

Methods and Techniques of Trumpet Practicing in China

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Abstract

This article explores essential methods and techniques for trumpet practice, focusing on key elements such as fingering, breath control, posture, and scale exercises. It emphasizes the importance of mastering basic fingering for accurate and fluent performance, proper breathing techniques—especially diaphragmatic breathing—for sound quality and breath stability, and maintaining a correct, relaxed posture to prevent strain and enhance airflow. Scale exercises are highlighted as a foundational practice for improving technical proficiency, intonation, and musical expression. Together, these techniques form a structured approach to developing trumpet playing skills and advancing overall musical performance.

Keywords: Methods; Techniques; Trumpet Practicing; China

Introduction

The trumpet, with its own tonal characteristics, is able to show its unique artistic features in performance and teaching. Trumpet plays an important role in the orchestra, and it can play in the form of ensemble or solo, such as Haydn's Trumpet Concerto in E-flat Major and Aruchunian's Trumpet Concerto in A-flat Major, etc. The trumpet has been used in the *Piedruska*, Ravel's Piano Concerto in G Major and Chinese works. In the orchestral piece "Piedruska", Ravel's "Piano Concerto in G Major" and the Chinese work "Red Detachment of Women" and other works there are a lot of exciting trumpet solo pieces. It is through the effective combination of trumpet and other instruments that the trumpet conveys the feelings expressed in the music clips, showing its unique playing style and teaching practice value.

As a more influential instrument, the trumpet has a wide range of applications, and plays an important role in symphony orchestras, but also plays a positive influence in different occasions. The trumpet is an essential instrument in jazz bands. Jazz bands have an improvisational style with strong syncopation. The bands play with trumpets and clarinets, and use pianos and double basses as rhythmic accompaniment. Entertainment bands are small bands that have become popular in hotels and dance halls in recent years, and are formed by violins, trumpets and saxophones, with the trumpet playing solo at individual times. In addition, the trumpet can also be used in symphony orchestras, ceremonial bands and electro-acoustic bands, which have a very wide range of applications.

Before 1840, little was known about Western music in China, and despite the visits of a number of missionaries represented by Marco Polo and Tang Ruowang, the elements of Western music, which the missionaries accompanied to a greater or lesser extent, were not popularized in China. On the one hand, this kind of imported things from the West, only in the court within a small range of display, the audience is limited to the ruling class of China; on the other hand, with the public's aesthetic mood at that time, as well as the whole country to the heavenly kingdom of the mentality of the inextricably linked.

As a brass instrument, the trumpet has a very long history. In prehistory, the trumpet was first used in war, and at that time, it was only in the form of a snail or an animal horn. Nowadays, the trumpet is popularized all over the world, whether it is used as an ensemble instrument in symphony orchestras, marching bands, jazz bands, or as a solo instrument in performances. In China, the trumpet exists in all music groups and colleges with music majors, and the trumpet players and educators in the orchestras and colleges are gradually converging with the foreign trumpet practitioners in terms of level and business quality (Chen, 2001).

Methods and Techniques of Trumpet Practicing

Basic fingering of the trumpet

The basic fingering of the trumpet is a crucial part of trumpet playing, which not only determines the accuracy of playing scales, but also has a far-reaching impact on the performance of sound quality and timbre. The following is a detailed discussion of the importance of basic fingering, how it is practiced, and common problems.

The importance of basic fingering is reflected in the consistency and accuracy of playing. For beginners, mastering basic fingering is the foundation for learning complex techniques and phrases. Studies have shown that students who have mastered the correct fingering are significantly better than those who have not mastered fingering in terms of intonation and fluency. Familiarity with basic fingerings allows the player to maintain fluency in fast passages, avoiding jams and pauses caused by improper fingering, which can affect the overall performance.

Basic trumpet fingering involves precise control of the fingers. Specifically, there are five finger combinations commonly used in trumpet playing: one finger, two fingers, one-two fingers, one-three fingers, and one-two-three fingers. Each combination corresponds to a different scale and chromatic scale. According to relevant research, the basic scales of trumpet include C major, G major and F major, etc. The playing of these scales requires frequent switching of different finger combinations. Taking the C major scale as an example, when playing the notes of C, D, E, F, G, A, B, C, the player needs to use the fingerless finger, first finger, second finger, fingerless finger, first and second finger, first finger, first finger, first finger, first finger. The accuracy of fingering is directly related to the correctness of pitch and the harmonization of playing, which is especially important in playing technique and musical performance.

In terms of operation, the fingers should always be naturally curved and the fingertips need to press the piston vertically. Studies have shown that over-tensioned fingers can lead to excessive pressure, which not only affects the tone, but also increases the risk of muscle strain. Therefore, the fingers should be in contact with the piston with minimal force to ensure sufficient flexibility. Through continuous fingering training, a good muscle memory can be gradually formed so that fingering operations become more comfortable and accurate.

The practice of basic fingering should also include the development of intervals. Intervals help the player to deeply understand and master the relationship between scales, thus improving the accuracy of intonation and scale transitions. Common intervals include 2nd, 3rd, and 5th, etc. The player needs to ensure intonation, and complete the transition of intervals through different fingering combinations. This kind of practice not only improves the stability of playing, but also helps to cultivate the player's sensitivity to pitch and auditory recognition (Pan, 2020).

In actual teaching, the practice of basic fingering is often carried out through the combination of music and practice pieces. For example, some research suggests that while mastering basic fingering, students should test and consolidate the application of fingering by playing simple pieces of music. This approach can enhance students' understanding and application of fingerings in real musical situations, thus improving the fun and effectiveness of learning.

Finally, common problems in learning basic trumpet fingering include inaccurate fingering, poor fingering transitions and finger fatigue. These problems can be solved by some specific strategies. For example, slow rhythmic exercises are used to ensure accurate pressing of each note, as well as the use of sectional exercises to break down difficult phrases into several bars, breaking through them one by one. Through these methods, players can obtain better intonation and timbre performance during practice and avoid finger fatigue and muscle damage caused by excessive practice.

The basic fingering of the trumpet is not only the foundation of playing skills, but also an important factor in determining the playing effect. Through systematic fingering training and scientific practice methods, players can master and apply the basic fingerings in a short time, and significantly improve the accuracy and fluency of their performance. Future research can further explore the effects of different fingerings on sound quality and timbre, as well as how to improve students' mastery of basic fingerings through innovative teaching methods.

Breathing and Breath Control for Trumpet

Breathing and breath control is a crucial part of trumpet playing, which not only directly affects the sound quality, intonation and volume, but also relates to the overall presentation of musical expression. Effective breathing techniques can provide the player with sufficient airflow support, thus realizing beautiful tone and sound effects. Breathing and breath control in trumpet playing involves a number of aspects, including the depth of breathing, breath stability and airflow control. These skills not only require long hours of systematic practice, but must also be carried out under the guidance of scientific methods, and at the same time require the player to have a thorough understanding and grasp of his own physical condition.

Breathing is the basic element of trumpet playing. In the process of playing, the depth of breathing directly determines the adequacy of airflow, while the stability of breath directly affects the duration of notes and the quality of sound. A good player is able to ensure the consistency of notes through deep and steady breathing, thus keeping the sound quality pure. As in the case of "abdominal breathing", this method emphasizes the use of the diaphragm to increase lung capacity, thus ensuring a steady supply of airflow. In the course of learning the trumpet, students often have weak notes and impure sound quality due to insufficient breathing. Therefore, specific breathing exercises, such as deep breathing and abdominal breathing exercises, are carried out before each practice to enhance lung capacity and respiratory control, which in turn improves the playing effect (Fu, 2018).

Breath control is not only dependent on the depth of breathing, but also closely related to the speed and pressure of airflow. Its experimental results show that by controlling the speed and pressure of airflow, pitch and volume are effectively adjusted. For example, when playing high notes, players need to use faster airflow and higher air pressure, while when playing low notes, relatively slower airflow and lower air pressure are required. During the

practice period, students can use the "segmental breathing method" and "pressure control method" to gradually master the breath control skills, in order to play with ease.

Breath stability also plays a crucial role in trumpet playing. Stabilized breath can ensure the duration of notes and the even distribution of tone quality. The stability of breath can be effectively enhanced through regular long tone practice. Research data showed that after six months of long tone practice, students' breath stability was significantly improved, and the sound quality was fuller than before. During this process, students need to pay special attention to the rhythm of breathing and the even distribution of airflow, to avoid intermittent notes or deterioration of sound quality due to rapid or uneven breathing.

Trumpet playing position

Trumpet playing posture is one of the key factors affecting playing quality and tonal stability. Whether you are a professional or an amateur, proper playing posture not only improves the player's technical level, but also prevents muscle strain and occupational diseases.

Body posture plays a pivotal role in trumpet playing. Body posture directly affects breath control and chest expansion, which indirectly affects the quality of tone. In everyday practice, the player is usually seated, but in some performance situations, especially in band performances, it may be necessary to stand. Whether seated or standing, the basic requirement is to keep the body relaxed and naturally upright. Tension in the limbs tends to impede the smooth passage of airflow. Studies have shown that an overly tense posture can lead to poor breath flow and affect the quality of playing. For example, studies by the International Trumpet Guild (ITG) have reported that keeping the spine naturally upright and leaning slightly forward helps to improve the smoothness of breathing and fully ensures the efficiency of air entering the lungs. Performers should ensure that their feet are flat on the ground and the distance between them is as wide as their shoulders when playing, in order to achieve an even distribution of weight and avoid the pressure and discomfort of the lumbar spine caused by tilting the center of gravity for a long period of time (Yan, 2013).

Furthermore, the breathing mechanism is equally crucial in trumpet playing. A proper breathing strategy is not only related to the stability of sound quality, but also directly affects the control of volume. A proper inhalation posture relies on the coordinated work of the chest, abdomen and diaphragm. During inhalation, one should first expand the thoracic cavity so that the breath enters the lungs smoothly and thoroughly, and then adjust the flow and pressure of the breath by controlling the contraction of the abdomen and diaphragm to produce a stable and rich tone. The use of diaphragmatic breathing (Diaphragmatic Breathing) is a widely recognized and effective technique today. When learning this breathing method, the effectiveness of the breathing method can be ensured by placing a hand in front of the chest in order to sense the expansion of the chest cavity while observing the natural rise and fall of the abdomen.

Finally, the common situations of playing posture errors and the corresponding corrective measures are also worthy of attention. Many beginners often encounter postural errors in the process of learning the trumpet, such as hunching over the chest, straining the shoulders, and putting too much pressure on the fingers, etc. These bad habits not only affect the playing effect, but also may lead to cervical spine and shoulder health problems. After analyzing the postures of several trumpet players, maintaining a correct playing posture is crucial for long time playing. It is recommended that players consciously check their posture during daily practice, and can observe and correct errors with the help of mirrors or shooting

videos. Teachers should also pay attention to students' postural problems during the instruction process and give timely corrections and guidance (Xie, 2005).

Correct trumpet playing posture is not only vital to improving playing technique, but also effective in preventing occupational diseases. By keeping the body naturally upright, paying attention to the correct position of the arms and fingers, mastering the scientific breathing mechanism, as well as carrying out continuous self-checking and postural corrections, players can maintain a good condition and improve the sound quality in long-term performance. In the future, in the application of trumpet teaching, more attention should be paid to the cultivation of playing posture, combined with scientific and reasonable training methods, to help students establish good playing habits, and thus promote the overall improvement of trumpet playing level.

Trumpet playing techniques

Scale exercises

Scale practice is a crucial part of the basic training in trumpet playing technique. With the continuous development of music education, especially in the field of trumpet playing, the scientific and systematic nature of scale practice has been increasingly emphasized. Studies have shown that through a systematic approach to scale practice, players can effectively improve their overall quality of intonation, finger dexterity and breath control. For example, scale practice not only helps players master basic playing skills, but also improves musical expression to a large extent, making the performance more moving and infectious.

Scale exercises help develop good intonation. Intonation is the foundation of playing any musical instrument, which not only affects the accuracy of the notes, but also directly relates to the harmonious beauty of the music. Through repeated scale practice, players can gradually develop sensitivity and control of individual pitches. In this process, when practicing the C major scale, players need to make sure that the pitches from the low C to the high C are accurate step by step, and this kind of practice effectively improves the ability of pitch recognition and adjustment. The results of the study showed that after one semester of systematic scale practice, trumpet students' errors in pitch were reduced by about 35%, reflecting the significant effect of systematic training (Zhang, 2014).

The combination of scale work and musical composition is also important, as it promotes the practicality and application of the technique. Players can choose to practice music pieces related to specific scales in order to enhance their ability to apply them in actual performance. For example, after practicing the E major scale, the player may try to play a concerto or sonata in the relevant key to consolidate the results of the scale practice, making it both technical and expressive. On the whole, scale practice plays an important role in the development of trumpet playing skills. Through systematic and scientific scale training, players can not only improve their basic playing skills, but also enhance their musical expression and self-confidence. Scholars generally agree that scale practice is not only a basic training for beginners, but also an important means for advanced players to continuously improve their skills. Future research can further explore the long-term effects of different types of scale exercises on players and provide more scientific guidance for trumpet teaching.

Blowing techniques

Trumpet playing technique is a crucial aspect of trumpet playing that directly affects the tone and intonation obtained by the player as well as the overall quality of his or her performance. Blowing technique covers a number of basic elements, including breath control, lip technique, mouthpiece use and airflow management. The mastery of these skills not only depends on continuous practice, but also requires a deep understanding and grasp of the trumpet's acoustic principles, playing techniques and psychological qualities.

Breath control is the foundation of playing skills, and it is also the most complicated part. Effective breathing control ensures continuous and even airflow, which is directly related to the stability of tone and accuracy of pitch. The use of abdominal breathing significantly improves breath control and persistence, especially when playing long notes and high notes. The coordinated movement of the stomach and diaphragm allows the player to breathe with a stronger and smoother airflow, and this process, when scientifically trained, will allow the player to be more comfortable in their musical performance (Hu, 2010).

Lip technique is an integral part of the blowing technique. It is also divided into two aspects: lip relaxation and lip vibration. Tension and relaxation control refers to the realization that the player can change the pitch and timbre by adjusting the tension of the lips; while lip vibration is the management of airflow to produce the appropriate vibration frequency of the lips to emit accurate tones. Maintaining a consolidated state of relaxation, combined with appropriate lip vibration frequencies, can significantly enhance the purity of tone and stability of pitch. Effective lip technique not only enhances expressive playing, but also brings a rich level of emotion to the musical performance.

Overall, trumpet playing skills involve comprehensive training in many aspects, and through continuous practice and scientific analysis and research, players can make significant progress in tone, intonation and musical expression. Future research can focus on the application of specific blowing techniques in different musical styles, as well as the performance and differences between players of all ages and levels in learning these techniques, so as to provide more systematic and scientific guidance for the education and performance aspects of the trumpet.

Tone adjustment

Timbre adjustment is a crucial aspect of trumpet playing technique, and plays a key role in enhancing the player's expressiveness and the performance of the piece. Timbre refers to the quality of a musical sound, which is determined by a number of factors other than pitch, intensity and duration. In trumpet playing, the adjustment of timbre involves a number of factors including, but not limited to, changes in embouchure, breath control, lip vibration, changes in pressure inside the horn, as well as playing technique and environmental factors. Through the fine control of these factors, the performer is able to realize a rich variety of timbral effects in his musical performance, thus better conveying the emotions and connotations of the piece.

The change of mouth shape directly affects the presentation of timbre. In the process of playing, the performer can significantly change the character of the tone by adjusting the degree of tightness and shape of the lips. For example, tight lips produce a bright and clear tone, suitable for strong emotions and passionate phrases, while relatively loose lips produce a soft and warm tone, suitable for lyrical phrases. By consciously controlling the tightness and looseness of the lips, the player can effectively switch between different styles of repertoire,

such as classical music and jazz. The space in the mouth and tongue position also affect the brightness and richness of the tone, and players need to keep exploring in practice to find the best mouth shape for different styles of music (Sang, 2006).

Breath control is an important part of tone adjustment. Trumpet playing requires a high degree of breath, which is mainly reflected in an even, stable and powerful airflow. By controlling the flow and pressure of the breath, the player is able to adjust the lightness and darkness of the tone without changing the pitch. Different styles of music place different demands on breath control. For example, when playing Baroque music, the airflow needs to be even and soft to show its elegant rhythm; whereas in contemporary music, the airflow is required to be more intense and agitated, reflecting the sense of momentum of the music. Therefore, when rehearsing, players can enhance their ability to control airflow through breath exercises and long tone training, thus expanding the range of their tonal modulation (Ma, 2019).

Changes in the vibration frequency of the lips and the pressure inside the horn also directly affect the timbre of the trumpet. Changes in the vibration frequency of the lips can be achieved by adjusting the tension of the lips and the speed of the airflow, which can effectively change the qualities of the timbre. Players need to realize that subtle adjustments in the lips can result in significant changes in tone. By making subtle adjustments to the frequency of vibration of the lips and the pressure within the horn, the performer can achieve extremely subtle changes in timbre, similar to a change in color on a painter's palette, demonstrating the variety and richness of timbre in different musical passages.

Finally, the performance equipment and the performance environment have equally important effects on the presentation of timbre. Different acoustic equipments, such as microphones and loudspeakers, will produce different effects in the process of timbre reduction and amplification. Meanwhile, the acoustic conditions of the performance environment, such as the size of the room and the material of the walls, will also have a significant effect on the timbre. In a good acoustic environment, the details and layers of the timbre can be better displayed, while in a poor acoustic environment, the timbre tends to be thin and flat. Therefore, performers need to consider the acoustic effect when choosing a performance venue to ensure that their timbre can be fully expressed (Pan, 2020).

Tone adjustment occupies an important position in trumpet playing technique, involving the comprehensive control and detailed processing of multiple factors. Through the control of mouth shape, breath, lip vibration as well as the environment and equipment, the player can realize rich and varied and distinctive tone effects, so as to better express the emotions and connotations of the music in the performance. The precise adjustment of timbre is not only related to the technical level of the performer, but also the core element to enhance the expressive power of a piece of music.

Emotional expression in performance

In trumpet performance, emotional expression occupies an extremely important position, because the transmission of emotion not only significantly affects the audience's appreciation experience, but also directly relates to the player's understanding of the musical work and the ability to reproduce. Therefore, how to effectively convey emotion to the audience in the performance process has become one of the core issues in the art of trumpet performance. The realization of emotional expression not only relies on the player's solid skills and technical level, but also needs to be combined with a deep understanding of the music and the full mobilization of one's own emotions.

In a trumpet performance, the player conveys the emotion of the piece through a variety of elements such as timbre, intensity and rhythm. Changes in these elements can produce rich and profound expressive effects. Changes in timbre are an important carrier of emotional expression, and the player can realize the diversity of timbre by adjusting the breath, the mouth shape and the degree of lip tension. For example, increasing the strength of the breath can show power and passion, a positive and upward breath level, while decreasing the breath can show a softer and more delicate tone. Brightness and dullness of timbre can also directly affect the listener's emotional experience. Some studies have shown that when the playing tone is brighter, it can better convey cheerful and joyful emotions, and comparatively speaking, a dull tone is more inclined to express sadness and sorrowful emotions (Li, 2018).

Conclusion

The methods and techniques of trumpet practice play a critical role in the mastery of the instrument, involving key areas such as fingering, breathing, posture, and scale exercises. Mastering basic trumpet fingering enhances accuracy, fluency, and sound quality, and demands consistent, relaxed finger control to avoid strain. Proper breathing techniques, particularly the use of diaphragmatic breathing, are essential for sound quality and breath control, requiring systematic training. Maintaining an upright posture with relaxed limbs ensures effective airflow and prevents long-term health issues. Scale exercises are fundamental to developing technical proficiency, improving intonation, and fostering musical expression. Together, these elements form a comprehensive approach to trumpet practice, laying the foundation for more advanced skills and musical performance.

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