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Joint and Divergent Elements in the Vilnius Treatises of the Second Half of the 17th Century: *Musical Grammar* by Mykola Dyletsky and *Ars et Praxis Musica* by Sigismundus Lauxmin

Vilniaus XVII a. antros pusės traktatų bendrumai ir skirtumai.
Nikolajaus Dileckio „Muzikos gramatika" ir Žygimanto Liauksmino
„Ars et praxis musica"

Abstract

This article is devoted to the comparison of different *ex facto* musical treatises *Musical Grammar* by Mykola Dyletsky and *Ars et praxis musica* by Sigismundus Lauxmin. One of the main purposes of these treatises was to teach singing. Another important element of our analysis is the term *cantus fractus* which was often used in this region from the end of the 16th century that gives us the opportunity to speculate about possible character of the music which has not survived. A detailed analysis not only confirms their close connection but also points to the place of these treatises in the historical development of the musical and theoretical conception.

Keywords: *Musical Grammar*, Mykola Dyletsky, *Ars et praxis musica*, Sigismundus Lauxmin, Gregorian chant, partes multivoice, Vilnius, protograph, manuscript copies, scala music, manus music, manus Guidonis, vox, clavis signatae, clavis non signatae, syllabae, cantus durus, cantus mollis, cantus diesis, cantus vero, cantus ficto, cantus mixto, organ, transpositio, tactus, cantus choralis, cantus fractus, cantus figuralis.

Anotacija

Straipsnyje tyrinėjami du skirtingi muzikos traktatai. Tai Nikolajaus Dileckio „Muzikos gramatika" ir Žygimanto Liauksmino „Ars et praxis musica". Vienas pagrindinių abiejų traktatų tikslų buvo mokyti dainavimo. Kitas reikšmingas bendras jų požymis – sąvokos *cantus fractus* vartojimas traktatuose. XVI a. muzikos teorijoje Vilniaus aplinkoje tai buvo dažna sąvoka, suteikianti galimybę mąstyti apie to laikotarpio neišlikusios muzikos pobūdį. Detali analizė atskleidžia ir patvirtina jų bendrumą ir įrodo traktatų svarbą muzikos teorijos raidai.

Reikšminiai žodžiai: „Muzikos gramatika", Nikolajus Dileckis, „Ars et praxis musica", Žygimantas Liauksminas, grigališkasis choralas, daugiabalsiškumas, Vilnius, protografas, rankraščio kopijos, *musica scala, musica manus, manus Guidonis, vox, clavis signatae, clavis non signatae, syllabae, cantus durus, cantus mollis, cantus diesis, cantus vero, cantus ficto, cantus mixto,* vargonai, transpozicija, *tactus, cantus choralis, cantus fractus, cantus figuralis.*

Introduction

Researching Mykola Dyletsky's[1] musical treatise *Musical Grammar* has lasted for more than 150 years[2]. However, the musical and theoretical legacy of this prominent theoretician and composer of the second half of the 20th century continues to draw attention of different scholars because it is only one source of musical and theoretical conception about studying the so-called partes multivoice[3], i. e. national variant of Liturgical multivoice of the European type.

In general, researchers agreed that the origin of *Grammar* should be searched in musical and theoretical treatises of the Western authors (Скребков, 1969, p. 69–70; Баранова, 1992, p. 152–156; *Музыкально-теоретические системы*, 2006, p. 216), however, they did not make such scholarly research.

In this work the author compared the systems of studying to sing enclosed in the musical and theoretical treatises *Musical Grammar* by Dyletsky and *Ars et praxis musica* by Sigismundus Lauxmin[4]. These systems also contain a lot of knowledge about the basis of musical grammar.

We also chose Lauxmin's work not accidentally and because of its joint territorial origin, joint musical surroundings and closeness in time of writing with Dyletsky's *Musical Grammar*.

The first copies of *Ars et praxis musica* were printed in the Latin language at the printing house of the Vilnius Jesuit Academy in 1667, and as Dyletsky mentioned the first copy of *Grammar* was also written in Vilnius:

ЇДЕА Грамматикїи Мусикїйской Составленная прежде Николаемъ Дилецкимъ в Вилнѣ [The idea of "Musical Grammar" was created by Mykola Dyletsky in Vilnius"] (The source of the quotation: РГБ, title page).

In *Grammar* there are also a few mentions of Vilnius protograph:

По поданому букварю и во Грамматїкїи моей нынѣшней виленской на органъ[5] [According to this alphabet and my "Musical Grammar" with an organ from Vilnius];

отвѣть узриши въ виленской моей грамматики [You can find an answer in my Vilnius grammar] (Смоленский, 1910, p. 154).

In the copy of the other treatise where this treatise was announced it was mentioned that musical rules and musical alphabets of *Grammar* were translated from the Polish language books to the bookish Slav language of that time:

книги сея, что перевелъ съ польскаго языка на словенській [This book was translated from Polish into the Slav language] (Смоленский, 1910, p. 53).

It is also confirmed by the fact that there is a fragment written in Polish on the scheme of transpositional wheel. This fragment is unique and it is preserved only in the oldest copy of *Grammar* from 1677:

musica duralna. Bemmolarna. Diesisowa w czetyrech bemolach. Duralna mieszana s bemolarna. Bemollarna mieszana z duralna. Diaesisowa mieszana z duralna. Mieszana w notach ut w wesoley re w smutney w spot [Hard music, flat music, sharp music with four flats. The mixed hard music with flat music. Flat music with hard music. The mixed sharp music with hard music. The mixed music with notes *ut* in merry music and *re* in sad music] (РГАДА, Л. 76).
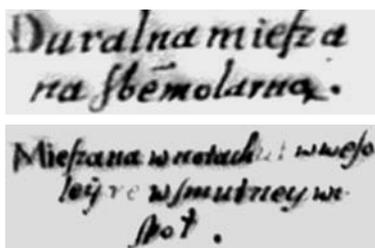
Example 1. Polish text fragments from *Musical Grammar*

But there is evidence that Dyletsky could have also used treatises written in other languages. In *Grammar* some terms translated into the Slav language are placed together with original primary sources in the transliterated form from the Latin, Greek and Italian languages. It should be pointed out that the majority of terms come from Latin:

Мусикия паки гречески, латински же паки кантус, славенски же пение [Music has origin from Greek, in Latin it sounds as cantus, in Slav it sounds as singing] (РГБ, Л. 9);

дискантусъ есть вещь сложенная, дисъ итталицки, латински же бисъ, славенски же дважды [*Discantus* is a word which includes two ones: *dis* from the Italian language and it sounds as *bis* in Latin, and in translation into Slav it will sound as twice] (РГБ, Л. 183);

италійски въ купѣ вси глаголется Тутти, или инако Капелля, или инако Рипіени [In Italian all together it sounds as tutti or otherwise capella or otherwise *ripieni*] (РГАДА, Л. 15).

To confirm that Dyletsky used Latin language books we can take the *Grammar* text where its author pointed that he studied music from Latin books:

наук свободных учащеся ... и от многих книг латинских яже о мусикии [I studied liberal arts ... and learned from many Latin books, in particular, from musical ones] (РГБ, Л. 8).

Basing on such evidence, we can make a very important conclusion that *Musical Grammar* is a treatise formed by the method of translation and compilation of Polish and other languages (viz Latin and Italian) musical treatises. According to the text of the *Grammar* copy, which comes from Smolensk, the translated manuscript was shorter in comparison with Vilnius protograph, confirmation of it we can find in the following fragments:

Не тако пространнѣ, якоже нѣкогда въ Вилнѣ написахъ граммàтіку мою, сокращеннѣе ю нынѣ [Not so in detail as recently I wrote my grammar in Vilnius. In this manuscript, I shorten it] (РГАДА, Л. 1);

оузриши въ Виленской моей Грамматікѣ [за не здѣ кратко пишю] [You will see in my grammar from Vilnius [in this grammar I write shortly] (РГАДА, Л. 12 об.).

We only know that Vilnius protograph was written not later than 1677, because Dyletsky made his first famous translation of the manuscript in Smolensk already in 1677[6]. It should be pointed that in the *Grammar* text we can find confirmation that Dyletsky graduated from the Vilnius Jesuit Academy:

прежде в Вилне, наук свободных учащеся, и избрах ю от многих искусных художников тако церкви православныя творцов пения, якоже и римскиа, и от многих книг латинских яже о мусикии [Earlier in Vilnius I studied the liberal arts and I studied from many skilful artists, i. e., composers of the Orthodox Church and the (Roman) Catholic Church and learned from many Latin books, in particular, from musical ones] (РГБ, Л. 8).

The confirmation of the above mentioned is also the title of the document in which Dyletsky applied to the Vilnius magistracy and called himself an academician, i. e. a graduating student of the Vilnius Jesuit Academy:

przez Mikolaja Dileckiego, akademica Wielenskiego[7] [From Mykola Dyletsky, academician from Vilnius].

For comparative analysis of *Grammar* we will use three copies which, to our mind, represent its three different versions (presented in Кузьмінський, 2011). They are the Smolenska Grammar[8] (1677), Moscow[9] (with Joanniciy Koryenyev) (1679) and Moscow (to Grigoriy Stroganov)[10] (1679).

Ars et praxis musica is a small Latin-language practical manual with 15 pages (including the titular page), where two pages are music texts and seven other pages are filled by music text halves[11]. There are music examples only for monody, because the author concentrated mainly on practical issues of Gregorian chant. In comparison with *Grammar* Lauxmin's work is much smaller because the biggest version of Dyletsky's treatise has 233 pages of manuscript text.

Also, we should note that this treatise was devoted to Gregorian monody not accidentally. It was a necessity connected with the revival of choral singing, in particular, in the Vilnius diocese the confirmation of which give historical documents dated from the last third part of the 16th century

Thus, Szymon z Brzeziny (1570–1595), cathedral prelate kantor, was rewarded *for work and merits during reformation of Cathedral singing* and also *for laying new antiphonary Roman ritual.* In 1608 prelate kantor Yasinsky presented *printed antiphonary.*

Also in 1602, 1607 and 1613 Vilnius diocese synods demanded Roman Catholic parish churches use choral singings in their old before the Council of Trent version (Ліхач, 2008, p. 50).

At the time of the publication of *Ars et praxis musica* they actively used Gregorian chant even in small provincial Roman Catholic churches. For example, applications of the parish of the village of Stoklyshek of the Vilnius diocese to a visitator (1668) have survived in which the local population asked to build a new school for the youth in the near future where young people could study to read, write and sing *because the old population forget choral singing* (Ліхач, 2008, p. 50).

In addition, even in the last decade of the 17th century and during the 18th century they continued to study Gregorian chorale in schools of the Vilnius diocese. For example, in the chapter from the Acts of Vilnius Provincial Synod (1685) devoted to Roman Catholic Church schools and music there is a provision that Roman Catholic priests were obliged to *preserve Gregorian singings* (Ліхач, 2008, p. 51).

Part 1

The central matter of our research is the methodology of training children to sing because the both treatises were formed on this principle.

Sigismundus Lauxmin formulated the necessity to write his work because of the lack of a specialist who could successfully train children in music and proposed an effective methodology of such training:

> *guod pauci sint, qui possint, aut velint, artem breviter et dilucide explicare. Nam sicut aliarum artium magistri, nescio quo errore, plerum que difficilioribus a principio propositionibus occupant Discipulos* [There is only small quantity of those who can explain shortly and clearly but if he or she wants this. As for others, the teachers of arts (music) do not often understand

how children should be trained and keep them very busy just at the beginning of the subject studying] (*Žygimantas Liauksminas*, 1977, p. 50).

In addition, another reason is a simple lack of books and unconvenience in using the existing books:

> *Alterum impedimentum est defectus librorum. Libri enim Ecclesiastici magni et preciosi ad docendum com mode proponi non possunt: describere vero in tabula est labor immensus* [The second fault is a lack of books. Church books are very big and expensive, so they cannot expect children to study from them properly, and it is very hard work to copy them to the tablature] (*Žygimantas Liauksminas*, 1977, p. 50).

Dyletsky, for his part, formulated his motivation to write *Grammar* in a different way. Thus, such motivation was the imperfection of music books. He wrote that there were many different grammars but they did not train children to sing, and they were only ABC books which were frequently not detailed. In addition, this *Grammar* trained children not only to sing but also to write music:

> *Много сицевых есть мусикійских грамматикъ оучебных иже несовершенно поучают пѣнія и несутъ истинни понеже и букварей не всѣхъ полагаютъ токмо а ля ре, и а ля ми ре, … сія есть грамматикія совершенная не букварь: понеже поучаетъ о своих си частѣхъ мусикіи еже есть не токмо пѣти совершеннъ но и творити пѣнія…* [There are many such musical teaching grammars which do not perfectly teach to sing. They are only alphabets, which are not complete and include only a la re and a la mi re, … this grammar is perfect and it is not an alphabet as it teaches parts of music which are dedicated not only to studying to sing perfectly but also to create singing…] (РГБ, Л. 189).

In his *Grammar* Dyletsky gave a different number of chapters, i. e. six or seven depending on its version. But, his treatise is divided into two main parts: for training of singers and for training of composers. In particular, the author pointed the following:

> *Здѣ скончивши во пѣнии совершеннаго пѣвца: начинаемъ божіею помощію формалнаго творца* [Here I finish to teach a singer to sing perfectly and begin to study from the creator with God's help] (РГБ, Л. 32).

In addition, it should be pointed out that the part for a singer is meant both for beginners and for experienced performers:

> *на двое пишу мусикію на основателнаго и совершеннаго пѣвца сію грамматикію* [I write my musical grammar in two parts for beginner and experienced singers] (РГБ, Л. 156).

Additional information about training to sing which Dyletsky forgot to write in the main part of his treatise is placed at the end of the treatise in a separate chapter:

> *О вещех забвенных, их же забых напредъ писати* [About forgotten things, which I forgot to write in the beginning] (РГБ, Л. 99).

In Lauxmin's *Ars et praxis musica*, we can also find a division of the text into two parts: the first part devoted to the training of single-voice singing and the second final part devoted to multivoice which is called as *DE CANTU FRACTO* (*Žygimantas Liauksminas*, 1977, p. 62). Let's consider the sequence of acts while training children to sing, which Dyletsky showed in the chapter:

ОБРАЗЪ поученія майстром ко пѣнію дѣтищ [Example of studying to sing by the master to children] (РГБ, Л. 190).

First of all, Dyletsky wrote that it was important that the teacher did not begin to train from studying of relative sounds *voces*, which he points as *sounds, notes,* i. e. *ut, re, mi, fa, sol, la,* but begins from real sounds *claves,* which he points out as the Latin letters, i. e. *a, b, c, d, e, f, g.*

Smolenska Grammar[12]	Moscow (with Koryenyev)[13]	Moscow (to Stroganov)[14]
Main musical letters, they are seven: A b C D e f g	Main musical letters, they are seven written in Latin: A. B. C. d. e. f. g.	Main musical letters, they are seven written in Latin: a, b, c, d, e, f, g.
Писмена основателная мусикіи, сія сут седмь. A b C D e f g	Словъ мусикійскихъ, иже суть основаніемъ пѣнія, есть седмь; написуютъ же ся латынски сице: A. B. C. d. e. f. g.	Писма мусикійскія тыя суть основанїемъ мусикіи их же есть седмь латински сице: a, b, c, d, e, f, g.

Example 2. Interpretation of real sounds *claves*

Dyletsky proposed to study real sounds *claves non signatae* on *manus Guidonis, manus musica* with the alto clef, i. e. for children's voices explaining that the fingers on a hand symbolize the same as five lines on the music staff. Such a method is not rare. In particular, a similar picture with real sounds *claves* but with the tenor clef C was shown in 1647 in the Polish language treatise *Tabulatura muzyki abo zaprawa muzykalna* by Jan A. Gorczyn, a superior contemporary of Dyletsky.

Probably, Dyletsky chose this metod of training with real sounds under the influence of the laws of organ music. The connection between Dyletsky and organ music is confirmed by numerous mentions of the organ in every version of *Grammar* (from 20 to 30 times). In addition, terms from organ practice, for example, score are mentioned there for a few times:

И сие правило есть органное, иже именуется партитура или партиментум [And this rule is the organ and it is called *partitura* (score) or *partimentum*] (РГБ, Л. 204).
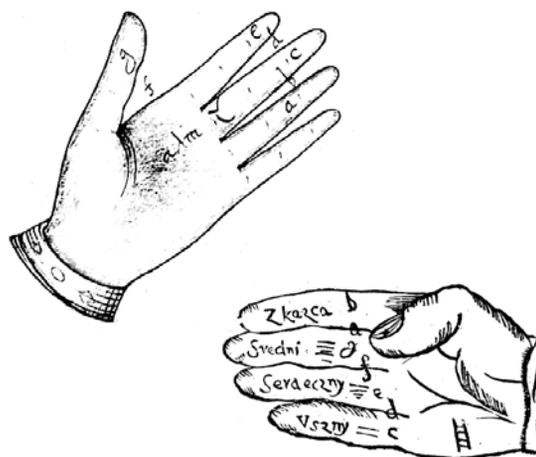
Example 3. *Manus Guidonis* from *Musical Grammar* (source: РГБ, Л. 190) and example from Polish treatise (Morawski, 1990, p. C 2)

Dyletsky used the organ in singing because during a long time he sang and conducted in Roman (Catholic) churches:

в латинском пѣнии се же во органъ, чесого аз чрезъ многія лѣта тамо поюще и мастерствующе [in Latin singing where the organ is used, I sang and was maestro (conductor) for many years] (РГБ, Л. 171).

It is notable that the above-mentioned Gorczyn also trained to sing by using a keyboard instrument – not the organ but the clavichord.

However, studying real notes is the key method of Dyletsky's training; he did not reject the classical method, i. e. training to sing by using relative sounds *voces* on the five-line staff *scala musica*. This example *scala musica* is introduced in the classical durus hexachord, i. e. from real sound *g*.

Example 4. *Scala musica* in the classical durus hexachord (source of illustration: РГБ, Л. 191)

Smolenska Grammar[15]	Moscow (with Koryenyev)[16]	Moscow (to Stroganov)[17]
There are only six sounds: ut, re, mi, fa, sol, la	There are only six music signs: ut, re, mi, fa, sol, la	There six notes: ut, re, mi, fa, sol, la
ВСѣхъ гласовъ числомъ шесть, ут. ре. ми. фа. сол. ля.	Шесть знаменій мусикійскихъ, иже суть сія: утъ ре ми фа соль ля	Нотъ быти шесть: ут. ре. ми. фа. соль. ля.

Example 5. Interpretation of relative sounds *voces* from *Musical Grammar*

Dyletsky pointed out a few definitions of *voces*. For example, in *Grammar* there is a famous classical Latin poem and its translation (РГБ, Л. 170) where the first letters of the lines construct names of six *voces*. However, the text partly differs from its origin (*Николай Дилецкий*, 1979, p. 629; Biblioteka Narodowa, BN.XVII.2.477, p. B 4), written by Guido Aretinus, who based this poem on the first lines of the anthem devoted to St. John:

| Dyletsky's Latyn transliteration	Dyletsky's Ukrainian and Belrusian literary text	Original text written by Guido Aretinus
Ut queant fibris, Retitare firmis, Mira sanctorum, Famuli tuorum, Solve pollutis, Labiis reatus.	да возможемъ хвалити чюдеса боже нашъ святыхъ твоихъ раби, твои развяжи оу стенъ сквeрныхъ прегрѣшенїя оузы.	**Ut** queant laxis, **Re**sonare fibris, **Mi**ra gestorum, **Fa**muli tuorum, **Sol**ve polluti, **La**bii reatus...

Example 6. Classical Latin poem and its version from *Musical Grammar*

Dyletsky also used the classical term *gamma* that comes from the Greek letter *G (γάμμα)* with the same name:

бысть прежде Гамма ут, послѣжде Гамма сол ут, латински же g сол ут [at first there was Gamma *ut*, then there was Gamma *sol ut*, in Latin it was *g sol ut*] (РГБ, Л. 170).

According to Johannes Tinctoris's definition, *Gamma*, i. e. clavis *G*, are the first in hand *manus musica* that is why this hand is called gamma (Поспелова, 2009, p. 126–127).

Lauxmin, in his turn, proposed a different training method. At first he proposes to study relative sounds *sex syllabae* on the five-line staff *scala musica* with tenor clef *C*. For this, he explained the interval correlation between relative degrees within one hexachord; herewith he did not mention real sounds *claves* in general. Lauxmin and Dyletsky showed this example in the classical hexachord and not in a hard one but in a natural one, i. e. from sound *C*.
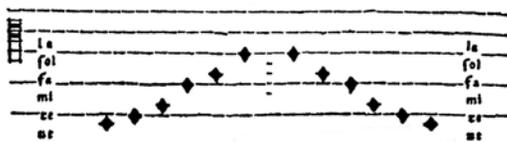
Example 7. Lauxmin's *Scala cantus naturalis* (source: *Žygimantas Liauksminas*, 1977, p. 53)

Therefore, Lauxmin used the classical method during training of relative sounds because already Johannes Tinctoris explained the meaning of *vox* by the interval correlation between relative degrees in the natural hexachord in his treatise dated by the last quarter of the 15th century, where he considered the bases of the medieval sound system

and solmization (Поспелова, 2009, p. 137–138). After this Lauxmin gave a cycle of vocal melodies for every day of the week, the diapason of which did not exceed the volume of the above-mentioned hexachord. Dyletsky, in his turn, also provided vocal exercises but at the same time he recommended singing a series of intervals in ascending and descending directions. And it is necessary to begin with major and minor seconds and finish by decimas (РГБ, Л. 192, 194–197). Gorczyn also wrote about a similar method, i. e. the singing of intervals (Morawski, 1990, p. C 2-C 4r.).

Taking another step Lauxmin trained special marks of Gregorian monody which he connected with practical singing of monody with verbal text (*Žygimantas Liauksminas*, 1977, p. 54–55). It sould be pointed that Dyletsky also paid attention to monody. However, as the treatise *Musical Grammar* was meant for musicians who belonged to the Orthodox musical tradition, the Orthodox monody became the object of his description.

The chapter devoted to the national Orthodox Church chant (*Znamenny Chant*) is called *О ІРМОЛОГЇОНУ* [About Irmologion] (РГБ, Л. 130) where the author described some issues connected with its practice. In connection with this, we should point out that in this case Dyletsky mentioned Irmologions because they were the first note-line samples of *Znamenny Chant*, which appeared on the Ukrainian and Belarusian lands in the last quarter of the 16th century.

The first thesis is that *Znamenny Chant* as multivoice forms from *claves a, b, c, d, e, f, g*. The second thesis is that Dyletsky researched the issue about correct and incorrect interval patterns while moving znamenna monody to note-line notation. The third thesis is that Dyletsky considered monody as material for writing multivoice compositions (Смоленский, 1910, p. 150–154).

By this way both authors, Lauxmin and Dyletsky, finished the first stage of training. Dyletsky gave two training variants: the main one, which is based on studying real sounds and an additional one which is based on studying relative sounds. The first method was formed under the influence of instrumental (organ) practice, while the second method has older roots and it is similar to Lauxmin's training method.

Part 2

The next stage of training to sing is connected with one more element of the solmization system, i. e. mutation. In Johannes Tinctoris' opinion, the term *mutation* (from Latin *change*) means the change of one voice to another (Поспелова, 2009, p. 144). In other words mutation is transitive place where *vox* is changed, i. e. relative sound of the first hexachord changes to another *vox* of the next hexachord. The sum of a few hexachords increases the diapason of relative scale. Mutation was one of the most important elements of the solmization system.

In *Grammar* the term *mutation* is not used but there we can repeatedly find note examples with line *voces* where mutation is everywhere used.

In *Ars et praxis musica,* we can find the mention of mutation only once. Lauxmin described this process in the following way: after mastering one hexachord you should study mutations to attract next hexachord and increasing the vocal diapason accordingly. *Cantus mollis* and *cantus durus* differ from each other just by such mutations (*Žygimantas Liauksminas*, 1977, p. 55).

In Lauxmin's treatise, there are only these two kinds of scale *cantus mollis* and *cantus durus*.

Lauxmin interpreted these scales in the following way: *Cantus mollis* means when near the clef there is the ign *b moll*, i. e. *b* (♭) *rotundum,* and the second hexachord nestles to this *b moll* by relative sound *fa*. To prove this Lauxmin showed *Scala cantus mollis* where he demontsrated classical mutation of natural hexachord into soft with *vox fa* to *vox ut* in ascending and descending directions.
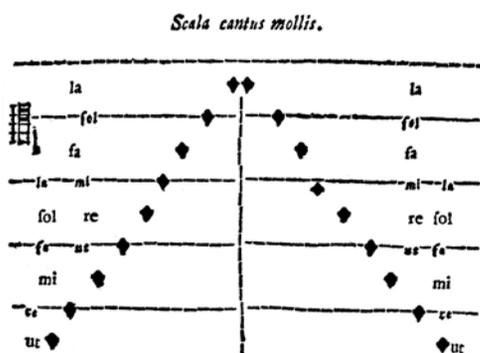
Example 8. Lauxmin's *Scala cantus mollis* (source: *Žygimantas Liauksminas*, 1977, p. 56)

Another kind is *Cantus durus* which means that near the clef there are no signs and second hexachord has to lie on real sound *b* (♮) *quadratum* by relative sound *mi*. To prove this Lauxmin showed *Scala cantus durus* where he demonstrated classical mutation of natural hexachord into hard with *vox sol* to *vox ut* in ascending and descending directions.
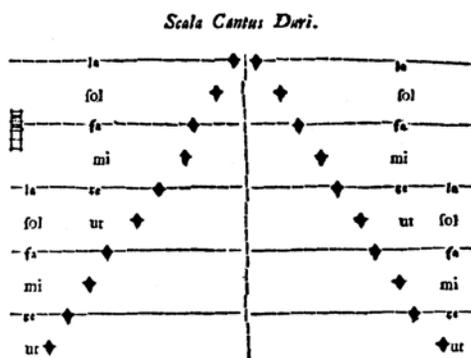
Example 9. Lauxmin's *Scala cantus durus* (source: *Žygimantas Liauksminas*, 1977, p. 57)

Such definitions of *cantus durus* and *cantus mollis* are identical to the ones which are in Simon Starovolscius's Latin language treatise *Musices practicae erotemata* published in Cracow in 1650, In this treatise the author also stressed the location of relative sounds *mi* (*e*) and *fa* (*f*) they must lie on *b quadratum* and *b rotondum* accordingly[18]. It should be remembered that Starovolscius' treatise is a compiled work that described musical theory mainly of the 16th century. In this and other cases, Lauxmin's treatise also describes the theory of the 16th century but it is assisted by the theme of the treatise, i. e. Gregorian monody.

As a rule, at the end of Lauxmin's treatise there are vocal exercises based on Gregorian choral. The author carefully selected these examples. In general, in these examples Lauxmin tried to include the majority of possible classical variants of mutation. Thus, Lauxmin marked by letters three mutation *voces* only in the first example and other ones we can define independently according to classical well-known rule of 18 universal mutations (Коклико, 2007, p. 377).

la		Re	mi	sol	
sol		Ut	re	fa	la
fa	↦	Ut	sol		
mi		re	la		
re		ut	mi	sol	la
ut		re	fa	sol	

Example 10. 18 universal mutations

Unlike Lauxmin, Dyletsky gave four kinds of music. The general name of such music is *music in clavis*, i. e. *claves signatae music*:

Мусикïя въ клявишу сирѣчь въ ключю есть четверочастная, дуралная, беммоулярная, дïезисовая и михта сирѣчь смѣшенная [Music in clavis, i. e. in clef (key) consists of four parts: hard, flat, sharp and mixed] (РГБ, Л. 18).

Dyletsky's definition is similar to Lauxmin's one, i. e. he defined that *dural singing* (analog to *cantus durus*) is when there are not any flat after the clef:

Дуралная есть когда неимѣетъ въ началѣ ключа положеннаго ♭ [Hard music is when there is no flat in the beginning near the clef] (РГБ, Л. 18).

In *dural key* or in other words *dural singing* Dyletsky used only the lettered form for designation of mutation formula. The lettered form for the designation of *scala vocum* was a widespread phenomenon in the European treatises of the 16th and 17th centuries:

Сицевыя в дуралномъ пѣнïи сицевыя раждаютъ ноты: а ля ре. b ми: C фа утъ. d сол ре. e ля ми. fa. g соль утъ [In hard singing, there are the following notes: a la re, b mi, c fa ut, d sol re, e la mi, fa, g sol ut] (РГБ, Л. 17).

Let's demonstrate such a lettered formula as the following scheme:

F				Fa
E			la	Mi
D			sol	Re
C			fa	Ut
B			mi	
A		la	re	
G		sol	ut	

Example 11. *Cantus durus* table

Dyletsky also noted that in *Cantus durus b* is marked as *h*, however, in solmisation lettered schemes he continued to use either the letter *b* or the sign of flat:

В дуралномъ ключю b Глаголется, пишемая сице h [In hard clef instead b we write h] (РГБ, Л. 19–20).

b moll music is analog to *cantus mollis* in *Grammar*. However, unlike Lauxmin, Dyletsky gave four kinds of *cantus mollis* basing on quantity of clef flats (from one to four) because he wrote not for the needs of Gregorian monody but for multivoice:

Беммулярная есть когда имать в началѣ единое, или двое, или трое, или четыре, в началѣ ключа положенное b [Flat singing is when in the beginning near the clef there is one or two or three of four flats] (РГБ, Л. 18).

CANTUS 4 b MOLLIS					
G				mi	fa
F			La	re	
E			Sol	ut	
De			Fa		
C		la	Mi		
Be		sol	Re		
A	sol	fa	Ut		

CANTUS 2 DIESIS		
Fis		la	Mi
E		sol	Re
D		fa	Ut
Cis		mi	
B	la	re	
A	sol	ut	
G	fa		

Example 12. *Cantus 4 b mollis* and *Cantus 2 diesis* tables

For the definition of *cantus b mollari* and *cantus dure* Gorczyn did not make any mention of mutation in his treatise *Tabulatura muzyki abo zaprawa muzykalna* (1647), but he stressed on the presence of clef flat sign as Dyletsky wrote (Morawski, 1990, p. A 7r.).

Next kind described by Dyletsky is *sharp music* which does not have analog to *Ars et praxis musica*. Like another kinds, it is determined by the presence and quantity of clef signs – sharps:

Дїезисовая мусикія есть, егда въ началѣ ключа или единъ кїй дїезисъ положенъ бывает, или два, или три, или четыри [Sharp music is when in the beginning near the clef there is one or two or three four sharps] (РГАДА, Л. 3).

Dyletsky insisted on that before singing every sharp the singer has to say to himself *vox mi* and another sound enounce *vox fa* (РГАДА, Л. 4 об.). Gorczyn gave the same advice (Morawski, 1990, p. A 8).

To understand the phenomenon of sharp Dyletsky proposed to use the organ, i. e. use the fingerboard principle:

Дїезисъ гречески латински паки семитониумъ полноты ввыспрь. ♭ же полноты въ низь и сице оуразумнѣеши оудобнѣе со органнаго играния [Diesis has origin from Greek, in Latin it is *semitonium*, i. e. half note up. ♮ is half note down and you will see it while playing the organ] (РГБ, Л. 21).

Gorczyn wrote the same and explained accidentals by black clavichord keys (Morawski, 1990, p. A 8r.).

The next kind is *the mixed music*, i. e. *musica mixta* where there are not any clef signs and accidentals appear only before notes so there is no constant mutation formula:

Смѣшенная мусикія сія есть, егда въ началѣ ключа небыло беммола, токмо посредѣ полагается или дїезисъ [The mixed music is when in the beginning near clef there is no any flat, but it or sharp appears in the middle] (РГАДА, Л. 3).

However, in *Grammar* there is one more kind – *false music*, i. e. *musica ficta* that is only in the Smolenska oldest version:

Мусикіа фикта или умышленая глаголется, яже имать въ клявишахъ, или беммолы, или дїезисы [Musica ficta or otherwise 'unnatural' has either flats or sharps in clavises] (РГАДА, Л. 6 об.).

Dyletsky's definition of *musica ficta* is very similar to *musica mixta*, but the meaning of these phenomena is different. In fact, *musica ficta* has deep roots and it means non-normative appearance of accidentals, signs of flat or sharp or sometimes diatonic scale deviation from *musica vera*, i. e. canonical scale. However, *musica mixta* is a phenomenon formed later and it means interchange of different scales. However, as Dyletsky thought on the base of chromatic fingerboard scale, he leveled the difference between these definitions.

The difference between Lauxmin's and Dyletsky's position concerning the kinds of scale is obvious. The old musical theory did not progress as practice, which discovered new laws, mastered the width of chromatic and diatonic scales. Many processes of instrumental practice were reinterpreted by theoreticians on the basis of old theoretical dogmas, concepts and terms. In addition, relative sounds took less and less place in the education system. In the vanguard of this process there was instrumental musical practice headed by the organ and clavichord.

Part 3

Lauxmin's next theme is *De clavibus musicis*, i. e. studying musical clefs *claves signatae*. Dyletsky also wrote a subchapter devoted to studying musical clefs – *О КЛЯВИШАХЪ* [About Clefs (clavibus)] (РГАДА, Л. 6 об.). It is interesting that Lauxmin's and Dyletsky's theme of clefs is only one which has a separate title. For example, other themes of the first part of *Grammar* have the form of *Erotemata*, i. e. the form of question and answer as it was made in Gorczyn's and Starovolscius's treatises. As the both authors accented the theme of clefs, we can make the conclusion that clefs became more important in musical practice of that time. Lauxmin and Dyletsky both announced the traditional thesis of theoretical treatises that the clef is necessary to open something. Nevertheless, there is essential difference between the definitions of these two authors.

Lauxmin pointed that *claves signatae* help to define those *voces*, i. e. relative sounds in which *locus* should be placed and hereby they defined the sign of *locus*, i. e. *clavis non signatae* (*Žygimantas Liauksminas*, 1977, p. 60). *Locus* (from Latin literally 'position, place') has a double meaning: it is simultaneously both scale degree and place (in hand and in staff) where degree is placed (Поспелова, 2009, p. 128). While *clavis* (from Latin literally 'key') means the sign of locus formed from the first seven letters of the Latin alphabet, viz. *A, B, C, D, E, F, G* (Поспелова, 2009, p. 132).

Therefore, in a very traditional way, the theme is devoted to *claves non signatae*, i. e. the clef, and it is related to the theme *claves signatae*, i. e. real sounds, because according to the classical theory of the 15th and 16th centuries the clef main function is the determination of *claves signatae*, i. e. real sounds. Lauxmin and many other theoreticians called real sounds *claves signatae* simply as alphabet letters *Alphabeti literae*. Even Dyletsky sometimes used the word letter or its synonym *bukva* for their definition, but the main terms remained terms *pysmo* and word depending on the version of *Grammar*. Therefore, Lauxmin gave a table where clavises and voces were shown side by side. This scheme has the same function as Dyletsky's lettered schemes:

Example 13. Two kinds of music *cantus durus* and *cantus mollis* in one table (source: *Žygimantas Liauksminas*, 1977, p. 60)

Lauxmin used classical names of clefs *claves signatae* and Dyletsky used a transliterated Cyrillic alphabet form as a translated one.

Dyletsky did not determine *claves signatae* in the context of theme of voces or locuses, i. e. solmisation system. For him clefs were only instruments of musical practice with the help of which you can define the type of voice and kind of scale:

Клявишъ латынски, славенски же ключь, отверзай ноты, или гласы ко пѣнїю, по нему же извѣстно аще алтъ, аще дишкантъ, аще теноръ, аще басъ и сего ради всегда вземше кантику или тетрат мусикїйскую, подобаетъ первѣе зрѣти на ключь, по семъ разсуждати аще мусикїя есть дуралная, аще беммолярная, аще дїезисовая, или смѣшеная [Clavis has origin from Latin, in Slav it is translated as a key which opens notes or voices to singing. This key defines if it is alto or discant, tenor or bass. For this, you will take a part (cantyka) or a music book and first of all you should look at the clef. On the basis of this, you can understand what kind of music it is: hard, flat, sharp or the mixed] (РГАДА, Л. 6 об.).

Like Dyletsky, Lauxmin mentioned the clefs *C* and *F* but in *Grammar* there is also the clef *G*. We should remember that *claves signatae* are formed on the basis of native clavises of *proprietas*. Proprietas (from Latin. literally 'peculiarity, feature') is a especial manner of performing of voces, i. e. three kinds of hexachord. In hard proprietas there is the native clavis *G*, from which *vox ut* and then other five voces are singing one after another. In natural proprietas there is native clavis *C*. In soft proprietas there is native clavis *F* (Поспелова, 2009, p. 139–140).

Dyletsky also pointed the type of voice to which these clefs belong:

Ключь ꙗ подобаетъ алту, тенору и дисканту низкому. Ключь ꙗ дисканту высокому. Ключь ꙗ единому бассу [Clef C belongs to alto, tenor and low discant. Clef G belongs to high discant. Clef F belongs only to bass] (РГБ, Л. 22).

Dyletsky also mentioned other main clefs that he called unusual. However, not clefs are unusual but only the place of their position on a five-line staff (РГБ, Л. 23). At the same time among these clefs we can find clef 𝄢 which is really unusual for Ukrainian and Belarusian notation graphic. This clef *C* traditionally is used in the Western notation, for example, in Lauxmin's treatise 𝄡 or in Gorczyn's treatise 𝄡.
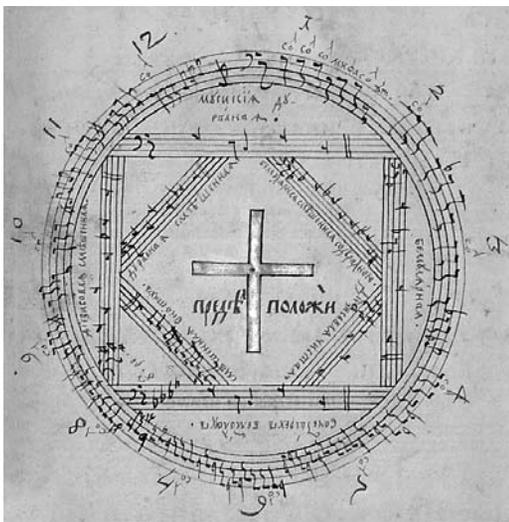
Example 14. Two circles of fifths (major and minor) (source: РГБ, Л. 133, 134)

Such a small detail confirms only that Dyletsky divided two different graphical note-line systems.

At the time transposition was one of the main clef functions. Transposition is only one easy practical method to master complete score (vocal) diapason within five-line staff. However, the theme of transposition is not equally represented by every of the above-mentioned theoreticians.

Lauxmin pointed that sometimes the diapason of the vocal scale increases, so it is necessary to add ledger lines to the five-line staff. And clefs, i. e. *claves signatae,* do not serve for increasing the quantity of lines. Such Lauxmin's formulations are similar to the interpretation of the term *transpositio* in Starovolscius's traditional treatise (Biblioteka Narodowa, BN.XVII.2.477, p. C 1 r.). Gorczyn also gave a similar definition in his treatise when he explained the difference between high and low discants.

Like other authors, Dyletsky interpreted transposition as the transference of clefs for the extension of diapason:

Транспозицïю латински, славенски же преложенïе ключевъ, или ради высокости, или ради низкости [Transposition has origin in Latin; in Slav it is translated as the change of clefs to go up or down] (РГБ, Л. 150).

Dyletsky also used transposition as a method for explaining to a beginner that interval patterns of scale with many clef signs was identical to that one where they were not present. To understand this it is enouph to change mentally the clef or its position. In such case, a sequence of relative sounds remains unchangeable.

The culmination of the theme of transposition in *Grammar* is a transpositional scheme based on all 12 chromatic scale degree, which is called a circle of fifths. It is interesting that there are two of such circles. The principle of the formation of these two circles consists in their division into sequences with major triads, on the one side, and minor

ones, on the another side, which Dyletsky called the sounds of 'merry' and 'sad' singing accordingly.

Therefore, in Dyletsky's theory we can follow the interpretation of new musical phenomena, which form the basis for the tonal major and minor system.

Смоленська Граматика[19]	Moscow (with Koryenyev)[20]	Moscow (to Stroganov)[21]
Ut, mi, sol are sounds of merry accord singing. Re, fa, la are sounds of sad singing.	Ut, mi, sol belong to merry singing, re, fa, la belong to sad singing.	Notes are divided into two parts: ut, mi and sol that belong to merry singing, and re, fa, la which belong to sad singing.
ут. ми. соль. Есть гласы радостнаго согластнопѣнія мѣры. Печалнаго же. ре. фа. ля прѣсно полагается:	утъ ми соль — веселаго пѣнія, ре фа ля — жалостнаго пѣнія.	ноты раздѣляются на двое: ут. ми. соль: веселаго пѣнïя: ре. фа. ля: печалнаго пѣнïя:

Example 15. Interpretation of major and minor triads

It is notable that in this example Dyletsky explains that major and minor triads have an interval structure because of the relative sounds of hexachord.

Part 4

The last theme in Dyletsky's training system is the basis of a measured rhythmical system.

The term 'tact' is a central term of this system. According to Dyletsky, tact is a universal measure for the measurement of notes in monophony and multivoice.

Smolenska Grammar[22]	Moscow (with Koryenyev)[23]	Moscow (to Stroganov)[24]
What is tact? Tact is nothing else than measure under which one voice does not tread on another one. In addition, tact is numerical accent in singing or conducting in singing or music.	What is tact? Tact is the measurement of notes, i. e. tacts, half tacts, quarter tacts and other ones, which are shown by hand.	Tact is the Latin tactus, Slav measure or the extent, which creates dimension in simple *znamenny* chant (when all sing as one) or in part singing (when voices do not sing together)
Что есть тактъ; Тактъ ничто же ино есть, точїю мѣра аки превѣса нѣкая, во еже бы един другаго непретяжалъ. Паки, тактъ есть ударенїе числителное въ пѣнїи, или руковожденїе пѣвчее, или мусикїйское.	Что есть такта? Тактъ есть измѣренїе нотѣ, сирѣчь тактовъ, полтактовъ, чвертковъ и прочихъ рукою изображенїе.	Зри: Тактъ; латински тактус: славенски же мѣра: или вага: иже творитъ измѣренїе: въ простомъ знаменном, иже вкупѣ поютъ: или в партесном иже не вкупѣ рѣчи иду.

Example 16. Interpretation of *tactus*

Dyletsky also used tact as the basis to the formation of names of music durations (tact, half tact, quarter tact). Herewith, he applied the so-called Kyiv notation – traditional music graphics of Ukraine and Belarus, which were used in *znamenny* chant and national variant of European multivoice beginning from the end of the 16th century (Шевчук, 2008, p. 377–382).

Dyletsky used tact bars in his own musical monophony examples and score fragments of *Grammar*. To his mind, measures are divided into double time and triple time, herewith there is no full range of features of the mensural system but only genetic connections. As a result, all these characteristics confirm that Dyletsky used a constant tact system. Lauxmin also used the term *tactus*, in particular, in the last chapter with the title *DE CANTU FRACTO* that is devoted to the laws of multivoice. Lauxmin affirmed that tact is a feature of *cantus fractus*, but he pointed two classical elements of mensural system *musica mensurabilis*, namely tempus (correlation of brevis and semibrevis) and prolatio (correlation of semibrevis and minima). Like Dyletsky, Lauxmin also noted that, firstly, tact is ruled by raising and lowering of the hand and, secondly, it is divided into two half tacts, and each half tact is divided in two ones and so on.

Cantus Fractus superaddit Chorali Tactum, quo determinatur tempus seu mora prolatae & cantandae vocis. Est autem Tactus Demissio & elevatio manus in eo, qui dirigit cantum. Habet ergo duas partes tactus, nimirum, demissionem, quae a graecis vocatur Thesis & elevationem, quae dicitur Arsis. Integer tactus utram que partem habet; alterutra vero pars est dimidium tactus. Dividitur quo que in plures partes: pro voluntate ejus, qui canticum ali quod componit [*Cantus fractus* adds **tacts** to the choral singing which determines tempus and shorter prolatio in sounding of singing. **Tact** is also hand raising and lowering which directs singing. So, tact has two parts: lowering which in Greek is called Thesis and raising which in Greek is called Arsis. Full tact consists of both of these parts and each part is half of tact. Tact can also be divided in more parts depending on the wish of the person who composes singing] (*Žygimantas Liauksminas*, 1977, p. 60).

It is rather a constant definition because Gorczyn's treatise has the interpretation of the term tact which is very similar to Dyletsky's and Lauxmin's ones (Morawski, 1990, p. C5 r.). Dyletsky and Lauxmin used tact as the basis for the formation of names of lengths[25]. Therefore, Dyletsky and Lauxmin and their contemporary Gorczyn used the constant tact system in training. However, they also used terms and elements of the old mensural system, for example, Lauxmin applied terms *tempus* and *prolatio*.

The sequence of acts in the methodology of both theoreticians is traditional. For example, a similar training scheme was mentioned in the system of famous Franco-Flemish composer Josquin des Prez at the end of the 15th century. This system was also described by his follower Adrianus Petit Coclico in his treatise *Compendium musices* (1552). Following Dyletsky and Lauxmin, Coclico finished his training to sing by studying measured rhythmical system (Коклико, 2007, p. 144–145).

Part 5

The term *cantus fractus* is the last term, which is jointly used by Dyletsky and Lauxmin.

Dyletsky applied the term *fractus* in *Grammars* in the transliteration form in the Cyrillic alphabet:

*сиречь гласы, подобают ирмологиону по чину церковному, но не ламающагося пения, сиречь единаго по другим грядущаго речами и с нотами наследствующе, иже именуется **фракт**, или инако партес* [so these sounds belong to irmologion, i. e. for use in church, but not to the broken singing where one voice approach another and imitate with words and notes which is called as **fract** or otherwise partes] (РГБ, Л. 124).

*Сія бо повинуются ирмологіону **нефракту*** [this belongs to irmologion but **not fractus**] (Смоленский, 1910, p. 146);

*Или Всемірную славу черезъ полъесокъ преложи, что будетъ красно въ **фрактовой** мусикіи* [or "World-Wide Glory" you should write by half tacts which will be good in the **fractus** music] (Смоленский, 1910, p. 152);

Азъ сію фантазію, дабы былъ тактъ **фрактовый** [I move this fantasy to make **fractus** tact] (Смоленский, 1910, p. 152);

Азъ сію фантазію превращающи на тактъ фрактовый черезъ пропорцію, дабы был тактъ **фрактовый** [I move this fantasy to make **fractus** tact by proportion] (Смоленский, 1910, p. 153).

In *Grammar,* we can also find not transliteration but the translated form of the term *fractus*, which sounds as *broken music*:

Преложи же ю на **ламаный** *тактъ* [Place it on the **broken** tact] (РГАДА, Л. 64 об.);

еже будетъ по добро видно въ **ламаной** *мусикіи* [It will be well seen in **broken** music] (РГАДА, Л. 64 об.);

А сію фантазію дабы тактъ былъ **ламаный** *полагаю въ полеску* [And place this fantasy on the half acts to create the **broken** tact] (РГАДА, Л. 64 об.–45);

Азъ сію фантазію превращающе на тактъ мусикійскій чрезъ пропорцію дабы тактъ былъ **ламаный** [I change this fantasy into musical tact using proportion to create the **broken** tact] (РГАДА, Л. 65);

сиречь гласы, подобаютъ ирмологиону по чину церковному, но не **ламающагося** *пеня* [These sounds belong to the church irmologion but not to the **broken** singing] (РГАДА, Л. 124).

Basing on the list of expressions in Dyletsky's *Grammar,* which concern the *cantus fractus* or *broken music* we should make the advance generalizations of their meaning and contexts of use. The first typical feature is that the *fract* or broken music is repeatedly opposed to the book of monody singings *irmologion*. The second typical feature is that in other cases the concept *fract* or broken music is used only in the context of interpretation of the measured rhythmical tact system. The third feature is that term *partes* is used as a synonym to the term *fract*. The *partes* is used in the context of one voice book, which points out to the multivoice character of the *fract music*:

сиречь единаго по другим грядущаго речами и с нотами наследствующе, иже именуется фракт, или инако **партес** [where one voice approaches another and imitates the first voice by words and notes (imitation) which is called fract or otherwise **partes**] (РГБ, Л. 124);

Тактъ – латински тактусъ, славенски же мера, или вага, иже творит измерение в простом знаменном, иже вкупе поют, или в **партесном,** *иже не вкупе речи идут* [Tact is the Latin *tactus*, Slav measure or extent, which creates dimension in simple *znamenny* chant (when all sing as one) or in **partes** singing (when voices sing not together] (РГБ, Л. 26);

яко же пѣніе ирмолойное, кое возбуждаетъ богодухновенно веселитися… Такоже и въ **партесномъ** *пѣніи* [like irmologion singing which motivates to enjoy God spirit …the same is in **partes** singing] (Смоленский, 1910, p. 61).

Let's compare the contexts of Dyletsky's using the term *fract* with the term *cantus fractus* in the treatise *Ars et praxis musica* where this term is also one of the main ones.

In the first case, the term *cantus fractus* is opposed to the group of synonymic terms, in particular, to the terms *cantus planus*, *cantus choralis* and *cantus Gregorianus*:

Agendum est primo de **cantu plano,** *qui etiam* **Choralis & Gregorianus** *vocatur. In eo enim principia musica facilius proponuntur & exercentur, & ab eo velut a fundamento ascendendum est ad* **Fractum,** *qui plus Artis habet* [First of all, let's consider **cantus planus** which is also called **Choralis** and **Gregorianus** singing. With its help, it is easier to study bases of music as a foundation and then gain proficiency in **Fractus**, which requires more mastery] (*Žygimantas Liauksminas,* 1977, p. 60).

Such comparison is similar to the text in *Grammar:*

Musical Grammar	Ars et praxis musica
Fractus or broken music or partes singing	Cantus fractus
Irmologion or *znamenny* chant	Cantus choralis, або cantus planus, або Gregorianus

Example 17. Comparative table of multivoice and monophony

It is also noticeable that the comparison in the context of measured rhythmical descriptions as it took place in *Grammar*:

Musica … complectitur **Cantum Planum** *seu aequalem, &* **Fractum** *seu Inaequalem* [Music … is formed from **Cantus Planus** or equal, and **Fractus** or unequal] (*Žygimantas Liauksminas,* 1977, p. 49);

In **cantu Fracto** *sunt plures notae. In* **chorali** *vero istae communiter in libris Nigrae* [In **fract** music there are a lot of notes. Only black ones are used in **choral** usually in books] (*Žygimantas Liauksminas,* 1977, p. 52).

To Lauxmin's and Dyletsky's mind, the important typical condition of the *fract* music is multivoice:

…sed quia quatuor diversae voces pertinent ad **fractum cantum,** *necessariae ad aliquid harmonice decantandum, ideo singulae suas claves signatas diverse dispositas habent* […but as for **fract** singing it is typical to use four different voices which are necessary for harmonic singing. They have their own keys that are placed in different way] (*Žygimantas Liauksminas,* 1977, p. 62);

…in **fracto cantu** *concordia diversarum vocum componitur* […consonance includes different voices in **fract** singing] (*Žygimantas Liauksminas,* 1977, p. 62).

Using the term *cantus fractus* is not the first and not the only one experience in musical practice of Vilnius and the Polish-Lithuanian Commonwealth at the end of the

16th and the 17th century (Ліхач, 1999). Already in 1597, the bishop of Samogitia brought to Vilnius his choir and surprised the local kliros by the fact that *his cantors sang Passions and other singings while fasting just before Easter fracto cantu* (Kurczewski, 1916, p. 82).

In the first half of the 17th century Waleryan Lithuanides, a member of the Dominican order, recommended all members of the brotherhood to sing Mass about *Passions "in choral or fract"* (*Ogrod różany*, 1627, p. 33) and wrote such recommendations in his work, published in 1646, only 11 years after the author's death. In addition, there are allusions about using the *cantus fractus* in the Lviv brotherhood's Orthodox school, which was mentioned in the *Register of obligations of Theodor Ruzkevycha, dydaskal of Lviv brotherhood orthodox school* dated 1686: *na chórze **fractem** spiwac będzie* (*Архив Юго-западной Poccuu*, 1904, p. 437).

In 1631 in her testament Zofia Żółkiewska-Daniłowicz made deposit to the Roman Catholic Church in Zhovkva (Galicia) and noticed there the following: *on Thursday you should sing Rorate Coeli in **fract**... on Monday you should sing in **fract** psalm "Miserere mei Deus"... you should sing "Dies irae" and "Salve Regina" in **fract** with organ player* (Szweykowscy, 1984, p. 4).

In the Polish comedy *School miseria* dated 1633 one of its characters pointed that *you can sing good in **choral** and you can sing not bad in **fract***. Another character of this comedy expressed his disrespect to choral and opposed it to the fract singing: *friends like it, however, they laugh, because he always sing in **fract**. Fool is the one who serves to **choral** now* (Bobrowska, 1977, p. 42).

So, in total the term *cantus fractus* was wide-spread in music practice of Vilnius and the Polish–Lithuanian Commonwealth. According to the historical documents, the beginning of its extension is dated from the end of the 16th century. Its popularity rose and it was actively opposed to Gregorian chant.

Let's consider the determination of *cantus fractus* made by Coclico, which is especially important for understanding Dyletsky's composing style. Coclico used the term *fractus* in combination with the term *contrapunctus* that means *a few notes against one note*. Coclico also used the combination of words *contrapunctus coloratus* and *contrapunctus figuratus* as a synonym of this definition (Коклико, 2007, p. 352). Obviously, *cantus fractus* should be considered as a kind of multivoice where the musical manner of execution is based on the following principle: a few notes against one note opposite simple musical manner *nota contra notum*.

In the history of music we can also find a term often used as a synonym to *cantus fractus,* viz *cantus figuratus*. Willi Apel, a famous researcher of history of music, made generalized definitions of these two synonymic terms, but out of historical context:

Cantus figuratus (figuralis), cantus fractus, and **cantus mensuratus** all refer to the use of exactly measured **(mensuratus)** note values **(figurae)** of different lengths such as a result from the breaking up **(fractus)** of a long note value into smaller parts. Hence, they designate polyphonic music as opposed to plainsong **(cantus choralis, cantus planus)** with its notes of (supposedly) equal duration (Apel, 1969).

It should be pointed that the Lviv Orthodox Stauropegic brotherhood's register of books dated 1601 contains the title of treatise *Quaestiones musicae* written by Protestant author Johannes Spangenberg in 1536. Thus, in its text the term *cantus figuratus* is opposed to the term *cantus choralis* and its description is similar to those that were used by Dyletsky and Lauxmin concerning *cantus fractus*. The difference is that Spangenberg applied terminology of the mensural but not tact system:

Quotuplex est musica regulate? Duplex. **Choralis & Figuralis.** *Quae est musica* **Figurals?** *Est, cuius notulae &* **figurae** *inaequales sunt, & mensuram variant, secundum signorum &* **figuratum** *inaequalitatem, cum incremento vel decremento prolationis. Haec & mensuralis & Nova musica vocatur* [How many music regulata are there? Two. **Choral and figurative**... What does **figurative** music mean? It means that, firstly, note and **figure** (i. e. rhythmical duration) are not equal and they have different mensures, and, secondly, sign and **figure** are not equal with increase and decrease of prolationis (i. e. rhythmical correlation of semibrevis and minima). This and mensural and New Vocal Music] (*Nuremberg: Iohannes Petreius*, 1536, Bayerische Staats Bibliothek, signatur: mus. th. 3244, A 6).

The term *cantus figuratus* is also used by the Orthodox hierarchs. It is only one term used for attributing partes multivoice in the first half of the 17th century. In 1629, Meletiy Smotrytsky also determined partes multivoice like this in his work *Exethesis*:

You cry: Evil union, evil union! And earlier you also cried: Sermon is evil! Figural singing is evil! To go with bell before sacramento is evil! All these are Polish! And now you use all these things and they are good for you! (Кралюк, 2004, p. 206).

It should be pointed that Smotrytsky also studied at the Vilnius Jesuit Academy, but beginning with 1595 he was turned out from the Academy as a schismatic (Кралюк, 2004, p. 36), i. e. Orthodox. However, it did not prevent him from taking sides with the Uniate Greek Catholic Church in 1627.

In 1644 Petro Mogyla, who studied at the school of the Lviv Uspenian brotherhood at that time, was the first to use the terms *figural* and *partes* as a synonym in his work *Liphos* addressed to Kasian Sakowicz. He also noted that such multivoice singing is legitimate to be used in church because it was permitted by the Ecumenical Patriarch of Constantinople. By the way, from 1620 to 1685 the Ukrainian Orthodox Church was a part of the parish of

the Ecumenical Patriarch of Constantinople as Metropolis after it was officially renovated.

> *And if we talk about figural or partes music that it is like a new thing in the Ruthenian church, but it was given by our own pastor, as we asked the question the Patriarch of Constantinople if we did right because it is not good to take such kind of singing to church without the pastor's blessing and permission* (Архив Юго-западной России, 1904, p. 352).

Other important sources for the interpretation of the term *figural music* were musical and theoretical manuscripts of the Polish–Lithuanian Commonwealth of the 16th and the 17th centuries. For example, Marcin Kromer's treatise published in 1534 and 1539 was called *Figurative music – a book based on the experience*:

> *non solum illa quidem ad* **planam musicam** *spectant, verum etiam ad* **figuratam**, *haec enim illius adminiculis, seu tibicinibus, sustentatur. Quare* **cantum figuratum** *modulaturo, in recenti memoria habenda sunt, quae diximus, omnis. Praeterea autem et alia consideranda, nempe* **figurae** *valoreque notarum et pausarum. Huc adde gradus, puncta, tactus et proportiones, quibus* **figurata musica** *constat* [Music is not only music **plana**, but also **figurative** one, which is a basis for the piper. **Figurative** music is considered in another way, i. e. what is the duration of **figure** or pause. To this, they add measures, dots and tacts in proportion which form **figural** music] (*Marcin Kromer*, 1980, p. 2).

Simon Starovolscius also wrote about figurative music in the above mentioned treatise dated 1650:

> *Qoutuplex est Musica Practica? Duplex.* **Mensuralis, & Plana** *seu Choralis &* **Figuralis**. *(...) Haec &* **nova Musica** *dicitur versatur que potissimum circa sonos instrumentorum, & vinas hominum voces* [How many musical practices are there? Two. **Mensural** and **Plana**, i. e. **choral** and **figurative**. (...) The **figurative** and new music twist as they spin because they mainly sound on the instrument and in appropriate human voices] (Biblioteka Narodowa, BN.XVII.2.477, A 7);

> *Quid est* **Musica Figuralis?** *Musica Figuralis est, quae in suis notis, secundum signorum ac* **figurarem** *diversitatem, diversam habet sonorum* **mensuram**. *Vel, Est peritia modulationis, in* **figures**, *forma discretis, modo, tempore, ac prolatione quantificatis, consistens* [What does **figurative** music mean? **Figurative** music means when there are different **figures** and different mensures. Also, **figures** have variable measure, diverse forms, moduses, tempuses and prolatione quantification, haltings] (Biblioteka Narodowa, BN.XVII.2.477, E 1 r.).

As in the previous treatises in Starovolscius's definitions, the *figurative* music is opposed to music *plana* and its synonyms:

> **Plana** *seu* **Choralis**, *vulgo* **Gregoriana Musica** *est, quae in suis notulis aequalem servat mensuram, absque incremento vel decremento prolationis. Haec* **vetus musica** *dicitur, & agit de clavibus, vocibus, cantu, mutationibus, modis ad que tonis* [Music **Plana** or **Choralis** more often is **Gregorian** music which includes equable mensuras without increasing or alleviation of prolatio. This **old music** pronounce and moves clavises, voces, cantus, mutations, moduses and also tones] (Biblioteka Narodowa, BN.XVII.2.477, A 7).

Therefore, Lauxmin's and Dyletsky's treatises have joint origin that is clearly shown by their comparison with historical documents and musical and theoretical treatises of the Polish–Lithuanian Commonwealth of the 16th and the 17th centuries.

Conclusions

The Vilnius musical and theoretical treatises of the second half of the 17th century, in particular, *Musical Grammar* by Mykola Dyletsky and *Ars et praxis musica* by Sigismundus Lauxmin, had joint origin as in the system of training to sing, as in the question of theory and practice of multivoice music regardless of whether they were addressed to different faiths.

While comparing them we can clearly notice that their main difference lies not in the addressee's confessional belonging, but in different authors' concentration on the multivoice and monody issues. Regardless, Dyletsky's treatise introduces to us the national note-lines monody, it takes only small part of such treatise and it is reinterpreted from the position of multivoice. Moreover, vice versa, in Lauxmin's treatise Gregorian choral takes first place.

Therefore, according to the provision of treatise partes multivoice is a complete produce of the Western European musical and theoretical opinion. Partes multivoice is considered a national phenomenon due to several main features, in particular the Belarusian and Ukrainian variant of the Church Slavonic language; traditional Belarusian and Ukrainian note-lines graphic; using texts of Orthodox and later Greek Catholic liturgical traditions; music itself and because this music became very popular and initiated bases which developed and became classical in professional Ukrainian music of the 18th and the beginning of the 19th centuries.

Lauxmin's treatise *Ars et praxis musica* introduces to us the classical European system of training to sing Gregorian monody. Dyletsky's treatise *Musical Grammar* introduces a new mixed system formed on the basis of classical solmisation system and under the influence of changes incited by organ musical practice and multivoice laws and it is very close to those one that are represented in Jan Gorczyn's treatise.

Analysing the term *cantus fractus*, which was used by Dyletsky and Lauxmin for the description of multivoice music and which was generally used in Vilnius beginning with the last decade of the 16th century we can draw the conclusion that both authors continued local musical and theoretical traditions. For example, in Lviv and then in Kyiv tradition the Orthodox liturgical multivoice of the European type was determined as *cantus figuratus*.

Therefore, by analysing Lauxmin's treatise we described contours of the musical and theoretical situation in Vilnius in the second half of the 17th century. This fact also gave us an opportunity to interpret Dyletsky's treatise *Musical Grammar* in a new way, i. e. in the context of the local Vilnius musical tradition and wider than it was made by the Western European musical and theoretical opinion.

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[1] Mykola Dyletsky (or Nikolay Diletsky, Ukrainian: Микола Дилецкий, Russian: Николай Павлович Дилецкий, Nikolay Pavlovich Diletsky, Nikolai Diletskii, Polish: *Mikołaj Dylecki*, also *Mikolaj Dylecki*, *Nikolai Dilezki*, etc., c. 1630, Kiev–after 1680, Moscow).

[2] The first description of copies of Dyletsky's musical and theoretical treatise *Musical Grammar* from 1845 can be found in the work by researcher Stroyev (Строев, 1845, p. 51). The earliest surviving version of *Musical Grammar* dates from 1677.

[3] Partes multivoice was formed for the needs of the Orthodox Church inside the Polish–Lithuanian Commonwealth during the last 15 years of the 16th century, in particular in the surroundings of fraternities headed by the Lviv Orthodox Brotherhood and its school. Later partes multivoice spread to other Orthodox schools; still later it was also used for the needs of the Greek Catholic Church and in the Church Tsardom of Muscovy.

[4] Latin: Sigismundus (Zygmunt) Lauxmin (Lithuanian: Žygimantas Liauksminas, 1596 or 1597, Samogitia–11 September 1670, Vilnius). The author of the first Lithuanian musical handbook *Ars et praxis musica* (Muzikos menas ir praktika, 1667).

[5] The source of the quotation: РГАДА ф. 181, № 541, Л. 48.

[6] It is well known that in 1677 Smolensk was already an administrative district of the Tsardom of Muscovy and it was also a part of the Polish-Lithuanian Commonwealth until the Truce of Andrusovo was signed.

[7] The full title of the document is (in Estreicher, 1897, p. 207): *Toga Złota w nowej świeta metamorphosi, szlachetnemu magistratowi Wilenskomu na nowi rok przez Mikolaja Dileckiego, akademica Wielenskiego oglaszona w Wilne. Typis Franciscanis anno 1675 w 4-ie, kart. 7 nib.* This document was lost during the Second World War.

[8] Protograhh of Smolensk copy has not survived, there remained only the closest copy – РГАДА, ф. 181, № 541.

[9] It exists in a joint format of two different treatises: by Kornyeyev and by Dyletsky. You should not exclude that fact that maybe Kornyeyev edited and translated some parts of "Grammar". Thus, we can explain some additions in text and its changes as to two other copies. The original of this version is kept at the State Historical Museum of Russian History, in the Barsov collection, No 1340. In our research, we used the more simple copy from 1681, published by Smolensky (Смоленский, 1910).

[10] In this version there is the author's inscription addressed to G. Stroganov (he was a Russian state figure and politician; Протопопова, 1979; РГБ, ф. 173, № 107).

[11] Facsimile of Lauxmin's treatise and its translation were made in Lithuanian by researcher Vytautas Jurkštas (*Žygimantas Liauksminas*, 1977).

[12] РГАДА, Л. 3 об.

[13] Смоленский, 1910, p. 62.

[14] РГБ, Л. 19.

[15] РГАДА, Л. 3.

[16] Смоленский, 1910, p. 61.

[17] РГБ, Л. 18.

[18] Biblioteka Narodowa, BN.XVII.2.477, – S. B 1 r.

[19] РГАДА, Л. 3.

[20] Смоленский, 1910, p. 61.

[21] РГБ, Л. 22.

[22] РГАДА, Л. 7.

[23] Смоленский, 1910, p. 71.

[24] РГБ, Л. 26.

[25] You should look in *Graduale* printed at the same time as *Ars et praxis musica*.

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Santrauka

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