

# The Freedom of Vocal Expansion and Transferred Notation

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Inhale, exhale, stammer, scream, growl, moan, snore, belch: we associate these vocal expressions to taboo noises that come out of our bodies naturally and carelessly. Being part of our lives, these sounds have also become powerful expressive signs in contemporary art. Many examples can be found within the realm of musical compositions, where these vocal utterances, like articulated spoken language, have become not only extremely enriching tools, but also fascinating material when considered specifically. While composers have entered the realm of spoken language using oral material as part of their resources, poets have gone the opposite way by exploring what lies beyond the text and the words; vocalists, on the other hand, have left behind the traditional *bel canto* to delve into the body, the mouth and tongue, jawbone and trachea, glottis and vocal cords. Throughout the twentieth century, the voice has been and still is on the one hand a revelation in these diverse realms of artistic creation – where we could also include performative and fine arts –, and on the other a well-kept secret, mysterious, evasive, and extremely attractive.

After the groundbreaking upheaval brought forth by Dada, lyrics, remained mostly on paper since the Gutenberg era, expanded, extended, embodied, turned back into sound and deconstructed themselves, as if they were reflecting on their basic essence and identity, recognising and reinventing themselves over again.<sup>1</sup> The living system of the voice shattered the vanishing lines: John Cage, Fluxus, happenings, sound poetry, expanded scripture, free improvisation... This text explores some elements of the still-unfinished and constantly-updated sound cartography, revisiting some historical turning points in the field of vocal experimentation, but mainly trying to highlight the contributions of a number of female artists who have extended and reshaped the notion of voice with regard to its multiple ways of expression and inscription. All these artists have been

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<sup>1</sup> According to George Steiner, poststructuralism and deconstruction stem from Dada (cited in Lomanno 2019).

particularly inspiring for contemporary vocal experimentalists like myself, because they had the courage to explore the phonic possibilities, seeking to liberate much more than their larynxes, and reminding us that the development of our voice is not only our right but also our journey, thereby opening many fascinating paths.

## The Voice

Thus, in this historical process the voice unfolded, becoming a total instrument, implicating the entire body, a body which is expressed and produced through the mouth.<sup>2</sup> To *come out* could be the verbal form that best describes what the voice does, its needs, its core of the matter. We often think of the voice as an organ, but what does this actually imply? If we start with the glottis, we find that it controls the fundamental frequency and the potential richness of harmonics through the vibration of vocal cords, making the voice possible. If the glottis closes, no sound is produced. The glottis is not a muscle, nor is it cartilage. It is actually a void, an interstice of resonance, a space between the vocal cords, but *not* the cords themselves. Similarly, the mouth is a void that comprises and hosts our lips, teeth and tongue. This becomes clearer when we think of its etymological origin, residing in the Latin word *oris*, which besides ‘mouth,’ also stands for ‘origin’ and ‘orifice’ (El Haouli 2006, 60). It can also be considered a space of transition, as Paul Zumthor put it: “Every origin is in the voice, uttered through the mouth, even when the mouth is conceived as the opposite of exile, or as the place of return. Therefore, multiple vocalities are related to the mouth” (Zumthor 1983, 15). As such, it fulfils our basic, primary needs and desires: the mother’s breast, the lover’s kiss, both so fluid and so alive; milk, saliva, blood. What was created in the body flows through our mouth. The body is also our personal alchemy that processes expressions and emotions, which may come out through the mouth. It is therefore not a coincidence that the Greek term *alquimia* is defined as ‘a mix of fluids.’ Does the voice, as a different type of material and emotional fluid, take part in this alchemy? What about its aerial condition, in between breath, sound, and resonance? Where does it leave its trace, what does it mark?

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2 This idea is borrowed from French avant-garde poet Henri Chopin, cited in Bartolomé Ferrando (2008).

The moan and the scream are the materialisation of the voice, matter in its primal and primary state, followed by the word, which is materialized like form and colour are materialized in painting. The voice does not only give a tone, it also draws the form in which a letter or a word should be transformed into sound and expression. Its strokes are gestures derived from echoes of our memory, which once again achieve presence when materialising beyond the sound uttered between our teeth. There, for a moment – always in transit, always evasive – it oscillates, similar to waves of air that reach the skin, penetrate, and may even shudder the bones of the hearers. The voice is similar to the light, able to illuminate, to obscure a moment. Voice as essence and particle, energy and materiality, intention and fact, vibration and resonance.

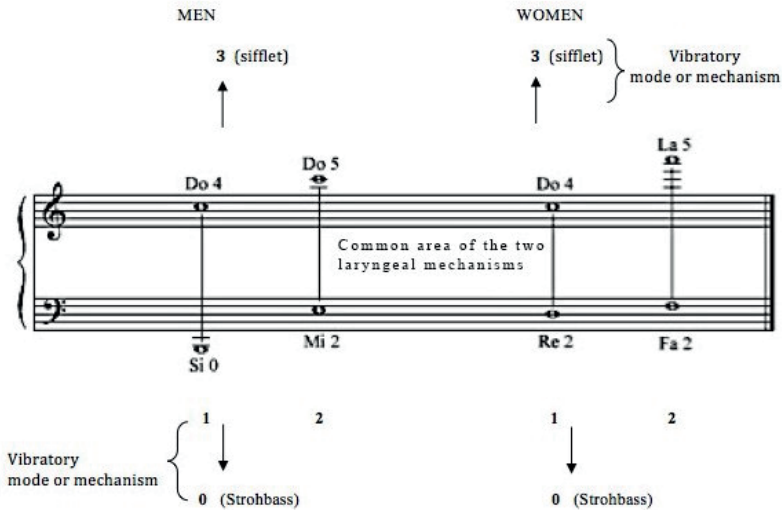
Where did we leave the void? In resonance, in the space created by the stroke and its experience or recognition: it opens up in the very interstice created by the voice and its silence, a silence that is a false projection of the void, since it does not really exist, because – as John Cage proved – even silence is filled with sound (Cage 1961). Rather than an empty space, the vocal void is “loaded,” full of energy, full of potential. In absence, its expressive power and efficacy are undeniable, this very “power of not being,” as Giorgio Agamben put it (cf. Agamben 1995, 54). Thus, the void is the very space filled with embodiment, the body and its marks, moulded throughout one’s life. The voice that inhabits this void is unique and has a particular way of relating to it, as to the other voices it encounters. It is therefore also a body in permanent transmutation, and a body with many tongues and voices.

The voice stands as a historical document of humanity. Its anthropogenesis retains, pre-semantically, the powerful flow that made the world sounding. As I have argued so far, voice is made up of dissimilar components: bones and air, fluids and flesh, space and void, matter and vibration... all this allows us to have at least a minimal idea of how we can recognize and hear the origin, the place where we began to perceive this world, and ourselves in it. The voice has been fundamental in and for our process of socialisation, the “channel and facilitator” of culture, a culture that has reorganized our vocal uses and has left us pre-conditioned and sometimes even a little mute. Like in the process of painting, when we made our first drawings and sketches – true jewels of pictorial freedom, of colour, of displacement – we tend to use our voice in our early years without any sort of inhibition: loud, clear, emotional. Slowly but steadily, our drawings, as our

voices, become disciplined, “educated,” in a process where we leave this freedom aside, either to recreate standardized forms – drawing the “typical” little house with the tree – or to communicate in proper manner, modulating our voice and volume according to the circumstances, learning to know when to talk and when to listen, when to shout and when to whisper.

Our sounds are defined by the agentiated meaning, socially agreed according to the place, the situation, or the oral exchange. We learn to protect our emotions by creating conditioned occlusions in order to redirect our primary impulses. We therefore also learn to gradually disconnect the neurological union between the centre of the stomach and the breath, which is, at best, a vital stimulus from birth until early childhood. This disconnection of the diaphragmatic air – more importantly of the emotions it expresses – is compensated by the use of the muscles of the throat and mouth. The breath ascends to the upper part of the thorax and the voice loses its natural strength and wide projection in exchange for a stable, conventional, and static continuity that enables the understanding agreed in the framework of social fluxes (Ocampo Guzmán 2010).

It is, however, important to remember that the human voice presents a range that extends from low-pitched to extreme high-pitched sounds, which anyone can develop when creatively experiencing with extended voice techniques. Physiologically, in order to make these sounds, the larynx must adapt to four different vibratory modes or mechanisms, which function according to gender characteristics, as explained by musicologist Michèle Castellengo (1991, 155), and as I have attempted to schematically synthesize elsewhere (Palacios 2007, 181), reproducing only a simple scheme here (Scheme 1):



Scheme 1: Vocal mechanisms and ranges in most cultures.

As can be derived from this scheme, laryngeal mechanisms 1 and 2 are common to most cultures. The extension of their registers is not fixed and can be regulated by vocal training, being therefore tightly linked to the aesthetic, historical, and socio-cultural requirements of individuals and social groups. We must not forget that all of us have a very extensive voice range and were born with the possibility to use the four different laryngeal mechanisms, not only the first and second. We have heard these modes for so long that convention and mimesis have forced us to adopt them. As for mechanism 0, it corresponds to the extreme lowest register, also known as *Strohbass*. An example of this is the *kargyraa*, a vocal technique used in Tibet and in Tuva, Mongolia. Mechanism 3, also called *sifflet* or whistle, is used to produce extremely high registers. Some examples can be heard in the voices of vocalists such as Yma Sumac, Fátima Miranda, Sainkho Namtchylak, and myself.

I remember that when I began to study singing and ethnomusicology, I always wondered how vocalists could develop so many different vocal techniques with the same physical possibilities. For instance, after their voice mutation, Western males are only able to speak within vibratory mode 1. And even if they do keep mode 2, they do not use it, and the mechanism atrophies. In certain African regions, however, these sounds

are constantly used, and men can easily shift from one mode to the other. On the other hand, Western women use one or the other vibratory mode, according to their personality or the effect they want to achieve. Of course, these ‘choices’ correspond to political and sexual conditionings. In our culture, a man using mode 2 could come over as too ‘effeminate,’ whereas a woman using mode 1 could give the impression of being ‘sensual’ or even ‘dangerous.’ Why? Because the lower register of the voice is associated with ‘power,’ ‘security,’ and with the ‘masculine’ world. So, in a patriarchal society, women gain status but also become a threat when they speak ‘like men.’

Therefore, a culture’s preferred singing mode reflects and reinforces the kind of behaviour that matches its primal survival effort and its institutions of power and social control. When we explore the vocal freedom of extended techniques and the power that lies within the voice, not only as a singing or speaking voice, but also as silenced voice, we question considerations such as singing ‘in tune’ and other dogmatic appreciations about the uses of our bodies and voices. Muted for political reasons (the masculine voice is associated with knowledge),<sup>3</sup> silenced for ontological reasons (when orality is deprived of semiotic value and is only posited as inferior to the written mode as a human institution), or for aesthetic reasons (phonetic ideal linked to what is thought of as beautiful or domesticated), the ignorance of our laryngeal physiology and the scarce practice of its reach and power embedded in our upbringing is also responsible for these silences. I mentioned the power of the glottis a few lines earlier, despite its being a void. We could, in the same vein, imagine that the voice, so often silenced for political, cultural, or gender reasons could retrieve its power and make itself heard. In this sense, the very concept of notation would be disrupted, since it would have to embrace the richness and variability of the vocal emissions more than (just) the pitch or the tone of the notes that these produce. It would have to account for the changes and modifications that arise and materialize, and, consequently, it would propitiate other, hitherto ignored visual and sonic realities.

Nothing betrays us more than our own sound; therefore, nothing is more intimate. Accordingly, the path of the voice is per force the path to self-knowledge. It is also a subversive medium that questions dogmas and beliefs through the body. “It is a question of *dislocating* the founding

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3 I have hitherto never heard a scientific documentary narrated by a female voice.

categories of language and the grammar of the *epistémè* through the access to another system that links speech and writing” (Derrida 1974, 92). This discontinuity, which proposes a wider reading of art and the related exit from the *epistémè*’s logocentrism and implicit eurocentrism, brings us from language itself to an orality of difference, a signifying articulation beyond the written word. This also already constitutes an expanded notion where-in the voice exits the body in order to become modulated space. Singing does not occur *within* a space, but *with* the space, and in fact the voice *creates* this space, shifting the surroundings’ usual position, dislocating the space itself to transport the listener to a different one.<sup>4</sup>

In this specific context, scores, as carriers of absence, require the body-voice to draw its desires, to trace its creative potential, including to account for its changes. The voice is the expression of successive acquisitions and losses, excisions and discoveries, it is the most complex of musical instruments because age modifies it, and its markings remain in the graphic of gestures and in the relationship with others. Barthes says: “Corporeality of speech, the voice is located at the articulation of body and discourse, and it is in this interspace that listening’s back-and-forth movement can be achieved” (Barthes 1991, 255). This dislocation of voice, and this intermediate space that propitiates the act of listening could be one of the reasons why extended voice techniques developed in vocal experimentation circles, extending to gestures and to the reincorporation of daily sounds beyond semantic staticity or the regulation of agreed meanings: the dislocated voice cohabits with excess, noise, nibbling, irregularity, and overflow.

I wish to continue with an outline of a number of historical milestones and important personalities, briefly exposing the different action spaces that opened the pathos for vocal experimentation in the past century. Today, with the added possibilities of technology and due to the interest they spark as the expressions of various forms of thought, these very spaces appear constantly renovated. I will mention here some of the artists who created these spaces, and briefly linger on a number of feminine vocal projects. The emphasis on the necessary reclaim of their voices will allow to value ‘the feminine’ beyond the culturally-accepted parameters of pitch or the simplistic dichotomy men-woman. It is not my intention to list them

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4 It is important to clarify that the space created by voice is not a previously established ‘place,’ but rather an also material and physical ‘no-place’ that is created, each time, within the meeting of the vocal emission (sound) and the listening process. In this sense, the body is also a space that is inhabited, a complex ‘sound board.’

all, but only schematically mention some from the most representative personalities that favoured what the West calls extended vocal techniques. As John Cage pointed out, these techniques not only question the disagreements between dissonance and consonance, but also between noise and what is called “musical sound” (Cage 1961, 4).

### Pioneers. Broadening the Pentagram

We owe part of the openness and liberation of the voice to avant-garde movements such as Futurisms (Russian and Italian), Dadaism, Schwitters’ Merz, and others – some of the movements the Nazis called “degenerate art” – that favoured “imagination without strings and words-in-freedom.”<sup>5</sup> All these movements shared, up to a certain point, the idea of freeing language from syntax, making chaos and noise intentionally audible, and admitting randomness as a possible guideline. This also became evident in a visual, notated manner, such as in *nomorepunctuationnomorecapitalletters*, creating new strings and configurations without apparent logic, which stimulated new and swift images and interpretations. Within this aesthetic and conceptual frame, voice was liberated from singing, from phraseology, from declamation; the spoken word was substituted by the phoneme, the certainty of logocentrism was shaken by the ambiguity of emotion and expression, and syntax was shaped by the rules of breath.

Beside the works by Tristan Tzara and Hugo Ball, the paradigmatic and fundamental piece that opened the era to a new vocal poetry was Kurt Schwitters’ *Ursonate* (1922). However, important creations by female artists have been forgotten, such as those by Mina Loy, a poet who, in 1914, wrote the *Feminist Manifesto* in response to Marinetti’s *Futurist Manifesto*; or German sculptor and poet Elsa von Freytag-Loringhoven, who was also a precursor of street performance and to whom the true authorship of the well-known *Fountain* (1917) by Marcel Duchamp is attributed;<sup>6</sup> or the other German poet and performer, Emmy Hennings, co-founder of

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5 “*Imagination Without Strings and Words-in-Freedom. Futurist Manifest*” is the complete title of Filippo Tommaso Marinetti’s text (May 1913).

6 From research done by art historian Glyn Thompson, together with Julian Spalding, director of the Glasgow Museums, it was determined that the readymade *Fountain* by Duchamp was in fact a piece by Elsa von Freytag-Loringhoven. This was discovered in 1982 thanks to a letter that Duchamp himself wrote to his sister Suzanne, in which he mentions that it was his friend who sent him the sculpture (Giroday 2020).

Cabaret Voltaire, and whose voice Julio Álvarez del Vayo described in 1918 as: “Being able to equally achieve a banal effect as well as a dramatic resonance. Her voice, usually childish, had an unusual communicative power. The human facet in the auditory arose by the spells of her art, either in its lustful manner or in its longing for justice [...]”<sup>7</sup> Around the same time academic music was also changing, and, again, it was the voice that allowed singing to go beyond its usual limits. In 1912, Austrian actress and music-lover Albertine Zehme inaugurated the *Sprechgesang* technique (vocal technique situated between speech and song) by commissioning Arnold Schönberg’s *Pierrot Lunaire*, an atonal composition based on the poems of Albert Giraud.

It is important to understand that the origins of Dada and their denunciation of tyranny and totalitarianism were directly related to the impact of World War I.<sup>8</sup> In this sense, we should remember – at least those of the new generations should remember – that, notwithstanding the insistence of the market to define art as a commodity (with formats that fit museums and galleries, domesticated even in the case of installations and concerts), expanded sound art is primarily the art of social transformation, of engagement, of collectivity, and should be understood as a revolutionary tool. Dada’s extreme criticism or the break of the tonal mode by free atonalism do not simply stand for aesthetic transformations, they are processes that reveal the contradictions and incoherences of the historical eras of which they are part. This vertigo of the voice, originated in the fearful period of WWI, reached a certain state of looseness after WWII and the Cold War. The surveillance technology developed in those years, such as the theremin, the hydrophone, the tape recorders, and more importantly the microphone, expanded the fields of creation and vocal experimentation, yielding unprecedented possibilities. These innovations began to influence cosmopolitan cities such as New York, or cities in Germany and Japan, which were full of war-weary refugees eager for a more optimistic language. Influenced by Dada, a new sensibility emerged in this context under the name of Fluxus, an Heraclitean name referring to the change in being. It is important to remember that, in its 1962 manifesto, Fluxus called itself “Neo-Dada in music.”

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7 Cited in Bonilla (2019).

8 Incidentally, the Cabaret Voltaire was created in neutral Switzerland, where German refugees Hugo Ball and Hans Arp were joined by Romanian poet Tristan Tzara.

In 1950, Henri Chopin coined the term ‘sound poetry.’<sup>9</sup> The decades between 1950 and the late 1960s saw the development of the Theatre of the Absurd, existentialism, abstract expressionism, and the *Event/Happening*.<sup>10</sup> Again, syntax – even understood as notation – was totally disrupted. Poetry became visual (or reintegrated its characteristic ocular aspect), orality became flesh, action, performance, dance (Merce Cunningham), and in music the openness was instigated by the influence of John Cage. This was a moment of hybridisation and border-crossing. Art altered and alternated the occupation of all its manifestations and deployed the significant variability of its artifices beyond the scope of pure information, to become simultaneously eye, ear, and gesture. According to American multifaceted artist Dick Higgins, this is how ‘intermedia’ art was born, by dislocating the known rules of normalized art. Higgins himself said: “I do not feel totally complete if I am not cultivating all the arts – the visual, musical, and literary. I suppose this is why I developed the term Intermedia, to include my works that conceptually fall between them” (in Padín 2007). It was, therefore, during the 1950s and 1960s that singers such as Cathy Berberian or Roy Hart, with their own compositions, but also those by Luciano Berio, John Cage, Sylvano Bussotti, or Karlheinz Stockhausen, to mention only a few of the most important representatives of the time, would be the starting points of the liberation of the voice for generations to come.

The voice was a propitious field for creation and experimentation at the intersection of academic music, Fluxus (intermedia art), and musics of oral traditions. This hybridity still develops to this day, spurring the discovery of new vocal emissions, but also encouraging the exploration of vocal techniques originating in oral traditions around the globe (which have forever been ‘extended voice,’ without the need for a label).<sup>11</sup> Accordingly, Iran’s *tabrir*, yodel in Switzerland and Malawi, the *katajjaq* of the Inuit, Scandinavian *kulning*, Mongolian *khoomii*, or Berber *zaghareet* became part of the extended voice techniques of the following decades, to-

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9 A term which later gave birth to his book *Poésie Sonore Internationale*, published in 1979.

10 A term that composer and Fluxus artist George Brecht (New York, 1926) first used when referring to himself as ‘propitiator of events.’ The *Event* concentrates its proposal in one single gesture, one single act, one single idea, and minimum time. On the other hand, the *Happening*, first created by Allan Kaprow (New Jersey, 1927) promotes simultaneity, complex action, wide spatiality, and multiple elements.

11 Obviously, the need for this category only works if we recognize the narrowness of a musical system, and thereby the need for a broadening or extension.

gether with *falsette*, tremolo, ululation, and multiphonics.<sup>12</sup> Japanese artist Michiko Hirayama, for instance, confronted the Japanese tradition of her voice with contemporary Western music in her *Canti del capricorno* (1962) by Giacinto Scelsi.<sup>13</sup> Decades later, Sainkho Namtchylak did something similar in the field of electronic music with the Tuva songs of her native Mongolia.<sup>14</sup> Another very important example is Peruvian singer Yma Sumac, who became prominent in the 1960s for the outstanding range of her voice. Simultaneously, these changes produced notations adapted to each technique, depending on the vocal resources of every creator or interpreter. Because of the artistic relevance of her practice and the innovative aspects of her graphic scores, I will now briefly explore the work of Cathy Berberian.

### ***Stripsody* (1966) by Cathy Berberian**

One of the programmes of the feminine voices is to name themselves; one of the ways to do this is to sing their own compositions, keeping in mind that to interpret is also to create, as, more acutely in the case of women, they have been overlooked as interpreters in favour of the composer's role. An important example of this is the case of mezzo-soprano Cathy Berberian (1925-1983), who created scores for her voice based on the onomatopoeias used in cartoons (Boom! Bam! Crack!). A succession of drawings at the hand of Roberto Zamarin reveal the implosion contained in a sheet of paper, now animated in a diversity of vocal forms which come alive in the mixture of comic strip and a free musical form of the rhapsody.<sup>15</sup> This notation is both text and meta-text, and establishes minimal units that are articulated with a scenic-gesture component suggested through the graphical manifestation of the scenic characters (objects, animals, superheroes)

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12 The Center for Music Experiment and Related Research, at the University of California, published the *Index to a Recorded Lexicon of Extended Vocal Techniques* in 1974. The list includes 74 techniques classified as “Monophonic, Multiphonic y Miscellaneous.” Three years later, composer Richard Jennings published *A Catalogue of Extended Vocal Techniques* (about these and other fundamental extended voice techniques see: [www.paulj.myzen.co.uk/blog/teaching/voices/files/2015/08/Part-one.pdf](http://www.paulj.myzen.co.uk/blog/teaching/voices/files/2015/08/Part-one.pdf) [8 July 2019]).

13 *Canti del Capricorno*. Michiko Hirayama (1967-72), [www.youtube.com/watch?v=9I-Uvp3Q6E10](http://www.youtube.com/watch?v=9I-Uvp3Q6E10) (20 October 2021).

14 Sainkho Namtchylak. *From Me To you*, (1982), [https://www.youtube.com/watch?v=-x\\_yohrUV7w](https://www.youtube.com/watch?v=-x_yohrUV7w) (20 October 2021).

15 In 1969 Cathy Berberian composed a piece for piano titled *Morsicat(h)y*, focused on mosquito bites, also illustrated by Zamarin.

and the onomatopoeic sounds at different levels of action.<sup>16</sup> Three specific themes retain my attention concerning piece. The first is related to the entrance of what is considered ‘popular’ into the field of the ‘cultivated world’ of academic music; another has to do with the issue of gender, and the third with the ongoing question of the contempt in which most contemporary composers hold scores of free format. The two last issues are of a more personal nature, as we shall see.

Coming from the *bel canto* tradition, Cathy Berberian ‘un-grains’ (from the original Spanish ‘des-granar,’ to remove the grain, TN) the voice in a pictographic ‘geno-song’<sup>17</sup> (Barthes, Kristeva), which, almost for the first time in an academic context, dares to sound like an animal without restraint. *Stripsody*<sup>18</sup> not only features barks and meows,<sup>19</sup> but explores the world of the popular without any prejudice. It is well-known that many contemporary composers disregard the music of the masses and find it banal or less than serious, more fit to the universe of spectacles than to concert halls. In this sense, Berberian opts for a mixed result: without any kind of belligerence, she draws from the sounds of ordinary live, of television, or even from the Beatles (*Beatles Arias*, 1967) to create and act.

Regarding my second point, namely the issue of gender in the question of the voice naming itself without a composer standing as mediator (almost invariably a man), I remember a conversation I had with the great Spanish soprano Esperanza Abad (1941). Using the vocal beyond the conventional and in a way also a successor of the aesthetic proposals of Cathy Berberian, Abad is a pioneer in her country. Around the year 2009, we

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16 There is an interesting analysis of *Stripsody* from the perspective of structural analysis in the tradition of Hjelmslv and Greimmas in René Lindekens: “Analyse structurale de la Stripsody de Cathy Berberian.” *Communications* 24 (“La bande dessinée et son discours”): 140-176.

17 I took the freedom to refer to Barthes, because in this ‘de-graining,’ shredding, or breaking down to amplify the significations of the written and its iconic discourse, to bark, to meow, to scream, to blow, etc. is where the multiple modulations that the voice offers come up, and do not end in its connotations. The registers of voice can transform its meaning. This voice, lacking ‘grain,’ lacking signifying weight that, according to Barthes, pertains to mass culture (1986 [1972], 185), becomes, in the mouth of Berberian, who was fond of mass media culture, a disseminated ‘grain,’ thrown at our feet with all its weight and signifying.

18 The notation of the piece, as well as Berberian’s interpretation can be seen in the following link: [www.youtube.com/watch?v=0dNLAhL46xM](http://www.youtube.com/watch?v=0dNLAhL46xM) (20 October 2021).

19 It is possible that G. Rossini, who composed extremely beautiful feminine duos, was the first to use animal sounds in singing, as for instance in *Duetto Buffo di Due Gatti* (1825).

talked in a café in Madrid, and she told me that as opposed to Berberian she was never really interested in composing for herself, although all the pieces she had sung had been recreated, arranged, corrected, improved, and often even rewritten by herself.<sup>20</sup> Nevertheless, the scores were all officially authored by men. “The aura of the composer was such that they were almost admired as gods,” she recalls. This was so generalized and accepted, that her own voice, turned into a sound object through her invisibilisation as a woman and creator, became one more element of the composer’s piece of work. Anna Ricci, the voice of the Catalanian avant-garde, similarly suffered the same kind of invisibilisation for being a woman and an interpreter.

I would like to add a comment regarding the notation system that uses drawings and graphics. Although the incorporation of this type of notation in contemporary music is already more than 50 years old (I. Xenakis, M. Feldman, K. Stockhausen, G. Crumb to cite only a few), and its value and efficiency have been acknowledged, a few years ago the composers that headed the Spanish Society of Authors still did not receive scores that were not written in conventional form as ‘compositions’. As a consequence, scores that did not feature a mastery of musical language could not be included in their collection. Drawings, calligrams, or comics were considered a sort of enjoyment suited for amateurs, not serious composers. The singer Fatima Miranda faced this situation and asked me to transcribe the eight songs of her *Arte sonado* (2000) in ‘traditional solfège.’ For those who are not acquainted with her life, Miranda studied library science and art history. She does not, therefore, master musical scripture, nor does she actually need it in her compositive creation. Nevertheless, if I must name one person who is faithful to the rigours of the score, that person is Miranda: no one is more demanding and meticulous in the decoding of her graphs and drawings. Every colour, every line, every letter size and every sign are precisely measured by the millimetre (I am not exaggerating). In one instance, the confluence of more than 27 voices previously recorded depend on this precision, which her voice contrapunctuates; in others, the detailed specifics of the video, lighting, stage, gestures, movement, and

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20 Abad’s repertoire includes more than 60 original works by Spanish and foreign composers, many of which are dedicated to her.

vocal emissions included in her works must be perfectly codified.<sup>21</sup> Her having her graphics converted into academic notation was only useful to have them included in the collection, but not for them to be sung by other people, much less to emulate or validate their worth.

Albertine Zehme, Cathy Berberian, Esperanza Abad, Anna Ricci, Fátima Miranda, all of who are mentioned here in the name of so many others exemplify the need to jump into the void of notation, enabling new inscriptions, sound experience that is not an instrumental object but rather a living, throbbing, thinking, and creating body, an open space-time of scripture, instead of a frozen sign on the score.

### **The Rhythm of Action is Free When the Score is Unleashed**

With the polyhedral shape of Intermedia already in full swing, the next generation of artists was ushered into the world carrying hybridity as identity and revolution as their voice. The decades of the 1980s and 1990s would add voices that stood out in those turbulent times, such as that of Demetrio Stratos (Egypt, Greece, Italy 1945), Phil Minton (UK 1940), Meredith Monk (New York 1942), Maggie Nichols (UK 1948), Diamanda Galás (California 1955), Shelley Hirsch (New York 1952), etc. In Spain, Llorenç Barber's diphonic songs were added to the world's larynx in an extended field of appended harmonic and bell vocals, and joined by the excessive poetry of Bartomeu Ferrando and the extended voice *par excellence*, Fátima Miranda. Together, they would create the *Flatus Vocis Trio*, a pioneering group that from the outset in 1985 would consolidate the term of 'talked musics.' In this practice, linguistic expressions keep all their significance but also serve as polyphonic vehicles for daily virtuosités.

As the semantic threshold of ordinary language and written norm were crossed, the score turned into incitation, suggestion rather than directive. At most, it became an 'instruction,' as outlined by Yoko Ono in her 1964 piece *Grapefruit*, and continued in so many pieces by ZAJ in the late 1960s. Sound was freed from the purely musical code to propose 'actions' rather than concerts, and 'interventions' rather than recitals or auditions, not only in concert venues or art galleries, but also in the public space. The exit of language was such that in those years nobody who ignored solfège

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21 Regarding Fatima Miranda's life and work, see: [fatima-miranda.com/sp/visual/partituras/](http://fatima-miranda.com/sp/visual/partituras/).

was considered an intruder in the world of music. For instance, Cornelius Cardew's 1969 *Scratch Orchestra*, or Barber's ACTUM in 1973 made clear that playing music did not require deciphering skills.

The place of hearing became the key point of undetermined significations, of acoustic traits in progressive dissolution. Noise took the norm as an excess of sense, and semantic uselessness filled the voice with poems (and vice-versa). Painting did not run out on the canvas. The gesture crossed space. Action became composing material as much as sound or the use of instruments, be it the voice, a piano (how much we owe to Cage and Satie!), or a record on a tape ribbon (Alvin Lucier, *I am sitting in a room*, 1969).

Heterophonic textures, noise, entrails, guts, lungs, moving bodies, strings crossed the border of the audible. And yes, "to talk is for the healthy and to sing is for convalescents," as Nietzsche said (in González Bisbal 2011, 32). The past decades saw the implosion of the free voice, and the voice has emerged with such strength since then, that nothing can stop her. In the words of Llorenç Barber: "The door of change is yet to appear" (2019).

If the microphone caused an upheaval in voice experimentation in the fifties, the next decade saw the exploration of vocal doublings, poliphonics, polyrhythms, and multitones by means of samplers, further disturbing the notion of time (simultaneity, juxtaposition, etc.) and the disorientation of the body. I will now explore three different feminine proposals that feature notations without paper, grounded in technology, in the streets, and in the mind: Pamela Z, Yoko Ono, and Demetrio Stratos.

### ***Elastic City* (2011) by Pamela Z and *Voice Piece for Soprano* (1961) by Yoko Ono**

Technology enables the extension of the body-voice, while also subverting the notion of the normative body and provoking a distortion in the hearer, who then hears multiple voices coming from a single body. This scenario, already proposed by Laurie Anderson (1947) and Joan la Barbara (1947)<sup>22</sup> in the seventies was subsequently amplified by Pamela Z (New York 1956),

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22 In her "Vocal Extension" (1976), a track of her first album *Voice Is the Original Instrument*, "She used a phase shifter, pitch modulator, and delay unit to create what she described on the record jacket as "a Sound fabric based on the natural rhythmic flow of thought." (Weber-Lucks 2003, 63).

among others. These artists practiced extended voice as a vocal-electronic project, integrating methods of composition, interfaces, performance, and improvisation. From the beginning, Pamela Z began exploring with opera *bel canto* but also with punk music, extended vocal techniques, and electronic musics. In the nineties she added Max/MSP Mac Book Pro software to her practice, as well as MIDI controls and Body Synth, a MIDI that transforms gesture and muscle movements into sound. She also used video, sophisticated ultrasonic and luminic sensors, words, breath, glottal ‘clicks,’ whisper, grunts, etc.<sup>23</sup> This relationship between voice and technology in its most elaborate aspect goes beyond the limits of the new sensibility and influenced artists of the 21<sup>st</sup> century like Kristina Warren (UK), Andrea Pensado (Argentina), Marie Guilleray (France), etc.

On the other hand, Pamela Z is also African-American, and her work tackles important issues regarding the articulation of ethnicity, identity, and Afro-diasporics, as well as the role of women in the development of technological means. Regarding notation, she declares:

A lot of people define a composer as someone who writes music for other people to perform. I think that composing is the creating of a piece of work, not communicating instructions on how to perform it. Some composers perform their own works and never need the notated score to communicate it to others. In the classical tradition composing and notating went hand in hand, but that doesn't mean that notating was actually the composing process.

[...] For a composer who is not a performer, notation is essential because otherwise the piece couldn't be realised. For a composer who is a performer, notating is not always essential (Kennedy 2000, n.p.).

Although Pamela Z is usually discussed in relation to her grand-scale multimedia work, here, on the contrary, I would like to refer to *Elastic City* (2011) and to the singularity of its notation. The piece is a composition that was not executed with any sort of electronic technology, which is rare in Pamela Z's corpus. Here, the idea of notation was rooted in geography, more specifically in the streets of Downtown Manhattan, and the score was traced itinerantly. In a kind of participative walk, Pamela Z guided a group of people, and together they sang the graphic signals of the subway, the signs written on the fronts of buildings, the stains on the sidewalk, etc.,

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23 Four of her most important pieces (*Quatre Couches*, *Bagdada*, *Typewriter*, and *Breathing*) can be listened to here in a recording from 2017: [www.youtube.com/watch?v=ebxv-VJwGWek](http://www.youtube.com/watch?v=ebxv-VJwGWek) (20 October 2021). To learn more about her life and work, see her webpage: [www.pamelaz.com/](http://www.pamelaz.com/).

turning the street into a gigantic contrapunctual score, randomly chrometered.<sup>24</sup>

Faced with the real possibility that absolutely everything can be sung and can, therefore, become notation, the world becomes an open score, an invitation to sound. Streets, the public space, the visible, have also another face, inhabited by what is not said, what is interior and profound in the mind. Both are susceptible to becoming scores and leave traces, to become inscription, marking, and sound. In this sense, I immediately think of the example of Yoko Ono's work. With a very different background than that of Pamela Z, and born two decades earlier, we may find they have in fact more similarities than what can be perceived at first hearing. All in all, Ono remains inspiring also in her more recent work, not least in my case, which I will discuss towards the end of this contribution.

In Pamela Z's work, the piece is rendered visible, even when the reading of her presence is intuitive, multiple, and random like the different eyes that see it and the mouths that sing it (*Elastic City* 2011), or as invisible as a typewriter that only sounds and is insinuated in the gestures of the hands. We can hear it but not see it, as it only exists in Pamela's mind and in the memory of those who remember those objects (*Typewriter* 1955). Pauline Oliveiros wrote on the jacket of her CD *A Delay is Better* (1955): "[...] an impressive survey of Z's imaginative compositions [...]" This is precisely what from my point of view links her to Yoko Ono: the power of imagination. To use the power of the invisible to materialize the sound of absence is to bring into presence the emptiness I mentioned in the beginning of this text, this endless power of *not being* in all things: "Each thing [...] was endless things," as Borges said in his *Aleph* (2000). The endless noises of thought sound in the mind, as loud as its silences:

If my music seems to require physical silence, that is because it requires concentration to yourself – and it requires inner silence which may lead to outer silence as well. I think of my music more as a practice (gyo) than a music. The only sound that exists to me is the sound of the mind. My works are only to induce music of the mind in people (Ono 1970 n.p.; transl. Ambar Geerts).

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24 Photographs of the event can be seen here: [www.flickr.com/photos/elasticcity/6193612671/in/photostream/](http://www.flickr.com/photos/elasticcity/6193612671/in/photostream/). *Elastic City* is an artistic project that since 2010 invites various artists to rethink participative walking as a poetic act: "The walk takes the poem off the page, the performance off the stage, and translates it to the street" (Todd Shalom, s/f, [www.elastic-city.org/book](http://www.elastic-city.org/book)). In 2011, Pamela Z was invited to guide the walk.

Accordingly, in “Voice Piece for Soprano,” Yoko Ono only gives one instruction: scream. The piece’s three movements will be executed with the same instruction: “1. Against the wind; 2. against the wall; 3. Against the sky” (Ono 1970).

Three screams, devoid of a determined identity (ego), wherein the voice is only a ‘vibrating pretext’ to make the wind, the wall and the sky, three apparently silent entities, (re)sound, and to open the fabric that unites the immaterial of the mind to the materiality of sound, the immateriality of what is absent with the making of the present, the sensitive with the rational.

### ***Mirologhi 1 and 2 (Lamento d’Epiro) (1978) by Demetrio Stratos***

Both these pieces are representative of the vocal techniques that, to my mind, defy any possibility to attribute the exploration of what has been considered the ‘feminine tone’ to women.<sup>25</sup> Enzo Minarelli claims that “Stratos felt both man and woman” (2006, 22). This is why I took the liberty to cite Stratos in a passage that is supposed to discuss feminine voices. Furthermore, Stratos’ work gathers characteristics that are essential to the vocal proposals of the 21<sup>st</sup> century, as for instance the questions of the racial codification of the tone and the gender codification of the voice, which are currently both crucial issues, but had already been suggested by Stratos’ vocal work. As with Pamela Z’s punk past, Stratos’ musical background was rock music. He joined “I Ribelli” in 1967 and formed his own band, Area International POPular Group, in 1972. Interested in ethnic vocal techniques, he studied ethnomusicology in 1975.

The question that concerns me here is if digging and excavating into the dichotomy and separation is really useful to human experience. Would it not be more convenient, possibly, to rethink what the feminine and masculine really mean, untying ‘doing’ from ‘being’ and from ‘how it sounds’? I do not mean to erase the importance of the necessary critical stance of contemporary music in issues such as the imposition of white, heterosexual, and masculine privilege. We should nevertheless be wary of repeating the same blindnesses inherited from the construction of the traditional canon in the narrative we would like to build now. So, my question be-

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25 *Flatufonie ed altro* and *Criptomelodie infantili*, both from 1978, could equally be examples of this.

comes: Do men and women *really* sound different? of course they do, forgive me for stating the obvious, but is this due to learning, experience, choice or exclusion?<sup>26</sup>

Weber-Lucks considers that as from the seventies, a “rediscovery” of the voice “allows Diamanda Galás to conceptualize the voice as a fighter, a weapon and a shield” whereas at the same time it brought great confusion to the gender division. According to Weber-Lucks’ interpretation, “The rediscovery of the voice seemed to promise women a way to find their own path in a male-dominated world of art, and, above all, to create their own gender identity” (Weber-Lucks 2003, 62).

Obviously, the voice yields various stances from which to reflect on gender. As we have seen in the beginning of this text, Dr. Castellengo defines the four vibratory modes according to gender. However, when we are capable of transcending the apparent limitations of the tone, and when we think of the feminine without falling in the man-woman dichotomy, we can rethink the place of the feminine or masculine voice as a space of transitory possibilities and gender permeability. If Stratos felt both man and woman, it was because his voice brought him to that place: “I am a man, I am not homosexual, nor bisexual. Nevertheless, I recognize that there is inside me something that I cultivate, which is a powerful feminine core. And I can express it through the original sound that the voice is” (Stratos 1978, 107; quoted after El Haouli 2006, 85). Of course, not all men who develop high pitches feel like women because of that, while others do. Anyway, the discourse should not be limited to the bodily construction or the imposed sounds, but rather rooted in the body’s own decisions and in each sounding materiality. What I am most interested in is thinking whether the complex demands of women and the feminine are not dismissing the construction of spaces that also allow us to think about the voice from positions of dissolution of privileges, without falling in the very differentiations and privileges we want to get rid of.

From the point of view of notation, the case of Demetrio Stratos is interesting, as he was one of the first singers who brought his own vocal

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26 Händel’s “Son nata a lagrimar,” a duo interpreted by Nathalie Stutzmann and Philippe Jaroussky, could also be a good piece to rethink the question of gender in voice. The piece can be seen and heard online: [www.youtube.com/watch?v=unb-z1KT3\\_c](http://www.youtube.com/watch?v=unb-z1KT3_c) (6 April 2020). Nathalie Stutzmann and Philippe Jaroussky, Recording Handel duet: “Son nata a lagrimar,” *Heroes from the shadows*, 2014.

work, concretely his own larynx to spectrographical analysis.<sup>27</sup> Towards the end of the 1970s, guided by the need to scientifically learn about the behaviour of his own voice, Stratos visited L'Istituto di Scienze e Technologie della Cognizione (ISTC, Institute of Cognitive Sciences and Technologies) in Padova. There, he established a very tight working relationship with physicist Franco Ferrero and phoniatrist Lucio Croatto, which allowed him to analyze his own phono-articular apparatus, and incited the two scientists to elaborate interesting articles regarding the spectrographies and the records of their collaboration.<sup>28</sup> The spectrographical and electroglottographical records that remained in the institute are in some way the scores of the body-voice, of the “voice-music” as El Haouli would say (2006), that we have kept of this ‘feminine’ man. Paraphrasing Jacques Derrida regarding the voice of Antonin Artaud, we can also think of Stratos when Derrida declares:

Once you have heard Artaud's voice, you cannot silence it. So you have to read it with *his* voice, with the spectre, the ghost of his voice that you must keep in the ear. To me, the voice archive is disturbing. Because, contrary to what happens with photographic archives, the archived voice is ‘alive’. It is living another life, and this is something that does not occur with other type of archives. In the voice, you can hear a kind of relationship to itself, life affecting itself. The very few recordings of Artaud's voice existing today are an essential part of what is left of his body, of his *corpus* (Derrida 2004; transl. Ambar Geerts).

### Jeopardizing Notation, or the Unfinished Present

The beginning of the new millennium comes with the gaps that were left open in the previous decades. More than being interpreted, the world is being reinvented. Reality is not a given or an inheritable thing, but rather an entity constructed by all. Social movements and contextual and behavioural imperatives are ferments for creativity. The power of the unfinished creates the conditions for the voice to manifest itself, while at the same time the latter becomes prominent in the cultural and vital pano-

27 The spectrographical analysis of Demetrio Stratos, suggested here as a form of notation, can be seen in the following link: Ceolin, Tisato, and Zattra. 2011. [https://www.researchgate.net/publication/264881481\\_Demetrio\\_Stratos\\_rethinks\\_vocal\\_techniques\\_A\\_historical\\_investigation\\_at\\_ISTC\\_in\\_Padova](https://www.researchgate.net/publication/264881481_Demetrio_Stratos_rethinks_vocal_techniques_A_historical_investigation_at_ISTC_in_Padova) (20 May 2020).

28 These are available in Accordi and Croatto, 1980. El Haouli later wrote an article regarding these authors which includes the spectrograms (2006, 165–174).

rama of the society in which it is present. What will we sing now? How will we construct phrases? How are we to use nouns and prepositions? Is broken syntax enough evidence for discontentment? This century questions everything we thought was settled and resists previously legitimated epistemic expectations. It is a skeptical century of broken utopias. It is an era marked by terrorism, by 9/11, by the corpses of immigrants found in the sea, by the rise of far-right politics, by climate change. Now, the COVID-19 pandemic turns hearing into an ignorant act by excess of information. Ambivalences and the unstable become creation tools. In the frame of the different modes of being voice, we could ask how far the changes it manifests are identifiable in this vital present. What does voice inscribe? What forms does it inhabit? What are the new graphics and notations that it will print today?

### **Notations that Exceed the Limits of the Written**

Possibly, the phonetism of the tongue and the semantics of language are not two opposed elements, but only two intensities that run through the field of the vocal. They have taught us to understand the Western world through oppositions and dichotomies. However, the voice itself imposes its inscription forms, its ways of signifying, alluding, emphasising, or silencing. Voice is what brings the void to be filled with the forms of its signs, and in its materiality it also shields its visual dimension. In turn, our decisions give form to the voice, as if it were a state of knowledge.

The socio-historical aspects signalled in this text, like the feminine proposals we have outlined, are part of the world's intelligence and of a diversity of modes in which this intelligence is heard and sounds, a kind of non-imposed logos, of which, in one way or other, we are all part and to which my own vocal proposal is not unrelated. The works of the women discussed here have been of great importance to inform my own vocal progression. For instance, in my work as interpreter, the influence of Yoko Ono has been fundamental to access the secret or hidden aspects of scripture. When Ono suggests that we should "take the sound of a stone ageing," or "imagine the clouds dripping," or "scream," multiple sonic manifestations derive from these sentences, and any of them coming out through our throat is valid, there is no judgement, no weight that prevents us from translating the code of the imaginary. When I interpret, reinter-

pret, or recreate Yoko Ono,<sup>29</sup> I remain with the experience that fragility is the best feeling we can have. Subtlety is undervalued in a masculine world, but I am certain that its resonant power is more efficient than any racket.

In my vocal work, the centrality of notation falls within the relationship with the other, and is sometimes directly inscribed in their ear, in an embrace, in the seams of their clothes, or directly on their skin and mine. On stage, my skin acts as a symbolic mediator that erases my presence to attend to the score in which it has turned. In order to achieve this, I paint musical graphs on my body, and in a kind of participative hearing and collective creation I intervene by painting the same graphs on the skin of the audience, thereby turning their own bodies into scores. The inscription of the notes, as gesture and form, is what gives me the key and matter to sing. The voice is materialized in the lines of the drawing, like a real-time composition. In other performance-concerts, I include the erasure of the work, the disappearance of what is represented, that is, the cumulation of the audible possibilities in which my skin has turned and which my voice sings until becoming diluted and silenced.<sup>30</sup>

In other cases, my voice, without electronic manipulation and mostly without amplification, cohabits with sewing-machines (*Music for Two Singers*, 2009), whistling kettles, fish bowls, crystal glasses, velcro tape, feathers, needles, threads, scissors, etc. to mingle their sounds and disorient the hearer into what exceeds the limits of the human squealing or the whistle of a kettle, a sewing machine, or vocal filaments. I print my scores by sewing them into pieces of fabric embroidered with precise notations or with “visual noises” of entangled thread. On stage, with a very fine needle and a long invisible thread I sew the audience’s clothes until they are all sewn together into one fabric, all along singing with high-pitched threads of voice. The final score is an almost invisible web in which we all remain entangled.

In yet other sound interventions, the score is inscribed by the “creation of situations.” An example of this is my *Cantos al oído* (2010). In this piece, I offer any passerby on the street to sing for them. This requires boldness

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29 Since 2010 I have interpreted twenty of her audio pieces contained in the instruction-scores book *Grapefruit* (Ono 1970, n. p). The citations come from this text.

30 In May 2016 I was invited by the international contemporary music festival *Ensems*, (Valencia, Spain) to perform at the “Baños del Almirante,” an antique Arab bathhouse from the fourteenth century and used as public bath until the 1960s. It is currently a cultural centre, but the bathing facilities were kept intact. My performance was created specially for the place, which has a very privileged acoustic setting for the voice, and in which the “erasure” of scores was made easier.

and audacity, for as I trespass the physical and emotional boundaries of someone and I also cause distrust and puzzlement. However, the link created with each person I meet on the street who accepts to become a “living score” entails the creation of momentary sound pieces that affect ordinary life. So, when I leave the ear in which I am singing, sometimes I receive a hug, or people are moved, crying, or grateful, some people do not know what to give me in exchange. Some just ignore me, or refuse to hug, or even refuse the song. However, this fleeting moment that allows for different types of vocal emissions to meet the other’s ear is yet another way of materialising the voice and of inscribing its mark in those fragments of approach, intimacy, and whispers born from the proximity of the being.

My experience with ethnomusicology brings me to imprint my voice with sounds of oral tradition learned during my field work, together with my education in opera singing and the vocal emissions of extended voice techniques. As any reader who has followed the thread of history in my narrative can deduce, my thoughts are underpinned by previous conditions, perspectives, and historic experiences. I do not pretend, in this sense, to be original, but I do contend that a voice that does not approach the present, or that does not challenge the here and now runs the risk of being superficial and unnecessary, and this is where the challenge really lies.<sup>31</sup>



Image: *La piel del son* (2016) Montserrat Palacios Photo taken by Mabel Grijalva. Notation: Llorenç Barber. Idea: Montserrat Palacios.

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31 About my vocal work: San Cristóbal (2019), Gómez (2020).

## To not conclude

We have seen some of the socio-historical paths that made the freedom of vocal expansion possible, and some forms in which the feminine tone became notation. Among its multiple manifestations, musical graphics turned away from academic tradition, hybridising with other languages, or dissolving in their own absence. By becoming emancipated from its possible rigidity, the score was printed as a drawing or comic (Cathy Berberian, Fátima Miranda); as imaginary score by using sensors and technology that disappears objects (Pamela Z), as instrumental and instruction music (Yoko Ono), as archive score (Demetrio Stratos), as skin-score, sewing with threads, or creation of situations (Montserrat Palacios), among other possibilities. The expanded notion of voice also explored the path of notation as action; in this encounter, poetics, visuals, sounds, time, space, experience, knowledge, noise... articulate and expand in the construction of an unknown direction.

*Translated by Ambar Geerts Zapién*

## Sources

- Accordi, Maurizio, Lucio Croatto, and Franco Ferrero. 1980. "Descrizione elettroacustica di alcuni tipi di vocallizzo di Demetrio Stratos." *Rivista Italiana di Acustica* IV, no. 3: 229–258.
- Agamben, Giorgio. 1995. *Homo sacer. Il potere sovrano e la nuda vita*. Torino: Einaudi.
- Barthes, Roland. 1986 [1972]. "El grano de la voz." In *Lo obvio y lo obtuso. Imágenes, gestos, voces*, 262–327. Barcelona: Paidós.
- Barthes, Roland. 1991 "Listening." In *The Responsibility of Forms: Critical Essays on Music, Art and Representation*, translated by Richard Howard, 245–260. Berkeley: University of California Press.
- Bonilla, Juan. 2019. "Emmy Hennings: vagabunda, dinamitera y reina del Cabaret Voltaire." *El Mundo*, 30 April. <https://www.elmundo.es/cultura/laesferadepapel/2019/04/30/5c-c1c0c121efa078068b4679.html> (20 May 2020).
- Borges, Jorge Luis. 2000 [1949]. "El Aleph." In *El Aleph*, 192. Barcelona: Paidós.
- Cage, John. 1961 [1937]. "The Future of Music: Credo." In *Silence. Lectures and Writings*, 3–6. Middletown: Wesleyan University Press.
- Castellengo, Michèle. 1991. "Continuité, rupture, ornementation, ou les bons usages de la transition entre deux modes d'émission vocale." *Cahiers de musiques traditionnelles* 4 (Voix): 155–166.

- Ceolin, Elena, Graziano Tisato, and Laura Zattra. 2011. *Demetrio Stratos Rethinks Vocal Techniques: A Historical Investigation at ISTC in Padova*. [https://www.researchgate.net/publication/264881481\\_Demetrio\\_Stratos\\_rethinks\\_vocal\\_techniques\\_A\\_historical\\_investigation\\_at\\_ISTC\\_in\\_Padova](https://www.researchgate.net/publication/264881481_Demetrio_Stratos_rethinks_vocal_techniques_A_historical_investigation_at_ISTC_in_Padova) (20 May 2020).
- Derrida, Jacques. 1974 [1967]. *Of Grammatology*. Translated by Gayatri C. Spivak. Baltimore: Johns Hopkins University Press.
- Derrida, Jacques. 2004. "Las voces de Artaud. Entrevista con Èvelyne Grossman." *Magazine littéraire* 434, n.p. Digital edition of Derrida in Spanish, translated by Dulce María López Vega. [https://redaprenderycambiar.com.ar/derrida/textos/artaud\\_voces.htm](https://redaprenderycambiar.com.ar/derrida/textos/artaud_voces.htm) (15 April 2020).
- El Haouli, Janete. 2006. *Demetrio Stratos, en busca de la voz-música*. México, D.F.: Consejo Nacional para la Cultura y las Artes.
- Ferrando, Bartolomé. 2008. "La enseñanza de la performance en Valencia. Performanceología. Todo sobre Arte de performance y performancistas." <http://performancelogia.blogspot.com/2008/10/bartolom-ferrando-la-enseanza-de-la.html> (7 June 2019).
- Giroday, Marise de la. 2020. "Baroness Elsa Von Freytag-Loringhoven, Marcel Duchamp, and the Fountain." FrogHeart. Commentary about nanotech, science policy and communication, society and the arts. Canadá, April 29, 2020, n.p. <https://www.frogheart.ca/?p=26225#comments> (15 February 2022).
- Gómez, Héctor. 2020. *Entre(t)ramas*. [www.youtube.com/watch?v=\\_V6hZ-\\_sJcM](http://www.youtube.com/watch?v=_V6hZ-_sJcM); <http://montserrat-palacios.blogspot.com/> (20 October 2021).
- González Bisbal, Sergio. 2011. "Zaratustra convaleciente." *Factótum. Revista de Filosofía* 8: 20–35.
- Kennedy, Kathy. 2000. "A Few Facets of Pamela Z." *Musicworks* 76. <http://www.pamelaz.com/musicworks.html> (10 April 2020).
- Lomanno, José. 2019. "Del mito y sus relaciones." *Psicología UNLAM*. <http://psic2705.blogspot.com/2019/> (7 June 2019).
- Minarelli, Enzo. 2006. "La fuerza Stratosférica de la voz." *Demetrio Stratos en busca de la voz-música*, edited by Janete El Haouli, 19–22. México, D.F.: Consejo Nacional para la Cultura y las Artes/Radio Educación.
- Ocampo Guzmán, Antonio. 2010. *La libertad de la voz natural. El método Linklater*. México, D.F.: UNAM.
- Ono, Yoko. 1970 [1964]. *Pomelo. Un libro de instrucciones de Yoko Ono*. Translated by Piri Lugones. Buenos Aires: Ediciones de la Flor.
- Ono, Yoko. 1970. *Grapefruit. A Book of Instruction and Drawing by Yoko Ono*. New York: Simon & Schuster.
- Padín, Clemente. 2007. "Recordando a Dick Higgins." *Escaner Cultural: Revista Virtual de Arte Contemporáneo y Nuevas Tendencias*. <http://revista.escaner.cl/node/220> (6 April 2018).
- Palacios, Montserrat. 2007. *De lo dicho: el silencio o la certeza y el desliz. La canción cardenche de Saporiz, Durango. Voz, espacio-tiempo y silencio*. Ba-thesis in Ethnomusicology. México, D.F.: UNAM/ENM.
- San Cristóbal, Úrsula. 2019. *Astrolabio*. [www.youtube.com/watch?v=EJAgPBCUCE0](http://www.youtube.com/watch?v=EJAgPBCUCE0) (20 October 2021).

- Shalom, Todd. 2010. *Elastic Dream City Catcher*. <https://www.elastic-city.org/book> (10 April 2020).
- Weber-Lucks, Theda. 2003. "Electroacoustic Voices in Vocal Performance Art – A Gender Issue?" *Organised Sound* 8, no. 1: 61–69.
- Zumthor, Paul. 1983. *Introduction à la poésie orale*. Paris: Seuil.