by Martin Horyna

Newly Discovered Fragments of Medieval Music

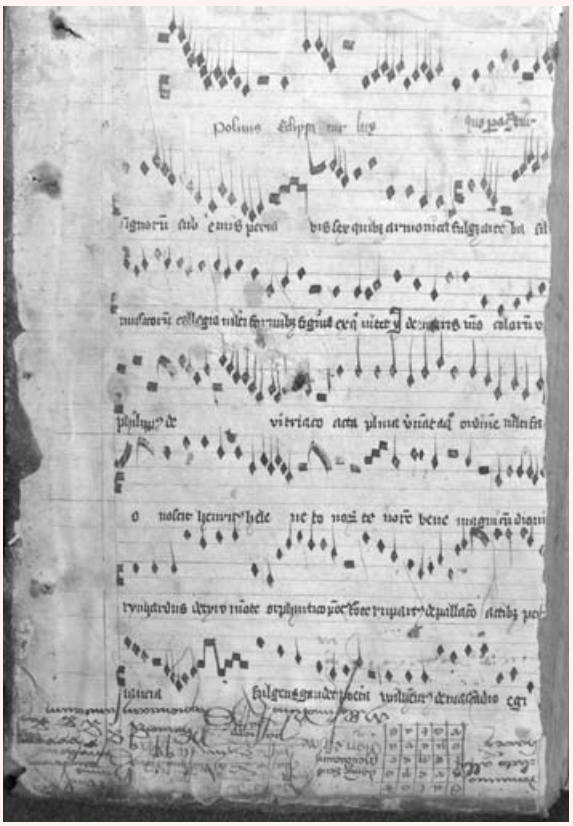
14th-century organ music, two-voice organa from 13th-century Notre-Dame, and a motet from the *ars nova* period. Music historian Martin Horyna introduces three important new discoveries regarding medieval music in the Czech lands.

The history of music, such as we might understand it from various written accounts of greater or lesser expertise, rarely corresponds to the true state of things, particularly in regard to the history of music of distant epochs. The process is always one of reconstruction, and its resultant form is influenced by a great number of factors. The first is the number of randomly preserved sources and testimonies – going against the flow of time, this number decreases significantly. The second factor is the capacity of musicologists to understand the period testimonials and mediate them to others in a comprehensible form. The third factor is the historical awareness of the period; a compendium of notions about the past that music historians actively enter into, influencing it themselves in turn.

The result is a perspective, changing with time, of historical events and their interpretation in continually new contexts. This is why a history of music written today is different – or rather, *should* be different – to a history written a hundred years ago. Newly discovered sources appear, some of which may significantly correct historians' perspectives on historical events – of course, only when they are reliably interpreted and this interpretation "catches on". In the following texts, I will mention three such discoveries made recently.

The first concerns a sheet of paper with barely discernible notation from the fragment archive of the Library of the National Museum in Prague (shelfmark 1 D and 3/52). The sheet suffered a similar fate to a number of musical and literary materials in the past: When they ceased being used, and were not destroyed, they could be used as binding material for new books. In the case of this fragment, there is unfortunately no record of which codex it was taken from and when. It was clear from the beginning that the notation contained on it is very old and that it is probably organ music. The fragment's true age was only discovered when the inscription was deciphered through the use of an image taken under ultraviolet light, which uncovered a layer of ink brushed off the surface or else hidden under dirt and traces of glue.

The sheet had originally served to record the debts of an unknown "Mister Thomas" (*Dominus Thomas*) and one of the inscriptions included a year: 1356. Only after this – though not long after – did someone use the empty spaces on both sides of the sheet to record notation. Each of the sides of the sheet contains one organ arrangement of a liturgical plainchant. On the "front" side, among records of debt, it is the *Kyrie, magne Deus potencie*, on the "back", an *introitus* for the Marian votive masses *Salve, sancta Parens*. The age of the fragment is comparable to a source that has, until now, been considered the oldest existing notation of music for keyboard instruments. This is known as the Robertsbridge Codex and is kept at the British Museum in London. It is generally dated around the year 1360, but the contents are quite different from the Prague fragment: it contains keyboard arrangements of instrumental *estampies* (a 14th-century courtly dance) and contemporary vocal motets from the *ars nova* period. The Prague fragment, then, is proof of the replacement of plainchant singing with organ music, a process we know from transcriptions made in Central Europe and Italy a little later, as well as from a number of literary sources. Our fragment captures a transition between unwritten improvisation and the beginnings of true composing, as it corresponds to period instruction books for playing organ settings of plainchant melodies. Theory suggests that the plainchant melody is to be played in longer notes in the pedal, applying pre-determined melodic formulas in smaller values to the manual, their selection guided by



The highest voice of the motet "Apollinis eclipsatur-Zodiacum signis" on the fragment from the parish library of St James in Brno, around 1400.

the progression of the bottom voice. And it is this repertoire of formulas that the musical language of the fragment draws from.

Period textbooks describe these formulas using the term *tactus* (in Latin, touch; sense of touch, from the verb *tangere* – to touch), which contains three related concepts: melodic movement filling in a certain interval, time divided into a certain number of notes, and the movement of the fingers across the keys. The similarity to the modern measure or bar (*takt* in German and Czech) is evident: the metric values in the length of the pedal notes are separated by barlines, while for the top voice, played on the manual, it is determined in advance how many notes will be regularly divided across the time specified by a single note in the pedal – most often, four, though in our fragment, it is eight, each of which can be divided into halves, arriving at a total number of sixteen.

The second meaning has to do with fingerings. The limited number of formulas had a corresponding number of fingerings, but we do not know all of these. They probably looked a little like someone typing on a typewriter or computer keyboard who never learned to type with all ten fingers, and so they use only one or two fingers on each hand. Church organs at this time certainly had wider keys than is common today, and the stereotypical progressions of the formulas corresponded to a simple technique consisting of alternating movements of several fingers of both hands.

The voice leading does not follow the rules of counterpoint – rather, it is reminiscent of the vocal music of the period, with a preference for fifths and octaves.

The notation suggests that what we are looking at is an organ tablature at the moment of its birth. The top voice is written in simplified mensural notation into a staff, the bottom voice, which needed no specification of rhythm, is written in three different ways – by notes in the same staff, letters referring to note names (a common element in later medieval organ tablatures), or simply as the syllables of the lyrics of the original plainchant melody, which served the organist as a mnemonic device to remind them of the melody.

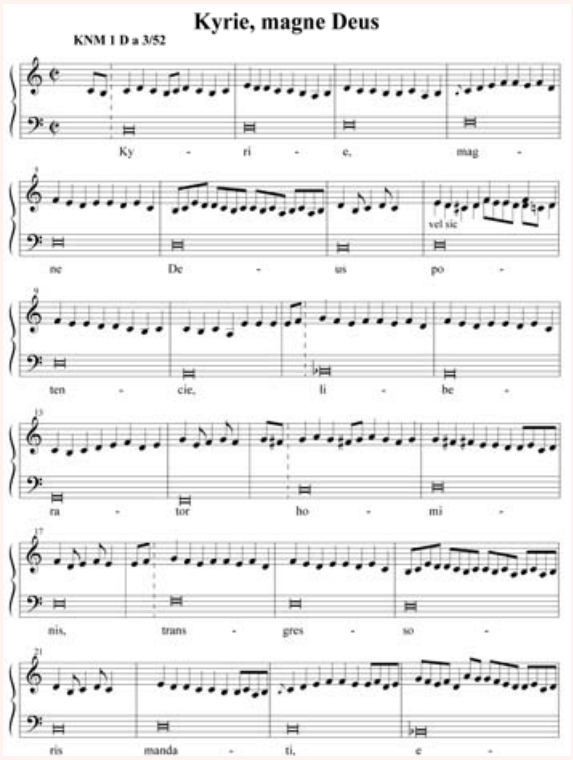
The notation of the top voice even includes chromatic notes and written-out melodic decorations (appoggiaturas and mordents) that were later transformed into symbols that are not always easy to decipher.

The organ for which this music was intended probably corresponds to a description of an instrument written in 1361. This organ was located in Halberstadt Cathedral and was still around at the time of Michael Praetorius, i.e. at the beginning of the 17th century, who described it as a curiosity in the second volume of his *Syntagma musicum* (Wolfenbüttel 1619, pp. 98–101). The highest note of both these compositions, as well as the manual of this organ, is A4.

The second fragment was identified in early 2021. It consists of two parchment double sheets containing 13th-century repertoire of two-voice organa, bound in the first half of the 15th century into a manuscript now housed at the National Library in Prague (shelfmark V E 15). This codex was probably linked – from its creation – with the university and its library. This, of course, brings up tempting questions, but the age of the fragment and its relation to a musical culture that was probably no longer alive at the time of the establishment of the university in Prague (1348) are sure signs for us to be cautious – and what's more, we have no proof that the necessary conditions for the performance of 13th-century Notre-Dame repertoire existed in our lands during the period of its blossoming in France.

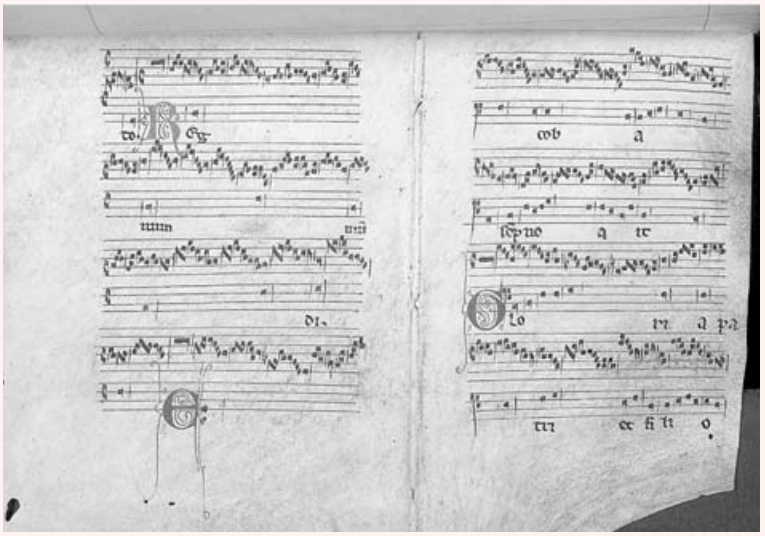
The fragment contains the torsos of seven pieces. The first double sheet includes three mass chants: the gradual *Gloriosus Deus*, *Alleluia. Veni electa* and the Marian *Alleluia. Post partum Virgo*. The second double sheet includes four chants of the canonical hours: the responsoria *Sint lumbi vestri*, *Regnum mundi*, and *Terribilis est locus iste*, and *Benedicamus Domino*, the final chant of the hours services. (In the Roman Rite, canonical hours (or offices) are the obligatory prayers of clergymen. In the Middle Ages, holiday hours – particularly Vespers, the evening prayer, and Matins, the night prayer – were celebrated with plainchant or polyphony.)

Prague, National Museum, manuscript fragment 1 D and 3/52 (after 1350), organ paraphrase of "Kyrie, magne Deus potencie", ultraviolet image. Perpendicular to the musical stave is the list of debts inscribed with the year 1356.



Transcription of the opening of the organ arrangement of "Kyrie, magne Deus potencie".

All of these chants can be found, in various forms, in the central sources for the repertoire of the Notre-Dame period, created around the middle of the 13th century, and are now housed at the Laurentian Medici Library (Biblioteca Medicea Laurenziana) in Florence and at the Duke August Library in Wolfenbüttel (Herzog August Bibliothek, in two manuscripts, one of Parisian origin, another from the abbey of St. Andrews in Scotland). At the end of the 12th century, the Cathedral Notre-Dame de Paris, then under construction, became the focal point of a remarkable musical culture, which – in only a few decades – culminated the transition from polyphonic improvisation to polyphonic composition.
In some music theory treatises from the 13th century, authorship of the earlier pieces of the Notre-Dame repertoire is attributed to a single figure known as Leoninus. This is probably a simplification, but Leoninus was a real historical figure – a singer (cantor) at the cathedral who died in 1201. His name is connected to an extensive repertoire (known as the *Magnus liber organi* – the great book of organa) of two-voice arrangements of the parts intended for soloists in selected plainchants for the important holidays. In the mass, this means the *graduale* and *alleluia* sections, in the hours services, it is what's known as the *responsoria prolixa*.
The two-voice arrangements, however, were also intended for soloists: while the singer of bottom voice sung sustained tones of the original melody in a manner of pedal notes, the singer taking the top voice had to be a singing virtuoso, improvising or using predetermined formulas to compose long and complex melismas in the top voice, rather than performing finished "compositions" written out in detail. Some principles in this music are remarkably reminiscent of the organ pieces from the fragment mentioned above, which are more than a hundred years younger.
While we do not know the true form of Leoninus' original "organum purum", it is certain that the notation of the time was not yet capable of describing rhythm. This music only survives in later transcriptions from the period around the mid-1200s, in a notation system that included rhythmic values. After 1210, what is known as modal notation developed, which was capable of expressing a few basic rhythmic "modes", such as the trochee (long – short), iamb (short – long), dactyl (long – two short), and other feet derived from the theory of syllable weight in Latin verse.
The younger layer, attributed to the composer Perotinus (who was probably active in the first third of the 13th century) could no longer make do without rhythmic notation – Perotinus wrote pieces for three or four voices, and they could not be coordinated without precisely inscribing the rhythm.



Prague, National Library, manuscript V E 15, back endpaper, fragment of two-voice organa from the Notre-Dame period (13th century), on the left of the open double sheet is the beginning of the responsorium "Regnum mundi", on the right is the "Terribilis est locus iste" section of the responsorium.

The fragment from the National Library in Prague includes two-voice pieces from the older layer of the Notre-Dame repertoire in a quality of execution and visual form identical to the central sources mentioned above. It is without a doubt that it does not come from the Czech lands. Smaller and greater differences in the notation of the individual chants will only now become the subject of research dedicated to the dissemination of this repertoire outside Paris and France. While it is certain that this dissemination took place, whether it reached the Czech lands at the time of the rule of the kings of the Přemyslid dynasty remains an open question.

The university in Prague was mentioned above, and it is certain that during the Middle Ages, music theory was taught here as one of the seven liberal arts. Its content was mostly speculative, using numeric ratios to explain tonal systems. However, there are also many texts that attest to the fact that practical theory was also cultivated here in connection to liturgical plainchant and the polyphony of the time. We must not forget that university students generally already had some practice as choirboys and would take part in the singing at the services held in the university chapel, along with their professors, and perhaps also in other churches in Prague. In any case, most of them were headed for career as priests, which at the time was unthinkable without a strong singing voice.

In relation to period polyphony, it is characteristic that in 1369, a treatise on French mensural notation was written for the students in Prague, which is also the oldest surviving text of its kind in Central Europe. If someone wanted to sing French music from the *ars nova* period, they had to master the theory of its relatively complex notation. The catalogues of the college libraries of the university in Prague attest to the fact that songbooks with music of French origin were available to the students.

Several other treatises point to specific pieces as examples of particular notational problems. One of them – a motet of French origin titled *Apollinis eclipsatur-Zodiacum signis* – partially survived in another fragment. The top voice of the composition is written on a sheet of paper that is glued on the inside cover of a manuscript in the parish library of St James Church in Brno, no. 94/106 (now the City of Brno Archive, part of the "St James Library" collection). The fragment attests to the piece settling into its new home – it is given in a simplified notation used for polyphonic music created around 1400 in the Czech lands. The piece is a celebration of the art of music and the text incorporates the names of twelve composers and music theorists popular at the time (e.g. the composers Guillaume de Machaut and Philippe de Vitry and the theorist Johannes de Muris, whose writing formed part of the curriculum of university studies), whose art literally shone like Apollo's light (i.e. the Sun) in the collegium of musicians. This fragment of a composition is precious proof of how French music could, through the intermediary of the university, become part of the intellectual merriment of the educated classes in the Czech lands at the turn of the 15th century.

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