

## The Principles of the Notation of the Renaissance Polyphonic Music

### Abstract

The notation of the Renaissance tenor polyphonic texture was not of a scoring type. Composers used to record independent melodic lines separately. A notation principle for individual voices was based on voice as a unit closed in it. An individual voice is a more or less completed independent musical unit, thriving in the company of other units similar to it. Melodic lines of individual voices, horizontally oriented, mutually match complementarily, and the generated harmonic consonances are resulting, adjusted in the final stage of a creative process.

The books that reached our epoch include large-format manuscript books for choral music, smaller manuscript books for secular music, and small-format printed books of choral music. The notation of instrumental music employed several different methods: a klavarscribo score, a klavarscribo system and tablature. The first two methods are based on writing down music sounds by using notes, whereas in tablature instead letters or figures, or both letters and figures were used. A great influence on the initiators of tablature notation was exerted by the achievements in the sphere of the notation of vocal polyphonic music. The marking of signs for rhythm and frequent usage of a linear system witness it, besides, it was those tablature writing methods, which were least of all distanced from the Renaissance notation of vocal polyphony, that took root.

**Keywords:** polyphony, individual voices, choral books, tablature.

**Object of research:** the principles of the notation of Renaissance vocal and instrumental polyphonic music.

**Aim:** to detect the main notational principles of the Renaissance multi-voiced music.

**Methods:** analysis, comparative, generalization, hypothesis.

Till the beginning of the 13<sup>th</sup> century polyphonic music was notated in scores. The beginning of writing in separate voices is related with the appearance of motet (about 1225). Nearly all musical compositions created since 1225 till 1600 were fixed in separate voices, excluding conduct and compositions written later in conduct style (e.g. English compositions of the 14<sup>th</sup> – beginning of the 15<sup>th</sup> centuries). Renaissance theoretician and composer Fr. Gaffurius in his "Practica musicae" wrote about the formed successive polyphony composing and writing down conception emphasizing that in polyphonic music tenor is the basis of relations (*fundamentum relationis ist*).

Separate voices were written down in chorus book in one or two beside present pages in a certain steady procedure. On one page the voices were written down in such a way: on the left side *triplum*, on the right – *duplum (motetus)* and the *tenor* below. In two pages the voices were fixed as follows: on the left *triplum*, on the right – *duplum (motetus)*, below on both pages *tenor* was written. Such order of writing voices was necessary, so that three singers would see their parts written on the same page equally well. Out of such voices placing it is clear that in the centre *tenor* – the most important voice, *cantus firmus* representative, is; on its right – *duplum (motetus)* and on its left – *triplum* were written. In the same principle the voice coordination in a music composition was conducted as well. So the principles of polyphonic composition and its notating were directly interrelated.

The polyphonic music of Renaissance epoch was fixed not in scores, by writing down independent melody lines separately. Every voice used to be written separately without any visual evaluation of other voice situation. The principle of writing in separate voices follows voice as a unit close in itself. A separate voice is a finished more or less independent melody line. These melodic lines developing in horizontal direction mutually matched in complementary way and forming harmonic consonances were corrected in the final stage of creative process. The composers used to neutralize dissonancy orientating to pan-consonant sounding – fauxbourdon norm which can have variant forms.

The problem of "composer's score" is directly related with organization of composing process, because, in opinion of musicologist C. Reynolds, "composer's plan for a work would ultimately affect a methods used to notate it, and, conversely, the notational habits of a composer would condition the type of plans <...> Thus the theory that Cipriano de Rore worked one phrase at a time on the limited space of a *cartella* is particularly useful to analysts, because it shows how a compositional plan conceived in terms of sections could be carried out"<sup>1</sup>. Although, as M. Bent says, "there is no evidence that fifteenth-century composers used scores in the process of composition. A composer could work out his ideas, and/or realize his mental conceptions, by communicating the successively-conceived parts, either orally or in writing, to singers who then substituted for the function of a written score by providing aural, not visual, control over the simultaneities"<sup>2</sup>.

B. J. Blackburn has a similar opinion – "As long as composers wrote music successively, there was no need of a score; they could write "upon the book", that is, look at one line of music and write another, in the same way that they could "sing upon the book"<sup>3</sup>.

In Renaissance after the functions of free voices unified, *cantus firmus* remained the generator of their material basing on interval of third and its inversions (sixth, tenth) on which the whole polyphonic composition three-dimensional space is based. The melodic line of each separate voice is created by multiplying the third interval in various directions. Surely one cannot get without jumps to wider interval, gradual movement, melodic ornamenting, however, behind similar camouflaging details always frame based on third which we recognize from longer note stops, the most elevated phrase points and others lies. The third and shapes of its inversions in the vertical structures are combined in various way by summing way. The consonants forming in Renaissance polyphonic music in their structure identical towards baroque, classicism and other styles tri-sounds have completely different meaning: by their resultant, summary quality they express the pan-consonant spirit of their epoch reflecting in the prevailing in the composition principles of musical material organization which are based on the spread of third interval in all the musical parameters.

Every separate voice grows out of religious or secular *cantus firmus (res facta)*. Separate voices in white mensural notation used to be of different length (voice performing *cantus firmus* most often used to be the shortest – as if a peculiar quintessence) besides in frequent case it was practically impossible to write them exactly vertically (due to ligatures, applied rhythm proportions) – so saving the expensive parchment and taking into consideration the needs and convenience of the singer the voices of polyphonic music used to be written not in score.

Till 1501 when publisher from Venice Ottaviano dei Petrucci published the first printed publication, polyphonic music was fixed in unique manuscripts valued as especially valuable property. The appearing of music printing sped up the internationalization of polyphonic music, however, due to that the era of manuscripts did not come to an end. In every church and estate in which vocal ensemble was disposed the work of the copier remained important as the repertoire for the local need was written by hand. Besides many printed publications were of a too small format, so that they could be used for work with a choir, so the manuscript variants were still necessary. Most part of manuscripts are chorus books of great format which used to be put on one stand in such way that music performers all of them gathering around the conductor could see the notes. Most often the voices of a musical composition were written down in two one near the other present pages, for example, four voice mass upper voice and tenor used to be fixed on the left page and alto and bass on the write one. If the fifth voice was necessary, it used to be written below on both pages (as in the manuscript of P. de la Rue "Missa de septem doloribus" Petrus van den Hove).

Beside chorus books with ecclesiastic compositions of huge format smaller chorus books aimed for secular music were written. In France they were called "Chansonniers". Among worldly polyphonic music chorus books the splendidly ornamented book belonging to Margaret from Austria with P. de la Rue and J. des Prez compositions and also an impressive "Chansonnier cordiforme" so called due to the shape reminding heart – in it anonymous three voice love songs with French and Italian texts are written, – can be distinguished.

Contrary to Renaissance vocal music for the writing of which the only principle of the white mensural notation used to be applied for the notation of instrumental music compositions several different methods were used. The early clavier music is the transcriptions of vocal music, so for the

writing of such compositions score notation was used uniting separate voices written in chorus books into a score. Surely original instrumental compositions written in scores appeared. This notation type existed at the end of the 16<sup>th</sup>–17<sup>th</sup> century in Italy, at the beginning of the 17<sup>th</sup> century in Germany and Portugal. Rhythmic units were separated by bar lines and this property used to reflect in the names of musical collections often (It. *spartiti* – separate, *partiti in casselle* – to separate by measures) and everything is written in notes.

Another way of clavier music notation used in the 16<sup>th</sup> century universally recognized later – is the clavier system which consists of two several (from 5 to 8, even 13) line systems. The line number varies in the musical compositions of different countries (Italy, France, England), different authors. In comparison with the white mensural notation there are changes in clavier system: bar lines, connecting bows, imperfection of rhythmic values are used, ligature (excluding English collections) have been refused.

As both the clavier system and the clavier scores are based on writing music sound in notes they cannot be called *tabulaturas*. By the latter term notation in which instead of notes letters or digits or both letters and digits are used is called. The pitch of music sounds was fixed in letters already in the 9<sup>th</sup> century, besides one should not forget the Greeks who in their notation already used letters. In the Medieval Ages various systems of notation in letters existed aimed for theoretic or didactic aims when in the 15<sup>th</sup>–16<sup>th</sup> centuries in German organ *tabulaturas* and French and German lute *tabulaturas* the letter notation had a practical importance.

German organ *tabulaturas* are divided into the old ones and the new ones. *Tabulaturas* written at the beginning of the 15<sup>th</sup> century–middle of the 16<sup>th</sup> century are considered to be the old ones, their upper voice is written in notes, the remaining in letters<sup>4</sup>. In the new organ *tabulaturas* the higher octaves are started not from *c*, but from *h*. Loops tied to the letter show alteration. Signs similar to the values of corresponding notes show the rhythmic value of sounds marked by letters. In the old *tabulaturas* *B. perfecta* is marked by three large dots, *B. imperfecta* – two, *S.* – one, *M.* was expressed in vertical dash, *semiminima* – by a stem with a flag, and *fusa* – stem with two flags. The signs of the new *tabulaturas* differed from the old ones: *S.* was started to be marked by a vertical dash, *M.*, *semiminima*, *fusa* and *semifusa* accordingly with stem with one, two, three and four flags.

The first lute *tabulaturas* appeared in the 16<sup>th</sup> century and were aimed for the instrument with six strings, although German *tabulaturas* were at first written for five string lute. Through six strings across stretched nine frets – in this way fifty four places of intersection are formed. The systems of different countries differ in the way how these intersections are marked. One must distinguish three *tabulatura* types: Italian (Spanish)<sup>5</sup>, French and German *tabulaturas*. Italian and German *tabulaturas* notations gradually disappeared and in the 17<sup>th</sup>–18<sup>th</sup> centuries only the French type survived. As the eleven lute strings are divided in six groups by pairs (only the highest string is left alone) it is considered that lute is six-stringed. The French used to mark the free strings by letter *A*, intersection places – *B*, *C*, *D*, *E*, *F*, *G*, *H*, *I*, *K*. The used rhythmic signs are the same as used in organ (clavier) *tabulaturas*. A system of five lines symbolizing five upper strings is used, and the sounds of the lowest string are noted at the bottom of the staff. The letters are written on the lines, rhythmic signs above line system; sometimes the latter are found on line and then they means pauses.

The first German lute *tabulaturas* were written both in notes and digits. Five strings are numbered, marking the free strings by digits. The Germans fixed the places of string and fret intersection by letters, orientating this marking in the direction of frets. As we see writing by letters is the common trait of French and German lute *tabulaturas*, only the French marked intersection places by letters along the instrument in the direction of a string and the Germans did it across the instrument in the direction of a fret. The letter sequence in French notation forms a chromatic sound succession.

The noting of the sixth string differs from other strings and is even more complicated, as some lute players chose for marking the capital letters, others small letters, others – digits (they wrote digits with a dash above).

In Italian lute *tabulatura* six line system is used the upper line of which symbolizes the lowest string and the lower – the highest. On the lines digits from 0 to 9 were written. As the sounds got in the intersections "rise" in halftones, every digit indicates by how many halftones the specific sound is higher than the tone got by the free string.

Digits were used to fix musical sounds in the organ *tabulaturas* of Spanish. In the second half of the 16<sup>th</sup> century in Spain several methods how to write clavier music existed numbering the all keys of the instrument from 1 to 42 or numbering 27 white keys. Finally in the second half of the 16<sup>th</sup> century only the white keys of one octave (f-e<sup>1</sup>) were started to be numbered, in other octaves digits were written with dashes, dots or commas. The digits are written on the lines symbolizing the composition voices.

The aim of *tabulatura* notation was to mark the pitch and duration of a music sound got by instrument key or string. So the creators of *tabulatura* notation in every country in their way solved this task making use of letters, digits, letters and digits, letters and notes. Still they were strongly influenced by the achievements of writing of vocal polyphonic music of that time. Still the principles of instrument (solo) and vocal (ensemble) music notation are completely different, as the first was written in scores and the second by separate voices. Thus the specific principles of notation formed affected by the functionality of music and specific composition of performers.

As the first instrument compositions were vocal music transcriptions fixed in scores, it is not difficult to understand that both these principles of notation – music writing in separate voices and score – have something in common. Consecutive writing of music does not do without the manifestations of simultaneous technique performing the coordination of separate voices melody lines at the final stage of creative process – correcting vertical interrelations of the voices. In this way although the principle of separate voice notation emphasizes the importance of horizontal parameter, Renaissance polyphonic music could not do without vertical coordination of independent melody lines. So the creative result of every multi-voiced composition written in separate voices is the harmonic structure coordinated vertically or in other words "score" existing in the head or maybe in the rough notes of a Renaissance composer.

### Notes

- <sup>1</sup> Reynolds Ch. Musical Evidence of Compositional Planning in the Renaissance: Josquin's *Plus nulz regretz* // Journal of the American Musicological Society, 1987, Vol. 40, No. 1, p. 53.
- <sup>2</sup> Bent M. *Resfacta* and *Cantare Super Librum* // Journal of the American Musicological Society, 1983, Vol. 36, No. 3, p. 376.
- <sup>3</sup> Blackburn B. J. On Compositional Process in the Fifteenth Century // Journal of the American Musicological Society, 1987, Vol. 40, No. 2, p. 268.
- <sup>4</sup> Printed *tabulatures* of N. Ammerbach (1571, 1583), B. Schmid (1576, 1577), J. Paix (1583), B. Schmid d. J. (1607).
- <sup>5</sup> "Dixhuit basses dances garnies de Recoupees et Tordios..., le tout reduyt en la tabulature du lutz "; "Tres breve et familiere introduction pour entendre et apprendre par soy mesme a iouer toutes chansons reduictes en la tabulature du lutz avec la maniere d'accorder le dict lutz...".

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## Santrauka

### Renesanso polifoninės muzikos notacijos principai

Renesanso tenorinis daugiabalsiškumas buvo notuojamas nepartitūriškai, savarankiškas melodines linijas užrašant atskirai. Atskiras balsas – tai išbaigtas daugiau ar mažiau savarankiškas muzikinis vienis, tarpstantis kitų į save panašių draugijoje. Atskirų balsų melodinės linijos, nukreiptos horizontalia linkme, tarpusavyje dera komplementariai, o susidarantys harmoniniai sąskambiai yra rezultatyvūs, koreguojami galutiniame kūrybinio darbo etape.

Kiekvienas balsas būdavo užrašomas atskirai, be jokio vizualaus kitų balsų situacijos įvertinimo. Atskiri balsai būdavo užrašomi viename ar dviejuose gretimuose chorinių knygų lapuose arba atskirų balsų knygose. Daugeliu atvejų viršutinis balsas ir tenoras būdavo užrašomi kairiajame lape, o altas (kontratenoras) ir bosas – dešiniajame.

Tokiu pat principu vyko balsų koordinavimas ir muzikos kompozicijoje. Tad daugiabalsiškumo komponavimo ir jo notavimo principai buvo tiesiogiai tarpusavyje susiję.

Instrumentinės muzikos kūriniams notuoti buvo vartojami keli skirtingi metodai: klavyrinė partitūra, klavyrinė sistema ir tabulatūra. Pirmieji du metodai remiasi muzikos garsų rašymu natomis, o tabulatūrose vietoj natų vartojamos raidės arba skaičiai, arba ir raidės, ir skaičiai. Tabulatūrinės notacijos kūrėjams svarbią įtaką darė to meto vokalinės daugiabalsės muzikos fiksavimo pasiekimai. Tai galima matyti ritmo ženklų žymėjime ir dažname linijų sistemos vartojime, be to, išliko ir įsitvirtino būtent tie tabulatūrinio rašto metodai, kurie buvo mažiausiai nutolę nuo Renesanso vokalinio daugiabalsiškumo notacijos.