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## **The Spatial Morphologies of Voice in the Ancient Greek World**

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### **Resumen**

Il presente saggio cerca di tratteggiare le componenti immaginative che stanno dietro allo sforzo di razionalizzazione del concetto di voce nel mondo greco, prendendo le mosse dal piano irriflesso dell'intonazione vocale, fino a dar ragione della antropomorfizzazione della natura che il concetto di voce mette in gioco sia dai poemi omerici.

Nel panorama speculativo della musica greca, il concetto di voce trova la propria immediata declinazione all'interno del rapporto che la lega alla nozione di spazio, inteso secondo due direzioni: da un lato lo spazio ambiente che la voce abita nel suo risuonare, diventando fonosfera simbolica, dall'altro esiste uno spazio interno alla voce, una sua possibile organizzazione matematica che ne guida i criteri di corretta intonazione. Fin dall'inizio della speculazione musicale il concetto di voce viene riportato alla qualità specifica del moto che ne caratterizza le forme articolatorie: in Aristosseno la voce che canta si muove diastematicamente, attraverso intervalli misurabili, staccandosi dal regime di continuità turbolenta della voce che parla. Ma questa ricerca della misura trova la propria radice nello sforzo platonico di articolare lo spazio musicale in un ripensamento radicale delle categorie quantitative del pitagorismo, per poter disciplinare i movimenti intonativi della vocalità, il suo modo di abitare lo spazio.

### **Palabras clave**

Phonè, intonazione, intervallo

### **Abstract**

This paper intends to outline the imaginative components underlying the effort of rationalizing the concept of voice in Ancient Greek World, from the instinctive realm of vocal intonation, to the anthropomorphization of nature that the concept of voice puts in consideration from the Homeric poems.

Into the speculative landscape of Greek music, the concept of voice finds its immediate declination within the relationship that binds it to the notion of space, understood in two directions. On one hand the space, an environment that the voice dwells in its resound, becoming a symbolic phonosphere. On the other hand, there is a space inside the voice, a possible mathematical organization that guides the criteria for the correct intonation. Since the beginning of musical speculation, the concept of voice is returned to the specific quality of motion that characterizes the articulatory forms: In Aristoxenus the singing voice moves diastematically through measurable intervals, detaching itself from the speaking voice's regime of turbulent continuity. But this research of measure finds its roots in the Platonic effort of articulate the musical space in a radical rethinking of the Pythagorean's quantitative categories, in order to regulate the movements of vocal intonation, that is to say, his way of inhabiting the space.

### **Keywords**

Phonè, intonation, intervals.

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## The Spatial Morphologies of Voice in the Ancient Greek World

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### The breadth of the concept of voice.

The Greek word φωνή has a daunting extension; it designates at the same time the voice and the acoustic phenomena in general. Our aim is to discuss the relationship between the word φωνή and another strong word: φθόγγος, which indicates the sound as audible and as an object of perception, in a preeminent and aesthetical sense. The relationship that ties the two terms implies a special rapport with both the world and the contents brought into play by listening.

In order to consider the concept of audibility, it seems essential to start from a particular form of silence linked with Aponia — the lack of voice or word —, because the absence of noise is always able to tell us something about the world of sound, which it opposes. There are narrative typologies of silence that, in order to be filled, appeal to a particular sonic quality.

In the fourth book of the *Odyssey*, Penelope is made aware of the possible death of Odysseus. So she must force herself to find a new partner, or rather, a new lord. The consternation or the kind of pain that brings one to their knees, leaving those affected — as the Queen of Ithaca — unable to utter the blooming voice (θαλ ρός a voice that explodes, for example, in sex; a voice of possession, of life that bloom like tears; a visible manifestation of emotion brought *in voice* instead of word): In the inability of voice,<sup>1</sup> we should see the expression of a crisis of subjectivity.

Mourning made her voiceless, it left her speechless because of the physiological transformation of the subject that it entails, which here consists in changing the person's social status. The shocked queen is no longer the same person; she is deprived of her regency powers: the color of her voice changes, however this metamorphosis should be shapeless, it should be inaudible. It does not capture the interaction between the significative intention — that which is related to words — but instead the weight of *timbre*, because it is essential to note that Penelope has a voice even if she cannot utter a word: tragic fate of the occurrence of vocalic sound, able to illustrate a character beyond the intentions put into play by the speaker and carry it on the realm of an untranslatable opacity. Thousand sounds enliven Penelope's mind and body, but nothing can get out of her: they say too much.

<sup>1</sup> See Laspia's comments on this topic (1996: 56)

Sappho is speechless seeing her beloved in dialogue with somebody else: her voice is undermined by sweats and tremors announcing the physiological transformation of love. The absence of voice is not mere silence which covers the changing of the regime of vocalic; it is a contraction that announces both the appearance of the regime of sighs and the polyrhythmic alteration that dominates the agitated diction of an unrepresentable aperiodicity: something is taking possession of Sappho, her identity is in flux and this change implies the neutralization of her voice.

In an exquisite game, Sappho opposes the loving conversation that unites the beloved and the man who listens to her— that is, the expression of words that brings the beloved closer to another person (while the woman speaks, he listens *shielded by the silence* of seduction, facing the unbalance of speech that says something else *beyond* what it should be said φωνείσας ὑπακούει — to her own inability to speak, the unrepresentable regime of vocal, which risks to express too much, (ὥς γὰρ ἔξ ὄϊδω βρόχε' ὥς με φώνησ' οὐδ' ἐν ἔτ?? εἴκει<sup>2</sup>). We are in the realm of intonation, sonic gestures that are more eloquent than words, which bring to light the symptom of a sort of holy disease,<sup>3</sup> patent in the longing that separates the two female protagonists.

Even the noise of the world is voice: it manifests itself in the Greek subjectivity as a Phonosphere, in which every natural phenomenon, every sound source produced by a body or an event, and is — rather than a timbric coloration or ensemble of noises that refers to the body — a *voice* that *tells* about the thing's purposes, as entailed in the expressions: βέλη φωνάεντα (resonant darts) and φωνή βροντῆς (thunder rumble). Noise's expressive result can be fixed in the character of a voice that becomes an expression of nature. The voice sustains *each* event in a distinctive acoustics icon: the background broken by sounds is never a mere silence but a world full of undercurrent sounds that become mute by the eruption of a dominant event, and then rekindle with acoustic potential whose direction is altered, starting with the song of the cicadas, which grounds the philosophical discourse of *Phaedrus*.

The essential relationship that binds the voice with the world of emotions —evoked by the sound of the objects and their roar — sees in φωνή something that belongs to the body in the proper sense: Odysseus' voice is a salient characteristic of this because it belongs fully to the

<sup>2</sup> "As soon as I see you, I cannot speak"

<sup>3</sup> About this translation see Sisti (1989: 126-127).

configuration of individuality, a highlight event that allow for an identification. When his friends advice him to not make jokes on the blinded Polyphemus, their intention is dual: on the one hand, φωνή do not utter scorn words that aggravate the anger Cyclops, on the second hand, do not provide information about Odysseus' location: this means that φωνή, indicates as much the position of an object in the surrounding space (a spatial mark) as the level of meaning, enclosing the sound properties in a manifestation of objectuality, which finds a particular expressive statute while indicating its *own* place of belonging in the space through the voice.

Voice and body are constituted together and a reference to this issue arises from the original bond between the concept of φωνή and that of ψυχή, whose original meaning is breath, a vital one, a principle of life. These concepts immediately call on each other in their appeal to the organic corporeality and in the presence of a space that surrounds the voice, but they also find a implicit spatiality in the voice itself, linked to its shake; rise, fall, grow and move, in a constant recalling of directionality and the space individuation that quiver in the voice as its corporeal result.

In the same manner, when the gods disguise and mask themselves, it is their voice which allows for the identification of the person behind the character. The animal's voice, man's voice, God's voice and object's voice are, broadly speaking, a *distinctive feature* — an index that opens itself for decoding the areas to which the thing belong, understood even in a material level— of a spatially oriented corporeality, which began to occupy places and is embued with features inherent the voice's movement and timbre. Thus, there are *sounds that speak*, calling continually the subject to the constitutive meaning of the sound's temporal essence: it is the regime of φθόγγος that *takes shape* in the sound's vehemence.

Voice is perhaps already a concept that also supports a sentimental and symbolic projection on *each* sonic event. We are now approaching the last problem, perhaps the most delicate: whether the voice produces a sound that has a meaning, even when wordless. Sound in general and the sound of music in particular, the φθόγγος, is a sound offered to the ear; there is perception, regardless of meaning. It is a perceived concreteness, which can be filled with expressive characters, or even better, a particular vocal intonation, which goes beyond the possibilities of signification, becoming a pure form of expression.

So let us take an example (Laspiá 1996: 102-103) from which many suggestions can be presented, generating each a particular interpretation, highlighting the semantization of the residual sound, a pre-categorical object linked to pure vocal resound: when Sarpedon dies, Glaucus

feels pain hearing the *sound* of Saperdon's voice:

Γλαυκῶ δ' αἰνὸν ἄχος γένετο φθογγῆς αἰόντι<sup>4</sup>

What is Glaucus listening to? He is listening to the sound of death and pain, two domains expressed by the character's voice *beyond* word. He listens to the life decay through a vocal *range*, not through words. The words cannot express it in a direct way, because the materiality of the scream or the retch is unrepresentable in itself. Sound has a characteristic, which has to mediate with voice. This is a recurrent philosophical problem which lies, generally, beyond the mere problematic of singing.

The vocalic is too powerful, the aesthetic dimension of sound that resonates in its concreteness has excessive force; it says too much and does not allow to be described: the turbulence that crushes the speech on the expressive level that breaks the filter of human communication rushes to the slippery realm of compassion. The φωνή is the characteristic *quid* of musical instruments starting from the *Iliad*, and this immediately implies a splitting of our problem into two segments. On the one hand, there is a measurable level that will become mathematically describable in the Pythagoreanism, and then it will be formalized by mathematical translation in the quality of a movement whose boundaries are circumscribed. On the other hand, and on a more subtle level, voice is accompanied by an ensemble of phenomena, referred to an expressiveness that must be dominated, which breaks up both social conventions and the sense of poetic. The timbre of the instrument refers to the corporeal individuality of that source —which we call formants of sound— and leads it into a particular situation.

Music undergoes all the dialectical ambiguities of voice: the concept of harmony allows us to grasp the many dimensions of voice, their intervallic flows, the amplitude of their movements and the color of their profiles (the Greek theory about enharmonic, diatonic and chromatic genres is not other than an extreme act of rationalization of color over form), and these concepts go together in the direction of the Greek concept of articulation, ἄρθρον, intersection, point of articulation between the bones that do not coincides with limbs placed in relation, but allows the unfolding of their movement, and then — in a broad sense — the possibility to articulate a significant vocal sound, but also a birdsong or the sound of dolphin, both provided with φωνή<sup>5</sup> in a functional relationship through which — and with word or sound — we reject the relations of

<sup>4</sup> And Glaucus was in tremendous pain hearing the sound of [Saperdon's] voice (*Iliad*, p. 508)

<sup>5</sup> These observations, out of Aristotle's *Historia animalium* have been analyzed thoroughly by Laspia (1997: 62-63).

meaning. Voice, scream and intonation expose the problematic of an excess of sensitive material with respect to the significative intentions. φώνμα, the singer's voice therefore moors in a dangerous place, a land filled with traps and *pathos*. The phonemes, each of the articulated sounds of language, are not mere sounds but sounds produced and delighted in their musical resonance and in their possibility of metric and material accumulation.

The expressive strength of musical sound has the same value as voice and music is a powerful generator of emotions: How can we negotiate through the charade of these meanings? How should a philosopher think to reorganize such an intricate object and open it to the practice of reflection?

### Voice and substance in the *Philebus*

It is no surprise that Plato, speaking on the material nature of vocal sound, felt the need to open the discussion on its status in the following terms, which seem vast and imposing

Φωνὴ μὲν ἡμῖν ἐστὶ πού μίαν διατόνιστον  
 ἰούσα, καὶ ἄπειρος ἅπλῃθι, πάντων τε καὶ ἐκάστου<sup>6</sup>

Socrates delves into a major philosophical task, and expresses the vocal essence with admirable simplicity of means: the concept of voice belongs to the idea of the limit and the unlimited, the vocal sound is a continuity dominated and regulated through grammar, phonetics and music, with a concise picture of the entire sonic world. It is necessary to learn to think the *sense* of voice and the resonant voice, and enter into the maze of its ontological classification. In particular, the strange phenomenon that is the consonance, the merger of two different sounds in a compound that is qualitatively different from both. We need to look for a *quality* of sound, which may save us, in the future, from the diminishing of the objects and so *Philebus* addresses the very issues of pleasure, good and happy life: an ideal context to deal with the experience of consonance.

The debated questions around the theme of pleasure prompted Plato to shape the ideal relations that allows to determine —within the sensitive experience—, the permanent nucleus of property, which give consistency to the real —compared to the mutability of becoming—, preventing the world from disintegrating completely into the transformation flow.

<sup>6</sup> "The voice that comes out from our mouths is, in some respects, a multiplicity without limit set for each and every one." Plato, *Philebus*, 17b. My translation retrieve, changing slightly the sense, that carried out by Maurizio Migliori (1995: 60-61).

In the dialogue, the ontological analysis is inflected according to four genres: (1) the one and the many, (2) the unlimited and that which sets the limit, (3) a third gender produced by their mixture that is called mixed genre, and (4) an active agent or cause, which takes part or coordinates the articulation of the processes in which these elements enter into a relationship, leading to the emergence of every objectuality that determine the world's *tessitura*. In the multiplicity — the shivering of life and constant change — take shape the four categories that make it an object of experience with respect to the properties that it shows: the unlimited, the limit, that is to say, what sets the limit and comes into essence (γένεσις εἰς οὐσίαν), as a result and cause of their mixture, they move together to ensure the possibility to think on a world shaken by oppositions. Without a fruitful structure — a limit that leads it to exist — the thing remains in an immeasurable fluidity.

The statute of substance and its meaning remain then the decisive issues upon which are grounded the bases of Platonic debate and the musical discussion in the *Philebus*, which seems so far away from the elusive dimension of sound. Music belongs to the mixed genre. It is the meeting point between the unlimited and what sets a limit: therefore the musical field holds in high esteem a dialogue that praises “mixed life”. The excerpt we shall focus on is 17c - d. The ontological layer in which the musical is placed<sup>7</sup> is a continuous modification of all things that exist *now* in the whole (πάντα τὰ νῦν ὄντα ἐν τῷ παντί<sup>8</sup>): What can we hold back from a realm so close to sensitivity? The sound is born — the *now* indicates it sharply — from the sensitive substrate and from the reality that moves in the grip of the flow, in the realm of all the objects that participate in the space-time dimension and are subject to the constraints of material necessity.

The unlimited is a continuous quantitative variation that flowing between two opposites, but there is a spatial section and a time phase, in which the dialectic between which that sets a limit and which that cannot find it, merging into a whole that can be isolated, which has a different nature from the turbulence that surrounds it. This is the area of consonance.

The first problem to solve is to find mediation between these opposites and build a shelter that emerges from within the quantitative relationship, declining it qualitatively: in music that means high and low; the sound as vibration, slow and fast. That is to say, in the sound which is dominated by a continuous quantitative variation that calls for endless possibilities of transition. There is something to hang on to: if the movement of quantitative change is unstoppable, given

<sup>7</sup> About these issues see Miller (2003: 26-32).

<sup>8</sup> *Philebus*, 23, c.

two sounds, the quantitative relatedness that makes them tight are infinite and continuously subjected to the moreness and the lessness. If I say that a sound is high with respect to a low one, I can always find another a bit higher than the first, *infinitesimally* higher or lower: space and time are continuums, and their quantitative progression is infinite.

The problem should be thought as a *differential* threshold, whose structure is based on the infinity of positions that two sounds can play both in the musical space and in the differences of intonation, which cross-refer to a *closed* totality.

On the ontological level, the qualities close in opposition that emerge according to the moreness and the lessness, live in a relationship that should be *understood* according to the action of that which set a limit. In themselves, they are simple and unrelated series with a purely quantitative relationship, which restricts itself to mediate between their magnitudes, but they are not formal objects able to resist the breakdown of the state of becoming. The ontological region of what gives the limit refers to the equal and the double, and everything that is number in relation to a number, or size in relation to a size (πρός ἀριθμὸν ἀριθμὸς, πρὸς μέτρον μέτρον): apparently quantitative relations that allow, however, to limit the possibility of variation of the phenomena that fall under their action, only when they are sealed in a genre, in a subcategory. The relationship will be able to block the flow of quantitative transformation between the opposites and also pose the question about quantity and size: only in this way the existence of a qualitative gradation between the coldest and cold is conceivable, “the taller” and “the tall” and so on... Acute and bass acquire significance with respect to the qualitative value that stems from that very limit. A common boundary is alluded in this way, in which can make the high and the low, the slow and the fast, converge.

In order to neutralize the voice’s unlimited character, the Platonic philosopher must get to the heart of the sonic constitution and risks the technicality of showing the joint that keeps it away from the dimension of “the now” and opens the *formal nature* of the relationship that supports it. The statute of listening should base itself on a dialectic relationship linking, genre to specie on a logical level.

Moreover, in order to become a true music expert and not just a mere empiricist, one has to understand the relational structure that make sounds an ensemble of interrelated elements in their breaking down. We shall become experts with Protarco, only when we recognize a network of relationships described with a cryptic speed:

ἔπειδαν λάβῃς τὰ διαστήματα ὅποσα ἐστὶ τὸν ἀριθμὸν τῆς φωνῆς ὀξύτητός τε πέρι καὶ βαρύτητος, καὶ ὅποια καὶ τοὺς ὄρους τῶν διαστημάτων, καὶ τὰ ἐκ τούτων ὅσα συστήματα γέγονεν<sup>9</sup>

In the expression τῆς φωνῆς — which refers to sound and a resonant voice — arises the relationship between acute and bass, slow and fast and in the dialectical process one becomes the limit of the other. The reasoning is developed on three levels: the first one is the construction of the scale as spatial object, pure intervallic articulation, and distance between pitches. The genesis of sound is understood on three levels, ranging from the infinite voice to the consonance, from the consonance to the scale, and from the scale to intonation. At the ontological level, the relations will be translated in this way: from the unlimited to what having a limit (movement of the voice and the interval, the dialectic one - many), from the interval to the scale, from the scale of its intonation. In all three of these ways, we will have to do with a residue of unlimited, which will accompany us until the end of the cycle, while the notion of movement is restricted to an area that is structured according to positions increasingly identified.

Socrates had in mind a kind of diagram, as Mitchell himself suggests one of in his article. Even departing from his scheme, we feel the need to correct its way:

βαρύ ὀξύ  
ὁμότονον  
ὀξύ βαρύ

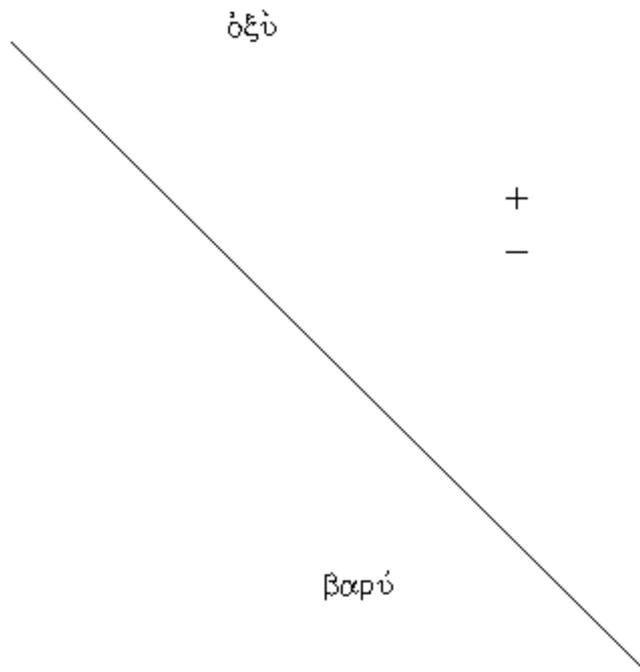
The relationship between acute and bass must be understood in the *constitutive movement* that identifies — in the continuous flow between elements of the dyad — the taking of consistency of that area that opens up the field of consonances. Now, the sense of Platonic discourse is that equilibrium is created in this area, thanks to a neutralization of opposites and the transformation of the continuous flow (high and low) in a *discrete*, in a segment that is changing its nature with respect to the simple quantitative increase: this is the area in which the movement of the sound is transformed into relational plot, a wide interval that is modulating itself progressively in ever smaller sections.

The arrow could have two verses, but it would not change its relational meaning.<sup>10</sup> The essential point is that this crux of spatiality has its peculiar properties: the consonance differs

<sup>9</sup> "When you have understood how big the number and quality of the intervals is compared to what is bass and what is acute in sound, what and how wide are the intervals' extreme and how many systems will result from them", Philebus, 17 d., in Migliori (1995: 60-61).

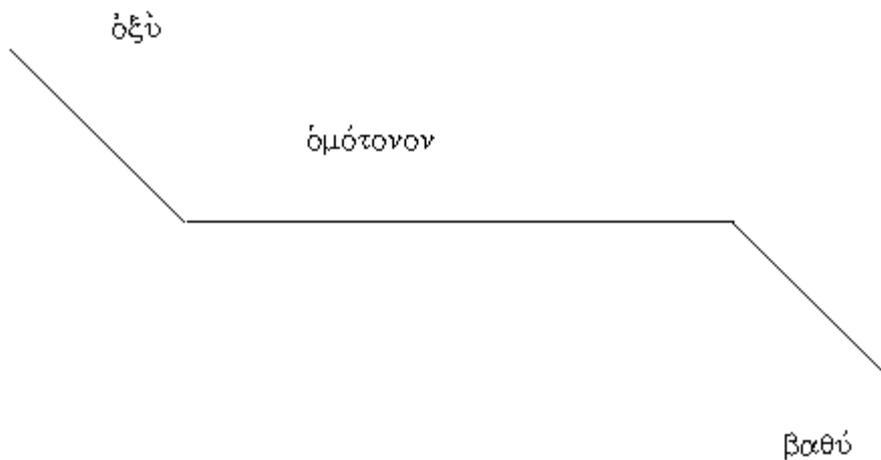
<sup>10</sup> About this remarks and Plato's diagram see Brumbaugh (1968).

qualitatively inside it, but every segment is, in principle, measurable.



Emerges an area where the process differs qualitatively and, in order to be differentiated, needs an expert looking in two directions: harmonic and mathematic. Now the opposition assumes the meaning of a spatial vertical opposition high - low, which — through the limit — find an acoustics peninsula, in which appear objects of different genre: the consonances.

The occurrence of the limit and the directional range allow the articulation of this spatial segment according to a high, a bass and an intermediate tone (ὁμότονον).



Rapporto grave/acuto (alto/basso): con  
il limite nasce anche il tono intermedio e  
la simmetria

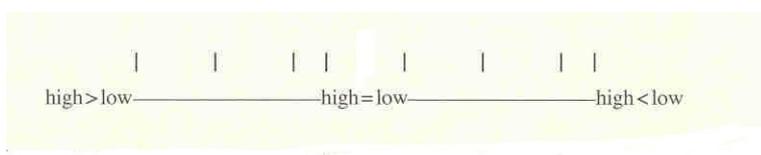
The term used by Plato to indicate the intermediate tone, refers to both the practice of tuning (ὀμότονον is equable tone) and a dialectical process: in a Platonic context, certainly it refers to the concept of equality, but also refers to the notion of ὁμολογία, a word that dialectic identifies as an agreement that, from a logical point of view, is born from the premises necessarily posed in the reasoning, and upon which an univocal agreement must stem; a convention that is valid to everyone. In this way, the intermediate level that hides the most precious core of dialectical reasoning opens up.

Following what is mentioned above, it should be clear that the double reference that resonates in the expression ὀμότονον implies that it is precisely the *nature* of that medium tone — the product of a metaphysical mediation between opposites — which must be illustrated *dialectically*. For Socrates, the problem of the formation of this intermediate area is the most important stage of the argument. Actually, all his inner discrimination stems from the fact that the relationship be performed, or rather, that be possible to pass from the unlimited variation in which bass and acute flowing without relation in the continuity of musical space that they are forming.

When the relationship takes place, are established directional links related to the fact that the two bands must overlap each other, at least partially: the region of consonance is the place of a crisis. The logic opposition in the spatiality — which will find its basis in Aristotelian logic — is

combined with a reflection on directional structures in an evocation of the space which is in turn, movement in which areas of consonance are created and that can be described in terms of number and συμφωνία.

Once identified the area of consonance, the discrete status should enter into discussion, opening an intermediate level between the technical and the dialectical. The identification of the segment — the reduction around a point — that identifies the transition into the consonance is crucial to establish qualitative relations. The Saturation of the contrast between two continuous directions is developed — in the speech of Socrates — the reference to the elemental spatial unit of Greek music: the tetrachord, a complete unit that has architectural value and — by merging with tetrachords according to the symmetric system brought into play by the intermediate tone — gives rise to the system. The imaginative values of listening create mediation between acute and bass; high and low, which became synonymous. From here we can elaborate the trend that constitutes the basic form of tetrachord (two tones and one semitone) and the system of Greek modes, with all the possible rotations.



Mitchell presents it first as a simple interval articulation ranging from the eighth to the tetrachord, then in its articulation of scalar type.

$$\begin{array}{r}
 1 \qquad \qquad \qquad : \qquad \qquad \qquad 2 \\
 2 \qquad \qquad \qquad : 3 \\
 3 \qquad : \qquad 4 \\
 \qquad \qquad \qquad 8 : 9 \\
 8 : 9 \\
 \qquad 8 : 9 \\
 \qquad \qquad 243 : 256
 \end{array}$$

The matrix illustrates *the sense* of all these divisions, supporting it on the metaphysical and dialectical level: it fully shows all the conceptual categories from the *Philebus*, all relationships between genres and the identification of what is to be, compared to the dialectic between unlimited and that which set the limit.

However, we must ask ourselves what happens when one listens to music, what are the heuristic contents brought into play by the restriction of consonance. It appears in its entire perfection, that is, in its entire fulfillment, in the static nature that captures the element from the movement, and imposing a measure: the dialectical path then assumes the value of a critical reflection about the importance of Pythagorean partition, on the meaning that this interweaving brings into play. It is not enough to set a limit, nor to consider the consonance in its mathematic and harmonic constitution (whenever be possible to separate the two terms), rather we must identify the ontological possibilities linked to the continuous declined of bass - acute (we could say high - low, as here highness and lowness are already imaginative synthesis, which have targeted a specific partition of space), which bloom in consonance. Here we find the last surprise: the high and low are solved now in the merger's *roundness* in which two sounds meeting each other are sealed in the fullness of their consonance.

### **The state of the problem in Aristoxenus.**

The aesthetic status of our music falls under the vocal rules, in the elimination of the unrepresentable residuals of perceived sound. The tendency to partition the morphology of voice that abstracts completely from the kind of vocal emission and radically leaves out every natural and physiological limits, reaches its apex with Aristoxenus of Tarentum.

Aristoxenus, who conducts a research on harmony from the continuity of musical space, finds similar problems: how to put in form a continuous structure such as the human voice that when it speaks, since it has a continuous and undifferentiated trend? In music, the experience of listening to the voice that resounds should be brought back to the network of spatial conditions that determine the interval articulation, and to the conditions of possibility that support its breaking down.

In the first book of the *Harmonics* Aristoxenus summarized,<sup>11</sup> in Aristotelian perspective,

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<sup>11</sup> Aristox. Elem. Harm., 1,3

the Platonic distinction on the status of voice. The problem of voice is articulated in two spatial categories: (1) the movement of voice that is intertwined with (2) the way in which it *conquers* its own position in the movement. In Aristotelian terms, the voice is brought back to the quality of movement that supports the articulation and, with respect to singing, a vocal movement should be treated by establishing a typology of its way of taking place, its way of occupying a position in space (κ τὰ τόπον), within the process of sound formation.

If we want to understand what the nature of the sound we perceive is, we are required to make decisions on the genesis of musical sound, the φθόγγος through which the vocal type is presenting itself, the fleeting character which is given to perception should be interrogated and Aristoxenus uses, in a brilliant way, the images of a quality of movement.

*The image illustrates the whole concept already:* that is the point we now should focus on. Therefore, it is necessary to carry on the research about two spatial categories that support the notion of acute and bass, the high and low (ὄξυ, βαρὺ, because the quality of movement in which those spatial categories relate to each other is the illustration of a style through which the voice occupies and inhabits a place in space, with respect to the movement that goes through it. The voice transforms its nature, depending on the mode of vocal emission and the way it occupies space.

Once again, the concept of position becomes central, which allows the voice to occupy a place in the reflection of noise or in the transparency of intervallic relation. The conceptualization of the problem is essential: when the voice speaks, it is taken from a continuous movement (συνεχής), which does not stop on a single position, but collapses all between them, in an unstoppable fray of tones. The edges, as Aristotle had taught in the fourth and sixth book of *Physics*, are mingled: the end of one is the beginning of the other, therefore movement is in fact a slide between positions.

In the spoken, the voice is the reflection of all possible positions: in this chaos — in which there is no possibility of identifying and every sound blends with the other — a diastematic motion (διαστηματική) is opposed, which holds the positions, moving in leaps and selecting intervals. The diastematic movement is discontinuous and has the ability to draw a structure, through the cuts made on the movement-continuity of the musical space.

There is therefore a conceptual opposition: those spatial areas that Plato consider as fertile spatiality, able to accept the consonance's roundness, can now become places of profiling, a sketch that takes its style from the mode of movement which supports it. The movement of voice

becomes capable of stably occupy a place, keep itself above it and jump between positions fixed by the interval width, thanks to the clarity with which the kinetic traces its edges.

The *sense* recognizes the height (see Mathiesen 1999: 304-305), it stabilizes around a vocal design, whose profile detaches itself from the continuity of musical and non-musical sound through cuts, resting firmly on points that are in motion by their nature (the musical space is continuous), and *capturing* the position. It is worth repeating that we are facing a kind of image of the concept, while the sound of music was born thanks to a *delay* and an arrest of voice (μονή τις καὶ στάσις τῆς φωνῆ<sup>12</sup>), a still precarious definition, but expresses with a rare strength the style of an Aristotelian approach, which brings back the quality of movement to the nature of formal articulation of sound materiality. The reference to temporal aspect is essential to understand the gesture through which the segment isolates the interval; the sound can be contracted to a point and the process finally has an end.

We still have to explain *how* one passes from the sound to its perception, from the musical note to the sound that should be *recognized* by the listener. It is an essential step that actually decides the fate of the concept of shape. Aristoxenus moves according to a procedure that requires two steps: first voice (φωνή), height (τάσις), and φθόγγος, the character of sound that makes it musical must tighten in a single definition. It follows a formal nature, a gestalt idea of song structure. The note we hear (φθόγγος) is the simple drop of voice on the pitch. If the musical nature of voice is generated in the *conflict* between two qualities of movement (κίνησις φωνῆς συνεχῆς, κίνησις φωνῆς διαστ μ τικῆς), the conflict of genres overshadows now the distinction between the breaking down of sound and the vortex of noise: the sound of singing voice brings their spatial configurations, its own image-concept that refers to the acute and bass, the height and depth, and articulating them. As it is already the case in Plato, high and low, acute and bass linked in a solid relationship, reflect a high - low dialectic which allows the enucleation of a place within two coordinates that are continual variants, creating a dialectical relationship in the space of voice, in which the references of directionality takes form immediately through fixed and mobile coordinates.

Reading Aristoxenus — which does not directly deal with the issue of the speaking voice, but indicates the conceptual position — we understand better why at a phonetic level the domain of speech limits itself to the rhythmic dimension that is scan through the long – short dialectic, and to the timbre, where the materiality of sound, the taste of onomatopoeia, enrich the imaginative

<sup>12</sup> Aristosseno - Da Rios, 17.3 - 4

thickness puts into play by the representative components of vocal event.

Many aspects of the voice can now be *expelled* from the philosophical perspective: the whole level of timbre and noise connected to singing voice go to the background, they become bearers of pathetic effects while the theme of voice confirms its privileged relationship with space, in its own *constitution* as formally articulated structure.

The musical note, the φθόγγος, is condensed inside the scan of singing profile, a sonic grain understood in all its possible coordinates and deployed in characters that are measured while the *rest* — the wealth linked to timbre, the body of the sound — it should be expelled because the materiality stains the purity of singing, overshadowing its formation and imposing a reference to the voice's whirling motion in speech. Those characters will now be relegated to a part of the poetics of the characteristic, the accidental, or what we would call in the end, and with a certain malice, the interpretative.

Can we conclude that the birth of singing paradoxically kills the uniqueness of voice? That it marginalizes and contracts it around the formal core of the movement that traces a profile? Certainly not. That formalization is meant to maintain the criterion of organization, which allows us to distinguish what can be put in shape, filed and dominated in all its details, from the irregularities of an uncontrollable declamation; but that choice still poses problems. While, in the whirl of rhythmic and chromatic effects, which from Monteverdi to Janacek, the nature of speech *still* tries to fit into the singing structure, into the cryptographic bloom of vocal embellishments until the expressive value of chromaticism or onomatopoeia, Penelope's cry or Sappho's emotion stay silent now and forever. The prostration and silent amazements that the *instrumental* voice of bassoon attaches to the emotions of *Petrushka* endures the same fate. That aspect certainly does not veil the voice's expressive power of refinement, whose origins we have evoked: the vocal expressiveness, recitative included, has lost none of the original strength of the φθόγγος, and the song still stimulates us, even in the vocal residues of spoken speech. The fact is that there are no words to express the richness of those sonic gestures that our tradition has sublimated into formal elements, because *there is no need* for a written indication, which would perhaps limit the interpretative character that the use of voice always brings into play through singing, as in the private level of the intersubjective vocal communication.

In the ineffable and enticing remains of intonation — made of sobs, breaths, sounds that become a formal and allusive gesture — singer and listener, or the two speakers, project their expressiveness, their way of *coloring* the sound events with the flesh of their own life brought to

the stage: the tint is part of the individuality of the work, such as the vocal timbre stretches itself while singing, to explore its potential on the basis of its expressive motivations (just think about how many times, to capture an example close to melodrama, speech replaces singing declamation in a character continually provoked, as Don José in *Carmen*, hovering between lived history and narration).

In that direction comes forward the entire pre-categorical content brought into play by vocal intonation, which no theoretical option may cancel because it brings forward the original nucleus of vocal expressiveness, the ability to move the emotions through the power of the simple intonation of an elemental gesture, with its indexical, emotional and motivational values.

The problem thus regains the field of aesthetic: the activity of the synthesis of perception, in fact, will be in charge of the entire emotional content in a passiveness that — by questioning the material consistency of the sonic event — is showing the echo of the imaginative activity. The sound is full of characteristics that belong to our experience of the world of things: weight, hardness, color. These convey its sense; they make our experience of sound possible. Whether sound leans toward high or low register is a conceptual rendering of the act of listening.

Our problem does not dissolve into the fruition of the work — it is still called into question in its entirety — but it becomes the nucleus around which the activity of listening revolves, taking on the subtle nuances of the sense, projecting the dynamism of its own conceptuality in the level of the *material* nature of sound, with which it matures in the listener the way of synthesis, leaving behind it the equivocal emptiness of synesthetic approaches: the brightening or darkening of sound certainly does not need recall to a mix between hearing receptiveness and sight, both mysteriously related to each other. They take consistency as carriers of meaning that provide, in the listening level, an appropriate image to understand the variation of the internal luminosity of the sound's formation flow and its movement between dark and light, high and low, bass and acute. The sound does not need to be seen, it is rather rendered into a series of schematic relations that rely on the visual parameter to illustrate *conceptually* the properties and modes of its manifestation in adequate images.

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