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PECULIARITIES OF PERFORMING TECHNIQUE DEVELOPMENT IN FRENCH HORN ART

The article actualizes the problem of performing technique development in French horn art, taking into account its essential functional and organizational-structural properties.

The purpose of the article is to consider the evolution of performing technique in French horn art and describe the horn as a brass wind instrument in its cultural and historical retrospect, which will enable characterizing the expressive aspects and sonorous performing features of the studied instrument.

The following methods are used in the work: analytical – to analyze approaches that have been formed in the art history literature in the direction of studying the phenomenon of French horn performance; historical – to understand the historical milestones of formation and development of performing technique in French horn art.

Scientific novelty. For the first time, on the basis of learning the peculiarities of formation of a group of brass instruments, the specifics of French horn performance is summarized through the prism of performing technique development (in particular, the main features of French horn technique are determined).

In the process of research, the following results were obtained, and the following conclusions were formulated. The concept of “performing technique” is considered in the context of modern musical-instrumental performance, which dates to the birth and early stages of the instrumental art formation. A retrospective analysis of performing technique is presented, which enables its understanding as a movement-motor organization of playing action with gradual recognition of artistic imagery in it as the main characteristic of the French horn playing skills formation. Emphasis is placed on the process of formation of structural and organological parameters of the instrument under study. The historical-organological, culturological and artistic aspects of the process of performing technique development in French horn art are emphasized.

Key words: French horn, musical-instrumental performance, wind instruments, performing technique, means of expression.

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ОСОБЛИВОСТІ РОЗВИТКУ ВИКОНАВСЬКОЇ ТЕХНІКИ У ВАЛТОРНОВОМУ МИСТЕЦТВІ

У статті актуалізовано проблему розвитку виконавської техніки у валторновому мистецтві з урахуванням її сутнісних функціональних і організаційно-структурних властивостей.

Метою статті є розгляд еволюції виконавської техніки у валторновому мистецтві та висвітлення валторни як мідного духового інструменту в його культурно-історичній ретроспективі, що уможливить характеристику виражальних аспектів та звукообразних виконавських особливостей досліджуваного інструменту.

У роботі застосовано такі методи: аналітичний – для аналізу підходів, що сформувалися у мистецтвознавчій літературі на пряму дослідження феномену валторнового виконавства; історичний – для розуміння історич-

них віх становлення та розвитку виконавської техніки у валторновому мистецтві.

Наукова новизна. Вперше на основі застосування особливостей становлення групи мідних духових інструментів узагальнено специфіку валторнового виконавства крізь призму розвитку виконавської техніки (зокрема, визначено основні риси валторнної техніки).

У процесі дослідження отримано такі **результати** і сформульовано такі **висновки**. Розглянуто поняття «виконавська техніка» в контексті сучасного музично-інструментального виконавства, що сягає ще часів зародження і ранніх етапів становлення мистецтва інструменталізму. Подано ретроспективний аналіз виконавської техніки, що уможливило її розуміння як рухово-моторної організації ігрової дії з поступовим визнанням в ній художньої образності як основної характеристики формування навичок гри на валторні. Наголошено на процесі становлення конструктивно-органологічних параметрів досліджуваного інструменту. Підкреслено історико-органологічні, культурологічні та мистецькі аспекти процесу розвитку виконавської техніки у валторновому мистецтві.

Ключові слова: валторна, музично-інструментальне виконавство, духові інструменти, виконавська техніка, виразальні засоби.

Introduction. The study of the problem of French horn performance involves consideration of the complex of artistic expressive means of the instrument, its timbre, structural and organological features, as well as their evolution during development of the French horn as a brass wind instrument. The French horn, as one of the most vivid wind instruments of the symphony orchestra, plays an important role among the elite instruments of academic sound due to its sonorous properties and is capable of reproducing human emotions, feelings, and thoughts. A wide palette of sound-expressive characteristics, a significant range and unique timbre possibilities have enabled famous figures of musical art to use these properties of the instrument to create vivid examples of performing art.

Analysis of recent research and publications. The processing of primary sources proves that in his scientific research P. Krul theoretically substantiates the problem of the genesis of brass instruments in the national musical culture of Ukraine (Krul, 2000). In the same aspect, in the works of V. Bohdanov, the ways of brass musical art development in Ukraine are determined (Bohdanov, 2000). Attention is drawn to the study of V. Posvaliuk, which examines trumpet performance in Ukraine for the first time, analyzes the performance characteristics of famous musicians and creative succession of generations of the Kyiv school of trumpet performance (Posvaliuk, 2006). Formation of foreign wind instruments schools, namely trumpet performance schools, and their impact on Ukrainian art development, is considered in the works of H. Martseniuk (Martseniuk, 2011). Of special importance for our research are the scientific works of Ye. Churikov, in which the theoretical and practical foundations of performing technique

in French horn art are developed.

The purpose of the study is to consider the evolution of performing technique in French horn art and describe the horn as a brass wind instrument in its cultural and historical retrospect, which will enable characterizing the expressive aspects and sonorous performing features of the studied instrument.

Presentation of the main research material. The study of scientific sources proves that the predecessors of the modern French horn appeared in ancient times, at the stage of formation of human civilization. It is worth noting that the first wind instruments were various objects from the surrounding environment and everyday life, capable of reproducing sounds through the passage of air. Among such objects were pipe-shaped objects, such as: animal horns, sea shells, etc. (Churikov, 2021).

The name “French horn”, which has long been used in the musical lexicon of East Slavic countries, comes from the German term Waldhorn, which is translated as “forest horn”. This term indicates its initial use as a hunting tool. This name has also been preserved in the music of some European countries, in particular in the Czech Republic, where the French horn is still called a “forest horn” (Explanatory Dictionary).

The main function of most early musical instruments was to transmit signals through sounds. The evolution of these tools began with their manufacture from various materials, such as animal bones, clay, wood, and later from metals, including copper, bronze, and silver. The first horn-like wind instruments were mostly straight in shape, and curved, rounded versions began to appear already in the 12th century.

Researcher Ye. Churikov, analyzing musical instruments of the Ancient World on the basis of biblical sources, singles out a group of horn-

like instruments, which, in our opinion, is a logical stage in the development of the modern French horn. The scientists' conclusions regarding biblical instruments make it possible to note that among the various instruments described in the Holy Scriptures, there are those that, in terms of their construction and method of sound production, largely resemble the modern French horn (Churikov, 2021).

Highlighting the history of horn's origin and its etymology, the researchers single out the ancient *buccina* as one of the first and probable ancestors of this instrument, which was known already in the 1st century AD, i.e., in the times of Ancient Rome. After all, it was the *buccina* – a long and curved pipe – that gradually began to be rolled up in a spiral, thereby achieving the shape of a closed circle. This is the shape of a modern tool. The name “horn” was first given to just such a *buccina*, despite the well-known and fairly established opinion that the prototype of the French horn is officially considered to be an ordinary animal horn adapted for musical performance.

Researcher V. Hromchenko claims that the competitive factor had a significant impact on the development of not only the artistic aspects of performance, but also the technique of playing, in particular, the musician's virtuoso abilities. This was manifested in the improvement of tactile sensations during contact with the instrument, improvement of motor skills and other aspects (Hromchenko, 2020). He also notes that this aspect of musical art led to the emergence of a separate genre – the Pythian nome, which required not only the high skill of the performers, but also the programmatic content of the music.

With the beginning of the Middle Ages and the development of feudalism, secular culture centered around cities, castles and fortresses, which affected the role of art in society. During this period in European countries, the art of tsirkingers, troubadours and trouvères, which was universal and multi-genre in nature, was actively developing. In the culture of the Middle Ages, wind instruments, due to their loud sound, were mostly used for signaling, and not for accompaniment (Bodiak, 2017).

Instrumental technique and performance tools in the art of minstrels and troubadours were at a fairly high level of development. In general, the art of minstrels contributed to

the improvement of professional performance on wind instruments of that time, and some of its features, particularly lyrical, became the basis for the formation of the instrumental performance style of the Renaissance (Bodiak, 2017).

According to V. Hromchenko, during the development of technical and expressive aspects of instrumental music in the Middle Ages such instrumental genres as *estampie* and *cantus* arose (Hromchenko, 2020, p. 57). Other researchers, in particular O. Oliinyk, also believe that it was the ornamented melodic *estampie* that influenced the development of other genres and the practice of ornamented improvisation in general, which prepared the style of instrumental performance of the Renaissance with its characteristic virtuoso coloring (Oliinyk, 2005, p. 13).

Researchers note that in the early Middle Ages there was a tendency towards the decline of instrumental performance culture, which was connected with the negative attitude of church leaders towards music. Although some wind instruments were still used during various ceremonies and celebrations, criticism focused on the display of instrumental virtuosity and the improvisational nature of the performance (Hromchenko, 2020, pp. 53–54). These facts indicate that the development of performance technique on mouthpiece wind instruments not only did not stop, but also actively moved in the direction of improving virtuoso skills.

Another area of using wind instruments in the Middle Ages was the so-called tower music – a complex of signals that were performed from the height of the towers of medieval fortress cities to inform residents about various events, situations or celebrations. Although trumpets predominated in this context, horn-like instruments were also often encountered.

Thus, the music of the hunting horn in European musical culture has become a separate type of musical activity, having undergone an evolution from a purely functional use to a more artistic and performing creativity, that actively flourished in the 17th century. At the same time, during the 16th century, the predecessors of the modern horn were mostly perceived as hunting horns with limited use, and their sound remained loud and harsh.

A gradual change in the performing practice, when the instrument that was previously called

a “hunting horn” began to be called a “horn”, took place at the beginning of the 18th century. One of the proofs of this fact is the well-known works describing the process of orchestra development, using the term “horn” and sometimes “French horn” (Martseniuk, 2011).

The constructive development of the horn in the 17th century, like other musical instruments, took place not only thanks to the practical searches of musical masters and performers, but also under the influence of scientific achievements of that time in the fields of acoustics, mechanics, mathematics, physics, and so on. A special role in this process was played by the musicological works of that time, which related to music theory, writing techniques, composition and instrumental science.

Summarizing the ideas presented in the works of M. Pretorius and M. Mersenne, Ye. Churikov emphasizes that they formulated the main principles regarding the specifics of sound production of instruments of the trumpet group. According to these provisions, the main tone of the instrument is determined by its length, and overtones, or higher tones, arise as a result of the separation of the air column due to a change in lip tension and blowing force (Churikov, 2021).

A new stage in the development of the French horn (or its predecessor, the hunting horn) was its introduction to the orchestra in the middle of the 17th century. This greatly accelerated the evolution of the horn and radically changed its artistic role, as the instrument began to “emigrate” from the circle of applied instruments to the class of musical instruments of the academic orchestral tradition. During this period, when there was a transition from polyphonic forms of music to new homophony, the process of orchestral culture and, in particular, the orchestra itself, continued. Therefore, the gradual enrichment of the string orchestra with wind instruments, in particular the first horns, became a timely and natural step.

Characterizing the experience of the first involvement of the French horn in orchestral music using the examples listed above, the researcher points out that this instrument was used for a long time mainly as an attribute of the signal hunting tradition, and the time for the full use of the individual stylistics of wind instruments would not come before the second half of the 18th century (Churikov, 2021).

In addition, wind instruments, in particular

horns, began to be actively used by composers of the Mannheim school, who made a significant contribution to the development of the symphonic genre and orchestral music in general. The main use of these instruments consisted in accompanying a string group, strengthening important episodes and accentuating rhythmic elements, and solo fragments were quite rare. Once in the orchestra, the horn began to develop as a classical instrument, remaining for a long time “natural”, i.e., capable of reproducing only the sounds of the natural scale, without the possibility of playing chromatic notes.

The transition of the horn to the orchestral musical culture (the second half of the 17th century – the first half of the 18th century) became the period of its adaptation, when the practice became the use of several natural instruments with different tunings. This significantly enriched the orchestra, expanding its timbre and acoustic capabilities, and also contributed to the development of the organology of the horn, improving its sound characteristics and playing technique. At this stage, the instrument was called natural or baroque horn.

The inclusion of the horn in the composition of the orchestra greatly expanded its timbre and color possibilities, however, the initial use of a large number of natural instruments with different tunings complicated the creative practice, making it sometimes cumbersome and complex. When performing in an orchestra, musicians were often forced to change instruments, and composers had to take these limitations into account, which significantly narrowed the possibilities for creativity in the process of writing orchestral works. This made it necessary to expand the range and scale of the horn by other methods. One such innovation was the use of additional tubes (crowns) that were inserted between the mouthpiece and the mouthpiece tube, allowing the tuning of the instrument to be changed by lowering the main tone by a certain interval depending on the length of the selected crown. Thanks to this, horn players no longer needed to carry several instruments with different tunes – one horn with a set of such crowns was enough.

The next stage in the constructive development of the horn can be considered the second half of the 18th century, when the Dresden horn musician Anton Joseph Hampel and the inventor Johann Georg Werner introduced a system of additional crowns (curved tubes of different lengths)

integrated directly into the instrument itself.

Despite the significant organological advantages that opened up in performance on the horn thanks to the constructive innovations of A. J. Hampel and J. G. Werner, the inventive horn remained an insufficiently improved instrument. Its main disadvantages were the presence of only natural tunings and the lack of an opportunity to perform chromatic sounds. An important step in the development of the instrument, as well as in the improvement of the horn performance technique, was the invention of the so-called closed sounds, which is also attributed to A. J. Hampel.

The technique of closed sounds, which was gradually improved and approved, made it possible to perform almost complete diatonic scales, depending on the chosen tuning of the instrument, and provided coverage of the main part of the intervals between overtones on a large range, actually filling the first and second octaves.

It is obvious that the full integration of the horn (as well as other brass instruments) into the composition of orchestral instruments of the academic tradition required the development of technological solutions for the chromaticization of the instrument. This question became especially relevant with the development of music, the evolution of the musical language, in particular its tonal and harmonic sphere, which in the 18th and 19th centuries became increasingly complex and chromatic.

The process of systematic study and further scientific and theoretical development of the problems of performing technique, which began in the 18th century and continues to this day, spans about three centuries and has gone through several stages. At these stages, understanding of the essence, nature and functioning mechanisms of performing technique changed, and in modern musicology these stages were established as mechanistic (J. F. Rameau, P. Rode, F. Kalkbrenner, et al.), anatomical and physiological (F. Steinhausen, L. Deppe, R. Breithaupt, et al.), psychotechnical (F. Busoni, I. Hoffman, et al.), as well as the stage of theoretical concepts of the 20th century (based on the synthesis of artistic and mechanistic approaches). A retrospective analysis of the development of theoretical ideas about performing technique (within the 18th – 20th centuries) gives grounds for asserting that most authors understood this concept primarily as

the movement-motor organization of playing an action instrument. Over time, especially since the beginning of the 20th century, the determining importance of the mental (psychophysiological) and auditory components, and later the artistic and figurative dominant, as a key condition for the formation of skills in playing a musical instrument, began to be recognized.

The scientific-methodological thinking of the 20th century demonstrates a growing interest in the study and further development of the laws of a musician-instrumentalist's performing technique functioning. This is manifested in the expansion of the meaning of the term "technique" – from understanding it as purely motor skills to realizing it as part of a complex performing technology.

The specificity of the French horn player's performing technique directly depends on the nature of the instrument and its structural and organological properties, as it is closely related to its sound (artistic and expressive) characteristics. The analysis of the acoustic features of sound production on the French horn confirmed the natural connection between the sound quality (timbre, loudness, character, articulation properties, etc.) and the organological specificity of the instrument.

The basis of the horn player's performing technique (as well as the entire complex of his playing actions) is a harmoniously developed performing apparatus. It is a set of organs and parts of a musician's body that are systematically organized to perform anatomical, physiological and psychophysiological actions under the control of the central nervous system in the process of musical performance on the instrument.

Conclusions and prospects for further research. During many centuries of development of the French horn and horn art in general, performing technique, as the main means of artistic expression and instrumental performance, underwent constant changes, which were determined both by the constructive evolution of the instrument and by the genre and artistic canons of musical culture of different eras and regions. In different historical periods, the key features of the horn technique were: improvisation and instrumental artistry (in competition-type music of antiquity); coloristic virtuosity (troubadours and tsirkingers of the Middle Ages and the Renaissance); refined vocal virtuoso performance (clarino of the Baroque period); emphasizing the sound-

timbral and expressive qualities of the instrument (J. Haydn, V. Mozart, K. Gluck, L. Beethoven); deepening of the figurative and expressive component of sound, interpretation of the horn as an elegiac, poetic instrument (G. Donizetti, G. Berlioz, R. Schumann, R. Wagner, F. Liszt, J. Verdi); the wealth of artistic characteristics and emotional expressions in the music of the 20th century (P. Hindemith, R. Strauss, M. O. Messian, F. Poulenc, et al.); application of new timbre-acoustic effects, focused on color and sonoristics, generalization and improvement.

as well as sound experiments and awareness of modern compositional techniques (D. Ligeti, A. Copland, T. Bedeti, L. Berio, V. Runchak, et al.).

Thus, the conducted study of the performing technique development in the context of formation of the art of playing the French horn, which covers the historical-organological, cultural and artistic aspects of this process, will become the basis for the further development of the theoretical and practical foundations of the French horn art, as well as for their further understanding,

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