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## A METHOD OF PHASE FORMATION OF VOCAL SOUND AT ACTIVITIES OF A TRAINING CHORAL COLLECTIVE

A. Kyfenko, T. Romanova

*The article is devoted to coverage of the stages of forming the vocal sound in a classroom training choir, united in the phase sequence. The feature of the first phase of the vocal sound formation is the creation of the psychological setting, which leads to the very essence of singers' activity. The second phase is characterized by a change in sound timbre similitude. Enormous pressure is required from the central nervous system to concentrate the inner mental work and make coordination. The sign of the third phase is the appearance of higher positional sound. In the fourth phase, the singing actions are more dynamically stable and coordinated. The fourth phase is characterized by broad compact timbre sound, but something too heavy by the power. A characteristic feature of the fifth phase is the automation of vocal skills, the sound gets flexibility and plasticity. The mechanism of stabilization in the formation of vocal skills that ensure the accuracy, efficiency and stability of the movements of the articulatory apparatus is analyzed. We have substantiated the method of imitation as a psychological process, transformed in the active thinking work and implemented in practice. The basic points of the head of a choir are analyzed, including: work on rounding lighting the sound, singing properly on the organized breathing support, forming a unified manner of sounding voices. It is noted, that the complex interaction of breath, soft palate and larynx ensures the correct formation of the vocal sound. It is determined, that the sound acquires a full quality characteristic only due to the smoothing of the registers. The main criteria of the set, academic voice are characterized, namely: the presence of two singing forms and the work of two resonators, which are equally involved in the formation of both low and high sounds. The mechanism of voice synchronization in choral parts is characterized*

**Keywords:** vocal sound, vocal skills, registers, resonators, sound position, choir, unison

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### 1. Introduction

Modern requirements, faced by a teacher of music art, include constant improvement of both pedagogical and vocal-choral mastership. Prominent music figures noted that skills of vocal-choral activity are a necessary condition of professional-pedagogical education of a future teacher of music art. In modern art-pedagogical education the problem of aesthetics of choral collective sound is actualized. Vocal-choral skills, vocal academic sound, in particular, of a future teacher of music art allows to realize the worldview, aesthetic, ethic, creative development of a child, based on an interpretation of artistic images, their vocal decoration and stage expression. So, there appears a necessity in elucidation of methodical grounds of vocal sound formation at training choral collective activities of a future music art teacher. A training choral collective is a full-value link of the communication process that transmits information and hypothetically changes it.

### 2. Literary review

The work on the defined topic conditioned a necessity in studying scientific literature that made a theoretical research base. The pedagogical discourse of Ukrainian and foreign science includes a spectrum of studies, oriented on elucidation of methods, techniques, forms of work with training choral collectives. Among the studies, let's separate ones of scientists, teachers that:

– study problems of professional training of future music art teachers for vocal-pedagogical activity [1];

– characterize bases of vocal pedagogy [2];  
 – elucidate methods of work with a choir [3, 4];  
 – highlight methodical formation bases of stage-image culture of a future music art teacher in the process of vocal training [5];  
 – consider vocal-stage culture of a future music teacher [6];  
 – substantiate acoustic-physiological bases of work with a choir [7].

At the same time art-pedagogical sources don't properly elucidate the problem of vocal sound formation of future music art teachers at training choral collective activities in the psychological-physiological context.

### 3. Research aim and tasks

The aim of the paper is to describe and to substantiate the method of vocal sound phase formation at training choral collective activities of future music art teachers.

The following tasks were set for attaining this aim:

1. To describe the method of vocal sound phase formation at training choral collective activities, based on practical experience;
2. To elucidate main tasks of a choirmaster at training choral collective activities.

### 4. Materials and methods

In the process of own work with a student choir we made a conclusion that vocal sounding of a choir undergoes several original timbre changes. Student age coincides with the mutation and postmutation period.

Singer's voice formation takes place together with the psychological-physiological development of a student. Just quality peculiarities in the development of vocal skills were combined by K. Nikolska-Beregovska [8] in phases in a certain succession. Phase transformations are extremely difficult, their boundaries are rather melting, but it is right to separate typical signs in phases, because one or another timbre coloration are present in each of them for a certain period of time.

*First phase.* A chorister, motivated to any action as a response to one of the external environment, at first perceives the psychological condition of readiness to realize this action that is a setting for a correspondent behavior. A psychological setting is a component of activity of the organism, it combines and coordinates this activity and may be considered as an integral psychological condition of a subject, his/her readiness for a certain behavior. The phonation process of singing involves the whole human organism, and its actions must be certainly coordinated.

A special feature of the *first phase* of the singing mastership development is the formation of a psychological setting that conditions the sense essence of vocal activity in a subject. A student, beginning to learn singing in a choir under the guidance of a teacher, comprehends this process and sets new questions and solves determined motor tasks by auditory analysis of juxtapositions [9].

Choir sounding (first phase of its development) is characterized by a timbre mixture, low sounding positions and above all, phonetic quality diversification. A choral collective leader sets a task to eliminate mixed sounding of it, works on sound rounding and clarification, its smoothing, and needs a united singing manner and correctly organized singing breath of a choir. Only complex interaction of breathing organs, soft palate and larynx provides correct sounding formation.

A rather fast qualitative change, characterized by certain homogeneity of intonation and sonorous formation, takes place in the first phase of choir sounding. This qualitative jump is rather fast, because at this development stage the central nervous system is included in solving the problem of coordination in the work of breath, soft palate and larynx and uses resources, accessible at the moment.

*Second phase.* A peculiarity of the second phase is the presence of a certain timbre coloration of a sound, characterized by more organized, but dim and sharp sounding. These timbre changes, from our point of view, are completely natural at this stage of vocal sound formation in a choir, because appear depending on an initial action on a sound (of either dark sonorous - *u, o*, or light - *i, e*). Such negative properties of sounding in a choir as "darkness" or "sharpness" are inevitable and, as we ascertain below, even positive, from our point of view [2].

The matter is that "dark" or "sharp" sounding depends on a series of objective causes that concentrate just in the second phase of singer skills development like in focus. Such causes include, first of all, just insufficient ability to use the sound support on breath that, in its turn, influences the work of the whole singing apparatus. At the same time when the central nervous system coordinates and corrects the work of esodic systems of the or-

ganism, participating in the singing process, sounding cannot be at the high quality level, because voices lack vibrato and high singing formant. The singing process is very complicated, because the great strain is needed from the central nervous system for concentrating the internal mental work and coordinating movements. It is possible only in a quiet and braked condition, because excitation and braking processes are a double manifestation of the unitary nervous process.

At the beginning of learning the imitation method is widely used; at first it essentially facilitates chorister's perception of a studied action, but then the stable habit cannot be formed without understanding of its essence [10]. Imitation must transform in the active mental process, realized in practical activity.

It is necessary to note, that just the organism begins to fight against difficultly managed freedom of movements, which excess impedes correct assimilation of skills, just in the second phase, at the development of efferent skills. A chorister tries to "tame", to subordinate reactive forces to the own will because of lack of experience, in such a way strains all muscles [8]. Such way of coordination results in stiffness that is a natural phenomenon for this stage. Then a singer learns to relax muscles very carefully and to use them correctly at successive mastering the habit.

So, "dim" or "sharp" sounding at the second stage is a result of the physiological condition of singers. This is a real fact that testifies that the development of singing skills goes in the correct way.

*Third phase.* Acquisition of any habit cannot be realized in one moment, but, as we know, is a difficult way of attempts and mistakes, in which result correct actions take place alongside with incorrect ones during a certain period of time. A peculiarity of the third phase is a sounding with a higher position, essentially highlighted, but a bit "rectilinear" and quite narrow in the register, alternated by a dim or soft, arbitrary rounded sound. Choir leader's requirement to sing with a high intonation, close position, softly and roundly results in the choristers' habit to sing, using higher resonators, but vibrato is not properly manifested because of insufficient mastering of singing breath, work of the articulation apparatus and also absence of an interaction between the higher and low resonator. For making them contacting, it is necessary to use special methodical techniques [9].

*Fourth phase.* Evening-out of registers takes place in the fourth phase. The breast resonator (trachea and bronchi) is characterized by lower frequency overtones, giving voice softness, nobility, solidity. High-frequency overtones prevail in higher resonators – higher singing formant that gives voice clearness, silveriness, brightness and fly. Sound gains the full characteristic only by smoothing registers. The main criterion of a set academic voice is the presence of two singing formants and the work of two resonators, equally participating in creation of both low and high sounds [2]. According to Y. Kuznetsov, vibrations, appearing in resonators, can grow by force and, above all, spread "on very big parts of the body, are felt by a singer not only by the voice apparatus, but also by most remote ones" [7]. Just these vibration sensations are dominating in the singing support perception.

The fourth phase is characterized by a wide compact, timbre sound, but a bit heavy by force, hiding in itself a tendency to vocal position decrease in the middle of diapason and sound fly loss that may be transformed in a stereotype if not timely to prevent it by changing methodical techniques [11].

*Fifth phase.* Only using correspondent exercises of the mobile type, based on the combination of sonorous with consonants, necessary in each individual case, choosing a repertoire, based on contrast correlation of tempos, dynamics and ways of sound conduct, a leader gets a possibility to get flexibility, easiness, mobility, cantilena and sound force in choral sounding.

A typical feature of the fifth (and partially fourth) phases is automation of the habits, when sound gains flexibility, plasticity and doesn't need consciousness intervention at singing. The habit becomes automated, when it is released from thinking intervention. But at first its automation may be subjected to so-called "malfunction" that is de-automation of the action. It is corrected by the moderate tactics of a choirmaster or switching another action and sometimes its total temporal stop.

Fixing of vocal habits is achieved by so-called stabilization, when special corrections and automatism, providing distinctness, economy or stability of movements, form in the central nervous system. At the first development stage stabilization of vocal habits is not typical for all its components, because one vocal habit is more subjected to "refutation", and another is stable [12]. Stabilization of vocal skills completely takes place at the second stage that is at the second year of learning, when skills plasticity, variations, adaptability and stability to refuting influences grow in singers in the process of long-term activity. As a result of it, automation is stabilized, and a chorister acquires the ability, so-called "technique" to make one or other actions flexibly. He/she doesn't think about the very technique of performance [13].

An important moment in the method of phase vocal sound formation at training choral collective activities is a mechanism of singers' voices synchronization. A choir party is an example of interaction between homogenous acoustic systems of self-oscillating type. The effect of voices synchronization in a choir by the frequency of

the main tone and by the overtone composition of singing sound was experimentally fixed by V. Morozov and Y. Kuznetsov [7]. Choirmasters knew about the phenomenon of involuntary setting of voices in a choir long since and used it in their work. Better conditions for resonant co-setting of voices in a choir appear at unison singing in a group of homogenous voices at the dense placement of singers [14]. The close placement of choristers in parties and selection of voices with related timbers objectively give more joint and strong sounding. It is not an occasion, that conductors, working with an ensemble, replace singers within the group, placing homogenous voices together. One of important tasks of a leader of a training choir collective is production of habits of just conscious and professional-artistic performance of choir works in students.

### 5. Research results and their discussion

The method of vocal sound phase formation at activities of a training choral collective widens the methodical research apparatus in the process of professional training of future music art teachers. This method of phase formation of vocal sound at activities of a training choral collective may be a base for renewing the content of learning courses of higher art educational institutions for correcting curricula and training programs for future music art teachers and may be used by teachers of higher art educational institutions at individual and practical activities.

### 6. Conclusions

1. Based on the theoretical-methodological analysis of the research problem and generalization of the practical experience, this paper substantiates the method of vocal sound phase formation at activities of a training choral collective that is one of main aspects of choral sound aesthetics. Vocal sound formation is an indicator of concert and performance practice of a future music art teacher and music-pedagogical activity.

2. It is noted, that the main choirmaster's task is the correctly organized work of a training choral collective, taking into account resonant co-setting of voices, all psychological and physiological regularities of vocal sound formation.

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**Anna Kyfenko**, PhD, Lecturer, Applied College «Universum» Borys Grinchenko Kyiv University, Yu. Haharina ave, 16, Kyiv, Ukraine, 02094  
E-mail: a.kifenko@gmail.com

**Tetyana Romanova**, Specialist of Highest Category, Lecturer-Methodologist, Applied College «Universum» Borys Grinchenko Kyiv University, Yu. Haharina ave, 16, Kyiv, Ukraine, 02094

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## THE ESSENCE OF EXPERIMENTAL RESEARCH OF THE PROCESS OF STUDENTS' SOCIOCULTURAL VALUES FORMATION IN THE EDUCATIONAL ENVIRONMENT OF HIGHER EDUCATION INSTITUTIONS

**E. Zaredinova**

*The relevance of the problem of students' sociocultural values formation in the educational environment of higher education institutions is obtained in the article. The theoretical substantiation of the problem is carried out and the necessity and expediency of revealing the essence and logic of experimental research of the process of students' sociocultural values formation in the educational environment of higher educational institutions is proved. The methodological basis of the research, which is represented by the polyparadigm integrity of educational paradigms and the synthesis of ideas of scientific approaches, and the research methods, used in the work, are disclosed. It has been found, that the essence of the experimental work is to verify the potential of the methodology of students' sociocultural values formation within the axio-oriented educational environment of higher education institutions and clarify the logic of the axiogenesis of sociocultural values. The criteria apparatus of the research is revealed, it contains motivational-axiological, cognitive-reflexive, and subject-activity criteria with corresponding indicators. In accordance with the requirements for the diagnostic stage of the experimental study, the diagnostic tools, which used in the ascertaining and control stages of the experimental work, containing both standardized approaches (“Value Orientations Study” approach by P. Stepanov); “Schwartz's Study of Personality Values” questionnaire, etc.), and author's proprietary questionnaires (“Level of Formation of Sociocultural Values According to the Motivational-axiological Criterion” questionnaire etc.), are presented. The general sequence of experimental work, which was reduced to such a logical scheme, is highlighted: 1) diagnostics of level of sociocultural values formation; 2) the methodology of students' sociocultural values formation in the educational environment of a higher education institution; 3) analysis of the dynamics of sociocultural values at different stages of its axiogenesis and environment. The summary interpretation of criteria, indicators, and related diagnostic approaches is presented in the table. The stages of experimental work are succinctly disclosed*

**Keywords:** sociocultural values, axiogenesis, verification of research results, research methods, diagnostic tools

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### 1. Introduction

Modern globalization and European integration processes, the rapid pace of society emphasize the importance of sociocultural values in human life because they determine the identity of a culture that distinguishes it from others, as well as the mentality, inherent in this

culture, and the uniqueness of its cultural and historical experience. Thus, sociocultural values unite the sociocultural traditions of a certain society, the social aspects of different ethnic groups and individuals. It is already well-established in science, that the value sphere of the individual is its fundamental, basic component (A. Asmolov,