THE CONTENT OF THE GLAGOLITIC MISSAL OF COUNT NOVAK IN THE DIGITAL ENVIRONMENT

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Summary

The Missal of Count Novak (1368) is the oldest dated missal according to the use of the Roman Court written in Glagolitic script and the Croatian Church Slavonic language. This missal has been subjected to scientific research by a group of Croatian and Austrian scientists due to its great value, arising from the fact it has survived in excellent condition since 1368, as well as the fact it was used as the template for the first Croatian printed missal.

This paper presents ground research of the Missal of Count Novak that is necessary for the TEI processing of the content of the current Missal so it could be accessible to the broader scientific and academic community. The scope of our research is the structure of the content of the Missal, its liturgical and textological ensemble that will be subject of the further research. The first part of the research will provide an overview of the history and content of first the Roman-rite missal, and then of the Missal of Count Novak. It will then provide insight into liturgical terminology, which will serve as the foundation for further digital research and analysis. This research establishes methodology for a modern approach to researching Glagolitic missals in the modern, digital humanities.

Key words: Croatian Glagolitic missals, Roman-rite missal, liturgy, digital humanities, Church Slavonic language, TEI

INTRODUCTION

Croatian Glagolitic missals are valuable historical, textological, and liturgical sources. They were created as a combination of translations of Latin exemplars and copied text from pre-existing Glagolitic texts. Their creation is tied to the Cyrillic-Methodian tradition, which built a culture and literacy founded on Church Slavonic liturgy in the Croatian lands. Roughly a dozen manuscript Croatian Glagolitic missals have survived; the content of their liturgical texts corresponds to the Roman rite. One of the best-known of these missals is the 1368 Missal of Count Novak.

1 The scientific article was prepared within the project "An Interdisciplinary Approach to the Glagolitic Missal on the Example of the Missal of Count Novak" funded by the Croatian Science Foundation (IP-2019-04-3797).
Modern research offers an opportunity to re-examine the Glagolitic missals, using the advent of new methodologies and technologies to study their content and uncover their history, content, function, and value. The current research portrays the first conclusions of research on the Missal of Count Novak, as well as its analysis through the digital interface. A project entitled "An interdisciplinary approach to researching Glagolitic missals based on the example of the Missal of Count Novak" is intended to create a holistic methodology for modern research of Mediaeval manuscripts. The foundational research in this paper concerns the liturgical content of the missal and its liturgical terminology, which will serve as the foundation for its digital analysis.

1. ON THE ROMAN MISSALS AND THEIR CONTENT

Throughout the Middle Ages, several different liturgical books were used to celebrate Holy Mass. "In the early Middle Ages, solemn Mass was celebrated from three types of books: the prayer book of the celebrant, lectionaries of the deacon, subdeacon and reader(s), chant books of the soloist and choir".2 The book used by the celebrant was called the Sacramentary; it contained the Canon of the Mass and masses with three prayers for the entire year, as well as forewords tied to particular masses.3 The merging of all texts necessary for the Holy Mass into one book occurred parallel to the development of the Breviary.4 The first examples of liturgical texts collected in a single book – a Missal – are found in the 10th century.5 Differences in nomenclature exist depending on whether a missal was intended for the entire liturgical year (Lat. missale plenum) or only elements for particular masses (Lat. missale plenarium).6 Only in the 12th century did the missal become a true liturgical book.7 Particular sacramentaries contained biblical readings and notation for the sung parts of the Mass, and as such were the forerunners to later plenary missals.8 These unified texts for the Eucharist were mostly used by the clergy; they contain no indication that they would have been used specifically by either monks or clergy.10 "The missal, in fact, grew in popularity among the clergy along with the development of pastoral care… As the libellus sacramentorum was the first Mass book of missionaries and travelling priests, while the liber sacramentorum was the Mass book of the bishop and his cathedral, so the libellus missalis with extracts of a few more or less complete Masses is the forerunner to the missale completum, the Mass book of the priest and his church".11

The Order of the Mass secundum consuetudinem romane curiae came into common use from 1200 to 1500, thanks especially to mendicant orders inspired by the strong Roman pontiffs of the time. It should be noted that four different Mass practices existed in Rome at the time: the Liturgy of the Roman Curia, of St. Peter's Basilica, of the Lateran Basilica, and the reform of Cardinal Orsini.12 The Franciscans began spreading the use of the Missal of Pope Honorius III through liturgical practice in 1230;13 in 1233/1234, a revised text of this missal by Franciscan monk Haymo of Faversham known as Indutus planeta entered use.14 The second edition of Haymo's missal was approved by Pope Clement V. This missal later became the foundation for the Tridentine Missal;

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3 Cf. Ibid, 58.
4 Cf. Ibid, 58.
5 Cf. Ibid, 59.
6 Cf. Ibid, 59.
7 Cf. Ibid, 61.
8 Cf. Ibid, 63-64.
9 Cf. Ibid, 64.
10 Cf. Ibid, 65.
11 Ibid, 65.
13 Under Pope Honorius III (1216-1227), the Roman Court created the Missale secundum usum Romanae Curiae according to its own needs; it also came into contact with the newly established Franciscan order. Aside from the further development of Mass liturgy, this missal is important to the very organisation of the missal itself" (Michael Kunzler, Liturgija Crkve, Kršćanska sadašnjost, Zagreb, 2020, 272). This missal became an exemplar for all other missals until the Council of Trent, which revised it while maintaining its form and content.
John Buckard, Papal Master of Ceremonies, published a new revision of Haymo's missal, which was used in Pope Pius V's reform.

Liturgical historical research is founded on the structure of mass forms. Masses are compared to the Ordo missae, the Order of Mass established by the Roman Church in the 13th century. The Masses contain a few different kinds of texts: euchologies, biblical readings, sung texts based on biblical texts or early medieval Christian verse.

Holy Mass consists of two large parts, known as the Mass of the Catechumens and the Mass of the Faithful. The Mass is divided into one part that could only be performed by christened members and another in which adult candidates for baptism or catechumens also participated; this division remained only nominal until the 13th century. The Mass of the Catechumens includes: Antiphona ad introitum (Introitus), Kyrie eleison, Gloria in excelsis Deo, Oratio, Lectio (Apostolum), Graduale, Tractus, and Evangelium. The centre of Eucharist service is called the Mass of the Faithful, which consists of the following parts: Antiphona ad Offertorium (Offertorium), Oratio Secreta (Super oblata), Canon Missae – Praefatio – Sanctus, Pater noster, Fractio – Agnus Dei – Comixtio – Pax Domini, Communion – Antiphona ad Communionem, Oratio ad complendum (Postcommunion), and Oratio super populum.15 Between each of these elements, there are rubrics (Lat. ruber) containing instructions to priests during the mass, marking the titles of particular units, etc.

2. ON THE MISSAL OF COUNT NOVAK

The Missal of Count Novak has been dated to 1368 and it is held at the Austrian National Library in Vienna under the signature Cod. slav. 8.16 It has 270 parchment leaves, measuring 32x24.5cm; the text of the missal covers 269 folio pages. The text is written in angular Glagolitic script and in the Croatian Church Slavonic language in two columns of 29 lines each.

An inscription on f. 269b names the scribe as Count Novak.17 Count Novak of Lička Ostrovica "was the Count of Solgo in Erdély and the Count of Nin in Dalmatia". The missal was written for the church in which he was to be buried in Lika, but it was later sold to Nugla in Istria in 1405 as recorded in an inscription on f. 269v.18 Marija Pantelić concludes that its Glagolitic exemplar was created and used in Zadar in the Benedictine St. Mary's Monastery in 1975, as well as that no valid conclusions can currently be drawn as to a potential and exact Latin exemplar. The content of this missal indicates that a type of liturgical book known as secundum consuetudinem romanae Curiae (referred to in the transliterated text as po zakuonu rimskogo d’vora, cf. f. 1a) was translated from Latin into the Church Slavonic language. Although the literature describes it as a complete missal, it lacks a calendar. 20 It has all liturgical and textual elements as the Latin missals of the same type. 21 It begins with a complete Proper of the Seasons (Lat. Proprium de tempore) from ff. 1a – 154d, followed by a complete Order of the Mass (Lat. Ordo missae) from ff. 155a – 157a.
The prefaces are found on ff. 157a – 159b, followed by the Canon of the Mass (Lat. Canon missae), which is not separately titled as a unit, instead beginning with the words Tebe ubo m(i)l(o)st(i)vo o(tь)če is(u)h(rьsto)mь s(i)nomь g(ospode)mь n(a)ši m’ priležno m(o)l(imь) i prosimь (f. 159a). After the canon, the scribe included a computational table (f. 162d). The liturgical and textual sequences continue with a series of votive masses from ff. 163a – 172c, followed by 20 requiem masses from ff. 172c – 173a. Votive masses and requiem masses are intermingled from ff. 173b – 183b. The liturgical unit of the Proper of the Saints (Lat. Proprium sanctorum) covers ff. 183c – 231a, beginning with the Feast of St. Andrew and ending with the Feast of St. Catherine. The Common of Saints (Lat. Commune sanctorum) is found on ff. 231a – 255a. On f. 255a, the scribe added a mass za dobro stanie grada (Lat. Pro salute civitatis), which he had likely mistakenly omitted from the votive missals. Of the content of the Missal of Count Novak, liturgical texts for rituals (from ff. 255b – 266a, f. 268c) and the texts of sequences and sung parts of mass 267a – 268c are considered especially valuable.

Our research encompasses the structure of the missal’s liturgical and textological units, which shall be the subject of further study. The content described has been obtained through thorough insight into and transliteration of the Glagolitic text. The value of the Missal of Count Novak lies in its age, its content, and the fact it served as the exemplar for the first printed Croatian Glagolitic missal. On the basis of research into this missal, we are creating a methodology by which to research other Croatian Glagolitic missals. This research primarily refers to historical liturgical research and historical-theological and liturgical textology, all of which represents the foundations for the digital processing of the missal, which will allow other research interests such as linguistics, lexicology, etc.

3. LITURGICAL TERMINOLOGY IN THE MISSAL OF COUNT NOVAK

One of the goals of interdisciplinary research into the Missal of Count Novak is to place the transliterated text of the missal in a digital environment with a tagged, searchable structure designed to help researchers find their way among the Glagolitic missal's sizable liturgical and textological corpus. This part of the research examines which criteria must be established in researching Glagolitic missals.

After having described the general structure of the Missal of Count Novak and some of the results of initial research, we shall now provide the conclusions of terminological research. Liturgical terminology in the Church Slavonic language is important in determining the structure of the Glagolitic missal, as well as for its tagging in the computer interface. All surviving Croatian Glagolitic missals are typologically identical to Latin missals secundum consuetudinem romanae Curiae, and thus Church Slavonic liturgical terminology is comparable to Latin terminology. Liturgical terminology is defined according to the terms used in the missal as compared to those from a Latin language Roman missal from 1474.25

3. 1. Names of days

The Missal of Count Novak provides the days of the week in Croatian Church Slavonic Language. The general term used for the days of the week is feria, after the Lat. feria. Other names of the days are not translated from Latin but provides names of the days in the Croatian Church Slavonic. Thus, the Missal names the days of the week as follows:

23 Marija Pantelić's research affirmed that this mass form is only present in the Missal of Count Novak and the Missale Romanum Glagolitice or Misal Prvotisak (cf. Marija Pantelić, Prvotisak glagoljskoga misala iz 1483. prema Misalu kneza Novaka iz 1368., 26.).
24 Marija Pantelić researched the history of the Missale Romanum Glagolitice, comparing it to other Glagolitic missals; she concluded that the content of the Missal of Count Novak served as an exemplar for the printed missal from 1483 (cf. Marija Pantelić, Prvotisak glagoljskoga misala iz 1483. prema Misalu kneza Novaka iz 1368., 5-109.).
3. 2. The names of liturgical times and holidays

Liturgical seasons are found in the Proper of the Seasons. According to the Roman liturgical custom, these are Advent, Christmas time, the time after Epiphany, the Sunday before Lent, Lent, Easter to Pentecost, and the time after Pentecost.

<table>
<thead>
<tr>
<th>Csl.</th>
<th>Lat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>nedêla</td>
<td>Dominica</td>
</tr>
<tr>
<td>ponedilakâ</td>
<td>Feria secunda</td>
</tr>
<tr>
<td>utorakь</td>
<td>Feria tertia</td>
</tr>
<tr>
<td>srêda</td>
<td>Feria quarta</td>
</tr>
<tr>
<td>četvrtačь</td>
<td>Feria quinta</td>
</tr>
<tr>
<td>petakь</td>
<td>Feria sexta</td>
</tr>
<tr>
<td>sobota</td>
<td>Sabbato</td>
</tr>
</tbody>
</table>

The list of names of liturgical seasons does not include the Lord's feasts that come during the liturgical year, such as the Feast of the Annunciation, the Feast of the Transfiguration, and Corpus Christi. The names of these holidays will be analysed alongside the names in the Proper of Saints and the Common of Saints. Croatian Glagolitic missals are peculiar in that the numbering of days in Lent does not correspond with that in Latin missals. For example, the Thursday after Ash Wednesday is listed as V četrtakь .a. (1) posta (f. 27b), while the Latin missal lists Feria quinta post cinerces.27

3. 3. Names of liturgical elements

The format of masses or liturgy is comprised of liturgical elements. Each mass contains a wealth of texts from the Holy Scripture and the Euchologium, as well as sung parts reflecting biblical theology and early Christian poetry. The mass format falls within the ordinary (Lat. ordinarium) – the structure of the rite of Mass – however it retains its own units of text, known as propers (Lat. proprium).

While Kyrie eleison, Gloria in excelsis Deo, Canon Missae, Praefatio, Sanctus, Pater noster, Agnus Dei, Comixtio, and Pax Domini are a part of the ordinary, these elements are a part of the proper:

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26 Csl. – Croatian Church Slavonic language
27 Cf. Robert Lippe (ed.), Missale Romanum Mediolani 1474., 50; Marija Pantelić concludes that the Eastern churches also used the same names (cf. Marija Pantelić, Prvotisak glagoljskoga misala iz 1483. prema Misalu kneza Novaka iz 1368., 10).
introitus and psalmus, oratio, lectio, graduale, tractus,28 evangelium, offertorium, oratio secreta, communio, oratio post communio.29

The Church Slavonic names for the ordinary, compared to Latin, are as follows:

<table>
<thead>
<tr>
<th>Cссл.</th>
<th>Lat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>gospodi pomilui</td>
<td>Kyrie eleison</td>
</tr>
<tr>
<td>slava vь višnĭь bogu</td>
<td>Gloria in excelsis Deo</td>
</tr>
<tr>
<td>propacię</td>
<td>Praefatio</td>
</tr>
<tr>
<td>svetь</td>
<td>Sanctus</td>
</tr>
<tr>
<td>otcь naьь</td>
<td>Pater noster</td>
</tr>
<tr>
<td>aganче božи</td>
<td>Agnus Dei</td>
</tr>
</tbody>
</table>

The Church Slavonic names of the Propers are as follows:

<table>
<thead>
<tr>
<th>Cссл.</th>
<th>Lat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pêsnь</td>
<td>Introitus, but also Graduale, Offertorium, Communio</td>
</tr>
<tr>
<td>стиьь</td>
<td>Psalmus</td>
</tr>
<tr>
<td>oracię</td>
<td>Oratio</td>
</tr>
<tr>
<td>trahьь</td>
<td>Tractus</td>
</tr>
<tr>
<td>čтение</td>
<td>Lectio</td>
</tr>
<tr>
<td>evанжelie</td>
<td>Evangelium</td>
</tr>
<tr>
<td>nad prinoшenie / prinosi</td>
<td>Oratio secreta (super oblata)</td>
</tr>
<tr>
<td>po braшancи</td>
<td>Post communio</td>
</tr>
<tr>
<td>za plкьь</td>
<td>Oratio super populum</td>
</tr>
</tbody>
</table>

The nomenclature of liturgical elements reveals differences between the translations. The translator uses čтение for the Latin lectio, which refers to readings of Old or New Testament passages, while naledovanie is used for the Latin expression sequential. Additionally, insight into nomenclature has established that the Church Slavonic term pêsan refers to all sung parts of the ritual. The term стиьь is used for verses of psalms. Ff. 6c-6d provides the terms berьь and отвьь for the sung elements versus and responsorium. For the offertory prayer (Lat. secreta), the Missal of Count Novak uses the antiquated linguistic expression над приношenie, which corresponds to the Latin super oblata.

3. 4. Names in the Proper of Saints and Common of Saints

The nomenclature used in the Proper of Saints is related to the epithets given to saints. Due to the scope of this research, we shall note only saintly epithets added alongside the names of saints. The Proper of Saints and Common of Saints feature their own, shared mass forms for the feast days of saints according to date or category of saintly title.

The following is a comparison of some of the saintly titles from the Proper of Saints and Common of Saints.

<table>
<thead>
<tr>
<th>Cссл.</th>
<th>Lat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>исповêдника</td>
<td>Confessor</td>
</tr>
<tr>
<td>муêпникьь</td>
<td>Martyrum</td>
</tr>
<tr>
<td>дêвьь</td>
<td>Virginis</td>
</tr>
<tr>
<td>апостолььь</td>
<td>Apostoli</td>
</tr>
<tr>
<td>оратььь</td>
<td>Abbas</td>
</tr>
</tbody>
</table>

28 The tractus, or tract, in the Latin missal appears during Lent; it also appears in the Missal of Count Novak as a separate liturgical element.
In addition to this terminology, the sheer number of votive and requiem masses in the Missal of
Count Novak would require the creation of an entire dictionary of liturgical terminology. We shall
thus refer to all votive masses and requiem masses with the Church Slavonic term misa, which
appears both in the Latin and Church Slavonic language.

The Feasts of the Lord and the feasts of the Blessed Virgin Mary, which correspond with the Proper
of Saints (i.e., which fall outside of the liturgical seasons) have their own names.

<table>
<thead>
<tr>
<th>CsSl.</th>
<th>Lat.</th>
</tr>
</thead>
<tbody>
<tr>
<td>na očiĉenie svete bogorodice</td>
<td>In festo Purificationis BV Mariae</td>
</tr>
<tr>
<td>na blagověĉenie svete bogorodice</td>
<td>In festo Annuntiationis BV Mariae</td>
</tr>
<tr>
<td>na v’znesenie svete dêvi bogorodice marie</td>
<td>In festo Assumptionis BV Mariaeq</td>
</tr>
<tr>
<td>v’zdviţišenje svetago kriţa</td>
<td>Exaltatio S. Crucis</td>
</tr>
</tbody>
</table>

The Missal of Count Novak is unique in that the feast of Corpus Christi is not found neither in its
Proper of Seasons nor its Proper of Saints. The Feast of Corpus Christi entered Roman liturgy in
the 13th century; 30 the lack of this holiday may indicate that it was translated from an older Latin
exemplar or was compiled using an older Glagolitic exemplar.

3. 5. Names in ritual and other texts

The Missal of Count Novak also contains ritual texts. The Church Slavonic nomenclature used
reflects translation from Latin. The Latin verb benedicere is translated into Croatian Church
Slavonic as blagosloviti, e.g. Činь blagosloviti vodu, blagosloviti soĉivo, blagosloviti solь i zobь,
blagosloviti prstens, blagosloviti vino. The term Činь refers to Latin term Ritus, and thus it could
be known that these texts are part of the Ritual. The term znamenanie also appears as part of the
Ritual, eg. during the rite of baptism (f. 255b), as does znamenati solь i vodu vsaku nedêlu (f. 263c),
and refers to the blessings.

4. ENCODING OF THE MANUSCRIPT OF THE MISSAL OF COUNT NOVAK

According to the established terminology, it is possible to set some criteria for tagging the content
and structure of the transliterated missal in the digital interface, namely in Text Encoding Initiative
(TEI). Terminology allows us to tag each element present in the textological content of the Missal.
The final goal is to create a computer program that would be searchable according to the content
and structure of the missal; a later iteration would also include searches according to liturgical and
theological syntagmas. Research on this project will also include a bibliography of biblical readings
and the creation of an interface for researching liturgical textology.

4. 1. Example of the encoding and some questions on the processing of Glagolitic manuscript

As far as we can see, there is no missal or any other liturgical text from the Croatian Glagolitic
tradition available as encoded text so far. This is to say we cannot refer to an established way of
how to do our work, but we are creating new methodology for future encoding work. It is clear that
text encoding can be realised in very different ways, from simple text transcriptions with only a few
items tagged to the ultimate effort of tagging even every single word so as to create a veritable
thesaurus (actually an analytic dictionary) of Glagolitic words.

The choice of how to carry out text encoding widely depends on what we want to do with the
product. There are several objectives the working group has agreed upon at an early stage of works:

30 Cf. Matias Augé, L’Anno liturgico è Cristo stesso presente nella sua Chiesa, Libreria editrice Vaticana, Città del Vaticano,
• There is the scientific claim. We are doing this work under the requirements of high scientific standards.31

• At a later stage of works we want to compare other euchological texts from the Croatian Glagolitic tradition with the text of Count Novak’s Missal (e.g. single prayers, chants, versets). This aim is of particular importance when it comes to identify manuscript fragments, too.

• The digital edition of our missal should provide a distinct liturgical terminology with corresponding lemmatas in Croatian Church Slavonic language and Latin.

• Our initiative should provide all biblical texts which are addressed in the missal.32

• In a widely generic sense: everything that should be searched for at the end has to be tagged to make it searchable.

At the beginning of the encoding of the Missal we are faced with several questions. One of them is the huge challenge to identify liturgical »units«, namely their precise beginning and ending. Even if a rubric indicates the header of a liturgical unit and we know where it commences, we have to be careful in fixing the very end of the unit: Does the answer belong to the previous prayer or not? How to deal with units which do not happen to be captioned by any rubric? How to deal with dialogue-like segments between some liturgical units? – All these and some other questions will have to be answered. The process of text encoding demands a particular good knowledge of the namely liturgy. And the encoder unavoidably has to make their decision. Decision-making is a constant process which will occur until the end of the works. In order not to be inconsistent we have to define our principles of what we are doing and in which way, and – of what we are not doing (it is not possible and not reasonable to tag everything thinkable). Thus, from the very beginning we have to formally declare our decisions. TEI, the Text Encoding Initiative, provides a separate statement for that (the »edition statement«). Together with the »revision description« we can easily document the way we have gone, which allows anybody at a later stage to continue, to add or deepen our encoding, according to the principles we have started with.

The following presentation gives some of the most sensitive decisions we had to make at the beginning of encoding of the Missal.

4. 2. Encoding of the rubrics

Rubrics: A rubric is something that is usually written in red ink in a manuscript. Rubrics may express different realities. We are paying tribute to this fact by distinguishing different »qualities«:

The element <rubric> may have different attributes, defining its qualities, the specification of a rubric:

    <rubric type="title">
    <rubric type="liturgical agent">, e.g. »priest«, »deacon«, …
    <rubric type="liturgical prescription">, e.g. »The priest raises his voice«, …
    <rubric type="liturgical calendar">, e.g. »Advent«, »Sunday«, …

31 With considerable impact on the work load.
32 It is quite obvious that we might encounter a variety of modes how biblical texts are expressed in the missal: quotes, allusions, paraphrases.
4. 3. Liturgical terminology

As it is one of the major aims of our work to establish a bilingual, searchable liturgical terminology, we have to tag all expressions of this category in two forms hinting at their interoperability. We are creating categories, e.g.:

```xml
<category xml:id="lectio" xml:lang="la"></category>
<category xml:id="čtenie" xml:lang="ocs" sameAs="#lectio"></category>,
```

or:

```xml
<category xml:id="sequentia" xml:lang="la"></category>
<category xml:id="šekvenciê" xml:lang="ocs" sameAs="#sequentia"></category>.
```

This means, we have to declare, that, whenever you meet one of these expressions, there is an equivalent. This helps us to finally create an index of liturgical terms – with Latin and Old Church Slavonic equivalents.

4. 4. Initials

There is probably no manuscript extant having no initial letters or anything else highlighted in a current text. Together with indentations different colours and sizes of initial Letters are the most frequent features to give any text in a manuscript a visible structure. We probably would want to encode such realities. And there is a bundle of possibilities to do so using the element `<hi> [= highlight]`. If we add specific attributes, we can express the specific character of highlighting, e.g.:

```xml
<hi><hi rend="ekthesis">…</hi>
<hi rend="initial">…</hi>
<hi rend="rubricated">…</hi>, and many others which we find in the TEI-guidelines.
```

4. 5. Erased or illegible text

Sometimes we may come across some erased or effaced spots in a manuscript text. If we are able to state its character we can give a specification, which adds some additional information to the reader, e.g.:

```xml
<del><del rend="erasure">…</del>
<del rend="strikethrough">…</del>
<del rend="overwrite">…</del>
<del rend="expunction">…</del>
<del rend="erasure" hand="#mr">[mr = manus recentior] …</del>
```

4. 6. Marginal additions

The situation is similar with obvious additions of the text written in the margins of the page. We could even detail whether it is the first hand or a later one that has added to the text:
4. 7. Lacunae of the text

From time to time we are encountering lacunae, in the text. If the gap is not too extensive – within one line or so – it makes sense to add the number of characters which we think are missing. If the gap covers more lines or greater parts of the page we will put down a descriptive note <note> ...

<gap> <gap reason="illegible"> ...

<gap reason="illegible" quantity="5" unit="character"> ...

<gap reason="erased"> ...

4. 8. Additional text

In many manuscripts which we want to encode we are confronted with the fact that there are numbers of notes present. If we want to record them TEI offers elements and attributes to describe them accordingly, e.g.:

<note> <note place="top, top_inner, top_center, top_outer"> ...

<note place="bottom, bottom_inner, bottom_center, bottom_outer>

<note place="margin_inner, margin_outer">

4. 9. Abbreviations

Like any other medieval manuscript so does the Missal of Count Novak have many abbreviations. We can deal with abbreviations in different ways. The Novak Missal, as any other missal, would mention the word »Bog« many hundred times. We find it abbreviated »Bg« or »B« with a stroke above or the like. The same is true with several other very frequent words. In TEI encoding the abbreviation tag <abbr> has a natural partner: the expanded form of the word/name etc. <expan>. Any encoder has to say to the machine that there was an abbreviation used in the text of the manuscript. And we have to give the full version of the abbreviated word for the reader. The most appropriate way to do this can be exemplified in the following way:

<choice>

<expan>Christus</expan>

<abbr type="nomSac">

<hi rend="rubricated">Chr</hi>

</abbr>

</choice>
A less elegant and precise (but more practical form) to encode the same word would be: Christus. It is always a decision of the editor(s) of how to handle the situation, especially with regard to abbreviations which would occur many hundred times in a text.

A missal is a highly complex kind of book with a variety of text genres (rubrics, prayers, biblical pericopes, hymns etc.). Even within an obviously simple genre like »prayer« we find a couple of different categories.

The iconographic reality of the Novak Missal for example can be added later, though it might be interesting for iconography, so does the encoding of the Calendar or some other elements that are not presented here. The biggest challenge for the team undoubtedly is to be seen in the question of consistency. TEI demands clear structures and a hierarchical representation of units. Sometimes it is hard to define a unit. This work can be done only by liturgical experts that are well informed about textual and liturgical structure of the Missal.

CONCLUSION

Contemporary textological and liturgical research of the liturgical manuscripts are recently connected to the Digital Humanities. Both scientific branches merge reach of the Humanities and Digital Technology. Research of the Missal of Count Novak enters in the field of the Digital Humanities by its part on the digital processing of the textual content of the Missal. For the purpose of the processing we have created basic prerequisites: transcription from Glagolitic to Latin letters and liturgical terminology that is fundamental for the encoding process. Thus, we created a base that will be searchable by the content, and later this base will be upgraded with elements that are required for further research: tagging of the lemmas, biblical readings, illuminations, and so on.

In the research of the liturgical terminology of the Missal of Count Novak we have pointed out the specifics of the Croatian Church Slavonic liturgical terminology and we have created a specific corps of the terminology required for the research of other Glagolitic missals. Knowing the terminology enables: determination of the content of the Missal as a whole and its specific parts and encoding in TEI processing. Croatian Church Slavonic liturgical terminology also presents that Croatian Glagolitic tradition belongs to the Roman Rite, and this thesis is basic for all further interdisciplinary research.

SADRŽAJ GLAGOLJSKOG MISALA KNEZA NOVAKA U DIGITALNOM OKRUŽJU

Sažetak

Misal kneza Novaka (1368.) najstariji je datirani misal rimske kurije pisan glagoljicom i hrvatskim crkvenoslavenskim jezikom. Zbog njegove vrijednosti koja proizlazi iz sačuvanosti od 1368. do danas te zbog činjenice da je bio predloškom na temelju kojega je priređivan hrvatskoglagoljski Prvotisak misala predmetom je znanstvenoga istraživanja skupine hrvatskih i austrijskih znanstvenika.

Ovaj rad donosi temeljna istraživanja Misala kneza Novaka koja su potrebna da bi se sadržaj misala mogao digitalno obraditi u TEI sučelju te na taj način učiniti njegov sadržaj dostupnim široj znanstvenoj i akademskoj zajednici. U obzoru je našega istraživanja struktura sadržaja misala, odnosno njezine liturgijsko-tekstološke cjeline koje će biti predmet daljnjih istraživanja. Rad je koncipiran tako da u prvom dijelu prikaže povijest i sadržaj rimskoga misala, a potom i ovoga misala. Potom se donosi istraživanje liturgičkoga nazivlja koje će biti temeljem za daljnju obradu u
računalnog sučelju. Ovim se radom postavlja metodologija suvremenoga pristupa istraživanju glagoljskih misala u okružju suvremene digitalne humanistike.

Ključne riječi: hrvatskoglagoljski misali, rimski misal, liturgija, digitalna humanistika, hrvatski crkvenoslavenski jezik, TEI

Bibliography