The purpose of this article is to disclose particular and the most characteristic features of using contemporary types of professional breathing by musicians playing wind academic instruments. The methodology of this investigation is based on the application of analysis and synthesis methods as well as comparative and system-complex ways of research. The methods of observation and generalization are applied as specialized methodological instruments for receiving the precise empirical results. The scientific novelty lies in the revealing of peculiar criterions of modern types of performer breathing and their particular principles of performing and practical use. The conclusions of this research produce sequences of character-logical attributes of the present types of professional respiration of the artists of wind music performing art. First of all, mixed chest-abdominal principle of working of respiratory system constitutes the particularity of sidepiece, spinal-lateral, full and incomplete breathing. The authors emphasize the absence of huge forward protrusion of stomach muscles. The place of pressure of air column is carried out to low sectors of abdominal cavity. The researchers stress on the necessity of system physical exercises for abdominal muscles.

The keywords: professional breathing, wind instruments, respiratory system, chest-abdominal breathing principle, muscles, pressure, particularity, type, air, performer.

PARTICULARITY OF USING MODERN TYPES OF PROFESSIONAL BREATHING BY WINDERS

The purpose of this article is to disclose particular and the most characteristic features of using contemporary types of professional breathing by musicians playing wind academic instruments. The methodology of this investigation is based on the application of analysis and synthesis methods as well as comparative and system-complex ways of research. The methods of observation and generalization are applied as specialized methodological instruments for receiving the precise empirical results. The scientific novelty lies in the revealing of peculiar criterions of modern types of performer breathing and their particular principles of performing and practical use. The conclusions of this research produce sequences of character-logical attributes of the present types of professional respiration of the artists of wind music performing art. First of all, mixed chest-abdominal principle of working of respiratory system constitutes the particularity of sidepiece, spinal-lateral, full and incomplete breathing. The authors emphasize the absence of huge forward protrusion of stomach muscles. The place of pressure of air column is carried out to low sectors of abdominal cavity. The researchers stress on the necessity of system physical exercises for abdominal muscles.

The keywords: professional breathing, wind instruments, respiratory system, chest-abdominal breathing principle, muscles, pressure, particularity, type, air, performer.
The problems of professional breathing of musicians on wind academic instruments represents the most impotent and very necessities questions of performing and pedagogical practices. Difficulty lies in the multi-laterals of complex nature of the processes of performing inhalation and exhalation. Integrity of the sound generating apparatus of winders, specifically synthetics of the work of specialized breathing, resonator system and embouchure (performer’s lip machine) constitute a bright expressive holistic character of the technological process of playing an instrument.

Consequently, the most difficult task for a contemporary musician on wind academic instrument is indivisible perception and complete awareness about physiological acts of respiratory system of a winder. The complex nature of professional breathing is receiving a particular significance in the light of introducing into playing practice of its new types. Among of the most well-known modern varieties are side-pieces, spinal-lateral, full and incomplete wind respiration. Certainly, new technological kinds of breathing cause a sequence of questions concerning performing particularity of one or another type of respiration, its characteristic attributes and features of wide practical applying in professional sphere of wind brass and wood academic performing?

The topicality of announced theme is conditioned by its enormous significance in long creative way of every musician. Evolution of technological processes of professional breathing of performers on wind classical instruments is implemented, in the first place, from results always growing demands of contemporary academic music.

The questions of air volume, subtleties controlling of air flow, specialized relationship respiration with other components of sound generating machine (resonator, embouchure) constitute technological foundation for deciding a lots of artistic tasks.

The matters particularities of contemporary types performing breathing have the most topicality in the sphere of modern musical pedagogy. Herewith high significance this problems is delineated on the all levels of music educational process, as in professional beginning school and at the middle and higher pedagogical stages.

A renowned teacher, professional academic trumpet player and today’s researcher E. Beliy approves the following: “Among of instrumentalists and vocalists there is an observing tendency to approach the problem of respiration with some frightening experience as if this is something uncontrollable, mysterious, that only somebody selected can hope sometime to realize and to cope with all wisdoms” [4, 101].

Analysis of domestic and foreign explorations devoted to studying of different components of professional sound-generating machine of performers on wind brass and wood instrument, in particular their specialized breathing, confirms inadequate attention to topicality of the questions of singularity of respiration machine of a modern winder.


An investigator E. Beliy [4] in detail considers the versatile spectrum of questions, connected with the technology of wind instruments breathing. But, unfortunately, researcher does not describe wide singularity of contemporary professional respiration types for musicians on classical wind instruments. The scientist studies a lot of key concepts namely support of exhalation process, phase of inhalation, place comfortable sounding, maximal complete phase of exhalation and others. Together with this, E. Beliy is considering it without outlining particular, singular attributes of one or another kind of performing breathing.

Scientific-investigative activity of a teacher, renowned researcher and well-known academic trombonist G. Martseniuk [5; 6] has brightly expressed practical significance of studying of playing wind-instrument respiration. The work of a popular American saxophonist and teacher D. Laibman [8] considers professional respiratory system from the position of the most sounding individualization of the instrument.

Research activity of an outstanding scientist, performer on classical bassoon, Professor V. Apatskiy [1; 2; 3] represents maximal wide and profound theoretical and methodological approaching into exploration questions of professional wind-instrument breathing. The researcher studies different types of vocational respiratory system, including and its modern kinds. But we should emphasize that he is deals in detail only with the most foreground types of breathing for highly qualified musicians on wind brass and wood academic instruments, namely abdominal and full chest-abdominal respiratory kinds.

The purpose of this scientific article is to open particular and the most characteristic features of using contemporary professional breathing (inhalation and exhalation) by performers on wind brass and wood academic instruments.

Synthetic work of many components of person’s respiratory system is the main singular attribute of performing breathing of winders. Herewith, some of them do not have certain nerve receptors. This makes it impossible for a musician to feel the work of respiration organs. V. Posvaluk approves the next: “Performing breathing is a difficult process of nerve-muscles apparatus. Lungs, diaphragm, chest and its muscles, abdominal cavity, abdominal muscles as well as back and even mouth’s cavity take part in its work. The work of some of mentioned internal organs and muscles (for example lungs, diaphragm) cannot be felt directly, for the reason that they have not certain nerve receptors. This attribute constitutes the big complexity for specialized control of performing respiration of professional musicians.” [7, 6].
It is known that three fundamental types of professional breathing are groundwork of traditional wind instrument pedagogy and academic wind musical performing art. These are chest, abdominal and chest-abdominal respiration. Mentioned types are very popular and famous for all musicians on wind classical instruments. The definitions of those kinds breathing is proceeding from characteristic phase of inhalation that is inhaling to chest, abdominal or mixed (chest-abdominal) places of very complex respiratory apparatus.

It is necessary to emphasize, that accomplishment of the most exact separation and putting limitation on the use of one or another type of breathing on practice are overmuch conditionally, because to every kind of vocational respiration involves all parts of respiratory system to different extents. A renowned investigator G. Martseniuk claims the next: “Generally, so-called clean breathing (chest or abdominal) for playing wind instruments does not exist. It is always mixed to certain degree, because in process of performing all respiratory muscles are used to a greater or lesser extent. This division of breathing on types depending on gradation activity of certain groups of muscles may be implemented only very conditionally” [5, 60].

Still, the vocational practices of many outstanding academic performers of the second half of the XX – early XXI centuries delineate a series of contemporary types of professional respiration namely, "sidepiece", "spinal-lateral", “full” and "incomplete” breathing.

The mixed chest-abdominal principle of respiration is their most important particular characteristic. Big pressure of air from sides or spinal-lateral places of breathing apparatus characterizes it. “Full” as well as “incomplete” performing respiration includes all sectors of respiratory systems (chest, abdominal, sidepiece, spinal) and is characterized by the volume of air, filling lungs.

Particularity outlined contemporary types of professional breathing is conditioned by absence of huge protruding middle and down segments of abdominal cavity. Active working sidepiece and spinal-lateral of abdominal round liquidates protrusion of press's muscles, produces approximately even expansion of spinal-abdominal circle. Professor V. Apatskiy determinates this type of vocational respiration as full chest-abdominal kind. At the same time the celebrated investigator and teacher emphasizes the importance of necessity for a performer to have the largest volume of air. Outstanding researcher is underlining the next: “The particularity of wind instrument performing, as a rule, demands enormous volume of air. Consequently, musicians on wind brass and wood academic instruments have to learn full chest-abdominal breathing. Namely it generates feeling that air comes not only in chest and abdominal cavity, but also in back and sidepieces.” [1, 95–96].

Transference of the place of support for air column from upper sector of abdominal muscles to the lower part is a shining singularity of modern types of professional performing respiration (“sidepiece”, “spinal-lateral”, “full” and "incomplete”). Certainly, this position increase intra-abdominal pressure is dangerous for musicians as it can cause vocational illness – inguinal hernia. "Weakness of muscular and ligamentous apparatus of abdominal walls as well as growing inter-abdominal pressure generates conditions for appearing of hernia. This growth is observed during the time of heavy physical work and formed in the result of different kind of tensions. Mentioned large pressure can lead to enormous thinning of layers of abdominal wall in its weak part and protruding it.” [1, 97]. Hence, the special physical exercises for strengthening of lower muscles of abdominal cavity must be included, as result said, into the above mentioned particular features of use of contemporary types of professional breathing for performers on wind academic instruments. Muscles of musician’s stomach have to be always in active tone and to withstand huge loads, tensions of various degrees on inter-abdominal muscles. It should be emphasized that musician’s belt around abdominal cavity is singular preventer from appearing inguinal hernia. Middle level tightening of belt saves down muscles of artist’s stomach from possible impulses.

Now then, above-mentioned information generates foundation for the next generalizing conclusions. The particularity of applying the contemporary types of professional breathing by performers on wind academic instruments is formed, first of all, from mixed, chest-abdominal principle working of respiratory system. Namely this synthetic and very readable quality constitutes the foundation of "sidepiece", "spinal-lateral", “full” and "incomplete" performing respiration.

Absence of huge forward protruding of muscles of abdomen is characteristic for modern kinds of wind instruments vocational breathing. It is important to underline that expansion of muscular material takes part nearly evenly during the whole circle of respiratory round.

Significant attribute for these types of breathing is establishing place for support, namely pressure of air into low parts of abdominal cavity. This feature obligates many professional musicians to practice the system of physical exercises as well as to use stomach round belt when they play.

The above mentioned features for modernized types of performing respiration of musicians on wind classical instrument have shining expressed practical criterion of its awareness. Therefore, daily, systemic and specialized lessons on instruments should become the main condition on the way to fundamental theoretic development of new particularity of vocational respiratory system.

Prospects of studying and understanding this problem lie in the use of different innovative methods of practical and theoretic investigations, involvement of certain computer programs as well as use of method of scientific experiment.

Certainly, future study of singularity of modern types of professional breathing should be carried out also on the basis of performing analysis of artistic compositions for wind academic instruments, written in the second half of XX – early XXI century. However, domestic and foreign composers should be the authors of such artistic works for wind brass and wood academic instruments.
Мистецтвознавство

Література


References


Стаття надійшла до редакції 18.10.2017 р.