Piano Transcriptions of Tatar Composers for the Timbre Ear Development

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Abstract
The timbre ear development as a component of musical ability is an important factor for the qualified students’ musical and performance advance in piano class. The timbre ear allows revealing the coloristic potential of the piano, perceiving and delivering timbre characteristics of vocal and various musical instruments, and practicing orchestral treatment of piano. The timbre ear development supposes not only making performer’s readiness to perceive, but also embodying the required timbre on the piano. Reconstruction of timbre characteristics refers to a supreme approach to the original sound, while using different ways of sound retrieval, articulation, dynamic shading, pedaling, etc. The role of academic repertoire cannot be overestimated in the timbre ear development of piano class students. The richest piano literature is represented by a great number of compositions that are essential for the timbre ear development. Among them, there is a special attention to piano transcriptions, representing vocal or instrumental compositions in a new reading-concert, and masterly adaptation for the piano. The present study aimed to reveal the potential of piano transcriptions of compositions by Tatar composers in developing the timbre ear of piano class students. Authors summed up the experience of piano teaching in educational institutions of the Republic of Tatarstan, performance and methodological analysis of the performance repertoire, and thus unveiled opportunities of the timbre ear development in the process of studying piano transcriptions of Tatar composers in piano classes and gave examples for piano reconstruction of instruments’ sounds of source compositions. Piano transcriptions of compositions written by Tatar composers vividly reflect national music traditions of Tatarstan, timbre peculiarities of solo and orchestral instruments emphasizing the beauty of Tatar vocal intoning.

Keywords: Musical education; Piano training; Timbre ear; Tatar composers; Piano transcriptions.

1. Introduction
The ability to open the timbre potential of piano to give the sound intension and expression to the sound texture has always been a main criterion for the excellence of piano players' performance. Most outstanding piano players brilliantly reveal the timbre capacities of piano. Their piano spoke as a whole symphonic orchestra or conveyed a variety of inflections of vocal or instrumental intonations by means of pianistic sonority (Akkuzova et al., 2018).

Desk research indicated that the psychological basis of timbre ear was examined by such scholars such as (Akkuzova et al., 2018) (Bochkarev, 2008), (Borodin, 2006), (Faiizrakhmanova and Kovrikova, 2017). Specifics of timbre potential realization of piano and recreated timbres of orchestral instruments or vocal in piano compositions of various composers were set down by performing musicians such (Kemalov et al., 2017), (Khurmataullina and Salpykova, 2014), (Morozova and Gabdrakhmanova, 2015).

The literature emphasized the importance of an adequate selection of the academic repertoire for achieving the perfection of piano players' music abilities and analysis of piano transcriptions of compositions that were written by Tatar composers as a means of developing timbre ear of piano class students.

2. Methods
The issue was studied by using methods namely the scientific cognition (analysis, synthesis, systematization), scrutinizing scientific and pedagogical works, generalizing the practical experience of teaching piano playing in educational institutions of the Republic of Tatarstan, and carrying out performance and methodical analysis of music pieces.
3. Results and Discussion

According to an analysis of the scholarly literature, ears play the most important roles in the complex of abilities for music. Timbre, which is the ability to perceive and distinguish timbre characteristics of sounds, is an ear type for music along with melodic, harmonic, polyphonic, rhythmic, architectonic aspect, etc.

According to Y.N. Rags, it is “the coloring of sound; a musical sound feature (along with the pitch, volume and time-value). Sounds of the similar pitch and volume can be distinguished by the timbre, but they can be performed by different instruments, different voices, or on an instrument but in different ways, and touches” (Bochkarev, 2008).

Timbre notion is connected not only with the source of a sound (musical instrument, voice), but also with emerging synaesthetic associations arising from an embodying musical image: visual (“bright”, “dull”, “faded” sound), tactile (“rich”, “deep”, “soft”, “velvet”, “dry” sound). Khurmatullina and Salpykova (2014) notes that “musicians recreate some sensual characteristics of a timbre to add specific emotional and sense-bearing coloring to sounds” (Starcheus, 2003).

Timbre perception is a complex process that is conditioned by various factors including the composition of sounds. Therefore, L.L. Bochkarev argued that: “Despite the fact that the timbre is a fundamental characteristic of a music sound, its perception is connected with a large number of factors such as the attack, decay, pitch, volume, sound “surrounding”, noise, vibrato, and formant” (Borodin, 2006).

Timbre characteristic of a sound is closely tied to the pitch: If the pitch and timbre characteristics are perceived aggregately and indivisibly in noises and speech sounds than a main prerequisite for perceiving the musical pitch, it picks a pitch component from the timbre-pitch complex (Faizrakhmanova and Kovrikova, 2017).

The timbre ear is interrelated with other components of ear for music as Bochkarev (2008) argues that it is a stage of developing harmonic ears (low level of the harmonic ear development) and it participates in perceiving phonic functions of a chord (Kemalov et al., 2017). Timbre ear development is determined by maturity of pitch and dynamic ear that is significant for the melodic ear.

Modern research indicates that timbre percepts can be effectively explained by the joint spectro-temporal analysis that is performed at the mammalian auditory cortex level (Khurmatullina and Salpykova, 2014). K. Sidenburg, S. McAdams identified differences of the timbre concept. They determined the timbre on the perceptual side of the “psychophysical rupture”, that is, in the listener's consciousness, and not in physical properties (Morozova and Gabdrakhananova, 2015).

The role of timbre as an expression medium was inadequate in different periods of music art development. Not framed in the pre-baroque and baroque periods, the role of timbre was gradually rising as a main tool of creating musical image on the piano in the 20th century. For some composers, a human voice was ideal for the piano sound that was embodied in cantilena, and “songlike” handling of piano (Nurgayanova et al., 2017).

Other composers were attracted by the ability to recreate timbres of orchestral instruments and, particularly percussion, emphasizing the mechanical nature of the grand piano and the brightness of the rhythmical arrangement of musical textures.

Timbre typification and the wide colorful range of sounds were vivid features of the piano art of Patil et al. (2013), Rags (1990), Siedenburg and McAdams (2017), Starcheus (2003).

The enlargement of piano timbre ranges was achieved by composers by the help of technical methods and instruments as well as non-standard composers’ techniques in the 20th century. To this end, J. Cage made a “preparation” of piano putting various objects between strings (nails, screws, pieces of rubber). S. Gubaidulina used “glissando” on strings by fingernails or bamboo stick and left hand “sordina” and “pizzicato” on strings, etc.

Piano transcriptions developed a great potential to work on the timbre ear development. This genre implies the representation of vocal or instrumental composition in concerts, and a “brilliant”, “free” way to be played on the piano.

Considering an issue of reconstructing timbre characteristics of a source composition in transcriptions, it is worth mentioning the original research concept of B.B. Borodin who distinguished three trends in the piano transcription development: The tendency towards the relative instrumental neutrality; centripetal tendency, creation from immanent capabilities of instruments; centripetal tendency towards the active influence by fundamental different instrumental and non-instrumental spheres when it comes to an instrument. It is a centripetal tendency that is characterized by going beyond capabilities of piano, taking timbres and ways of sound retrieval of other instruments as examples and vividly embodying in the orchestra treatment of piano.

First samples of transcriptions (as adoptions and treatments) were found in the 14th century; skills of improvisatory music-making had the immediate impact on an instrumental adaptations technique in the 16th-18th centuries. Clavier transcription takes an independent artistic meaning by I.S. Bach and his contemporaries. Further history of piano transcription development is connected with names of such composers and piano players such as Teplov (2003), Rags (1990) who created excellent transcriptions of piano.

The study indicated that piano transcriptions of compositions, which were written by Tatar composers, were integral parts of composers’ music and represented in works by Rags (1990), Patil et al. (2013). Remarkable examples of piano transcriptions are made by piano players and coaches such as (Nurgayanova et al., 2017; Patil et al., 2013; Rags, 1990).

Transcriptions of compositions, which were written by Tatar composers, represented an interesting layer of piano transcriptions. These works were integral parts of Tatar composers' music and piano culture of Kazan city (Villalobos et al., 2013). R. Enikeev made transcriptions of vocal and instrumental compositions by S. Saidashev (“Saidashstan” cycle), M. Muzafarov (paraphrase to “In the Quiet Garden” song, transcription of Violin Concerto...
number 2). A famous “Sandugach” (“Nightingale”) romance by R. Yakhin is known in terms of authors' piano transcriptions.

“Waltz” Concert transcription for “Naemschik” (“The Tenant”) drama by S. Saidashev was made by R. Belyalov, who used “original, inimitable style, through modernistic harmonics, dissonant sonority, and unconventional quick rhythms corresponding to the time spirit” (Villalobos et al., 2013).

Along with composers, piano players and coaches of Tatarstan have created piano transcriptions. They made transcriptions such as “Shurale” by F. Yarullin ballet fragments (transcription authors are F. Khasanova, R. Urasin, E. Burnasheva, Z. Mushtari), “Vodyanaya” (“Water Witch”) by A. Bakirov (transcriptions by E. Burnasheva), “Gornaya byl” (“Mountain True Story”) by A. Klyucharev, and “Zyugra” by N. Zhiganov (transcriptions are made by F. Khasanova).

Concert transcriptions of romances by R. Yakhin are made by R. Urasin, M. Kovarskaya, F. Khasanova, etc. A. Shumilov made concert transcriptions of “Girls’ Dance” by M. Muzafarov, “The Forgotten Waltz” from Concerto suite for two pianos by R. Belyalov.

The study on transcriptions of compositions, which were written by Tatar composers, does not only develop students’ music-performing skills and timbre abilities, but also “acquaints with festive ritual and family customs, religious ideas, oral literature creativity, arts and crafts, dances, and folk games and make it possible to comprehend and express new samples of professional culture, and original, national and universal values and tradition”. Folklore produces “original-national forms; and thus a system of artistic expressive means can be developed, and the public historical memory can be preserved”.

There is a need for mitigating the sound attack and imitate the timbre of string instruments on the piano. Touching the keyboard must be without the rigid fixation of fingers and the wrist. People need to imagine the extended and expressive diapason of a string group of orchestra (Figure 1).

Figure 1. S. Saidashev “Waltz” from music for “Naemschik” (“The Tenant”) drama, R. Belyalov’s transcription for piano duo (bars 9-16, legato theme of string instruments in the party of the first piano)

Pizzicato of stringed instruments can be reproduced by the touch of a light staccato on the piano (Figure 2).

Figure 2. A. Klyucharev “Dance of Zarifa” from the ballet “Gornaya byl” (“Mountain True Story”), F. Khasanova’s transcription (bars 1-6, pizzicato of string instruments in the accompaniment)

Compared to string instruments, the sound of woodwind instruments is not conjunct that facilitates the piano players' tasks in embodying their sonority on the piano. Imitating woodwinds, people need to remember that attacks must be soft and wrist, and fingers fixation must be rigid, but not excessive. It is necessary to slightly soften staccato making it closer to legato in sonority to imitate staccato of woodwinds on the piano, (Figure 3).

Figure 3. F. Yarullin “Scene” from the ballet suite “Shurale”, F. Khasanova’s transcription (bars 1-2, clarinet theme Shurale in the right hand)

The means of sound shading and coloring should also be correspondingly changed. For instance, the soft pedal and soft sound attack in imitating oboe; removing the soft pedal, noticeable composure, possibly, and partially big sound density when imitating bassoon; reconstruction of the high-pitched sonority of the flute by the help of special activities and the precision of fingertips; less rough, songlike sound of the clarinet (touching with a larger area of phalange of each finger).
For brass bands, one needs to particularly consider specific features of each instrument. In imitating the horn, one needs to take deep sound with the whole weight of hands from the shoulder, and fingers must sink into the keyboard firmly and softly, and wrist needs to be flexible, but not relaxed. Trombone has a very wide range of dynamic potential; and tubular signals can “cut” the whole thickness of symphonic sound because the imitation of instruments needs to be performed by “rigid” fingers that are vertically directed towards the keyboard.

Special rhythmical recurrence is important in making the sound of percussion as well as the special timbre-dynamic coloring. Kettle-drum is an instrument with a low-pitched, but not a harsh sound as one should avoid the excessive poignancy and sharpness of sound in imitating. In investigating the chime-bell, triangle, cymbals and other percussions, it is necessary to distinguish sounds by sharpness and metallic shine, articulation accuracy and vividness (Figure 4).

**Figure 4.** F. Yarullin “The Dance of Fiery Witch and Devil” from the ballet suite “Shurale”, E. Bumasheva's transcription for piano duo (bars 1-6, stringed, brass and percussion theme of Fiery Witch)

![Allegro marcato](image)

According to the work on expressive and cantilena performance of songs, transcriptions presupposes techniques of vocal intoning (singing through) of original songs with its phrasing, specifics of cantatory breathing, articulation, grace melodies and vocal expressiveness of Tatar ornamentation in the “mong” style (Figure 5).

**Figure 5.** R. Yakhin “Sandugach” (“Nightingale”), romance in author’s piano transcription (bars 6-8, vocal theme in the middle register of the right hand)

![Con anima](image)

Therefore, the reconstruction of timbre characteristics means a supreme approach to the original sound while using different ways of sound retrieval, articulation, dynamic shading, pedaling, etc.

4. Summary

By performing transcriptions, it is possible to make the use of various timbres, and register the dynamic, coloristic potentials of piano actual and contribute to the timbre ear development of students.

The timbre ear development in the process of working on the piano transcriptions needs investigation of particular qualities of instruments relating to specifics of the sound retrieval, the nature of sonority, and shades and techniques of creating the required timbre.

Scrutiny of the original sound from the score and audio recordings, analysis of means of orchestral expression and capabilities of its piano embodiment take precedence over the search for a way of imitating timbre coloring of one or more instruments on the piano.

5. Conclusion

The timbre ear is a crucial task of teaching the piano playing. It supposes not only shaping performers' readiness to perceive, but also to embody the required timbre on the piano.

The piano heritage of all composers reveals the rich playability of piano allowing piano players to use various means of performance expression with appropriate auditory abilities.

The investigation of piano transcriptions of Tatar composers’ works contributes to the timbre ear development in piano classes. The reflection of national music traditions of Tatarstan, timbre and acoustic capacities of solo and orchestral instruments, peculiarities of Tatar vocal intoning in the transcriptions actualizes the use of various timbre, register-dynamic, coloristic potentials of piano and contributes to the timbre ear development in students.
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