Eötvös Loránd University Faculty of Humanities

PH.D. DISSERTATION

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Analogy in Lovari Morphology

ABSTRACT

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1 The hypothesis

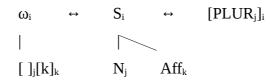
The present dissertation discusses three particular instances of variation in the nominal and verbal morphology of Lovari, a dialect of Romani belonging to the Vlax dialect group. The discussion is conducted in an analogical framework, relying only on surface forms and their relationships, using the notions of constructions and schemata (Goldberg 1995, Booij 2010), and taking them one step further.

My hypothesis is that when there is a weak point in the grammar of a language, variation may emerge and pattern-seeking may begin. These processes can be interpreted and explained by looking at surface forms and the possible analogical connections among them. I will present three examples of weak points taken from the morphology of Lovari, the masculine oblique base, the feminine plural oblique base and the past tense of verbs with a stem-final vowel, and explain them by finding and identifying the possible analogical sources of the variation.

2 Theoretical background

In order to clarify what a weak point is and explain the variation in the morphology of Lovari, I will use the notion of schemata as developed by Booij 2010. Firstly, I will further improve it by suggesting a circular structure instead of the original linear one; secondly, I will add the possibility of expressing different grades of strength through the thickness of the arrows marking the correspondences within a schema; and thirdly, I will combine schemata to show that they can be interconnected.

The regularities on a particular level of linguistic description can be expressed in terms of schemata. Although, closely related, schemata represent a more general notion than constructions. While the latter denote a pairing of form and meaning (Goldberg 1995, Jackendoff 2008), the former, in case of morphological schemata, contains phonological, syntactic and semantic information. For example, the schema for the Hungarian plural suffix -k would be the one shown in Figure 1, where the symbol \leftrightarrow stands for correspondence. The three kinds of linguistic information included here are the phonological form ω , the syntactic information S (that it is an affix), and the semantic information.



 $Figure \ 1$ Schema for the Hungarian plural suffix -k

Instead of this representation, based on the idea of Booij (2010), I suggest a circular representation of the schema, as sketched in Figure 2, where every kind of information is connected to the other two through correspondences, marked by arrows in both directions, as there is a relationship between the semantic and the phonological information as well.

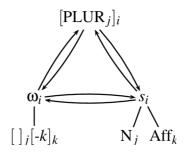


Figure 2
Improved schema for the Hungarian plural suffix -k

A schema like this becomes weaker when there is a disturbance in any of the correspondences. For example, if a new phonological form, ω'_i started to appear in the same syntactic position and with the same meaning as the plural -k, then this would weaken the overall strength of the schema, which would in turn trigger variation and the schema would become a weak point. It is also possible that more than one correspondence becomes unstable, like the locative case in Lovari, where the semantic component may pair up with a different set of phonological form and syntactic position, resulting in variation. Thus, a weak point in morphology can be represented by a schema where at least one of the correspondences is not mutually unambiguous.

We can draw up the combined schema, shown in Figure 3, consisting of two schemata,

for the locative case in Lovari. The upper section of the schema describes the agglutinative case marking: it contains the phonological form, for instance, *kheréste* 'in the house'; the morpho-syntactic information, which says that the case affix is attached to the oblique base of the noun; and the semantic component, which is the locative function in this case.

Sticking with the same example, there is an alternative way of expressing the locative, by means of a preposition: *andó kher* (the form is in fact made up of the preposition *andé* and the definite article *o*, but that is irrelevant here; the article immediately precedes the noun in every case, so the other form of the locative with case marking and including the definite article is *e kheréste*). The lower section of the schema shows the prepositional locative.

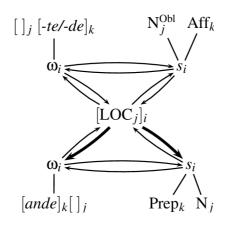


Figure 3
Schema for the locative case in Lovari

The thick arrows in this schema mean that the correspondences in that direction prevail in the expression of the locative case, so the prepositional form is more typical than the agglutinative one. However, the presence of both forms suggests that the locative function does not exclusively correspond to either the form represented by agglutinative case marking or the form represented by the preposition.

As another example, let us take the English past tense. There is a strong relationship between the semantic function "past tense" and the way of marking commonly called "regular" (the addition of the suffix *-ed*). If all English verbs inflected that way, there would only be one single schema for the past tense.

However, this is not the case. There are several alternative, so-called "irregular" verbs of

lower or higher frequency, making up smaller or bigger groups (*sing-sang*, *cut-cut*, *keep-kept* etc.). The existence of these verbs means that the correspondence between the past tense function and the marker *-ed* is not unambiguous, and neither is the correspondence between the past tense function and the morpho-syntactic property of affixation for the past tense. Several other morpho-syntactic ways and phonological forms are used in the formation of the English past tense, for example ablaut (*sing-sang*), vowel shortening (*keep-kept*) or reverse umlaut (*think-thought*).

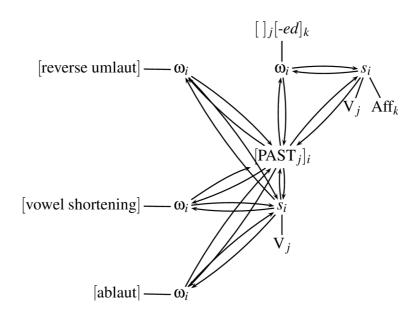


Figure 4
Schema for the English past tense

With so many schemata coalescing around the same semantic component, the correspondences become ambiguous and represent a weak point, where variation may emerge, although it does not necessarily do so. This probably depends on other factors, such as frequency, the extent of the embedded nature of the forms etc. However, if variation emerges, then we have every reason to think that there are patterns which are competing for the same function, or patterns which have some other kind of phonological or morpho-syntactic influence on the forms that begin to vary.

3 The phenomena

We will look at three weak points in the inflection of Lovari where variation occurs and where the surface forms and analogical effects might play a role in producing and maintaining this variation. These are the following.

- 1. The first weak point is the masculine oblique base. The oblique marker for masculine nouns is *-es-* in the singular and *-en-* in the plural, so the oblique bases of a word like *šēró* 'head' are *šērés-* and *šērén-*, respectively. However, this pattern does not exclusively prevail within the masculine nouns. It is weakened by the existence of another phonological form, containing *-os-* in the singular and *-on-* in the plural, so, for example, the oblique forms of the word *fóro* 'town' are *fōrós-* and *fōrón-*, respectively.
- 2. The second weak point can be found in the feminine class of nouns. The oblique marker in the singular is invariably -a: \check{sej} 'girl' $\sim \check{sej}\acute{a}$ -, $\check{z}uv$ 'louse' $\sim \check{z}uv\acute{a}$ -. The plural oblique marker is -an-, for example the plural oblique base of \check{sej} 'girl' is $\check{sej}\acute{a}n$ -. However, there is another phonological form for the feminine plural oblique marker, -en-, see for example $\check{z}uv$ 'louse', whose plural oblique base is $\check{z}uv\acute{e}n$ -. The two forms for the plural oblique marker represent two competing patterns.
- 3. The third weak point we will look at is in the verbal system of Lovari. The past tense of consonantal verbs shows a pretty regular nature. The perfective markers are either -*d* or -*l*-, depending on the nature of the stem-final consonant. Bilabials, velars and voiceless fricatives are followed by -*l* (with a strong palatalising tendency in Hungarian Lovari), whereas voiced alveolars are followed by -*d*-. However, there are verbs which are different in that their stem ends in a vowel, and not a consonant, and there is no existing, straightforward pattern for these verbs. With an unambiguous pattern missing, we will see that the past tense of consonantal verbs will only be one of the patterns used for the past form of vocalic verbs, and other patterns will emerge from other areas of the verbal system.

3.1 The masculine oblique base

We will go over six possible reasons for the weak point and the ensuing variation found in the masculine oblique base, and discuss to what extent there can be interaction between the

possible reasons and the variation. The six possible reasons are the following.

- 1. The position of stress. At first glance, it seems that there is at least some sort of correlation between the variation of the oblique forms and the fact that Lovari lacks a straightforward stress pattern. Stress itself seems to vary, especially in words with three syllables. While the stress pattern of disyllabic words (word-initial or word-final) seems to determine the form of the oblique base unambiguously, the varying stress pattern of trisyllabic words pairs up with the unpredictability of oblique forms.
- 2. The number of syllables. This is related to the position of stress to some degree, as oblique forms begin to vary when the number of syllables reaches three. The variation is especially ostensible on trisyllabic words with a stem-final /o/, while disyllabic words never vary.
- 3. The plural form. There are two possible nominative plural endings for masculine nouns. It seems that the plural ending can provide us with some clue as to the distribution of the oblique ending, but it can be predicted only partially.
- 4. The masculine adjectival ending *-ano*. There is a set of denominal adjectives whose ending is *-ano* in the nominative and *-ane* in the oblique. These adjectives are interesting because their nominative ending is identical to certain nouns which show a high degree of variation, but also more generally, due to the fact that their oblique form ends in /e/, while their nominative form ends in /o/, which is similar to what we find in one of the patterns for the masculine oblique base, where nouns ending in /o/ take the oblique forms *-es-/-en-*.
- 5. 2nd person singular verbal endings. The 2nd person singular present indicative ending of many verbs (those with a stem-final consonant) is *-es*, while the same form of the verbs belonging to the mediopassive class is *-os*. We will examine whether there is any correlation between the proportion of the type frequency of the consonantal verbs and the mediopassive verbs and the proportion of the masculine nouns with the oblique ending *-es-/-en-* and the oblique ending *-os-/-on-*.
- 6. The adverbial ending *-es*. Although the data here are particularly scarce, as a last possibility, we will briefly discuss whether the adverbs mostly derived from adjectives and ending in *-es* can influence the choice of the singular oblique ending in the masculine in favour of *-es*-, as opposed to *-os*-.

3.2 The feminine oblique plural base

We will examine examine two possible aspects that might influence the choice of the plural oblique ending for feminine nouns. These two aspects are the following.

- 1. The masculine oblique plural *-en-*. Besides *-an-*, the other variant of the feminine oblique plural marker is *-en-*. The form is identical to one of the variants of the masculine oblique plural marker. As the semantic content (oblique plural) is also identical, we would like to look into the possible analogical influence of the masculine oblique plural marker on the feminine one. As we will see, the *-en-* form is dominant in both the masculine and the feminine nominal paradigms, which suggests that the influence exists.
- 2. The feminine nominative plural suffixes. We will examine whether the nominative plural endings -i and -a have any connection to the appearance of one or the other plural oblique marker. We will find that there seems to be a relationship, which is made slightly more complicated by the fact that the singular ending of the nouns with the plural ending -i is -a and that of the nouns with the plural ending -a is often -i.

3.3 The past tense of vocalic verbs

The third weak point to be discussed is the past tense of vocalic verbs, that is, verbs with either a stem-final /a/ or /i/. We will examine two possible aspects that might influence their past forms. These two aspects are the following.

- 1. The stem-final /r/, /n/ and /v/ of consonantal verbs. Additional sounds or sound sequences, which also resemble certain derivational markers, appear in the past forms of vocalic verbs besides one of the regular past tense markers. We will explain their appearance with the lack of a straightforward pattern on the one hand, and the analogical effect of certain consonantal verbs on the other, and we will find that the relationship, at least in terms of type frequency, can clearly be seen.
- 2. The past forms of verbs with the derivational markers -*av* and -*ajv*-. We will look at the possible connection between the past forms of verbs with the derivational markers -*av* and -*ajv* and the past forms of vocalic verbs. We will find that the results are convincing for the -*i* stem verbs, but not so convincing for the -*a* stem verbs.

4 Structure of the dissertation

The dissertation consists of two main parts. The first part (Chapters 1-3) is of an introductory nature, while the second part (Chapters 4-7) presents the research itself.

Following the introduction in Chapter 1, Chapter 2 will provide a description of the Romani language. This includes its history, its research, as well as an outline of its dialects. These will be discussed both on an international level and with regard to the Hungarian scene. This chapter also contains the description of the current research, fieldwork and material on which the dissertation is based. In Chapter 3, I present the notion and significance of analogy in grammar in more detail, taking the following aspects under scrutiny: patterns, rules and categories; the role of similarity and frequency; prototypes and paradigms; and the idea of rich memory.

After a brief overview of the Lovari sound system in Chapter 4 at the beginning of Part Two, I will provide my analysis of the Lovari nominal and verbal system in Chapter 5, while also presenting the existing analyses and correcting them where necessary. In Chapter 6, I will introduce the nature of weak points, present and improve the notion of schemata as used by Booij (2010) and apply them to three different instances of variation in Lovari morphology. Finally, in Chapter 7 I will draw the conclusions and go through the possible directions of further research.

5 Results

After the discussion of the masculine oblique base, we will see that stress begins to vary in trisyllabic words, and the same lexical item can occur with different stress patterns. That is exactly where the oblique markers begin to vary, too, so the varying stress pattern pairs up with the unpredictability of oblique forms. We will also find that while the oblique forms of disyllabic nouns do not vary, the oblique forms of trisyllabic nouns with a stem-final /o/ do. Based on this, it seems that the number of syllables influences the choice of oblique forms: the higher the number of syllables is, the higher the possibility of variation is. As for the two possible nominative plural endings for masculine nouns, it seems that they can provide us with some clue as to the distribution of the oblique ending, but it can be predicted only

partially. When we look at the masculine adjectival ending -ano, we will see that the -ano ~ -ane (singular ~ plural) endings support the appearance of the oblique endings -es-/-en- for masculine nouns with a stem final /o/. In connection with the 2nd person singular verbal endings, we will compare the proportion of the type frequency of the consonantal verbs and the mediopassive verbs to that of the oblique forms -es-/-en- and -os-/-on-, and we will find that the forms with the vowel /e/ are in majority, which reflects the influence of the verbal system, more specifically the 2nd person singular forms of the verbs on the oblique forms of masculine nouns. If we look at the adverbs mostly derived from adjectives and ending in -es and their possible influence on the choice of the singular oblique ending in the masculine in favour of -es-, as opposed to -os-, we cannot come to a satisfactory conclusion, as the data here are particularly scarce.

At the end of the section dealing with the feminine oblique plural base, we will find that the possible aspects we take into consideration do seem to influence the choice of the plural oblique ending for feminine nouns. When we look at the masculine oblique plural *-en-*, which is identical to one of the variants of the feminine oblique plural marker, we see that the *-en-*form is indeed dominant in both the masculine and the feminine nominal paradigms, which suggests that the influence exists. We will also find that the other factor, the the feminine nominative plural endings *-i* and *-a* have connection to the appearance of the plural oblique marker *-en-* and *-an-*, with the front vowel /i/ predominantly predicting the marker *-en-* and the back vowel /a/ predominantly predicting the marker *-an-*.

After examining the third weak point in Lovari morphology, the past tense of verbs with either a stem-final /a/ or /i/, we find the following. On the one hand, we find that the proportions of the verbs with a stem-final /r/, /n/ and /v/ correspond to the proportions of the various sounds and sound sequences appearing in the past forms of vocalic verbs. This provides us with evidence that the lack of a straightforward pattern for the vocalic verbs triggers a search for an appropriate pattern, and the most frequent patterns are combinations of inserted sounds and sound sequences which resemble certain, existing markers and contain consonants which clearly reflect the patterns found among consonantal verbs. On the other hand, while we have convincing results for the -i- stem verbs, where we compared the proportion of consonantal verbs with a stem-final /r/ and verbs with the derivational marker -ajv- with the proportion of the perfective markers -sard- and -sajl- for -i- stem verbs, our results are not so convincing for the -a- stem verbs, where the proportion of consonantal verbs

with the derivational markers -av- and -ajv- is quite different from the proportion of the perfective markers -d- and -j(l)- for the -a- stem verbs. This means that this question will definitely need further investigation.

Through the example of the Lovari dialect of the Romani language I will demonstrate that variation is an essential part of language and that its study brings us closer to a better understanding of the nature of language change, language acquisition and the essential cognitive processes behind the structure and use of language.

The simultaneous presence and effects of two forces, regularisation on the one hand and differentiation on the other make make language a dynamic process. For the study of variation and gradience, analogy proves a useful tool, especially because even variation can be gradient. This is illustrated through the phenomena we encounter in the nominal and verbal system of Lovari. Within the nominal morphology, we see two distinct, internally uniform patterns for both the masculine oblique forms and the feminine oblique plural forms. On the one hand, uniformity means that we do not find mixed paradigms; on the other, uniformity also refers to what we called regularisation above: the presence of the marker *-en-* in the feminine plural oblique is variation in the feminine plural paradigms but uniformity in the wider category of nouns. This is what we might call gradience in the variation in a broader sense.

In a narrower sense, gradience in the variation can refer to intra-categorial phenomena, like in the case of the past tense of verbs. For consonantal verbs, the perfective marker depends entirely on the stem-final consonant. Uniformity like that is not present among the -a- stem verbs, where the stem-final vowel cannot predict the perfective marker unambiguously. The emerging markers introduce more uncertainty into the system, and for the -i- stem verbs, regularity and uniformity is further weakened, and variation is even more robust, with all the "regular" perfective markers eliminated.

Whereas the past tense is one dimension, we can also see the gradience of variation along another dimension, that of the verb classes. Both the present and past tense of consonantal verbs is fairly regular. If we move onto the -*a*- stem verbs, we can see that while the same regularity applies to the present tense, variation emerges in the past tense. For -*i*- stem verbs, variation already occurs in the present tense.

As our corpus increases, we are expecting to be able to extract data concerning token frequency as well, and further investigate our assumptions and other phenomena.

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