mimetic representation of it, but to the human faculty of listening to the internal

and external organisations of oneself; of listening to the sets of relations that configure the modes of coexistence wherein one's own, the other's, and the common, unfold. Thus, listening is constituted as a synthesis of hearing-discernment and therefore as a *sine qua non* condition for the harmony of the *polis*.

Yet in music's subsequent developments harmony is not seen to hold the possibility of the State, but limits itself to modelling sound material concocted in the sphere of authorial creation (Predelli 2001). The set of structural, sonorous, conceptual and ideological elements in Boethius's treatise become the normative apparatus of music, which consequently now has little to do with the forces of coexistence that resonate in Boethius's treatise. Although Boethius's understanding of the world was maintained in later Latin Christian literature (Spitzer 1944: 423), its normative force, its organicity understood as a set of laws, became fundamental to music from that point onwards. In later times, harmony was no longer a *sine qua non* condition for a coexistence with the self, the other and the common that had taken root in the human world, represented by music and accorded agency through listening. Harmony was understood merely as a normative theoretical apparatus, rather became subject to logical-discursive operations whose articulating axis is no more than a certain human logic (Carreres 2018). How this logic ties the configuration of the world into a sounding subject to power relations, or to an exchange between power and taste (Eagleton 1990), thenceforth defines music for a large part of its history from the Middle Ages to the beginning of the twentieth century (Dahlhaus 1989).

Contemporary endeavour by musicians, such as Stefan Östersjö, has nonetheless succeeded in sustaining musical experience beyond a practice subject to procedural or normative regimes. Östersjö, through his study of shared emotions, alludes to a methodology of cognition 'that suggests that our perception of the world is not only embodied, but also embedded, enacted and extended' (Östersjö 2020: 14), and draws on this to analyse the creative process of his work *Strandlines*.

In Östersjö's monograph *Listening to the Other*, he studies how listening may constitute a vehicle for change, in music, and in the lives of people (ibid.). On the basis of ecological perspectives on human creativity, the density of matter enters the stagnant language of the self-referential musical discipline in order to think about the contact, albeit silent, with the other of oneself. In Östersjö's work there is a harmony that does not arise solely from procedures coined by the European musical tradition, but also from the contact that air configures between objects, bodies, membranes and organs. A sense that the author expresses around the idea of the 'sensor' that he

explores in the idea of the Aeolian harp, which musically connects the human and nature (ibid.: 144). Listening refers not only to a human community of things and their orders but also to a community of resonances in reciprocal transformation; in Lipari's words, an intersubjective production of sound (Lipari 2014). From a sociological perspective, Lipari points out that it is precisely in this process of transformation that the successive unfolding of communication takes place: 'In this view, selves are a kind of polyphonic chorale of everything one has heard, said, and read throughout one's life' (ibid.: 509).

What listening brings about is a communicative act. That is to say, it is not only the perception of a sound, nor the understanding of a logically available meaning, but also the conjunction of a multiplicity of dispersed elements that enter, even silently, into the experience of inhabiting. It is what Lipari calls an 'interlistening' that which connects interactions that are not reduced to a transmission of messages but 'co-occur' by changing the receiving states:

Just as intersubjectivity describes the way dialogic interactions transcend simple boundaries between self and other, so interlistening describes the ways dialogue transcends boundaries of time, place, and person. Interlistening thus aims to describe how listening is itself a form of speaking that resonates with echoes of everything heard, thought, said, and read. (Ibid.: 512)

At this point, let us imagine that what Lipari proposes as 'interlistening' would constitute the articulation between listening, ecology and economy; that is, the articulation between communication and the construction of the dwelling (Marder 2023).

This is how it is possible today to revisit Boethius and rethink the concept of musical harmony. If listening is a communicative act that is not univocal but must necessarily be combined with diverse aspects that make up a phenomenon, harmony underlies it as the horizon towards which we turn our ethics, our practices and their paths. This persists as the centre of the current dilemma around the environmental crisis – think also of Haraway's situated knowledges by which she expresses interspecies, intercommunity and inter-determination – and the problem of the sustainability of the landscape as we know it (e.g., Haraway 1989).

In the metaphor of the tube that Lipari uses to express the most widespread view of communication – a message passing from a sender to a receiver – it becomes clear that one-way or unidirectional listening does not connect interactions or build community (Lipari 2014). One-way or unidirectional listening does not patch up the broken ecology, nor does it seal the engagement with the sensitive experience of the awareness of the other, but it exhausts itself as soon as it has begun. This dynamic of the tube, one we could equally attribute to a 'purely' musical harmonic

conception, or to deafening individualism, overlooks relevant aspects of communication understood as a generative system that not only puts into operation a message, a discipline, a function, but above all such systems 'bring a shared sense of a 'we', a collectivity and a polis, into being':

In this way, communicating is how we co-construct worlds with ourselves and others, from groups as small as two people to organisations as large as an international congress and everything in between ... In these and myriad other ways, communication brings ideas, relationships, organisations, governments, and laws into being. In short, communication is more than a matter of exchanging symbols or decoding representations. (Ibid.: 507)

For Lipari it is the impulse or power of a sound that has found in another body a germ of transmission; this, in turn, makes it possible for the movement to produce changes of state that multiply and spread to other bodies. What is born is a community with objects, with things and with other beings, human or not. An extended community – between humans and non-humans – that constitutes and sustains an authentic harmony: a set of resonances and points of tension that communicate and extend by conjoining elements.

## 6. CONCLUSION

The sound experiment in the Petorca River focuses on a perspective of harmony beyond art and its forms, centred on the conjunctive nature of the dynamics of coexistence between humans and other constituents. The sounds reconnect a broken harmony through the idea of an acousmatic patch that reveals the hidden, thereby reharmonising the broken bond. The experiment demonstrates that the notion of harmony is synonymous with ecology and that the latter, in turn, contains that of economy in a marvellous co-implication of language and world.

A conceptual and political weft, which I recognise as a harmonic approach to the world, emphasises the disciplinary potential of going beyond human survival through operations that seek answers to problems that transcend one's own experience, and which at every moment are connected to other realities, other experiences and new relationships. *El sonido recobrado* made it possible to experience a transmission of a different order; the acousmatic patch that emerged from it reveals the birth of a repair device that should be further explored, especially in its reharmonising function. Both harmony and acousmatic were reincorporated into the dynamics of the territory. In the context of the rupture of a certain harmonic conjunction that links world, sound and territory, loudspeakers appear as reparative technologies that



allow us to question reality, its networks of force and normativity, making the verisimilitude of the landscape appear for human and non-human communities. Both, together, make up the world-cosmos to which Boethius opens us through the concept of musical harmony.

In the same way, the Baker River flowed into the dry riverbed of the Petorca River mediated by an acousmatic patch that displaces the technical dimension of the object to reveal the silent relations of a dry river and its multiple inhabitants, human and non-human. An operation that, in the end, finds both its questions and its effects beyond its installation.

In the installation on this dry bed, there is no univocal point of view regarding harmony, but rather an idea that emerges, revealed by the loudspeaker-acousmatic-patch as a new medium of interrogation. This enables a psychological state in which past and present converge. This repairs the river and along with it the memory and awareness of the interdependence of organisms and others that inhabit universes and cosmogonies. In other words, the loudspeaker mediates the reharmonisation of a broken state of affairs, it repairs and transforms, albeit temporarily, the daily life of its surrounding communities.

How to inhabit the broken harmony? How to inhabit the harmonic spectrum that constitutes a given landscape or exists in such and such a territory if its constituent elements have disappeared? There is no univocal or absolute answer. The challenge is to create the conditions of possibility for new interrogations that allow us to rethink the problem in order to understand that this is part of any solution as it allows us to keep posing possible solutions to the problem. How can we protect the sustainability of the cosmos-world that the Boethian concept of musical harmony extends to the environment, to reconnect with human or other-than-human community life? The sound that re-enters the river, through the figure of the acousmatic patch, allows us to perceive the broken harmony while discovering a harmony of another order.

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