

# PAST AND PRESENT: INTERPRETING THE CHANT NOTATIONS OF THE PRAY CODEX

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## ABSTRACT

The paper examines the music scripts of the Pray Codex (Budapest, National Széchényi Library, Mny 1), one of the most important manuscripts of 12th-century Central European cultural history. This is not the first time that a systematic music paleographic review has been carried out: decades ago, the noted plainchant scholar, Janka Szendrei, subjected the notations of the codex to a detailed analysis, some of which she considered to be the earliest surviving examples of Esztergom staff notation. However, more recent studies have shown that the neume compositions of the 12th-century examples of the Pray Codex are rather undeveloped compared to the 13th–14th century Esztergom notation. There are no definitive neume forms, but there is a very rich range of variants belonging to a single neume type. Can this set of signs be considered Esztergom notation? In order to answer this question, contemporary comparative sources – the Krakow and Šibenik codex fragments – were also studied, and our examination made use of the most advanced digital techniques. We also tried to go further than Janka Szendrei as regards isolating and characterizing the notations of the Pray Codex, while also exploring the genesis of the Esztergom notation and, above all, by examining the role the French university peregrinations of Hungarian archpriests may have played in the formation of the musical literacy of the 12th-century Kingdom of Hungary.

**Key words:** codex, music paleography, staff notation, Esztergom, neumes, peregrination

The Pray Codex, a Sacramentary written in the last decade of the 12th century, is a key manuscript of Hungarian cultural history, especially for music paleographical research. A manuscript that, in the words of Janka Szendrei, “replaces a whole series of

sources in the history of plainchant notations of Hungary”.<sup>1</sup> It does so even though the Sacramentary is not a musical book: it contains chants only as an addition. The reader is rightly amazed at how many layers of chant notation are hidden on the leaves of the codex and, moreover, from that important period of the ecclesiastical culture of the Kingdom of Hungary in the 12th and 13th centuries, from which hardly any musical sources have survived.

Scholarly works on the notations of the Pray Codex, including the notable 12th-century staff notation sections (see f. 55v, 132rv, see **Table**, Notation 1), were published in the 1970s, before the systematic study of the source began.<sup>2</sup> Kálmán Isoz, Zoltán Falvy and Kilián Szigeti classified this notation appearing in the main corpus of the book as the earliest music script written on staves in the Kingdom of Hungary, raising the questions that have occupied the scholars of the codex’s notations ever since. These include, for example, how the first noteworthy neume system of the codex can be described most accurately,<sup>3</sup> how it relates to other notation types appearing in the manuscript, what developmental stages and interactions are behind its formation, and finally, where the notation variants should be placed within the history of Hungarian/Esztergom notation.

The authors of early analyses of the historical background of the manuscript, which is inevitably fragmentary due to the lack of source material, primarily suspected the influence of the St Gallen notation behind the main music scripts of the Pray Codex,<sup>4</sup> and the possibility that other notations were related to even more distant writing types.<sup>5</sup> Whether or not these theories of origins now stand up to scrutiny,<sup>6</sup> the initial hypotheses that opened the door to further scientific discourse still seem intriguingly bold even today. The first analyses of the notations of the Pray Codex set the Hungarian music paleographic research on a definite course, which would focus on the search for the “medieval Hungarian notation”, thus definitively setting the most important direction of the examination.

The present study does not take the reader through the stages of the music paleographical research history of the Pray Codex – Janka Szendrei’s analysis has provided

<sup>1</sup> SZENDREI, Janka: *A “Mos patriae” kialakulása 1341 előtti hangjegyes forrásaink tükrében* [The Development of the “Mos patriae” in the Light of Hungarian Notated Sources before 1341]. Budapest : Balassi Kiadó, 2005, p. 195.

<sup>2</sup> ISOZ, Kálmán: *Latin zenei paleográfia és a Pray-kódex zenei hangjelzései* [Latin Music Paleography and the Music Notations of the Pray Codex]. Budapest : Budavári Tudományos Társaság, 1922; SZIGETI, Kilián: *Denkmäler des gregorianischen Chorals aus dem ungarischen Mittelalter*. In: *Studia Musicologica* T. 4, 1963, Fasc. 1/2, pp. 129-172, here pp. 137-139; FALVY Zoltán: *A Pray-kódex zenei paleográfiája* [Music Paleography of the Pray Codex]. In: SZABOLCSI, Bence – BARTHA, Dénes (Eds.): *Erkel Ferenc és Bartók Béla emlékére* [In memory of Ferenc Erkel and Béla Bartók]. Zenetudományi Tanulmányok 2. Budapest : Akadémiai Kiadó, 1954, pp. 509-534.

<sup>3</sup> See f. 55v and f. 132rv.

<sup>4</sup> Both Kálmán Isoz and Zoltán Falvy came to this conclusion.

<sup>5</sup> Zoltán Falvy considered the musical notation of the votive Masses of the Holy Trinity and Mary (f. 99v–102r) to be mostly of Milanese origin, while he called the notation of the *Exsultet* (XXVIIIv–f. 1r) an Aquitanian notation, based on the many point-elements. See FALVY, Ref. 2, pp. 527, 529.

<sup>6</sup> The above definitions of Zoltán Falvy are refuted by Janka Szendrei, see SZENDREI, Ref. 1, pp. 208-209.

a comprehensive overview.<sup>7</sup> The results of her systematic study have been used as a starting point for our review. Szendrei's most important insight was to link the notation of the Pray Codex to the ecclesiastical centre, Esztergom, where she posited a new, independent Hungarian school of chant notation, and mentioned the manuscript's Notation 1 as the first example of this. The thoroughness with which Szendrei collected data and arguments from the Sacramentary to give a convincing explanation of the circumstances of the genesis of Esztergom music writing and the motives for the development of the independent local staff notation is remarkable.<sup>8</sup> An additional accomplishment of her analysis is that she places all the music notations which appear at different points in the codex – both the diastematic notations of a special neume selection and the staff notations from the 12th and 13th century – in the same evolutionary sequence, refuting the narrow and erroneous conclusions of previous analyses about the different origins and relationships of the writings, or the lack of such relationships.<sup>9</sup>

Szendrei places the development of the Hungarian staff notation in the second half of the 12th century, “20–25 years earlier than the writing of the Pray Codex”,<sup>10</sup> i.e. around 1165–1170.<sup>11</sup> She argues that the specific notations in the manuscript cannot be interpreted as a random assemblage of neume forms, but rather are the result of a conscious creation. Here is a script that goes beyond the level of development of the early German adiaesthetic neume forms used in the region. In the absence of comparative sources,<sup>12</sup>

<sup>7</sup> SZENDREI Janka: A Pray-kódex notációi [Notations of the Pray Codex]. In: SZENDREI, Ref. 1, pp. 183–209.

<sup>8</sup> See SZENDREI, Janka: II. A magyar notáció kialakulása. 1. Írásreform a XII. században: a vonalrendszer bevezetése és új jelrendszer alkotása. A Pray kódex hangjelzése [II. The Development of Hungarian Notation. 1. Writing Reform in the 12th Century: the Introduction of the Staff System and the Creation of a New Set of Signs. Notation of the Pray Codex]. In: SZENDREI, Janka: *Középkori hangjegyzírások Magyarországon* [Music Notations in the Medieval Hungary]. Műhelytanulmányok a magyar zenetörténethez 4. Budapest : MTA Zenetudományi Intézet, 1983, pp. 30–36; later SZENDREI, Ref. 1, pp. 195–196. The new, extensive summary does not refine the conclusions drawn in the earlier discussion of the Pray Codex, but it does deepen the analysis and the distinction between types of notations.

<sup>9</sup> Earlier analyses refer to the music notation of the Pray Codex as mostly independent notations.

<sup>10</sup> SZENDREI, *Középkori hangjegyzírások Magyarországon*, Ref. 8, p. 35.

<sup>11</sup> In support of this date, Szendrei cites the striking uniformity of the notations of Esztergom and Kalocsa sources (i.e. the “Hungarian notation”), from which she concludes that the adoption of the Esztergom notation in the Kalocsa archdiocese must have taken place before the conflict between the two centres became acute. Later Kalocsa might not have accepted the Esztergom notation. See SZENDREI, *Középkori hangjegyzírások Magyarországon*, Ref. 8, p. 127, Footnote 24. Her argument is weakened by the fact that the date seems late in this respect. The conflict over the coronations of kings had already flared up in the early 1160s, but reached a temporary lull at the end of the century, around the time of Jób, Archbishop of Esztergom. See KOSZTA, László: *A kalocsai érseki tartomány kialakulása* [The Development of the Archbishopric of Kalocsa]. In: *Thesaurus Historiae Ecclesiasticae in Universitate Quinqueecclesiensi*. A PTE Egyháztörténeti Kutatóközpontjának sorozata. Pécs : Pécsi Történettudományért Kulturális Egyesület, 2013, p. 106. See also our historical summary at the end of the study.

<sup>12</sup> At the time of the publication of Szendrei's source catalogue in 1981 (SZENDREI, Janka: *A magyar középkor hangjegyes forrásai* [Notated Sources of the Hungarian Middle Ages]. Műhelytanulmányok a magyar zenetörténethez 1. Budapest : MTA Zenetudományi Intézet, 1981) and her history of the Esztergom notation in 1983 (Ref. 8), no other source of staff notation from the 12th century was known other than the Pray Codex. Therefore, the Šibenik fragments

Szendrei finds reasons for the development of this new writing in the cultural and ecclesiastical history of 12th-century Kingdom of Hungary. She believes the introduction of staff notation was a part of a reform of music writing, which took place in Esztergom, the centre of the Hungarian Church.<sup>13</sup> She credits this innovation to the new demands and aspirations of the French-educated Hungarian clergy of the 12th century, and dates it to the time of the archbishopric of Lukács Bánfi (1158–1181). As far as the historical data is concerned, the peregrination of the Hungarian high clergy abroad (to Paris at the time) may have laid the foundations for the modernisation of music writing and the formation of a notation of European standard.<sup>14</sup> It seems that Lukács, and later his successor, Jób (1185–1203), may have become closely acquainted with western liturgical music theories, as both were committed to the Roman Gregorian reform of the late 11th century. While studying in Paris, Lukács studied alongside Thomas of Canterbury, a noted advocate of the Gregorian reform. So it is certain that members of the later Hungarian high clergy were closely acquainted with the progressive music theory of the time, including Guido of Arezzo's modern system of staff notation.

After the 11th century, this new method completely changed the earlier process of learning and disseminating liturgical music across the continent, with lasting effects on the further development of musical literacy in the countries where it was popular. All this offers a logical explanation as to why the Hungarian church may have abandoned the German system of musical notation in favour of the Latin system.<sup>15</sup>

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discovered at that time (Šibenik, St. Francis Monastery Library, Cod. 10, flyleaves) were not included in the completed manuscripts of her works. Her analysis in 2005 ('Mos patriae') also does not mention the fragments discovered in 1982, perhaps as there were no further investigations and no good quality photographs on which to base an evaluation. The fragments are mentioned only twice in Szendrei's works: SZENDREI, Janka: The Introduction of Staff Notation into Middle Europe. In: *Studia Musicologica*, 28, 1986, pp. 303–319, here p. 317; SZENDREI, Janka: Árpád-kori források [Sources from the Árpád-Era]. In: RAJECZKY, Benjamin (Ed.): *Magyarország Zenetörténete I. Középkor* [The Music History of Hungary I. Middle Ages]. Budapest : Budapest Akadémiai Kiadó, 1988, p. 225, Footnote 60.

<sup>13</sup> SZENDREI, *Középkori hangjegyírások Magyarországon*, Ref. 8, pp. 35–36.

<sup>14</sup> There are several references to this. In the early 12th century, the epitaph of the scholastic scholar of the Laon Cathedral School in northern France, Anselm, includes the name of *Pannonia* in the list of the disciples' places of birth. The line of later high priests who went to Paris begins with Lukács, who studied at the school of the English canon lawyer, Girardus Puella, in the mid-1150s. The Archbishop of Esztergom, Jób, according to a letter of 1177 from Abbot Stephen to the King of Hungary, was still studying at the monastery of Sainte-Geneviève in Paris along with the scholarly friars, Michael and Adorján (and at the same time as Thomas Becket). The career of Adorján can also be traced. He became chancellor and then provost of Buda during Jób's time. See MEZEY, László: *Deáksg és Európa: irodalmi műveltségünk alapvetésének vázlata* [Literacy and Europe: the Foundations of Hungarian Literary Culture]. Budapest : Akadémiai Kiadó, 1979, pp. 136–143; KISS, Gergely: 11–13. századi magyar főpapok francia kapcsolatai [French Relations of the Hungarian High Clergy of the 11th–13th Centuries]. In: GYÖRKÖS, Attila – KISS, Gergely (Eds.): *Francia–magyar kapcsolatok a középkorban* [French-Hungarian Relations in the Middle Ages]. In: *Speculum Historiae Debreceniense* 13, A Debreceni Egyetem Történelmi Intézete Kiadványai. Debrecen : Debreceni Egyetemi Kiadó, 2013, pp. 343–344.

<sup>15</sup> SZENDREI, *Középkori hangjegyírások Magyarországon*, Ref. 8, pp. 28–29.

One of the most remarkable notations of Europe at that time can be observed in the Esztergom codices of the 13th and 14th centuries. However, it is also striking that, although it tries to meet new national and international demands that shaped musical literacy, the neumes of Notation 1 of the Pray Codex are still rather undeveloped compared to the final Esztergom neume set, and cannot be perfectly reconciled with later developments. It can perhaps be most accurately classified as *pre-Esztergom notation*.

Among the most innovative solutions of this notation is the use of the staff system to facilitate reading and writing of chants.<sup>16</sup> Several observations can be made. Based on the notations of the Pray Codex, it seems the medieval Esztergom neume set was only established after the introduction of the staff system of Guido of Arezzo to the Hungarian church. Nevertheless, the book also provides evidence that the mixed set of neumes was also used as *in campo aperto* notation (see e.g. the special climacus and scandicus forms of the staffless neume notations, where the later Esztergom forms also appear). In addition, we now know that the first example of the use of the staff system in Hungary is not present in the Pray Codex.<sup>17</sup> Research into 12th-century Esztergom notation should therefore focus not only on the Sacramentary, which was written in the last decade, but also on earlier phenomena and more complex interconnections relating to the development of notation.<sup>18</sup> The move towards the Latin schools of music theory must be examined over the whole of the 12th century, only then can we gain a valid picture.

In line with the cultural historical details, Szendrei emphasizes the influence of French, Messine and Italian notations on Esztergom music writing in her neume analysis. She does not discover any new Hungarian neume form, but rather draws attention to a specific constellation of basic signs and supplementing writing elements, a composition of neumes, which became established exclusively in the plainchant practice of the Hungarian Church from the end of the 12th century, and whose use can still be found in the early modern period, and even as late as the 18th century.<sup>19</sup> The initial angular and pointed French-Messine, then the rounded, more flexible German style of the neumes, the tractulus-like punctum (uncinus), the 7-shaped clavis and the 9-shaped cephalicus, the pes marking by a torque at the beginning and end of the sign, the vertical climacus starting from two puncta, and its conjunct secondary form, the conjunct torculus, porrectus and scandicus, the disappearance of the supplementary decoration signs, the writing direction of the slant ascending to the right and then moving vertically downward, together defined the Esztergom notation, which was only used in the scriptoria inside of Hungary. The problem remains, however, whether all this is also

<sup>16</sup> Even in the 14th century, conservative, adiastematic German neume notation was still used in many institutions east of the Rhine.

<sup>17</sup> For example, the musical fragments in Footnote 12.

<sup>18</sup> Because the links with Laon go back earlier, to the time of King Kálmán Könyves (Colomann the Learned). See MEZEY, *Deákosság és Európa*, Ref. 14, pp. 136–137.

<sup>19</sup> Elements of medieval Esztergom notation can still be found in the 18th-century retrospective music notations of the Pauline Order. So the use of this music script spans 600 years. See most recently: GILÁNYI, Gabriella: Preservation and Creation Plainchant notation of the Pauline Order in 14th–18th-century Hungary. In: *Studia Musicologica*, Vol. 59, 2018, no. 3–4, pp. 399–417.

true of the 12th-century music scripts of the Pray Codex, and whether or not they can be regarded as examples of Esztergom notation.

Many questions can be raised regarding the vague details and contradictions of the development of the Esztergom notation, since according to the sources, a fully developed set of signs was not yet ready by the end of the 12th century. In addition to Notation 3–4 of the Pray Codex (early 13th century, see the Table), the first definitive Esztergom notation system in continuous use through the Middle Ages can be reconstructed from the *Missale Notatum Zagradiense*, kept in Güssing, Austria,<sup>20</sup> which I believe weakens Szendrei's assumption that a reform in the second half of the 12th century gave the Esztergom notation system its definitive form, and that Notation 1 of the Pray Codex represents this, i.e. the reformed Esztergom notation, 20–25 years later. The sources, however, point to the existence of a transitional neume assemblage with a foreign (French, Messine) influence, i.e. a slowly crystallising national neume set, much more abundant in neume forms than the final set of later centuries.

In addition to these details, the identification of Esztergom notation proved to be a milestone not only for Hungarian plainchant research in the 1980s, but also for wider international research, since foreign literature had previously considered Hungary to be the easternmost province of the German/Bohemian notational area.<sup>21</sup> Szendrei's main merit – apart from outlining the possible development of independent Esztergom notation from the earlier German neume notation through the staff and staffless notations of the Pray Codex – is that her research finally places the Hungarian musical notation system on the notation map of medieval Europe.<sup>22</sup>

As mentioned above, our latest analysis of the musical writings of the Pray Codex<sup>23</sup> is based on Szendrei's meticulous research. We also set ourselves the goal of examining issues that have been neglected so far and highlighting contradictions which indicate that the research is not yet complete and the conclusions can be refined in some areas. Recent research into the sources, especially the noteworthy progress in the study of musical codex fragments in Hungary – including the discovery of new manuscripts – also encourages a rethink.<sup>24</sup> In addition, the expansion of the technical possibilities of music paleographical analysis has offered new opportunities for interpreting the musical notation of the Pray Codex. Several factors have therefore inspired us to continue the study of the Sacramentary's music scripts. Some phenomena, such as the dilemmas concerning the relationship between the diastematic neume notations and staff nota-

<sup>20</sup> Güssing (Austria), Bibliothek des Franziskanerklosters, cover of I/43.

<sup>21</sup> Szendrei's detailed analysis refutes the view of earlier German literature that Hungarian notation was a descendant of the Klosterneuburg notation. SZENDREI, *Középkori hangjegyírások Magyarországon*, Ref. 8, p. 39; SZENDREI, Janka: Choralnotation als Identitätsausdruck im Mittelalter. In: *Studia Musicologica*, Vol. 27, 1985, pp. 139–170, itt: pp. 149–153. Hungary is mentioned as the area of use of Bohemian notation: STÄBLEIN, Bruno: *Schriftbild der einstimmigen Musik*. In: *Musikgeschichte in Bildern III*. Leipzig: VEB Deutscher Verlag für Musik, 1975, p. 206.

<sup>22</sup> German version of her monograph on the history of Hungarian notations: SZENDREI, Janka: Die Geschichte der Graner Choralnotation. In: *Studia Musicologica*, Vol. 30, 1988, pp. 5–234.

<sup>23</sup> For the interdisciplinary volume of studies planned to accompany the facsimile edition of the Pray Codex, which will be published in the near future.

<sup>24</sup> See the activities of the Momentum Digital Music Fragmentology Research Group, founded in 2019 by Zsuzsa Czágány in the Research Centre for the Humanities, Institute for Musicology.

tions in the manuscript, call for greater caution than before in forming an opinion, so that a question mark still hangs over some statements, while other questions are much closer to an answer.

A more nuanced picture of the Pray Codex's scripts is provided by the music sources that can be dated as contemporaneous or earlier. Recently discovered codex fragments are also now available. Their value in comparative musical paleographical analysis is greatly enhanced by the fact that they represent codices chronologically close to the Pray Codex and are derived from musical manuscripts (antiphoner, troper–proser). The antiphoner fragment from the Biblioteka Jagiellońska in Kraków, containing the office of St Demetrius,<sup>25</sup> confirms the hypothesis of the coexistence of two different notation types during the 12th century, notations with and without a staff system: a calligraphic writing and a musical shorthand. In fact, two types/functions of notation can be distinguished on the fragment, as in the Pray Codex: (1) the notation on the four-line staves, which is closest to Notation 1 of the Pray Codex, and (2) the diastematic neumes above the text, which is also represented by the Notation 2 of the Sacramentary. The relationship between the two scripts can of course also be examined.

In addition to the notations of the Kraków fragment, today's paleographic researchers have at their disposal hitherto overlooked comparative sources: two 12th-century flyleaves of the 15th-century Hungarian “Codex Demetrii de Laskó” kept in the library of the Franciscan (Conventual) friary in Šibenik (Croatia), discovered and identified by Béla Holl.<sup>26</sup> The fragments were cut from a troper-proser of Hungarian origin, as indicated by the writing elements familiar from the Pray Codex and from later Esztergom notation. The same was observed in both cases: underneath the dry-lines, which were scratched out specifically for music notation, the chant texts were written in a wider space, also guided by a dry-line. After the texts were inscribed, the melody followed on the dry-lines, and the rubricator subsequently emphasized the F-line in red ink, presumably during the same process of copying the necessary rubrics and red ornamentation of the capitals to differentiate the beginning of the verses and half-verses of the sequences.

In conclusion, both the well-known staff notation and the *in campo aperto* diastematic neume notation in the Pray Codex clearly reveal a later stage of development than that of the fragments. Regarding the Šibenik and Kraków leaves, the notation of the troper seems to be the most archaic, which would seem to support the statement made by Szendrei in 1984 (in her unpublished notes): these fragments are the first known example of the use of a staff system in Hungary.

<sup>25</sup> Binding of a book, signed 2372. See CZAGÁNY, Zsuzsa: Fragmentum Cracoviense Officii Sancti Demetrii Thessalonicensis. In: *Studia Musicologica*, Vol. 56, 2015, no. 2-3, pp. 173-188.

<sup>26</sup> Samostan sv. Frane, Cod. 10. Béla Holl discovered the *Liber Demetrii de Lasko* in 1982, during a research trip to Dalmatia. A comprehensive review summarizing his first results was published in 1984: HOLL, Béla: Egy ismeretlen középkori iskoláskönyv és magyar verses nyelvemlék 1433-ból [An Unknown Medieval Schoolbook and Hungarian Language Monument from 1433]. In: *Magyar Könyvszemle* [Revue pour L'Histoire du livre et de la presse], Vol. 100, 1984, no. 1, pp. 1-23.

## Results of the analysis

The scope of the present study does not allow for a detailed music paleographical analysis – we plan to publish a comprehensive work on the music scripts of the Pray Codex in the near future,<sup>27</sup> which will include the details of the new comparative inspections. However, the basic notation types of the codex and the different neume sets are presented here (see Table), as well as the main results and conclusions that can be drawn from the new examination.

1. From the 12th-century layer of the Sacramentary, and from the comparative musical codex fragments closest to this period the same extended set of signs can be documented. At first glance, it appears as if the collection of neume form variants in the comparative notation (cf. Pray Codex Notation 2, Kraków and Šibenik fragments) is more abundant than in Notation 1 of the manuscript. It is conceivable that Notation 1 used a narrower neume set, but this is only a possibility, and it cannot be ruled out that the missing neumes can be explained by the sporadic occurrence of Notation 1 in the codex. The main corpus contains only one antiphon and one responsory, and therefore does not contain a full set of signs. In any case, the Kraków fragment, which contains a greater number of melodies, shows a richer range of neume form variations than Notation 1 of the Sacramentary, and this supports the second explanation: Notation 1 may have included more sign variants than this.

2. The notation of the *Clemens et benigna* trope of Mary (a sequence that became independent) inscribed on the last leaf of the codex is closely related to Notation 1. But based on its neume selection, we would date it somewhat later than Janka Szendrei (late 12th century, the same age as Notation 1). The retouching mentioned in her analyses<sup>28</sup> cannot be definitely proven: either a thicker pen cut, or the deterioration of the musical notation over the centuries, e.g. the effect of humidity, could explain the thickening of the writing elements. We agree, however, that the later (13th century) additions (especially the returns of the word *Mary*) are not identical to the main hand: they are sharper, more angular shapes of neumes, written with a different ink.

3. An attempt can be made to establish a chronology of sources based on the archaism of the neume selection of a given notation. It is probable that the antiphoner fragment preserved in Kraków and the music script of the proser leaves of the Codex Demetrii de Laskó, which are examples of contemporary Hungarian sources, can be dated to before the early notations of the Pray Codex. In summary, it seems certain that Notation 1 in the Pray Codex was not the first early staff notation made in medieval Hungary.

4. The evaluation of Notation 1–2 needs to be added in the light of the new study. Although there appear to be more variants of a single neume type in Notation 2 than in Notation 1, the two (Notation 2 written *in campo aperto* and Notation 1 that appears to be a more advanced and elaborate system on staves) are extremely close. This can be discerned despite the different functions of the notations. In our opinion, both notations may well be the work of the main scribe, and this leads to a very important conclusion for the early practice of music notation in Hungary: the simultaneous use

<sup>27</sup> See Ref. 23.

<sup>28</sup> SZENDREI, Ref. 1, pp. 200–201.

of different script types. Indeed, the examples point to the existence of a more archaic neume notation and a refined, calligraphic early staff notation: the same hand was presumably capable of writing melodies in two different ways. The *in campo aperto* script (Notation 2) is also diastematic in its nature and gives room for heightened neumes. These notation types in the manuscript may vary according to the function of the script, either musical shorthand or a more complex notation for a more elaborate chant. It is understandable that the scribe would notate the more complex melody of a rare or new chant differently from an older, simpler melody – the former would obviously require more precise guidance.

The use of the two types of notation during the same time period is also shown by the Kraków fragment, which is an earlier source than the Pray Codex, and by Notation 3–4 of the Sacramentary, which dates to the 13th century. In all three cases, the more unique, proper chants are notated on staves, while the repeated, or commune chants *in campo aperto*. This diastematic notation between lines of text is reminiscent of cursive marginal notations from centuries later.

5. The fact that the scribe (third hand<sup>29</sup>) may have worked on the music notation alone, perhaps sharing this task with a partner in the same workshop, i.e. that a different person was not needed for musical notation, could be explained by a modest monastic workshop and the lack of separate Hungarian musical notation at the time. A monk specially trained in writing music script was not necessarily needed for these notations. Our theory is strengthened by the fact that the scribe who wrote the rubrics of the Pray Codex was also able to write music notation. The sole, but persuasive evidence of this is the neume inscription in red on the folio 133v. It may have been written at the same time as Notation 1 and 2, and although it consists of only a few neumes, its composition is strongly parallel to the neume forms of the diastematic notation of the main hand. The above reflection and the latter specific coincidence lead us to postulate that the red ink notation, like the rubrics, may have come from the main hand, the third scribe of the manuscript.

6. The surviving sources from the 12th century suggest that Hungarian workshops could not have used the Esztergom notation that we know from the 13th century. Without exception, the sources testify to the use of a mixed notation with a rich set of signs, in which German and Messine elements compete for dominance. This suggests that the Esztergom notation may have been finalised before the mid-12th century. Unless it took several decades for the results of a posited notation reform to spread (which we strongly doubt), it seems plausible that this “reform” (or more precisely “simplification”) took place in Esztergom at the earliest in the decade the Pray Codex was written at the end of the 12th century, possibly in the early 13th century. As has been repeatedly stated, the Esztergom/Hungarian notation, as an independent, developed neume composition, which is also remarkable by international standards, corresponds to Notation 3–4 of the Pray Codex. The above dating may therefore shed light on why the neume set of Hungarian notations was unified from the 13th century onwards, and why, after this finalisation, it remained completely intact until the end of the Middle Ages.

7. What does this tell us about the chant notation in the 12th-century Hungarian church? Our examples suggest that the use of the Guidonian staff system may have

<sup>29</sup> SZENDREI, Ref. 1, p. 144.

appeared much earlier than previous literature has suggested. Perhaps as early as the middle of the century, see the Kraków fragment, dated to a similar time as the Codex Albensis,<sup>30</sup> i.e. the first decades of the century.<sup>31</sup> It would be a mistake, therefore, to claim that an established Esztergom notation was placed on the staff lines. All the indications are that there was a gradual shift over the course of the century to the use of the staff system, with a rich, mixed set of signs. An example of this gradualness can be seen in the design of the staves, which seem to be malleable in every respect, here scratched, elsewhere drawn in ink, brown or red, with one or four staff lines. The staff lines are rough and imprecise, as vague as the neume selection. In addition, modern neume forms of the later Esztergom notation are already found in this transitional script. The replacement of German neumes by French–Messine elements is evident in this temporary neume set, although the archaic neume forms have not yet completely disappeared from it, and are present as secondary forms beside the new ones until the end of the century. This redundancy is a clear sign of the undeveloped character of the 12th-century notation in Hungary.

The fact that the 12th-century notations of the sources are clearly distinguished by their archaism from the innovative, disciplined Hungarian notation of only a few decades later is our final argument against a 12th-century reform. It is impossible to discern an exact moment of qualitative change from the sources, and it is likely there was a very slow process of development. Nor does Notation 1 of the Pray Codex show the final result of the introduction of the reform, i.e. ‘the post-reform stage’, as Szendrei writes,<sup>32</sup> and it would be a misunderstanding to associate the music scripts dated before it with a reform. The most important of the steps necessary for the central regulation is missing: the final decision on the neume forms, i.e. the crystallisation of the Esztergom sign set. In our opinion, this occurred about thirty years later than previously assumed. All of which may well significantly change ideas regarding the development of the Esztergom notation.

8. What could have happened at turn of the 13th century that gave rise to the narrowing of the earlier neume set in favour of the French–Messine elements? Can the fixation of the Esztergom neume set and the French–Messine writing style, which characterises Notation 3–4 of the Pray Codex, be linked to specific individuals and events? Here the evidence is sparse, we can only hypothesize. As far as the end of the 12th century is concerned, Lukács, Archbishop of Esztergom, who had previously been associated with a liturgical reform, was succeeded by Jób, while another ecclesiastical position was occupied by Adorján, chancellor and notary to King Béla III, who headed the Buda provostship. In Pécs, too, the archbishopric was given to a scholarly church leader, probably educated in Paris, Bár-Kalán, who in the 1190s was given the unprecedented title of ‘governor of all Croatia and Dalmatia’, after the Pope had deemed him

<sup>30</sup> Graz, Universitätsbibliothek, Ms. 211. A 12th-century antiphoner from Transylvania written in adiastematic German neume notation. Facsimile edition: FALVY, Zoltán – MEZEY, László: Codex Albensis. Ein Antiphonar aus dem 12. Jahrhundert. In: *Monumenta Hungariae Musica 1*. Budapest : Akadémiai Kiadó; Graz : Akademische Druck- und Verlagsanstalt, 1963.

<sup>31</sup> CZAGÁNY, Ref. 25, p. 187.

<sup>32</sup> SZENDREI, *Középkori hangjegyírások Magyarországon*, Ref. 8, p. 33.

worthy to wear the archbishop's pallium.<sup>33</sup> Similar examples could be given, but it is clear that at the end of the 12th century a new, educated elite of high priests was at the head of the Hungarian Church.

Educated abroad, the high clergy represented the Kingdom in diplomatic affairs with great expertise. They may also have been instrumental in the marriage of King Béla III by proposing to Margaret of Capet via her brother, the French monarch Philip August II.<sup>34</sup> These Parisian contacts not only influenced the development of Hungarian court life, but also helped to bring literacy levels and clerical culture up to Western standards.

The question of notation could be resolved in this fertile environment. At the time of Jób, a final correction of the Esztergom notation, which now put a stop to neume variations, is more conceivable than in the more turbulent preceding period, when Archbishop Lukács, who demanded the assertion of primogeniture by right in the succession struggles and who was several times at a disadvantage, was in power. At first he was overshadowed by Archbishop András of Kalocsa, who did not support the accession of Béla III.<sup>35</sup> The idea that this change took place while Jób was archbishop is also supported by the argument that was previously put forward against him: the rivalry between Kalocsa and Esztergom. Under Lukács, who was reluctant to compromise, a reform that would have extended to the whole church could probably not have been successfully implemented, and Kalocsa would certainly have rebelled against the Esztergom diktats.

Blessed with a highly developed diplomatic sense, Jób inherited a difficult situation from Lukács. But fortunately for him, the struggle with Kalocsa reached a stalemate at the end of the 12th century, under Archbishop Saul, when the southern archbishopric was preoccupied with the question of the choice between the two sees, i.e. the resolution of the Kalocsa–Bács issue. Finally, in 1201, Pope Innocent III confirmed the rights of both the sees of Kalocsa and Bács.<sup>36</sup> This dual governance may have temporarily weakened the position of the Kalocsa archbishopric vis-à-vis Esztergom, but it may also have had positive consequences: the reestablishment in Kalocsa–Bács could easily have provided an opportunity for the introduction of the definitive Esztergom notation.

The high level of administration of the Kingdom of Hungary and the Hungarian church in the 12th century, the emergence of the place of authentication (*locus credibilis*) at the end of the century, and the rise in the quality of education<sup>37</sup> guaranteed

<sup>33</sup> KISS, Ref. 14, p. 345.

<sup>34</sup> GYÖRFFY, György: Jób esztergomi érsek kapcsolata III. Béla királlyal és szerepe a magyar egyházi műveltségben [The Relationship of Jób, Archbishop of Esztergom with King Béla III and his Role in the Hungarian Ecclesiastical Culture]. In: *Aetas*, Vol. 9, 1994, No. 1, pp. 58–63, here p. 59; KISS, Ref. 14, pp. 344–345. In 1185, the monk, Rigordus of Saint-Denis, a court physician, reported the arrival of a delegation from a Hungarian embassy, whose members asked King Philip II for his blessing for the marriage of his sister to Béla III. He does not mention either Jób or Adorján, but the latter's appointment as chancellor in 1195 may be linked to this successful event.

<sup>35</sup> KOSZTA, Ref. 11, p. 107.

<sup>36</sup> KRISTÓ, Gyula: Kalocsa. In: KRISTÓ, Gyula: *Fejezetek az Alföld történetéből* [Chapters from the History of the Great Plain of Hungary]. In: *Dél-Alföldi Évszázadok 20*. Szeged : Csongrád Megyei Levéltár, 2003, pp. 83–96, here p. 90.

<sup>37</sup> MÁLYUSZ, Elemér: *Egyházi társadalom a középkori Magyarországon* [Ecclesiastical Society in Medieval Hungary]. Budapest : Akadémiai Kiadó, 1971, pp. 44–45.

the rapid spread of the new notation in Hungary – there is no other explanation for why the same characterised, reduced neume set suddenly appears everywhere in the Hungarian church from the first decades of the 13th century. It is indicative of a new approach that within a decade or two the same music script was being used in every copyist's workshop in Hungary, from the small parish of Zagreb (see the *Missale Notatum Zagradiense*, kept in Güssing) to the cathedral of Esztergom and Kalocsa–Bács. This was the starting point for local initiatives, i.e. the confident appropriation and further development of the Esztergom notation, which created an exceptionally rich network of music notation variants and thus a flourishing musical literacy in medieval Hungary.

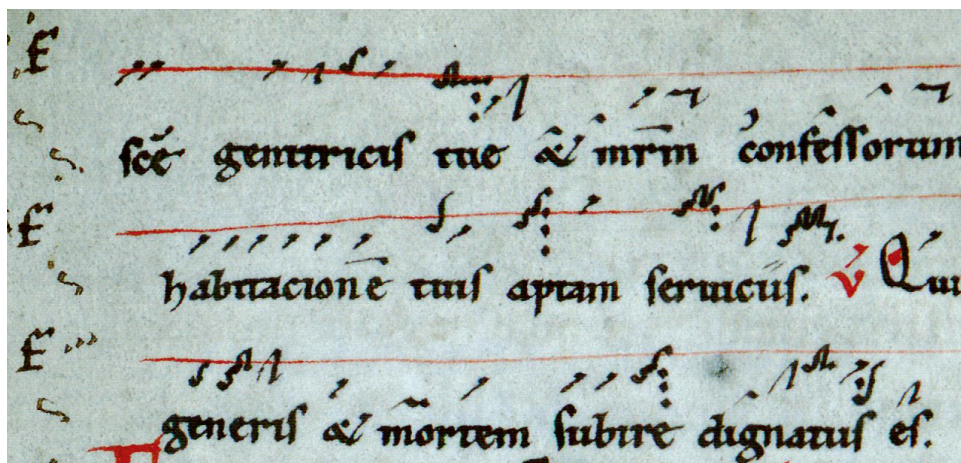
\*

We conclude this discussion by expressing our wish that our analysis will contribute to further assessment of the role of the Pray Codex in Central European music history. The studies have confirmed at every point the exceptional value of the manuscript as a source: we have no other text of such importance.

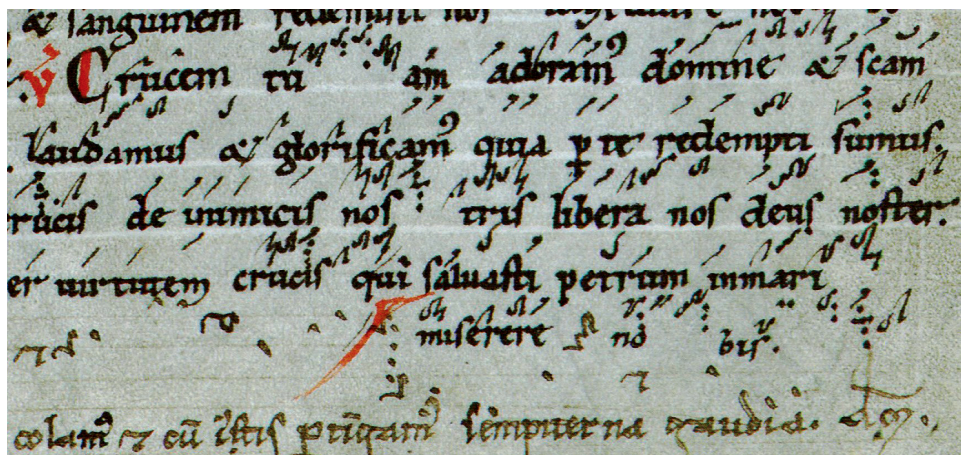
The Pray Codex is a key witness to two periods in Hungarian music history. Its 12th-century notations captured an exciting moment in the development of musical literacy. The reader is confronted with a mixture of signs that combines German writing technics with French and Messine neumes. The background to this is the Laon education of Kálmán Könyves' time, later Hungarian peregrinations and dynastic contacts with Paris, and the introduction of modern Italian music theory. The first layer of the Pray Codex's notations is anachronistic by the end of the century and, perhaps, the last valuable representative of a temporary period. But the Pray Codex is also a harbinger of the future, since it presents to posterity not only the older music scripts, but also the much admired Esztergom neume selection, one of the most significant and enduring works of medieval Hungarian cultural history, in its 13th-century, fully developed form.

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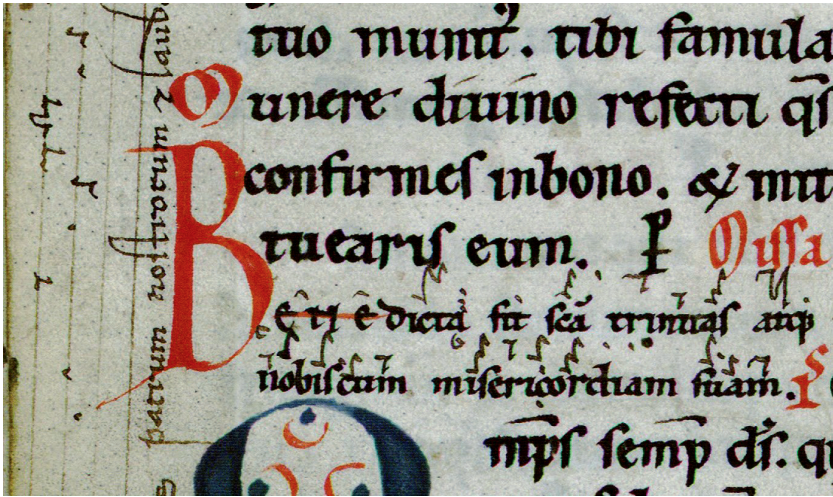
## PICTORIAL SUPPLEMENT



Notation 1 (end of the 12th century), f. 132v



Notation 2 (12th century), f. 102r





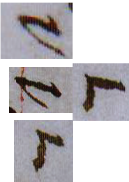

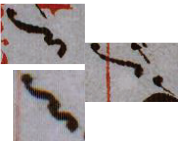















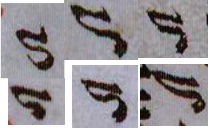
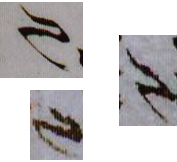
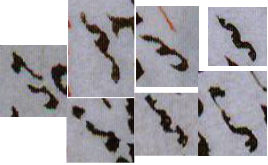
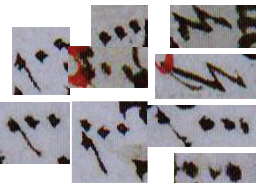
Notation 3–4 (beginning of the 13th century), f. 99v




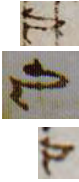






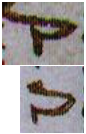



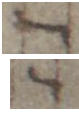







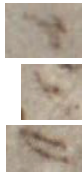


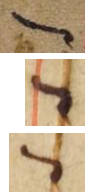
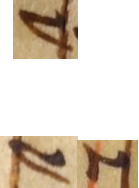

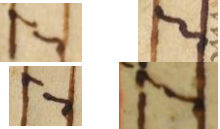
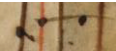


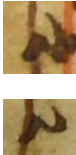








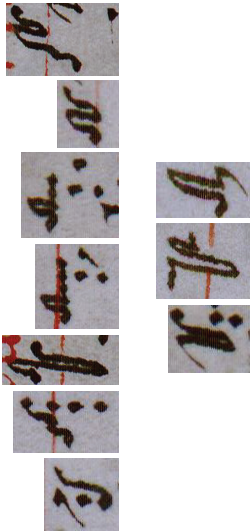


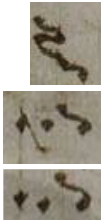



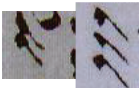





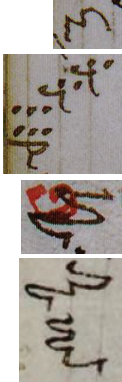

Notation for the trope *Clemens et benigna* (12th–13th century), f. 144v








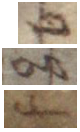


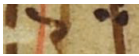

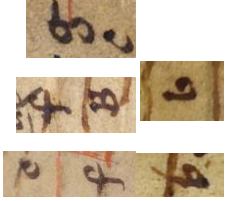

Table

1.	Pray Codex	Notation 1	c. 12	f. 55v, 132rv
2.	Pray Codex	<i>Clemens et benigna</i>	c. 12–13	f. 144v
3.	Pray Codex	<i>Ab Oriente portae et tres</i>	c. 12–13	f. 132v
4.	Pray Codex	Notation 2	c. 12	f. XIIIr, XVv, 39r, 45r, 46v, 47rv, 48rv, 49r, 50rv, 51r, 53r, 54rv, 55rv, 56r, 57r, 59rv, 60rv, 65r, 68v, 69r, 70r, 90rv, 102r, 103r, 116v, 117r, 118v, 133v, 139r
5.	Pray Codex	Notation 3	c. 13	f. XXVIIIv–1r, 99v, 100r, 101v, 102r, 103v, 104r, 116v, 117r
6.	Pray Codex	Notation 4	c. 13	99v
7.	Kraków fragment	Notation 1	c. 12	
8.	Kraków fragment	Notation 2	c. 12	
9.	Šibenik fragment	Notation 1	c. 12	
10.	Šibenik fragment	Notation 2	c. 14–15	

	Punctum/virga	Pes	Clivis	Torculus	Porrectus	Scandicus	Climacus
1.							
2.							
3.							
4.							

	Punctum/virga	Pes	Clivis	Torculus	Porrectus	Scandicus	Climacus
5.							
6.							
7.							
8.							
9.							
10.							

	Cephalicus	Strophicus	Pes subbipunctis	Combinations	Clefs
1.					
2.					
3.					
4.					
5.					

	Cephalicus	Strophicus	Pes subbipunctis	Combinations	Clefs
6.					
7.					
8.					
9.					
10.					

## Resumé

### MINULOSŤ A SÚČASNOSŤ: NOTAČNÉ VRSTVY V PRAYOVOM KÓDEXE

Prayov kódex, uložený v Národnej Széchényiho knižnici v Budapešti pod signatúrou Mny 1, je jedným z najvýznamnejších a najvšestrannejších písomných prameňov kultúrnej histórie strednej Európy. Jeho obsahové vrstvy poskytujú témy a podnety pre viacero vedeckých disciplín vrátane dejín liturgie, umenia, medicíny, literatúry a hudby. Svojou všestrannosťou tak rukopis prispieva k tvorbe uceleného obrazu kultúrnych dejín stredoeurópskeho regiónu na konci 12. storočia, vrátane vysokej kultúry vtedajšieho Uhorska.

V predloženej štúdií sa zameriavame na analýzu typov hudobnej notácie zachytených v rukopise. Nie je to prvýkrát, čo sa hudobné zápisy kódexu stávajú predmetom systematického hudobnopaleografického bádania: maďarská bádatelka Janka Szendrei sa vo svojich dvoch základných prácach (*Középkori hangjegyíráások Magyarországon*. Műhelytanulmányok a magyar zenetörténethez 4. Budapest : MTA Zenetudományi Intézet, 1983; A „*Mos patriae*” kialakulása 1341 előtt hangjegyes forrásaink tükrében. Budapest : Balassi Kiadó, 2005) ako prvá zamerala na identifikáciu a analýzu jednotlivých notačných vrstiev rukopisu. Domnievala sa, že niektoré notované zápisy reprezentujú najstaršie príklady tzv. ostrihomskej notácie a zároveň prvé doklady moderného hudobného písma používajúceho linajkový systém na území strednej Európy.

Z dnešného pohľadu, postaveného na neporovnateľne širšej pramennej základni, si však tento názor vyžaduje upresnenie a čiastočnú modifikáciu. Najnovšie výskumy v oblasti hudobnej paleografie poukázali na skutočnosť, že neumové štruktúry v Prayovom kódexe sú v porovnaní s ostrihomskou notáciou 13. a 14. storočia primitívne a nevyzreté. Neexistujú ustálené formy jednotlivých neum, ale naopak, existuje množstvo variantov, z ktorých sa až neskôr a postupne, v procese dozrievania vykryštalizujú definitívne tvary. Niektoré neumy sú zastúpené stredofrancúzskymi i metskými tvarmi, ktoré vystupujú ako rovnocenné alternatívy. Dá sa tento súbor notačných symbolov vôbec nazvať ostrihomskou notáciou? Ako ju možno definovať vo svetle neskoršieho vývoja?

K problematike sme pristupovali z troch aspektov. (1) Porovnali sme notačné systémy sakramentára s notáciou nedávno objavených fragmentov pochádzajúcich z rukopisov vzniknutých v 12. storočí na území Uhorska. Ide predovšetkým o tzv. krakovský fragment, objavený v roku 2015, a o fragmenty zo Šibeniku, ktoré boli síce známe v minulosti, kvôli nedostatku kvalitného fotografického materiálu však doposiaľ nemohli byť podrobené dôkladnej analýze. (2) Využitím možností modernej digitálnej technológie boli odhalené nové, doposiaľ neviditeľné písarsko-notačné vrstvy rukopisu, ktoré umožnili rekonštruovať jednotlivé fázy vyhotovenia opisu a stanoviť chronologické poradie notových zápisov. 3. Dôkladná analýza neumových zápisov Prayovho kódexu nás zaviedla k počiatkom ostrihomskej notácie, odhaľujúc pozadie, dôvody a etapy procesu zavedenia linajkového systému. Ako kľúčové sa ukázali kultúrnohistorické vplyvy smerujúce v 12. storočí z Francúzska do Uhorska: zdá sa, že „modernizácia” notácie sa realizovala v dôsledku inovatívnych postupov v oblasti hudobnej teórie na jednej strane, a peregrinácie uhorských prelátov v Paríži na strane druhej. Z toho dôvodu sme sa v predkladanej štúdií sústredili na prieskum a hodnotenie francúzskeho vplyvu, a v tejto súvislosti na historickú rekonštrukciu genézy ostrihomskej notácie.