PERFORMANCE ANALYSIS BASED ON THE USE OF MULTIMEDIA TECHNOLOGIES IN PROFESSIONAL TRAINING OF MUSIC STUDENTS AT THE PEDAGOGICAL UNIVERSITY

[a]LARISA PARSHINA, [b]INNA KOBOZEVA, [c]NADEZHDA CHINYAKOVA

[a, b,c]*Mordovian State Pedagogical University named after M. E. Evseviev, Studencheskaya str., 11 A, Saransk, Russia, 430007*
email: [a]l.g.parshina@yandex.ru, [b]kobozeva_i@mail.ru, [c]chinyakova-n@yandex.ru

Abstract: The paper summarizes the scientific theoretical foundations and approaches to defining the place and importance of the performance analysis with the use of multimedia technology in the process of work on the musical image as part of musical performance training of students at pedagogical university. The forms and methods of work on a musical image based on the performance analysis with the use of multimedia technology have been differentiated. The authors examine the peculiarities of work on the musical image in the process of music performance training, along with pedagogical methods contributing to the performance analysis with the use of multimedia technologies in the process of work on the musical image.

Keywords: music education, music performance art, performance analysis, music image, multimedia technologies.

1 Introduction

Music performing art, as aptly noted by L. N. Stolovich (1985), becomes "a mirror of culture, its self-consciousness because it is the self-consciousness of those who create it" (p. 50-51). Solo and collective music performance plays a significant role in the artistic space of the world of culture, resulting in changes in value orientations, personal worldviews, strengthening certain competencies of music students.

Solo and collective music performance aiming to master the works of both folklore and professional tradition, seeks to contribute to the creation of a new artistic universe. A musical piece performed by a musician, as the value belonging to the musical culture of society, attains life in the mind of listener, who lives it through and evaluates. Therefore, communication between the performer and the listener is a necessary premise for the existence of musical art, and one of the main forms of this communication is the listener's perception of the musical image.

Extrapolation of the mentioned problem into the field of pedagogical education shows the necessity of considering this process of teaching the music students where development of their ability to accurately convey an emotional vivid musical image in the context of integral artistic perception and reflection of a message encoded by composer in their musical score is the key priority. At the same time, the uniqueness and persuasiveness of the performer's interpretation is associated with the creative conveyance of the musical image on the basis of that experience the performer gains related to understanding and living it through based on the performance analysis. For creating a bright performance concept of a musical piece the author's text should be studied in detail to identify the elements of musical language contributing to revealing and conveying the author's intent through bringing the musical image to life. Communicative chain, Composer - Performer - Listener, is inherent in the means of musical expression and the task of the performer, who is a future music teacher, in the process of scientific research into the performance analysis of a musical piece, is to convey the composer's intent to the listener through the musical image.

Performance analysis is not only a thinking process involved with the peculiarities of music perception, analyzing the structure of musical piece, its material matter and means of musical expression, but also interpretation of the emotive content, search for ways to produce an artistic impact on the listener through the external manifestations of the musician. Given that communication with music and comprehension of any work "is based on its analysis, then all of its directions should be present in the learning activities of students, systematically included in the learning process until they reach their full exhaustion" (Chinyakova, 2014, p. 71-75).

The guiding beacons of modern vocational education set the new requirements to organizing the performance training of a music teacher on the basis of innovative, information, multimedia technology. Multimedia technology opens up new opportunities in performing analysis during the work on the musical image. With the help of interactive integrated capabilities of multimedia technology there comes an opportunity to dive into a thorough analysis of historical aspects related to creation of a musical piece, musicological analysis, and analysis of performance techniques, which will contribute to more effective work on the musical image in the process of creating your own creative concept of the performance interpretation.

2 Literature Review

Addressing the problem of organizing the work on the musical image in the process of music performance training on the basis of the performance analysis is not a new aspect in the psychological and pedagogical literature. Theoretical analysis of the literature showed that there exist a large number of publications devoted to the performance analysis of a musical piece and reflecting its structure and stages (Liberman, 1988; Zhivov, 2017); the pianist's work on a piece of music (Stolovich 1985; Kogan, 2004; Neigauz, 2015; Neigauz, 2017; Borisov et al., 2020; Kobozeva et al., 2020; Savshinsky, 2020); problems of musical analysis in terms of theory and methodology of music education (Zadneprovskaya, 2020; Kolenko, 2013; Chinyakova, 2014); comprehension of musical image as a complex phenomenon (Borisova, 1999), preparation of students for perceiving and interpreting the artistic image (Karnaukhova, 2009), Chinyakova, 2014; Parshina & Karpushina, 2021; Vardanyan et al., 2020) including on the basis of the semantic analysis (Karnaukhova, 2019).

I. Gajim, L. Granetskaya (2018) note that the artistic image creates the impression of beauty through its perfect unity and ultimate meaningfulness of its constituent parts. There is nothing superfluous, random, and mechanically procedural. The authors distinguish three types of images in the artistic creative activity of performer: musical, artistic, performance. For the vivid and emotional performance of a musical piece it is essential that the composer's artistic intent is revealed, ensuring immersion in the musical image for its proper understanding, which is associated with the process of comprehension and perception, and requires a detailed performance analysis.

According to I. F. Orkina (2012), the performance analysis includes exploration of the performance means of expression which shape interpretation of a musical piece. It is based on the principle "See - Hear - Play". The art of interpretation consists in conveying the character of the music, its emotional meaning, and at the same time bring your own vision, understanding and living through the musical play as accurately and convincingly as possible. This makes the interpretation unique and persuasive.

Modern performing art is a reflection of the experience of generations, which is embodied in the modern environment for creative endeavors. In recent years, the issues associated with the use of multimedia technology, the latest developments in the field of digital tools for creativity, has become highly relevant. V. T. Deryuga, S. N. Gorshenina, Y. Evseeva, V. I. Laptun (2020) note that the development of information technology has contributed to the creation of virtual space for an unlimited number of users; the time of information, digital paradigm of education has come. The emergence of artificial intelligence (AI)

facilitated achievement of many learning objectives (Deryuga et al., 2020). Multimedia technology has made it possible to input, process, store, display and transmit over big distances huge amounts of different kinds of information (audio, video, text, graphics) (Parshina, 2008). In publications of recent years, researchers highlight the importance and specific characteristics of media competence (Babushkina & Kalugina, 2020), and focus on the use of multimedia technology in the music education (Parshina, 2008; Parshina, 2015; Parshina & Karpushina, 2020; Parshina & Karpushina, 2021); Kobozeva et al., 2020).

At the same time, the problem of performance analysis using multimedia technology in the process of work on a musical image has not yet received sufficient coverage in scientific literature.

3 Research Methodological Framework

The purpose of this research was to reveal the essence and specific aspects of organizing the work on the musical image in the process of music performance training based on the performance analysis with the use of multimedia technology. The research objectives were: 1) to consolidate the scientific foundations and approaches to defining the place and value of the performance analysis with the use of multimedia technology in the process of work on a musical image; 2) to differentiate the forms and methods of work on the musical image based on the performance analysis with the use of multimedia technology.

Comparative-correlative, logical, complex, dialectical, hypothetical-deductive approaches, as well as generalization, systematization, classification of the research results on the basis of theoretical analysis of scientific literature were the methodological guidelines. The research relied on theoretical methods: analysis of scientific literature, systematization and comparison of the works on the problem under scrutiny from the perspective of musicology and pedagogics.

4 Results and Discussion

4.1 Scientific foundations and approaches to defining the place and value of the performance analysis with the use of multimedia technologies in the process of work on a musical image

Performance analysis with the use of multimedia technology significantly accelerates the process of obtaining, comprehending and processing the necessary information and acquired performance experience. With the use of multimedia technology it becomes possible to get a generalized idea of music, character and figurative sphere of the musical piece (the main image, the circle of images, the change of moods) in the process of collecting and organizing the necessary information (a large volume of text, images, musical material, sound and video files, etc.) about the composer, the musical language of the era in which he lived; stylistic features, history of the musical piece creation, correspondence of the means of musical expressiveness to the patterns dominant in the particular historical epoch, most expressive performance of the musical piece, get to know various interpretations and performers of the musical piece. All collected information can be used for further work on the musical image.

The initial musical image, the first impression, gets quite firmly imprinted in the mind. The first vivid impressions help to more accurately grasp the author's idea and embody it when working on the musical image. The effect of the first impression will determine the individual interpretation of the piece of music.

Multimedia technology boosts the researching activity, allowing systematizing information about a musical piece and integrating it into a single content. The researching activity will be manifested in the ability to "go beyond" the boundaries; in paying attention to the elements of musical language, in the study of musical score (author's score and editorial notes: music tempo, mood, sounding, dynamics); in identification of the

means of musical expression (key, tone pattern, prevailing harmonics, harmonic pulsation, rhythmic pattern, textural expression, melodic pattern, role of voices in multi-voiced presentation, leading voice, phrasing, culmination and methods to reach it), specific aspects and components of a musical piece; in creating short content references reflecting the emotional coloring of the musical image; in building the scheme of a musical piece specifying the number of bars, tonal plan, harmonics (for pieces of homophonic-harmonic kind) and themes, counterthemes (for polyphonic pieces); in the ability to find the ways of artistic influence on a listener with the help of mimicry, gestures, eyes, posture, fluid movement, appearance, spatial organization, in generalization of data of the performance analysis, contributing to a deeper and more conscious work on the musical image (for example, making a scheme of the musical piece with indication of the number of bars, tone pattern in order to feel the structure and phrasing).

Interactive interface, hypertext structures, interactive properties of multimedia technology contribute to management of the received information about a musical piece. The ability to respond quickly to user actions and interact with multimedia data allows additional playing of audio and video files at the right time, focusing on the necessary details to properly work on the piece, make emotive content analysis, refresh and consolidate impressions, deepen into the figurative sphere of music, into the content of a musical piece, feel elements of musical language and phrasing at any stage in the process of work on a musical image.

Multimedia technology allows you to control the technical and artistic comprehension of the musical material when working on a musical image. Creating video recordings of own performances and comparing them at different stages of work on the musical image help to improve performance.

4.2 Forms and methods of work on a musical image based on the performance analysis with the use of multimedia technology

Work on the musical image based on the performance analysis with the use of multimedia technology implies the use of the following techniques:

- technique of problem-based learning (simulation of problem situations, proactive independent research activity of students, which manifests in the search for and analysis of information about the history of creation of a musical piece and information about its author);
- creation of a portfolio (in the process of performance analysis the information about the composer, about genres, about style is collected);
- project technique (organization of independent research activities of students aimed at solving the problems of the project);
- use of the role and business games (modeling interpretation of a musical piece);
- quest technique (in the process of performance analysis under the guidance of a teacher, students widen their knowledge and improve their performance skills);
- information and communication technology (performance analysis is based on the use of multimedia technology for collecting, processing and storing necessary information about a composer and a musical piece).

The methods of work on the musical image on the basis of performance analysis with the use of multimedia technology include interactive methods, exploratory methods, project-based learning, etc.

One of the leading methods of efficient and intensive training of students in the performance analysis with the use of multimedia technology when working on a musical image is the project-based learning. This method helps to direct students to the search for musicological knowledge about the stylistic features of a musical piece, which play an important role for choosing the performance mimicry, gestures, expressive movements, it also

sparks the research interest in the performance analysis, helps to acquire new knowledge about the composer and the musical language means and culture of the composer's historical epoch. Projects may focus on the genre features of a piece of music, its historical transformation.

For the work on the musical image based on the performance analysis with the use of multimedia technology, interactive teaching methods may be useful. Students interact with the teacher, virtual space, information content, other students in the format of group projects (through ensemble performance and individual/group forms of training), creative sessions, and brainstorming.

Exploratory teaching methods are most appropriate for performance analysis because it begins with exploratory, cognitive activities (collecting and processing information).

5 Conclusion

The primary and ultimate goal of work on a musical image consists in comprehension of the author's idea and its reproduction by students at a higher performing level: expressively, meaningfully, emotionally, technically free in accordance with the composer's style and the historical epoch in which he lived. The performance analysis involves comprehension of the musical piece, its emotional perception, examination of its structural composition, the means of musical expression. The performance analysis results in own creative concept of the emotive content, certain methods of artistic impact on the listener (facial expressions, gestures, eyes, posture, expressive movements, appearance, spatial organization). Multimedia technology allows a deeper dive into the performance analysis by collecting, systematizing, summarizing digital information about a musical piece as a single content and saving it for further use and work. Structuring and visualization of multimedia information, as well as interactive capabilities of multimedia technologies strengthen the motivation of performing search and boost cognitive and searching efforts of students.

Literature:

1. Babushkina, L. E., Kalugina, O. A.: *Students' Media Competence Formation in French Foreign Language Teaching in the Practice of Higher Education*. XLinguae, 13(1), 2020. 314–333 pp.
2. Borisov, V. O., Migunova, N. I., Kobozeva, I. S.: *Development of Motivation for Educational and Research Activities in Students Learning the Art of Musical Performance*. Domestic and Foreign Pedagogy, 1(4), 2020. 177 – 187 pp.
3. Borisova, S. L. *The Problem of Image in Musical Art*: dissertaion .... Candidate of Science in Philosophy: 09.00.01. Tyumen, 1999. 181 p.
4. Chinyakova, N. I.: *Role of Analytical Activities of Students in the System of Continuous Music Education*. Humanities and Education, 4(20), 2014. 71 – 75 pp.
5. Deryuga, V. T., Gorshenina, S. N., Evseeva, Y., Laptun, V. I.: *Teacher as a Humanizer of Digital Technologies in Modern Education*. Ad Alta: Journal of Interdisciplinary Research, 6, 2020. 80–86 pp.
6. Gajim, I., Granetskaya, L.: *Interpretation of a Musical Image as a Methodological Problem*. Musical Art and Education, 4, 2018. 132 – 142 pp.
7. Karnaukhova, T. I.: *Semantic Analysis as a Necessary Prerequisite for Interpretation of the Musical Image*. Music and art education in the modern world: Ttradisions and innovations: Proceedings of the 3rd International Research and Practice Conference. Editor in Chief T. I. Karnaukhova, Rostov-on-Don, 2019. 92 – 98 pp.
8. Karnaukhova, T. I.: *Theoretical Aspects of the Performance Interpretation of a Musical Image in the Preparation of a Music Teacher*. Bulletin of the Taganrog State Pedagogical Institute, 2, 2009. 397 – 401 pp.
9. Kobozeva, I. S., Chinyakova, N. I., Borisov, V. O.: *The Problem of Strengthening Emotionality in Students Learning the Music Performing Art*. The World of Science, Culture, and Education, 5(84), 2020. 109 – 112 pp.
10. Kobozeva, I. S., Chinyakova, N. I., Karpushina, L. P., Asatryan, O. F.: *Sheet Music as a Target of Cross-Disciplinary Analysis and a Tool for Teaching Music to Students of Pedagogical University*. Ad Alta: Journal of Interdisciplinary Research, 10(2). Special Issue XIV, 2020. 31–34 pp.
11. Kogan, G. M.: *The Pianist's Work*. M.: Klassika-XXI, 2004. 201 p.
12. Kolenko, R. G.: *Analysis of Musical Forms: Study Guide*. Minsk: Belarusian State University of Culture and Arts, 2013. 147 p.
13. Liberman, E. Ya.: *Creative Work of a Pianist with the Author's Score*. Moscow: Music, 1988. 234 p.
14. Neigauz, G. G.: *On the Art of Piano Playing*. Teacher's Notes. Saint Petersburg: Planet of Music, 2017. 264 p.
15. Neigauz, G. G.: *On the Art of Piano Playing*. Teacher's Notes: Textbook. Saint Petersburg: Planet of Music, 2015. 256 p.
16. Orkina, I. F.: *Performing Analysis. Essence and model of performance analysis*: Lecture for full-time students in the specialty 07.01.01 "Instrumental Performance (by types of instruments: orchestral folk instruments), specialty 07.13.01 "Folk Artistic Creativity". Compiled by I. F. Orkina. Barnaul: Publisher of Altay State Academy of Culture and Arts, 2012. 28 p.
17. Parshina, L. G., Karpushina, L. P.: *Development of Students' Music Auditory Perceptions within Multimedia Technology-Based Solfeggio Training Course*. International Journal of Applied Exercise Physiology, 9(2), 2020. 55–62 pp.
18. Parshina, L. G., Karpushina, L. P.: *Fostering the Students' Readiness to Reveal a Musical Image (in the Framework of the Discipline "Fundamentals of Music Theory Knowledge")*. Humanities and Education, 2(12), 2021. 75 – 83 pp.
19. Parshina, L. G.: *Fostering the Competences of Students of Pedagogical Universities with the Use of Multimedia Teaching Tools*. Humanities and Education, 1(21), 2015. 63 – 67 pp.
20. Parshina, L. G.: *Pedagogical Conditions for Fostering the Competences of Students in the Process of Mastering the Multimedia*: dissertation ... Candidate of Science in Pedagogics: 13.00.01. Saransk: Mordovian State Pedagogical Institute, 2008. 212 p.
21. Savshinsky, S. I.: *The Pianist and his Work:* Textbook; Edites by L. A. Barenboim. Saint Petersburg: Planet of Music, 2020. 276 p.
22. Stolovich, L. N.: *Life. Creativity. Human*. Moscow: Political Literature Publisher, 1985. 415 p.
23. Vardanyan, V. A., Khomyakova, I. V., Zobova, I. O.: *Formation of the Readiness of Students to Create an Artistic Image in the Process of Performing the Plot-Thematic Composition*. Perspectives of Science and Education, 4, 2020. 283–289 pp.
24. Zadneprovskaya, G. V.: *Analysis of Musical Pieces: Textbook*. Saint Petersburg: Planet of Music, 2020. 272 p.
25. Zhivov, V. L.: *Performing Analysis of a Choral Piece*: Textbook for Secondary Vocational Education. Moscow: Urait, 2017. 99 p.

Primary Paper Section: A

Secondary Paper Section: AM, AN