

Melody and Timbre in Piano Performance

LES SONS ET LES TIMBRES DU PIANO

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Abstract: Melody and timbre is a very prominent problem in piano lesson teaching activities nowadays. By giving examples and making comparisons, the article explored the meanings, the differences and relations between these two concepts. The article also gave a detailed explanation of the unreasonable parts in the knowledge of “piano performance”, thus revealing the inner rule of this type of performance. It will play an active role in regulating the piano lesson teaching.

Key words: melody, piano, performance of melody timbre

Résumé: Les sons et les timbres sont les deux problèmes très marqués dans l’enseignement du piano pour l’instant. Cette thèse profite des exemples et des comparaisons pour décrire en profondeur les deux définitions ainsi que leurs différences et liaisons. Elle fait un résumé concrètement sur les aspects non raisonnables de conscience sur «la méthode des sons» et elle nous révèle aussi ses règles de nature, ce qui joue un rôle très actif pour mettre en unification l’enseignement du piano.

Mots-clés Mélodie, piano, exécution de timbre de mélodie

The development of piano lesson teaching is closely related with the development history of the piano manufacturing industry, as well as the natural science and social science, especially the development of the music theory. Over the years, piano lesson teachers, theory researchers, performers have, through their teaching practice, summarized a set of effective teaching rules and methods, thus completing the comprehensive teaching system of today. However, we should not lose sight of the fact that, there are still some problems in the piano teaching to various degrees, some of which need to be solved without delay, while others could only be solved by carrying out deep research. The author considers that, only when more and more piano lesson teachers participate, research and practice in this campaign can we effectively promote the work smoothly.

1. TOUCHING AND MELODY

French composer Beltone once argued: “The first beauty element in art lies in its idea, and the second beauty element lies in the choice of performance method to reflect this idea. But an art work can only be created when the two elements combine together” (Kara • Beltone, P19). As the second beauty element,

the performance method also enjoys its own important role and status. Therefore, to freely demonstrating and expressing the beauty of music, it is necessary to thoroughly understand and master the playing techniques of the musical instrument we play, and strive to produce the “melody” .

1.1 How Piano Melody Comes into Being

To learn about melody, we have to mention the vocal organ. When people sing, they pronounce by using the right singing method, while controlling the shape changes of such organs like the throat and mouth, changing the breathing flow, as well as using people’s own sense of music. In this way, they are able to pronounce beautiful timbres, and demonstrate colorful music charm. In contrast, string music blend people’s emotions and musical sense into the playing of the strings of the instrument, thus producing gorgeous timbres with strong infectious effect. The creation of the above- mentioned beautiful timbres depend on the organ or instrument that makes sounds, as well as the person who uses it.

When analyzing from piano’s structure, we find that, it makes sound through the knocking of the tight string by the hammer that wraps around the felt pan. To put it more concretely, it depends on the force of the fingers on the piano board and the time of it. Then,

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through a series of transmissions of mechanical levers determined by the hitting power, the dynamics of the sound produced by the piano is also decided. The single tone produced by the piano is different from string music and the sound pronounced by throat, whose defect lies in that the sound volume of the string hit will gradually grow weak by and by. It can not control the sound volume freely like other instruments, nor can it reproduce the more complicated timbre (like the string-kneading of violin and vibrato of throat), with the exception of the usage of the piano pedal.

Meanwhile, however, piano boasts unique advantages over other musical instruments, its wide range of dynamics variation. Just as Cherny put, "Piano can produce up to dozens of different dynamics level, and has a wide diapason. As a result, besides the music especially compose for piano, all stuffs that can be called music (except symphony) could be play out by piano." (Josepf • Hoffman, P26) By comparing the advantages and the disadvantages of the piano structure, we can easily reach such a conclusion: a good touching and an effective control dynamics is a precondition for producing a melody on the piano.

1.2 Relations between the Touching Method and Melody

The late well-known Russian pianist and educationalist Levin (1874-1944), "Basic Principles of Piano Playing" (Shanghai, 1929), has a far-reaching impact on the piano lesson teaching of China. In the book, Levin repeatedly emphasized that: "Touch the piano keyboard with the surface part of the first finger joint which is bouncy and full of flesh", which is the basic principle of playing melody. He thought "The more the surface of finger covers the keyboard, the higher the sound will be". The article went on to say that: "Usually, tunes with a lot of thumb uses have a very sweet melody that is probably the result of the flesh of the thumb". (Levin, P22)

As a great master, he and his students achieved great success. Even today, there are still many who follow this principle and achieved success. However, after careful study, in Levin's time and today as well, those who propose to raise high fingers, the so-called "hammer type" also achieved success. This makes us couldn't help but think that whether Levin's proposal should be considered as a principle, and whether this principle conforms to the natural law? The explanation provided in the book is like this: "When we listen to the sound produced by glockenspiel, it's easy for us to distinguish which one is produced by hard hammer, and which one is produced by the rod wrapped up by soft felt; the former is quite sharp with the sound of metal, while the latter is very sweet and mellow. Maybe you will say that, the sound of the piano is

different from that of the glockenspiel. But after a small experiment, you will find the sound of the piano is the same." (Levin, P18) Actually, when hitting the metal bar with the rod wrapped up by felt, if the time lasts longer, the metal bar could easily produce a low frequency (with long vibration circle) overtone, which is a depressing sound. When hitting the metal bar with the same rod wrapped up by felt for a short period of time, it is easy for the metal bar to produce a high frequency (with short vibration circle) overtone, which is a sharp sound. For piano, each and every sound is produced by the hitting of a set rod with felt. No matter it is a strong or a weak hitting, the time of hitting of the rod and the string remains the same, and so does the timbre of the sound. What is different is the dynamics of the sound. The touching of fingers is just the process of speeding up the string-hitting system, while the piano itself does not make a sound. When the rod touches the string and makes the strike, the key already touches the bottom, and the touching of the finger is finished. Therefore, no matter which part of the finger that touches the piano board, the fact remains that the same rod hitting the same string will produce the same timbre.

So, as a great master, why did he emphasize again and again the touching of the part with more flesh of fingers? After careful studies and comparisons, the author thinks that: When playing tunes with longer note period, if the player uses the part with more flesh of fingers, it will be easier to control the touching board without touching a wrong one. As a result, there is enough time to catch the time when the sound is produced, and grasp the time period and dynamics of notes, especially when then Westerners generally have a big hand, and it will be very easy for them to have a good touching dynamics without big turns of finger joints. So, the playing method Levin proposed is more suited to the natural movement of hand palm and its fingers formed during the evolution of the humankind. If the dynamics is the same, then the movement of raising fingers can be avoided. This playing method is, under certain circumstances, within certain scopes, the correction of the traditional playing method which focused too much on the raising fingers. Without a doubt, this kind of playing method that Mr. Levin proposed has made a great contribution to the development and improvement of the modern piano playing method.

Therefore, the choice of touching method depends on the feature of the tunes being played. If it requires continuous, speedy playing with short time period, also a triad with certain dynamics, even the large palm will do by using the above-mentioned playing method. Only touching with the tip of fingers, which is harder, can the player produce a larger touching dynamics, and also shortens the touching time. Surely, the sound produced in this way can also be a melody. In short, the basic starting point for us should be finding different playing methods according to different tunes.

reason for the title of “the king of musical instruments” that the piano enjoys.

2. TOUCHING AND TIMBRE

What is “Timbre” ? It is an element of tone, or the quality feature of sound. The timbre of a single-tune is determined by the keynote (representing the sound pitch) with the lowest frequency and the amount of overtone. Studies have shown that, timbers of different musical instruments (including throat) are all determined by the sound production object itself. The piano is the musical instrument with the widest frequency and the richest overtones. That is the reason for the fact that any randomly produced tune on the piano would be very pleased to the ears.

2.1 The Concept of Timbre

Timbre is a quite complicated issue in the piano performance, was well as the question towards which musical workers hold different opinions. Sometimes, people will confuse the variation of the intensity of a sound with that of timbre. Here we can learn the meaning of the timbre from two angles:

In the narrow sense, timbre means the sound feature created by the keynote as well as the overtones it contains. The tune of a high frequency produced by any type of musical instruments (including throat) is the combined sound of the keynote with the same frequency plus some overtones. When playing the same melody with different musical instrument, it is easy for us to tell them apart. The reason for this is that different musical instruments have different overtones when it come to play the same tune, hence the different timbres. Studies have shown that, timbers of different musical instruments (including throat) are all determined by the sound production object itself. The piano is the musical instrument with the widest frequency and the richest overtones. That is the reason for the fact that any randomly produced tune on the piano would be very pleased to the ears.

In broad sense, timbre means the attribute of harmonic, or the sound color of the combined sound. Color is previously a concept of vision. Blend two or more colors together, different combined colors will be produced. Even by using just two single colors, we can produce different combined colors by changing the proportions of the two colors. With the similar theory, a music player can produce various harmonics with the 88 tunes of different frequencies, using different amount of the tunes, or the same amount of tunes with different comparative intensities. In mechanical musical instruments, only the piano can express such richness of the harmonic color, which also explains the

2.2 Relations between the Performance Dynamics and Timbre

Normally, the piano music expands its musical inspiration through the sharp contrast of color of sequencing and inflexion. In the piano performance, the differences of the player’s personality and style are usually reflected through the differences in the performance intensity and the ideas about colors. Play a strong C tune, then play a weak C tune. By comparison, we can find that, the sound intensity has been changed, while the timbre remains the same. The reason is that, whether it is a strong tune or a weak tune, the amount of overtones and the comparative intensity remain the same. Similarly, strike a chord on the piano, then repeat it, we can find that the chord color does not change, only the intensities form a sharp contrast.

Different performers, when playing the same musical work, demonstrate the difference in color by changing the comparative intensities of different voice parts when setting off a certain voice part by contrast; or in polyphony, there are minor changes to the comparative speeds and rhythms of different voice parts. They will cause changes to the amount of overtones and the comparative intensities of different voice parts, thus causing differences to the performance colors.

We should listen regularly the piano performance by great masters, and analyze earnestly how they express the features of a time, different styles and national characteristics through making changes to intensities and timbres. This is beneficial to improving our listening as well playing skills.

To sum up, in order to improve and enhance our piano lesson teaching, it is essential to carry out discussion about and research into the irregular problems in the teaching practice, even debate when necessary.

From a long-time perspective, we must also attach importance to the re-learning of general knowledge. Besides the specialized courses, we should, according to the teaching characteristics, learning some knowledge about natural sciences, such as Physics, Physiology, Anatomy, etc. We could find answers for many of our problems there. Scientific conclusions equal to the standard to regulate teaching classes. With this at hand, we are able to wipe out contents that are not in conformity with the standard, thus gradually making our piano teaching lessons standardized and scientific in nature.

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