

An Evaluation on the Human Voice and the Act of Singing

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ABSTRACT

The human voice is an alive, natural instrument belonging to the human body and most beautiful tool for the individual to express himself. When evaluated from a musical point of view; the human voice, the first known musical instrument in the history of music, is the oldest, most natural and most valuable of musical instruments. This privileged instrument bestowed upon man is different for every human being, like a fingerprint. This makes it a single and unique instrument unique to a human being. The human voice, which is used for simpler (primitive) situations (crying, laughing, screaming, etc.), turns into a more complex ability, to speaking and an even more complex ability, to singing. Although all three forms of voice are formed instinctively and/or for a reason arising from necessity, they are also used to express a higher artistic expression. The voice, which is basically used for self-expression and communication, turns into a tool of higher expression in the oral arts and the art of singing. The act of speaking is the basis of the act of singing. Accordingly, it can be said that the act of singing is an enhanced and expanded speaking skill. The correct, beautiful and effective use of the human voice, especially in the art of singing, is based on both technical and artistic skills. Therefore, not only technical skills but also technical skills and artistic skills should be considered together for the development of singing skills in vocal training, and technical skills should support artistic skills. The researches on the human voice and the singing act until today have generally only dealt with the sound from a scientific, biological-acoustic perspective. As far as can be reached, no study has been found in the literature in which voice is considered as a multidimensional phenomenon, in a holistic way, including its biological, spiritual, emotional and aesthetic dimensions. In this context, the aim of this research is to make an evaluation and make suggestions by considering the human voice and the act of singing with its artistic and philosophical aspects. It is hoped that the research will contribute to filling the gap in the literature and set an example for new research to be conducted in this direction. In the research, which is based on the literature review, the domestic and foreign literature on the subject has been tried to be examined.

Keywords: Music, Instrument, Human voice, Singing act.

INTRODUCTION

The human voice is a valuable instrument that usually begins with the first cry after birth and is indispensable for human beings until death, except for special cases/exceptions. The fact that it is an alive, natural instrument belonging to the human body and that it is a unique instrument with its own uniqueness like fingerprint, makes it special and important. To understand how special, important and valuable it is for life, it will be enough to think for a moment that this unique instrument has never been given to man.

The voice, which is basically a means of self-expression and communication, turns into a more complex ability, to speech and an even more complex ability, to singing. Therefore, on the one hand, the human voice used for simpler (primitive) situations (sigh, crying, laughing, screaming, etc.) is also used for the expression of a higher artistic expression. In this sense, it can be said to be a surprising and fascinating instrument.

From a musical point of view, it is thought that human beings have been making music by singing or playing an instrument since the beginning of their existence on earth. Music plays a role in almost all important stages of human life (from growing up to marriage, from birth to death). It accompanies work, dance, entertainment and religious rituals. The sound required to make music is produced by the voice of the human mouth or by various musical instruments (Lord and Snelson, 2018, p. 6). The rhythmic dance and musical production types that have characterized music throughout the ages have served as a proof of physical and mental vitality, moreover, higher consciousness and reliability. Because the expertise required to be a musician, requires a special kind of mental focus (Levitin, 2015, p. 289).

It is stated that the earliest sources of music making are probably the "Iliad and Odyssey" (ca. 800 BC), in which epic singers are mentioned. In addition to epic songs, songs that have been sung with a wide variety of vocal forms in almost all areas of life have been included in various sources since Homer. These include business anthems, love songs, and booze songs, and many of them still have. Hymns have been sung to the gods or have been featured

in religious rites such as weddings. There is a certain voice repertoire that is reserved for both gods and humans, or accepted as suitable for both groups (Lord & Snelson, 2018, p. 13).

According to Mark (1982, p. 74), the subject of human voice and singing has occupied the minds of philosophers and musicians throughout history. Martin Luther, in the preface to Georg Rhau's "Symphoniae Incundae" (Sweet Symphony), dated 1538, has said:

Philosophers have tried to explain the marvelous nature of the human voice: How can the air reflected by a slight movement of the tongue and an even lighter movement of the larynx produce such an endless variety of sounds and pronunciations? And how can the sound come out so strong? Despite their best efforts, philosophers can't find an explanation... No one has yet been able to identify or show the original components of the human voice. They are surprised, but they do not understand.

Understanding the human voice in his own way, Luther's questions contain key ideas that modern philosophers, psychologists, and phonologists have focused on to explain the "infinite variety and articulation of voice" and "how a human can sound so powerfully." Luther, defines two forms of movement produced and perceived in singing, "the movement of the throat" and "the movement of the tongue." While making this definition, he emphasizes that the physical movements of the larynx and tongue are important components of the singing sound. Such movements (for example, breathing, vocalization and articulation) can be described separately but are not. "Singing" is the sum of all the movements that compose it. The muscles work together in a continuous cyclical process, and all parts of the voice function as a whole in some special coordination. It is not used for any other purpose (even for speaking). However, ensuring the continuity of such movement and coordination and controlling these movements to produce an aesthetic product depend on another important factor, art, which is a set of skills and understandings.

It can be said that the human voice, which has an important place in the transmission of emotions and thoughts from the first ages to the present, has developed over time and today's singing art has emerged. As a result of prehistoric research, anthropological and sociological findings, various hypotheses have been put forward about how singing emerged, but the most notable of these; it is the use of certain sounds and melodic rhymes in order to increase physical strength and motivate people during joint work in primitive tribes. These rhythmic repetitions are thought to be the basis of speaking and singing. It is assumed that in primitive times, people imitated the sounds of nature by listening and used these sounds to communicate with each other. Primitive music has no artistic or entertaining function. In primitive music, which is predominantly rhythmic and used for magic, every sound or every word has a different rhythm. Expressing the words in accordance with their inner rhythm is called "logogenic", while the music formed by the expression of enthusiasm and emotion without depending on the words is called "pathogenic". In the course of evolution, other sounds have been added to the first melodies that hovered over two voices and in two, three or four intervals. In primitive music, in order to revive monotonous repetitions, the communication between two people or two groups in a choir in turn (question-answer method) is called "antiphony", while a group continues the sound of a song, the other group puts another song on this sound at the same time, it is called "pedal". When everyone sings with different voices, it is "heterophony". Thus, the so-called polyphony is formed. As a result of the development of all these different voices and techniques, today's music has been reached (Ömür, 2001, p. 39, 40).

The act of singing, a fundamental form of musical expression, has played a vital role in ancient forms of ritual and theater in antiquity. Aristotle, who said, "song is the sweetest source of joy for man," and Athenaeus, who said "it is not shameful to admit that one knows nothing, however, his/her refusal to sing among them is shameful" have expressed the importance of singing in human life. The ability to sing well has always been seen as a sign of culture and humanity in the history of western and other civilizations. In general, two basic qualities are always necessary for a singer to be good: correct intonation (intonation) and correct pronunciation. Characteristics of a good singer are; while according to Tinctoris (1481), the a good voice quality and a good sense of voice, correct rhythm and correct pronunciation; according to Giulio Caccini (1601), respiratory control, correct pronunciation and power of expression; according to Sergius Kagen (1950); musical hearing ability, naturalness of voice in singing, proper pronunciation and expressive power (www.groovemusic.com).

Although general information is given above in the context of various sources, most of the research to date on the human voice and the act of singing has focused almost exclusively on voice as a biological phenomenon, not on the voice as a musical instrument. According to Rao (1988, p. 141), while the shape of a musical sentence can be successfully reproduced scientifically with sound synthesizers, it is important and necessary for more phonologists to ask important questions about the aesthetic dimensions of the singing experience. In this context, philosophical, descriptive and experimental perspectives will be required to see the human voice and singing act as a multidimensional phenomenon more holistically rather than a purely biological-acoustic sound source. The act of

singing is a special way of using the voice that embodies a biological, spiritual, emotional and aesthetic nature. The definition of singing as art depends on these aspects of singing. Therefore, the correct, beautiful and effective use of the human voice, especially in the art of singing, is based on both technical and artistic skills. For this reason, not only scientific approach and technical skill, but also artistic skill should be given importance for the development of singing skill in vocal education, technical skill should be considered together with artistic skill and should support artistic skill.

PURPOSE AND IMPORTANCE OF THE RESEARCH

The aim of this research is to make a holistic evaluation and make suggestions about the human voice and singing act in terms of biological, spiritual, emotional and aesthetic aspects. The researches on the human voice and the singing act until today have generally only dealt with the voice from a scientific, biological-acoustic perspective. As far as reached, no study has been found in the literature in which voice is considered as a multidimensional phenomenon in a holistic way, including its biological, spiritual, emotional and aesthetic nature. In this context, it is thought that this research, which deals with voice with its artistic and philosophical aspects, is important in terms of filling this gap in the literature and being an example for new researches to be done in this direction.

METHOD

This research is a compilation study based on literature review. Literature review is the reading, selection and effective critical evaluation of existing knowledge, thoughts, discussions, speculations and findings related to the research area in order to achieve a specific purpose (Ekiz, 2003, p. 173). For the literature review, it is envisaged that a comprehensive review will be carried out in order to reach both the domestic and foreign literature, especially to scan the literature in recent years and reveal the trends in the world (Demirel, 1999, p. 101). In accordance with the purpose of this research, as far as can be reached, the domestic and foreign literature on the subject has been tried to be examined and relevant sources have been utilized as much as possible.

THEORETICAL FRAMEWORK

HUMAN VOICE

The human voice, the first known musical instrument in the history of music, is the oldest, most natural and most valuable of musical instruments. In addition, it is the most beautiful tool for the individual to express himself and communicate. The human voice is capable of producing sounds that are personal and identifiable, even without words. It can be said that it is the most delicate, skillfully made, intelligent and a flexible instrument among musical instruments, and it carries the charm and magic of the art of singing. Because it gives a high expressive power to words. According to Green (1975, p. 3), the human voice is the only unique instrument and its features are:

- This instrument which belong to human and the sound produced are called by the same name.
- Only its owner can produce the human voice.
- Its structure is mostly hidden in the human body.
- It is made of muscle, cartilage and bone.
- It can produce words.
- It can develop good or bad habits.
- It is directly related to a brain.
- Responds to a variety of sounds in a similar and recognizable way with the aid of hearing sense and culturally. In other words, it naturally has the ability to imitate.
- It has two vocal tracts, the oral tract at the bottom, the nasal cavity and sinuses at the top. Other instruments have only one vocal tract.
- Four physical processes, namely “respiration, phonation, resonance and articulation”, play a role in the formation of the human voice.

According to Bunch (1994, p. 9), the physiological difference between the human voice and other musical instruments is the articulatory mechanism that creates words.

The term "voice" is understood differently in the varying contexts of science, religion, psychology and aesthetics. In a sense, voice is an expression tool. In the history of religions, voice is considered a form of conscience/belief or a form of God, whereas in psychology, voice is generally defined as a manifestation of emotion. In aesthetics, it is considered as a living form of musical expression. To date, research on the human voice and the act of singing has only considered it from a biological/acoustic perspective. In the literature, there is almost no study in which voice is considered holistically as a multidimensional phenomenon that includes its biological, spiritual, emotional and aesthetic nature (Rao, 1988, p. 144). In this context, the human voice is discussed in different dimensions below.

The Human Voice: An Expression Tool

In life, humans always need expressing themselves more clearly because of a compelling desire for self-expression which comes with existence. The things that people express and tell are their thoughts (Webern, 1998, p. 23). Speech and language are the basic ways of expressing oneself using communication. So the human voice serves as a means of self-expression.

A person could be happy, sad, angry, happy with it, sometimes calms down, relaxes, heals with it and sometimes convinces, influences, is affected by it. The voice that people use in daily life, basically for the need of communication and self-expression, enables them to directly and naturally reflect their feelings and thoughts. A person's voice feature and the style of using it are the factors that determine his quality and respect. On the other hand, the voice that a person uses for simpler (primitive) situations (crying, laughing, sighing, groaning, screaming, etc.) turns into a more complex faculty, to speaking, and an even more complex faculty, to singing. Although all three forms of voice are formed instinctively and/or for a reason arising from necessity, they are also used to express a higher artistic expression. In verbal arts or the art of singing, when the technical and artistic power of the artist is combined with the technical and artistic power of the work, there are magical moments filled with intense and sublime emotions for the listener and the speaker. Thus, the voice that is used in a plain and simple way has the feature of transforming into a fascinating artistic expression.

Human is the unique creative force who transforms voice into letters, letters into language and language into culture. In this context, the sounds that are naturally reflected by the movement of the human larynx and the vocal cords in it are the first basic factors that give life to the art of speech and music. Man has found the first tool of music that shapes his emotional life in his own voice. Interaction between people and nature created music, that is, symbolic language and meaning, thus enabling the emergence of a rich and independent music literature. (Altar, 2013, p. 114, 116).

Vocal cords, concretely, is the organ where the voice is produced and can be thought of as a voice part/structure created in the human larynx for the purpose of speech. Susanne Langer (1953) states that, the voice is a tool of biological response. According to this explanation, voice is the basic tool of human self-expression. Thus, Langer argues that biologically voice is not a musical instrument, but fulfills a practical function. Human voice has a distinctive range of sounds including shouting sounds, crying sounds, speaking sounds, and singing sounds. In all these forms, voice serves a basic human function. According to Langer (1972), early human beings knew the humanizing power of voice because it was used in social rituals. Langer argues that the human voice was originally used in ritual singing, rather than possibly for communication and choral chant lyrics were "gradually reduced to the voice of speaking." Indeed, one anthropological view holds that the primitive use of voice in chorus (singing loud, rhythmic chanting) serves as the original means of mental contact between people, thereby uniting the participants as a whole. Thus, in terms of the evolution of speech, some anthropologists believe there was a time when speech and singing were inseparable (cited by Rao, 1988, p. 144, 145).

In Aristotle's psychological treatise "On the Soul", voice is explained as a point of intersection between body and soul. Using the Greek term resonance (sound), Aristotle speaks of the concept of "voice" as a natural phenomenon. "voice" in nature is defined by Aristotle as the psychic sound emanating from the heart, near the vital center. In addition, there is the pitch or melody of the voice (melos; lyrical quality of singing) and its expression (dialecton; the form of articulation that languages have) (Sparshott, 1987, p. 47). Likewise, clear and intelligible speech is another differentiation of voice. Aristotle's definition of voice connects the purely organic or biological dimension of voice to the psychic or spiritual dimension. Similarly, modern science suggests that there is an isomorphism of phonetic and psychic qualities found in the human voice. While science suggests that there is a certain isomorphism between sound and its emotional content, it implies that emotions can be interpreted according to the way voice is used (Rao, 1988, p. 146).

The Human Voice: The Expression of God or Faith

In addition to the general view that the human voice is God's grace, both as a means of self-expression and basic communication in life and as a supreme means of artistic expression; McKinney (1994, p. 150) also states that the human voice is the only musical instrument made by God.

The Oxford English Dictionary that researched for early definitions of the human voice, proposes two forms of voice, "inner voice" and "outer voice." Inner voice can be understood as a form of conscience, soul, or emotion. In ancient moral and theological doctrines, true intelligence is the union of inner voice and outer voice. In other words, what the person thinks (inner voice) and what he says (external voice) must match. From this perspective, external voice is the vocal image of the voice in the mind (spoken by mouth). Huxley says, referring to the

relationship between external voice and inner voice, "voice can exist without speech and speech can exist without voice" (cited by Rao, 1988, p. 146).

In the sixteenth century, the term "voice" was used figuratively and often as an expression of God's will, namely "the voice of God." In Biblical idioms, the term "voice" is regularly referred to as "the voice of eternity" or "the voice of duty". These references imply that there is a voice within us, an inner voice that speaks and guides our actions or as it were a conscience. Today, "inner voice" is generally understood as a form of thought or feeling. External voice, on the contrary, can be perceived as a form of action.

The separation of the biological dimension of voice from the spiritual dimension of voice (i.e. body and mind) contradicts Aristotle's teaching that "soul and body constitute one substance". Aristotle's view combines voice as an organ with voice as soul. According to Aristotle's understanding, voice includes besides musical performance, animal cries and clear, intelligible speech. The significance of this view of his lies in the idea that voice is all these things (cries, screams, speech and musical performance). In other words, he argues that the voice used in singing is never separate from the voice used as both thought and emotion (Rao, 1988, p. 147).

As a natural phenomenon (self-expression through speech), there is intonation and articulation of the voice. When singing, the pitch becomes the melody and the articulation becomes the musical phrase. Of course, these differentiations are partly determined by cultural habits. However, both uses of voice are connected with the vital breath, namely the human body. A cross-cultural proposition by Alan Durant (1984, p. 90) in "Conditions of Music" states that "voice is even as noise produced by the lungs with the power of the breath and modified in different ways as it passes through the vocal tract, becomes the rule of gravitational contour and style" and it becomes an expression of emotion and thought." In musical performance, voice functions as a single phenomenon, inseparable both as body and soul.

When discussed from a phenomenological point of view, all sounds; are "voices" in a broad sense, including "the voices of things, others, Gods and man himself": the voice called "spirit" or "conscience" is phenomenologically referred to as the "otherness" produced by the voice. A voice phenomenology goes towards the concept of voice as "meaning in voice" or "being in voice". Contemporary phenomenologist Don Ihde is careful to distinguish between the meaning of words or language and the meaning of voice. Ihde speaks of words as voice and voices as meaning (Ihde, 1976, p. 152). According to Merleau-Ponty (1967), the meaning in speech sound is limited to ordinary words existing "lazily in the middle of words". In unusually sublime usage (singing voice, acting voice) the human voice magnifies the artistic effect. The voice used in singing or acting exhibits a potential power that raises him above his usual strengths. This voice "convinces, transforms and awakens humanity with the importance of its amplified timbre." The phenomenological account of voice is a theoretical example of "inner voice" that reflects a humanistic, potentially religious or moral perspective on the relationship between sound and the supreme being. In its broadest sense, voice embodies all the richness of human meaning. When the human voice sings the musical text in a narrative form, the interpretation is both vocal and meaningful. This may be one of the foundations of the affective power of voice in music (cited by Rao, 1988, p.149).

The Human Voice: Expression of Emotion

Manfred Clynes defines the movements towards phonation and articulation in the formation of the voice as the expressions of the emotions underlying the structure of the music. "Motions towards phonation and articulation" are manifestations of a common expressive dynamic form that underlies both the perception and production of expression in different ways" (Sundberg, 1982, p. 146). A number of studies on the human voice and emotion show that these gestures or forms of movement reflect the emotional content of musical expression (Rao, 1988, p. 149).

Hungarian scholar Ivan Fonagy (1981, p. 59), who studies the human voice, music and emotion, argues that the act of singing is a "symbolic bodily movement" that carries emotion (and potentially musical meaning) from thought to physical expression. Accordingly, "emotions can be interpreted as gestures or symbolic bodily movements."

Fonagy (1981, p. 69) states that singing and poetic speech are symbolic forms that embody emotion, that is, "expressed emotion is somehow actually present in prosodic expression. Furthermore, singing and poetic speech objectify, reflect or externalize the tension felt in emotion. In this context "emotional intonation (singing or poetry) is expressive only if it relieves tension by throwing out the imaginary (idea) that creates tension." According to Fonagy, voice is used as a form of expression, not communication while objectifying emotion with a symbolic gesture such as singing. In singing or drama, voice expresses the tensions and resolutions inherent in music through sustained pitch and rhythmic articulation.

Fonagy, Sundberg and Clynes argue that independently, but also in consensus; in singing, the pitch and its variability, reveal the emotion conveyed by the music. While measuring the various movements of the vocal system during phonation, it is possible to detect the nature of the emotion that arises in the music transmitted by the singer. Emotions are closely related to the voice as well as the affective content conveyed by the text. Although vocal music is not a language in which something is said, it is closely related to words and with this union, it takes its place among the fine arts. The emotional character of the text or subject depicted in singing, like the emotional character of the subject of a painting (for example, a lonely orphan), is an unaesthetic element in the art symbol (a traditional symbol) which is a song or picture. However, as Fonagy and Clynes argue and Reimer (1970, p. 32) explains, non-aesthetic elements can become part of the aesthetic content of a work of art if they are integrated with the expressive elements of a work of art. From this perspective, the emotional character of a text can be as much an element of the expressive singing tone as its other qualities (cited by Rao, 1988, p. 151).

The Human Voice: A Musical Instrument

The human voice is an alive, biological organ and a form that lives 'philosophically as well as literally'. While the voice can function as a form of human discourse, "the primary means of self-expression or genuine emotion," it can also function artistically as a means of musical expression. Langer (1953 p.142) states that: "Since syllables are fixed to a certain pitch and breathing is sustained, vowels precede consonants and thus voice becomes a remarkable phenomenon rather than discourse" (cited by Rao, 1988, p. 152).

As a musical instrument, the voice conveys the qualities and durations of the pitch (bright voice-dark voice; high voice-low voice; long voice-short voice). Indeed, the transformation of voice from a bodily sound generator to sound as a musical instrument of self-expression depends in part on the formal qualities of the music itself (melody, rhythm, and harmony). Music provides a framework in which the voices produced by the lungs (respiration is the necessary energy source for the formation of voice) and changed as they pass through the vocal tract become an expression of ideas and emotions in music (Durant, 1984, p. 90).

Immediately after the formal features of the music are introduced, the voice becomes the carrier of new ideas and leads to a new order, the sung music. Attention shifts from what is said (what the text means) to what is said (how the text sounds). Rather than shouting in anger or sighing in sadness, the voice as a musical instrument details or expresses the feeling of anger or sadness. While voice as a means of self-expression can describe an event or a mood, voice as a musical instrument cannot. As a musical instrument, the voice finds "metaphors" or "analogues" for real feelings in the melody, rhythm and harmony of the music. In short, voice as emotional expression in music becomes the voice of clear, intelligible musical expression through musical form.

Both the body and the sensory system are the parts that make up the voice as a musical instrument. In singing, the distinction between the physical, emotional and musical aspects of the voice is determined by purposeful human actions, well, the "intended thing." While singing, the voice is deliberately used to sing it musically. As a tool of musical expression, voice is phenomenologically intertwined with human and aesthetic possibilities. As the carrier of musical ideas, the voice has two significance: It remains a means of self-expression, that is, a way of communicating ordinary thoughts and feelings. It also carries the musical idea from thought to physical expression (Rao, 1988, p. 152, 153).

According to Idhe (1976, p. 172), voice has an "all-in-one quality" as a medium of musical expression. When voice is used for musical purposes, its possibilities transform from their usual function to their extraordinary aesthetic potential. At the same time, the voice is both real and unreal. As a musical instrument, the voice is a bodily instrument of human expression and is also a highly skilled bodily movement, that is, a living symbol that carries the lively feel of tone and serves to present the music itself aesthetically. However, the voice retains its relevance to real human emotion, regardless of the complexity of the music or the virtuosity of the vocalism.

Joseph Goddard (1905, p. 87) beautifully expresses the uniqueness of human voice as a musical instrument closely related to human emotion:

When music is produced by the human voice, it ceases to be simple in associations and then takes on the multifaceted unity of humanity. We feel this great change in the transition from abstract sound to sound rich in human associations - from foreign tones to familiar tones - is very striking when human voices enter instrumental music. In vocal music, the mystical properties of musical sound have a human aspect.

Goddard's reference to the human aspects of vocal music supports the holistic thesis that the human voice is a multidimensional phenomenon embodying a biological, spiritual and aesthetic nature. The same reference supports Langer's theory that voice, as a carrier of musical ideas, never loses its relevance to real emotion. Technically

stating, compared to other instruments, the human voice is limited as an instrument. As Langer points out, the human voice is musically constrained by the physiological functions of the lungs, the sensitive delicate constrictions of the throat and the habits of the tongue. Unless the voice is masterfully controlled, these parts of the body cannot accommodate the stylistic features of music and cannot function artistically (cited by Rao, 1988, p. 157).

THE ACT OF SINGING

According to Davran (1997, p. 44), the art of singing; “it is the act of achieving the secrets of the human body and soul by taking control of all the muscles involved in the singing task in our body and using these muscles properly.” The New Grove's Dictionary of Music and Musicians defines the act of singing as:

It is a basic form of musical expression and since it is almost always linked to a text, it is more suitable for expressing certain ideas than dancing. The human voice, without words, can give emotional expressions as uniquely personal and identifiable as a baby's cry (to announce itself to its mother). It is indisputably one of the most subtle and flexible of all musical instruments (cited in Rao, 1988, p. 159).

Singing voices originate from vital centers such as the heart and lungs (breath). Also, singing is closely related to true emotion, because voice is often used as a means of self-expression. Langer (1953) defines vocal talent as an interpretative musical talent that enables the production of purposeful and controlled sounds. In her assessment, the singer's interpretive ability is derived from the "natural connection between mind and voice" (cited by Rao, 1988, p.160).

The psychological aspects of singing include perception of the way singing is received or heard by the singer. One's perception of the singing voice directly affects their ability to sing. According to Bunch (1994, p. 7), perception is an important factor in singing. Many factors, including emotion, environment and self-image, affect the singer's perception of voice in singing. Bunch argues that the perception of tone while singing is necessary so that the quality of the produced tone fits the artistic purpose of the composition and does not detract from the meaning of the music. The analysis of the voice (the ability to "hear" and evaluate one's own voice) depends on:

- sound source (sound),
- environment (where sound is produced and heard),
- reception of sound,
- the ability to hear and distinguish.

Bunch also states that perception in singing includes the ability to recognize the aesthetic qualities of music and states that the act of perceiving while singing has three aspects:

- correct hearing without a physical disability,
- actual stimulation of the sensory receptor systems of the ear,
- neurophysiological aspects.

On the other hand, Sundberg (1982, p. 91) says the following about the perceptual effect of singing: "One of the most important things about the act of singing... It is truly remarkable that a performer can use voices to convey musical phrases rather than unrelated tonal sequences to the listener." Sundberg states that the ability to sing and interpret music in a meaningful way depends on the singer's ability to hear, feel and evaluate his own voice to adapt to the characteristics of the music. There are two ways to create a "certain musical effect" when singing. The first is the use of audio signals (the singer's ability to systematically produce and hear sound) to adapt to the structure of the music. Second, the singer "must be consciously or unconsciously aware of the nature of the music."

Since the tone of singing is different from the tone of ordinary speech, the singer must be able to perceive this difference systematically. In his research on the act of singing, Seashore (1936) argues that the singer's interpretation (ability to produce and "hear" vocal tone) is accomplished by what he calls artistic deviations from the mean. So, this happens with the change in vibrato, which is actually the movement of the pitch. Seashore is convinced that the deviations in singing are by no means random. Namely the singing voice and the singer's ability to produce that voice musically are not incidentally. It requires a system that has a way of hearing and evaluating the tone (cited by Rao, 1988, p. 134).

Sundberg (1982, p. 95) agrees with Seashore that "artistic deviations" in tone are not random. They are about a "set of rules" or technique. He argues that the ability to produce "deviation from the mean" or "acceptable" song tone, as distinct from ordinary speaking tone, is the basis of musical performance: "Systematic deviations from the mean cause the performance to come to an artistic agreement with the musical structure." An aesthetically pleasing voice performance is dependent on the ability to produce tones appropriate to the musical structure. That is, technique must be applied to the structure of the music. The act of singing requires picking up or hearing the tone

and making any necessary adjustments to the sound production. According to Sundberg, artistic interpretation is a singer's ability to convey the musical content and emotional atmosphere underlying the text and music through "the emotional information in the musical sounds from the singer's own voice". The use of the term "aesthetics" is theoretically inappropriate unless the singing mechanism and its function are related to the expressive qualities of art and the artist's perception of these qualities.

Vernon A. Howard's book "Artistry: The Work of Artists" is an important example of philosophical research into the artistic aspects of singing. Howard (1982, p. 35) draws attention to the relationship between singing and art in his book. He distinguishes between "function of sound" (the way sound is produced) and "art of the singer" to get a clearer picture of both components. Howard defines singing as a combination of "scientific" knowledge (physiology and acoustics) and "active" management (voice control, projection and flexibility). According to Howard, arriving at a theoretical vision of singing mastery from the first evidence of one's senses and experiences has philosophical as well as physiological and practical dimensions (1982, p.37). Accordingly, it is very important and essential to develop an understanding of singing as a subtle practical decision governing action. Howard (1982, p. 52) states that singing cannot be reduced to "rote tools to fixed ends," as if it were a mindless routine. While accepting routine in singing, He argues that thought (mind) drives the development of the singing voice and its use in performance.

Meribeth Bunch (1994, p. 1, 2), in her book titled "Dynamics of the Singing Voice", accepts the relationship of the act of singing with art. He sees the act of singing as a sensorimotor phenomenon that requires certain physical skills based on an understanding of the singing processes. At this point, Bunch expresses his thought as follows; "although most people can sing and produce musically acceptable vocal sounds... few could become true artists." Because singing is a common activity, the intricacies of the vocal mechanism are often overlooked. In his book, Bunch identifies coordination and energy as the two most often overlooked components essential to artistic performance. She sees the relationship of the singing voice to the art of music as a "personal and often . . . mystical" issue. She tries to relate vocal function to art by explaining in scientific terms how the muscles involved in singing work to produce certain vocal musical qualities. According to Bunch; Knowledge of anatomy, physiology and acoustics is an important aspect of singing. Thus, "a student who understands voice function can develop a more educated perception." Although she claims that the world of science has the most consistent terminology for use in the context of sound teaching, and that scientific terminology provides the most logical basis for constructing a science of vocal pedagogy, Bunch argues that for teaching purposes scientific terminology should be supplemented with images that are descriptive and artistic.

Thelma Merrick's theoretical work on cognitive-emotional processes in vocal pedagogy distinguishes between vocal production and aesthetic perception of voice in singing. Merrick developed a theory of the singing voice called "voice perception". Voice perception is based on the use of images in the analysis of sensations felt during the act of singing. It is an approach to teaching singing that uses the assessment of singing tone sensations as a tool for conceptualizing singing tone.

Through the experience of singing and the analysis of the process, the student develops a concept of singing. In this theory, the ability to sing is acquired through the singer's heightened awareness of the act of singing, this includes the following:

- awareness of vocal functions,
- assessing the changes that have occurred and
- the ability to repeat a modified production if desired.

Merrick distinguishes between vocal sound production and perception of produced sound. Singing is the ability to develop a concept of tone through awareness and evaluation of sensations experienced in tone production.

Russell Hammer (1937) states that the ability to singing is a result of musical development. It can be said that Hammer's book is the only example of an aesthetic-based approach to singing that takes musicality into account. According to Hammer, the following are important for the development of singing ability:

- awareness of a musical problem,
- initiate a response to the musical question,
- distinguishing or recognizing the musical problem, and
- developing more insight.

According to Hammer, the technique of singing "must be learned in the context of the situation in which it will be used." For Hammer, musical literature is the primary way to develop singing. Because literature provides the source from which singing technique can be learned. Hammer distinguishes between pure tone reproduction and the singing experience. Accordingly, the real tone is generated from the respiratory system, larynx/vocal cords and

resonators/mouth and pharynx. Song tone reproduction is based on vowel quality. Through vowel formation, musical qualities such as color, character, and variety are given to singing. Therefore, the "connection" of voice production with musical activity is achieved in the use of vowels and consonants according to the characteristics of the music. The application of vowel to music creates singing as opposed to vocal tone production. Hammer's approach to singing regarding vowel formation is similar to Appleman's work. Appleman's phonetic approach suggests that the singer's focus on the phoneme helps to select the timbre appropriate to the musical purpose. In his phonetic approach to singing, the vowel makes a connection between the "science of singing" and the "art of vocalization" (cited by Rao, 1988, p. 139).

Rogers (2013, p. 4) says that the act of singing is the highest expression of music, as it is a direct expression of spiritual feelings. The human voice is the only instrument that can respond to the will with its absolute spontaneity. When the supremacy of natural law is permitted by the singer, there is nothing between the will and its agent to break or divert the magnetic current. Voice is the only tool that is part of our body and connected to the soul itself. The real urge to singing is the unconscious feeling of the soul that drives the word to sing. It is the spirit that informs the human voice, through the mind, as "transfer my power to the voice so that I can know it". In this way, Rogers states that voicing the silent language of the soul is a marvelous task. The act of singing is discussed in widely below with its various dimensions.

The Act of Singing: Using a Special Tone of Voice

Sparshott (1982, p. 85), defines the act of singing as "an elaborate form of using a particular tone." Sparshott's definition of singing incorporates components of both art and skill, given the distinction between singing as an art (a quality of voice or tone) and singing as a technical skill (a way of producing or forming a tone). If the phrase "a detailed way of using voice..." is taken to suggest a specific type of sound production or a way of making/producing sound, this sentence alone satisfies the technical skill component of singing. The remainder of the expression, namely "a special tone of voice", satisfies the artistic component of singing, referring to the singing tone of the voice. This is an aesthetically recognizable tone as opposed to spoken tone or ordinary voice. When these expressions are used together, it is understood that singing is both a technical skill and an art.

Singing transforms the ordinary voice into an extraordinary special voice, a voice that can be expressed musically. Singing as a special way of producing sound, that is, presenting ideas and sharing the meaning of life with others, serves the basic human inclination of man. In singing, in contrast to speech, emotion precedes meaning, and attention is literally shifted from what is uttered to tonal form, to what is sung with the voice. Verbal expression creates resonances. The concept of singing underlies the aesthetic nature of singing as a specific tone, perceived tone, or musical sound. Indeed, when the act of singing is considered as a special tone, one's understanding of singing as an art deepens.

When someone sings, the voice is recognized as the musical tone. At this point, Sparshott asks a key question, "What is tone?" and he states that musical tone is ordered by pitch and that pitch is a mathematically defined scale in an ideal instrument often determined by frequency ratios or string lengths. Sparshott argues that the music system based on a mathematically defined pitch system may be an artificial system. Such a system, developed from instruments rather than the human voice, has elevated instrumental music to a "pure or absolute" form has leaved vocal music in a less pure (or more distorted) category. Indeed, it is common to hear instrumental music referred to as "absolute music or pure form".

Sparshott (1982, p. 47) advocates a different way of thinking about music, which sees the notion of musical pitch as "voice" (phone) rather than tone (tone). In practice, pitch (such as high or low) is described by the fact that: "People produce different sounds depending on whether we speak, shout, whisper or sing and the time when vocal sounds differ most clearly according to pitch is when we sing."

Sparshott uses the term voice as "voice as faith/conscience". In this sense, the sound in nature is the psychic sound attributed to the body, heart and vital breath. Inner voice (voice of conscience or mind) and external voice (phonation, that is, the act of producing sound) are considered as one voice. Echoing Langer's definition of voice as "passionate expression", Sparshott calls music in which the voice is central "heteronomous music organized by the succession of passions expressed in a spoken text".

Whether the human voice is considered a musical genre or music a type of voice, the act of singing can be considered an aesthetically pleasing musical tone rather than a mathematically defined set of pitches. Although the act of singing is not considered "pure art" due to its relation to the text or irregular pitch frequencies, it can be considered as a distinctive art form embodying meaningful expression in the sung text (Rao, 1988, p. 162).

The Act of Singing: Creating Musical Voice

According to Robert Shaw (1979), the human voice creates a musical tone in the act of singing. The human voice in music art and singing; it is melody, rhythm, harmony and dynamics, not a narrative or expression to explain a story. This view is expressed in slightly different terms by Margaret Hillis (1975) in an interview on the philosophy of choral singing in *The Choral Journal*. Hillis argues that in singing, the human voice is "just one of many instruments" and that the essence of singing is "the music itself", not diction or expression. By "the music itself" Hillis means that the act of singing begins with an intense musical awareness of the inner life of the art form, not the notes or the elements themselves (cited by Rao, 1988, p.163).

The expression conveyed while singing is never separate from the voice it sounds come to ear. That is, the literary content cannot be perceived separately from the music itself. However, the traditional philosophical view, contrary to the view that evaluates singing as a multidimensional phenomenon with a holistic approach, accepts that the close relationship of purely musical sounds and text in singing interferes with aesthetic perception - the aesthetic response to purely aesthetic qualities. From this point of view, the act of singing is understood as less than an absolute or purely aesthetic experience because of its relation to words.

Although music owes its place within the fine arts to its relationship with literature, expressionist philosophy, which derives from its roots, particularly because of the poetry sung, tends to characterize text in music as less of a primary element. Although Langer mostly adheres to this line of thought, he states the following about the relationship between words and music:

When words enter music, they are no longer prose or poetry but elements of music. The task of words is to help create and develop the primary illusion of virtual time, not of literature, which is another expression; so they renounce their literary status and assume purely musical functions. However, this does not mean that they only have sound value.

What Langer is suggesting in the last sentence of this passage is, although words do not function as elements of the primary illusion of poetry and prose after entering music, this does not mean that they act only as sounds and do not carry any descriptive or associative meaning. On the contrary, any meaning that words convey "meaning of words, enthusiasm of expression, devotional duties, choric responses" also enters directly in the musical structure whether or not it is understood literally. While words are elements of virtual time, the primary illusion of music, they can also have a literal or figurative meaning. In other words, Langer does not exclude the possibility that the true meaning of a text adds something to the emotional experience of the music. He even concedes that "words can suggest emotional centers and ways of connecting to spark a musician's imagination." (cited by Rao, 1988, p.165).

Sparshott offers a different take on the theme of Langer's discussion of the role of text in vocal music:

Music is not a language in which something can be said... What is singing? It is a very specific way of saying something... It conveys how you feel about what you say or how you want others to feel, your attitude towards it (or the attitude you want to evoke) or how you want it to be received (ironic, sarcastic, serious...). So the music of the song tells what the person understands from the text or how one understands it, not what the text means. It doesn't say it, it shows and the word traditionally used for this type of display is "expression".

When Pratt's (1931) famous statement, "the "auditory characters" of music sound only as their mood makes them feel, when considered in more detail, in short, it can be said that singing is "similar" to music in a sense, that is, singing in sensation is like singing of felt emotions (Rao, 1988, p.165, 166).

The Act of Singing: A Way of Hearing Music

While the act of singing can be thought of as a special way of vocalization, it can also be thought of as "a form of listening" (Idhe, 1976, p. 180). At this point, it is important to explain that one's own voice reaches someone's ear in two different ways. One of the ways of hearing is air. The air transmits the sound from the lip opening to the ear canal. It is a sound heard from the outside in. Airborne sound consists of two parts. A section moves from the lip opening to the ears. The other part reaches the ear after to resonator cavity is reflected in one or more times. These reflections can significantly change the voice depending on the resonator cavity.

The other auditory pathway is the one that is heard from the inside out and consists of structures that separate the vocal tract from the inner ear. During vowels is sung, the amplitude of the sound in the vocal tract is very high. The singing voice produces vibrations in the vocal tract (in the resonator cavities: larynx, pharynx, mouth) and these vibrations are transmitted to other parts of the head, including the inner ear. The resulting with bone conduction sound can only be perceived by the singer. This means that bone-conducted sound does not propagate

through the skull efficiently enough to reach the listener or contribute significantly to the sound projected outside the singer. "Only the singer himself perceives his own bone-conducted voice." This describes how singers "hear" to adjust the volume and sing in tone. Vibrations in bone structures caused by bone conduction sound provide the singer with a sense of sound; that is, the sound felt. The frequency characteristics of sound transmitted through bone are converted into skull vibrations. These vibrations can be perceived by the singer in various parts of the body during the phonation of different vowels (Idhe, 1976, p. 81).

The act of singing as a way of hearing can be thought of as a dual form of perception that includes feeling and hearing. Vennard (1967, p. 260) describes the process of hearing and experiencing sensations while singing as the singer's "ear" and states: "sensation-hearing ability is the whole auditory complex following phonation."

Appleman (1967, p. 141) agrees this view, he says "hearing is interpreting voice" and continues as follows:

For the physicist, voice is a form of energy that can be measured and controlled to do work. For the psychologist, voice is a feeling-sensation, something that exists only within ourselves. Such sensations create emotions and change our behavior. Voice is real but abstract. One cannot measure it or see it; one can only feel its effects.

Victor Fields (1952, p. 52) agrees with these thoughts and states:

"Sensation is the mental awareness of some momentary physical stimulus for the body organism." Hearing is the capacity to perceive auditory sensations of voice. Hearing is the function of recognizing, correlating and controlling initial perceptions of acoustic phenomena for vocal expression purposes."

In this multidimensional sense, hearing is at the center of the act of singing. The sensations experienced while singing include auditory hearing (listening to the voice) and awareness of the movements and positions of bodily functions involved in the singing process (listening to the body). In the act of singing, both types of hearing are used, auditory and kinesthetic sense impressions. The importance of physical sensations in singing is emphasized by John Burgin, who defines it as "a change in awareness or a feeling that is the result of a stimulus." Burgin (1973, p. 134) argues that singers "rely heavily on physical sensations for the control of singing intensity". Singers do not generally rely on auditory feedback; that is, the sound that reaches the ear through the air. This principle is confirmed by Sundberg's work, which claims that "singers... rely less on the auditory feedback signal... to control phonation" (cited by Rao, 1988, p. 168).

Descriptions of hearing that involve experiencing sensations show that hearing is a multidimensional, essential and innate aspect of the act of singing. This type of hearing is the primary way a singer interprets the sound and evaluates the results. It is a way of perceiving changing or lack of changing in voice. (Rao, 1988, p. 169). This type of multidimensional hearing accepted in science and aesthetics by researchers is the result of the dynamic process of singing which includes affective, cognitive, psychomotor and aesthetic components.

The Act of Singing: A Way of Musical Performance

Describing musical performance as "the ultimate image/imagination of tone" Langer states that:

This ultimate imagination of the tone itself, as something completely decided by the whole to which it belongs, requires a special symbolic support, a very distinct bodily gesture; obviously, this gesture is the act of producing tone, the expression of it by the performer; physiologically, it is the sense of tone in the muscles tuned to produce it, and is the symbol for imagined tone. Possibly all auditory imagination is somewhat lacking, except for such symbolic action, unless it is based on a vivid memory of the music actually heard.

According to Langer's explanation of musical performance, it is possible to say that the act of singing, which is the act of producing tone, is both a skill used to produce music and a way of understanding music. Remembering in the sense of "imagining" is a way of knowing. Knowing how to produce tone and that the tone supports and complements the musical idea is a way of understanding in itself. Therefore, it makes sense to point out that musical performance ("the ultimate imagination of tone") is a way of producing and perceiving tone. In this sense, the act of singing is a form of bodily knowledge about music.

Dewey (1938), who agrees with this view, characterizes the movements of the body involved in expressive roles or skill-based performances as "motor tendencies". He argues that these movements "make perception... sharper and more intense and add meanings that give it depth". Dewey states that "motor (bodily) preparation is a large part of aesthetic education." Dewey's expression is this way:

A skilled surgeon is someone who appreciates the artistry of another surgeon's performance; he watches it in his own body sympathetically, though not overtly. Anyone who knows something about the relationship

of the piano player's movements to the production of music from the piano will hear something that the layman does not perceive, just as a master performer hears the music 'with his fingers' while reading a note.

Langer argues that musical performance also relies on a "special symbolic support" for the ultimate imagination of tone, including notation and technique. Ultimate imagination requires a "highly distinct bodily movement" in the act of deftly producing the tone and the performer's expression of the tone. The highly articulate bodily gesture is physiologically the "feeling for the tone in the muscles set to produce it," and the means whereby the tone is imagined. In this case, there is a distinction between the experience of cognitive awareness (thinking about something mentally) and being cognitively involved in an experience as a process. In other words, as Jerome Bruner (1968) states, there is a difference between grasping something and applying it (cited by Rao, 1988, p. 170). Sparshott (1982, p. 31) agrees: "A system of grasped facts is not the same as the ability to produce a product." Sparshott continues that: "The joy of doing, of being aware of what one is doing, is the primary kind of aesthetic pleasure, the importance of which no art theorist should ever forget."

Langer states that any form of listening or "auditory imagination" other than the act of producing music is "somewhat lacking." In the case of a very competent musician, it's possible to hear music "purely imaginative" without real tone. In most cases, however, the ability to hear music is helped by the actuality of tone realized in singing or playing: the act of carrying the music from thought to physical expression. According to Langer, the listener imagines music from bodily sensations recalled from the physical act of producing music. Depending on the listener's performance history, the recalled sense impression may vary. Chopin heard the music with the senses of his fingers. Similarly, composer Alan Stout states that he constantly suffered from a sore throat while composing a long choral piece for the Chicago Symphony Orchestra and Chorus. He, too, has "heard" from the "subvocal" (pertaining to or denoting an unexpressed level of speech comparable to thought) senses of the throat. The physical production of music while singing or playing an instrument can be considered a musical imagination or muscle memory that is remembered for the purpose of hearing the music. In Langer's account of musical performance, the act of producing the tone depends on the ability to make "the final decision on what each tone sounds like." The ability to make such decisions is part of the performer's art. When it comes to the art of singing, decision making involves the planned production (or intelligent use) of the body and mind in order to have control over the music itself (cited by Rao, 1988, p. 172).

An artist's art may not require a verbal explanation of everything that is done, but it does require that the produced (voice) be checked, corrected and critiqued by the performer in the light of a purpose, namely the qualities of the music itself. Music provides a context in which sound is produced and controlled. How sound is produced and controlled (how changes and improvements are made) has to do with the qualities and standards of the music itself. Consequently, the act of singing, based on a high-level skill, is a way of hearing music, imagining music, knowing music, and performing music.

CONCLUSION AND RECOMMENDATIONS

The aim of this research is to make an evaluation and make suggestions by considering the human voice and the act of singing with its artistic and philosophical aspects. The human voice is accepted as the oldest, most natural and most valuable instrument among musical instruments in the history of music. In addition to being a living instrument belonging to one's own body, it is also special and valuable because, like fingerprints, each person has their own uniqueness. Vennard (1967, p. 165) states that the human voice is a more romantic instrument than other musical instruments, since it belongs to one's own body and allows emotions to be expressed directly. According to the definition of "man is a walking musical instrument"; his own voice, which is the natural instrument of man, contains his body, soul and environment (Denizoğlu, 2008).

It is generally accepted by all musicologists that the human voice constitutes a category in itself among the sound types with musical quality and has a very different sensitivity. The human voice is distinguished from instrumental music by a very important distinguishing feature. In other words, a person who carries both the feelings and thoughts coming from his inner world and the vocal organ, which is an inseparable part of his body, thus contains the basic elements of the "self-form balance" which is the ideal rule of art (Elmas, 1988, p. 238).

The human voice, which basically helps the individual to express himself and communicate with the outside world, turns into a more complex ability, to speaking and an even more complex ability, to singing. Thus, the voice of the human being, which he/she uses as a result of a necessity for the purpose of being intelligible, is also used for a higher expression artistically. According to Egüz (1980, p. 1), voice has two important functions in human life; talking and making music. The human voice, in addition to containing all the various sound colors that other musical instruments cannot create alone, has increased its effectiveness even more with the power it gets from the language, as well as its unique techniques and methods.

It can be said that the human voice, which has an important place in the transmission of emotions and thoughts from the first ages to the present, has developed over time and today's singing art has emerged. Singing, a fundamental form of musical expression, has played a vital role in ancient forms of ritual and theater in antiquity. The act of singing, which is the sublime and artistic expression of the human voice is a special way of using voice that embodies a biological, spiritual, emotional and aesthetic nature. The definition of singing as art depends on these aspects of singing. Therefore, it is thought that it is important and necessary to evaluate the act of singing together with its technical and artistic/aesthetic aspects. According to Marchesi (undated), “the art of singing, like any art, has a technical/mechanical dimension and an artistic/aesthetic dimension. A singer who cannot overcome technical difficulties will never achieve artistic/aesthetic perfection.” It is important to understand this view of Marchesi correctly. Because, as mentioned before, it is seen that in theoretical and practical studies in the literature on voice education and in the voice education process have generally (sometimes only) technical studies focused on. However, the ultimate purpose of technical studies, knowledge and skills in vocal education is to develop the artistic aspect of singing. In this context, technical knowledge and skills are of course important, but it would be correct to consider them together with artistic skills in the vocal training process and to support artistic skills. Kaygısız (2017, p. 32) also states that aesthetics and technique are the two most important inseparable components of art. Aesthetics is beauty and there can be no art without aesthetics and even if it is, it does not give pleasure. Technique, on the other hand, is the mastery of a job, the realization and application of theoretical knowledge. According to Rock (2005, p. 113), the power of the human voice reaches its peak in the art of singing. In this context, it can be said that in the art of singing, magic for the listener and the singer occurs when technique, words and music are combined with personal style and passion.

Most research to date has focused on the human voice almost exclusively as a biological phenomenon, not as a musical instrument. With a similar approach, according to Rao (1988, p. 116), who argues that the human voice and singing act should be considered as a whole, not only scientifically, but also with artistic and aesthetic dimensions, there is a deficiency in the literature in this respect. As far as can be reached, no study has been found in the literature in which the sound is considered as a multidimensional phenomenon, in a holistic way, including its biological, spiritual, emotional and aesthetic nature. Therefore, this research is considered to be important in this context and it is hoped that it will shed light on new research to be done.

The following can be suggested as a result of the research:

- As far as can be reached, since there is no study on this subject in the field of voice education, new theoretical studies can be made based on this research.
- New researches and postgraduate thesis studies can be made based on qualitative and quantitative research methods on the subject.
- Studies based on qualitative and quantitative research methods can be conducted to determine the approaches of sound artists and voice trainers to the subject and their understanding of education on the subject.
- The use of verbal and pictorial images in order to develop both the technical and artistic aspects of the act of singing can be beneficial in terms of making the education process more effective, efficient and fast.
- In vocal training, not only technical skills, but also technical skills and artistic skills should be considered together for the development of singing skills, and technical skills should support artistic skills.
- It is important and necessary to raise the awareness and education of individuals receiving vocal training about the technical and artistic aspects of singing.
- Individuals receiving vocal training should be provided with a foundation of knowledge, skills and understanding regarding the philosophical aspect of the art of singing. In addition, at the level of theory and practice, about works; composer, period, genre, style of singing, subject, meaning of words (if the works in a foreign language) etc. should be taught. Finally, it should be studied so that the works can be interpreted with an experience in which the feelings of the soul are fully reflected. For this purpose, using the internet, technological tools, visual and audio materials, namely taking advantage of educational technology will contribute to the development of performance skills.

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