APPLICATION OF RENOVATION MODEL
IN TEACHING OF HARMONY

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Abstract. Practical harmonization on an instrument within the Harmony course is continuously an element of professional musical education, from the first grade of the secondary music school to the completion of bachelor studies of music. The manners, means, methods, as well as the degree and approach to this technique (skill) are naturally and inevitably open to new ideas. The paper presents the renovation potential of the specific Medieval Church scales (modes), sequences, transpositions, and modulations, as the terms and techniques familiar to the students within the course of Harmony. The application of the recommended procedures of the renovation model in teaching Harmony is one of the possible ways to accomplish successful and creative classes in this interesting and inspiring area of musical expression for students, allowing for more successful transfer and presentation of the acquired knowledge and opening doors to their potential creativity.

Key words: methods, harmonization on the instrument, Harmony, renovation model of teaching.

1. INTRODUCTION

The school subject Harmony, taught at both secondary and tertiary level of music education, makes use of various teaching methods, such as oral presentations, class discussions, interpreting texts, written assignments, illustrations and demonstrations, laboratory work and practice (Filipović 1977; Ђорђевић и Ничковић 1990).
Methods applied in teaching this subject may differ in minor details. The purpose of their application is to develop and stimulate expressive, reflective, and creative skills of the students (Nagorni Petrov and Stojanović 2023).

The practical harmonization on the instrument, being part of the method of illustration and demonstration, enables students to apply the acquired knowledge of harmony. Applying this method the teacher transfers the illustration of the theoretical knowledge via a visual experience into an actual sound image (demonstration) as the final act of the reflective process. Students are thus enabled to turn their acquired theoretical and practical knowledge into the skill of harmonizing cadences, short modulations, and ascribed harmonic tasks on the instrument (Živković 1979). However, this method is rarely applied in class and students consider it both difficult and not very popular (Haropun Hipron 2017).

The practical harmonization on the instrument involves a systematic process of playing the figured bass (general bass), the oldest known method in teaching Harmony. Described as the bass which is notated, figured, and marked with numbers, the figured bass is one of the frequent systems for denoting and playing music. It appeared in Italy during the Renaissance in the late 16th century as the system of contracted denotation of harmonic chords (Boien 2008). This system prevailed till the end of the 18th century as a very efficient method of teaching harmony. Particular chords of the figured bass were accomplished by the codes written in Arabic numerals and other symbols. The figured bass thus became some kind of music stenography. It yielded its own rules (instructions) for its own creation (performance) (Živković 1979). The figured bass imposed certain requirements upon the performer who was expected to know and master compositional techniques. The figured bass method is practiced at present, as well, when teaching harmony on the keyboard instruments. Earlier textbooks for studying the figured bass were considered crucial and primary textbooks for studying harmony (Ibid 1979). Pedagogical practice of teaching harmony in Serbia regards playing the figured bass as vitally important.²

² Many figured bass (general bass) playing textbooks often served as the first, basic harmony textbooks (Science of Harmony). The first written instructions for playing the bass were written in the beginning of the 17th century. Their authors are Viadana: 12 avertimenti (12 Instructions) in the preface to the collection Cento Concerti ecclesiastici (1602); Agazzari: treatise Del sonare sopra'l basso con tutti li stromenti e dell' uso loro nel concerto (1607); Praetorius: Synagmus Musicum, III (1619). Significant works and textbooks on playing the general bass were written by: Penna: Li Fundamenti per suonare l'organo sopra la parte (1672); Saint-Lambert: Nouveau traité de l'accompagnement du clavecin, de l'orgue et des autres instruments (1707); Heinichen: Der General-Bass in der Composition (1728); Marburg: Handbuch bey dem Generalbasse (1755); Geminiani: The Art of Accompaniment (1755); Bach, S. Ph. E.: Versuch über die wahreArt das Clavier zu spielen: Zweyter Theil, in welchem die Lehre von dem Accompaniment und der freyen Fantasie abgehandelt wird (1762); Telemann: Singe-, Spiel- und Generalbass-übungen (1733–34); Hesse: Kurse, doch hinlängliche Anweisung zum Generalbass (1776); Bossler: Elementarbuch der Tonkunst zum Unterricht beim Klavier (1789) (Nagorni Petrov 2021).

2. PRACTICAL HARMONIZATION ON THE INSTRUMENT

Practical harmonization on the instrument, playing the instrument, playing the piano, harmony on the piano is only part of the widely used and, regarding the harmonic theory and practice, rather recognizable terms whose common denominator is the technique (skill) of transferring theoretical and practical knowledge of harmony onto the instrument
The promoters of the aforementioned activities insist on musicality, persistence, practice, and creativity.

The majority of contemporary textbooks underline that the main goal of Harmony as a science is the harmonization of melody (Živković 2014), which further emphasizes the importance of creating the harmonic, melodic, and rhythmic fantasy (Vasić 2003).

The application of the harmonic reflection logic on the actual performance on a music instrument is the goal of teaching the practical harmonization on the instrument. This goal is accomplished by practicing various compositions, from cadences, modulations, didactic tasks in the form of coded basses, contoured double voice, particularly sopranos up to the compositions containing modulations and harmonization of playground rhymes and quotes from music art literature (Čuperjani 2009). "Playing harmony on the piano contributes to the acquisition of significant knowledge. On the other hand, it may become one of the goals of teaching if the knowledge and skills are presented in an instrumental, interpretational manner. Then, the acquired knowledge is aimed at creating individual, original compositions" (Belković 2009).

Teaching Harmony at all levels of music education necessarily involves the method of the practical harmonization on the instrument (Nagorni Petrov, Stojanović & Ilić 2020). The new curriculum for secondary music education introduced a new school subject, Harmonic Accompaniment, to be taught to the first-grade secondary music school students at the Music Theory department (who are qualified for the profession of the Music associate) during two classes per week (Pravilnik o planu i programu nastave i učenja umetničkog obrazovanja i vaspitanja za srednju muzičku školu 2020). The outcomes of this school subject are expected to qualify students "to recognize musical components aurally and analytically and to explain their influence on the character of the melody, to recognize the chords, types of cadences and harmonic connections aurally and to adequately create and play them, to define the functional characteristic of chords and to perceive their harmonic role, to observe the functions, stages, position and form of chords in short exemplary tasks, to analyze the melody and select appropriate chords, to interpret various harmonic patterns in the harmonic accompaniment, to analyze and interpret chords from music literature of various genres, to verbally express their own impressions of the assigned composition, to critically assess their own performance and the performance of their classmates, to apply the necessary knowledge and skills on the instrument" (Ibid. 2020, 479).

3. Innovations in Teaching Harmony

The need and idea to innovate emerges under various conditions, in different circumstances, communities, social systems. It is the result of an individual and constant realization of new ideas or creation by means of analogous inspiration (Pedagoška enciklopedija 1 1989). Innovations are well-devised, original, organized, and special changes in education that improve it and contribute to better school achievement. They are the measures that have an impact on the efficiency of education and improve school potentials with the purpose of providing the best possible education (Vlahović 2001).

Innovations span a wide range of activities. They are involved in all segments of education – from its goals and tasks, curricula, methods and forms of instruction, quality of students’ and teachers’ education to supervision and assessment of the results obtained at school (Ibid, 2001). As far as music education is concerned, the need to innovate is as
old as this education itself. Written records provide evidence of valuable texts which are almost a century-old that describe music instructors, concern about music education and music as a creative activity. Teachers of both theoretical and practical subjects in music have always struggled with a myriad of questions, when looking for answers to them. Hindemith (1983), a music teacher, makes a statement based on his teaching experience with students of different ages and dispositions: "The person who has taught students for years, who has to answer students’ questions why great masters are allowed certain things that they are forbidden to do, why a particular topic is good and the other one is bad, why harmonic sequences can be calm or impulsive, why sense and order must rule even over the most furious whirlpools of sounds, why that order is impossible to obtain using traditional means – the person who has not avoided that incessant struggle with the question ‘why?’ and who, at risk of being embarrassed in front of their students, has considered that question an impetus to more thorough and meticulous research" (Hindemith 1983, 21).

Innovative sparkles in music education have shed philosophical and creative light on teaching music courses. The teachers from the theory department presented new forms of teaching to mark the anniversary of the music school Mokranjac (the 75th anniversary), (Музичка школа „Мокрањац” 1899-1974, 1974). Stating the problems, practical results, and the importance of teaching the school subject Harmony, they left the classroom accompanied by their students and stepped onto the stage. Thus, the internal class performed in the music school Mokranjac got a completely new form and meaning. The students presented the most successful harmonic tasks, performing their own work by playing instruments or singing in a group. This form of public performance of the students’ accomplishments in Harmony describes a manner in which students may be qualified for practical work and a creative approach to teaching this school subject, which should reach beyond pure music theory (Ibid 1974).

Criticism of the concept but also of the implementation of the teaching of theoretical subjects, and especially the school subject Harmony, was presented in the eighties of the last century. Describing the pedagogical diseases of our society, this criticism emphasized the "lack of creativity in its conception" and pointed out that “the work on mastering the technique of harmonizing melodies, as well as the work on developing harmonic improvisation, if it existed at all, was not placed in the foreground, as it should be, but on the margins" (Plavša 1989, 27).

Possible solutions were offered by teachers of theoretical music subjects from the Faculty of Music in Belgrade by designing creative workshops. They supported the importance of methodological issues in the teaching of theoretical subjects (Harmony, Counterpoint, Music Forms, and Music History) with selected examples from textbooks and embarked on a kind of analytical and challenging voyage, referring to current problems from everyday practice (Cašo at al. 2014). Emphasizing the importance and effects of the practical harmonization on the instrument in the complex teaching process, they tried to answer the following questions: Why is harmony on the piano a problem for most students? Are the demands placed on them too difficult, or does the problem stem from an inappropriate approach? Is it possible to learn harmony as a set of rules? How to approach the understanding of harmony through playing the piano? The answers to these questions were offered through an overview of the valid Harmony Textbook and a selection of other sources in order to point out different approaches to this subject, with an emphasis on playing harmony on the piano as a starting point in mastering the material. The special importance and value of the workshops opens the issue of
innovations in the teaching of theoretical subjects (Harmony) and initiates a creative dialogue on these issues (Ibid. 2014).

The author Jovanović (2006) suggests additional study of harmony and the harmonic component from the instrumental-kinetic perspective, which would lead to an understanding of its essence. She proposes the application of "playing 12 chords according to Timakin" (Evgeny Mihaylovich Timakin 1916‒2004), a technique that is also applied in the pedagogy of piano lessons (Ibid. 2006). Appealing to the perseverance and imagination of the teacher, the same author suggests a "selection of models from subcultural genres" that provide supplement, actualize and popularize the teaching process of the school subject Harmony.

4. APPLICATION OF THE RENOVATION MODEL FOR MORE SUCCESSFUL PRACTICAL HARMONIZATION ON THE INSTRUMENT

Looking at the complexity and specificity of music pedagogy, as well as harmony pedagogy, through the harmonization of physiological, affective, and intellectual elements, there is an opinion and a need for innovation in the teaching of Harmony at all levels of education (Nagorni Petrov 2016a). In harmonic practice, a real innovative potential is recognized in pedagogical renovations as the idea of achieving something new, without major changes, consistent with what preceded the practical harmonization on the instrument. "The very process of adopting teaching material of Harmony is usually very slow, it requires a lot of patience and endless repetition of the same thing with very small quantitative changes of the results, which in the end sometimes has a bad effect on student motivation. It is a direct consequence of the phenomenon that university students, as well as students in secondary schools, rely exclusively on the adopted, memorized rules for connecting chords, while they do not consciously hear. They do not distinguish aurally and they do not understand the actual sound image of chords, chord connections (voice leading) and harmonic units in general" (Čuperjani 2009, 180).

The proposal for renovation procedures includes several important segments that are present in the teaching of the subject Harmony. By highlighting some of them, as well as directing them towards important steps in their implementation, the aim is to reach a different, free, practical skill of harmonization on the instrument encouraged by knowledge and experience (Nagorni Petrov 2016a).

1. The attempt to introduce changes in the teaching process of the school subject Harmony represents a conscious introduction of transposition as a technique present in all areas of music education: through the teaching of various musical disciplines – theoretical, practical, and performing. Mastering the technique of the practical harmonization on the instrument, which includes playing a completely authentic cadence in different tonalities, represents an organized, gradual introduction of the student to the technique of transposition. Mastery of transposition is necessary to gain confidence and automation in practical performance, theoretical training, practicing knowledge of chords and acquiring the skill of harmonic improvisation. "Knowledge and practice of different textures makes improvisation inevitable already in the initial stages of learning harmony. In mature stages, it becomes its own goal and transforms into a creation" (Jonasová 2006, 67). Inventiveness and improvisation are priorities in relation to recording, which comes only after the adopted sound.
2. The next stage in the process of introducing innovations into the practical harmonization on the instrument is to know and practically master the sequence, a technique that is present in everyday harmonic practice and literature of different stylistic eras. The sequence is presented through the phrase "unity in diversity", a clash of repetition and contrast, an element of development and contrast: major-minor, loud-quiet, fast-light, homophonic-polyphonic (Petrović 2011). This is an occasion when students should be reminded of the mechanism of the sequence and the principle of repetition of motifs – models. In the beginning, students should be given a simple model of the melodic and harmonic sequence, its ascending and descending direction (Radenković 1972). Everything mentioned about the mechanism of the sequence, the method of transmitting the model, the types of sequences should be presented primarily in sound form. Start from sounding through playing. End the sound performance of the sequences with a short but mandatory analytical review of the already presented theoretical and sound performances. The segmentation of the sequence, as well as the re-establishment of the whole, should highlight all the necessary elements of the above mentioned mechanism.

By expanding harmonic knowledge and perfecting the skill of practical harmonization (creating tasks, practical harmonization on the instrument), sequence models become different and more complex. As part of the higher education teaching process, apply the mechanism of extra tonal-modulating sequence, in which each subsequent repetition of the model brings a new tonality. The degree of monotony caused by exactly the same shift and application of the same chords is compensated by the freshness of a new tonality, a new tonal color. Acquiring the skill of creating and analyzing a sequence is recommended in textbooks by Russian authors of the second half of the 20th century: Abyzov (1994) and Maksimov (1977). Expressive harmony leads to the frequent use of a chromatic sequence, in the model of which altered chords are present (most often non-tonal dominants and substitutes). In compositional practice, the sequence rarely appears as a closed whole. More often it consists of smaller or larger fragments within a formal section. Only in school harmony it is possible to include all scale degrees rounded off with a cadence. Sequences are most often intended to achieve dynamic, substantive, and tonal gradation in the construction of a compositional form. Pupils and students learn about the importance and beauty of the sequence in other musical disciplines - instrument, solfeggio, counterpoint, music forms, arranging. During the period from the mid-17th to the mid-19th century, the sequence was an important constructive element in shaping of instrumental forms. It was mostly used in the episodic parts of the fugue and the developing part of the sonata form (Ibid. 1972).

3. The sonority of modal scales (old church scales, modes) as a spectrum of new sound colors, specific harmonic connections and cadencing processes characteristic of modal diatonics (Despić 2002) should be presented to students. The best visual, auditory, and interpretive effect is achieved by different ways of harmonizing and playing the same set melodies in different modes. Attention should be paid to the orthographic and sonically identical structures of the Ionian mode with natural major and the Aeolian mode with natural minor (Maksimović 1995), their different harmonization, as a result of the equality of all degrees.

The obvious differences between the modes were reflected in the melodic lines characteristic of each mode and the concluding, final formulas – cadences, as the only place where the dominance of the fifth chord of the first degree is manifested. Modal
harmonic expression has a certain, specific spirit and a general, unique sound impression. In the period of dominance of classical harmony, we encounter a certain number of modal harmonic remnants: Phrygian Quinta chord ($F^5_3$, $N^6_6$), Neapolitan sphere, Phrygian cadence, Lydian sextachord ($L^6$, $l^6$), Mixolydian stepping into the subdominant field, Mixolydian quintachord ($Mi^5_3$) (Despić 2002; Petrović 2011). Their appearance is related to different artistic styles (especially romanticism and impressionism) in which they appear as a reminiscence of early medieval music and the values of European and non-European national musical cultures whose folklore tradition is based on different modal structures (Despić 2002).

The first practical modal step would be the playing of the basic modal scales known to students (Doric from the tone of de, Aeolian from the tone of a...), as well as the transposition of the modal melodies through all the tonalities of the tempered system. The next step is an attempt to form a modal ending based on the given melody. Combining and using (practical and analytical) tonal and modal harmonic elements will create for students the possibility of a definitive sound, and therefore harmonic separation of different scale options – tonal and modal, i.e., tonality and modality as two basic types of gravity that influenced the formation of the harmonic component of art music (Despić 2004; Stefanija 2008).

4. Playing modulations as the most widely understood and most frequently used changes of tonality represents a practical field of action that enables connecting harmonic knowledge, resourcefulness, dexterity of pupils/students, nurturing harmonic logic. At the level of secondary music education, playing modulations includes the use of scale chords in tonalities with a small number of signs. What prevails is the diatonic mode of modulation and mastering the skill of choosing a common chord as the best moment of re-signification and transition into the sphere of a new tonality and a new harmonic color (Nagorni Petrov 2016a). The procedures of chromatic and enharmonic modulating methods retain their informative character. "The art of modulation has as much importance in music as rhythm and form. These three things, when the ideas are beautiful and adapted to the theme, provide vitality to the works, and sometimes create masterpieces from them" (Dubois in: Živković 2005, 191). By moving to a higher level of musical education, diatonic modulation takes on an additional chromatic character with altered chords of the diatonic and less often chromatic type. The means of chromatic modulation are Neapolitan sextachord, change of triad and quadrature, chromatic and apparent third kinship. Students are expected to be logical in the presentation of harmonic material and to find good, logical solutions (identification). The formation of modulating harmonic tasks is more easily realized with the already mentioned didactic path, which includes individual creation of the same, analysis and final voicing. Playing enharmonic modulation is the last, the most difficult and the least acceptable way for students to switch to one of the tonalities of the tempered system. The process of playing enharmonic modulation begins with the use of a diminished seventh chord - theoretical explanation and concrete sound realization. The acceptance and application of enharmonic modulation as the possibility of a quick and effective transition to all the tonalities of the tempered system enables a quality approach to the harmonic analysis of compositions starting from the period of musical classicism.

The process of devising and interpreting short modulatory harmonic tasks in the form of sentences should be supplemented with a chord fund that goes beyond the framework of basic chord forms on the main functions. Constantly remind students that there is
another solution, some other chord structure of the diatonic or less often chromatic type, which can play the same or similar role in shaping the modulatory harmonic task. Also, insist on the application of all modulating methods, regardless of the kinship between tonalities (modulation from major to parallel minor can be carried out faster and more effectively by chromatic and enharmonic means).

Finally, in the last year of studying Harmony, organize a kind of rehearsal of playing modulations. Cover the playing of all types of modulations on the example of the same given tonalities: diatonic, chromatic (choice of one means of modulation), enharmonic (choice of one of the chords of the diatonic or chromatic type). The act of renewing and unifying the modulation procedures would round off the multi-year harmonic modulation problem, with the application of the adopted harmonic knowledge and skills. Also, the intention is to build students’ awareness of modulation as a necessary procedure in shaping a piece of music.

5. CONCLUSION

Teaching the school subject Harmony at all levels of music education is unthinkable and incomplete without the practical harmonization on the instrument. By the practical harmonization of cadences, shorter and longer didactic assigned melodies, modulation on the instrument, the acquired knowledge and skills are consolidated, whereas dynamism and a new quality of harmony teaching is achieved.

The proposal for inventing new procedures in the teaching of Harmony includes several important terms and techniques familiar to the students. The first of them is a reminder of transposition as a somewhat forgotten technique applicable to the practical harmonization on the instrument. The next step would lead to a widely understood and detailed problem of the sequence, as a ubiquitous technique in shaping different musical contents. The sonority and potential of various old church scales (modes) brings the necessary innovative spirit. The last step in the attempt to make the practical harmonization on the instrument interesting, provocative, and inspiring is to look more broadly at the means and mechanisms of modulation, as a necessary procedure in shaping a piece of music.

By introducing the renovation model and directing it towards important steps in the implementation of Harmony lessons, the aim is to achieve a different, freer, knowledge and experience-driven practical skill of harmonizing on the instrument. Real, desirable results in the acquisition of knowledge of Harmony arise precisely from the practical harmonization on the instrument, if the acquired knowledge and skills are presented instrumentally, interpretatively. The teaching of harmony can also reach the stage of creativity, which will open an unfathomable creative space for pupils and students.

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PRIMENA RENOVACIONOG MODELA
U NASTAVI HARMONIJE

U okviru nastave Harmonije, praktična harmonizacija na instrumentu odvija se tokom kontinuiranog stručnog muzičkog obrazovanja – počev od prvog razreda srednje muzičke škole, i traje do završnih godina osnovnih akademskih studija u okviru visokog muzičkog obrazovanja. Način, sredstva, metode, stepen kao i pristup ovoj tehnici (veštini) su prirodno i nemanjno otvoreni ka novim idejama. U radu će se pristupiti specifičnom zvuku starocrkvenih lestvica (modusa), mehanizmu sekvence, transpozicije i modulacije, kao učenicima poznatim pojmovima i tehnikama rada u nastavi Harmonije. Primena renovacionog modela u nastavi Harmonije prilagođenih postupaka put je ka uspešnoj, kreativnoj, učenicima i studentima interesantnoj i inspirativnoj oblasti muzičkog izražavanja i prenošenja ali i prezentovanja stečenog znanja, kao i potencijalnoj kreativnosti.

Ključne reči: metode, harmonizacija na instrumentu, Harmonija, renovacioni model nastave