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An inventory and digital map of toponym evolution – a case study in Northern Hungary

Keywords: toponyms, inventory, OpenLayers, topographic maps, cadastral maps, digital mapping

Summary: Geographical names or toponyms are indispensable elements of most map types. They help map readers to identify objects on the field and provide information about the geographical thinking of certain groups of people. However, in a broader, non-cartographic aspect, toponyms determine our everyday life as we use them when travelling, walking, planning excursions and working in the field. The role of small settlements has rapidly decreased during the last decades in Hungary. The abolishment of the socialist industrial and agricultural policy and the processes of globalisation forced people to move to the cities and search for new job opportunities. The formerly booming agricultural outskirts and forests became abandoned and less important for the local people. This has led to the fading of toponyms too – as they have not been used regularly.

We have designated Váraszó, a village in Northern Hungary, to examine and visualise toponym evolution in parallel with land-use changes. Various large-scale map types and textual databases were collected since the end of the 18th century (Habsburg First Military Survey) – 16 sources were examined altogether. Around 250 distinct toponyms were recorded; many had more variants in the different sources. These variants mainly refer to land-use types (e.g., grazing, forestry) and changes (e.g., when cultivation is ended in an area).

Some distinct aims were set to be completed. The most important is to inventory and preserve local toponyms as these carry the cultural traditions of the local people and have special meanings to them. We also established a classification system of toponyms mainly based on land use types, morphological categories, and cultural meanings. Thirdly, an online, OpenLayers-based map was compiled to present the toponym content of each examined source material: this also illustrates changes in land use activities during the past few centuries.

Introduction

In our globalising world, the role of villages and small settlements usually became less important in economic aspects. The industrial and agricultural infrastructure (mainly built and developed in the socialist era) was abandoned, and the production and yield of goods were outsourced. Because of this, smaller rural communities became unemployed and many people got into financial trouble. Besides this, arable lands, mines, industrial areas, factories, and other manufactories were left behind resulting in a drastic change in land and property use (Faragó 2014a).

This process was accompanied by the fade of toponyms. The people of a certain settlement gave unique names to the croplands, forests, creeks, and other artificial and natural objects that they worked on, visited regularly or helped them in orientation. As modern society does not spend as much time in the field as before, the use of geographical names denoting larger scale or specific formations consequently

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disappears. However, there are also examples, where the original meaning of the toponym is not accurate due to the change in land-use patterns.

This paper aims to collect the toponyms of Váraszó village in Northern Hungary. This is achieved using cartographic (topographic, cadastral and tourist maps), textual sources (old textual inventories) and oral discussions and questionnaires with many inhabitants (mainly old people who worked in the lands and forest in the past decades and know their unique names). The collected toponyms were gathered into a spatial database that served as a basis for an analogue (produced for representative purposes) and a web-based digital map in which the names and areas can be searched and the collection process is also described.

**Hungarian toponyms**

In Hungarian literature, toponyms are considered distinctive names denoting various parts of the landscape (with different scales) and various manmade and natural features of the environment (Lőrincze 1947). In the Hungarian language, toponyms are built up by a geographical common noun and a unique proper noun. Proper nouns discriminate places marked by the same common nouns. Geographical common nouns describe an area’s geographical, landscape and relief characteristics. Qualifiers usually limit or enhance the meaning of a toponym highlighting physical (e.g. colour, size) or other natural (e.g. tree types or animals living in an area) properties. The spelling of toponyms is more complex than that of the English language (e.g. settlement names are always written together, the use of hyphens and en dashes are connected to strict rules, and proper names usually start with capital letters except for denoting a place belonging to somewhere) – but this paper does not concentrate on the accurate Hungarian spelling (Fábián et al. 2010).

**Váraszó and its surroundings**

Váraszó is a village between the Bükk and Mátra Mountains and the Hungarian-Slovakian border (Fig. 1). According to the National Atlas of Hungary (Kocsis 2018), it is located in the western part of the landscape Vajdavár Region, next to stream Tarna. The surroundings of the village are located between 150-540 m asl. The highest peak of the Vajdavár Region is Ökőr Hill with 541 m. However, the area is often described as a lower type of mid-mountain due to deep valleys, steep slopes and relatively dissected surface (Hegedűs 2004). The climate is humid continental with an annual average temperature of 8.3-8.5°C and average precipitation of 600-640 mm. The main watercourses are the streams Tarna and Hangony. There are only small, mostly artificial lakes (fishing ponds) in the area. For the protection of the natural values of the Tarna Valley and its surroundings, the Tarna Region Nature Conservation Area was established in 1993. A large area of Váraszó is located within this (Marosi & Somogyi 2010, Utasi 2010).

The industrial and agricultural opportunities are very low in this area: after the closure of coal mines and factories nearby, many people became unemployed. Despite being one of the least developed regions of Hungary, tourism opportunities and services rooted in the exceptional natural environment provide a solution to employing the labour force. However, many young people (especially those who study at universities) leave this area – and because of this, most settlements suffer from constant depopulation.
The history of Váraszó reaches back to the era of the Árpád House at the end of the 13th century. The first written occurrence of its name was found in 1280, but sources are referring to it from e.g. 1451 (Warasow), 1459 (Varazo), and 1466 (Warazlo). The village was abandoned for a short time during the Osman occupation in the 16th century, but it was soon repopulated. After the Habsburg liberation in the 17th century, it became the property of loyal landlords. The socialist era brought a large change in the life of the village as in parallel with industrialisation and the centralised agricultural work, infrastructural developments also took place: roads with asphalt were built, tap water and electricity were introduced to households and basic services (a post office, a telephone station, and a shop) were established (Ifj. Reiszig 1910; Voit & Dercsényi 1978).

Figure 1: a) The location of map c) in Hungary; b) the coat of arms of Váraszó village; c) the overview map of the surroundings of Váraszó (edited by Imre Faragó).
The most important attraction of the village is the Roman-style church from the early 13th century (Fig. 2). Its history is rather unclear, it is only mentioned in a few historical documents. In the 20th century, the church was completely burned due to an accident. After the rebuilding, it was consecrated in 1998 in honour of Our Lady of Hungary (Erdei & Kovács 1964, Voit & Dercsényi 1978).

Figure 2: The Roman-style church from the early 13th century.

Sources for inventorying toponyms

Three main groups of source materials were examined in this study. Based on queries made on the Hungarian.hu webpage, old cadastral maps of Várasszó were located in the Heves County National Archives in Eger. All toponym variants were recorded from 6 maps in Table 1.

<table>
<thead>
<tr>
<th>Title (HUN):</th>
<th>Year of issue</th>
<th>The number of distinct toponyms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Várasszó község urbéri rendezés előtti Térképe - cadastral</td>
<td>1869</td>
<td>71</td>
</tr>
<tr>
<td>Várasszó község határának szabályozás utáni Térképe (U413) - cadastral</td>
<td>1884</td>
<td>71</td>
</tr>
<tr>
<td>Várasszó község határának szabályozás utáni Térképe (U414) - cadastral</td>
<td>1884</td>
<td>72</td>
</tr>
<tr>
<td>Váraszó majorsági Erdők és Rétek Tervezete - cadastral</td>
<td>1868</td>
<td>38</td>
</tr>
<tr>
<td>Heves vármegye, Várasszó kisközség. Várasszó községben ... végzett földosztás helyszínrajza - cadastral</td>
<td>1888</td>
<td>108</td>
</tr>
<tr>
<td>Várasszó kataszteri község vázlata - cadastral</td>
<td>1889</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 1: Maps collected from the Hungarian.hu database and examined in the Heves County National Archives.

Geographical names were also collected from all three Habsburg Military Survey map sheets, but there were fewer names than in archive cadastral maps. The examined topographic surveys and the number of collected names are in Table 2.
Hungarian civilian topographic map sheets (EOTR) also contain toponyms. These were also analysed, and every name variant was noted from this source too. Each map sheet and the collected number of toponyms are in Table 3.

<table>
<thead>
<tr>
<th>Title:</th>
<th>Date of issue</th>
<th>The number of distinct toponyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Váraszó (EOTR)</td>
<td>1994</td>
<td>29</td>
</tr>
<tr>
<td>Váraszó: Bagoly-lyuk (EOTR)</td>
<td>1991</td>
<td>30</td>
</tr>
<tr>
<td>Váraszó: Dávid-tanya (EOTR)</td>
<td>1991</td>
<td>39</td>
</tr>
</tbody>
</table>

Table 3: EOTR Hungarian civilian topographic sheets examined in the study.

Two books containing toponyms on a settlement level were also found. Although they did not contain accurate maps of the location of the noted areas, their place could be identified based on the already analysed maps. The book titles and the number of collected distinct toponyms are in Table 4.

<table>
<thead>
<tr>
<th>Title:</th>
<th>Date of issue</th>
<th>The number of distinct toponyms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frigyes Pesty: The toponym inventory of Heves County</td>
<td>1864</td>
<td>51</td>
</tr>
<tr>
<td>Béláné Pelle (ed.): Toponyms of Heves County I.</td>
<td>1970</td>
<td>154</td>
</tr>
</tbody>
</table>

Table 4: Textual publications examined in the study.

40 inhabitants were also questioned if they could provide additional names. After filling the questionnaires, 15 additional, not widely known names were collected. All other toponyms were recorded from each source and were inserted into an Excel sheet. 233 distinct toponyms were collected. This is less than the sum of the number collected from each source. This is because of name variants: in their case, the word form is different (e.g. 1-2 letter is different or another similar geographical common name is used), but the denoted place is the same (based on the proper nouns).

**Classification of the collected toponyms**

The collected geographical names were categorised based on their common nouns. After this step, the toponyms were visualized in an analogue and a web-based digital map. This classification gives the opportunity to further examine the names, especially the change in their meaning in parallel with land
use and industrial changes. A unique classification system was established especially for Northern Hungarian settlements – mainly based on the system of Faragó (2014b). However, the systems Kázmér (1957), Hoffmann (2007), Kálnási (1996), and Báth (2010) were also used to differentiate toponym categories. The following system of categories was determined, and every toponym was classified uniquely:

1. Names of natural features:
   - water names: lakes, watercourses, swamps, reservoirs, channels, springs, and wells;
   - land names: depressions, heights, plains, soils, names rooting from body part names, names referring to position and shape, names rooting from plant and animal names.

2. Toponyms from professional names:
   - profession names;
   - toponyms from the name of the possessor (individuals or a community can also be a possessor);
   - building names;
   - toponyms rooting from a special event;
   - toponyms relating to growing plants;
   - toponyms relating to livestock breeding;
   - toponyms derived from nationalities and/or from their habits;
   - toponyms relating to defence purposes;
   - industrial names;

3. Associative names;
4. Uncategorized names;
5. Names of settlement parts.

**Analogue map of the toponyms of Váraszó**

Figure 3: An excerpt of the resulting map.
The cartographic visualisation is probably the most didactic way to put the researched toponyms into a geographical context. Corresponding SRTM DEMs were used to generate contour lines automatically. This was corrected based on the contour network of the ETOR map sheets: gullies, breaks and hollows were drawn in graphic software to the already generated contour line system. Other map elements such as road and watercourse networks, important buildings, and settlement boundaries were edited with the help of topographic maps and OpenStreetMap. The resulting 1:20,000 scale map (Fig. 3) serves multiple aims: it helps local people to put the toponyms into the geographical context, helps to preserve the geographical name heritage of the settlement and can be used as a representative, decorative item. It is currently placed for example in the mayor’s office, the local shop, bar, post office and kindergarten.

**Digital map and inventory of the toponyms**

![Figure 4: An excerpt of the OpenLayers-based web-map.](image-url)
A more usable way to hand over toponym heritage is a digital map. A webpage was created to present the details of the research, the base material, and the full database of every geographical name and every name variant. Each toponym appears on the map as polygons (e.g. land names) or points (e.g. hills and springs), and with the help of a popup window, their names are shown. In Fig. 4, an excerpt of the webpage can be seen with all visualized map features. The webpage can be visited via this link: http://mercator.elte.hu/~marchello/varaszo_en/.

Concluding remarks

Although the topic and main results of this study represent a research area especially important for Hungarian-speaking cartographers and local people, the methodology of searching and categorising toponyms can be a task for anyone reading this article. The inventory resulting from this study is mainly important for the local community, as this is the widest database of the geographical names of Váraszó. The analogue and digital maps have the value of putting these identified names into a clear and accurate geographical context, that was never done before. With the help of the digital map and webpage, anyone can search the database for toponyms and also get information about the results and base materials. The village now has a complete written and visualized database that can contribute to the handing over of local cultural values to younger generations. The methodology can also contribute to other areas, settlements and even countries to preserve their usually forgotten cartographic value, toponyms.

References


