
**INTERACTION OF MUSIC PERFORMANCE ELEMENTS IN TEACHING
SOLFEGGIO AND INSTRUMENTAL MUSIC**

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Abstract: The official system of the specialized music education in Serbian primary and secondary music schools as well as in faculties of art has systematically improved the music potentials of children and young people to the level of high performance and pedagogical proficiency and competence. Music schools curricula are primarily designed as to promote tutorials in instrument playing and solo singing which all encourage the development of performance skills. However, it is of utter importance to consider the aspects of music performance in the classes of solfeggio, the school subject which is taught throughout entire music education and which thus has a crucial role in the process of music education and practice. Music performance in the classes of solfeggio is generally a vocal reproduction, i.e. singing with solmization syllables respecting all performance elements. Notwithstanding the fact that music performance in solfeggio and instrument playing classes has its particularities, it is still possible to define some common elements that determine the successful music performance and that have to be permanently applied in the course of music teaching using specific teaching methods. One of these is to constantly encourage a correlation of instrument playing teaching and solfeggio teaching, which has to ensure an adequate development of music talent. This paper is an interactive review of the music performance components with the aim of encouraging the development of music competence of professional musicians in the course of music teaching. The expected result of music teaching, regardless of the field of specialization (music pedagogy, performing art), should be the ability of a student to understand and “hear within” the music sheet notes before performing it either vocally or on an instrument on the one hand, and to decipher, comprehend and write down or perform on an instrument the music they hear on the other. The paper discusses the elements relevant for music performance from the aspects of music pedagogy and music psychology: reading a music sheet, creating sound performances, associations and mechanisms, developing music memory, encouraging the improvement of various categories of musical ear, mastering the principle of arrangement while performing or memorizing music, endeavoring to respect the elements of music interpretation (tempo, dynamics, articulation, agogic, phrasing). It is believed that the development of consciousness about the music performance factors among the teachers who teach instrument playing and solfeggio (and students, future teachers, as well) will have a positive impact on music education in general and the improvement of music abilities and skills of students. Finally, skillfully correlated classes of instrumental music and solfeggio may result in a proficient music performance characterized with understanding of melodic, rhythmic, harmonic and artistic content of a music piece.

Keywords: music performance, solfeggio, teaching instrument playing

1. INTRODUCTION

Although in music education and practice, notion of music performance is mostly related to the teaching of instrument playing or solfeggio, it is necessary to define more precisely different aspects of performing music, which occur during the process of music education, as well as their importance. In that sense, solfeggio as a subject has an important role to serve as bases of gaining music literacy and further development of music knowledge and skills, being taught from the beginning of elementary music education up to the music studies at the faculties of art. Music performance in teaching/learning solfeggio focuses primarily on vocal reproduction i.e. singing with solmization syllables (with occasional and well thought out use of the piano or some other instruments), which permanently applied in correlation with teaching instrument playing may result in a proficient music performance with different aspects, as well as practical use of knowledge of music theory. The aim of teaching solfeggio is to enable students to consciously experience visually perceived music sheet notes by the inner ear, comprehend its content taking into account expressive elements given in the music text¹⁴⁸ and perform successful singing with

¹⁴⁸ Agogic, articulation, dynamics, phrasing, as well as performing of music content in suitable tempo, which illustrates a need for acquiring a skill of esthetic forming of music course.

solmization syllables. Conduct of different processes in solfeggio teaching (hearing of something already seen – comprehending – reproduction, as well as comprehension of the music content) is a starting point and condition for a quality interpretation (Kodela and Todorović, 2014). To this end, elements which determine successful interpretation i.e. different ways of giving contribution to the music performance are defined in the paper.

2. INTERACTION OF MUSIC PERFORMANCE ELEMENTS IN TEACHING PROCESS

Within the system of music education, the presence of differences and specific characteristics of music performance in teaching solfeggio and instrumental music is evident. However, it is still possible, and necessary to define some common elements that determine the successful music performance, and should be applied permanently in the course of music teaching by the use of specific methodology. One of these elements, sight-reading (reading from the music sheet notes) presents a complex process of transforming (transmission) of visual images into the sounding ones with active participation of music hearing by *recording* of graphic symbols. Synchronized reading and performing of music text, not familiar to the performer, is a subject of studies of music pedagogues and psychologists. However, it is a fact that studies dealing with sight-reading are not numerous, therefore this area has not been studied sufficiently (Sloboda, 2005). This statement may certainly act as a negative factor, especially if we take into account significance of developing a skill of reading from the sheet on the levels of music education, with synchronization of audio-visual components.

Relevant studies have dealt with characteristics and particularities of literary and music text reading. While some authors report on high correlation between these activities (Lamb & Gregory, 1993), Sloboda emphasizes that difference between reading literary and the music sheet notes and its performance is conditioned by more complex motor reactions of different set of components present during the music performance. This, among other things, refers to the need to direct attention on intonation and rhythmic precision, dynamic nuances, precision in performing agogic and articulation requirements and so on. Sloboda thinks that the degree of mastering and acquiring a music sheet reading skills is conditioned and is directly related to the length of reading. This “ability ... does not require audio-visual interaction only, or mere transfer of facts between visual and audio aspects of perception” but also activating of physical, motor aspect during music performance, which proves that this is “a very complex process with receptive activity included (connecting of sound stimulus, melodic and harmonic sets ...) and performance, while the performer must simultaneously observe and follow the structure of what has been performed” (Radoš, 2010: 178).

In regard to the complexity of the process mentioned, we can state that sight-reading is a result of a skill acquired by continuous and thought out practice. As a condition for successful interpretation, performer has to interpret music presented in music/orthographic writing, in which different music parameters such as – melody, rhythm, harmony, form, structure, tempo, agogic, dynamics and articulation are presented. Sight-reading is thus a psycho-physical process necessary in teaching of instrumental music (instrumental reading), by the use of which a visual image of note texts is created. It stimulates and moves motor impulses, which then make it possible for the written down music content to be performed with precision. It is of particular interest to perform a music text in a manner in which “visual images are transformed into sound ones and in which creation of sound in the inner hearing comes before the technical move which is to create real sound” of the instrument (Kršić-Sekulić, 1990: 47). It is interesting that following of note text by the inner hearing, when it is not reproduced (not sang) stimulates and creates a set of changes in the vocal apparatus (vocal cords), while the instrumentalists (even when not playing their instruments) have evident finger nerve stimuli. Effects of sound impression and its transferring (transmission) into motor impulses is in synergy with audio, visual and innervative factors and relevant actions: intonal precision and control of intensity during the playing, gaining of sound images, finger movements which are in the function of correct performance of music text, fixing of finger position during the analytic phase, perception of music content etc. Mentioned activities must be brought to automatism by practice because their relationship is of key importance for performance, performers must also “be fully conscious, so that the final result may look as a set of perfect reflex-conditioned reactions” (Kršić-Sekulić, 1990: 47).

From the aspect of music literacy, and also from the aspect of music performance, in a wider sense, associations as mental bonds of different sensual stimuli – memory, senses, ideas or stimulus, have a significant role in music education. Music education is conditioned by use of associations which encompass applying of *acquired sound images*. “The music note in hearing imagination (in the inner ear) creates sound associations, which may have absolute or relative value for a musician” (Kršić, 1982). Thus, in a certain moment during seeing a requirement in the music notes text an *activating* of association on music content or one of its part occurs, which is familiar and recognized from learnt clichés previously. Todorović emphasizes, in regard to solfeggio teaching, that “on the bases of developed music opinion, a sound is formed in our consciousness, that is, sound association, actually, which is

directed into sound reproduction. We are convinced that the only way in which music abilities are developed is almost simultaneous functioning of the process of intonation and perception. Only thus, from sound, as technical-physiological apparatus of speech, shall we create a specific aspect of expressive music text singing, led entirely by music thinking (Todorović, 2005). Selection of examples for teaching certain (melodic-rhythmic) requirement is also important. “Logical melodic courses are easily memorized and they should be permanently acquired – to the so-called ‘brain localization’ of their audio and visual forms – in order to be used as associative elements in solving new tasks” (Vasiljević, 2002: 130).

With the aim of creating music competencies, teaching of solfeggio and instrumental music strives to the development of music memory which has a significant role even in the period of music literacy, but progressively defines performance success to a great extent. Music memory “helps collecting the audio impressions – bases for later forming of sound associations in consciousness. This gathering, collecting of impression may be given another name – experience” (Todorović, 2005). It is important to emphasize a significance of automatism creation by continuous practice of perception and memory during music performance – playing an instrument or singing from the music sheet notes. According to Vasiljević, they represent “higher level of consciousness and lead to the development of comprehension as a fundamental factor of music thinking” (Vasiljević, 1989: 114). In teaching music, automatisms are important as they are in direct connection with acquiring ability for performing particular music requirements without longer thinking, examining, that is, a longer period of (time) analysis. They increase velocity of receptive and reproductive requirements during performance of music text, in this way music course does not *stop* but lasts in time, therefore, in continuation. We would like to mention here a psychological concept of “grouping”, as it enables more successful reading of music sheet notes, and its memorizing. This principle “lies in the foundations of memory mechanism which connects our perception with previously stored knowledge” (Leman at al., 2012: 134), thus enabling an individual to put in groups new music text notes or acoustically received music content (its parts, more precisely) into comprehensive wholes which would be perceived, performed and memorized more easily. In this way, a student may (using previous music experiences) group melodic and rhythmic patterns or experience taking to parts accords as clear harmonic wholes, which will make reading the music sheet notes faster, as well as more successful interpretation respecting present music-esthetic elements.

When singing from the music sheet notes or if instrumental performance is concerned, apart from a process of stimulation and perception (as a category of psycho-physical activities among which a mutual distinction is identified) reception plays an important role, too. Perception and reception (acquiring) of music content, comprehension and correlation with music expression and its psychological esthetic idiom, as well as understanding style and form of the content designated by the author in the notes writings are of great significance during performance of music text. In addition to this, factors that determine successful music performance *encircling* the mentioned processes are attention, motivation, retention¹⁴⁹ as a complex form of adopting information and recognition (recognizing that is a conscious *reviving* of what had been learnt). During music performance, time (having taken into consideration that music content, which is performed, lasts through time), vertical and horizontal dimensions are being observed. Vertical dimension is observed as “tonal factor, and the horizontal one ... brings work on a whole, which is enabled by previous ability for hearing of the note text” (Kiselčić-Todorović, 2001: 71). During interpretation these dimensions act in coordination, with an addition – a dimension of music thinking “which transforms notes writing into something alive, tangible, thereby realistic, threedimensional tissue” (p. 71). In regard to the previous statements, it is evident that sight-reading cannot be regarded as “a mechanical process of automatic transferring of visual taking into motor programmes” (Leman at al., 2012: 140). On the bases of information gained by perceptual way in determined time, performers should first process in their consciousness i.e. *imagine* sound of a concrete music content. This process is characterized with mutual expectations, knowledge and skills acquired as a condition of its functioning. Intuitive performers express, during fast and correct performing while reading from the sheet “mental approach to stored knowledge of style, performing practice and music theory”. (p. 140).

From the very beginning of music education both solfeggio and instrumental music teaching have been aimed at the development of musical ear, which is crucial for a successful music performance. As an element of musical ability, it is not “reduced to the precise perception of the tone qualities only”, its characteristic being “a deeper reception of outer impressions and a possibility to feel an inner relation which unites tones into a whole. In that sense, musical ear makes bases for reception of music-esthetic impressions” (Krsić-Sekulić, 1990: 20). Determination of different properties of music hearing and its development is conditioned by different musical-

¹⁴⁹ Retention is “ability to retain experience after its outer cause, so that, it appears unexpectedly in our consciousness later during a similar experience” (Vujaklija, 1970: 830)

psychological aspects of its expression. Views in professional literature define different categories of musical ear, which can be differentiated such as follows:

- melodic hearing, which presents ability of differentiating tones according to the pitch. It is necessary for perception of intonal tasks (requirements) that is, melody reproduction. According to Garbuzov, melodic hearing is of the “zone” character, that is “height of the tone may move within one, not very wide zone and yet be received as a correct one”. The “best hearing” is near the centre of the zone, according to the author, while hearing which leaves (goes away) from the zone threshold is considered as “undeveloped” by Garbuzov (Radičeva, 1997);
- absolute and relative hearing refer to the different approaches to tone height differentiating. Absolute hearing represents ability to name, reproduce or recognize certain tone height without foundations on some familiar tone standard (tone, tonality and so on). According to Levin and Rogers, development of this ability is related to the early period of childhood i.e. ideal age limit is nine years of age. The authors do not cast away a possibility of achieving an absolute hearing by thought out and persistent training (practice) with the use of absolute naming of tones (Levin & Rogers, 2005). However, it is possible to “break” from this ability during educational process by using the method of relative naming of tones (Cvetković, 2015). Relative hearing, as “a decisive assumption of music activity”, (Michel, 1975), represents ability of perception (reception) and reproduction of tone heights on the basis of comparison, that is, on the bases of a fixed tone standard – tone or tonality;
- tonal hearing, special ability of differentiating tones according to their height independently from the timbre components presence, that is timbre characteristics;
- inner hearing, fixation ability (imagining) tones within one’s consciousness, i.e. ability of “inner recording of tones” which is related to “the inner comprehension of sound impressions” (Krsić-Sekulić, 1990: 24);
- harmonic hearing, ability of differentiating harmonic phenomena – observing accord structure i.e. accord constructions, sets and their relationships (mutual relations). As a specific aspect of disposition and gift, harmonic hearing is related to relevant, already acquired experiences of an individual, which is supported by a view that “the consciousness of harmony is learnt” (Radoš, 2010: 81). Olujić states that harmonic hearing should be nourished from the very beginning and also throughout the whole music education, particularly emphasizing a construct “harmonic memory” (Olujić, 1990: 35), which refers to the possibility of memorizing harmonic course and its later instrumental reproduction. It is necessary to point out, having in mind importance of development of harmonic hearing on secondary and tertiary level of music education, a need for applying “perception of functions in tonality through listening to pieces of music as complete recording”, that is “in combination of different timbres in different factures” (Nikolić, 2014: 12).

Having observed music performance complexity, especially on the higher level of expertise, it can be assumed that the basis of success is made up of synthesis of the two aspects – psychological and motor ones. From a psychological standpoint it is necessary to build mental plans of performance “with simultaneous implementation of emotional and expressive aspects of performing” (Radoš, 1996: 153). Thus, during the sight-reading, practice and performing of a piece of music, it is necessary that a performer fulfills *specific requirements* concerning comprehension of the whole piece of work he is performing as well as making its structure plan. Performing plan encompasses a general analysis of tonal and rhythmic structure of the music piece: “it is, therefore, much more than a mere addition and unison of individual motor and music activities, which can be performed in an almost unlimited number of ways” (p. 153) for example, performing a piece in faster or slower tempo, with weak or stronger sound intensity, different combining of expressive properties etc. The final achievement or a *truly music skill* comprises ability of activating (higher) levels of mental achievements in different situations, while “‘technique’ refers to the transformation of the plan through successive lower levels” (Rados, 1996: 154). In any case, it is expected that an individual on the level of expertise has already acquired performance elements and mastered its use, which will enable directing attention not only to technical, but also artistic and expressive aspects of performing.

3.CONCLUSION

Teaching instrument playing and teaching solfeggio within the music education curriculum involves important aspects of music performance, which despite specific differences, play an important role in creation of music competencies. It is necessary to permanently stimulate elements of music performance through music teaching with skillful and creative lead of correlation of solfeggio and instrumental teaching, which should provide for an adequate development of music talent. The paper considers relevant elements present in the pieces of music performing, from the music-pedagogical and music-psychological standpoint: sight-reading, creation of sound images, associations and automatisms, development of memorizing music, stimulating development of different categories of musical

ear, mastering the principle of grouping during performing and memorizing of music content, tending to respect elements of artistic performance (tempo, dynamics, articulation, agogic and phrasing). Complex interaction of elements stated points to a need of their thorough observation in future studies, with defining of their role and activities. We think that education and development of awareness of factors of music performance would have positive effects on teachers of instrumental music and solfeggio (but also on students, the future teachers), and would influence the teaching practice and development of music abilities and skills of the students. The aim of music education is to develop ability of an individual to understand and “hear within” the music sheet notes before performing it either vocally or on an instrument on the one hand and to decipher, comprehend and write down or perform on an instrument the music they hear on the other. In that sense, it is expected that interactive stimulation of all interpretative elements during different levels of music education results in music expertise and success in dealing with music as profession in performing, pedagogic and/or creative area.

LITERATURE

- [1] Cvetković, J. (2015). *Imanentni sluh i recepcija muzike*. Niš: Fakultet umetnosti u Nišu, Univerzitet u Nišu, Centar za naučnoistraživački rad SANU i Univerziteta u Nišu
- [2] Kiselčić-Todorović, D. (2001). Percepcija i recepcija muzičkog sadržaja pri pevanju sa lista. *Zbornik radova četvrtog pedagoškog foruma*. Beograd: Fakultet muzičke umetnosti u Beogradu, Katedra za Solfeđo, 71-73
- [3] Kodela, S. i Todorović, D. (2014). Sinergija opažanja, reprodukcije i muzičkog mišljenja u nastavi solfeđa. *Tradicija kao inspiracija*, tematski zbornik sa naučnog skupa „Vlado Milošević“. Banja Luka: Akademija umjetnosti Univerziteta u Banjoj Luci i Muzikološko društvo Republike Srpske, 643-648
- [4] Kršić, J. (1982). *Čitanje s lista i korepeticija*. Beograd: Zavod za udžbenike i nastavna sredstva
- [5] Kršić-Sekulić, V. (1990). *Korelacija nastave solfeđa sa instrumentalnom nastavom*. Knjaževac: Nota
- [6] Lamb, S. J. & Gregory, A. H. (1993). The Relationship between Music and Reading in Beginning Readers, *Educational Psychology*, 13/1, 19-26
- [7] Leman, A., Dž. Sloboda i R. Vudi. (2012): *Psihologija za muzičare: razumevanje i sticanje veština*. Novi Sad: Psihopolis institut. Beograd: Univerzitet umetnosti u Beogradu, Fakultet muzičke umetnosti
- [8] Levin, D. J. & Rogers, S. E. (2005). Absolute peach: perception, coding and contro-versies, *Elsevier Trends in Cognitive Sciences*, Vol. 9, No.1
- [9] Michel, P. (1975). *Psychologische Grundlagen der Musikerziehung*, Leipzig: Veb Breitkopf & Härtel Musikverlag
- [10] Mirković Radoš, K. (1996). *Psihologija muzike*. Beograd, zavod za udžbenike i nastavna sredstva
- [11] Nikolić, I. (2014). *Solfeđo: jednoglasni diktati*. Knjaževac, Nota
- [12] Olujić, A. (1990). *Razvoj harmonskog sluha*. Beograd: Univerzitet umetnosti u Beogradu
- [13] Radičeva, D. (1997). *Uvod u metodiku nastave solfeđa*. Novi Sad: Univerzitet u Novom Sadu, Akademija umetnosti
- [14] Radoš, K. (2010). *Psihologija muzike*. Beograd: Zavod za udžbenike
- [15] Sloboda, J. A. (2005). *Exploring the musical mind*. Oxford: Oxford University Press
- [16] Todorović, D. (2005). Vizuelno i auditivno opažanje kao osnova postavke i razvoja pevanja sa lista. *Nasleđe, časopis za književnost, jezik, umetnost i kulturu*, godina II, br.3, 113-128
- [17] Vasiljević, Z. (1989). *Solfeđo – Metodski praktikum*. Beograd: Univerzitet umetnosti
- [18] Vasiljević, Z. (2002). *Solfeđo – Metodski praktikum*. Knjaževac: Nota
- [19] Vujaklija, M. (1970). *Leksikon stranih reči i izraza*. Beograd, Prosveta