Koninklijk Conservatorium Den Haag

INSTITUTE OF SONOLOGY

Radio Art

An Expression Of Social Relatedness

Margherita Brillada
Master's Thesis

May 2021

Acknowledgements

Abstract

Radio bridges time and space, brings together people and ideas by establishing collective auditory experiences allowing at the same time mass and individual listening—the absence of a single and precise singular location but rather many indeterminate locations. The intermediate space and time between the broadcaster and the listener allow space-time dislocation—a broken concept of the linearity of time. All these paradigms have to be considered while composing music conceived for a radiophonic context both from the broadcaster and the listeners' side. Fascinated by Radio Art, the research explores the rich history of radio as an artistic medium, the new networks promised by the exponential development of mass media, the relationship between the artists and the various approaches to it. The thesis attempts to understand how Radio/Sound art could bring a greater level of awareness to the audience and involve it in socio-political life. A firm trust in the communicative scope of music and the need to express through it the contradictions of our society led me to designate a space of musical critique to express an array of delicate social topics artistically. Exploring the socio-political agency of the medium– its direct contact with the audience, the possibility of live interaction – the research is driven by the vast forms of expressions that can be projected through it.

Introduction

Overview

This research project, whose title is: *"Radio Art: An Expression of Social Relatedness"*, is conceived to actively participate in social reality. The project attempts to create a specific "radio poetics" considering the paradigms and specificities of the radio medium, aiming to develop a compositional approach intended as a tool for critical reflection on current issues. By increasing awareness of audiences and re-thinking radio as an exhibition space for experimental Sound Art, the project focuses on the production of radio artworks and podcasts characterised by voices, field recordings and instrumental sonorities.

This thesis is the result of several years of studies and it represents a summary of the research developed during nine years of studies in electronic music upon completion of my academic studies. An in-depth historical and theoretical research on the body of Radio Art was fundamental to understanding various approaches and explorations of radio as a medium for artistic activities. The study is driven by specific topics related to my main interests and compositional ideas, such as a significant set of questions about the community, collective listening, the socio-political agency of radio as a medium, technological development and its artistic implications/implementations.

When trying to outline the evolution and ramifications of socio-political commitment, especially those connected with musical experimentation and new technologies relating to one's ethical and aesthetic conception of sound, I argue that the engaged composer must respond to inherent contradictions in contemporary society. Looking at the ancient Greek πολιτική, πόλις and τέχνη, that is "art that pertains to the city", every artistic fact can be *de facto a* 'political' one. By this notion, the sense of music exists in its being *res publica*; moreover, with a firm trust in the communicative scope of music, I have come to designate a space of musical critique to express an array of contemporary social issues artistically. Thinking about the composer-audience relationship and to whom my compositions are addressed, the direction taken by my project aims to diffuse strong social messages through powerful channels of communication. My research is driven by the vast forms of expressions that can be diffused through this media, such as Radio drama and radio artwork. In doing so, I embrace listening as a cultural practice.

The initial research into this topic started about five years ago and involved a historical-artistic contextualisation of the project guided by Rudolf Arnheim's 1936 book, *Radio, an Art of Sound*. Arnheim's book was fundamental at the initial step into the research, looking into topics such as: "The world of sounds", "A New art of sounds", "Wireless and the nations", "Broadcasting and the spirit of unity" "Creating a community". During the last two years, a more in-depth investigation on the history and theory of Radio art was possible mainly thanks to the valuable books *Radio Re-think: Art, Sound and Transmission* edited by Daina Augaitis and Dan Lander, *Experimental Sound and Radio* edited by Allen S.Weiss, and *Wireless Imagination* by Douglas Kahn.

Relationships and parallelisms between early explorations and more recent theoretical considerations were fundamental to delineate a direction of various artistic approaches to the medium. The thesis opens by discussing the early investigations and the first avant-garde theories that penetrated and anticipated the role of mass media, and it develops following the timeline of significant events in the history of radio art.

After the Second World War, new technologies opened new possibilities for radio artists and modern Radio art practice development. Thanks to these new favourable conditions, a new radiophonic genre developed in Italy: the radio drama. An in-depth study on radio drama, especially concerning the evolution in the Italian context, was fundamental to frame my radio compositional artworks in a historical-theoretical context. The research into this topic was possible thanks to the precious book *Radiodramma e arte radiofonica. Storia e funzioni della musica per radio in Italia* (translated to English: "Radio drama and Radio art. History and function of music for radio in Italy) by Angela Ida De Benedictis.

The second chapter discusses topics that have influenced my compositional approach and the theoretical direction of this research analysing authors and works correlated to the socio-political context of radio art. A firm trust in the communicative scope of music, my belief in its socio-political dimension, in addressing social issues and raising audiences awareness began to arise years ago. From this moment on, I have always been fascinated by the socio-political commitment expressed through the compositional ideas of Luigi Nono, which has become a great source of inspiration. An in-depth analysis of Luigi Nono's work was fundamental in my previous Bachelor's thesis to understand the character of the music and the social commitment of the Maestro. A detailed analysis of Luigi Nono's *Contrappunto Dialettico Alla Mente* has been fundamental in composing one of my last pieces (*Stati d'Ansia - C1)*, a strong inspiration source for the choices of sound material, the text and the formal structure. *Stati D'Ansia C-1* is the first musical outcoming of this specific research project; it results from different studies and can be considered the evolution of my compositional approach in dealing with voices in the musical context. It is the first radio artwork disengaged from the radio drama/documentary form produced in my artistic research, an attempt to explore the practical implementations of compositional ideas derived from the previous theoretical research about using voices in the electroacoustic musical context. It is a studio-focused piece on voice and interaction with electronic processing that embraces practice-oriented research.

To continue through the fragmented history of radio art, the third chapter deals with a period of fundamental importance in the history of Radio Art, that can be envisaged in the first half of the 1970s, with the development of the Free Radios Movement. 1976 is the year that marks the opening of the ether to private broadcasters, allowing the birth of a new way of conceiving Radio Art.

In Italy, in 1975, the ether opened up to private individuals. It was a cultural and political phenomenon that deserves attention in the socio-political context of the history of radio art. Free radios meant freedom of expression, circulation of new music, politics, new languages and moments of aggregation. The thesis moves on by considering the contemporary context. Radio had renewed itself through the Internet with the development of Web Radio and online streaming. The audio streaming technique has replaced the analogue transmitting system, and artists can experiment on radio outside the legal constraints of an FM license. Over the years, the potential of the mass media has expanded and changed, developing in various aspects and artistic forms. This thesis interest is focused primarily on how new media can impact socio-political life. The context of "Radio" and its audience has changed so much in recent times. Furthermore, the new media re-established different ways of listening, the interaction between audience–composers and the possibility of potentially reaching an audience all over the world simultaneously.

The fourth and final chapter will focus on my compositional approach development. Analysing many of the early speculations and theories on the medium, I came to outline my compositional approach. The first artistic radiophonic form, the radio drama, was born as a broadcast of theatrical works and then evolved during the past century towards increasingly experimental techniques and approaches to the medium. My approach to radio art began with compositions with a closed, linear and narrative, formal structure to ultimately move towards open forms that experiment and reflect the paradigms and specificities of the radio medium. I can argue that my compositional approach development in the context of radio art is somehow mirroring this historical-theoretical evolution.

During the development of this research project, a set of questions regarding sound artists who move in the areas between socio-politics and sound art were addressed to frame the social context of the project. The main goal was to investigate the evolution of theoretical and historical questions focusing on the practice of Sound-Artists, looking into the transition in a contemporary context. Exploring the possibilities of radio as a medium for artistic activity, it is evident that one of the areas of most significant interest concerns acoustic ecology.

In this thesis, I preferred to focus on the evolution of the history of radio art, specifically from the first explorations up to the 1970s, mainly because it is not easy to recreate a homogeneous and compact history of radio art. This project attempts to outline a sort of continuity in radio history, obviously concerning the topics of my interest. Consequently, at the end of the thesis, instead of dwelling on the approaches to the medium in the contemporary context, I outline my compositional process and the theories that led me to shape and narrow.

Radio, podcast, and music streaming platforms all have their public and different ways of listening. Questions raised about the context of new media and its audience are cardinal points for choosing the compositional methods and how to shape the sound according to this.

Podcasts are listening-on-demand platforms that allow a conscious and intimate way of listening. My compositional methods deal with the concept of linearity of time in such formats, resulting in a sonic narrative structure. On the other hand, FM Radio and related online streaming platforms are usually listened to in everyday situations where it is difficult to predict when the audience is tuned in. When composing in the radiophonic context, it is possible to overlook the concept of linearity of time. I argue that Radio Art should avoid dealing with finite temporal objects with a beginning, a middle and an end, but rather allow radio listeners to perceive a different piece and create the final version from a framework of possibilities. The compositional approach for Radio Art should be an open acoustic final result, welcoming the idea of losing control of a temporal structure.

My artistic work focuses on producing a composition, titled *Il Tempo Sospeso*, conceived as a radiophonic artwork, reflecting on the change of urban soundscape of the city of Den Haag during the pandemic period and related social problems. By offering an intimate space for reflection on how the new sonic environments and the new aural conditions are changing during the pandemic, one of my goals is to stimulate conscious and collective listening, creating moments of reflection on current issues. The concept of the composition is based on looped samples, which represent this suspended time we are living in, almost as if we were in a cyclical and repetitive time bubble, without changes and external stimuli. Il Tempo Sospeso is framed in the context of radio/sound art in acoustic ecology, given the attention paid to the anthropogenic and biological environment. As an audio artist, one of my primary concerns is how to create the desire to listen in the audience – in a world where the tendency is not to listen – to radio or the soundscape?

Chapter I

1.   History and theory of Radio Art

This research explores radio's rich history and theory as a medium for artistic activities and the relationship between the artist and technology. The study is driven by specific topics related to my main interests and compositional ideas, such as a significant set of questions about the community, collective listening, the socio-political agency of radio as a medium, technological development of the medium and its artistic implications/implementations, the role of the disembodied radio voice and different languages expressed through it.

Relationships and parallelisms between early explorations and more recent theoretical considerations were fundamental to delineate a direction of the medium's various artistic approaches. The following chapter will mainly focus on early investigations and the first avant-garde theories that could penetrate and anticipate the role of mass media.

First of all, it is essential to say that it is difficult to delineate a continuity in radio art history; the radio medium was born as a state propaganda tool, with military, industry, and commercial control. It has always been regulated by state control and censorship situating radio artists in a quasi-industrial relationship with the medium. Impeding the development of an art of radio, above and beyond a complete consideration of aural signification, is the fact that artists have not had easy access to the airwaves, as the radio apparatus itself has historically been developed under the control of state and corporate interests. Radio, and other electronic and digital technologies, are derived from military research and development, sought primarily as weapons of destruction and social control. In this context, artists had a particular challenge, or rather, how to bypass censorship and the way in which the state uses broadcast media to regulate the dissemination of ideas. When considering radio as art, most artists have grown to accept a level of control and censorship that is not normally tolerated with forms of artistic and cultural expression such as painting and literature. Considering all the restraints applied to the medium (broadcast quality, balanced programming, marketing research, the trained voice, restriction to access, licensing regulation, just to name a few), it is difficult to consider it as a form of autonomous artmaking[1]. For those who wish to express themselves through the medium of radio, a barrier exists that represents a crisis of democracy and freedom of expression. Since artists began to express interest in the radio medium with early theories and speculations, the tension between perceived possibilities and politically controlled space has meant that an incomplete history of the practice of radio art has emerged. During the last century, many radio artworks were never broadcast or censored due to their socio-political contents. In the second chapter, I will analyse and consider some of these works relevant to my compositional approach adapted to the radio specificities and paradigms.

---

[1] Daina Augaitis and Dan Lander, *Radio Rethink - Art, Sound and Transmission* (Walter Phillips Gallery, 1994) Pag. 13–14

The history of radio art is relatively recent. Therefore the exploration of its impact on society is still at its very beginning. One of my aims is to try to understand its evolution in a contemporary context. As Dan Lander observed in the chapter *Radiocasting: musing on Radio Art* in *Radio Rethink*:

> Although historical and contemporary artistic and theoretical discourse regarding radio art is scant, to say the least, there has been and continues to be, audible evidence of artists and writers whose considerations on the subject begin to shape a theoretical body. (...) From the beginning, artists were prone to considering radio as a material as opposed to a merely distribution apparatus, as is evident in the writings of Bertolt Brecht, F.T. Marinetti and others. However, when compared to the other arts, namely the visual, there is a marked absence of historical radio artworks and theoretical writings. There are many factors which contribute to this absence including the prominence of the visual over the aural, industrial imposition, the practice of transposing other media onto a radiophonic space, the lack of an autonomous theory of sound and, finally, a generalized disengagement with the spatial and temporal shift brought about by the new electronic technologies. In addition, radio artists have had to confront the regulation of content, political and conceptual, that follows with state regulation of the airwaves. The development of, and desire for, new modes of production and interpretation that artists have expressed over the years has not always materialized as a result of these imposed restrictions.[2]

In his book, Dan Lander explores some of the reasons for the historical discontinuity regarding radio art and, at the same time, points to the relevance of the theoretical basis. As Allen S. Weiss wrote at the beginning of his book *Experimental Sound and Radio*: "Multiple and contradictory histories of radiophony could be constituted, depending upon both the historical paradigms chosen to guide the research and the theoretical phantasm behind the investigation" (or I would say the investigation's focus chosen to guide the research). Its prehistory is vast; many key moments are essential; during this thesis, I will focus the attention on some main relevant theories and artworks in the history of radio art that were fundamental to shape my compositional approach. As Allen S. Weiss said:

> There is no single entity that constitutes "radio"; rather, there exists a multitude of radios. Radiophony is a heterogeneous domain, on the levels of its apparatus, its practice, its forms, and its utopias. A brief and necessarily incomplete sketch of some possibilities of non mainstream concepts of radio will give an idea of this diversity: F.T. Marinetti—"wireless imagination" and futurist radio; Velimir Khlebnikov—revolutionary utopia and the fusion of mankind; Leon Trotsky—revolutionary radio; Dziga Vertov—agit-prop and the "Radio-Eye"; Upton Sinclair—telepathy and mental radio; Bertolt Brecht—interactive radio and public communication; Rudolf Arnheim— radiophonic specificity and the critique of visual imagination; the labyrinthine radio narratives of Hörspiel; William Burroughs—cut-ups and the destruction of communication; Glenn Gould—studio perfectionism and "contrapuntal radio"; Marshall McLuhan—the primitive extension of the central nervous system; the diversity of community radios; free radio; guerrilla radio; pirate radio; radical radio...[3]

---

[2] Daina Augaitis and Dan Lander, *Radio Rethink - Art, Sound and Transmission* (Walter Phillips Gallery, 1994) Pag. 11
[3] Allen S. Weiss, *Experimental sound and radio* (The MIT Press, Cambridge, Massachusetts-London2001) Pag. 2

By gathering both original essays and several newly translated documents into a single volume, editors Douglas Kahn and Gregory Whitehead, in *Wireless Imagination Sound - Radio, and the Avant-Garde*, provide an overview of the theories of the last century.

> Yet the literature on the arts of recorded and broadcasted sound, and of conceptual, literary, and performative sound, is scant at all levels, from basic historical research to theoretical modelings. Thus, while other historical fields may be busying themselves with something more detailed, the study of the relationship of sound and radio to the arts is open to a full range of investigations, including the most in general.[4]

As observed by Douglas Kahn:

> From most of the wireless age, artists have found themselves vacated from radiophonic space; thus the history of radio art is, in the most literal sense, largely a history of nobodies. Periodic visitations have remained isolated occasions. (...). The nobodies of radio art have been diminished even further by the numbing absence of critical discourse. Such silence can only feed up upon itself, eventually making even the thought of radio as cultural space seem remote, farfetched, improbable. By consequence, when radio has appeared under the name of art, it is most often under the degraded guise of industrial artefact, with its commercialized cacophony providing one sound source among others. In this reduced state, radio is no longer an autonomous public space but merely an acoustic readymade to be recontextualized, switched on, and played. Alternately, the investigation of radio has disappeared into the investigation of ***sound,*** the wireless body stripped and redressed to provide a broadcast identity for the nebulous permutations of diverse *ars acustica*. In this variation, radio art is defined as simply whatever any artist from any medium happens to represent, acoustically on air. Radio's gradual drift into such a flatly pedestrian state of mind contrasts sharply with the high-flying and exuberant aspirations first triggered by Marconi's twitching finger: promises of communication with alien beings, the establishment of a universal language, instantaneous travel through collapsing space, and the achievement of a lasting global peace. "It would be almost like dreamland and ghostland, not the ghostland cultivated by heated imagination, but a real communication from a distance based on true physical laws." However breathless in formulation, this author's coupling of "dreamland and ghostland" roots radio in a vibrant double infinity, the dreamland infinity of the human nervous system oscillating with (and against) the vast ghostland of deep space.
> If the dreamland/ghostland is the natural habit for the wireless imagination, then the material of radio is not just sound. Radio happens in sound, but the sound is not really what matters about radio. What does matter is the heart of the infinite dreamland/ghostland, a hearts that beats through a series of highly pulsed and fricative oppositions: the radio singal as intimate but untouchable, sensually charged but technically remote, reaching deep inside but from away out there, seductive in its innovation but possibly lethal in its effects. Shaping the play of these frictions, the radio artist must then enact a kind of sacrificial autoelectrocution, performed in order to go straight out of one mind and (who's there) then diffuse, in search of a place to settle. Mostly, this involves staging an intricate game of position, a game that unfolds among far-flung bodies, for the most part, unknown to each other.[5]

---

[4] Douglas Kahn and Gregory Whitehead, *Wireless Imagination, Sound - Radio, and the Avant-Garde* (The MIT Press, Cambridge, Massachusetts-London, 1992) Pag. 1
[5] D. Kahn, 254–254

1.1.   Radio specificities, according to Rudolf Arnheim

Starting the research from the early explorations and the first avant-garde theories on the medium illuminated my perspective on composing music conceived for radio. It is impressive to see how the early investigations were somehow visionary in light of the contemporary context.

In 1936 Rudolf Arnheim published an essay dedicated to the invention of the radio and probing its artistic potential. For those unfamiliar with Arnheim, it should be explained that he was a German-born writer, perceptual psychologist, and an art and film theorist/historian.

"Radio – an Art of Sound" was written when radio was still a relatively young medium. However, Arnheim's book has, over the years, become a classic in communication studies. Thanks to his ability to penetrate and anticipate the new and future impact of mass media, his book can still be read today, in the presence of a completely transformed scenario, not only as a historical document. In his investigation on the art of listening to the radio, Arnheim captures the medium's profound essence and moves to understand some constant aspects of communication and human culture's functioning. It is a book that moves between speculations on radio art and its socio-political agency, with a solid historical and sociological value, still very insightful in a contemporary context.
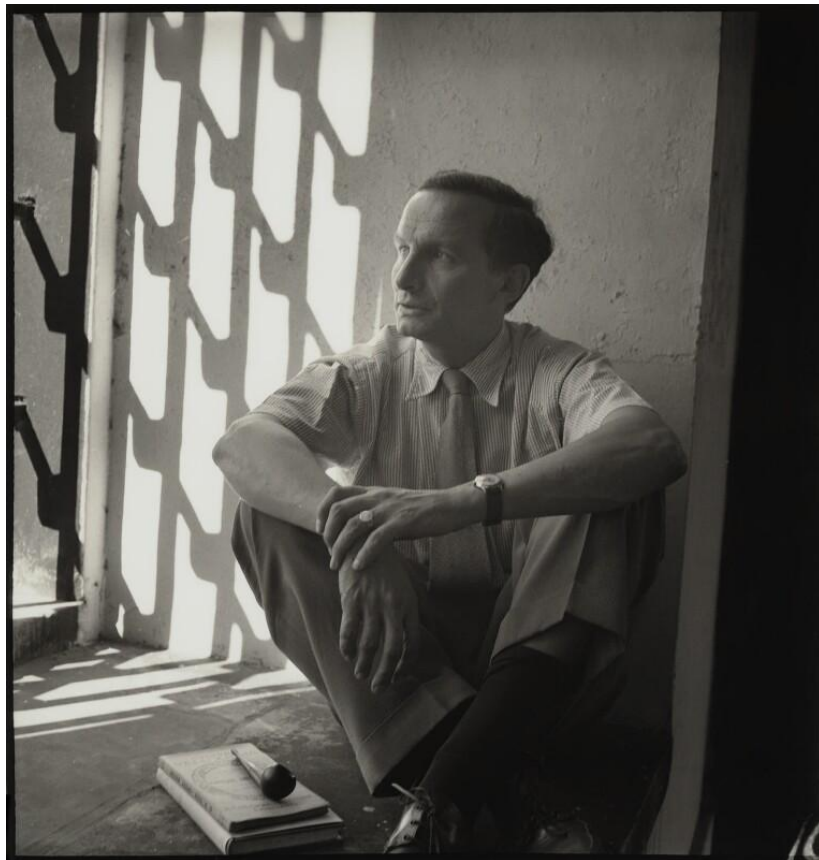
Rudolf Arnheim contemplated in his book the possibilities for what he perceived to be a new form of art, born from the invention of the wireless. He described a range of ontological and conceptual considerations with topic headings such as "A new art of Sound,", "Sequence and Juxtaposition" "Voices without bodies", "In praise of blindness: Emancipation from the body", "The art of speaking to everybody", "Wireless and the nation".

In his book, various key concepts piqued my interest and can be considered relevant as a guide for radio artists. In *"Radio – The art of listening"*, he wondered if radio can be considered an art form. This question was connected to his observation about this new communication medium's reproductive character, namely that of the visual and acoustic channels that it offered. His reflection on Radio Art moves precisely from the recognition of what he himself calls "stretch marks of the medium" or which can be more simply paraphrased as imperfections inherent to radio, which make it appear more defective than film since the medium is not visual – the primary sense that we are accustomed to.

However, for Arnheim, these qualities of radio make the medium unique and fascinating. According to him, on the one hand, there is a visual language with a passive audience; on the other hand, there is an auditory language with an intensely active audience. In addition to focusing on speech and music, Arnheim also suggests that a listener has a large capability to reflect and think through "pure sound" and "blind listening".

> If wireless claims the whole attention of the theorist of art because for the first time in the history of mankind it makes practical experiments with an entirely unexplored form of expression in pure sound, namely, blind hearing, it is a no less enthralling phenomenon for the sociologist.[7]

He describes "a world organised by ear", where there are only two kinds of art capable of completely renouncing the eye — music and radio.

Arnheim's observations point to one of the principal factors contributing to the underdevelopment of radio art: a hierarchy of the senses that situate sight at the top of the perceptual scale. It remains elusive as an autonomous language suited to the task of developing a discourse on delocalised reality media forms such as radio art.[8]

Only a small part of the book, right at the end, deals with "wireless" as a means of transmission and dissemination. During the same period, in Berlin, Goebbels and Hitler invaded the airwaves, declaring that the radio's destiny was to become a state propaganda tool of unassailable force[9]. At that moment, Rudolf Arnheim was not yet the famous American art historian who would make arts understandable through experimental psychology, but only a young film critic, temporarily exiled to Italy after the Nazis came to power.

---

[7] Rudolf Arnheim, *Radio: An Art of Sound* (Salem: 24 Russell Square London Publishers, 1936) Pag. 226
[8] Daina Augaitis and Dan Lander, *Radio Rethink - Art, Sound and Transmission* (Walter Phillips Gallery, 1994) Pag. 12–13
[9] It is impressive that the first people to take full advantage of the propagandistic opportunities of the new communication medium were politicians of the extreme right. I think there is a strong parallel here with the way the extreme right in the early 21st century has understood how the internet, and new mass media, can be similarly used as a channel for disinformation.

However, he asked Gestalt psychology's fundamental questions: why do we see or hear things as we do, and how can art change the way we see and hear? Arnheim tries to answer these above questions in his book, examining the social and political possibilities of the technology of radio.

As observed by Serge Cardinal in *Radiophonic Performance and Abstract Machines: Recasting Arnheim's Art of Sound*[10]: "Arnheim understands that if an art of sound can have a social and political impact, it is because society and politics are first a partition[11] of the perceptible and a partition of sensibility; politics is a form of aesthetics: a partition between what can and cannot be seen or heard, a partition between what can and cannot be joined together, a partition between what can and cannot be intermingled. Consequently, an art of sound can reconfigure a political and social order only if it reshapes the social and political partition of our acoustic sensitivity." Arnheim knows that artists seriously interested in radio performances - Filippo Tommaso Marinetti and Pino Masnata, for instance – aim at the same aesthetic target[12]. But he also knows how quickly a struggle for a redefined sensitivity can become a war on people—how quickly radio's capacities to synthesise infinite simultaneous actions can become a rapid transmission of war orders. For this one crucial reason, he needs to look more rigorously at the aesthetic potential of radio performances. In the chapter "Wireless and the Nation" he writes, "wireless eliminates not only the boundaries between countries but also between provinces and classes of society."[13]

> Wireless without prejudice serves everything that implies dissemination and community of feeling and works against separateness and isolation. (...)[14]
>
> An apparatus whose technical peculiarity simply consists in enabling sounds made at a particular spot to be simultaneously reproduced in as many and as far removed places as one wishes by disrespectfully breaking through boundaries of class and country, signifies a spiritual event of primary importance, and creates a situation at once dramatic and humorous.[15]

He believes in the capacity of radio to abolish frontiers. As deduced from his essay, he is optimistic about radio's capacity to draw the entire planet into the sphere of sonic influence and to create a music of global dimensions[16]. Then he comes to a conclusion that only by exploring the singular macrocosm of the radio would our world be restored, not as a static presence, but as a dynamic potential for activities and changes.

---

[10] Serge Cardinal, *Radiophonic Performance and Abstract Machines: Recasting Arnheim's Art of Sound.* Pag. 1–2
[11] See Jacques Rancière, *Le Partage du sensible. Esthétique et politique* (Paris: La Fabrique, 2000)
[12] See F. T. Marinetti and Pino Masnata, "La Radia (1933)", in this thesis at pag. 20–25
[13] Arnheim, 238
[14] Arnheim, 232–233
[15] Arnheim, 226–227
[16] Arnheim, 28-29, 34-35, and 42.

> The new and close alliance of natural and artificial sound will not only create a new branch of art, but will also bring about a refinement of our sensibility. The new aural education by wireless, which is so much talked about, does not consist only of training our ear to recognise sounds, so that it can learn to distinguish the hissing of a snake from that of steam, and the clanking of metal from the clatter of porcelain. Such a discrimination is doubtless desirable: it brings about, so to speak, the enrichment of the aural vocabulary by whose help the loudspeaker describes the world. But it is more important that we should get a feeling for the musical in natural sounds; that we should feel ourselves back in that primeval age where the word was still sound, the sound still word.[17]

Not only does Arnheim rewrite here Luigi Russolo's "Art of Noise" manifesto, but he also anticipates Pierre Schaeffer's *musique concrète*.[18]

Arnheim begins by defining the perceptual characteristics of the medium of radio programming so from this base he could explore its expressive potential. He recognises that radio is entirely free to reconfigure an event's temporal landscape and lists the editing procedures—reduction and transposition—that break up one-dimensional, linear movement through time.[19]

His analyses go beyond a simple catalogue of radio's attributes as it is possible to deduce from this double claim: "the radio drama [...] is capable of creating an entire world complete in itself."[20] Thus, we should be able to evaluate the success of a radio program—its capacity to arouse the empathy and participation of our senses aside—by its power to test the boundaries of hearing[21] and by its capacity to invoke other uses of that faculty: a fresh, discordant and unattached employment of the senses, the imagination, the memory and the very thinking process.

Moreover, in the chapter "In Praise Of Blindness: Emancipation From The Body – Against Using Imagination", he asserts:

> The wireless artist must develop a mastery of the limitations of the aural. The test of his talent is whether he can produce a perfect effect with aural things, not whether his broadcast is capable of inspiring his listeners to supplement the missing visual image as realistically and vividly as he can. Just the contrary: if it demands such supplementing it is bad, because it does not succeed with its own resources, but has a bitty effect. The sensory preponderance of the visual over the aural in our life is so great that it is very difficult to get used to considering the aural world as more than just a transition to the visual world.[22]

His ruminations on the order of the senses are most relevant when considering the gap in historical, theoretical and practical developments of an art of radio.

---

[17] Arnheim, 34–35
[18] See Luigi Russolo, *L'Arte dei Rumori* (Milano: Edizioni Futuriste di "Poesia", 1916); Pierre Schaeffer, *Traité des objets musicaux* (Paris: Seuil, 1966)
[19] Arnheim, 105–117
[20] Arnheim, 137
[21] Arnheim, 136
[22] Arnheim, 136

> The eye alone gives a complete picture of the world, but the ear alone gives an incomplete one… The essence of broadcasting consists just in the fact that it alone offers unity by aural means… the essence of an event, a process of thought, a representation… The sensory preponderance of the visual over the aural in our life is so great that it is difficult to get used to considering the aural world as more than just a transition to the visual world. Thus there is a widespread fixed opinion as to the task of the wireless.[23]

Arnheim's study can help us understand why a voice heard on the radio may acquire so much power and how a multimedia performance can reshape our time-space. Once I understood that this performance replays in its own ways many radio's features (disembodiment of the voice; schizophrenic editing of words; a music of noises; a combination of several spaces and places), I found it very interesting to follow the storyline of his essay and try to make analogies with the contemporary radio art practice in order to comprehend how his essay was able to anticipate various future approaches to radio art.

Other factors have also contributed to the underdevelopment of an art of radio. These include the imposition of a borrowed musical discourse applied to all sound phenomena. As observed by Dan Lander: "These strip away any social and/or cultural referentiality and create a situation in which aurality in general is perceived as music, as if the origin, context and phenomenology of any given sound or noise can be measured only by its contribution to a renovation of western art music."[24] Radio art requires a consistent body of research and practice that concentrates on sound at its point of signification, not a literal rendering which will collapse into clichè, but a sensitivity to the ways in which meaning in sound circulates dissipates and re-emerges. The development of an autonomous body of theory and practice regarding aural referentiality – in particular as it relates to radio and electronic media – will contribute to a better understanding of the role that radio art plays in the articulation of social and cultural ideas.

In addition, it is the mainstream radio model that dominates the context of the majority of production and reception. However, looking into alternative approaches, ones that point to alternative/different modes of expression, it is just through analysing the documented historical-artistic ideas and activities that will be possible to delineate an autonomous articulation of a specific "radio language" and "radio poetics".

1.2. Early explorations and Avant-Garde theories

Certain things have become evident while researching radio in the western avant-garde. First, most artists respond to radio only rhetorically, at a distance from it, because access to the airwaves was limited, even when it existed; or because the technology did not exist, so there was just mere theoretical speculation on the medium. As Douglas Kahn says:

> The situation is comparable to the recent fascination with virtual reality technology as a sign of artistic possibility while access to the equipment by artists remains extremely limited: the interest in radio during the avant-garde too rode on the trope of its perceived inevitability.[25]

---

[23] Arnheim, 135–136
[24] Daina Augaitis and Dan Lander, 13
[25] See *"Radio Space"* by Douglas Kahn in *Radio Rethink - Art, Sound and Transmission*, 95

It is essential to consider that radio at the beginning of the last century is not necessarily radio today; it could include microphones, sounds recorded or amplified in a studio and was not necessarily broadcast from a single source to a mass of listeners. It could be clearly defined to signal a modernist reconfiguration of political economy, technology, thought, language, communication and entertainment. Although radio has been used and imagined as a space for possibility in avant-garde literature, music and the visual arts, it has received little treatment within historical writing. This has distanced not only contemporary radio and audio artists from their ancestry, but media artists in general even if contemporary radio art defines itself within issues raised by the Futurist Manifestos. The development of a sound language of new narratives continues, but such approaches reside in a tradition established before the digital revolution. Furthermore, it is essential to rethink all the art from the understanding that wireless, radio and other media communications have transformed the conduct of life since the late nineteenth century.[26]

At the beginning of the 1930s, with more than a decade of delay compared to the English, French and German cultural circles, the times for a debate on the possibilities and the legitimacy of a "Radio Art" began to be ready also in Italy. A first decisive contribution on a theoretical and aesthetic level was provided by Enzo Ferreiri, artistic director of the national Italian radio from 1929, who in 1931, on the pages of the magazine *Il Convegno*, published the first Italian Radio Manifesto entitled *Radio as a creative force*. Underlining on the one hand the potential of the new communication tool, on the other the need to distinguish between the needs of the artist (production) and those of the user (dissemination).
Ferreiri came to note the absence in all nations - except for some experiments attempted by Paul Hindemith in Germany - of a radio that would stimulate the creation of "new journalistic or artistic forms" conceived according to a language suited to his possibilities.[27]

The urgency of "a new art that begins where the theatre, the cinematographer and the narration end"[28] was expressed in a loud voice in the Italian Futurist Manifesto drawn up in 1933 by F. T. Marinetti and P. Masnata, *The radio futurist theatre*, a text renamed by the same authors *La Radia*. The "new creativity", as well as the linguistic and technical innovations invoked in these visionary pages, obviously remained anchored to a purely theoretical and utopian level, easily explained by the intimate contradiction inherent in understanding a mass communication system as a means of individual exaltation.

---

[26] Ibidem, Pag. 96
[27] Angela Ida De Benedictis, *Radiodramma e arte radiofonica, Storia e funzioni della musica per radio in Italia* (Torino: De Sono, 2005) Pag. 3–6
[28] See F. T. Marinetti and Pino Masnata, "La Radia (1933)", in this thesis at pag. 19–24

F. T. Marinetti and Benedetta Cappa Marinetti, 1932, Rome (in front of Fortunato Depero's Stormy Patriotic Marinetti: Psychological Portrait, 1924), black and white photograph, Marinetti Papers, the Beinecke Rare Book and Manuscript Library, Yale University, New Haven, CT. © Artists Rights Society (ARS).

1.2.2.   Velimir Khlebnikov and *The radio of the Future* Manifesto

Considering the complexity of the historical development of radio as an industry, radio as a military weapon, it is not difficult to imagine that artists have had a difficult time in creating autonomous works and theoretical histories. However, although the possibilities were in favour of a controlled radio, lacking any natural communicative properties, there continue to be artists who have developed complex relationships to the medium.

One of the earliest of such artists was the Russian avant-garde poet Velimir Khlebnikov[29]. His poetry was "aimed at revealing the primaeval meaning of existing word roots, expressed through consonantal sounds rather than conventional semantics", creating "a universal language based on similar-sounding roots"[30].

In 1921 he wrote a manifesto called *The radio of the Future,* where it is clear that he considers radio as a device that can inform, educate and unify all people.

> The Radio of the Future – the central tree of our consciousness – will inaugurate new ways to cope with our endless undertaking and will unite all mankind.
> The main Radio station, that stronghold of steel, where clouds of wires cluster like strands of hair, will surely be protected by a sign with a skull and crossbones and the familiar word "Danger", since the last disruption of Radio operations would produce a mental blackout over the entire country, a temporary loss of consciousness.[31]

1.2.3. *La Radia* – The Italian Futurist Radio Manifesto

Khlebnikov's understanding of how new media would affect the collective consciousness of humankind by its global presence is somehow anticipating the manifesto written by the Italian Futurists Filippo Marinetti and Pino Masnata. *La Radia*, written in 1933, borrowed from Marinetti's notion of *parole in libertà* (words in freedom). The basis for his idea was "that the elements central to the logical linguistic structure (conjunctions, adverbs, adjectives, verbal conjugations and punctuation marks) had to be eliminated to reduce language to its essential parts". Words that were now liberated from the original syntax could be juxtaposed by analogy, creating what Marinetti called a *wireless imagination*.

La Radia is prefaced with a general Futurist overview, and it first appeared in the Torino *Gazzetta del Popolo* on September 22, 1933, and soon after, across Europe and South America. Marinetti and Masnata were late to join the theoretical discussions of radio in Italy. They followed the first radio manifesto by Enzo Ferrieri, who introduced the crucial idea that the source of radio's true, paradoxical power derives from silence. The concept reappears as one of the most provocative topics of *La Radia*.

---

[29] For more on Velimir Khlebnikov see Douglas Kahn's essay "Radio Space" in *Radio Rethink - Art, Sound and Transmission*
[30] Daina Augaitis and Dan Lander, 15
[31] Velimir Khlebnikov, "The radio of the future", in *The king of time,* ed. Charlotte Douglas (London and Cambridge: Hardvard University Press, 1985) Pag. 155

F.T.Marinetti & Pino Masnata

La radia

Futurist Manifesto of October, 1933

(Published in "Gazzetta del Popolo")

LA RADIA MUST NOT BE _____

1 theater because radio has killed the theater already defeated by sound cinema

2 cinema because cinema is dying (a) from rancid sentimentalism of subject matter (b) from realism that involves even certain simultaneous sytheses (c) from infinite technical complications (d) from fatal banalizing collaborationism (e) from reflected brilliance inferior to the self-emitted brilliance of radio-television

3 books because the book which is guilty of having made humanity myopic implies something heavy strangled stifled fossilized and frozen (only the great freeword tableaux shall live, the only poetry that needs to be seen)

LA RADIA ABOLISHES

1 the space and stage necessary to theater including Futurist synthetic theater (action unfolding on a fixed and constant stage) and to cinema (actions unfolding on very rapid variable simultaneous and always realistic stages)

2 time

3 unity of action

4 dramatic character

5 the audience as self-appointed judging mass systematically hostile and servile always against the new always retrograde

LA RADIA SHALL BE

1 Freedom from all point of contact with literary and artistic tradition   Any attempt to link la radia with tradition is grotesque

2 A new art that begins where theater cinema and narrative end

3 The immensification of space   No longer visible and framable the stage becomes universal and cosmic

4 The reception amplification and transfiguration of vibrations emitted by living beings living or dead spirits dramas of wordless noise-states

5 The reception amplification and transfiguration of vibrations emitted by matter   Just as today we listen to the song of the forest and the sea so tomorrow shall we be seduced by the vibrations of a diamond or a flower

6 A pure organism of radio sensations

7 An art without time or space without yesterday or tomorrow   The possibility of receiving broadcast stations situated in various time zones and the lack of light will destroy the hours of the day and night   The reception and amplification of the light and the voices of the past with thermoionic valves will destroy time

8 The synthesis of infinite simultaneous actions

9 Human universal and cosmic art as voice with a true psychology-spirituality of the sounds of the voice and of silence

10 The characteristic life of every noise and the infinite variety of concrete/abstract and real/dreamt through the agency of a people of noises

11 Struggles of noises and of various distances, that is, spatial drama joined with temporal drama

12 Words in freedom   The word has gradually developed into a collaborator of mime and gesture   The word must be recharged with all its power hence an essential and totalitarian word which in Futurist theory is called "word-atmosphere"   Words in freedom children of the aesthetics of machines contain an orchestra of noises and noise-chords (realistic and abstract) which alone can aid the colored and plastic word in the lightning-fast representation of what is not seen   If he does not wish to resort to words in freedom the radiast must express himself in that freeword style which is already widespread in avant-garde novels and newspapers that typically swift quick synthetic simultaneous free-word style

13 Isolated word repetitions of verbs in the infinitive

14 Essential art

15 Gastronomic amorous gymnastic etc. music

16 The utilization of noises sounds chords harmonies musical or noise simultaneities of silence all with their gradations of appoggiatura crescendo and decrescendo which will become strange brushes for painting delimiting and coloring the infinite darkness of la radia by giving squareness roundness spheric geometry in short

17 The utilization of interference between stations and of the birth and evanescence of the sounds

18 The delimitation and geometric construction of silence

19 The utilization of the various resonances of a voice or sound in order to give a sense of the size of the place in which the voice is uttered

   The characterization of the silent or semisilent atmosphere that surrounds and oolors a given voice sound or noise

20 The elimination of the concept or the illusion of an audience which has always had even for books a deforming and damaging influence

32

---

[32] F. T. Marinetti and Pino Masnata, "La Radia (1933) in *Wireless Imagination, Sound - Radio, and the Avant-Garde,* 265–269

During the development of this project, the theoretical research and the artistic-musical approach development brought my focus into the use of the voice in the musical discourse for radio art. Digging into the pre-history of radio art led me into an in-depth interest in the discussion around the use of the voice in the radio art context. What is fascinating to me in this Manifesto is the attention they bring to the concept of *words in freedom* and their ability to overcome borders and unify time and space in the unity of action.

According to Heidi Grundmann, seen today, *La Radia*[33] – and other Futurist manifestos – possess an iconic force: they are statements about the contemporary world, images of the industrial age, that have changed the world entirely.[34] Inside the Futurist manifestos we find ideas very close to those sought today by philosophers and media theorists to describe the state of a society that is characterized by the rapid development of electronic technology. Futurists were able to "see" the image of a worldwide network of distributed electricity just as well as they "saw" the image of the crisis of time-space in today's communication. Moreover, they were able to develop in their writing such as *La Radia* the image and concept of an art that they themselves could not put into practice, here they understand the ability of new technology and predict the shift of the role of radio.

La Radia signals a clear understanding of the implications inherent in the ability of new technology to allow a simultaneous presence, a dematerialization, an "organism". Marinetti and Masnata grasped what has since developed into a body of theory regarding mass communication as it relates to artists working in media. *La Radia* was able to predict the shift from a machine age to an electronic age, moving beyond radio into the kind of global information society that has since come to be.[35] In the same year Marinetti wrote five short pieces for radio that he called *Radio Sintesi*, which were never aired. In the Sintesi entitled *Dramma di Distanze* (*Drama of Distances*) Marinetti most clearly elucidates his understanding of the ability of transmission to traverse the globe in a simultaneous juxtaposition of dislocated sites (11 seconds of a military march played in Rome, 11 seconds of a Tango danced in Santos, 11 seconds of Japanese religious music performed in Tokyo, and so on.). In other words, Marinetti works with the specific characteristics of the radio medium, its lines and channels, its mix of live and recorded material, its ability to be in many places simultaneously. Marinetti underlines the character of sounds and/or recorded information as material, a strategy that continues to play an important role in media art, especially now with the advent of the digital era. According Heidi Grundmann, *La Radia:*

> "emphasized the new sensibility that Marinetti felt was inherent in modern experience. Sound waves, creatively used, could offer a "universal cosmic human art". This was a world without "time, space yesterday and tomorrow". Futurist radio art would utilize the characteristics of the medium. Interference, static and the "geometry of silence" could play a part in the general Futurist overturning of conventional values.[36]

---

[33] It is important to specify that the term "Radio" in English also translates into Italian, instead "Radia" (in Italian, it has a feminine meaning) is a term that refers not purely to radio medium but rather includes other concepts linked to futurism and art in general.
[34] See *"The Geometry of silence"* by Heidi Grundmann in *Radio Rethink - Art, Sound and Transmission*, 129-137
[35] Daina Augaitis and Dan Lander, 16
[36] See *"The Geometry of silence"* by Heidi Grundmann in *Radio Rethink - Art, Sound and Transmission*, 129-137

The specific ideological and political intention of the conceptual radio works of Marinetti is unclear. At least twice during his life, he maintained ties to Mussolini's Fascist Party, although it appears that the Party had not so much interest in him. "Marinetti's most political works, *Democrazia Futurista* (Futurist Democracy, 1919) and *Al di là del comunismo* (Beyond Communism, 1920)," point to a "wide gap between Futurists and Fascists. It lies in the Futurist anarchic element that rebels against all state hierarchies."[37]

However, as Dan Lander writes at the beginning of *Radio Rethink,* "there is a thin line separating technological utopianism – the belief that there may lie in new technological developments possibilities for emancipation and cultural equality – and fascism – characterised by an elated state of mind regarding the extension of perceptual powers based on a recognition of technology's propensity for aesthetic and social control." What is clear is that by the time Marinetti had formulated his conceptual and artistic theories on the *wireless imagination*, radio had firmly implanted itself into the European home and psyche in a very political way.[38]

Earlier thinkers had already recognised the implementation of radio into society and the insidious aspects of that invasion. Among them was Bertolt Brecht who, in 1926, wrote a paper entitled *"The radio as an Apparatus of Communication"*. Brecht was concerned with the lack of collective participation in radio, its unidirectionality and its (even by then) apparent function as a propaganda tool for the state, while Marinetti demonstrated an understanding of the medium that goes much further than its definition as a distribution medium.

It is interesting to observe how in the contemporary context, many projects refer to the manifesto of Marinetti and Masnata. Started in April 2005, the Radia network[39] is an international informal network of community radio stations that have a common interest in producing and sharing artworks for the radio. In 2020, the network gathered 24 radio stations from 23 cities across 17 countries, speaking ten different languages. It also organised linked-up events and special broadcasts. Radia intends to be a space of reflection about today's radio and radio art. Its activities try to contribute to intercultural exchange and artworks' and artists' circulation.

1.3. *Pour en finir avec le jugement de Dieu* and the disembodied voice

In 1947, playwright, poet, painter and actor Antonin Artaud was commissioned by French radio to create a radiophonic work for broadcast on *Radiodiffusion francaise* the following year. The resultant recorded work, entitled *Pour en finir avec le jugement de Dieu* (*To Have Done with the Judgment of God),* was never broadcasted and it was censored. Contrary to Brecht's concern regarding the ability of the collective body politic to utilize radio as an

---

[37] Daina Augaitis and Dan Lander, 17
[38] Daina Augaitis and Dan Lander, 16
[39] http://radia.fm

interactive exchange system, Artuaud's radio work reflects a dystopian view of the individual as he/she relates back to the culture at large.[40]

Although *Pour en finir avec le jugement de Dieu* contains anti-Americanisms and sacrilegious statements, it is more than likely that the work was censored due to its perceived ability to inculcate fear in the listener, rather than any specific content of the text. Artaud's idea of a material language, the language of a corporeal body that would utilize sounds, cries, screams, onomatopoeia, and so on, was well suited to the disembodied space of transmission, as it is a language that, like a gas, escapes from the entire body. This is a body without organs which, according to Allen S. Weiss, places the particular work by Artaud in the realm of a radio-phantasmic space.

> Though the radiophonic voice is "disembodied," the body is never totally absent from radio, while it is often radically disfigured, transformed, mutated. The body is neither purely natural nor purely textual, but rather the primal symbolic system that articulates nature and culture. As transformed by the re-recording, looping, and feedback capabilities of sound engineering (especially given the subliminal, microphonic levels of digital sampling), the human voice in radiophonic art (and, by extension, in certain extreme examples of experimental cinema) will project the voice of "nobody," which like Artaud's "body without organs," from his radiophonic To Have Done with the Judgment of God, is proposed as an antidote to the ills that beset the fragile, tortured body in pain. We must therefore rethink the radio in terms of a potentially disarticulatory—and no longer articulatory—site of the symbolic, not representing the body but rather transforming or annihilating it.[41]

To continue this fragmented history, bringing radiophony into high modernism, the date 2 February 1948 is crucial. This is the moment that remains crucial in radiophony, the suppression of Antonin Artaud's scheduled radio broadcast of *Pour en finir avec le jugement de Dieu*. This year also marks the origin of modern radiophonic and electroacoustic research and creativity, for it was at this moment that magnetic recording tape was perfected and became available for artistic purposes.[42]

As observed by Allen Weiss, the confluence of these two events—Artaud's final attempt to void his interiority, to transform psyche and suffering and body into art; and the technical innovation of recording tape, which subsequently permitted the experimental aesthetic simulation and disarticulation of voice as pure exteriority—established major epistemological and aesthetic shifts in the history of art.[43]

> The body without organs is the ultimate deboning of the voice, a recreation or disarticulation of the corporeal structure that takes on cosmic dimensions. It is thus no accident that this corporeal phantasm first arises in conjunction with a radiophonic work, radio being the site par excellence for such anatomical revisions, and ultimately for the loss of the body.[44]

---

[40] Daina Augaitis and Dan Lender, 20
[41] Allen S. Weiss, 4
[42] Ibidem, 3
[43] Ibidem, 3
[44] Allen S. Weiss, *Radiophonic art: The voice of the impossible body* (*Discourse* 14.2, 1992), 192

1.4. Post-war evolution

After the Second World War, the development of new technologies opened new possibilities for radio artists and modern Radio art practice development. During the 1950s, new technologies led to a new form of radio not dependent on radio-studio, composing recorded works for radio broadcast. Almost simultaneously in different European countries, centres and studios were developed dedicated to the research of new sound recording techniques and new expressive languages. In those years, musicians developed a strong interest in musical experimentation and communication channels. Since the 1950s, there has been a significant change in radio history and the composers themselves, which starts from a renewed interest in the creative innovations of electronic music.

One development that opened up possibilities for including different sounds in radio artworks, was phonography (field recording). By the late 1940s, Pierre Schaeffer and Pierre Henry had developed a new compositional technique referred to as *musique concrète,* and in 1951 founded the Groupe De Recherches de Musique Concrète (GRM) of Paris. By 1950 they had acquired the use of magnetic tape and were actively composing recorded works for radio broadcast. The use of concréte sounds, and the technological ability to edit and electronically alter them, led to a new form of radio that was not dependent on scripts, actors or the radio studio.

The tape recorder introduced new freedom in the artist's mobility. No longer forced to work only in the studio, artists could now interact with the external world at large, enabling them to represent the human voice in a cultural context, to deconstruct official media, to juxtapose disparate times and places, to disintegrate dominant language forms (as predicted by Marinetti's notion of *Words in Freedom*), to utilize sound as material in ways that might better elucidate the multitude of ways in which we communicate through the production and reception of sounds.

---

[45] Radio is a tool - a medium.
Every new tool (every new medium)
is the origin of a new form (mental, art, etc.)
- Alberto Savinio (1949) -

1.4.1.   Radio Drama in Italy – The definition of a genre

> It would be a step of great importance for the development of the art of radio drama, if every radio play which used space and montage as a means of expression were not 'performed' in the studio as if on the stage, but were recorded piecemeal on film strips like a sound-film, and the individual strips cut properly afterwards and mounted as a sound-film.[46]

During the same years, thanks to these new favourable conditions, a new radiophonic genre developed in Italy: the radio drama. An in-depth study on radio drama, especially regarding the evolution in the Italian context, was fundamental to frame my radio compositional artworks in a historical-theoretical context. The study that involved the evolution of a radio genre was guided by the precious book *Radiodramma e arte radiofonica, Storia e funzioni della musica per radio in Italia* (*Radio Play and Radiophonic Art. History and Functions of the Music for Radio in Italy*) by Angela Ida De Benedictis.

In her book, she investigated and defined – for the first time in Italy – the history and the characteristics of music specifically created for the Radio and the dimension of the δρᾶμα (*drama*) in an exclusively acoustic dimension. This point of departure that elucidating the progress of radio's potentiality is urged by the awareness that since the constitution of RAI (Radio Audizioni Italia) in October 1944 – almost all artistic, cultural and intellectual events of the century passed through the channels of the radio. From a means of diffusion, the radio became more and more a means of expression, communication and behaviour, having its own technology and specific aesthetic rules. Because of its characteristics, such as microphone recording and later on, of the synthetic generation of sound, the medium was intended right away, by all nations, as an instrument itself that implied a new way of thinking about music. However, in Italy, the path towards the acceptance of an autonomous language was long and complex, with a symptomatic delay compared to other European countries. The "delay" became a peculiar element of the Italian radiophonic culture where for years, the radio was used exclusively as an informative and recreational medium focused on musical diffusion.

Reflecting on the social background, enriching the more artistic considerations, the tangible delay that the Italian radio had in the 1930s in respect to the foreign broadcast institutions regarding the evolution or promotion of a radiophonic creative form is evident. The beginning of radio-dramatic broadcasting in Italy dates in fact to 1929, when *L'anello di Teodosio* by Luigi Chiarelli, was aired by the EIAR. (The first experiments in radio dramaturgy took place in England when the BBC, in January 1924, aired the earliest radio drama, Danger by Richard Hughes.). This fact is interpreted in the context of that epoch's reality: what was pronounced as an absolute requirement by the intellectuals and the researchers – the reflection on the peculiarities of the medium – was not (nor it could have been) understood by a population in which the proliferation of radio devices did not even reach 0.5% of the whole population. These circumstances made Italy become the "tail-light" of the occidental broadcasting; nevertheless, the debate about specific radio art got stimulated

---

[46] Rudolf Arnheim, *Radio: An Art of Sound* (Salem: 24 Russell Square London Publishers, 1936) Pag. 126

in order to evidence this absence of general interest. Furthermore, in Italy, a systematic study of radio art's various manifestations has never been undertaken until the postwar period.

1.4.2.   Radio Drama and Radio Opera/Artwork

For my research, I have considered exclusively the various forms of musical expression born in Italy and Germany with or for the radio, tracing the history of the debate on a 'specific radio art' that emerged since the first years of the new medium. In favour of a more general rather than narrow analysis, the word "*radiofonico*" (*radiophonic*) – an attribute that involves the channel chosen for the communication of an artistic message – is examined and discussed. I aimed to understand if and how the linguistic potentialities of the radio did influence the authors' intention and the final dramatic and musical outcome of their radio operas.

It is important to underline that the birth of television broadcasting – officially inaugurated in Italy in January 1954 – led to a kind of 'counteroffensive' of the radio to face the competition with television. In those years, the radio experienced one of the most fertile periods of its history. From the second half of the decade, the rhythm tended to diminish progressively, ending in the open crisis of the early '70s pushed by the emergence of private broadcasting companies.

The theory that A.I. De Benedictis has developed in her book, represents the first theoretical reflection in Italy on the characteristics of radio drama and on the functions – in use, quality and stylistic principles – that music can assume in them. The first step to approach a theory of function of music in radio dramatic works was to define the difference between the field of 'radiodramma' (radio drama) or 'opera radiofonica'(radio artwork).
The theoretical section, *Elementi per una teoria funzionale della musica nel radiodramma* (*Elements for a functional theory of music in the radio drama*)[47] starts with a reflection on the means of the expression *"specifico radiofonico"* (*specifically radiophonic*), where she defines the technical and dramatic characteristics that make an artwork appropriate for the medium. In light of this, it is possible to eliminate any potential ambiguity of the terms "radio artwork" and "radio drama". A first step was to approach a distinction between *"dramma radio trasmesso" (aired radio drama)* and *"rappresentazione radiofonica originale" (original radiophonic artwork)*[48].

From this investigation, A.I. De Benedictis concluded that there is a precise dependence on the conventions of the traditional theatre for the first category. In contrast, the latter category deals with works composed and designated exclusively for the radio and its technical characteristics. Based on this difference, she has come to a broad and generic definition of radio drama, intended as «forma di espressione acustica composta da parole, musica, canto,

---

[47] Angela Ida De Benedictis, *Radiodramma e arte radiofonica, Storia e funzioni della musica per radio in Italia* (Torino: De Sono, 2005) Pag. 1–150
[48] Ibidem, 47–52

speciali effetti sonori e silenzio» [form of acoustic art composed of words, music, singing, acoustical special effects and silence]; inside this general category, I have identified some specific typologies, which, from case to case, are either prevalently of a musical, narrative, dramatic, fairytale or documentary style. Considering these "radiophonic" characteristics, she went into more detail on the subject "specifically radiophonic" identifying four different qualities that make a dramatic and/or musical production appropriate for the medium[49]. These are 1) the technical level, relating to the means used for registration and/or dissemination; 2) the instrumentation and the timbre choices; 3) the articulation and characteristics of the language used, verbal and musical; 4) the dramatic and formal particularities of plays.[50]

In the last chapter of this section, she has identified and defined eight distinct functions of sound (music and noise) in the radio play[51]. These are in the order of mentioning: 1) music with opening and closing function; 2) music as "curtain", *caesura* and separation; 3) music as background; 4) music as a contextual comment, descriptive amplification and emotive counterpoint; 5) music with intradiegetic function and/or inner on the action; 6) music for identification of characters, feelings, ideas; 7) music for identification of the levels of action or narration; 8) music as a cognitive vehicle to recognise localities or epochs.

> The wireless play (radio drama) is self-sufficient, completes itself in the aural; the transmission of an opera, a theatrical production, a cabaret performance, a race, a celebration or a meeting, judged by the sound that comes through the loudspeaker, must appear to be only the part utterance of a greater whole whose perception is denied the listener. It is not only that he is conscious of a space to which the broadcast is not adjusted, and which frequently drowns most of the performance by its reverberations, not·that voices and music are going on somewhere in the distance and making the prerequisite of attentive listening impossible. Thus while in radio drama the listener has the peaceful feeling that he has a complete grasp of the proceedings, during the relay he feels himself crippled. He hears people tramping up and down and doesn't know what they are doing, he hears a happier audience laughing loudly and doesn't know what they are laughing at, he hears sudden applause or shouts of greeting and hasn't even noticed anyone come in.[52]

1.4.3.   *Ritratto di città* and the Studio di Fonologia RAI of Milan

An expressive ideal of Radio Art seems to have emerged in Italy since the mid-1950s. The idea of founding an electronic music studio in Italy, like what had already been built in Paris or Cologne, greatly excited Luciano Berio and Bruno Maderna, who founded The Studio di Fonologia RAI in June 1955 at the RAI centre in Milan.

---

[49] Angela Ida De Benedictis, 52–77
[50] Ibidem, 46–47
[51] Ibidem, 96–150
[52] Arnheim, 138–139

Berio's interest was captured by the possibilities of expanding the creative tools available to the musician, he immediately understood (with intuition and sagacity) that for his freedom from pre-established schemes, the new technologies, as well as opening the world of sounds to new rhythmic and timbral solutions "through a more coherent and solid creative organisation", could perfectly adapt to various psychological situations, that is to the sonification "of radio, television and cinema scripts"[53].

If elsewhere these experiments were promoted and also practised in places unrelated to radio broadcasters - such as departments of some universities or private studios - in Italy, the only environment that could guarantee technical-instrumental support was the RAI. The two musicians immediately wanted to offer a first example of the expressive potential of the new electro-acoustic media by creating a very peculiar piece: *Ritratto di città* (*Portrait of a city*).

> La storiografia che cristallizza è, per definizione, inattendibile. Il lavoro allo Studio di Fonologia, almeno quando c'ero io, non era la sintesi di due entità esistenti. Preferisco descriverlo come un dialogo fra dimensioni diverse, piuttosto che come la sintesi di due entità specifiche.[54]

Describing *Ritratto di città* as a "prelude" to the nascent Studio di Fonologia is plausible only on the condition that it is seen as a first experimental trial more than an overture. It is a work born from the collaboration of Luciano Berio and Bruno Maderna, two of the most influential musicians of the second half of the 20th century in Italy, and the author of the text Roberto Leydi, with the aim of producing a work that could convince the managers of RAI to promote the development of the Studio di Fonologia. The piece's subtitle, *Studio per una rappresentazione radiofonica* (*Study for a radiophonic representation*), contains a hint at the experimental nature of the composition and radio work forms, for many aspects, the beginning of a new period in the radio art in Italy.[55]

56

---

[53] Angela Ida De Benedictis, 188

[54] Angela Ida De Benedictis – Veniero Rizzardi, *Colloquio con Luciano Berio* (Firenze, 13 luglio 2000), in V.Rizzardi – A.I. De Benedictis, *Nuova Musica Alla Radio, Esperienze allo studio di Fonologia della RAI di Milano* 19954-1959, Roma – Pag. 160-175. trans.: "The historiography that crystallizes is, by definition, unreliable. At least when I was there, the work at the Studio of Phonology was not the synthesis of two existing entities. I prefer to describe it as a dialogue between different dimensions rather than the synthesis of two specific entities"

[55] For a detailed analysis of Ritratto di città see my Bachelor's thesis – Pag. 11–12 at http://sonology.org/wp-content/uploads/2020/04/BaSon_Brillada.pdf

[56] In the picture: Bruno Maderna and Luciano Berio rehearsing a concert at the Dutch Radio Studio. Hilversum, The Netherlands, June 30, 1972.

> (...) Nessuno dei giovani musicisti italiani ha sino ad ora potuto "consumare" con serietà, in patria, esperienze elettroniche di sorta. Tenori e mandolini sono evidentemente i privilegi che, al momento, si preferiscono ancora riscattare. Perciò *musica concreta*, e quanto ad essa si ricollega, suonerà forse nella lingua italiana come una parola insensata da non salvare.[57]

During that year, Milan was on the verge of becoming a pivotal point in the international electroacoustic music post-war scene through a new expressive language. The studies and experiments carried out by the composers Luciano Berio and Bruno Maderna contributed between 1955 and 1960 to raise the artistic level of radio productions. With the post-war restructuring, Italian radio experienced a period of great fervour, thanks to the numerous RAI production centres. In 1950, with a reorganisation of the radio networks, RAI ranked on a par with the other major European broadcasters. The sixties and seventies are remembered as the golden years of Italian radio for the enthusiasm of production and experimentation. Luciano Berio and Bruno Maderna, together with Luigi Nono, have produced in the "Studio di Fonologia" of the RAI in Milan much functional music for the radio and the experimental electroacoustic production. Looking into the history of the Studio di Fonologia, it is possible to see the strong connections that link the development of electroacoustic music to the radio environment in Italy.

1.4.4.   The German Hörspiel

> On June 6th, 1930 a radically new form of radio was broadcast over the Berlin airwaves. An 11 minute, 20 second long collage of raw sounds greeted listeners accustomed to hearing news reports, occasional classical musical programs and, only very recently, literary works written specifically for radio performance, the nascent genre known as Hörspiel ("radio drama"). This startling work was Weekend, an audio documentary created by Walter Ruttmann, an avant-garde artist best known for his experimental filmmaking.[58]

Contrary to what happened in Germany, where the birth of the medium and that of a theory of its expression were almost contemporary, in Italy, as mentioned before, the theoretical investigation of radio drama was promoted with a certain delay compared to the rest of Europe.

The effects of this gap between practice and theory are even more evident if we reflect on the semantic fields of the terms "radio drama" and "radio opera". In Germany, the experimentation and study of radio and radio drama were very intense: the distinction between *Schauspiel* (theatrical performance), *Sendespiel* (radio-broadcast conventional theater) and *Hörspiel* (drama intended for listening only) dates back to 1924. *O-Ton*, or *O-Ton-Hörspiel*[59] (where "O" stands for Original), is composed of completely *concrète* sounds from natural acoustic sources and has become a significant feature of the West German Hörspiel of the 1970s. For *O-Ton* the fundamental issue is whether the tape recorder,

---

[57] Luciano Berio, *Musica per Tape Recorder*, ("Il Diapason", IV 3–4: 1953), in Angela Ida De Benedictis, 186. Trans.:(...) "(...) None of the young Italian musicians has so far been able to seriously "consume" electronic experiences of any kind at home. Tenors and mandolins are evidently the privileges that, at the moment, they still prefer to redeem. Therefore concrete music, and as far as it is connected to it, will perhaps sound in the Italian language as a meaningless word not to be saved."
[58] Walter Ruttmann's *Weekend*: Sound, Space and the Multiple Senses of an Urban Documentary Imagination, essay by Jesse Shapins
[59] The first *O-Ton* in history is considered retrospectively *Weekend* di Walter Ruttmann (1930)

with its new authenticity, provides a different sort of access to social reality than traditional fiction or drama, and if so how and with what implications. *Neues Hörspiel* is a term introduced in 1964 by Klaus Schöning to describe the new developments that were influencing traditional *Hörspiel* – radio drama, where artists started to use innovative strategies. They include the "testing of semantic boundaries between shaped sound and deformed language; the use of stereo techniques, synthesizer and vocoders to manipulate acoustical material and even to generate sounds not found in nature; and the substitution of musical principles of composition for traditional approaches to organizing a text"[60]. Cory goes on to describing the *O-Ton*, which

> differed from the features of the past by virtue of its compositional techniques. Instead of beginning with a script and then taping interviews to illustrate and give depth to the various points the author wishes to make, the O.Ton artist simply begins recording and then assembles out of the recorded original material a coherent and sometimes surprising, sound portrait… The O-Ton Hörspiel was the first to employ postwar technology (the tape recorder) to implement Brecht's prewar hope that radio would go beyond mere distribution to organize its listeners into producers. The most productive source material for O-Ton has proved to be the voices of those otherwise disenfranchised by traditional radio art. The men in the streets, prisoners, workers, apprentices – those whose distinctly nonlinear voices and nonstandard diction had seldom figured in Hörspiel – became its staple.[61]

---

[60] Mark E. Cory – "Soundplay", in *Wireless Imagination*, 363
[61] Ibidem, 362

Chapter II

2.   Between compositional ideas and political ideals: inspiring sources

This chapter will discuss topics that have influenced my compositional approach and the theoretical direction of this research analysing authors and works correlated to the socio-political context of radio art.

First of all, I will introduce the *Prix Italia*, a competition that oscillates between the promotion of art and the promotion of the European international radio organisation; begun in the post-war European context, and still disputed today, with the aim of promoting the circulation of works and re-establishing delicate and fragile relationships. On the occasion of the Prix Italia, in 1964, *Contrappunto Dialettico Alla Mente* was composed by Luigi Nono, then censored due to the political content of the texts, and Berio's "*Ritratto di città*" in 1955 was presented out of competition in the Prix Italia.

A firm trust in the communicative scope of music, my belief in its socio-political dimension, in addressing social issues and raising audiences awareness began to arise years ago. From this moment on, I have always been fascinated by Luigi Nono's work, which has become a great source of inspiration. An in-depth analysis of Luigi Nono's work was fundamental in my previous Bachelor's thesis[62] to understand the character of the music, and the social commitment of the Maestro, fascinated by the socio-political commitment always expressed through his compositional ideas.

During the past year, a detailed analysis of Luigi Nono's *Contrappunto Dialettico Alla Mente* has been fundamental in composing one of my last pieces (*Stati d'Ansia – C1*); a strong source of inspirations for the choices of sound material, the text, the voice and the formal structure. Various reasons led me to analyse this composition. First of all, I wanted to understand his approach in dealing with voices in the context of musical discourse, the political texts used in his works, and how this work was specifically conceived for a radio context.

In the second part of the chapter, I will go through an in-depth analysis of my composition *Stati d'Ansia – C1,* discussing the topics that inspired me, the context and the contents, the formal structure, the compositional choices and the electronics processing techniques applied in dealin with the sound material. *Stati d'Ansia – C1* is the first musical outcoming of this specific research project; it results from different studies and can be considered the evolution of my compositional approach in dealing with voices in the musical context. It is the first radio artwork disengaged from the radio drama/documentary form produced in my artistic research.

---

[62] http://sonology.org/wp-content/uploads/2020/04/BaSon_Brillada.pdf Pag. 13–18

2.1. *Prix Italia* – **International Radio Competition**

Un premio tra promozione dell'arte e promozione dell'Ente (An award between the promotion of art and the promotion of the institution), this is the subtitle that Angela Ida De Benedictis herself dedicates to the chapter on the Prix Italia[63], the international radiophonic competition promoted annually by RAI.

At the beginning of 1948, just over two and a half years after the end of the Second World War and at a time of great transformation, the Italian national radio, RAI, decided to promote a conference aimed at establishing an international radio award. The need for reflection on the possible forms of productive incentives arose from the awareness of the profound discontinuities that characterized an environment in which

> there was a huge difference between the purely reproductive radio artistic activity and the creative one. / The radio is almost always able to reproduce works already previously established in the theater [...], but it almost never succeeds in being the first medium of launching and disseminating unpublished intellectual works.[64]

The causes of this condition were identified in the ephemeral reality of radio productions which, however successful or made by leading personalities in the artistic field, could only aspire to a few airings, only to fall, in a short time, into oblivion. The core of the problem lies essentially in economic reasons: except for rare cases in which artistic and experimental reasons had prevailed over financial ones – for a composer, or a playwright, it was more convenient to see radio as a medium of diffusion than production. So they preferred the concert hall, stage, printed music or cinema to a radio form. The solution, to bring artists closer to the radio form, was glimpsed precisely in the establishment of a national context that would promote the creation of "works conceived and created only according to the special needs and very special resources of radio technology"[65].

In addition to stimulating the authors with a substantial remuneration, the competition formula would have both guaranteed and promoted the circulation of the works between the various European broadcasters registered for the competition. These artistic policy motivations were certainly a priority, but the creation of a competition to coordinate the various international broadcasters seems to reveal more hidden intentions of institutional policy. Born at the end of 1944 in an Italy divided between allies and Nazi-fascists, in 1948 the RAI was still paying the price of the economic and structural instability caused by the war. The *Prix Italia* was aiming at re-establishing delicate and fragile relationships in the post-war European context.

---

[63] Angela Ida De Benedictis, 153–185
[64] Giuseppe Spataro in Angela Ida De Benedictis, 153
[65] Luigi Greci, *Arte e radio al Convegno di Capri*, "Radiocorriere", XXV, 34, 1948, Pag. 3
A further premise for the establishment of the Prize was the renewal of the debate on radio art in Italy

Considering the interactions between the development of a radio art form and the possibilities offered by the structure and technical instruments of that time, I have extended my field of research to a critical examination of certain broadcast company behaviours. In Italy, all the works produced for radio are also works produced by the radio company and within the radio studios. Even today, the broadcast company itself decides, commissions, produces, and keeps the rights of the artworks. During the time period investigated, the RAI had adopted different cultural strategies and, as the 'commissioning company', it had often conditioned the choices (aesthetic and linguistic) of the composers. As the superior judge of the selection and diffusion of radio-broadcastings, the RAI played a considerable role in the impact of some composers and, as a consequence, in the formation of the listeners' taste.

Angela Ida De Benedictis in her book[66] proposes a new perspective of the development and aesthetic-cultural selective guidelines of *Prix Italia*. For a correct analysis of the criteria that guided the assignment of the awards in the various editions from 1949 to 1970, she regarded it as indispensable to reconstruct – for the first time in the history of *Prix Italia* – the whole set of participants concerning the different musical categories. In fact, preceding publications of RAI or various researchers regarding *Prix Italia* exclusively report the list of winners. The comparison of the plays that won with all that participated, permitted me to observe that artistic experimentation was always seen with suspicion or even was deliberately left aside in the radio competition, in favour of a production corresponding better to the requests of the popular market.

2.2.   Luigi Nono – between political "ideal" and compositional "idea"

The Italian composer Luigi Nono (1924–1990) is one of the most fascinating examples of the relationship between music and politics in the second half of the twentieth century. I have always admired L.Nono's political activist ideal and his ability to express it through his compositional thought. The continuous research for new sonorities, the commitment in the treatment of socio-political themes, the constant research in musical experimentation, his close contact with the class struggle are the reasons that have always fascinated me.

Contrappunto Dialettico Alla Mente is the result of a commission from the *Prix Italia*, which in February 1968 invited Nono to compose a work for radiophonic diffusion/representation. The realisation of the tape took place at the Studio di Fonologia in Milan between May and July of the same year, but in early August, the RAI management communicated to Nono that, due to its political content, the piece would not be admitted to the events of the Award for reasons of political "courtesy" towards the American government. Similar causes, moreover, had already motivated the exclusion from the *Prix Italia*, in 1964, of *La Fabbrica Illuminata*.[67]

---

[66] Angela Ida De Benedictis– «Arte alla Radio – arte per la Radio: il caso Premio Italia», 153–185
[67] **FONDAZIONE ARCHIVIO LUIGI NONO ONLUS – Contrappunto dialettico alla Mente – (**Veniero Rizzardi, *Contrappunto dialettico alla mente*, Note al disco LP Deutsche Grammophon DGG 2561 044) http://www.luiginono.it/opere/contrappunto-dialettico-alla-mente/#tab-id-2

The character of the music of Luigi Nono led to some degree of confusion between (political) "ideal" and (compositional) "idea". In parallel, a firm trust in the communicative scope of music and the need to express through it the contradictions of its own time gradually led Nono to select committed texts for his works that were more and more political towards current events.

In 1971 he described himself as an "activist-musician not *above* but *within* the class struggle as it exists." This idea refers to one of Nono's biggest interests: how to reconcile in a coherent manner his artistic activity as a composer with his political commitment and the role he attributes himself in the transformation of society. As Nono asserted in 1969, for him, there was "no difference between music and politics" since through music composition he aimed to contribute "to class struggle and help to push it forward."[68]

During the evolution of this research, the interest has shifted towards the inclusion of different voices and texts in my compositional approach. No longer exposed clearly and sharply as in a documentarist form, but to reveal its value and semantic power in the musical context. The attention then moved to the use of the voice in Luigi Nono's compositions and to the choice of texts with a strong political content as a form of criticism and tool for critical social denunciation, deepening the study about the dramatic value of the human voice in musical discourse. These considerations led me to an in-depth analysis of his composition *Contrappunto Dialettico Alla Mente,* accomplished thanks to the valuable work analysis carried out by Veniero Rizzardi at the *Luigi Nono Onlus Archive Foundation*. While carrying out this analysis, I found very fascinating the formal and technical choices that L. Nono utilised in the creation of the *Contrappunto,* that I subsequently took as a model and as a source of inspiration for the compositional choices adopted in the drafting of my composition for voice and cello *Stati d'Ansia – C1* (2020).

2.2.1. *Contrappunto Dialettico Alla Mente* – **The Dialectic of Intelligibility**

With the *Contrappunto Dialettico Alla Mente,* Nono throws an indictment against the USA government policy, emphasising the country's internal racial discrimination and repressive violence. The composition opens with the evocation of the murder of Malcolm X and ends with the text of the appeal of the Harlem PLP Enraged Women Manifesto[69] against the Vietnam war. Nonetheless, it is precisely in the choice of texts that this work stands out as a curious unicum in Nono's production.[70] There is, in fact, a return to the use of poetic texts and, indeed, for the first and only time in Nono's entire production, of materials provided by an experimental author such as Nanni Balestrini. He was an Italian poet, writer, an activist artist socio-political involved, one of the main figures of the Italian Neo-Avant-Garde poetry, visual artist, and part of the neo-avant-garde group of experimental writers gathered in the so-called Group '63.[71] His vast production includes experimental poems and politically

---

[68] http://sonology.org/wp-content/uploads/2020/04/BaSon_Brillada.pdf Pag. 13–18
[69] African American women's organization
[70] **FONDAZIONE ARCHIVIO LUIGI NONO ONLUS – Contrappunto dialettico alla Mente – (**Veniero Rizzardi, *Contrappunto dialettico alla mente,* Note al disco LP Deutsche Grammophon DGG 2561 044)
[71] Group 63, defined as neo-avant-garde to differentiate it from the historical avant-gardes of the twentieth century, is a literary movement made up of young intellectuals who are strongly critical of literary works still linked to traditional models

engaged novels concerning the struggles of the sixties and the *Anni di piombo* (years of lead)[72]. His contribution of "total poetry" in the field of visual art is also important.

Connected to this is another fundamental singularity that makes *Contrappunto* the work perhaps closest to the poetics of the Italian neo-avant-garde that Nono conceived, namely its character as a parody of a composition from the past. In this sense, one could then understand why Nono took a divertissement like *Il Festino* by Adriano Banchieri as a model. Nono himself reveals how the playful and realistic features of the 1608 text were the starting point for creating a "dialectic" in the musical work – hence the title of the composition.

As Veniero Rizzardi described in his analysis, it is possible to identify contrasting characters: the hard and fundamental sense of the political manifesto and the nonsense of the verbal game, the individual and the mass.

The balance between the different compositional characters finds precise confirmation in the preliminary operation carried out by Nono starting from Banchieri's text, as emerges from an examination of his printed copy of the *Festino*. Nono marks each episode according to three prevailing characters "lirico" – "scherzo" – "fonemi" ("lyric" - "joke" - "phonemes")[73]; then selects three "lyrical" episodes (Il diletto moderno per l'introduzione, Mascherata di villanelle; I cervellini cantano un madrigale), one of which (Mascherata) full of phonemic games, and three "scherzi" ("jokes")[74]. The parodic episodes are finally organized according to the following scheme which, despite the reduction, reproduces that of the *Festino*.

1.	Il diletto delitto moderno	("lirico")
2a.	Mascherata dei vecchietti	("lirico" / "scherzo")
2b.	Interludio dei venditori di soffio	("scherzo")
3.	I cervellini cantano un madrigale	("lirico")
4.	Lo zio Sam racconta una novella	("scherzo")
[1. Ripresa]	il diletto delitto moderno	("lirico")[75]

Having established this system, Nono moves in complete independence and proceeds with the collection of different acoustic materials: the voices recorded in the studio; the voices collected at the Rialto market in Venice; the noises of water from the lagoon of Venice, the

---

typical of the fifties. Luigi Nono suggested the model of Gruppo 47, a cultural movement born in Munich in 1947. The group's constitution was anticipated by the publication of the collection of poems I Novissimi, edited by Alfredo Giuliani. The group included poets, writers, critics and scholars animated by the desire to experiment with new forms of expression, breaking with traditional schemes. Referring to the avant-gardes of the beginning of the century, Group 63 referred to the ideas of Marxism and the theory of structuralism. Without having defined rules (the group never had its manifesto). They produced works of absolute freedom of content without a precise plot.

[72] *Anni di piombo* identify the Italian historical period between the end of the sixties and the beginning of the eighties of the twentieth century, in which there was an extremeization of the political dialectic that produced street violence, armed struggle and terrorism.

[73] (The modern delight for the introduction, Mascherata di villanelle; Cervellini sing a madrigal)

[74] (*Giustiniana di vecchietti chiozzotti, Intermedio dei venditori di fusi, La zia Bernardina racconta una novella*)

[75] **FONDAZIONE ARCHIVIO LUIGI NONO ONLUS – Contrappunto dialettico alla Mente – (**Veniero Rizzardi, *Contrappunto dialettico alla mente*, Note al disco LP Deutsche Grammophon DGG 2561 044)

grave bell of S. Marco; and finally the sounds produced at the Studio di Fonologia by means of square and sawtooth wave generators.[76]

The organization of the textual material is variously different, almost suggesting a personal application of the "scale of comprehensibility frameworks" devised by Stockhausen in 1956 for *Gesang der Jünglinge*.[77]

A specific verbal material consists of the titles of the different sections of the piece, which appear polyphonically announced at the beginning of each section. Veniero Rizzardi observes that it is precisely the practice of "titles" that seems to incorporate a radio-style that is constitutive of the piece. Of all the works created by Nono for "tape solo", *Contrappunto* is in fact the only one conceived as a function of diffusion on a stereophonic sound front - at the Italian radio in 1968 stereophony was coming out of the experimental stage - and, by extension, it can be considered Nono's only authentically "phonographic" work: that is, the tape was created as a support for a finished work in itself, which does not require a subsequent live sound projection as was Nono's usual practice, so a finished tape - normally quadraphonic or monophonic - it was, in any case, susceptible to being "interpreted" differently (spatially, dynamically) according to the circumstances.

Analysing the catalogue of Nono's works, some constants in the choice of texts are immediately evident. First of all, the refusal of literariness; Nono is oriented towards more open, irregular and arduous texts. Literary artifice retreats to zero, and words reveal their primary value.

Secondly, the contents constitute a strong signal capable of revealing its ideological charge down to the details of the musical procedures. Finally, where the text is a literary one, it is always a fragmentary text (such as Nanni Balestrini's poetic materials, the least calligraphic of the *Gruppo '63*, and the most involved on the ideological and political level). This text has already made, in its way, the anti-literary choice.

In some cases, the sources are multiple, and the text itself results from an assemblage of logics that are discursive and more strictly musical (Prometeo). In other words, the texts appear not in their meaningful autonomy as in an overall re-semantization by reading and reflection. It is as if memory operates juxtapositions and overlaps, thanks to which the texts lose their autonomy to reconstitute themselves in the subjectivity of the reader-composer.

Nono's choices for this composition are exemplary. Sonia Sanchez, a poet who concedes nothing to literary frills, in this case expresses herself with a severe dirge for the death of Malcolm X; Nanni Balestrini, who identifies, in this case, rhetorical-literary research and systematic linguistic instability; finally, the Manifesto of the Enraged Women of the Harlem PLP, which, as often happens in Nono, breaks away from any literary context in favour of an immediate political contemporary urgency. It is possible to translate these choices into purely musical terms; scrolling through the "tape" it is immediately evident how the texts involved

---

[76] **FONDAZIONE ARCHIVIO LUIGI NONO ONLUS – Contrappunto dialettico alla Mente – (**Veniero Rizzardi, *Contrappunto dialettico alla mente*, Note al disco LP Deutsche Grammophon DGG 2561 044)
[77] Ibidem

determine a solid formal structure. The adherence of particular operational choices to the different levels of literary processing is constant.
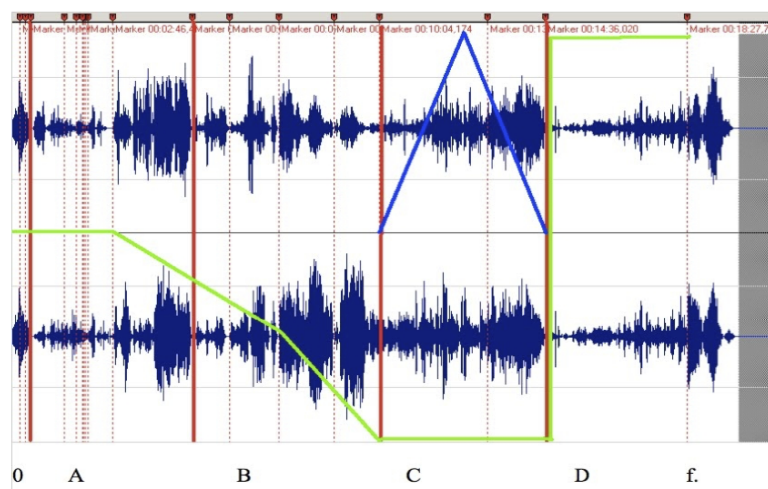
When considering the central line as a dividing threshold between comprehensibility and concealment of the text, the green line traces its progress. In the introductory section (prologue) and the first one, the text is understandable as long as there is a particular commitment to listening (S. Sanchez). In the second section, the processing procedures make the text unintelligible; In C, the text reaches its maximum unintelligibility: it is not pronounced; except the title of Balestrini's second poem (blue line), which is repeated periodically by a sort of falsetto voice whose comprehensibility gradually increases in correspondence with the decreasing speed of the tape, and then goes back to hiding, this time simply by lowering the level (fade out). Finally, we listen to the Manifesto of Angry Women in D, which is read, against a chaotic background, in all its chilling actuality. It is possible to consider that the more elaborate and literary the text is, the greater the degree of musical elaboration; on the contrary, the documentary text does not undergo alterations capable of hiding its full meaning. In *Contrappunto Dialettico Alla Mente* this practice, which is not common in Nono's works[79], is a formal strategy. The subdivision into four sections (plus two of prologue and epilogue, indicated in the graph with 0 and f.) results in four different ways of relating to the word and of measuring its contribution to the meaning total.

The "declaration" of the text in section D, without its enunciation, frees its symbolic charge and enhances its value as a testimony. The content annihilates the expression; the relationship of mutual necessity between text and music goes beyond the traditional threshold of the "musical text".

---

[78] Luigi Pizzaleo, *Il Contrappunto Dialettico alla Mente di Luigi Nono, Elettronica e testo. La dialettica dell'intelligibilità.*
[79] See *Il Canto Sospeso*, in which the words of the condemned of the Resistance are distorted by an expressionist still, after all, expressionist.

2.3.   Stati d'Ansia – C1

Stati d'Ansia C–1 results from different studies and can be considered the evolution of my compositional approach in dealing with voices in the musical context. It is the first radio artwork disengaged from the radio drama/documentary form produced during this research project, an attempt to explore the practical implementations of compositional ideas derived from the previous theoretical research about using voices in the electroacoustic musical context. It is a studio-focused piece on voice and interaction with electronic processing that embraces practice-oriented research. Specifically, it is a study about the dramatic value of the human voice in the musical discourse, experimenting with sounds and gestures of the cello as an extension of my interest in acoustic instruments and electronics processes applied to it. The voice is a central element in my compositions, usually used to convey a message through speech content (what is said). In this composition, I experimented with paralinguistic cues (how it is said).

In my previous radio drama/documentaries – *Mare Nostrum and No borders[80]* – the narrative line automatically dictates the formal musical sections into which the pieces themselves are divided. There is no narrating voice but fragments of interviews and personal experiences. The intent was to create sonorities and a sonic environment in each specific section to recall and frame the situation. The second intent was to combine sounds of different nature in a single texture (field recording and "artificial sounds"), creating a coherent flow. The compositions moved towards a reflection around the boundaries between sonic experimentation and audio documentary, creating a bridge between political perspectives, philosophical ideas, contextual approaches and aesthetic perspectives.

Stati d'Ansia – C1, unlike previous compositions, can be defined as a radio artwork, where the adaptation of a poetic text is developed into an *original radiophonic artwork*[81]. There are no events in succession or linearity in narration; it is not a story to be told nor a radio documentary. The formal structure oscillates around the intelligibility level of the voice.
The connection of *Stati d'Ansia – C1* to my previous radio dramas is the content of the piece, the issues addressed, or an explicit critique of the problem of immigration present in the Mediterranean area, with related topics of intolerance/racism in southern Europe for African refugees and the inability of the European Union to address the problem. The piece concept is conceived reflecting on various topics, enunciated as a tool for critical reflection.

2.3.1.   Topics and context

The composition deals with a profound reflection that began two years ago, which reveals a critique on different questions related to the Mediterranean immigration situation. *"The double face of the Mediterranean sea"* is the concept that I developed, and it inspired me during the compositional work.

---

[80] For an in-depth analysis of these compositions look my Bachelor's thesis
http://sonology.org/wp-content/uploads/2020/04/BaSon_Brillada.pdf
[81] See A.I. De Benedictis' definition in the previous chapter at pag. 29

The conception of *"Double Face"* refers to the double perception experienced every time I return to the Mediterranean Sea. Every year millions of tourists flock to the Italian coasts to enjoy their beauty and immerse themselves in the characteristic crystalline waters. Still, every time I look out over the Mediterranean waters, it is inevitable and immediate to think of the millions of migrants who try to cross the Mediterranean sea every day, in inhuman conditions and often with a dramatic ending. Moreover, I have been very close to immigration and related policies for years and those that affect daily Italian life. My interest moved towards this topic because of my activity in "social centres" in Italy, where I provided aid and assistance to refugees.

The Sea-Watch incident of June 2019 was a scandal in Italy and Europe[82], and this vicissitude pushed me more to tackle the issue of immigration again. The story of Carola Rackete, a German ship captain who works for the German sea rescue organisation Sea-Watch, shows Italians' attitude towards immigrants arriving in the country is becoming less and less tolerant. Distrust and, in some cases, hostility increase; even the political guidelines have become more stringent. This is one of the reasons that push me to interpret this delicate subject artistically. There is a lack of socio-political involved radio artworks and the need to talk as much as possible about this situation. The aim is to transmit strong messages and try to create a more informed and sensitive collective consciousness.

2.3.2.   Contents

In the first draft of the work, the idea included various texts and different voices; texts selected included poems by Nanni Balestrini, Erri De Luca, and some specific verses of the Divine Comedy by Dante Alighieri that referred to the Mediterranean Sea and wandering sailors. My previous radio artworks are characterised by multiple intertwined voices in different languages, recorded interviews, or found samples from the news and specific immigration references.

A reflection on the "disembodied" and acousmatic voice in my compositions was fundamental for conceiving *Stati d'Ansia – C1*. Musing on how to use the voice within my compositions, how explicit the message/text should be, and what the cathartic and centralising dramatic value of the human voice can be in the musical context, I argue that the use of the voice in my compositional approach should provoke in the listeners an emotional reaction-response more than a rational one. The human voice is a powerful vehicle of social and affective communication. Compared with other sense modalities, the voice is a dynamic and accurate conveyor of emotion via speech content (what is said) and

---

[82] Sea-Watch 3 incident of June 2019: On 12 June, the ship picked up 53 migrants in the Mediterranean off the Libyan coast. Sea-Watch 3 rejected an offer to dock at Tripoli, which is considered unsafe by the European Union and the humanitarian organizations, and headed toward Lampedusa. According to non-governmental organizations (NGOs) this was the nearest safe harbour per maritime law. On 14 June, Italy closed its ports to migrant rescue ships. Italian interior minister Matteo Salvini refused to allow the ship to dock until other European nations had agreed to take the migrants. Ten of the migrants, including children, pregnant women, and those who were ill, were allowed to disembark. On 28 June, Finland, France, Germany, Luxembourg and Portugal offered to take the migrants.
On 29 June, without authorization, Rackete decided to dock. The motivation for this was that according to her the passengers were exhausted. Rackete was arrested by the Italian authorities after docking.
Italian interior minister Matteo Salvini accused Rackete of trying to sink an Italian patrol boat that was trying to intercept her and that her ship collided with, calling the incident an act of war and demanding the Netherlands intervene

linguistic/paralinguistic cues (how it is said). The intonation and pitch of the voice provoke feelings of compassion[83], regardless of the languages and the meaning of the word itself.

As described by Rudolf Arnheim:

> In radio drama, even more forcibly than on the stage, the word is first revealed as sound, as expression, embedded in a world of expressive natural sounds which, so to speak, constitute the scenery. The separation of noise and word occurs only on a higher plane. Fundamentally, purely sensuously, both are first and foremost sounds, and it is just this sensuous unity that makes possible an aural art, by utilising word and noise simultaneously.[84]

Starting from this consideration, I decided to experiment with an approach to words/voice similarly. In *Stati Asia – C1*, the compositional process deals with the treatment of the voice purely as a sonic element and sound material, revealing the poetic power and trying to convey a message through the different modes of expression. The vocal component and the text are dismantled, demolished to discover their nerves, and free their poetic-musical charge in a sort of feedback that does not guarantee their literal integrity but preserves all their semantic density. For these reasons, the sonic material is reduced to its essence and the bare minimum, working only with one text and one voice, focussing mainly on the articulation and electronic process applied to them. It is a studio where I experimented and explored the semantic boundaries between shaped sounds and deformed languages.

In this piece, I experimented with the sounds and gestures of the cello and the interaction of electronics processing applied to it. The composition plays around with the contrasts between instrumental and electronic/recorded sound and the expansion of the natural sounds made by the conventional instrument. I have always been fascinated by extended techniques for instruments in contemporary practice and the extension allowed by the electronics applied to it. I experimented empirically by asking the cello player (Sóley Sigurjónsdóttir) to perform determinate gestures and sounds with a different interpretation. Focussing specifically on bow stroke techniques, as for example: Col legno battuto (percussive sounds), detaché, legato, tratteggiato, staccato, spiccato, saltellato e balzato, e martellato; and others techniques as vibrato and the production of harmonics.

2.3.3.   Formal structure

The piece is articulated on the concept of degrees of intelligibility applied to voice and instrument, creating a dialectic between the two sound elements. The whole formal structure oscillates around the intelligibility level of the voice. The words and the text are deconstructed, in articulation with the cello that moves in the opposite direction replacing the missing and unintelligible words. The meaning of the words oscillates around the horizon of understandability, sometimes emerging towards the level of content, sometimes sinking towards the level of pure expression.

---

[83]**Compassion** (from the Latin: *cum patior* - suffer with - and from the Greek συμπάθεια, sympatheia - "sympathy", feeling emotions with ..) is a feeling for which an individual emotionally perceives the suffering of others, wishing to alleviate it.
[84] Rudolf Arnheim, *Radio: An Art of Sound* (Salem: 24 Russell Square London Publishers, 1936) Pag. 27–28

As in the *Contrappunto* by Nono, *Stati Asia – C1* is characterised by a prologue, four episodes, and an epilogue. As in the previous figure, when considering the central line as a dividing threshold between comprehensibility and concealment of the text, the green line traces its progress. As can be seen in the figure below:
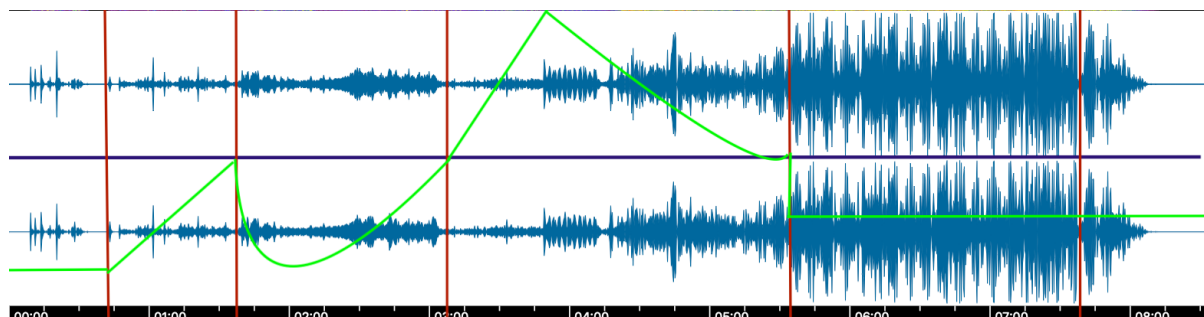
The prologue opens the piece with *"colpi col legno battuto"* (bow strokes with beaten wood), percussive and incisive cello sounds, and whispers expressed with vocal phonemes, where the voice is completely unintelligible and fragmented.

The cello is sharply recognisable and not electronically manipulated. In the first section, the words begin to be slightly understandable (medium intelligible). The cello slowly begins to be modified electronically; at the end of the second section, the strokes start to crumble through granular synthesis. In the second section, the voice disappears, almost completely filtered (completely unintelligible), and the cello predominates with overlapped harmonics (different harmonics are manipulated with time stretching and pitch shifting). In the third section, the voice became a "phonetic dust"[85] texture generated with granular synthesis. The same processing is applied to the cello that is increasing speed and tension. In the fourth section, the voice is sharp and stands out clearly. At the same time, the cello is increasingly unrecognisable. In the epilogue, it is possible to listen to a compendium of all the sonic elements previously presented; some cello strokes try to emerge on the texture created by the processed cello' sounds.

2.3.4.   Compositional choices

A female voice recites a poem titled "C1" by Nanni Balestrini, who recently passed away in 2019. The poet's death was a further motivation that led me to use one of his poems as a tribute to his works. The first draft of the title of the composition has become: *Omaggio a Nanni Balsterini (Homage to Nanni Balsterini)*. "C1" was written with an algorithmic system due to deconstruction and assimilation of multiple texts, and it has a different level of interpretation. It has an evocative power with an allusion to the offshore and migrant problematics.

---

[85] In *Contrappunto Dialettico Alla Mente* Nono produces a texture of "phonetic dust" by means of permutations he himself operated, both on Balestrini's text and on single target-words chosen to be sarcastically deformed; finally concludes the composition with the text of the manifesto of the Black Women Enraged sharply marked and well silhouetted against the background of the other sounds. Also in this case I took the procedure applied by Nono as a model. In the third section, the fragments of poetry begin to crumble more and more, thanks to an applied process of granular synthesis, creating phonetic dust, making the words almost unrecognizable and unintelligible. In the last section single words stand out clearly and distinctly on the texture created by the cello.

86

I directly recorded the poem, recites by the actress Alma Brero with different modes of expressions and interpretation (spoken, sung, whispered and screamed). I then dismantled the text into small fragments, selecting phrases, keywords and single syllables to recreate alliterations. At the beginning of *Contrappunto Dialettico Alla Mente*, Nono uses the fragment of a poem by Sonia Sanchez dedicated to Malcolm X to bring out just single fragmented expressions. A similar procedure was applied in composing *Stati d'Ansia – C1,* where single fragments of C1 were selected and processed with dynamic filters, choosing keywords that emphasise the cry of anger to be hurled against the critical situation of immigration. Such as the single words "Massacra" and "schizofrenica". Words are no longer the pretext for a chant/lyric but the hidden engine of musical-poetic activity. The meaning of the words oscillates around the horizon of intelligibility, sometimes emerging towards the level of content, sometimes sinking towards the level of pure expression. While composing, I absorbed the text in my subjectivity, and it undergoes a metamorphic synthesis to re-emerge in sonic form.

2.3.5. Sound processing and techniques

The compositional process began by working with sound design techniques applied to the recorded voice. I fragmented the voice into small verses, words, single letters and phonemes, to then modify the material obtained through various filters: dynamic, bandpass and eq.

Techniques as time stretching, pitch shifting and granular synthesis were applied both to voice and cello. Other devices used to transform the original sound materials are filters and dynamic modulation devices or signal gating, such as cello percussions modulated by the voice. In the figure below, it is possible to see an overall scheme of the techniques and processes applied in the composition phase.

---

[86] *Ultimi*, 2013-2014 by Nanni Balestrini

Level of intelligibility of the voice/cello
• Completamente Inintelligibile (completely unintelligible)
• Pochissimo Intelligibile (very little intelligible)
• Poco intelligibile (hardly intelligible)
• Medio Intelligibile (middle intelligible)
• Molto intelligibile (very intelligible)

Mode of expression and interpretation of the voice/cello
• Sussurrando *(whispering)*
• Parlato *(spoken)*
• Gridando *(shouting)*
• Intonato - tipo filastrocca *(rhyme type)*
• Scandito
• Legato
• Arrabbiato *(angry)*
• Nervoso *(nervous)*
• Ansioso *(anxious)*
• Stupito *(astonished)*
• Enfatizzando consonanti o sillabe specifiche (S-R-CR-MA)
  (Emphasising specific consonants or syllables (S-R-CR-MA)
• Veloce/Lento *(Fast/slow)*
• Forte/Piano

Spatialization
• Superimposed
• Fragmented
• Explosion
• Sensations of dislocation
• Estrangement
• Deconstruction
• Scan
• Tied

Sound design on the voice
Deconstruction of the poem in:
• Verses
• Words
• Single letters
• Phonemes
• Texture with variable density of "phonetic dust"

Deconstruction of the cello in:
• Single musical event
• Gestures
• Harmonics

Sound processing, techniques applied to voice/cello
• Granular synthesis
• Dynamic filters
• Pitch shifting and time stretching
• Dynamic modulation/Signal gating
• Overlapping, juxtaposition, crossfade

Cello
• Study on extended techniques
• Experiments with gestures and sound processing applied
• Sciarrino, Scodanibbio
• Acousmatic - fixed media in order to be deconstructed and mixed with voice

2.3.6. Sonic spatialization and binaural version

The premiere of the piece was during a Sonology Discussion Concert in the Schonbergzaal at the Royal Conservatory of Den Haag and was presented on an 8-channel diffusion system. The spatialization develops starting from the central frontal channel, where the sound of the cello begins to show itself without processes applied to it as if there were a cellist in the centre of the stage. Considering how the piece was designed, a live performance was not necessary. The idea implied using the instrument in an "acousmatic" way, deconstructing its sound and making it unrecognisable. As the sound starts to be processed, it unfolds on central front channels until it appears on the side channels to recreate a completely immersive sound image. The same procedure is applied to the voice, which is initially presented on the central front channels and then completely envelops the listener with "sound explosions of phonemes" that occur with a slight delay of milliseconds on all fronts. For example, in the second section, different cello harmonics come on stage in a stereo version on all the diffusion pairs (Frontal left, Frontal Right - side L / R - back L / R - Central Frontal / back). A binaural version of the composition was broadcast in France on Radio Campus Grenoble, and other associated radio programmes in France, during the Ecoutes Festival; as well as in Greece during the Electroacoustic Music Days 2020.[87]

---

[87] The 19th annual festival of electroacoustic music in Greece, co-organised by the Hellenic Electroacoustic Music Composers Association (HELMCA) and the Computer Music Lab of the Department of Music Technology and Acoustics of Hellenic Mediterranean University on 11, 12 and 13 December 2020.

2.3.7. Video montage

For the final presentation of this research project, at the end of June 2021, the composition will be presented with a video montage made by the visual artist Sarah Atzori. The aim is to present the radio piece in another format and experiment with a different way of fruition. One of the artistic-compositional research objectives is to present two versions of the same work: a purely acousmatic version conceived for radio broadcasting and another version of the same piece with video support presented on online media. Only by experimenting empirically, it would be possible to find answers to the speculation started in theoretical research: what works in one format and what doesn't in the other.

Chapter III

3.   Expansion and Changes of Radio and its Audience in Recent Times

A period of fundamental importance in the history of radio art can be envisaged in the first half of the 1970s, with the development of the Free Radios Movement. 1976 is the year that marks the opening of the ether to private broadcasters, allowing the birth of a new way of conceiving Radio Art. During the 1970s, radio stations started utilising the FM standard and switched to the free-from stations to gain more audience and provide the listeners with high-quality sound paired with fewer restrictions compared to the AM standard.[88] Continuing through this fragmented history of radio art, the thesis will move on in this chapter by considering the contemporary context. Radio had renewed itself through the Internet in 1995 with the development of Web Radio and online streaming. The audio streaming technique has replaced the analogue transmitting system, and artists can experiment on radio outside the legal constraints of an FM license. The Internet-based radio only appeared and got fully developed throughout the 1990s.[89]

The thesis will discuss the development of new online media platforms with an observation on audience reception. Considering the changes from analogue to digital media, I will go through the differences between broadcast FM, Podcasting and Live Streaming Platforms and the relative way of listening in different contexts; the collective listening, intimate listening, fragmented listen-on-demand. An overview of the contemporary context of live streaming will be delineated with examples of online platforms and the social impact in media consumption during the Covid-19 pandemic period.

3.1.   Free Radio – new voices in the air

> We understand the end of something all too easily in the negative sense as a mere stopping, as the lack of constitution, perhaps even as decline and impotence; the end suggests the completion and the place in which the whole of history is gathered in its most extreme possibility.[90]

Despite efforts by the Futurists in the 1920s, radio has been considered a means of communication rather than an art form throughout its history and theoretical considerations. Therefore, "it is ironic that just as traditional forms of radio are in decline, its possibilities as an art form are reaching extreme potentials. If, as Heidegger suggests, extreme possibilities are reached at the end of something, what then ends with radio? What is radio's *most extreme possibility?*"[91]

---

[88] ASLAN, C., & ÖRDEM, Ö. A. (2019). Social Science I, 116
[89] Ibidem, Pag. 117
[90] Martin Heidegger, *On Time and Being,* trans. Joan Stambaugh (New York: HarperCollins, 1972), 56–57
[91] Tetsuo Kogawa, "Toward polymorphus Radio" – *Radio Rethink - Art, Sound and Transmission by* Daina Augaitis and Dan Lander, (Walter Phillips Gallery, 1994) Pag. 287

To rethink these questions, I will go through the experience in Italy with the free radio movement. The radio medium approach has changed during the evolution of the media during the century that has elapsed between the first speculations and the current situation in the modern era, characterised by web radio and streaming platforms.

In Italy, in 1975, the ether opened up to private individuals. Free radio stations with private broadcasters entered Italians' lives in a disruptive way; it was a cultural and political phenomenon that deserves attention in the socio-political context of the history of radio art. Free radio meant freedom of expression, circulation of new music, politics, new languages and moments of aggregation. The way of producing radio works was no longer tied to control and censorship. Then there were the politicised radio stations born from political movements and the active participation of the public that allowed interaction between broadcaster and listeners.

> "c'era chi era insoddisfatto, e chi maturava utopie e sogni di poter
> cambiare il modo attraverso la comunicazione di massa"[92]
> – Renzo Rossellini –

3.2.   The Italian Free Radio Movement

Free radio is an expression that refers to radio broadcasters born in Italy after the liberalisation of the ether sanctioned by the Constitutional Court in 1976. Until the mid-1970s, Italy authorised only broadcasting public broadcasters – the Radio Rai network, whose programs were controlled by a special commission that censors uncomfortable content. The law reserved the exclusive exercise of circular broadcasting to the State control. When in the 70s with cable radio and the development of new technologies that allowed the coexistence of several broadcasters on the same frequencies, the public monopoly was no longer justifiable, and the laws opened at the end of the state monopoly. In 1974 the Constitutional Court granted private individuals the right to broadcast via cable in the local area: it was the first historic ruling against the state monopoly. Transmission over the air remained off-limits to private individuals. However, sensing that times were changing, some thought that broadcasting over the air would be liberalised sooner or later. Without waiting for a subsequent pronouncement, private radios over the air were opened in some Italian cities.

On March 10, 1975, the first *free radio* was born in Italy: Radio Milano International. Angelo Borra[93], the founder of the radio, together with his brother, began broadcasting as Pirate radio (a radio station that broadcasts without a valid license). After 36 days of clandestine broadcasts, the police arrived at the Milan office and shut down the station. But shortly afterwards, the broadcasts were authorised as long as they did not interfere with RAI. This

---

[92] "There were those who were dissatisfied and those who matured utopias and dreams of being able to change the world through mass communication." – Renzo Rossellini, founder of "Radio Città Futura" – Roma
https://www.youtube.com/watch?v=b_eLHElXBII
[93] See the documentary edited by MEDIAITALIATV that illustrates and explains the history of free radio in Italy.

event marks the beginning of a new era: the end of the RAI monopoly and the Free Radio development throughout Italy.

Private radio stations exploited the potential of the FM with its strengths and weaknesses. A limit was the geographical breadth: it was difficult for a broadcaster to cover an entire province. Free radio transformed this limit into a strength: programs aimed at easily identifiable "targets" were born. The powers of free radio, compared to the public operator, was instead the possibility of using new technologies such as stereo (used by private broadcasters in advance of RAI) and interactivity with listeners who were directly involved – giving them the chance to intervene in the course of the programs by providing opinions and comments, or by allowing them to choose musical pieces of their liking. Thus, many stations set schedules dedicated to specific groups of listeners, centring the programming on musical themes or social (politics in primis). In 1976 came a second, decisive sentence from the Constitutional Court: local broadcasting was liberalised.

Thus, free radio stations gained legal coverage; since then, they have been able to multiply throughout the national territory. The phenomenon was initially considered more as a temporary measure than as an evolution of conceiving radio in Italy. Over time many broadcasters proved to be able to compete qualitatively with public broadcasters. The territorial limitation was overcome by creating interconnected networks that covered the entire national territory. In a few years, the private radio broadcaster established itself no longer as an alternative to public broadcasting but as the primary source of ideas and professionals with even more excellent skills. This competition regime also benefited RAI itself, which was forced to focus on innovative and targeted broadcasts that would hardly have been possible without the stimulus of competition.

As Félix Guattari points out:

> Technological development, and in particular the miniaturization of transmitters and the fact that they can be put together by amateurs, 'encounters' a collective aspiration for some new means of expression.[94]

The 1970s were a time of social and political upheaval in Italy, and the birth of free radios was intertwined with the student movements, feminism and workers' rights movements, who for the first time could make their voices heard without any intermediary. "The social movements needed to deconstruct the language of [those in] power and to create their language. They needed to show the dark side of power," explains William Gambetta, researcher of history and human science at Centro Studi Movimenti of Parma.
In the early 1980s, many free radio stations began to shut down: the high management costs, the reordering of radio frequencies so that it favoured the creation of large oligopolies and the fierce repression of social movements made their job too difficult. Yet, a new generation of free radio was still to come. In the mid 80's Radio Onda d'Urto was born in Brescia. In 1992, Radio Blackout was founded in Turin, still the youngest of the bunch.

---

[94] Félix Guattari, *"Plan for the Planet"*. In *Molecular Revolution. Psychiatry and Politics*. (London: Penguin Books, 1984) Pag. 269

In 2017 an abandoned building in Turin, called Ex_Moi, illegally occupied by more than 3,000 North African refugees, aroused much interest in the local media, given the continuous demonstrations and clashes both for and against the occupation of the buildings. In the same year, I produced an electroacoustic composition/ radio documentary titled *MareNostrum* regarding this specific situation about immigration, social integration, and urban waste to be broadcast through an independent local radio. *MareNostrum* found a space to be broadcast via Radio BlackOut, an independent and non-profit radio born from the set of various realities of the Turin left-wing political movement, where I then actively participated through interviews and debates. Radio Blackout includes many people who, through broadcasts, workshops and debates, make the radio project much broader than just the radiophonic one. The project allows musical experimentation, political and cultural discussion, counter-information social aggregation, self-management.

95

In Italy, every day a small group of radio stations give voice to the voiceless: from social and environmental movements to immigrants and ethnic Roma who suffer discrimination. These are the "free radio", a group of progressive and non-commercial broadcasters around Italy – from Turin, in the North, to Cosenza, in the deep South – who try to cover the kind of news that the mainstream media does not. Today, the free radios are trying to find a balance between their mission of broadcasting content that is outside the mainstream and the need for economic sustainability.[96]

3.2.1. Popular Free Radio by Félix Guattari

Pierre-Félix Guattari (April 30, 1930 – August 29, 1992) was a French psychotherapist, philosopher, semiologist, activist and screenwriter. Towards the end of his life, he made several enigmatic suggestions about the emergence of a Post-Media era that would have the effect of displacing or at least decentring the hegemony of the mass media as we still know them today.

---

[95] Radio Blackout stencil outside Turin Polytechnic, 2012. Wikicommons/jcracow. Some rights reserved.
[96] Italian free radio: giving a voice to the people Published on: 1 November 2017 Written by: Giorgio Ghiglione

In the late 1970s, Guattari devoted several texts to the phenomena of popular free radio, especially in Italy. "Why Italy" is the essay that gives the clearest indication of why he considered this such an important phenomenon. The case of Radio Alice and its conflict with the apparatus of state control that eventually resulted in a massive wave of repression demonstrates very clearly how the media is a crucial site of struggle for the contemporary circulation of information. In Guattari's terms, "despite its apparent economic and technological backwardness at that time, Italy was the future of England, France and Germany". The fundamental aspect of this reflection is that the polarising of politics into the mutually reinforcing duality of state violence and terrorism was developed first of all in Italy before being applied elsewhere.

As Guattari wrote in his *Popular Free Radio* essay, published in "La Radio Siamo Noi":

> The Evolution of the means of mass communication seems to be going in two directions:
> – toward hyper-concentrated systems controlled by the apparatus of state, of monopolies, of big political machines with the aim of shaping opinion and of adapting the attitudes and unconscious schemas of the population to dominant norms.
> – toward miniaturized systems that create the possibility of a collective appropriation of the media, that provide real means of communication, not only the "great masses", but also to minorities, to marginalized and deviant groups of all kinds.
> On the one hand: always more centralization, conformism, oppression; on the other, the perspective of a new space of freedom, self-management, and the fulfillment of the singularities of desire. How is that a relatively old technology like radio has set the stage of a breakthrough in this second direction – in Italy and France – through the phenomenon of the Free Radio stations? Why not video, which, not long ago, raised so many expectations? It would be very difficult to disentangle all the factors that permitted Free radio to take off. But there are two factors that seem to demand particular attention:
> – With video and film, the technical initiative remains, essentially, the object of big industrial enterprise;
> – With Free Radio, an important part of the technology depends on the improvisational ability of its promoters."
> The point the organisers of the popular Free Radio stations particularly emphasizes is that the totality of technical and human means must permit the establishment of a veritable feedback system between the listeners and the broadcast team: whether through direct intervention by phone, through opening studio doors, through interviews or moments of social aggregation. The Italian experience, in this regard, shows us the immense field of new possibilities that is opened in this way; in particular, the experience of the Bologna group that organised Radio Alice and the journal A Traverso. We realise here that radio constitutes but one element at the heart of an entire range of communication means, from daily, informal encounters in the Piazza Maggiore to the newspaper – via billboards, mural paintings, posters, leaflets, meetings, community activities, celebrations, etc.[97]

Guattari underlined the radically different function of free radio compared with conventional mass media. His notions of transmission, transversal and molecular revolution suggested that, unlike conventional radio, free radio would not impose programs on a mass audience, whose numbers have been forecast, but would come across freely to a molecular public, and producers/artists in a way that would change the nature of communication between those who speak and those who listen, as wished in the previous century by Brecht.

---

[97] **Popular Free Radio** by Félix Guattari, La radio siamo Noi. Pag. 26

Today, radio has become much more than Tesla or Marconi could have ever imagined. Traditional radios and radio broadcasting have become a thing of the past. Instead, radio has steadily evolved to keep up with current technology, satellite and streaming internet stations gaining popularity.

> "We often don't recognize the significance of important historical moments while we are living through them. I believe public radio is at one of those moments right now — a hinge point that marks the end of one era and the beginning of another."[98]

3.3.   A community of listeners

Today, it is thanks to listeners if free radio stations are still active. But does free radio contribute to shaping the public debate? According to Tiziano Bonini, a researcher in media studies at IULM University, not so much. He argues there are too few of them to make a difference and local radios anyway. "Free radios give voice to the voiceless, but they don't counterbalance the gap between mainstream media and common sense." Inevitably, the question that arises spontaneously is: how does that fascinating experience of the free radio movement affect the contemporary context? I argue that modern web radio platforms result from that historical moment considering many of the innovations invented by the free radios have passed to the mainstream media. For instance, the "open microphone" allows listeners to comment on a specific theme.[99]

"The concentration of media ownership in Italy should paradoxically stimulate forms of dissent", says Alessandro Robecchi, former program director of Radio Popolare. "The prevalence of ideological conformism should stimulate dissonant voices. I think of a free radio as a megaphone of a society that does not accept and disputes the current narrative." It would be wrong to reduce the radios to a relic of the golden age of social movements. Undoubtedly the concentration of media ownership and the relationship between the media and politics in Italy is extreme, so it's challenging for different voices to be heard. But while the mainstream media are only interested in what happens in the corridors of power, free radios offer a possibility to be heard for all those groups ignored by the mainstream media and discriminated against by society.[100]

---

[98] By Eric Nuzum, Co-Founder (Magnificent Noise) in "Why public radio is on the threshold of a new era"
[99] https://www.radiospeaker.it/blog/web-radio-radio-libere-di-oggi/
[100] Italian free radio: giving a voice to the people Published on: 1 November 2017 Written by: Giorgio Ghiglione

3.4.   Radio had renewed itself through the Internet

Over the years, the potential of the mass media has expanded and changed, developing in various aspects and artistic forms. This thesis interest is focused primarily on how new media can impact socio-political life. The context of "Radio" and its audience has changed so much in recent times. The audio streaming technique has replaced the analogue transmitting system and artists can experiment on radio outside the legal constraints of an FM license.
Furthermore, the new media re-established different ways of listening, the interaction between audience–composers and the possibility of potentially reaching an audience all over the world simultaneously.
Recently, there has been a revived interest in the medium of radio, which can be attributed to the extended range of network-based services. Most important in this context is the worldwide availability of high-quality streaming, abolishing monopolies, or at least the unproblematic and easy access to technologies and infrastructures and concessions and licences. After all its years of existence, and despite momentous technological chances, radio still displays its characteristic directness; a characteristic already pointed out by Rudolf Arnheim and Bertolt Brecht. As Arnheim predicted, the possibilities opened by web radios have increased the potential of crossing borders and overcame Brecht's concerns regarding the lack of collective participation in radio and its unidirectional communication.[101]

In a contemporary context, it is possible to consider that, in some cases, web radios are the successors of the free radio Movement. They are born from small independent realities. They are the voice of a community with little visibility and shape its identity and could mix modern, multimedia languages and interact with listeners, showing a high degree of proximity to the public. Web radios constitute social aggregates and unify people with the same goals and ideals. With online radio, the radio system becomes more and more horizontal, democratic, economical and easily accessible.

3.4.1.   Broadcast FM, Podcasting, Live Streaming Platforms

During the project's development, it was fundamental to understand how radio itself and its audience have expanded and changed in recent times. Currently, my compositional approach has narrowed and adapted thinking about the paradigms and the specificity of the radio medium. Radio, Podcast and music streaming platforms all have their audience and different ways of listening. Questions raised about the context of new media and its audience are cardinal points for choosing my compositional methods and how to shape the sound according to this. Reflecting on the social context of the project was necessary to investigate who is listening, how and where, or in which circumstances – environment.

Today FM Radio is usually listened to in everyday situations, spread in small communities and local reality usually governed by censorship and gatekeepers. Podcasts are

---

[101] See pag. 24 in Chapter I

listening-on-demand platforms; in a sense, the audience can choose what, where, and when to listen, allowing a more conscious and intimate way of listening. Podcasts are online formats that can be listened to by a vast audience that can directly interact with the authors, allowing the artists to have a more intimate connection with the audience. Podcasts have still less audience than FM.

According to recent statistics by Radiocentre in London (the industry body for commercial radio), streaming online music services such as Spotify have gone from nothing to 30% of all listening for 16-24-year-olds in the last decade[102]. The statistics show how the new generation is incrementally using online digital platforms instead of FM Radio. Web-based services use listener interaction with algorithms, producing music recommendations that could impact audiences behaviour influencing and shaping the way of listening. The development of qualitative and quantitative research is playing an essential role in understanding these changing habits.
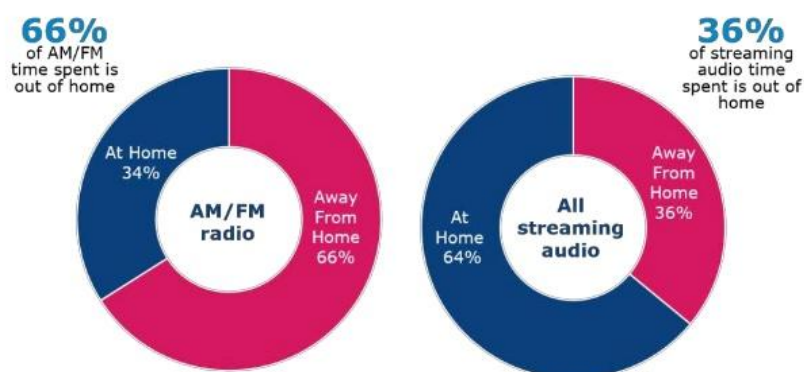
Therefore FM Radio is listened to as a background to other activities. The radio does not require careful listening like podcasts and on-demand, not anymore, after the advent of the new online media streaming platform. Radio remains a popular medium, with many listeners tuning in for several hours a day. However, there is a clear generational divide in listener demographics. Although use among listeners aged 40 and over remains high, it is declining for younger generations. This trend can largely be attributed to increased competition from new services, the most notable streaming platforms. Many young people favour the tailored, interactive features of streaming that, as of now, are not possible in a live radio broadcast.[103]

---

[102] https://www.radiocentre.org/wp-content/uploads/2015/07/Radio-Connecting-Past-and-Future-FINAL.pdf
[103] https://cordis.europa.eu/article/id/411708-bringing-radio-into-the-21st-century

3.4.2.   From Analogue to digital platforms

As Kate Donovan[104] observed in her essay *"Listening through the Elements: Ecological Radio Art"*:
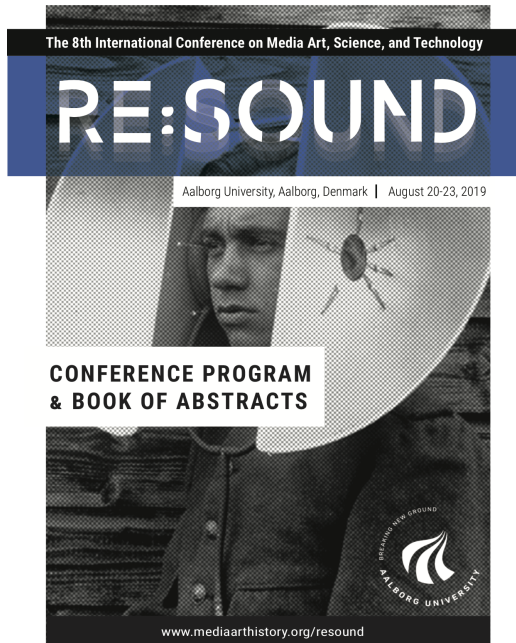
"Radio is currently at a significant moment because major corporations switch from analogue to digital platforms, and consequently there is a change from live, collective listening to fragmented listen-on-demand media. Partly due to these changes, radio is (re-)establishing itself as a medium for artistic practice. Despite its emergent and often marginalised position within the landscape of the arts, it inherently works to expand perceptions not only of the capabilities of broadcast radio as an artistic medium, but also the ubiquitous natural phenomena from which radio stems."

RE:SOUND
The 8th International Conference on Media Art, Science and Technology
–Aalborg University, Aalborg, Denmark 20-23/08/2019[105]

I argue that making this distinction today is not so important. Obviously, there is a change in the evolution of the Radio–Audience relationship. Still, let's consider that today almost all FM radio have switched to the live streaming platform, potentially allowing to reach an audience all over the world and to be heard from anywhere. Collective listening is still possible, probably even more than before. The new media platform/network allows us to create a feeling of collective listening by sharing on social media between different communities or alternating between several platforms, enabling live interaction even more than on FM stations.

3.4.3.   Covid-19 and the social impact in media consumption

It is interesting to consider how media consumption is booming due to COVID-19 restriction measures during the pandemic. Live streaming, in particular, jumped by 61% during these periods. As we sadly know, around the world, concerts and music festivals have been cancelled, so the role that new media and music are playing in bringing communities together has probably never been more powerful. Several initiatives, from the global to the very local,

---

[104] Kate Donovan is a radio artist/practitioner, facilitator and researcher based in Berlin. With questions of science-fact, the imagined, and 'ecology' in mind, her academic research and artistic practise is an exploration of radio as a natural phenomenon, an artistic medium, and a site for resistance. **(DE) ZeM; University of Potsdam**
[105] RE:SOUND was the 8th International Conference on the Histories of Media Arts 2019 - Aalborg, Denmark.
The conference addressed the technological, cultural and social repercussions of media art, focusing on a wide range of the field's practitioners, producers and creators – past, present and future.

are using music to bring communities together. I see the use of streaming platforms as an antidote to the growing sense of alienation and isolation in society in general – even more so now we are being asked to practise social distancing and isolation actively.

Artists are "forced" to switch to these platforms to not lose an audience. Still, at the same time, this allows the creation of new and different audiences for determinate context and the result of new online collaboration.

3.4.3.1. "Oscillation Festival" in Bruxelles

One of the most interesting examples of these changes is the "Oscillation Festival" in Bruxelles that has adapted and taken place entirely online under the additional strain of collective lock-down measures. Formats were rethought as live streams, concerts-on-tape, focus radio features, workshops via video-conference, and experiments in synchronised remote performance. In the necessary absence of a live-local audience, attention again folds out to a public dispersed in space. These new conditions created the possibility to draw on contributors from other places to see a wider spread of autonomous practices in dialogue with those in Brussels. In this way, the festival could stay with the initial plan to be an open laboratory for near-continuous broadcast, reflecting communities of producers and listeners.[106]

"… In the absence of project funding, the format of radio offered us a possibility to nonetheless continue the festival and to use it as a framework to reflect on the notion of value in art and cultural organisation beyond the monetary. Radio has always been a favourite tool of autonomous, DIY and experimental practice; offering low-cost means of reaching people, diverse forms of expression, and new tools for thinking community, audience (...)"[107]

The example of the Oscillation festival best expresses the concept of making radio in the contemporary context. Therefore, we can consider that thanks to the development of new media, and under this new condition imposed by the current situation, a new audience is developing for online radio art.

---

[106] Oscillation festival – Bruxelles – 30.04 - 02.05
[107] Oscillation festival – Bruxelles – 30.04 - 02.05

Chapter IV

4.   Compositional approach development and new aural conditions

Fascinated by the research carried out during the last years about radiophonic dramaturgy, acoustic ecology, and socio-political topics, the goal that I set is to develop an electroacoustic composition with a social theme and current issues. Currently, my artistic work focuses on producing a piece conceived as a radiophonic artwork, reflecting on the change of urban soundscape during the pandemic period and related social problems. My research is conceived to actively participate in social reality in the sphere between sound art and socio-political activism. The project attempts to create a specific "radio poetics" considering the paradigms and specificities of the radio medium, developing a compositional approach intended as a tool for critical reflection on current issues. By increasing awareness of audiences and re-thinking radio as an exhibition space for experimental Sound Art, the project focuses on producing radio artworks and podcasts characterised by voices, field recordings and instrumental sonorities.

The first artistic radiophonic form, the radio drama, was born as a broadcast of theatrical works and then evolved during the past century towards increasingly experimental techniques and approaches to the medium. My compositional approach to radio art began with compositions with a closed, linear and narrative, formal structure to ultimately move towards open forms that experiment and reflect the paradigms and specificities of the radio medium. I can argue that my compositional approach development in the context of radio art is somehow mirroring this historical-theoretical evolution.

4.1.   Considerations on the social context-aim of the project

At the beginning of the project, the initial goal was to compose a radio drama/documentary cycle. In my previous radio artworks, the linear narrative form was the fundamental central idea I used to articulate the formal structure of the piece, creating soundscapes that recall specific situations and environments, sometimes in a more abstract way and sometimes clearly and directly. *MareNostrum* and *NoBorders* have been articulated following a linear and close formal structure, convinced that a narrative line could help the listener immerse themselves in listening, reach total catharsis, and identify with the social issues addressed in the musical journey. Still, in *Stati d'Ansia – C1* the formal structure oscillates around the intelligibility level of the voice. The formal/narrative structure here is not linear but crossed between two elements: the voice and the cello that move in opposite non-progressive directions. I recently changed my approach to the medium, reflecting on the specificities, limits and unicity of the medium and exploring the project's timeframe.

4.1.1.   Timeframe and location

My compositional approach – the choice of the sound material and the articulation of the formal structure, both on the level of content and form – depends on the audience to which the compositions are addressed and the context/place where they are performed.

Investigating how radio itself and its audience has expanded and changed in recent times, now my compositional approach has narrowed and adapted, thinking about the paradigms and the specificity of the Radio medium. The direction taken by this research project moves towards the aim and the need to diffuse content through the communication channels of radio, podcast and music streaming platforms.

As mentioned in the previous chapter, podcasts are listening-on-demand platforms that allow a conscious and intimate way of listening. My compositional methods deal with the concept of linearity of time in such formats, resulting in a sonic narrative structure. On the other hand, FM Radio and related online streaming platforms are usually listened to in everyday situations where it is difficult to predict when the audience is tuned in. When composing a radiophonic artwork, it is possible to ignore the concept of linearity of time considering that it is a medium with a strictly delineated time sequence, in whose broadcasting it is impossible to move back and forth. I argue that Radio Art should avoid dealing with finite temporal objects with a beginning, a middle and an end, but rather allow radio listeners to perceive a different piece and create the final version from a framework of possibilities. The compositional approach for Radio Art should be an open acoustic final result, welcoming the idea of losing control of a temporal structure.

The strong influence of narrative line in my compositional *forma mentis* approach was fundamental to researching the concept of narration in musical discourse. Curtis Roads, in his book – *Composing electronic music: a new aesthetic* – examines the important concepts of sonic narrative, including narrative function, sonic causality, nonlinear narrative, narrative context, humor/irony/ provocation, narrative repose, anti-narrative and hearing narrative structure.

4.2.   Nonlinear interactive media and the broken concept of linearity of time

> "What is narrative? In a general sense, it is a story that the human brain constructs out of our experience of the world, by anticipating the future and relating current perceptions to the past. We are constantly building stories out of sensory experiences."[108]

As Curtis Roads observed in the chapter *Sonic Narrative*:

> In the context of the media, terms like "linear" and "nonlinear" are ambiguous metaphors with multiple meanings. Something can be linear in one sense, yet nonlinear in another. Like many metaphorical adjectives, we need to be careful if we intend to speak precisely. The term "linear narrative" has often been applied to a story with a beginning that introduces characters or themes, followed by tension/conflict resulting in a climax/resolution and final act. It was called a linear narrative partly because there was a sense of sequential time progression

---

[108] Roads, C. (2015). *Composing electronic music: a new aesthetic*. Oxford University Press, USA. Pag. 323

> coupled with a sense of causality. A given event could be seen as being caused or implied by a previous event. A linear narrative presents a logical chain of events; events progress and develop; they do not just succeed one another randomly. Contrast this with what is often called *nonlinear interactive media*, where each participant can choose their own path through a network. A classic example is a gallery exhibit, where each person can view artworks in any order. Another example is a video game, where each player's experience is different depending on the choices they make. Yet another example is reading the news, where we tend to pick and choose what we will read and in what sequence. Notice, however, that there is linearity within nonlinearity. Each person in a gallery views a linear sequence of images. It is merely different from what another viewer sees. The video game player experiences a linear sequence of events that seem like logical consequences of his or her actions. The newspaper reader scans an article from beginning to end, linearly. The musical listener hears a performance that has been designed with interchangeable parts so the order is of little consequence. Moreover, all of these experiences are taking place in time, which according to the metaphor, is a linear medium. What makes a medium "nonlinear" is its variability—everyone can do it a different way—whether by chance or choice. "Variable multi-path narrative" is perhaps a more descriptive term than "nonlinear narrative."[109]

Radio broadcasting takes place in time, which is a linear medium. Radio reveals a broken concept of linearity of time and neglects the idea of beginning and end as we can not predict when the listeners tune in or out. Thus we can consider it as a ***nonlinear interactive media***. I argue that the compositional approach for Radio Art should be an open acoustic final result, welcoming the idea of losing control of a temporal and linear structure favouring a variable multi-path narrative formal structure.

> Some would say that music and movies are linear, in that they unfold in time, and different audience members have no choice in what they hear. Similarly, a book is read from the beginning to the end. Here "linear" is again being used in place of "unvarying single path." A recording of a Beethoven symphony is essentially the same every time it is played.
> Yet filmmakers, composers, and novelists often speak of nonlinearity in the organisation of their works, even if they are ultimately presented in the form of an unvarying single-path narrative. It is obviously not necessary for a musical narrative to unfold in a linear chain. Artists use many techniques to break up or rearrange sequential narrative: ellipses, summaries, collage, flashback, flash-forward, jump cut, montage, cut-up, and juxtaposition.[110] Using digital media, sounds and images can play in any order, including backward, sped up, slowed down, or frozen. Granulation can pulverize a sound like a speaking voice into a cloud of phonemes, transforming a story into an abstract sonic narrative.[111]

4.3. Radio specificity and its paradigms

Approaching the concept of Radio from the perspective of composition and the practice of sound art, it was and remains necessary to see the radio not only as a medium but also as an art form. Radio Art is discordant with radio and music in their traditional perceptions.[112] In its classical diffusion, music does not adapt efficiently to the radio medium because it is not designed for this medium and does not consider its specificity and paradigms. The radio has

---

[109] Roads, C. (2015). *Composing electronic music: a new aesthetic*. Oxford University Press, USA. Pag. 329
[110] Ibidem, 329
[111] Ibidem, 330
[112] As said by Arnheim and F.T. Marinetti and Pino Masnatas, see chapter I

its unique listening characteristics and some parameters to consider while composing music conceived for it. Keeping in mind that the radio enters in the intimacy of the home and that the listeners are often listening to others sounds when tuned in, like, for example, the domestic everyday life sounds.

The place from which the music is coming is different from where it is being heard— there is an absence of a single and precise singular location but rather many indeterminate locations. The intermediate **space** and **time** between the broadcaster and the listener allow space-time dislocation. Is a medium with a strictly delineated time sequence, in whose broadcasting it is impossible to move back and forth. Radio bridges time and space, brings together people and ideas by establishing collective auditory experiences allowing at the same time mass and individual listening.

I believe that all these paradigms have to be considered while composing music conceived for a radiophonic context, both from the side of the broadcaster and the side of the listeners. That being said, during this chapter, I would like to bring up some questions raised around the concept of linear sonic narrative and non-linear or variable narrative. The thesis will discuss the possibilities radio allows composers to work with non-linear concepts of time, focusing on the compositional approach and method related to the choice and articulation of sounds.

These considerations led me to develop my last composition, the final musical result of this research project, an ongoing project titled *Il Tempo Sospeso* (*The Suspended Time*).

4.4. Il Tempo Sospeso

> "The fact that sounds can signify and evoke moods means
> that it can be used to design a narrative structure."[113]
> – Curtis Roads –

Offering an intimate space for reflection on how the new sonic environments and the new aural conditions are changing during the pandemic, the ongoing project *Il Tempo Sospeso* is a radio artwork that reflects the city's urban soundscape of Den Haag. Many considerations led me to the conception of this composition which will be discussed later in the *New Aural Conditions* paragraph. These are mainly sociological considerations, reflecting on acoustic ecology/environment issues, how the use of the media has changed and became the primary way of communication in the pandemic period, and how communication and human relations are radically changing.

The concept of the composition is based on looped samples, which represent this suspended time we are living in, almost as if we were in a cyclical and repetitive time bubble, without changes and external stimuli. The idea is to produce a piece that never repeats itself, and it is potentially a never-ending composition produced with an algorithmic generative system. The composition is a study representing the most extreme and pure open form experiment. The concept and the content of the piece are mirrored, representing a statement welcoming the idea of the open form.

---

[113] Roads, C. (2015). *Composing electronic music: a new aesthetic*. Oxford University Press, USA. Pag. 319
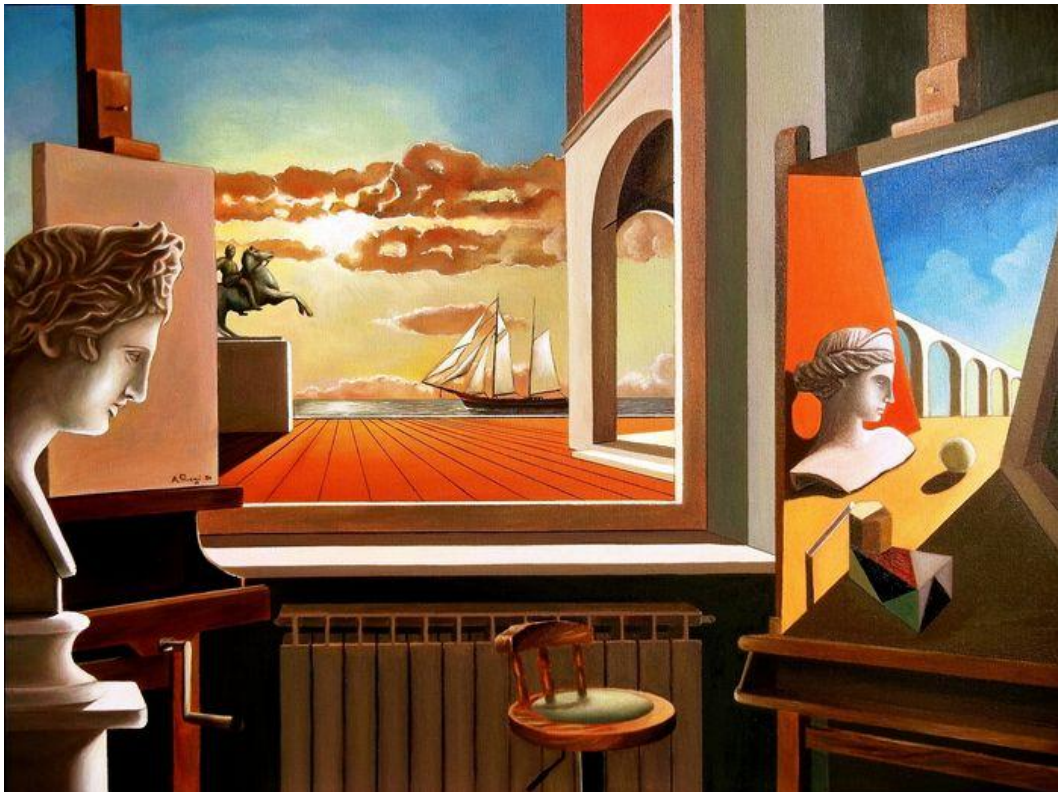
The development of the project is divided into three steps as follows:

First stage → Production of sound material

During the last year, I collected several hours of sound materials, including field recordings from my window and capturing the urban soundscape of Den Haag. Spending several hours of soundwalking in different characteristic areas of the city, I recorded the sounds more representative of the anthropogenic presence (like stations, bus stops, the centre of the town) and the ones hosting biodiversity (parks, green areas, seaside, dunes). The field recording will be a source of reflection on this particular historical moment and new aural conditions. The recordings were made during symbolic and representative times slots. For example, when the curfew began, it was possible to perceive a clear and sharp change in the soundscape in the centre of the city.

The predominant idea is to record mainly from the window of my apartment, mainly for two reasons: living in the centre of the city I found it interesting to notice the change in the soundscape in this central street of the town, usually very busy with vehicles and people walking by. The consequence of the reduction in traffic has favoured the settlement of various species of birds that, in the absence or almost no noise of vehicles, seem to sing louder and

---

[114] "Il tempo sospeso" by Antonio Pirozzi, June 2020

are present during all hours of the day, with a more significant presence morning and the evening.

On the other hand, we are spending most of our time indoors, so these recordings are symbolic of home intimacy, an alternation between external soundscape and internal noises, or rather the ones affecting the inner world, the one in which we are confined most of the time, where even the most common and delicate sounds now appear more present and mark our days. I found it interesting to include in the composition sounds that belong to my everyday intimacy, where sometimes my neighbours were listening to loud music or screaming, in the "silence of the pandemic". The recordings[115] are shaped by the desire to educate, to raise awareness of the present state of soundscape, and as a resource of reflection into social and cultural habits.

The voice being a primary element in my compositions and an object of study in the radio context, I decided to include various representative voices of this period. Many activities that have been transferred online have significantly changed our lifestyle, giving greater relevance to the internet as the primary environment for music production and consumption and human communication. Virtual environments and online media have become our direct communication channels. Voices sound filtered during online discussions on platforms such as Zoom, Skype, and Microsoft Teams and sometimes are altered due to internet connection issues. Even in the few moments in which we are socialising in a real-life context, the voices sound filtered due to the mandatory face masks. *Il tempo Sospeso* will include interviews and testimonies of the citizens of Den Haag and discussion with artists, scholars and students about the changes in the soundscape.

Second stage → Processing and articulation of sound material

The second step of the work consists of editing and manipulating the field recording and the interviews. The sound material is pre-composed with tools such as AdobeAudition, MaxMsp and Ableton Live. The field recordings will either be very or relatively recognisable and even almost abstract. But all of them will have to do with memory, intimacy, my subjective worldview and my memories. The resulting sound samples will be composed with algorithmic generative composition.

Below is a brief outline of the sound material that will be included in the composition:

4 parallel narrative elements

1) word element (voice, words, fragments of sentence)

2) realistic element (noises of the environment, more or less recognisable)

3) silence (vacuums of long and different sizes)

---

[115] The recordings were made by experimenting with different microphones like, for example, Shotgun, Soundfield, Zoom H5 and Schoeps CMC, and other microphone techniques: Ambisonics, binaural, stereo MS and XY format.

4) harmonic sound or rhythmical patterns (abstract "or instrumental sounds")

Third stage → Composition and broadcasting

The formal structure is articulated following a variable multi-path narrative with a different linear narrative structure between each category of sound material. The pre-composed sound material, from each category of sounds, is used to create a chain of sonic events. These lines of layers are intertwined with each other. The MaxPatch is constantly creating new material by combining randomly chosen parts of the sound source in different ways. Therefore, the different parallel layers are randomly superimposed in time with a generative algorithmic[116] system to produce a dynamic texture in space.

These samples are processed and permuted with MaxMsp, changing in duration, velocity and pitch with a random-controlled-variable system. They are chosen by the algorithmic system and mixed with the other elements of the layers. In a certain sense, the sonic material will always feel familiar to the listener but re-present itself always in a different way. Small and big variations are applied both on the micro and macro structure to follow an unpredictable narrative line, form and time. The goal is to allow radio listeners to perceive a different piece and create the final version from a framework of possibilities. The ear will dwell on multiple layers, thus creating its concatenation of sound/narrative events.

Il Tempo Sospeso includes the possibility to become a larger project. Upon completion of the composition, the expectation is to present a radio program and to delineate a space for reflecting on the new aural condition and changing urban soundscape. The final results could include the possibility of exhibiting the compositions as a sound installation for a multi-channel system. The composition, conceived in a radiophonic context, will be broadcasted at *Radio Cashmere* in Berlin and *Radio JaJaJaNeeNeeNee* in Amsterdam.

---

[116] **Generative music** is a term popularized by Brian Eno to describe music that is ever-different and changing, and that is created by a system.

4.4.1.   Abstract Sonic Narrative

> "A compelling sonic narrative is the backbone of an effective piece of music."[117]
> – Curtis Roads –

A sonic narrative consists of chains of events, as observed by Curtis Roads, "Our sensory experiences are continuously and immediately analyzed and categorized within a cognitive context. So it is with music. This musical narrative builder is our "listening grammar" in operation, as Lerdahl (1988) called it. Our listening grammar is how we make sense of the sonic world. Part of how we make sense of the world is that we anticipate the future. Indeed, the psychological foundation of music cognition is anticipation. Thus a narrative chain can function because we inevitably anticipate the future. These chains can create an illusion of cause and effect as if a subsequent event was the plausible or even inevitable consequence of an antecedent event." Thus the introduction of every new sound contributes to the creation of a musical narrative.

> In electronic music especially, the musical narrative often revolves around processes of sonic transformation. (...) Metaphorically, we can think of sounds as abstract characters that enter a stage as we become aware of them, do something, and eventually leave the stage and our awareness, as follows:
>
> * Enter—suddenly, through fade-in, or through coalescence
> * Act—i.e., do at least one of these four things:
>   * Stay the same (stasis)
>   * Mutate—change in some way
>   * Transmute—become something else, change identity
>   * Interact with other sounds, form harmonies, consonances, or contrasts/clashes
> * Exit—suddenly, through slow fadeout, or through disintegration
>
> This sonic play is a multiscale process; such a sequence can describe one sound, a phrase, a section, or a whole piece. Within the act phase is a limitless realm of possible behaviours: repetitions, surprises, climaxes, relaxations, all manner of development and evolution, and interactions with other sounds.[118]

How we interpret the sequence of musical events depends on our anticipation and our psychological reaction to whether or not our expectations are met. A succession of events in time constructs the sonic narrative. That is why in *Il Tempo Sospeso*, moments of silence or unexpected sound events/gestures are included to interrupt the continuity of chain progression of events and to find a balance between predictability and surprise. The aim is to find a balance to help the listener follow the narration of the different layers and understand what is going on during the narration in connection with surprising, unpredictable singularities elements that will break the flow of continuous progression.

---

[117] Roads, C. (2015). *Composing electronic music: a new aesthetic*. Oxford University Press, USA. Pag. 319
[118] Ibidem, 319

4.5.   Acoustic Ecology in the contemporary context

During the development of this research project, a set of questions regarding sound artists who move in the areas between socio-politics and sound art were addressed to frame the social context of the project. The main goal was to investigate theoretical and historical questions focusing on the practice of Sound-Artists, looking into the evolution in a contemporary context. Exploring the possibilities of radio as a medium for artistic activity, it is evident that one of the areas of most significant interest concerns acoustic ecology.[119]

The World Soundscape Project (WSP), founded by R. Murray Schafer in the late 1960s, was one of the first attempts to study the acoustic environment and the impact of technology on it. As Hildegard Westerkamp[120] observed: "Through systematic and critical study, the project coordinated and researched the scientific, aesthetic, philosophical, architectural and sociological aspects of soundscape ecology"[121]

> "Ideally, when we listen to radio we are listening to a listening medium. Radio listens through its microphones to the world, to human voices, to the environment. However, the microphone does not make choices. In itself it is without culture: the way it listens to the world is entirely determined by the recordist behind the microphone. Radio that listens then is about the recordist's position and perspective, the physical, psychological, political and cultural stance shaping the choices when recording. My choices are influenced by an understanding of the sonic environment as an intimate reflection of the social, technological and natural conditions of the area."[122] (...)
> "Another way to create radio that listens is with a stationary microphone, where its perspective remains constant during a given recording process. Through this approach the microphone listens by recording whatever occurs in the soundscape during a specified duration."[123].

Il Tempo Sospeso is framed in the context of radio/sound art in acoustic ecology, given the attention paid to the anthropogenic and biological environment. As an audio artist, one of my primary concerns is how to create the desire to listen in the audience – in a world where the tendency is not to listen – to radio or soundscape? One of my goals is to stimulate conscious and collective listening, creating moments of reflection on current issues.

---

[119] This topic should deserve a specific chapter that is not possible to discuss in detail in this thesis.
Mentioning only some of the projects / artists that have been fundamental for the development of the project:
In Re:Sound: Kate Donovan, Parasite Radio and Robertina Šebjanić
Robertina Šebjanić is a Slovenian sound artist: In 2017 she developed the new notion of the Aquatocene in which the sound of the underwater pollution is at the core of the sound compositions. The subaquatic soundscape encourage us to reflect upon the anthropogenic sonic impact on the underwater habitat and marine life. Her work explore the phenomena of interspecies communication, sonification of the environment and the underwater acoustic as well investigates the phenomenon of underwater noise pollution created by humankind in the seas.
AGF aka Antye Greie-Ripatti, German new media artist. She utilises language, electronics, field recordings, politics and explores speech within the audible depths of anti-rhythmic assemblages. Her work inhabits an a ugmented space where pounding Berlin experimental techno, spoken word, abstract video art, feminism and radical ecology create a self-sustaining environment.
The Sonic West Amsterdam and the project SoundTrackCity
[120] She was one of the six members of the original research team.
[121] See Hildegard Westerkamp's essay – *The Soundscape on Radio* – in *Radio Rethink - Art, Sound and Transmission*. 87
[122] Ibidem, 89
[123] Ibidem, 90

> "I was attempting to make radio a place of environmental listening by broadcasting the soundscapes that listeners experienced in their daily lives. with that I had hoped to create a state of resonance within listeners so that when they encountered sounds in the actual environment, recollections of the radio broadcast would alert them to the soundscape in which they lived – creating participating listeners, that is, listeners of the broadcast who could then also be receptive to the soundscape as a whole"[124]

One of the foundations of my creative research concerned listening to the world through the microphone and broadcasting it on the radio, in the perception of the sound artist. One of the goals of *Il Tempo Sospeso* is to create a radio piece that listens through my position and perspective, political and cultural behaviours of the society. Soundscapes of everyday life are used to stimulate active listening and reflection in the audience, even if presented abstractly and mixed with sounds of different origins.

4.5.1.   New aural conditions

> "The outbreak of the Coronavirus pandemic has had a strong impact on the sound of the places we live in, particularly as a consequence of the measures taken to stem the contagion. First of all, the lockdown and the suspension of most activities marking our everyday lives have produced a crucial drop in noise pollution due to an almost total reduction of traffic: this has caused silence to emerge powerfully in the aural conscience of individuals. Meanwhile, the lockdown has produced new sonic environments, putting in the foreground new aural experiences and acoustic elements that are usually covered by "human noise": the emergence of animal sounds in urban settings. Moreover, new aural conditions emerged once activities resumed, subject to restrictions due to the need to keep the health crisis under control. For many, lockdown silence is by now an odd memory, and traffic wraps most cities once again in its keynote: nonetheless, in many contexts, limitations are still enforced, especially in the world of the performing arts, sports and public education. Some sonic peculiarities are then to be found in the so-called "phases" after lockdown."[125]

The world around us is changing rapidly, and the sounds associated with life are also changing. New sounds emerge, others are recovered, others have been lost.
Part of my work in the last year focuses on investigating how the current lockdown changes the soundscape around us. It is through considering the modifications of sonic environments and the transformations in sound production/listening behaviours – not only in the musical field but generally in all human practices that are strongly characterised by sound – that I have found the motivation in composing *Il Tempo Sospeso*.

A series of sociological questions arise:
Does the suspension of activities cause sonic peculiarities to surface? What kinds of emotional responses have the modifications of sonic environments generated? How has the urban soundscape changed during the last year? Has the way in which we listen to it changed? Will the sonic environment change in the post-Covid period? If yes, how?

---

[124] Dan Lander and Augaitis Daina, 88
[125] Sounds of the pandemic – international online conference organised by Scientific Committee: Università di Firenze, Dipartimento SAGAS, Tempo Reale – Centro di ricerca, produzione e didattica musicale

With the end of the lockdown, will we return to previous habits, or will there be a change in the relationship between anthropogenic sounds and the sounds of nature/animals?

Is it possible to foresee long-lasting transformations in expressive and listening habits?

What kind of impact are social distancing measures having in the gradual reopening of theatres and concert halls and, in general, in the cautious restart of live musical practices? How can the challenges entailed by these measures be turned into new opportunities?

It is currently difficult to give concrete answers to all these questions. Still, I am confident that, with careful listening and with an open debate between the community of field recordists[126], artists and sociologists, over the years, we will be able to outline answers that will change our way of thinking about *"the sound of the pandemic"*.

4.6. Online projects

At the same time, many activities being transferred online have significantly changed our lifestyle. The Internet has become the primary environment for music production and consumption, and more broadly as a receptacle and vector of sonic accounts of the lockdown experience: from live streaming "homemade" concerts to field recordings collected in various online projects and sound maps. Starting from the beginning of the pandemic, the community of field recordists immediately began to reflect on these mentioned questions, using different interfaces to represent the pandemic's sound. Looking into the various projects, I wondered if the format of sound maps is a good option and representative of the context. For example, on Radio Aporee, exploring the project called: *How is the current Covid-19 pandemic changing the soundscape around us?* Without the title, I wondered if it would be possible to hear the "sound of the pandemic". If we listen to the field recording without other media such as video or image, it is difficult to understand that it represents the pandemic period. An example that best illustrates the sound of the pandemic is the project made by The Farins Team.

> "We tried to document the lockdown with the thing that struck us most, the silence (…)No noise, no voice, a surreal situation... We tried to convey our sensations to you with sound, experimenting with binaural audio for total perceptive immersion, flying a micro drone through one of the most historic cities in the world - Rome, Italy."[127]

This example shows that with the implementations of sound in connection with videos/images, it is clear to understand the representation of the projects. Still, if we consider just one of the two media formats, it is not obvious. It would be challenging to explore more the possibilities offered by contemporary technologic, such as rethinking the Gui interface format, wondering what could be the more effective way to represent the sound of the pandemic. In that sense, the format and interface could be explored more.

---

[126] it was valuable the participation in the online discussion organised by the Jubilee Project: *The city after lockdown: A European love letter to our public space after quarantine* and *Listening in the time of Corona*
https://jubilee-art.org/?rd_news=2770
[127] https://www.youtube.com/watch?v=vzntKrS-8_Q
https://www.ilmessaggero.it/video/roma/roma_drone_lockdown_audio_8_d-5194906.html

"Everything changes and the change is often not visible: but is it audible?"
- Giuseppe Gavazza -[128]

---

[128] "Ascolto la tua voce, città" (I listen to your heart, city), project by Giuseppe Gavazza

Conclusion and Future Developments

This project must be considered a work in progress, and many ideas are currently under development. During the thesis development, some initial objectives were achieved, understanding how to create a specific "radio poetics" considering the paradigms and specificities of the radio medium and developing a compositional approach intended as a tool for critical reflection on current issues. During the last years, the project mainly focused on theoretical and historical research; the project will continue to move through practice-oriented investigation. Considering the compositional form chosen for the different contexts: radio, podcast and online streaming platforms, the idea is to experiment more with other online formats like virtual environments and interactive media.

At the beginning of the project, the goal was to create a podcast to share my own composition/audio documentaries. Over the past year, the necessity of collaboration has arisen to go in my social commitment and artistic research direction. Aiming to explore the potential offered by new media in continuous growth and expansion, offering an intimate space for reflection on artistic practices and communities, an Online Interactive Sonic Platform will be developed, creating a collective to explore boundaries between different artistic disciplines.

During the next few years, the project will be developed to create a specific website that would also allow for discussion, like an interactive forum and recorded podcast plus live streaming sessions with the possibility of live interaction (on social media). The aim is to create a space for experimental music, sound art, field recordings, documentaries, forum/discussions, podcasts and live streaming sessions with the possibility of live interaction on social media. Of course, the direction of this project would have led me to the development of a similar platform. Still, in this Covid period, I feel even more the need to create a platform for exchanging and interacting with the artistic/musical community and the audience. Various different realities will be included.

The Online Interactive Sonic Platform project is initiated as an extension of my radio-sound-based research and studio practice. Since the beginning, it has had the purpose to work with guests and collaborators. Essentially, the aim is to promote the live performance of audible artworks via live audio streaming from various sites throughout the city of Den Haag and beyond. The project is now focused on creating the platforms and on and the creation of collaborations.

In parallel, the research will move through new research theoretical questions of investigation, which arose during the development of this thesis. A set of questions regarding "The genealogy of radiophonic voice" and "The disembodied voice in the radio context" will be addressed during the further progress of the project.

Radio invades, with the naive impetuosity of what is really an entirely unpolitical idea, a century in which men are less clear than ever before whether those walls, which have been worked at for thousands of years, are to be kept as they are or built higher or torn down altogether, and moreover at a time when, on the other hand, an unequivocal decision seems increasingly unavoidable. The relation of man to man, of the individual to the community, of communities to one another was originally strictly determined by the diffusion of human beings on the surface of the earth. Spatial propinquity of people, so we used to think, makes for a close bond between them, facilitates common experience, exchange of thought and mutual help. Distance, on the other hand, makes for isolation and quiet, independence of thought and action, versatility, individuality and the possibility of sinking into one's own ego and doing what one likes without considering others. Contrariwise, the proximity of others disturbs us in quiet and meditation, demands consideration and attention, promotes assimilation to an unoriginal mass-type and, by division of labour, limits production to a one-sided specialised department. Whereas distance condemns people to do everything for themselves· and so perhaps they achieve less, are apt to think of their own interests and in time of danger are thrown on their own resources. Spatial proximity demands collectivism; distance individualism, in each case with all their advantages and disadvantages.

Radio: The Art of Sound

Wireless and the Nations, *The Conquest of Space.* – Rudolf Arnheim –

References

Bibliography

- Arnheim, Rudolf, Radio: An Art of Sound (Salem: 24 Russell Square London Publishers, 1936).

- ASLAN, C., & ÖRDEM, Ö. A. (2019). Social Science I.

- Augaitis, Daina, and Dan Lander, eds. Radio Rethink: Art, Sound and Transmission. Walter Phillips Gallery, 1994.

- Cardinal Serge, Radiophonic Performance and Abstract Machines: Recasting Arnheim's Art of Sound.

- De Benedictis Angela Ida, Radiodramma e arte radiofonica, Storia e funzioni della musica per radio in Italia (Torino: De Sono, 2005).

- Guattari Félix, "Plan for the Planet". In Molecular Revolution. Psychiatry and Politics. (London: Penguin Books, 1984).

- Hartnett, Gerald. "Wireless Imagination: Sound, Radio and the Avant-Garde ed. by Douglas Kahn and Gregory Whitehead." Leonardo Music Journal 4.1 (1994): 107-108.

- Heidegger Martin, On Time and Being, trans. Joan Stambaugh (New York: HarperCollins, 1972), 56–57.

- Marinetti, Filippo Tommaso, and Pino Masnata. "La radia." Wireless Imagination: Sound, Radio, and the Avant-Garde (1933): 265-68.

- Pizzaleo Luigi, Il Contrappunto Dialettico alla Mente di Luigi Nono, Elettronica e testo. La dialettica dell'intelligibilità.

- Rancière Jacques, Le Partage du sensible. Esthétique et politique (Paris: La Fabrique, 2000).

- Roads, C. (2015). Composing electronic music: a new aesthetic. Oxford University Press, USA. Pag. 323.

- Russolo Luigi, L'Arte dei Rumori (Milano: Edizioni Futuriste di "Poesia", 1916).

- Schaeffer Pierre, Traité des objets musicaux (Paris: Seuil, 1966).

- Schmid, Laurent, Ceel Mogami De Haas, and Jonathan Frigeri. LapTopRadio. La Radio Siamo Noi. Lulu. com, 2019.

- Veniero Rizzardi – A.I. De Benedictis, Nuova Musica Alla Radio, Esperienze allo studio di Fonologia della RAI di Milano 19954-1959, Roma.

- Weiss, Allen S., ed. Experimental sound and radio. MIT press, 2001.

- Weiss, Allen S., Radiophonic art: The voice of the impossible body (Discourse 14.2, 1992).

Sitography/Web

- https://www.youtube.com/watch?v=b_eLHElXBII
- http://radia.fm
- http://sonology.org/wp-content/uploads/2020/04/BaSon_Brillada.pdf
- Italian free radio: giving a voice to the people Published on: 1 November 2017 Written by: Giorgio Ghiglione
- https://www.radiospeaker.it/blog/web-radio-radio-libere-di-oggi/
- https://www.radiocentre.org/wp-content/uploads/2015/07/Radio-Connecting-Past-and-Future-FINAL.pdf
- https://cordis.europa.eu/article/id/411708-bringing-radio-into-the-21st-century
- RE:SOUND http://www.mediaarthistory.org/resound
- https://jubilee-art.org/?rd_news=2770
- https://www.youtube.com/watch?v=vzntKrS-8_Q
- https://www.ilmessaggero.it/video/roma/roma_drone_lockdown_audio_8_d-5194906.html
- Veniero Rizzardi, Contrappunto dialettico alla mente, Note al disco LP Deutsche Grammophon DGG 2561 044) FONDAZIONE ARCHIVIO LUIGI NONO ONLUS – Contrappunto dialettico alla Mente – http://www.luiginono.it/opere/contrappunto-dialettico-alla-mente/#tab-id-2