

# **GENERAL TORRES: COMPOSITIONAL PROCESS IN AN ENVIRONMENTALLY-FRAMED MUSICAL WORK**

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## **ABSTRACT**

This paper presents a series of processes used for the creation of an environmentally framed musical composition: music that derives its structure and sounds from a soundscape study. To achieve this goal, two contemporary compositional trends that support the creation of such type of music are used: Sound Imagery and Soundscape Composition.

The work General Torres (2007) is used as a means to explain how sounds present in a soundscape can favor the creation of a musical composition. This piece is based on the temporal narrative proposed while waiting inside the train station “General Torres”, in Vila Nova de Gaia, Portugal. The structural process and sound discourse used in the piece is described in order to highlight the uses of both Sound Imagery and Soundscape Composition. Thus, the goal for this study was to develop a piece (composition) in which listening awareness was encouraged, and that (what, the listening awareness?) musically translates a sound context using referential sound material.

## **1. INTRODUCTION**

The use of environmental sounds in music has created new possibilities, new ways of musical organization, and new sound materials for the composer, giving the ability to evoke in the work (composition) the relationship between the soundscape, the sound, the listener and the musical process.

This article is based on the principle that environmentally(-)framed composition (i.e. music that takes its structure and sounds from the study of a soundscape) is constituted by several sounds. This (The compositional) material was recorded, produced and/or processed with a series of strategies that retain its sound context (or its morphological model) to impart the listener with the relationships evoked by the piece (in its structural form and in its narrative) and the musical context proposed through the soundscape composition.

It is possible to assume that a two-step process is necessary for the creation of such a type of music: the first step is the analysis of a soundscape, with an acoustic ecology approach(footnote to explain with references), where one can try to determine the temporal

structure, the ecological and social context, the sounds, and their levels of integration with the context. This research is the basis for the second step in the compositional process (what is the second step?). For Hildegard Westerkamp “the ear and the microphone are the starting points for the soundscape composer” (Westerkamp, 2002). She also states that the experience and intimacy with the sound that is being recorded provide crucial tools for the compositional process. Further, on the importance of experience, Denis Smalley comments: “The temporal disposition of, and relation among, sounds serve to articulate and shape spectral and perspectival space [...], we can profit by starting with the idea that time can be placed at the service of space rather than the reverse” (Smalley, 1997). This assertion is only possible (when) taking in account the experience of the composer with the sound material.

The second step is formed exclusively by compositional processes, where the result of the research is applied with the necessary artistic freedom, trying to transmit, through the musical discourse, the relations in the studied soundscape. This article focuses on this second step, seeking to highlight the approaches that support the composition of an environmentally framed work, using as example the work *General Torres* (2007), and its structural processes.

## **2. Sound Context**

*General Torres* is a work based on a situation experienced daily by the author (composer) during his residence (while living) in Vila Nova de Gaia, Portugal. This piece is based on the temporal narrative, proposed while waiting in a train station (“*General Torres*”). Initially, there is no one on the platform (the platform is empty); little by little, people arrive; they will also be waiting for the train. There is an increase in the number of people, and as they arrive, their conversations start overlapping, causing an increase in the background noise at the train station. When the train arrives, people quickly board, and then it leaves. After the train departs only silence remains at the station, creating a new waiting situation until the next train arrives. This situation is rich in emotional content because it leads to the interior of the self. The sounds become part of the imaginary; they detach from reality and penetrate the world of the inner-self, referring to different types of memory connections. While one is waiting at the station, there is a desire to be already inside the train. This evokes in the person the situation of being already traveling, with the sounds of many stops, people boarding the train, the speed, and the sensation of being in that environment.

While this soundscape is recognizable to anyone who has been waiting for a train at this station, this situation is common to many people in different locations and in different train stations around the world. This creates a common bond of communication, that is: even if the

materials are not specifically identified, the narrative is always understood, leading the listener to his own perspective of this situation, leading him to wait for his own train, taking the reality as basis (I don't understand this last clause).

### **3. Creative Process**

The process used in this composition refers to (draws on) two contemporary compositional trends: Sound Imagery and Soundscape Composition. The sounds that are used as (an) initial catalogue are taken from recordings made at the train station, (recorded) in order to study the constituents of the soundscape.

#### **3.1. Sound Imagery**

In the propositions of Sound Imagery, the material is regarded as an ambiguous sound with a real sound image, with characteristics that lead to its real meaning. These materials may lead to subjectivity in a composition, carrying with them new possibilities of abstractions, where the interplay between the recognizable and abstract musical treatment, create semantic and musical narratives that connect the listener to the work.

John Young emphasizes that Sound Imagery is the.... (There is a confusion of subjects and objects in this sentence, better written as follows:). John Young explains that "one genre of acousmatic music which innately demonstrates these kinds of reducible structural levels is that which uses environmental/natural sounds as recognizable referents within a network of morphological transformations, frequently pulling realistic images into surreal, distended sound-imagery" (Young, 2004).

In this stage (stage of what, your composition?) the idea presented by Denis Smalley (Smalley, 2007) was applied, trying to achieve the same musical condition that he achieved in his work *Empty Vessels* (1997). "Specific source-bonded sounds are used not only because they create an environmental space but also because they produce spectral space" (Smalley, 2007). He seeks the soundscape constitution searching for spectral formations and sound morphologies he wants to use during the piece. With this basic material he constructs a music in which he demonstrates the musical potentials of the real sound.

This also favors the proposal by Barry Truax (Truax, 2002) that discusses the necessary utilization of manipulations on sounds from the soundscape, in such a way to achieve a distant reference that enables the memory to be put at work. In terms of soundscape composition, a processed sound often creates a sense of being abstracted from its real world context. One example of this procedure can be found in Truax's *Basilica* (1994): the sounds of the bells of

Quebec's Notre Dame Basilica' are prolonged in time, together with a transposed version. As a result, the sounds are transformed "into a large resonant space reminiscent of the interior of the church itself" (Truax, 2002). Therefore, a sound can be abstracted from its original context in such a way that it interacts with the listener in this new musical syntax. In the beginning of *General Torres*, I try to achieve equilibrium between abstracted musical construction and a series of references to the soundscape that will be used in the rest of the work. Therefore, I am presenting a subjective allusion of the sound materials that reveals itself in its original context during the piece.

### 3.2. Soundscape Composition

In this approach, the sound and social context of the ambient (environment) is portrayed, as well as its narrative, providing the listener with material that makes the environment understood under a different perspective (different from the "living through" experience). This happens because the ambient is perceived in its new musical aspect, and also in the relations and the information transmitted by all sounds present in the soundscape composition. Andra McCartney states that "soundscape composers can act as interpreters of the various languages of places, based on their knowledge of these places which is honed through the processes of listening, recording and composing" (McCartney, 2002). The essence of this type work is to relate the transformation of the recorded sound to the memory of the listener; and this memory can be about a place, an object, a scene, or any personal experience. "Hearing a particular sound or ambience can launch a chain of related memories [...] that reconnects us with particular places and times in our lives" (McCartney, 2002).

For Barry Truax a soundscape composition should enhance our understanding of the world, and its influence should be taken into our daily life and perception. "The soundscape composition intends to change listeners' awareness of their environment" (Truax, 2000). Hildegard Westerkamp agrees with this by stating that a "soundscape composition can and should create a strong oppositional place of conscious listening" (Westerkamp, 2002). John Drever suggests that the soundscape composition should be connected to ethnography, because both disciplines need an involvement of the researcher/composer with the environment, their object of study. Therefore, they both need a holistic approach, through the perceptive and participative personal experience in the context, to translate and reveal connections that are present in the environment, either social, physical or through sound (Drever, 2002).

## 4. Musical Structure

The piece composition General Torres is divided into two sections, according to a narrative that takes the Sound Imagery and Soundscape Composition models as paradigms.

#### 4.1. First Section

In the first section, the treatment given to the musical material focuses on the presentation of the sound material from an abstract point of view, where the play between pure sounds (realities) / processed sounds (abstractions), makes the listener enjoy the music as subjective constructions of reality with a musical treatment. The spectral morphology is treated in a way to create a syntax within the pitches' framework. At the same time, the listener notices and assimilates the sounds that later will be part of the soundscape.

The creation of this section is based on the gestural movement of the passing of a train through the station. It emphasizes crescendos and decrescendos, and the pitches from the harmonic spectrum of the train's whistle prior to its arrival. Along with this, the sounds inside the train are manipulated so that its rhythmic characteristics are highlighted and its "reality" is extracted. (N.B.: in this first moment the composer is not creating a direct reference of the sound material to its real context, instead the composer focuses on the creation of a musical abstract construction of a sound world). The perception of reality is processed in two ways: the first is the direct perception of the surroundings: the situation of the contextual environment is analyzed; the second way is based on aesthetic appreciation (the sounds present at the environment are listened with pleasure or displeasure). In this first section the listening process inferred is the aesthetic appreciation, thus leading to a more musical and subjective setting.

To build this initial section, the strategy used to process sounds was to emphasize the ambiguity of the sounds, and to create a catalogue of musical objects rich in cross-references between abstract and real material. The goal is to enable the construction of an imaginary narrative that stresses abstract sound and not (rather than) reality. Young discusses two types of techniques for sound modeling that provide the creation of hybrid morphologies of the sound: "these are described in terms of idio and exo-morphologies, which respectively describe the distinguishing identity features that remain re-shaped within a processed sound, and the re-shaping features of another sound superimposed on it" (Young, 2004). He points out that the sound that results from spectral manipulation becomes ambiguous and can suggest different connotations.

Denis Smalley's proposal in his (discussion of) Spectromorphology (Smalley, 1997) was used to establish the temporal structure of this section (at a certain point he describes a guideline

of spatial settings in electroacoustic works). There are works whose space setting is fixed, where the distribution of the material is fixed and is known since the beginning of the work, and different aspects of the space can also be revealed over time. "Spatial awareness is cumulative, and the listener eventually realizes that there is a global spatial topology into which the whole work fits" (Smalley, 1997). This process suits this work very well, where the initial idea is to show little by little the constituents of a soundscape in an abstracted form, which will be revealed in the second part, using another musical approach.

Thus, the work starts with the warning signal of the train approaching the station. From this moment, the gesture expected (that of a train approaching) is presented not with the actual sound but rather with a manipulation of the sound spectrum, which leads to understanding of the movement. This gesture is manipulated to form a glissando whose apex is exactly the same pitch as the signal, re-affirming that spectrum. Upon the reappearance of the gesture, many sounds that are present in the station and inside the train are heard, and all are processed using the same spectral morphologies of the initial gestures. Manipulations of the train's signal are heard, and they mix with the spectral constitution of other materials. Sounds from inside the train suggest the characteristic rhythm of a train speeding along the track, leading to a slowdown in rhythm, the train arriving at the station, culminating with the opening of the door and the appearance of the environmental noise from the station. The second part of the work is about to start, introducing a new narrative.

#### 4.2. Second Section

The second section of the work is constructed using the proposals of the soundscape composition, where the social context is evoked through the placement of environmental sounds and temporal structure of a soundscape, in a musical setting. Thus, from this moment, the sounds previously processed are now presented in pure form, exposing the social situation from the station, suggesting to the listener the waiting, amidst the sounds of people walking and talking. This continuous growth, until the arrival of the train (and its subsequent departure), is wrapped in reality and in subtle references to the processed sounds, connecting to what Barry Truax already highlighted: the listener enters an immersive world as he waits for the train, imagination blends with reality, the passing of time is distorted and some sounds seem different than they really are (Truax, 2002).

During the temporal framing of the second section, emerges the need to connect the narrative with the temporal discourse of the soundscape, as the idea of this section is precisely the sound evolution present in the waiting, the train arrival, its departure and the new waiting.

Truax notes that there is a structural model of soundscapes, which he calls the static approach, where the composer is focused on the observation of the environment, where the sound discourse is created using the model of time evolution in a specific environment (Truax, 2002). The necessity of creating this type of structure is based in the need that, while the soundscape presents itself as real, it can evoke the desired musical narrative. Ulises Ferretti states that in musical works based on soundscapes “the unity is recognized by the permanence of materials or behaviors, and the diversity by the presence of changes, mutations or novelty” (Ferretti, 2006). Thus, the sounds used in the construction of the second section of the work are treated with little processing, but at the same time taking into consideration small distortions that occurs in perception.

This section begins with the sound of the empty train station. From the point where a coughing is heard and a page of a magazine is turned, people start arriving, noise increases and amplify the natural resonance of the platform. The train appears from inside this resonance, and subtly disappears (filtered to an almost unrecognizable morphology), referring to the process of daydreaming and inner-self thinking experiences of a person waiting for the train. With the recurrence of these materials the soundscape is transformed, the noise of the conversations reaches a peak, and then the train whistle is heard, signaling its immediate arrival, followed by its actual arrival. This sound is connected to the sounds from inside the train, and, again, it is also connected to the sound of the departing train. After its departure, the silence returns, the page turns and coughing are re-stated. The work ends, conveying the sense that this situation is repeated endlessly.

## **5. Final Considerations**

In this article the compositional process used in the work General Torres was described, seeking to explain how the sounds in a soundscape can favor the creation of a work that, while presenting itself as musical, also delivers an appreciation model for assessing the everyday world. During this process Sound Imagery and Soundscape Composition approaches were used. Through Sound Imagery it was possible to create an abstract world, where the musical construction has a spectro-morphological organizational model of sounds. The Soundscape Composition approach was used to present a sound context where the listener can observe and appreciate the relations between the sounds in the soundscape. Therefore, it was possible to create an environmentally framed musical composition, which is modeled from the perspective of a person waiting a train and the time passing. This context is musically translated using the reference material to stress the musicality of sounds.

The aim of this study was to develop a piece (composition) in which listening awareness was encouraged. Through this work, listeners can appreciate sounds that are part of their daily lives. The composer tries to transmit in this work, not only his artistic insight, but also his sound vision of the world, offering new models of sound and musical appreciation. As Hildegard Westerkamp has said: "It starts with listening as a conscious practice in daily life, continues during the acquisition of sound materials, the work in the studio, right through to the presentation of the final piece" (Westerkamp, 2002).



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