

Valéria Tóth

# Theoretical considerations in the linguistic analysis of toponyms

**Abstract:** My paper uses a functional linguistics approach and addresses issues related to toponym theory. In the first parts, I discuss some of the key principles of the functional approach (e.g., the role of name models and schemes), followed by an overview of name analysis. I also introduce toponym types and toponym forms as they must be defined for the further analysis of names. The structural description of names (including the description of both the functional-semantic and the lexical-morphological models) is followed by the introduction of the historical aspect and the models of name-giving and name changes. In the final section of the paper, I focus on the issue of toponym borrowing (i.e., the relations between linguistic contacts and toponymic systems): in this respect I write about name pairs and the phenomenon of name integration. As part of the conclusion, I highlight the role of linguistic prestige from the perspective of linguistic contacts and toponym use.

**Keywords:** name theory, functional linguistics, toponym structure, toponym history, toponym borrowing

## 1 The principles of toponym analysis

No toponymic system of any language may be described without an adequate theoretical framework and typology. Toponym typologies, however, are often characterized by a mixture of approaches and the heterogeneity of considerations and concepts used. Yet it is a basic requirement for any toponymic study that the criteria of the inquiry shall be distinguished clearly even if these different features are present simultaneously in a complex way in the particular elements and operation of the name system. Moreover, it is important to clearly separate the criteria of the analysis exactly so that they can be introduced in relation to one another, in interaction, and in their real network of relationships.

---

**Valéria Tóth**, University of Debrecen, Department of Hungarian Linguistics, Egyetem tér 1, 4032 Debrecen, Hungary. E-mail: [toth.valeria@arts.unideb.hu](mailto:toth.valeria@arts.unideb.hu)

The toponym analysis framework discussed in my paper is basically of a functional nature and distinguishes between two, closely related approaches: descriptive and historical analysis. Descriptive analysis primarily studies the structure of the toponym but within this the functional-semantic and lexical-morphological approaches provide an opportunity for further differentiation. Historical analysis focuses on two factors, the processes of name genesis and change. Of course, additional considerations may also be relevant in the study of place names (onomatostylistic, name sociological, etc.), however, these may be considered as playing only a complementary role in the typological, systemic description of toponymic elements. The central position of descriptive and historical analyses, as the two fundamental aspects of toponym analysis, is due to the fact that names are linguistic signs themselves, and traditionally in the interpretation of these the descriptive, constructive (containing both formal and functional components) and diachronic analyses have played a crucial role.

This toponym description framework is characterized by a high degree of differentiation. There are clearly-defined categories on each level of analysis, which possibly cover the full scope of name formation methods; thus the categorical system developed in this way may be suitable for the description of all types of toponyms (microtoponyms and macrotoponyms alike) and of the name-formation processes and characteristics of all eras. We believe that ultimately name-analysis is nothing else but the exploration of the regularities and patterns in place names (with regard to their creation and functioning). And, if we evaluate each name (as members of the system of toponyms) in view of these investigations, the totality of the names can also be presented in a systematic way.

We presented Hungarian toponyms using the descriptive model to be introduced below in our Hungarian and English monographs (Hoffmann et al. 2017, 2018). One may find further details in these concerning the principles of the analysis as well as the toponym analysis method itself. The name analysis model has also been published in its outlines (see Hoffmann and Tóth 2018a, 2018b). Still, I consider it important enough to discuss it again in practically the same form (in Sections 5 to 7) because the problematics of toponym borrowing and name integration that I deal with in the second part of my paper can be introduced based on this.

## 2 Schemes and name models

According to functional linguistics, the systematicity of language is primarily made up by schemes, which are decontextualized, abstract structures of linguis-

tic expressions that serve as models on different levels at the time of the creation of linguistic expressions (cf., Ladányi and Tolcsvai Nagy 2008: 26; Tolcsvai Nagy 2017a: 33–35, 51, 57–59, 63). The schemes are developed with the ordering of specimens into categories (Bybee 2006: 730). There are scholars who refer to the relationship between general patterns interacting with each other through use as schemes, they also highlight the emergence of general patterns from specific elements deriving from direct experience (for more information see Barlow and Kemmer 2000: 3 and 17: Note 1.). At the same time, the schemes are not rules (as language is not a ready-made system of rules and tools) but probability patterns that develop by means of categorization and constructive operations through frequent use by the individual and the community (Ladányi and Tolcsvai Nagy 2008: 26; Tolcsvai Nagy 2017a: 63–64, 2017b: 35).

In this approach, we look at the specific specimens of the toponymic system as the implementations of linguistic patterns, models. The language-user abstracts language schemes from the known linguistic elements, structures (in this case toponyms in their linguistic stock), and based on these creates new names. Moreover, the user can also identify language elements previously unknown as names. The linguistic schemes are actually not categories of language description but an integral part of the mental-linguistic system of language-users, which has a central role in the use of toponyms and exactly because of this must have a place also within the description of names.

Schemes are recognizable both on the semantic and morphosyntactic level but they exist also in terms of phonotactics, socio-onomastics, etc. In cases when toponym typology attempts to capture these schemes (name-patterns, name-models), in reality it is trying to explicitly present these categories of the language-users' cognitive-linguistic abilities (cf. Hoffmann 2012: 14).

As the linguistic system is a strongly use- and experience-driven system according to the functional approach, the frequency of specimens and schemes is a primary factor in its structure and operation. A higher frequency of a linguistic construct or linguistic scheme results in a higher degree of cognitive routinization that affects the processing of the given unit. Thus frequency also plays an important role in the operation of the linguistic system (Barlow and Kemmer 2000: 4). As a result, frequency is also significant in connection with schemes, since frequency indicates for the individual the degree of routinization (which is the measure of individual language knowledge) and for the community it is the measure of conventionalization (indicating the acceptance of the linguistic expression, linguistic structure by the community) (Barlow and Kemmer 2000: 12–13; Ladányi and Tolcsvai Nagy 2008: 30–31; Tolcsvai Nagy 2017a: 35, 58, 59–61).

In the differences seen in the frequency of schemes, patterns play a role not only in the operation of the linguistic system but also in its changes. For example, on the morphosyntactic level this may appear as a conserving effect because frequent use strengthens the memory imprint of words and expressions with certain morphosyntactic features, which makes their availability as a whole easier and therefore it becomes less likely that they would fall victim to analogical changes (cf. Bybee 2006: 714–715, 723, 728, 730).

There may be great differences not only in the degree of acceptance of certain schemes but also that of name specimens, with a certain scalar relationship between them. This means that we may use a name occasionally, only once and then forget it, that is, the name does not become conventional: these name specimens represent one end-point of the scale. The other end-point of the scale includes those names that have been functioning in society for centuries, i.e., they exist as “accepted, established onomastic conventions”. However, even among accepted, conventionalized names there are some that function only within a narrow group of users (for example, in the family and in smaller groups), while others are well-known worldwide (Van Langendonck and Van de Velde 2016: 19). The question of the frequency of name specimens is related to the frequency of schemes only to the extent that the schemes are based on specific name forms: information generalized from them analogically, in a way that connections are established between the networks mapping the names by means of shared elements of knowledge, and these links represent the schemes (Reszegi 2015: 165–166).

The variations in the frequency of using schemes, models, and linguistic elements are also found in certain changes of the toponymic system. The formants used more rarely (affixes and geographical common nouns) are replaced much more often during changes by more frequent elements than vice versa. Using a specific example, this means that in the early Old Hungarian Era the schemes of toponyms with the *-gy* and *-j/-aj/-ej* suffixes could operate as weaker models than that of toponyms with the *-d* and *-i* suffixes, and over time (as a phenomenon accompanying the end of the productivity of suffixes) the model of toponyms with the *-gy* and *-j/-aj/-ej* suffixes has assumed a peripheral position in name-giving. The same process applies to *patak* ‘brook’ and other hydrographic common nouns that displaced the old hydrographic common noun *jó* ‘river’ from the structure of hydronyms.

The introduction of name patterns, name models (i.e., the linguistic schemes present in names) has a crucial role in the toponym description model introduced here, thus special attention is paid to the analysis of the linguistic structure. The genesis, functionality, and history of names are studied in rela-

tion to communication, human activities, and the environment even when the particular toponyms are interpreted as the manifestations of semantic and lexical-morphological models.<sup>1</sup>

### 3 Types of toponyms

Toponyms have a rich semantic structure (for an overview see Hoffmann at al. 2018: 151–159) in which denotative meaning has a decisive role, and this besides individual identification expresses a degree of categorization in itself. This means that in case of the name-users being aware of the denotative meaning of the place name, they are also familiar with the type of the given place (whether the name refers to a settlement, a body of water, a mountain, etc.). Very often, this type of categorization is also expressed in the toponyms linguistically, while in the name structure this role is always played by geographical common nouns: e.g., the *ér* ‘brook’, *falu* ‘village’, *hegy* ‘mountain’ lexemes of the toponyms *Száraz-ér* (*száraz* ‘dry’/ *ér* ‘brook’), *Németfalú* (*német* ‘German’/ *falu* ‘village’), *Körtvélyes-hegy* (*körtvélyes* ‘abundant in pear trees’/ *hegy* ‘mountain’), etc. serve this function.

The identification of toponym types is a primary task in the linguistic analysis of toponyms, as such identification provides the basis for the further structural analysis of names. This means that a *Sárospatak* (*sáros* ‘muddy’ + *patak* ‘brook’) or a *Hegyeshalom* (*hegyes* ‘pointed’ + *halom* ‘smaller protrusion’) de-

---

<sup>1</sup> The role of schemes in name-giving is discernible also in the context of colonization. This has been shown in the publications of Thomas Stolz, Ingo H. Warnke and Nataliya Levkovich (e.g., Stolz and Warnke 2018, Stolz et al. 2016, 2018) within the *Comparative Colonial Toponymastics* (CoCoTop) research program (for the theoretical basis of the project see Stolz and Warnke 2018). The fact that the formal-structural, name formation models may differ even in the case of identical motivational backgrounds (identical semantic models) is well supported by those studies that compared the name-giving patterns of different countries in their colonies. The analysis involved the same toponym type (settlement names) and the same semantic model (settlement names formed from anthroponyms). The prototypical toponym scheme of toponymic systems of European colonies is the two-component, binary name form with a personal name first constituent and a geographical common noun second constituent. Besides this (less frequently) the anthroponym may appear on its own as a toponym and the name structure formed from an anthroponym with the use of a derivational suffix also appears in European colonial name giving. There are, however, major differences in terms of how frequent schemes these structures represent in a given naming system: the German colonial exonyms, for example, almost exclusively use the prototypical, two-component pattern (cf., Stolz et al. 2016, and in a narrower comparison 2018).

nomination may be described with a very different name structure if it denotes a protrusion or in the instance where it serves as the name of a settlement. The different toponym types are often characterized by different name models, schemes, therefore, their linguistic differences are primarily seen in this respect.

Categorization is to a certain extent a culture-specific phenomenon. Thus there may be differences between cultures and languages in terms of which categories receive a name and which do not (Van Langendock and Van de Velde 2016: 24). This may be clearly seen in, for example, bilingual settlements where polynymy is especially frequent, which actually derives from bilingualism itself: the objects of the settlement are named by both communities living there each in their own language. The usual reason for using only one name for an object in these settlements occurs when a certain object is not named by one of the communities, because that community does not interpret it as a “place” that should be denominated with a separate name (cf. Póczos 2010: 177).

## 4 Topoformants

We recognize toponyms in their function partly based on their typical formal characteristics. Such components frequently appear on certain name types (lexical and morphological elements) that are characteristic only of them and are called topoformants. Topoformants are all those morphemes (independent lexemes or affix morphemes) that are used to express toponymic status linguistically in any era of a given language. Name-users create new toponyms with their use (Soltész 1979: 19–21, Tóth 2008: 182–192, Bényei 2012).

We can distinguish between two types of topoformants (lexical topoformants and affixal topoformants) in terms of morphological and functional aspects. In the role of lexical topoformants, there are always geographical common nouns that are usually denoted with this term especially because of this special toponym-constituent role. These may fulfill a topoformant function in natural names (e.g., *Ér* ‘brook’, *Száraz/ér* ‘dry/brook’) and civilizational names alike (e.g., *Lak* ‘village’, *Miklós/laka* ‘Miklós/village’). Geographical common nouns in toponyms are, however, not always name-formants at the same time in every position: in the *Homok-hegy/útja* name (*homok* ‘sand’ + *hegy* ‘mountain’/ *útja* ‘road’), for example, the lexeme *út(ja)* ‘(its) road’ has a name-formant function as it signifies the type of the place and simultaneously specifies the actual status of the name; *hegy* ‘mountain’, however, does not have such a role in this name structure (as the name says about the place only that it is a ‘road that leads to the place called Homok-hegy’); however, in the *Homok/*

*hegy* ‘sand/mountain’ name denoting a protrusion it signifies the type of place and specifies the name’s status.

The category of affixal topoformants primarily includes toponymic derivatives. The former constraint, however, is valid in this case as well, i.e., not all formants present in the toponym structure carry a topoformant function as well, only those that play a role in the emergence of the name and its functioning as such. While, for example, the *-d* and *-i* affixes of the *Besenyőd* (*besenyő* ‘Pecheneg’ + *-d* topoformant) and the *Petri* (*Péter* anthroponym + *-i* topoformant) settlement names are considered topoformants, the *-s* suffix of the first constituent of *Dióstelek* only contributes to the creation of the syntagmatic relationship (*dió-s* ‘abundant in walnuts’/*telek* ‘lot, village’, where *-s* is an adjectival suffix expressing abundance in something), it has no role in expressing the nature of the structure as a name.

Among lexical topoformants, we may distinguish between primary and secondary topoformants. Primary lexical topoformants are those geographical common noun components of toponyms that denote the type of the place such that this function matches the dictionary meaning of the geographical common noun used as a formant. For example, the *falu* ‘village’ geographical common noun is considered a primary topoformant as a component of settlement names (e.g., *Újfalu* ‘new/village’, *Kisfalu* ‘small/village’, *Apátfalva* ‘abbot’s/village’) as this lexeme in its common noun role, in terms of its dictionary meaning also carries in itself the ‘village, settlement’ semantic content as this is its meaning also in settlement names.

Toponyms, however, may also include such formants which although indicate the type of the denoted place, the common noun, as a vocabulary element, has no geographical common noun meaning referring to the given type of place. In the early Old Hungarian Era the *-ház(a)* ‘house’ second constituent appeared in numerous settlement names, and it was certainly used as a settlement name formant, as contemporary name-users knew that *Gyulaháza*, *Ivánkabánháza*, *Boldogasszonyháza*, etc. were the types of names that they denoted a settlement, and they used the *-ház(a)* element (based on the pattern of already existing settlement names with the same structure) for the creation of new settlement names. This, however, does not mean that the word *ház* in itself (as an element of the common noun corpus) would have meant ‘village, settlement’ (as well) in the early Old Hungarian Era.

Based on this, secondary lexical topoformants are those common nouns used in toponyms that assume the role of indicating the type of place as part of the specimens of the given toponym type (as a result of frequent use) without, however, this function fundamentally affecting the common noun meaning of

this lexeme. The *-egyháza* ‘church’, *-monostora* ‘monastery’, *-hida* ‘bridge’, etc. name-constituents of settlement names are secondary settlement name formants, which means that in the settlement names of the *Dorog/egyháza*, *Ellés/monostora*, *János/hida* type they carry the special semantic meaning of ‘a village having a church or a monastery’, ‘a village with a bridge’ (and their typical name-patterns play a role in their spreading) but all this is not reflected in the common noun meaning of the lexemes (see Tóth 2008: 182–192; Bába 2016a: 32–44, 48–54, 2016b; Bátori 2017). (The semantic structure of the names mentioned may be described as follows: ‘village with a church/named Dorog’, ‘village with a monastery/belonging to a person named Ellés’, ‘village with a bridge/of a person called János’).

The topoformant function can always be interpreted in relation to a specific era, i.e., in a synchronic role. This is because the corpus of topoformants (as in the case of linguistic elements in general) is not constant in language but changes through time. As a result, linguistic elements cannot have a topoformant role in general but only with relevance to a specific time. But, as linguistic changes are rather slow in this respect, we can speak about the topoformants of longer eras in language history in consideration of the fact that language shows the ability and specific signs of change at any moment in time. This is well illustrated in the early Old Hungarian Era when there were major rearrangements in the corpus of Hungarian topoformants: the productivity of some increased, while that of others declined; while some elements’ role as a topoformant ended in relation to the fact that the given lexeme or affix was no longer used in language.

## 5 The functional-semantic basis of toponym-giving

All place-naming acts are semantically conscious, which means that at the time of their creation all toponyms are motivated. The name-giving and name-using individual or community creates new place names by highlighting a feature or characteristic of the referent and adapting it to already existing name models. This presumption provides the justification for the analysis of the functions expressed by toponyms. At the time of their creation, all names are semantically transparent and descriptive, since the motifs and semantic categories serving as the basis of name-giving are present either directly or indirectly.

The basic concept of functional-semantic analysis is the name-constituent. Those units of a toponym are considered to be name-constituents that express

any semantic feature related to the referent at the time of the name-genesis or during the functioning of the name. We also need to stress, however, that a name-constituent function is not associated with each lexeme in the name. The name *Mély-patak* ‘deep/brook’ (as a hydronym), refers to a type of water that is deep, while the name structure of *Mély-patak-fő* ‘Mély-patak’s/spring’ expresses only two name-constituent functions, i.e., ‘the spring (1) of the brook named Mély-patak (2)’. Similarly, in the spring name *Kék-kút* ‘blue/spring’, two name-constituents can be distinguished: its functional structure can be described as ‘such a spring (1) where the color of the water is blue (2)’. The *Kékkút* settlement name that was created from it, however, includes only one name-constituent as only one semantic feature is expressed in it, i.e., that the settlement ‘lies next to a spring called Kék-kút’. The above mentioned *Sáros-patak*, as a river name, is a two-constituent name-form, semantically it means ‘muddy/brook’; as a settlement name, however, *Sárospatak* has only one constituent and refers to ‘(a settlement) lying next to the brook named *Sáros-patak*’.

In this approach, toponyms may have a maximum of one or two constituents and the semantic features expressed in them may be categorized into three large semantic groups. (We use the forward slash sign [ / ] for the separation of the name-constituents when it plays a role in the description of the semantic structure).

The name-constituents, on the one hand, can refer to the features of the given place. The **descriptive function** may include a lot of semantic features: it may express one of the characteristics of the place (its size, shape, color, etc.; e.g., *Hosszú* ‘long’, *Nagy/erdő* ‘great/forest’; *Teknő* ‘shell’, *Görbe/ér* ‘curved/brook’; *Kékes* ‘[a mountain] of blue color’, *Fekete/erdő* ‘black/forest’); the relationship of the place to a certain external feature or circumstance (plant, animal, building, owner, etc.; e.g., *Bükk* ‘[a mountain] with beech trees’, *Nádas/patak* ‘reed/brook’; *Csókás* ‘[a place] with jackdaws’, *Sólyom/kő* ‘falcon/rock’; *Szentistván* ‘[a village] with a church consecrated in honor of **St. Stephen**’, *Malom/út* ‘a road/leading to a mill’; *Petri* ‘[a village which] belongs to **Peter**’, *Mihály/falva* ‘*Michael’s*/village’, etc.); or the relationship of the place to another place (e.g., a settlement, river, hill, etc.; as in *Bocsárd/pataka* ‘the brook of/*Bocsárd* settlement’, *Tó/rét* ‘a field/lying next to a lake’, *Sólyom-kő/völgye* ‘the valley/next to a mountain called *Sólyom-kő*’, etc.).<sup>2</sup>

The name-constituent expressing the type of the name has a special position in toponyms among the different features (e.g., *Patak* ‘brook’, *Lak* ‘village’,

<sup>2</sup> Within the theoretical framework of CoCoTop this name component function is called a *modifier* (MOD).

*Kis/hegy* ‘small/mountain’, *Új/falu* ‘new/village’). This function reflects the categorization activity of people and it is expressed with a geographical common noun lexeme. Due to its frequency and special role, this feature should be distinguished as a **type-indicating function** and perceived as an independent name-component function.<sup>3</sup>

Besides these examples, there are also name-constituents whose only function is to name the place itself. The **designating function** is expressed by such place names, which were borrowed by one language from another (*Duna, Balaton*), and those where the place names were used in another place name (*Berettyó/újfalu* ‘the place called *Újfalu*, which lies next to the river *Berettyó*’).

Finally, we also need to consider the **conventional function**. Although it plays a peripheral role in place-naming as a whole, due to the great demand for place names in modern times it retains a frequent name-constituent function: it is customary in Hungary to name streets, for example, after famous people (*Petőfi/utca* ‘*Petőfi*/street’), flowers (*Ibolya/utca* ‘*violet*/street’), etc., but other types of toponyms might also get such names (e.g., *Margit/híd* ‘*Margaret*/bridge’, *Lenin/város* ‘*Lenin*/city’).

The Hungarian toponymic system is characterized by the fact that single-component toponyms may be used in three types of semantic structures: in a toponym-type indicating (Type\_i; e.g., the name of a hill *Hegy* ‘hill’), designating (Design.; e.g. the settlement name *Nógrád* borrowed from Slavic languages), and descriptive (Descr.; e.g. the settlement name *Péteri* ‘Peter’s’) function. In two-component names these semantic contents join each other, typically creating a Descr. + Type\_i (e.g., the name of a brook *Kis-patak* ‘small brook’) or Descr. + Design. structure (e.g., river name *Kis-Duna* ‘small Duna’). The Design. + Type\_i. structure is in a peripheral position in the name system. Figure 1 below illustrates this relationship and also shows that in Hungarian the core of the toponymic system is made up by two-component names with a Descr. + Type\_i. semantic structure.

The semantic basis of name-giving, i.e., the functional-semantic categories are not linguistic, language-specific categories but refer to extra-linguistic relations. The place name created is influenced by perceived reality in all cases: the referents motivate the created toponyms in a sense that their inherent characteristic features (as reflected by people) are included as the basis of name-giving. In line with this, the functional-semantic categories expressed in toponyms are general conceptual categories of human thinking. Thus in comparing them we

---

<sup>3</sup> Within the theoretical framework of CoCoTop this name component function is called a *classifier* (CLASS).

expect to see larger variance in the case of name-cultures exhibiting major cultural differences (for more details see Šrámek 1972–1973; Kiviniemi 1975, 1990; Hoffmann 1993: 30–31, 43–54, 1999; Tóth 2001: 131–163).

	<b>Design.</b> ( <i>Duna</i> )	
<b>Descr.</b> ( <i>Hosszú</i> ‘long’)	<b>Descr.+Type_i.</b> ( <i>Újfalú</i> ‘new village’)	<b>Type_i.</b> ( <i>Patak</i> ‘brook’)
	<b>Descr.+Design.</b> ( <i>Kis-Duna</i> ‘little Duna’)	

**Figure 1:** Toponym structures in the Hungarian language.

## 6 The lexical-morphological basis of toponym-giving

Of course, the toponymic system also has purely linguistic features: the lexical-morphological models are naturally language specific. All those linguistic means of expression may be included here (the set of linguistic elements and the rules for their connections), which can be used to create place names in the language of a given time. The lexical-morphological models form a part of all languages, yet, in the use of the system of schemes and the connected set of elements there are also differences. For example, in the majority of languages the use of personal names as lexical categories is a frequent phenomenon in name-giving (mostly to express possession), but there can be major differences between languages in terms of the morphological structures and name-formation rules used to create place names from personal names.

The lexical basis of name-giving (corresponding to a certain extent with the semantic base) also includes three categories. There can only be geographical common nouns expressing a type-indicating function on the lexical level and there can only be toponyms in a designating role. However, the function of indicating characteristic features (i.e., descriptive function) can be performed by several language elements (and several parts of speech): besides the categories called “feature words” in the summary (which can include even word structures along with the various categories of nouns, adjectives, and numerals), geographical common nouns and toponyms may also play such a role as seen in the examples already mentioned.

Besides name-constituents (or more precisely within them), we need to distinguish an additional unit for the lexical-morphological study of names: the name elements. By name elements we mean the lexemes included in the name and the affixes performing a function in it. Thus in the previously mentioned *Mély-patak-fő* place name, we can distinguish two name-constituents and three name elements (*mély* ‘deep’ + *patak* ‘brook’/fő ‘spring’), and in the *Kék-kút* spring name there are two name-constituents and two name elements (*kék* ‘blue’/kút ‘spring’), while in the *Kékkút* settlement name the two name elements are featured only as a unit of a single name-constituent (*kék+kút*). The separation of name elements within name-constituents provides an opportunity for the fine-tuning of structural analysis; (for more details see Šrámek 1972–1973; Hoffmann 1993: 31–32, 55–58, 1999).

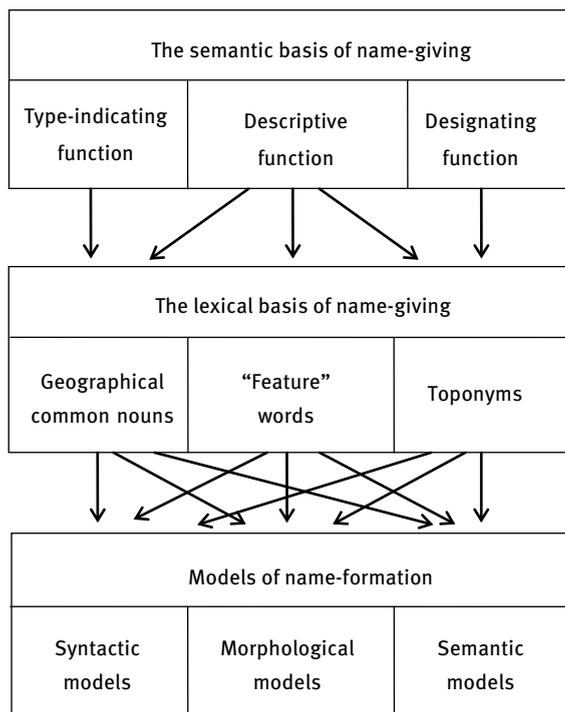
## 7 Models of toponym creation

These two components of name-giving, the semantic and lexical bases have to be complemented with the name-formation models in line with the description of the history of name-formation. As part of historical toponym analysis we study those linguistic schemes with which the new toponyms are created and the forces that shape the integration of the language elements into the names. Among the models of name-formation, the syntactic, morphological, and semantic models represent the basic categories of name-giving.

Due to the syntactic models, in Hungarian such toponyms are usually created that have an attribute or, more rarely, an adverbial structure (e.g., *Kis-hegy* ‘small/hill’, *Három-halom* ‘three/hills’, *Pap rétje* ‘priest’s meadow’). Morphological name-formation is primarily manifested as the formation of toponyms with derivational suffixes (e.g., *Bükkös*: *bükk* ‘beech’ tree name + -s derivational suffix, *Német-i*: *német* ‘German’ ethnonym + -i derivational suffix). As for the semantic models, the three most frequent name-giving forms are metaphoric name-formation (e.g., *Gatyaszár* ‘trouser-leg shaped [street]’), metonymic name-formation (e.g., *Kér* tribal name > *Kér* settlement name, *Veszprém* personal name > *Veszprém* settlement name, *bükk* ‘beech’ tree name > *Bükk* name of hill, *horvát* ‘Croatian’ ethnonym > *Horvát* settlement name, *Sáros-patak* hydronym > *Sárospatak* settlement name, etc.), and semantic split (e.g., from the geographical common nouns *patak* ‘brook’, *eresztvény* ‘young forest’, *bérc* ‘mountain’, *liget* ‘grove’, etc. the place names *Patak*, *Eresztvény*, *Bérc*, *Liget*, etc.).

The relevant links between the semantic and lexical bases of name-giving and the rules of name-formation can be illustrated as follows (Figure 2). The

arrows pointing to the particular types of name-formation models indicate that the elements of all the categories of the lexical base may, in theory, participate in any name-formation process; (for more details see Hoffmann 1993: 67–143, 1999; Tóth 2001: 165–230, 2008).



**Figure 2:** Correlations within the typological description of toponyms.

## 8 Change models of toponyms

The names thus created, however, are not constant either in terms of their lexical-morphological appearance, or in their semantic structure, since they also change in line with the alterations in linguistic and extra-linguistic conditions. The functional-semantic and lexical-morphological structure of the names are not equally sensitive to changes: the name-constituent functions may change very slowly, as opposed to the formal means of expression, the lexical-morphological types, which exhibit relatively fast change as linguistic phenomena. This

“tension” results in the transformation of the name models and name-giving forms. Thus the description of change processes must form an integral part of the analysis of toponyms.

As toponyms – similarly to common words – can be defined as the correlations between the name form and the meaning, their changes can also be grasped in the alterations of the lexical-morphological structure and – more rarely – in the related functional-semantic structure on the one hand, and the changes in the denotative meaning on the other. In line with this, complex changes may be seen that affect both the denotative meaning and structure of toponyms; changes in meaning that, besides the modification of the denotative meaning, leave the name structure unchanged; and the diverse spectrum of formal changes has the common feature that in the process of these alterations the name structure changes but the denotative meaning remains the same; (for more details see Tóth 2008, 2011; Hoffmann at al. 2017: 237–253, 2018: 345–360).

## 9 An analytical model of toponym pairs and name integration

The model used for the analysis of toponyms needs to be suitable not only for the description of name-systems of particular language-using communities (for example, for it to help in the description of the Hungarian toponyms in any era of the name-system) but it also has to extend to the study of the interactions of name-systems of different languages, including Hungarian and other languages that have come into contact with it. When developing such a model, we need to start out from the fact that in the case of a contact a referent may have several names used by communities of a different language, in which the relationships are usually not random but follow some kind of a pattern. Thus the toponym description model should also include a set of criteria which may be used to introduce the consequences of linguistic contacts and thus may help us in the interpretation of the correlations between name-systems of two (or possibly more) different language-using communities. Moreover, it is another important criterion regarding the model that it should be able to manage both contemporary and historical name-systems in this respect also; that is, it should also be universal in the interpretation of name-giving, name-using traditions of different languages and eras.

The toponym description model described so far is suitable for the linguistic analysis of the toponym systems of both Hungarian and other languages but

two further remarks should be added for the complete implementation of this objective. The addition should, on the one hand, concern the extension of the category system of linguistic tools with a role in the genesis of names as these are linguistically-bound elements that may have different features in various languages.<sup>4</sup> It requires a more significant addition, however, that the examined name systems should not be explored only as systems existing besides one another but we should also consider the special relationship between them. These details of the analytical model are fundamentally based on the work of Rita Póczos (2010).

In the process of toponym borrowing, the integration of loan words from one language into another goes through several stages. At one end of the scale we find those names that did not go through any changes in the process of borrowing and name-usage (e.g., Serbian-Croatian *Bukvik* > Hungarian *Bukvik*). At the other extreme of the integration process are those names that conformed both to the sound and name system of the receiving language, meaning that their phonological form and morphological structure were both modified by means of the adaptation (e.g., Hungarian *Gerebice* > German *Kerpicvíza* ‘Kerpic/Wiese’). Between the two endpoints, there are many other types (and transitions), one of them being that the integrated element is adjusted to the sound system of the receiving language during name use (e.g., Serbian-Croatian *Blata* > Hungarian *Baláta*) while the other is when the morphological structure of the borrowed element is modified in the process of name use (e.g., German *Pfarrer/tal* > Hungarian *Fartal/domb*) (Póczos 2010: 145–147, but see also 2005: 140–142, 2006: 89).<sup>5</sup>

---

<sup>4</sup> In multiethnic areas the functional-semantic categories of name systems show relatively few differences as the extra-linguistic reality serving as the basis of name-giving is the same for both name communities, and the cognitive processing of these does not really differ either due to the similarities of cultures in contact with one another. On the level of name genesis, however, there may even be significant differences if the word formation systems of the languages used by the two name-giving communities differ from each other to a great extent (Póczos 2010: 105). This phenomenon, however, may appear differently from what is mentioned here, for example, in a colonial context (cf. Stolz and Warnke 2018; Stolz et al. 2016, 2018).

<sup>5</sup> Berit Sandnes studied the different aspects of toponym borrowing and also found that toponyms borrowed from one language to the other are rarely taken over without any changes (i.e., they are rarely adopted as is) into the target language; the majority of them stand as witness to the adaptations occurring in the receiving language. Their types are defined and introduced in detail by Sandnes (2016: 544–549) as the following: a) phonological adaptation, b) morphological adaptation, c) syntactic adaptation, d) semantic adaptation, e) lexical adaptation, and f) she mentioned hybrid (mixed) names separately from the above.

Such changes in the integrated elements clearly indicate their use in the receiving language. At the same time, there may also be names in the name-system the name-givers and -users of which often belong to different ethnic groups but this difference either leaves no mark on the name form at all or it could only be discovered using the precision of dialectal phonetic transcription. This circumstance should definitely be considered (especially knowing the orthographic uncertainties after the emergence of writing) when in connection with medieval times we connect the toponymic data of written sources to a language (name-givers and name-users) and we attempt to provide ethnic reconstruction based on this.

The coexistence of stocks of toponyms and their joint development over the centuries may result in such system-level interactions that follow unique patterns distinguishable on the level of typology and greatly contribute to the development of new members of toponymic systems. Thus, we may look at the issue of name pairs denoting the same referent but coming from communities speaking different languages as a phenomenon joining the two name-systems due to bilingualism.

The relationships of toponym pairs with the same denotative meaning may be described within a framework which in line with the main principles of the model endorse the descriptive (i.e., synchronic) and the historical aspect separately. Rita Póczos (2010) developed the model for Hungarian-German bilingual name-systems, but as the suggested analytical framework consists of general categories, in theory it may be used for the introduction of any name-system emerging by means of contact of two languages.

On the descriptive level of the analytical model, additional typical relationships may be identified between the members of the bilingual name pairs. The main categories are made up by phonological and semantic correspondence and their combinations, but the main categories themselves are also divided further into additional sub-groups depending on the extent to which the correspondence affects the structure of the name (partially or fully); see Figure 3.

Besides all these, it is also possible that members of the name-pairs are not connected by any linguistic relationship beside the same referent, meaning that there is no correspondence between them in terms of linguistic tools.<sup>6</sup>

---

<sup>6</sup> German onomasticians distinguished name-pairs based on the same approach before, specifying a) phonologically bound name-pairs, b) semantically bound name-pairs, and c) free name-pairs (Eichler 1976: 139–141; Eichler and Šrámek 1984: 14–15).

## I. descriptive (synchronic) level

1. phonological correspondence
  - fully: Hung. *Puposka* > Germ. *Pupiska*
  - partially: Germ. *Lange/tal* > Hung. *Langetáli/dűlő*
2. semantic correspondence
  - fully: Hung. *Malom/árok* > Germ. *Mühl/graben*
  - partially: Hung. *Séd* 'Brook' > Germ. *Mühl/bach*
3. phonological and semantic correspondence
  - Hung. *Hosszú/hegy* 'Long/hill' > Germ. *Hosszi/berg*
4. name pairs are not connected
  - Hung. *Lovas/hegy* 'Horse/hill' > Germ. *Frei/acker*

## II. historical (diachronic) level

1. borrowing
  - fully: Hung. *Puposka* > Germ. *Pupiska*
  - partially: Hung. *Szigeti/dűlő* 'Island/land' > Germ. *Sziget*
  - ~ + complementation: Germ. *Langes/tal* > Hung. *Langetáli/dűlő*
2. translation
  - fully: Hung. *Malom/árok* > Germ. *Mühl/graben*
  - partially: Hung. *Kerek/erdő* 'Round/forest' > Germ. *Garten/wald*
  - ~ + complementation: Hung. *Séd* > Germ. *Mühl/bach*

**Figure 3:** An analytical model of toponym pairs.

As the processes that create the name-pairs also work on the system level, we may categorize them in terms of their genesis (name-formation) with the help of the analytical model. The main categories are represented by borrowing and translation, which in turn also have additional sub-types depending on the extent to which the primary name-structure is affected by them: partial and complete borrowing, and partial and complete translation, as well as borrowing + complementation, translation + complementation may be distinguished in this sense (for a detailed introduction to the model and the specific types of the two levels see Póczos 2010: 180–203).

Based on the study of today's bilingual name-systems close to half of the name-pairs are characterized by complete semantic correspondence, but the fact that in older times this type of contact can rarely be found is definitely worth paying attention to. Such a difference may be explained either by the fact that at the time when charters were beginning to be written and in the subsequent time there was no bilingualism in the Carpathian Basin (which is not really likely) or the standards of contemporary charter writing did not require the recording of name-pairs showing lexical matching (and the notaries did not consider it necessary).

In this respect I believe that polynymy could be a much more frequent phenomenon in early toponymic systems not only in this type but also in general than what might be indicated by sources. Of the names with the same meaning (the same denotative reference) the notary mostly recorded only one and there is a clear reason doing so. In the documents written mostly for legal purposes the toponyms were mentioned only for the purpose of precisely identifying the referents and in such a function the listing of variants would not have provided any further evidence, but to the contrary, could have resulted in more confusion (cf. Póczos 2010: 175–179, 204). We might see exceptions to this case only if the name of the place in question changed in the meantime and in such a situation (exactly in order to record the change) the writer of the charter considered it important to include both versions; e.g. 1391: Super *Selniche* que nunc vocatur *Isipfalva* (Gy. 4: 90).

## 10 Conclusions

Thus this analytical framework now introduced in detail is suitable not only for the description of the stock of toponyms of a given language (in any era) but also that of the relationship of name systems in contact with each other. There is another important factor here as well in connection with the latter aspect.

In all ages linguistic contacts are fundamentally determined by the prestige status of languages that come into contact with each other. Linguistic prestige certainly has an effect on name-usage as well, which manifests itself both in the direction of borrowing between the languages and the means of name integration. Moreover, linguistic prestige plays a crucial role in the written recording of names, that is, which of the names of a referent used simultaneously the notary preferred when recording it in the text. Stronger differences in prestige may also lead to the adaptation of name-systems. As a result of these considerations, I believe the issue of linguistic prestige should not be disregarded when we study the interactions of linguistic systems and the toponymic systems which form part of that study.

**Note:** This work was carried out as part of the Research Group on Hungarian Language History and Toponomastics (University of Debrecen – Hungarian Academy of Sciences) as well as part of the project *International Scientific Cooperation for Exploring the Toponymic Systems in the Carpathian Basin* (ID: NRDI 128270, supported by the National Research, Development and Innovation Fund, Hungary).

## References

- Bába, Barbara. 2016a. *Földrajzi köznevek térben és időben* [Geographical common words in space and time]. A Magyar Névértudományi Kiadványai 39. Debrecen: Debreceni Egyetemi Kiadó.
- Bába, Barbara. 2016b. Lexical topoformants in toponyms. *Acta Onomastica* 55. 17–24.
- Barlow, Michael & Suzanne Kemmer. 2000. Introduction: A usage-based conception of language. In Michael Barlow & Suzanne Kemmer (eds.), *Usage-based models of language*, vii–xxviii. Stanford, CA: CSLI Publications.
- Bátori, István. 2017. Településnév-formánsok a régiségben [Settlement name formants in historical times]. *Helynévtörténeti Tanulmányok* 13. 61–90.
- Bényei, Ágnes. 2012. *Helynévképzés a magyarban* [Toponym formation in Hungarian]. A Magyar Névértudományi Kiadványai 26. Debrecen: Debreceni Egyetemi Kiadó.
- Bybee, Joan L. 2006. From usage to grammar: The mind's response to repetition. *Language* 82. 711–733.
- Eichler, Ernst. 1976. Sprachkontakte im Lichte der Onomastik. *Onoma* 20. 128–141.
- Eichler, Ernst & Rudolf Šrámek. 1984. Thesen zur toponymischen Integration. In Ernst Michael Christoph, Ernst Eichler, Karlheinz Hengst & Rudolf Šrámek (eds.), *Sprachkontakt im Wortschatz*, 9–18. Leipzig: Wissenschaftliche Beiträge der Karl-Marx-Universität Leipzig.
- Gy. = Györfly, György. 1963–1998. *Az Árpád-kori Magyarország történeti földrajza I–IV*. [Historical geography of Hungary in the age of the Árpád Dynasty]. Budapest: Akadémiai Kiadó.
- Hoffmann, István. 1993. *Helynevek nyelvi elemzése* [The linguistic analysis of toponyms]. Debrecen: Debreceni Egyetem Magyar Nyelvtudományi Tanszék. Second edition: Budapest: Tinta Kiadó, 2007.
- Hoffmann, István. 1999. A helynevek rendszerének nyelvi leírásához [Supplement to the linguistic description of the system of toponyms]. *Magyar Nyelvjárások* 37. 207–216.
- Hoffmann, István. 2012. Funkcionális nyelvészet és helynévkutatás [Functional linguistics and toponomastics]. *Magyar Nyelvjárások* 50. 9–26.
- Hoffmann, István, Anita Rácz & Valéria Tóth. 2017. *History of Hungarian toponyms*. Hamburg: Buske.
- Hoffmann, István, Anita Rácz & Valéria Tóth. 2018. *Régi magyar helynévadás. A korai ómagyar kor helynevei mint a magyar nyelvtörténet forrásai* [Old Hungarian toponym-giving. Old Hungarian toponyms as sources of the Hungarian language history]. Budapest: Gondolat Kiadó.
- Hoffmann, István & Valéria Tóth. 2018a. Theoretical issues in toponym typology. *Onomastica Uralica* 12. 7–29.
- Hoffmann, István & Valéria Tóth. 2018b. Theoretical issues in toponym typology. *Mitteilungen der Österreichischen Geographischen Gesellschaft/Annals of the Austrian Geographical Society* 160. 281–302.
- Kiviniemi, Eero. 1975. *Paikannimien rakennetyypeistä* [Translation]. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Kiviniemi, Eero. 1990. *Perustietoa paikannimistä* [Translation]. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Ladányi, Mária & Gábor Tolcsvai Nagy. 2008. Funkcionális nyelvészet [Functional linguistics]. *Általános Nyelvészeti Tanulmányok* 22. 17–58.

- Póczos, Rita. 2005. Nyelvtörténeti szempontok az Árpád-kor etnikai vizsgálatához [Language historical aspects in the ethnic reconstruction of the Árpád dynasty period]. *Névtani Értesítő* 27. 136–143.
- Póczos, Rita. 2006. Az Árpád-kori Borsod vármegye lakosságának nyelvi-etnikai összetételéhez [Linguistic and ethnic composition of the inhabitants of Borsod county in the Árpád dynasty period]. *Helynévtörténeti Tanulmányok* 2. 87–105.
- Póczos, Rita. 2010. *Nyelvi érintkezés és a helynévrendszerek kölcsönhatása* [Linguistic contact and the interactions of toponymic systems]. A Magyar Névtudományi Társaság Kiadványai 18. Debrecen: Debreceni Egyetemi Kiadó.
- Reszegi, Katalin. 2015. A névközösség fogalmához. Névközösségek napjainkban és a régiségben [Additions to the concept of name community. Name communities today and in historical times]. *Helynévtörténeti Tanulmányok* 11. 165–176.
- Sandnes, Berit. 2016. Names and language contact. In Carole Hough (ed.), *The Oxford handbook of names and naming*, 540–553. Oxford: Oxford University Press.
- Soltész, Katalin J. 1979. *A tulajdonnév funkciója és jelentése* [The functions and meaning of proper names]. Budapest: Akadémiai Kiadó.
- Šrámek, Rudolf. 1972–1973. Zum Begriff „Modell“ und „System“ in der Toponomastik. *Onoma* 17. 55–75.
- Stolz, Thomas & Ingo H. Warnke 2018. System- und diskurslinguistische Einblicke in die vergleichende Kolonialtoponomastik: Eine gemeinsame Einführung. In Thomas Stolz & Ingo H. Warnke (eds.), *Vergleichende Kolonialtoponomastik: Strukturen und Funktionen kolonialer Ortsbenennung*, 1–75. Berlin & Boston: De Gruyter Mouton.
- Stolz, Thomas, Ingo H. Warnke & Nataliya Levkovich. 2016. Colonial place names in comparative perspective. *Beiträge zur Namenforschung* 51(3/4). 279–355.
- Stolz, Thomas, Ingo H. Warnke & Nataliya Levkovich. 2018. Anthroponymic constituents of colonial toponyms: A comparison of Netherlands New Guinea and Portuguese Timor (as of 1955). *Onomastica Uralica* 12. 189–210.
- Tolcsvai Nagy, Gábor. 2017a. Bevezetés [Introduction.] In Gábor Tolcsvai Nagy (ed.), *Osiris Nyelvtan*, 23–71. Budapest: Osiris Kiadó.
- Tolcsvai Nagy, Gábor. 2017b. A nyelv emberi lényege. A magyarázat látóköralkotó változatai a nyelvtudományban [The human essence of language. Horizon-creating versions of explanations in linguistics]. In Gábor Tolcsvai Nagy (ed.), *Megértés és megértetés. A magyarázat a bölcsészettudományokban*, 38–62. A humán tudományok alapkérdései 1. Budapest: Gondolat Kiadó.
- Tóth, Valéria. 2001. *Névrendszertani vizsgálatok a korai ómagyar korban* [Onomastical analyses in the Early Old Hungarian Era]. A Magyar Névtudományi Társaság Kiadványai 6. Debrecen: Debreceni Egyetem Magyar Nyelvtudományi Tanszék.
- Tóth, Valéria. 2008. *Településnevek változástipológiája* [Change typology of settlement names]. A Magyar Névtudományi Társaság Kiadványai 14. Debrecen: Debreceni Egyetem Magyar Nyelvtudományi Tanszéke.
- Tóth, Valéria. 2011. Change typology of toponyms. *Acta Onomastica* 52. 179–189.
- Van Langendonck, Willy & Mark Van de Velde. 2016. Names and grammar. In Carole Hough (ed.), *The Oxford handbook of names and naming*, 17–38. Oxford: Oxford University Press.