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## The voice in the ancient spaces

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#### ABSTRACT

Voice and singing in historical and archaeological places to travel through time through sound. Sound and vocal performances through research and experimentation within spaces that have extraordinary architectures and reverberations. To have a connection with the historical, geographical and cultural depth of the origins through our "Voices of Inside" to create "Other Spaces" and improve perceptual and vocal emission qualities. With Voice and musical instruments it's possible to improvise in total freedom, being inspired by the strong relationship with the places and using instruments that conform to environments such as percussion, wind instruments, string and string instruments, shells, stones and water. The places of the performances were: The ancient Baths of Baia, The Castel Sant 'Elmo (Naples), The Castel Maschio Angioino (Naples) In addition to the artistic, therapeutic, sound and experimental experience, the project proposes itself as a path to enhance and enjoy historical, archaeological, modern and postmodern sites and communication between old and new traditions, creating live performances and audiovisual productions. Marco Francini has been bringing the experimentation and research of "The Voice in the Ancient Spaces" to various Italian universities, conferences and academies for over 10 years.

Keywords: voice.

#### 1. INTRODUCTION

"The Voice in the Ancient Spaces" is a research path within places that have acoustic details and unique geographical positions. The possibility of emitting sounds with the voice and with some musical instruments, within these spaces, allows us to establish a very strong relationship with the history of the environment and the surrounding landscape.

Entering an archaeological-historical place that has certain reverberations, emitting a sound, listening and perceiving its effect is one of the most extraordinary experiences I have ever had in life. From here began my research path "The Voice in the Ancient Spaces" within environments with which I create a special relationship that has lasted for over twenty years.

In such a condition the voice expands, transforms, envelops you and transports you to other dimensions as if your whole body and soul were hooked to a sound to travel through time in an "Other Space" where present, past and future coexist.

Together with other musicians we create free improvisations with the voice and with musical instruments (strings, winds, percussion, shells), sometimes we also use materials found on the spot such as stones, water, earth and branches. "The Voice in the Ancient Spaces" has a powerful symbolic value and always requires a type of performance with very intense physical and psychic energy. Perception, breathing, emission, listening, everything is amplified and improves our vital qualities.

It is very important to understand the "relationship voice space body" with "voice space environment": from this connection comes my research that develops on several levels and with different phases of study:

#### 2. INSPECTIONS

The first aspect of the Voice in the Ancient Spaces is the identification of the site through inspections, to understand its history, myth and geographical connotation.

The second element is the perception of the energy of the space we have identified, observing its architecture, the material of which it is composed, learning the olfactory sensation, the surrounding soundscape and above all starting the acoustic test with the voice and with some musical instruments to establish the type of reverberation and any resonance frequencies.

Through the first vocal improvisations I can decide what kind of sound and emission are suitable for the space, including the rhythmic aspect that is very important because some natural reverberations allow to create, with the percussive instruments, extraordinary atmospheres.





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To have a thorough knowledge of the places you must spend a lot of time on site and let yourself be carried away by the sensations that project us into the journey we are about to undertake. Capturing historical memory and making it live in the present becomes a fabulous and fascinating task.

During the inspections I am always accompanied by a sound engineer who knows my research well and by one or two musicians who have been collaborating with me for a long time.

At the end of this stage, we begin the training phase for the performance that we are going to do.

#### 3. PREPARATION

In the preparation phase we establish the possible **"Musical Ensemble"** imagining the type of acoustics of the space and the sound character we want to build.

In addition to the creative part, we organize the phonic and technical aspect for audio-video shooting by carefully choosing the equipment and microphones suitable for the circumstances.

Regarding the voice: I deepen the poetics to be used by immersing myself in the texts of historical and mythological literature, I extrapolate phrases, quotes, images that I often combine with elaborations created by me, I also try to understand which phonemes and which languages are more suitable for the performance, although this aspect is conditioned by the moments of vocal improvisation that I am going to do in the place.

Finally, I create musical canvases on the basis of tones that seem more suitable to me, but I leave ample freedom to the musicians to **create** and **compose.** 

#### 4. PERFORMANCE

The days of the performance of the Voice in the Ancient Spaces are always exciting, and we are all very full of energy: we prepare a first set of audio recording exactly like a real cinematic ciak and after a few seconds of silence we start with **improvisations**.

The aspect that concerns this phase is to play freely immersed in natural reverberations letting go of the flow of the moment. The duration of the pieces varies according to the sensations, perceptions and looks of the musicians.

Another element is to move in space in order to create different **audio sets** that exploit the acoustics from various angles and perspectives and that act on the sound emission in a different way.

Another important component is the **interplay** between the musicians, based on listening to the melodies, harmonies and rhythms that are produced.

Another interesting element concerns the production of sound **harmonics**: vocal spatialization allows the voice to produce harmonics that, in this context, are heard with great naturalness, clearly facilitating the quality of the sound.

#### 5. THE VOICE IN THE ANCIENT SPACE IN CAMPANIA – NAPOLI

In each place we spent many hours to get in touch with its acoustics, the type of reverb and its atmosphere. Each space always imposes its own intensity, its own breath and its own time; we must be very patient and careful to create an authentic, ancestral and deep relationship.

Churches, castles, temples, theaters, quarries, caves, each of these buildings preserves an extraordinary historical memory that communicates with us beyond time. With sound and voice we can tear through the space-time dimensions to connect with what **Pythagoras** called *the harmony of the spheres*.

The places that have characterized my research in recent years are in the Flegrea Campana area and in the city of Naples.

#### 5.1 THE MIRABILIS POOL

Is an ancient water cistern, very large, built in the Augustan era and located in the area of Bacoli in the province of Naples. The Mirabilis Pool was entirely dug into the **tuff** of the hill near the port, slightly raised above sea level. With a rectangular plan, it is very high and is surmounted by a ceiling with barrel vaults, supported by many pillars.

The reverberation of this structure is quite homogenous in every part of the space and has a delay of about **3.5** s but it is above all its architecture that acts on the sound in a strong and incisive way in addition to the dominant characteristic of the tuff as a supporting material. All this made it possible to create extraordinary compositions in whole days of audio shooting. The enormous internal spatiality has allowed us to move freely with the instruments, determining perspectives and sound geometries impossible to recreate in other types of physical and virtual contexts.

#### 5.2 TEMPLE OF MERCURY

Inside the **Archaeological Park of Baia**, a fraction of the municipality of Bacoli, is located The sector "of Mercury" so called because it includes a building that was initially believed a temple dedicated to Mercury, but in reality it was a *frigidarium*, a cold water pool. The externally square-shaped building had a circular internal environment and a domed roof that is the oldest example of a large spherical roof. It dates back to the end of the first century a.C. and in *the Severian age* other rooms with sumptuous decorations were added. The vault, placed to cover the building, is equipped with a central skylight made using large flakes of **tuff** made wedge-shaped.

The reverberation of this place has a delay of about **6 s** and each performative action has an extraordinary fluidity, it seems to be immersed directly in the sound that is produced. The presence of water within space contributes to the perception of sounds as if they were *ancient sea creatures* talking to us from other worlds. Wanting to make a rough encoding I could say that the tonality that resonates better than the others is the F# along with some frequencies

of the same musical scale. The harmonics of the voice that are highlighted with great intensity starting from F#2 are  $8^{\circ}$ ,  $5^{\circ}$ ,  $8^{\circ}$ , 11#.

#### 5.3 MASCHIO ANGIOINO

Castel Nuovo, also called Maschio Angioino, is a historic medieval and renaissance castle, as well as one of the symbols of the city of Naples. The construction of its ancient nucleus, today partly re-emerged following restoration and archaeological exploration, is due to the initiative of Charles the First of Anjou. Located near the sea in the center of the city, the castle has several rooms with interesting acoustics including the **Palatine Chapel** and the **Hall of the Barons**. Both places face the sea, with large windows inside. **Tuff** and **piperno** are the cornerstones of the whole building. In this place the Voice in the Ancient Space tells us about the extraordinary events of the history of Naples

#### 6. YELLOW TUFF

Many of the underground buildings that today the city of Naples jealously preserves were born thanks to the massive presence, on the territory, of tuff that constitutes a precious value for the Campania region.

The Neapolitan tuff is very suitable for the Voice in the Ancient Space and also known as yellow tuff, comes from the volcanic activity of the **Phlegraean Fields**. It is the production of ash that for the Neapolitans takes the name of "pozzolana" to give life to this material, the so-called "pozzolana" in fact has been settling in the sea, then reemerging due to tectonic pressures that occurred, according to experts, about thirty-five thousand years ago.

The tuff was used by the ancient civilizations settled in Naples to recreate extraordinary, inhabited structures, which the city still preserves in perfect condition as an incredible historical legacy. The construction of architectural works, dug into the tuff, was made possible by the thermal insulation capacity of the material, which also proved to be skilled in containing moisture.

This precious characteristic is made possible in turn by the absorption property of zeolites, minerals that make up the tuff, enriching it with new and peculiar abilities. It is precisely the latter who assimilate water molecules or dissolve them again, making tuff a cold material during the warmer months and warmer during the colder months. These properties have the merit of making tuff the perfect material for the construction of works and constructions, some of which today are considered inestimable.

All that the geological substrate of Naples owes its value to the formation of the tuff. To it also owes much the historical and cultural heritage of the city, which has been enriched over time thanks to the presence of this material, exploited in a masterful and refined way by Greeks and Romans. In fact, the underground quarries have been obtained from the Neapolitan tuff. These quarries served in antiquity as catacombs, crypts, funerary hypogea, houses, shops and works of a military nature.

#### 7. SOUNDSCAPE

Many of the places where we have been having natural settings, such as birds, wind, sea and many other sounds that contribute to making each performance even more authentic. The whole landscape gives us a symbolic image and strong vibrations that continually bring us back to deep memory and our roots. Our visual and sound journey reminds us of the close bond we have with the land and its history. The Voice in the Ancient Space tells the story of humanity and its evolution.

#### 8. REPORTS, OOBSERVATIONS, DATA

The research "**The Voice in the Ancient Spaces**" has produced incredible results over the years, thanks to two printed discs as well as conferences, conventions, video material, audio and acquired knowledge.

### 8.1 CD

**Echos 1** performance of voices, shells, guitar and percussion (2001).

**Echos 2** performances of voice, cello, sax, guitar, trumpet, shells, harp and percussion (2017).

#### 8.2 CONVENTION AND CONFERENCES

12th International Course Phoniatrics and Speech Therapy "**The artistic voice**" speaker with the research project *The voice in the ancient spaces* (2019).

13th International Course Phoniatrics and Speech Therapy "La voce artistica" live video performance for voice and cello of the *E-Nea* project (2021).

#### 8.3 WORK IN PROGRESS

All the material collected, together with the experience in the field, allowed us to make important considerations and establish more precise parameters:

The first important fact is that the voice changes and transforms according to the places in which it is produced, so it makes us understand the close relationship that man has with the environment as if it were a **"single body**"

Another consideration concerns the sound, which turns into something powerful and unique with a force that balances all our extreme and opposite qualities such as sweet and violent, light and dark, melancholic and cheerful, restless and happy.

Another aspect concerns the **perception of listening**: every little movement and every little action is amplified and supported by the spatiality of the place that concerns not only its reverberation and resonance but also the type of atmosphere that is created. I could define this type of energy as two types, the first composed of **light colors** and the second of **dark colors**, understanding every shade that is in the middle. In this regard, I like to quote the writer **Elémire Zolla** who spoke of **the aura** of places.

Another fact of the Voice in the Ancient Space listening to the recordings made that we made with great attention: we realized that some sounds of musical instruments, in particular percussion, were not recognized immediately but we had to listen to them repeatedly to understand the source. All this highlights the incredible aspect of a true "**timbre metamorphosis**" conditioned by the place and its living energy.

# 9. CONCLUSIONS OF THE VOICE IN THE ANCIENT SPACE

Our research is developed on two parallel tracks, on the one hand the experimentation of new musical architectures thanks to the wonderful reverberations of these spaces and on the other the enhancement, increasingly targeted and attentive, of historical places.

To make live, through the *sound journey*, in a total way, all those who participate, communicating new and ancient traditions. In this way you can share musical experiences with a passionate and attentive audience.

Man, lives in close relationship with his environment, he must respect and care for it continuously. Culture, history, and art are the foundations of a healthy and evolved community because without history and without memory there is no future.

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