## **REVIEW**

## by Dr. Borislav Alexandrov Yasenov -Professor at AMTII "Prof. Assen Diamandiev, Plovdiv

dissertation for the award of the educational and scientific degree "*PhD*" in: field of higher education 1. Doctor of Philosophy in Doctor of Education 1,

Professional field 1.3. Pedagogy of education in...,

Doctoral programme "Methodology of Music Education".

## Author.

**Topic**: "Pedagogical technologies for improving the sound production in the upper register of the saxophone"

**Scientific supervisor**: assoc. dr Diana Ivanova Stancheva - Plovdiv University "Paisii Hilendarski"

By Order No. RD 21-710 of 01.04.2024 of the Rector of Plovdiv University "Paisii Hilendarski" I have been appointed as a member of the scientific jury for the procedure for the defense of a dissertation on the topic "Pedagogical technologies for improving the sound extraction in the upper register of the saxophone", for the acquisition of the educational and scientific degree "Doctor" in the field of higher education 1. Pedagogical Sciences, professional field 1.3. Pedagogy of Music Education..., doctoral programme "Methodology of Music Education". The author of the dissertation is Tsvetana Ivanova Karageorgieva - PhD student in full-time studies at the Department of Music, with scientific supervisor Assoc. Prof. Dr. Diana Ivanova Stancheva from Plovdiv University "Paisii Hilendarski".

The set of materials provided to me includes the following documents:

- CV in European format;
- Dissertation:
- Author's abstract;
- list of scientific publications.

Tsvetana Karageorgieva graduated from High Scool of Music in Shiroka Luka, in 1994. In the period 1994 to 1999 she studied at AMTII, Plovdiv, now AMTII She graduated with a Bachelor's degree in Music Pedagogy. From 2003 to 2006 he studied at the Music Academy of Bern, Switzerland, with a degree in Jazz Saxophone. During his studies at the University of Bern he worked as a freelance musician and played in the Big Band of the Swiss Jazz School. In 2014 she graduated from the AMTII "Prof. Assen Diamandiev", Plovdiv, with a Master's degree in Art Management.

The doctoral student's work experience is related to artistic and pedagogical activity. From 2013 to 2024 he worked as a musician in Switzerland, Germany, Austria, Bulgaria - Big Band Plovdiv, Plovdiv Wind Orchestra and Plovdiv Opera. In May 2018 he realized an original album with the title "City Night Lights".

He is a freelance teacher of saxophone, as well as a guest lecturer of saxophone at Paisii Hilendarski University and AMTII "Prof. Assen Diamandiev, Plovdiv.

The topicality of the topic of the dissertation "Pedagogical technologies for the improvement of sound production in the upper register of the saxophone" is determined by the need to examine, analyze and update the approaches in the teaching methodology for each musical instrument, in particular the saxophone, as well as their practical application.

The work explores and summarizes information related to the examination of fundamental staging requirements that facilitate sound formation in the saxophone, with an emphasis on the high register, poorly covered in the teaching methodology in Bulgaria. The

development is based on the approaches of prominent saxophone teacher-educators, searches and developments in this field, as well as on Karageorgieva's personal experience and purposeful pedagogical experimentation.

The doctoral student notes the fact that the most frequent deterioration of tone quality is observed in the high register of the saxophone, called "altissimo". In the methodology of saxophone teaching, the guidelines for achieving a quality sound in the above-mentioned register are insufficient. In the methodological literature on the instrument used in this country (American and Western European publications), guidelines for sound production in the altissimo register are given primarily for performers with established skills. In the Bulgarian music-theoretical literature, the problem under consideration is addressed only in Dimitar Simeonov's school for saxophone, as an appendix, with no other methodological guidelines for qualitative application.

The dissertation is provoked by the lack of more comprehensive and in-depth theoretical research and studies, the lack of specific pedagogical guidelines concerning the improvement of sound formation in the altissimo register of the instrument. Karageorgieva expresses the opinion that in the application of the current approach, some partial requirements, caused by the level and peculiarities of the trainee, as well as general methodological recommendations can be used, where intuition is important.

The foregoing justifies the author's interest in the problems under consideration and the conviction that such research will contribute to the expansion and improvement of the theoretical and practical competences of saxophonists.

The thesis of this thesis is that in order to master and improve the sound production of the saxophone, in particular its high register, specific methodological guidelines are used, which need to be mastered and applied. Systematic, purposeful work, both during lessons and in independent preparation, is also important for achieving a quality result.

For the development of the work the author relies on three aspects:

- analysis of the interpretations of famous saxophonists;
- theoretical knowledge acquired from specialized literature;
- many years of teaching and performing experience.

The subject of this dissertation is the mastery and improvement of sound production in the saxophone, particularly the altissimo register. The choice of the subject was prompted by the doctoral student's findings pertaining to:

- weaknesses in the technique of sound extraction in the performance practice in our country, leading to poor tone and therefore having a negative effect on the interpretation;
- the lack of sufficient clarity in the theoretical literature concerning the problems under consideration, as well as a specific system of approaches for improving sound formation in the methodology of saxophone teaching.

The object of the study is the process of teaching the saxophone to students studying the instrument as a Special Subject.

The aim of the present study is the formulation of methodological guidelines to enrich the learning process in order to develop the technical competencies of the saxophone students, contributing to a qualitative sound production in the high register of the instrument, and also to improve the technical skills of the students to achieve ease and virtuosity in interpretation and improvisation.

In order to achieve the objectives, the PhD student sets the following tasks:

- study of the historical development and refinement of the instrument, as well as its application in different musical styles;
- a study of the state of the art of the saxophone sound extraction problem, in particular its high register, as reflected in the methodological literature, identifying which of the issues raised have been resolved to date and which need research and development;

- Systematize issues arising in sound formation, with emphasis on the high register, defining rules and considering practical guidelines for mastering them;
- creation of pedagogical techniques helping to improve the sound extraction in the altissimo register of the saxophone in the learning process;
- Practical verification of the effectiveness of the proposed innovative methods in the considered problems in teaching saxophone to advanced students.

The methods used in the development are pedagogical observation, analysis (of theoretical, visual and sound information), abstraction, comparison, generalization, pedagogical experiment.

The hypothesis of the study is that the application of the new pedagogical approaches to improve the sound production in the high register of the instrument in the training of advanced students will contribute to improving the efficiency of the process of mastering the altissimo register, as well as the overall technical development of the trainees, respectively, and to improve the artistic performance.

In the introduction of this in-depth study, the PhD student presents the subject, object, aim, objectives and states his/her scientific hypothesis.

In Chapter One, "A Study of the Evolution of the Instrument and the State of the Problem of Sound Production in the Upper Register of the Saxophone in the Specialized Literature," the dissertation chronologically examines the evolution of the instrument and the state of the problem of sound production in the altisimo register of the saxophone in the specialized literature, identifying which issues have been addressed to date and which need research and development. It presents the results of the study of the problem in the methodological literature, the use of extended techniques such as sound effects and of overtones in sound production in the altissimo register. Sigurd Rascher's contribution to the improvement of the saxophone's high register, his concept of achieving quality tone, mouthpiece selection, and technique for mastering the saxophone's high register are noted. Conclusions are drawn and the views and opinions of various prominent saxophonists concerning the importance of the various components of sound production and staging requirements are analyzed.

Issues that have not been clarified and require elaboration are indicated. According to the doctoral student, the results of the study establish the absence of a system of pedagogical technologies conducive to the improvement of the altisimo register of the saxophone in Bulgaria, which justifies the need to develop such in the present work.

In the second chapter, "Pedagogical Technologies for Improving Saxophone Upper-Register Sound Production", Karageorgieva elaborates on the unsolved problems found in the study of the methodological literature. Performance techniques and suggestions for selecting equipment suitable for forming quality tone on the saxophone with an emphasis on the upper register are presented. The origin of the term embouchure, the meaning and development of the embouchure historically, types of embouchure, and the muscles and parts of the oral cavity associated with the embouchure system in sound formation are explained. Methodological guidelines are given for achieving an appropriate embouchure conducive to quality sound production in the high register of the saxophone, depending on the different stages of development of the learner. Attention is paid to the choice of mouthpiece and cloth, another important component influencing the formation of quality tone. Mouthpieces suitable for the high register of the saxophone are described, the result of many years of research by the doctoral student. Different characteristics are mentioned, such as material, shape, volume, etc.

The paper discusses the necessity of forming a correct embouchure in the initial stage of training to achieve quality results in mastering the altissimo register, referring to an embouchure characteristic of jazz interpretation. The basic element in sound production, the performer's breathing, is also explained, contributing to quality intonation, articulation, phrasing and dynamics to achieve an impressive artistic interpretation. Methodological guidelines are given.

Attention is paid to the octave valve unifying the application in both registers, as well as to peculiarities in the performance of overtones in the saxophone. The concept of mastering the vowel sounds and their relation to mastering the high register of the saxophone is proposed. Important generalizations and conclusions are made and methodological guidelines are given.

In the third chapter, "An Experimental Study of Pedagogical Technologies for Improving Saxophone Upper-Register Sound Retrieval," the dissertator reports the results of a pedagogical experiment implemented between 2021 and 2023, involving 14 students studying saxophone as an advanced instrument at the universities where he teaches.

In the final stage of the experiment, the doctoral student makes a comparative analysis of the level of technical skills of the trainees from the initial stage with the level at the end of the formative stage, taking into account the effectiveness of the experiment.

Conclusions are drawn, which justifiably defend the hypothesis of the dissertation, namely that the application of new pedagogical approaches to improve the sound production in the high register of the instrument in the training of advanced students will contribute to improving the effectiveness of the pedagogical process in mastering the altissimo register, and also to the overall technical development of students, respectively, and to improve the artistic performance.

All this will lead to enriching the theoretical and practical skills of the performers and expanding the competences of music educators. The above determines the contribution character of the dissertation.

The research creates a prerequisite for the development of new technical exercises that contribute to the quality of sound formation in the high register in jazz saxophone training and enrich the interpretive possibilities of performers.

The work collects, organizes and analyzes a large amount of information, presented in 155 pages, of which 147 are main text. The explanations are substantiated with relevant examples (29 in number), which contribute to creating an even clearer picture of the subject under consideration. There are 8 tables and 18 diagrams reflecting the experimental results. The bibliography includes 8 Bulgarian sources, 93 in Latin and 23 web pages.

The reference of the scientific publications shows that they are three in number and are directly related to the topic of the thesis.

- "The choice of mouthpiece for saxophone an important condition for forming a quality sound in jazz music performance", Musical Horizons 7/2021;
- "Sigurd Rascher contribution to the development of the upper register of the saxophone (Altisimo)", Proceedings of the Eleventh Scientific Forum, Volume I, Plovdiv University Press, 2022, ISSN 2738-8859;
- "The saxophone constructive development of the instrument from its inception until today", Scientific Works of the Union of Scientists Plovdiv, Series B, Natural Sciences and Humanities, Volume XXIV, Plovdiv, 2023, ISSN 2534-9376 (on-line).

The abstract gives a clear picture of the content, subject, object, aim, objectives, research tools and reflects the main results achieved in the dissertation.

The contributions of the paper are as follows:

- actual generalizations and conclusions of theoretical character and significance are made, which will help to develop the competences, respectively the methodological work in saxophone teaching;
- Attention is paid to a problem in saxophone teaching for which no systematic pedagogical approach has been developed, namely the work of improving the high register of the instrument, and solutions and methodological guidelines are proposed;
- the consideration and theoretical justification of the essence and the constituent elements of the performance technique of the saxophone and the knowledge of the constructional features and the principle of sound formation helps to study them in a differentiated way, to systematize

them and to create approaches for the development of the aforementioned technique, with an emphasis on the altissimo register in the learning process;

- the definition of the characteristics of the articulation of the individual tones in the altissimo register, the ambuscière, the performer's breathing depending on the dynamics, the tone quality and phrasing, the indication of the specific finger combinations, will contribute to the creation of methodological exercises for the development of the high register in saxophone training;
- Analyzing the sound production in the high register of the instrument, controlling the air flow and the performance technology in articulating individual tones, as well as the possibilities of applying dynamics and phrasing in musical works contribute to the enrichment of artistic expression.

The dissertation has a theoretical and practical character, contains scientific and applied results, contributing to the methodology of saxophone teaching.

In conclusion, I would like to point out that Tsvetana Karageorgieva's dissertation on "Pedagogical Technologies for Improving Saxophone Upper-Register Sound Production" impressed me with the depth of the subject matter, the scientific-theoretical grounding and the qualitative examples that help to make the research even clearer. I believe that the theoretical work meets the requirements for the degree of *Doctor of* Education and Science as set out in the Law on the PhD in Education and Science and the Regulations for its implementation. This gives me grounds to propose to the esteemed scientific jury to award Tsvetana Ivanova Karageorgieva the degree of Doctor *of* Education and Science.

16 .05.2024.	Reviewed by:
	(Prof. Dr. Borislav Yasenov)