

# Csanád Bodó – Fruzsina Sára Vargha – Domokos Vékás

## Classifications of Hungarian dialects in Moldavia

### 1. Introduction<sup>1</sup>

This paper is about the classifications of the Hungarian dialects as spoken in the Moldavian region of Romania. Four different approaches will be discussed: firstly, the traditional classification based on the isoglosses of selected linguistic features. In this framework dialects are demarcated by bundles of arbitrarily selected isoglosses. Secondly, it will be illustrated that dialect areas, broadly comparable to, but far more differentiated than those of the traditional approach, can be outlined with the help of dialectometry as a tool for measuring dialect distances between language varieties. Thirdly, results of dialectometry will be compared with the speakers' beliefs on the geographical extent of their respective dialect area. The aim of this comparison is to validate the dialectometric method with subjective evaluation of linguistic similarity. Finally, the paper attempts to relate the former two approaches to speaker attitudes; these will be discussed concerning the aesthetic value of the Hungarian dialects in Moldavia. We carry out this analysis to see the interplay between objective measurements and subjective beliefs on linguistic similarity, as well as aesthetic factors influencing dialect identity in a highly heterogeneous language area.

The article is organized as follows: after presenting the databases used for the analysis (Section 2), traditional approaches will be discussed in Section 3. Sections 4 and 5 focus on the main three approaches of this study for dialect categorization, i. e. dialectometry (Section 4), as well as subjective evaluation of linguistic similarity and aesthetic categorization of dialects. Section 6 then summarizes the results with regard to the Moldavian speakers' Hungarian dialect identity.

### 2. The data

Two databases will be used in this study: firstly, the corpus of the Moldavian Csángó Dialect Atlas (hereafter referred to as MCsDA), gathered between 1949 and 1964 in 44 settlements (Gálffy–Márton–Szabó eds. 1991). This atlas, containing 1049 phonetic, morphological, as well as syntactic maps, has been digitized in the 2000s (cf. Bodó–Vargha 2007). Secondly, data come from the re-study of the MCsDA, the Moldavian Diachronic Hungarian Language Atlas (referred to henceforth as MDHLA). The latter project, started in 2005, includes not only the follow-up study of language use as documented in the 1950s and 1960s and recent years, but also a sociolinguistic module on the speakers' attitudes, beliefs on language use, bilingualism, and the varieties of their linguistic repertoire. Beside these, language choice patterns have been investigated in order to achieve a better understanding of the ongoing language shift process from Hungarian to Romanian in Moldavia.

Until now, 408 speakers have been sampled living in 26 settlements for the MDHLA project. The settlements, which we have chosen for sampling, are partially identical to those of the former atlas, but there are two minor differences between the projects. On the one hand, the settlements where language shift had reached its end point before the second project started were not been selected for the follow-up study. Practically, it means that we have found only monolingual speakers of Romanian in these communities. On the second hand, the density of settlement sampling has been altered in the MDHLA project; we have chosen more settlements in the valley of the Szeret (Siret) and Tatros (Trotuş) than in the earlier project. In these areas, the Hungarian-speaking population lives in homogeneously bilingual micro-regions with a dense settlement structure which makes these areas more suited for investigating spatial aspects of language contact and change. Our analysis, however, focuses on only sociolinguistic results of the MDHLA project (see also the

---

<sup>1</sup> The research was supported by the Bolyai János Research Fellowship (Hungarian Academy of Sciences) to Cs. Bodó.

articles by Bodó and Heltai, in this volume), because the processing of the phonetic, morphological and syntactic data is still in progress.

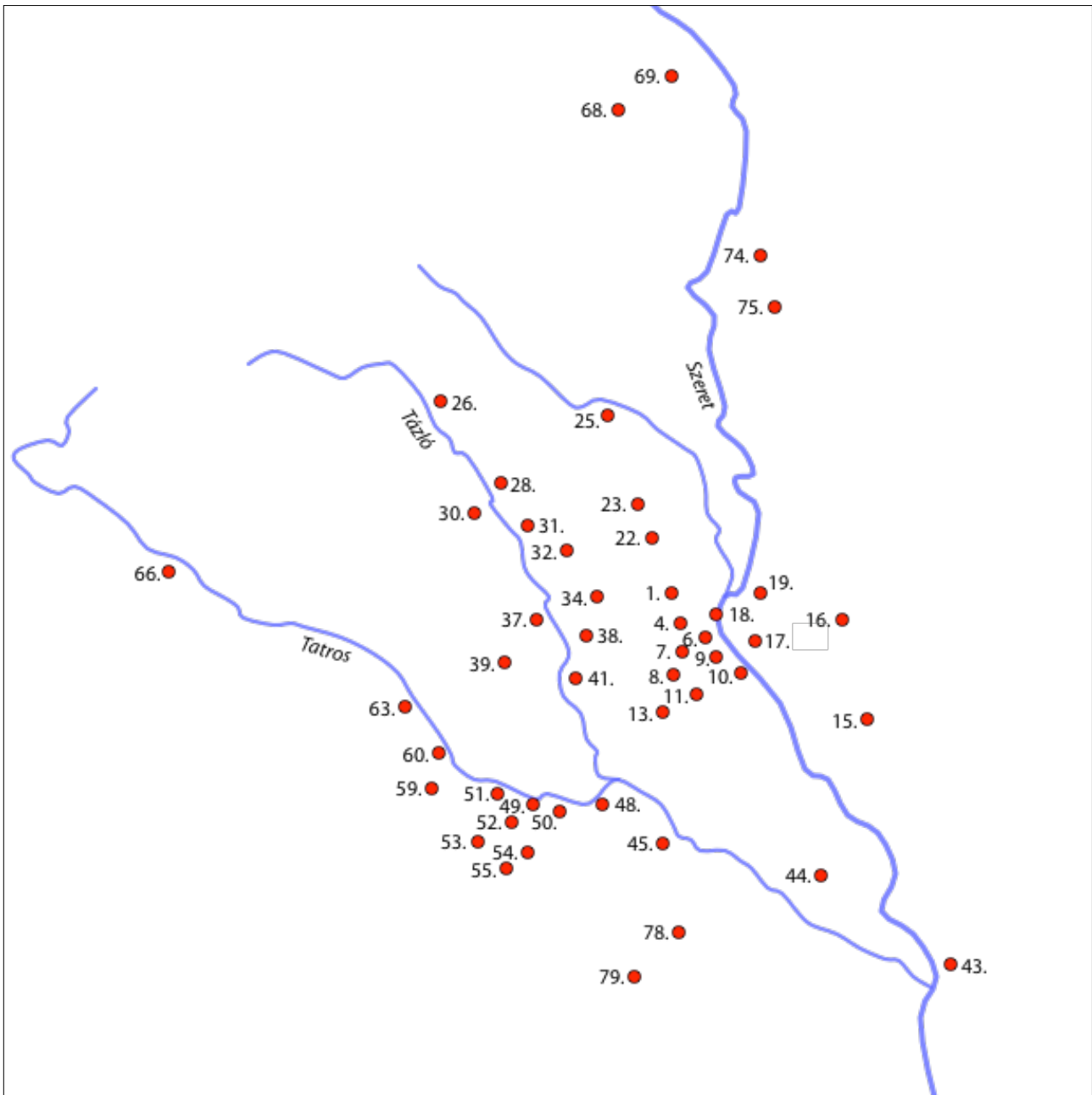
### 3. Traditional approaches

Traditional dialect classification often applies isoglosses as a means of dividing language areas into dialects. The use of isoglosses is dependent on the quality and quantity of data available on the language varieties. No wonder that the first comprehensive categorization has been provided based on the then ongoing work of the MCsDA. In this classification, Szabó T. divided the Moldavian dialects into three broad groups as follows (Szabó T. 1959):

1. Northern Csángó dialects spoken around the town Románvásár (Roman):<sup>2</sup> Szabófalva (Săbăoani), Kelgyest (Pildești), Balusest (Bălușești), Ploszkucény (Ploscuțeni)
2. Southern Csángó dialects spoken around the municipal town Bákó (Bacău): Bogdánfalva (Valea Seacă), Nagypatak (Valea Mare), Trunk (Galbeni), Szeketura (Pădureni), Gyoszény (Gioseni).
3. Székely Csángó dialects spoken along the Szeret (Siret), Tatros (Trotuș) and Tázló (Tazlău) rivers: all other settlements presented in Map 1 (see the Appendix for the codes of the map).

---

<sup>2</sup> Hungarian forms of place and river names are used throughout this article. An appendix is provided at the end of the article giving Romanian variants of place names. Concerning river names and a few town names, when Hungarian variants are first mentioned, Romanian forms are given in parentheses.



Map 1. Locations sampled in the MCsDA and the MDHLA projects

The author notes that there are a few transitional language varieties characterized by linguistic features of both the Southern Csángó and the Székely Csángó dialect group. He enumerates the dialect of Gyoszény, ascribed to the Southern Csángó group, but showing linguistic features typical of the Székely Csángó dialects, as well as that of Kákova, Klézse and Lujzikalagor, which carry features of Southern Csángó, although they have been characterized as belonging to the Székely Csángó dialects. While the linguistic indicators are not mentioned for this classification, an attempt can be made to identify the main isoglosses dividing the Southern Csángó and Székely Csángó dialect group. It seems to be the so-called *szelypelés* ‘lispings’ (Gálffy 1964a: 31–32), a stereotypical feature of the former group that distinguishes it from the adjacent Székely dialects. This phenomenon, also present in the Northern Csángó group, is the difference in the place and/or manner of articulation of some consonants, such as dialectal *c*, *z*, *sz* [tʂ, z, s] versus common Hungarian (including Székely Csángó) *cs*, *zs*, *s* [tʃ, ʒ, ʃ]; e. g. the Northern or Southern Csángó *kici* ‘small’ vs. Székely Csángó *kicsi* ‘ibid.’, Northern or Southern Csángó *zák* ‘bag’ vs. Székely Csángó *zsák* ‘ibid.’, Northern or Southern Csángó *szok* ‘many’ vs. Székely Csángó *sok* ‘ibid.’ These

representative isoglosses reflect settlement history (for the use of community histories in drawing dialect boundaries cf. Kretzschmar 2006); according to Benkő (1990), the earlier immigrants, who had settled in Moldavia at the end of the 13<sup>th</sup> century and the beginning of the 14<sup>th</sup> century, have spoken ‘lispings’ language varieties of their Hungarian-speaking source communities in the Central regions of Transylvania, and present-day Northern and Southern Csángó dialects descend from them. However, these dialects are used by only a minority of the Hungarian-Romanian bilingual population in Moldavia. The vast majority are speakers of non-‘lispings’ Székely dialects, as a result of immigration from the east-most regions of Transylvania populated by Hungarian-speaking Székelys. These Székely immigrants mostly settled in Moldavia in the 18<sup>th</sup> and 19<sup>th</sup> century, and as we will see below, they mixed up with the speakers of the Southern Csángó dialects in the valley of the river Szeret (cf. Baker 1997, Benő–Murádin 2002).

The very first categorization has been refined by including a detailed analysis of additional phonetic and morphological features as well as described in the Atlas (cf. Gálffy 1964a, 1964b, 1965; Márton 1974, Murádin 1965). Based on these phenomena, Gálffy states that there were only two main Hungarian dialects in Moldavia; the Northern Csángó and the Székely group. The previously mentioned Southern Csángó group formed a transition zone between the Northern Csángó and the Székely dialects (Gálffy 1964a: 33, 1965: 267–269).

While the linguistic distinctness was questioned in the case of the Southern Csángó dialect group, being partially similar to the Székely dialects, the latter group has been regarded as a more or less homogeneous entity in this classification. Recently, an attempt has been made to divide the Székely dialects into subgroups. Dezső Juhász suggested in his dialect categorization of the Hungarian language, that there seem to be three different subgroups in the Moldavian Székely dialect area (Juhász 2001: 308). These are the followings:

1. Western Moldavian Székely area between Lészped (Lespezi) and Balanyásza (Bălăneasa)
2. Southern Moldavian Székely area between Pakura (Păcurile) and Szászút (Sascut)
3. Central Moldavian Székely area neighboring the settlements of the Southern Csángós.

More recently, János Péntek has proposed that a new classification can be achieved in the central region of the Moldavian Hungarian dialect area by using all the data of the MCsDA which show geographic variation (Péntek 2006). His focus is on word geography; the analysis of 52 maps showing variations on the word level resulted in a scale from the dialect characterized by the most ‘Csángó’ – i. e. not Székely – words to the dialects having less and less Csángó words. The scale contains 12 settlements, with the same words in more than half of the 52 maps (listed in descending order of concord): Szabófalva (Săbăoani), Kelgyest (Pildești), Bogdánfalva (Valea Seacă), Trunk (Galbeni), Ploszkucény (Ploscuțeni), Kákova (Fărăoani), Klézse (Cleja), Nagypatak (Valea Mare), Gyoszény (Gioseni), Külsőrekecsin (Fundu Răcăciuni), Balusest (Bălușești), and Csík (Ciucani). These settlements are immediately followed by Dózsa, Lujzikalagor, Szeketura, and Magyarfalu. As it can be seen from the list, it contains mainly Northern and Southern Csángó settlements, albeit there are a few villages at the lower end of the scale, which are unequivocally ascribed to the Székely dialect group by former categorizations. These are Külsőrekecsin (Fundu Răcăciuni), Csík (Ciucani), Dózsa (Gheorghe Doja), and Magyarfalu (Arini). As a conclusion Péntek states that there was a dialect area along the river Szeret, differentiated from the Székely dialects. Nevertheless, the former area could be divided, based on the analysis of 30 further maps, into two subgroups, the Northern and the Southern dialect area. This classification was the first attempt to relate linguistic boundaries of Moldavian Hungarian dialects to the complete set of data available to the researcher, although the analysis was limited to lexical variation found in the corpus of the MCsDA.

#### 4. Dialectometry

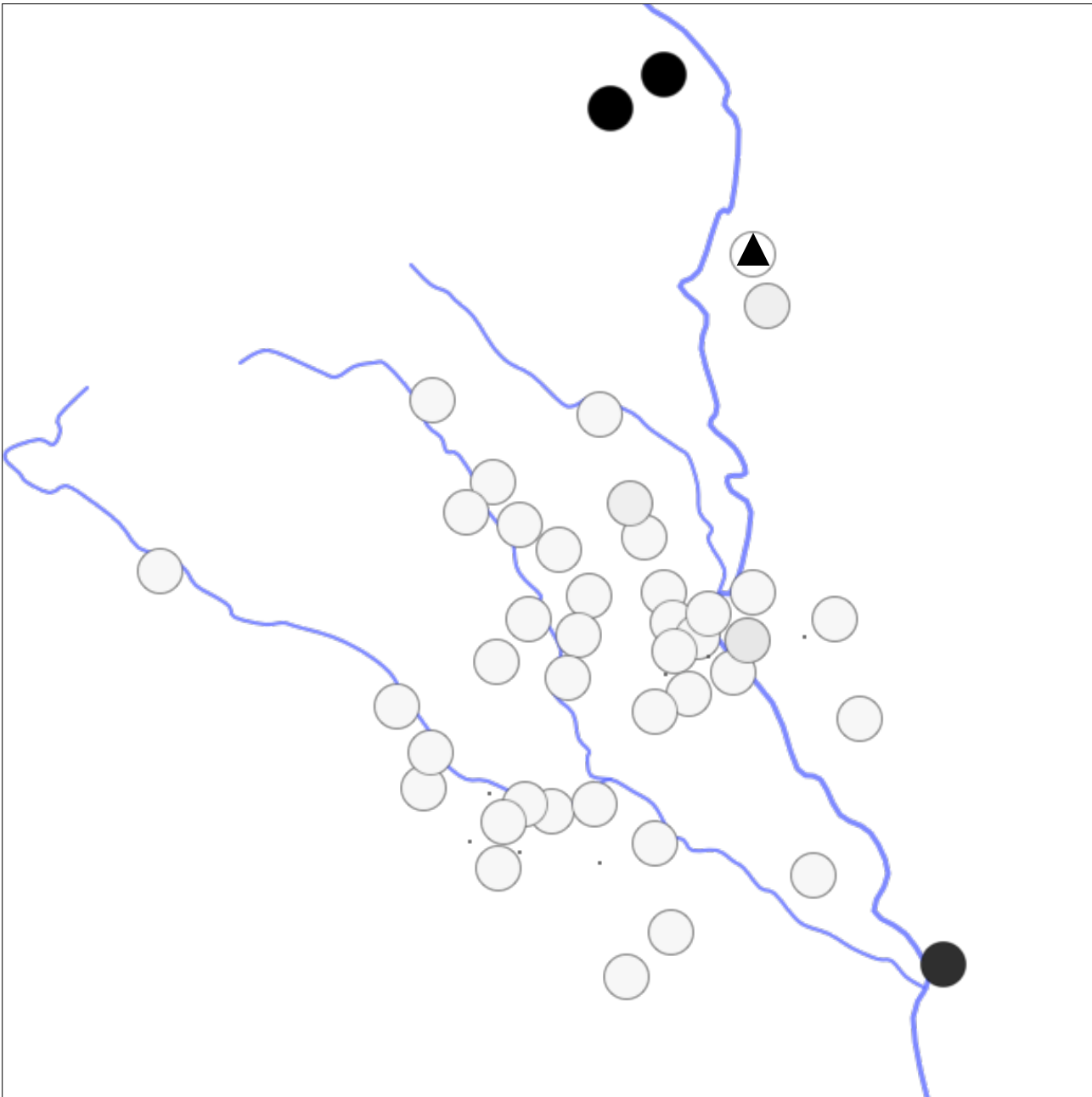
What we can deduce from the brief presentation of the attempts to classify the Hungarian dialects in Moldavia is that the definition of areas and their boundaries is quite complicated. On the one hand, inhabitants arrived to Moldavia from different regions of Transylvania (and possibly from other nearby regions of Hungary), on the other hand, there is a continual interaction between the initially different dialects. Classical methods aimed at retrieving dialect boundaries are based on the analysis of a few linguistic variables chosen by the researcher, inevitably favouring his preconceptions. Thus classical methods are less objective (see Nerbonne–Heeringa 2010), especially if the number of variables involved is limited. Another problem is – especially in territories where originally different Hungarian dialects are present in the same or neighbouring locations – that there are practically no overlapping isoglosses, which makes it nearly impossible to define dialect boundaries using the traditional methods.

The analysis of aggregate data, called *dialectometry*, makes dialect classification more objective. It aims to abstract a basic pattern from a linguistic atlas seen as a huge empirical database. The term was first used by Jean Séguy who created a map representing dialect distances between the locations of the Linguistic and Ethnographic Atlas of Gascogne (Atlas linguistique et ethnographique de la Gascogne). The linguistic distances were determined by categorical data analysis (1973). Since the first application of such a method, several techniques have been developed (see also Chambers–Trudgill 1998: 137–140, Goebel 2006, Heeringa 2004). Lately the application of the Levenshtein algorithm (a string edit distance measurement) made the automatic comparison of words possible (strings of phonetic symbols) stored in appropriately digitised data sets. When comparing two words we calculate the number of operations needed to transform one string to another. That way we compare map by map the data collected at one location with data collected at other locations. The result of such comparisons is a similarity matrix showing how similar the collected data in one location are to data recorded in all other locations. In other words, linguistic similarity between every pair of locations is expressed by a numerical value or a percentage (for a detailed description of the method see Heeringa 2004, Nerbonne–Heeringa 2010, for its application to Hungarian dialect data see Vargha–Vékás 2009).

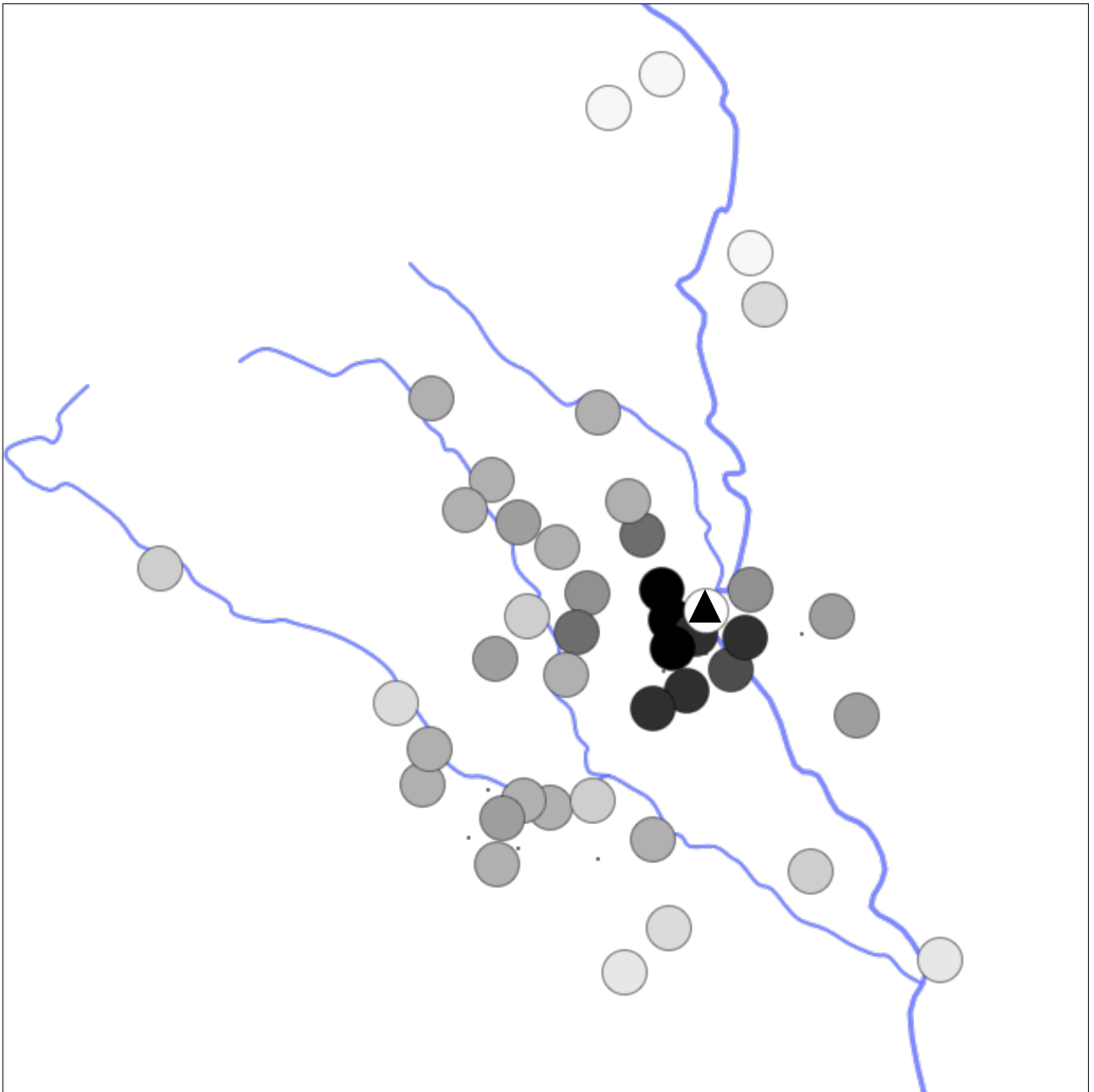
The similarity matrix can be mapped using different colours (ranging on a gradation scale e.g. from black to white) as a visualisation in space of the linguistic relations of different dialects. When a location is selected, the stronger the similarities, the warmer (or darker) the colour of other locations presented on the map becomes.

In the present study data from the 1049 maps and 43 locations of the Atlas of the Moldavian Csángó Dialects have been appropriately digitized, then analyzed with the Levenshtein algorithm. In the analysis the original narrow transcriptions were used, diacritical marks were considered separate segments, thus differences in diacritics (signalling slight pronunciation differences) were also taken into account. As data were collected more than fifty years ago, our maps might not reflect the present situation exactly. It would be therefore important in the future to replicate the research with newly collected dialect data and to compare the results. Such a comparison could be fruitful not only for the researchers of Hungarian dialects in Moldavia, but also might have general implications about linguistic variation and change.

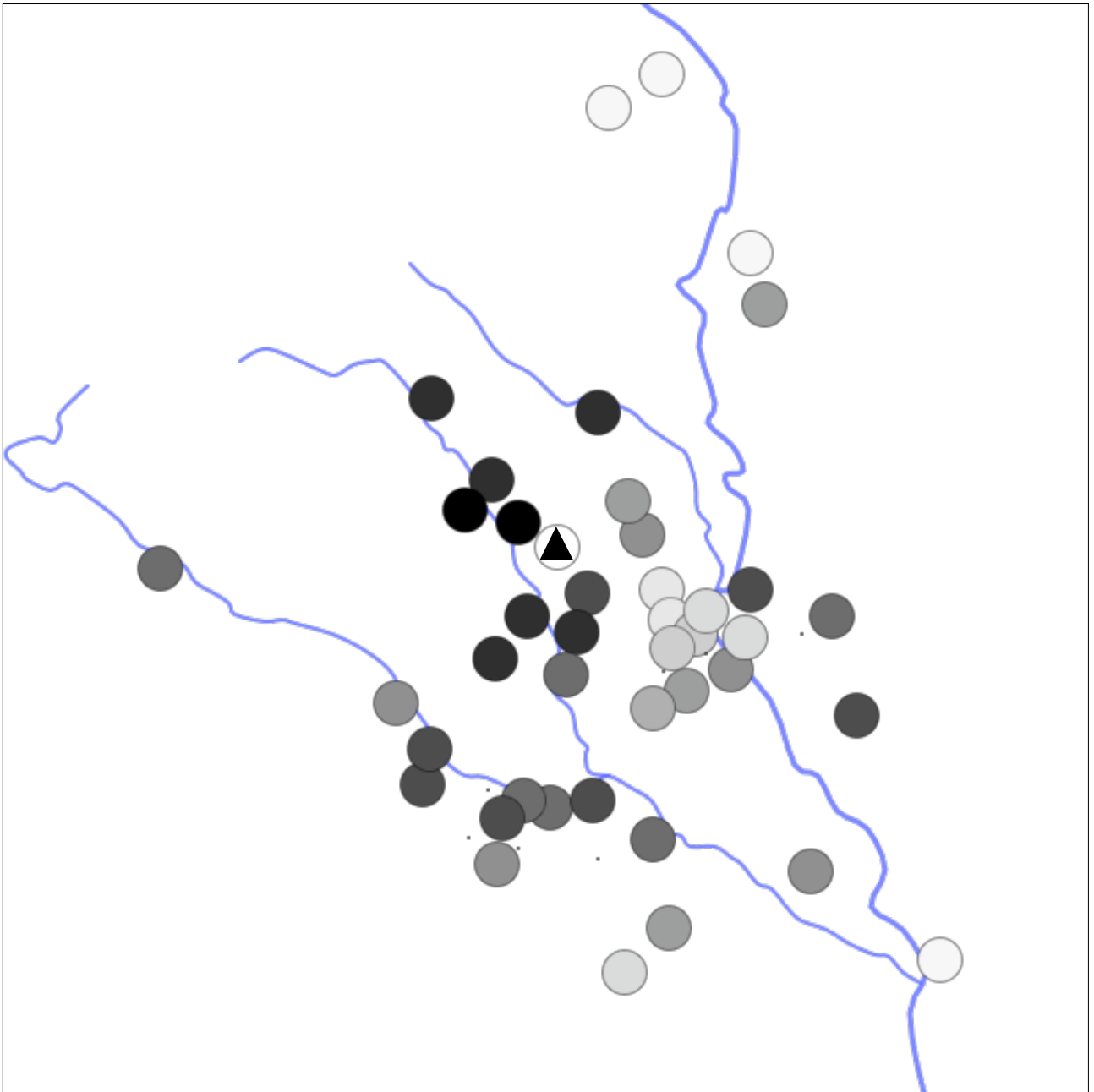
Based on the linguistic similarity relations revealed by the dialectometric analysis of the Hungarian dialects in Moldavia, four areas could be outlined. Each location was classified into one of these areas according to the geographic “center of gravity” of the locations with the highest similarity values (in relation to the selected settlement). On map 2 Balusest is selected, and the dark coloured locations represent the linguistically most similar localities (including the geographically distant Ploszkucény [Ploscuțeni]). On maps 3–5, the similarity relations of other locations, deemed representative of their respective dialect area, are shown.



Map 2. The Northern area as shown by linguistic similarity to Balusest (Bălușeșt) (symbolized by the black triangle)

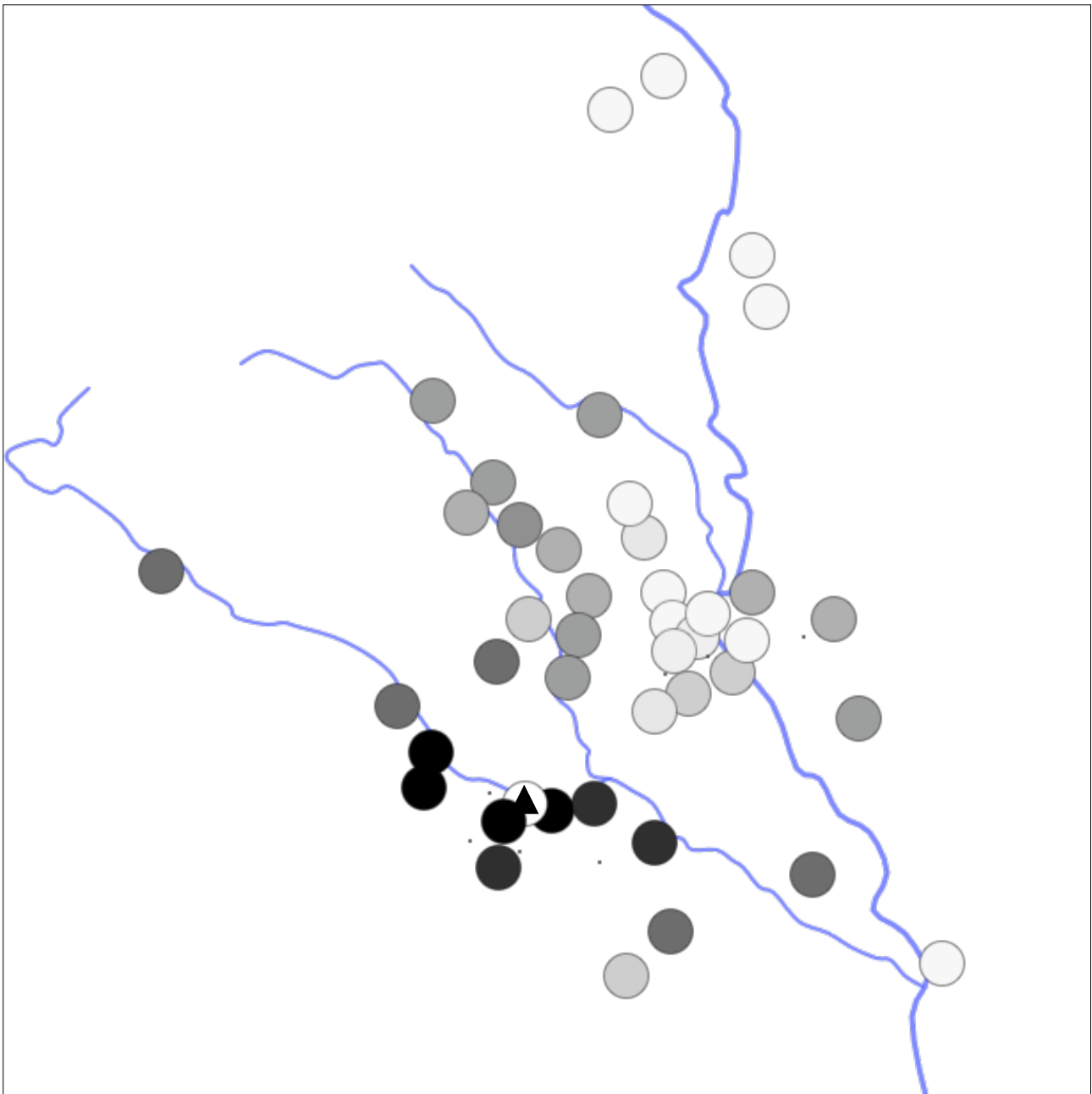


Map 3. The Szeret (Siret) area as shown by linguistic similarity to Trunk (Galbeni) (symbolized by the black triangle)



Map 4. The Tázló (Tazlău) area as shown by linguistic similarity to Esztrugár (symbolized by the black triangle)





Map 5. The Tatros area as shown by linguistic similarity to the town of Tatros (symbolized by the black triangle)

The four areas are:

1. Northern: Szabófalva (Săbăoani), Kelgyest (Pildești), Balusest (Bălușești), Ploszkucény (Ploscuțeni).
2. Along the river Szeret (Siret): Bogdánfalva (Valea Seacă), Nagypatak (Valea Mare), Trunk (Galbeni), Klézse (Cleja), Kákova (Fărăoani), Külsőrekecsin (Fundu Răcăciuni), Csík (Ciucani), Gyoszény (Gioseni), Dózsa (Gheorghe Doja)
3. Along the brook Tázló (Tazlău) : Pusztina (Pustiana), Frumósza (Frumoasa), Szoloncka (Tărăța), Szerbek (Florești), Esztrugár (Strugari), Gajdár (Coman), Esztufuj (Stufu), Gyidráska (Verșești), Balanyásza (Bălăneasa) and a few settlements geographically situated elsewhere, but linguistically related to this area: Szakatura (Pădureni), Lujzikalagor (Luizi Călugăra), Ketris (Chetriș), Lábник (Vladnic), Lészped (Lespezi), Kalugarén (Călugăreni).

4. Along the river Tatroș (Trotuș): Dormánfalva (Dărmănești), Pakura (Păcurile), Szalánc (Cireșoia), Újfalu (Satu Nou), Tatroș (Târgu-Trotuș), Gorzafalva (Oituz), Diószeg (Tuta), Onyest (Onești), Válászaka (Valea Seacă), Szászkút (Sascut Sat), Práléa (Pralea), Vizánta (Vizantea), Csügés (Ciugheș) and one more distant location, nearer to the river Szeret (Siret), Magyarfalva (Arini).

The southern-most location, Vizánta (Vizantea), is mostly related to the locations situated along the river Tatroș, even if its similarity relations are relatively feeble compared to the otherwise dialectally more homogeneous group (more detailed data are given in the Appendix). One location, Berzunc-Butukár (Berzunți) (originally two settlements) that is situated between the valley of Tázló (Tazlău) and the valley of Tatroș (Trotuș) is linguistically equally similar to both areas.

## 5. Subjective evaluations of dialects

In the MDHLA project inhabitants of 30 Moldavian settlements were questioned about the places where people speak a similar dialect to theirs in Moldavia. Almost three hundred (299) informants responded to this question. There was a possibility to enumerate several locations in the answer. The answers were compared to the outcome of the dialectometric analysis. In the analysis we also took into consideration the answers given to another related question: “Where is the most beautiful Hungarian dialect in Moldavia spoken?” This question was answered by 243 respondents.

Our hypothesis was that locations enumerated by the respondent would appertain to the same dialect area their settlement belongs to according to dialectometrical analysis (Gooskens and Heeringa [Gooskens–Heeringa 2004] found a broad correspondence between the judgments of dialect speakers and dialectometric distances). We also expected the prestige of the dialects to play a role: the more prestigious a locality, the more frequently it would be named, regardless of the dialect areas.

In the MDHLA project several locations missing from the MCsDA were also sampled. These have been classified, according to the dialectometric assignment of the neighboring dialects to an area, as follows: Somoska and Pokolpatak belong to the area of the valley of Szeret, because they are surrounded by settlements of this micro-region (e. g. Kűlsőrekecsin/ Fundu Răcăciuni, Csík/Ciucan, Klézse/Cleja). Similarly, the village of Újfalu (Satu Nou), assigned to the Tatroș (Trotuș) area by dialectometry, is adjacent to the settlements of Szőlőhegy (Pârgărești), Szitás (Nicorești) and Bahána (Bahna) which, therefore, have been regarded as belonging to the same area. Respondents could also name in their answers any settlement where Hungarian is spoken in Moldavia. It means that locations missing from the Atlas could be mentioned as well. These settlements have been classified according to the above scheme. When their neighbouring locations, as in the case of Máriafalva (Lărguța), belong to more than one dialect area (in this particular case both to area 2 and 3), the answers naming such settlements were not considered in the analysis.

For every location we counted the number of settlements enumerated by the respondents as having a similar dialect, grouping the mentioned places by dialect area. The informants could enumerate as many locations as they wanted to. When calculating the sum of the mentions of one location, a weighted counting was applied: if the location was enumerated first, it was multiplied by one, when it was mentioned second, it was multiplied by 0.9, by 0.8 the ones in the third place and so on. The weighted sum of the mentions of locations by dialect areas is given in Table 1. The first (Northern) area is missing due to the insufficient number of respondents (six informants in Szabófalva / Săbăoani and three in Kelgyest / Pildești). In these two locations only settlements belonging to the same area were mentioned. We also did not take into consideration the answers coming from Vizánta because of its relatively feeble linguistic relations with all other locations from the same dialect area.

Table 1. Sum of the mentions of locations grouped by dialect area in the answers to the question “Where is a similar Hungarian dialect spoken in Moldavia?”

	Mentioned Area 2 localities (valley of Szeret)	Mentioned Area 3 localities (valley of Tázló)	Mentioned Area 4 localities (valley of Tatros)	Sum of mentions
Informants of Area 2 (valley of Szeret)	239.0	16.7	3.1	258.8
Informants of Area 3 (valley of Tázló)	57.9	110.9	9.6	178.4
Informants of Area 4 (valley of Tatros)	1.8	0.3	259.3	261.4
All informants	298.7	127.9	272.0	698.6

In the 4<sup>th</sup> area (valley of Tatros / Trotuș) respondents named settlements almost exclusively from that particular area. There is a higher but not considerable proportion of the mentions of other areas in the valley of Szeret, while in the case of locations belonging to the 3<sup>rd</sup> area from the linguistic point of view (valley of Tázló / Tazlău) a greater proportion of the answers name settlements from the 2<sup>nd</sup> area (valley of Szeret). Data coming from the 2<sup>nd</sup> and 4<sup>th</sup> areas confirm our hypothesis that informants would judge those dialects to be similar that are linguistically nearer to theirs according to dialectometry. But how can we interpret the answers identifying a different area by the informants of the valley of Tázló / Tazlău?

Based on a more detailed analysis considering every location one by one we can see that among the settlements belonging to the valley of Tázló from the linguistic point of view there are four locations where settlements from the 2<sup>nd</sup> area are considered to be quite similar: Lujzikalagor (Luizi-Călugăra), Ketris (Chetriș), Lészped (Lespezi) and Gajdár (Coman). Data are given in Table 2.

Table 2. Answers in Lujzikalagor (Luizi-Călugăra), Ketris (Chetriș), Lészped (Lespezi) and Gajdár (Coman) to the question “Where is a similar Hungarian dialect spoken in Moldavia?”

	Mentioned Area 2 localities (valley of Szeret)	Mentioned Area 3 localities (valley of Tázló)	Mentioned Area 4 localities (valley of Tatros)	Sum
Lujzikalagor	22.6	3.9		31.5
Lészped	9.8	20	1.7	31.5
Gajdár	8.1	21	0.8	29.9
Ketris	3.9	2.9		6.8
All	44.4	47.8	2.5	94.7

Lujzikalagor (Luizi-Călugăra) and Ketris (Chetriș) are geographically situated nearer to the valley of Szeret (Siret) than to the valley of Tázló (Tazlăi), while Lészped (Lespezi) is located equally far from both dialect areas. Thus findings are compatible with our hypothesis that the answers could be different from the results of dialectometric analysis in case of the settlements that are geographically located closer to a different area. Nevertheless the similarity judgements in Gajdár (Coman) cannot be explained in this way.

Comparing the results to the answers to another related question: “Where is the most beautiful Hungarian dialect in Moldavia spoken?” the distribution of the answers (the naming of the same

dialect area the settlement in question belongs to) is more homogeneous. Data are given in Table 3. We did not consider the answers from the northern dialect area, where except for one mention of Trunk in the second place (village situated at the valley of Szeret / Siret) respondents named locations only from the same dialect area. Data collected at Vizánta (Vizantea Mănăstirească) were also omitted from the analysis for reasons explained above. The counting of the answers was made with the same methodology presented above.

Table 3. Answers to the question: “Where is the most beautiful Hungarian dialect in Moldavia spoken?”

	Mentioned Area 1 localities (Northern)	Mentioned Area 2 localities (valley of Szeret)	Mentioned Area 3 localities (valley of Tázló)	Mentioned Area 4 localities (valley of Tatros)	Sum
Informants of Area 2 (valley of Szeret)		97.2	14.5	0.9	112.6
Informants of Area 3 (valley of Tázló)	2	11	96	0.9	109.9
Informants of Area 4 (valley of Tatros)	2	4.7	1	88.3	96
All informants	4	112.9	111.5	90.1	318.5

It seems that in every dialect area informants considered the linguistically similar dialects beautiful. It is also important to state that self-naming is common in almost every settlement: informants usually mention their own dialect first. A more detailed analysis is required in the case of the four locations belonging to the dialect area of the valley of Tázló (Tazlău) where settlements from the 2<sup>nd</sup> area (valley of Szeret / Siret) are frequently named as having a similar dialect (see Table 2). At Lujzikalagor (Luizi-Călugăra), the only place where another dialect area prevailed in the answers to the first question, self-naming was high (8) and this time only settlements appertaining to the same dialect area were mentioned: Lészped / Lespezi (2), Pusztina / Pustiana (1.9), Frumósza / Frumoasa (0.8). Answers are quite similar in Lészped where the informants mostly judged their own dialect as being the most beautiful in Moldavia (11) and named Pusztina / Pustiana (2.8) and Lujzikalagor / Luizi-Călugăra (1) from the same area (while one person mentioned Tatros / Trotuș at the second place). In the case of Ketrís (Chetriș) only 6 informants responded to the question, three of them named Ketrís (Chetriș) first and three of them mentioned other locations appertaining to the first and to the second dialect area: Klézse (Cleja), Gyoszény (Gioseni), Szabófalva (Săbăoani). One respondent also mentioned Külsőrekecsin (Fundu Răcăciuni) at the second and Lujzikalagor (Luizi-Călugăra) at the third place. In Gajdár (Coman) Lujzikalagor (Luizi-Călugăra) took the first place (4) and Gajdár (Coman) itself was less popular (2.9), only one other linguistically similar location was named third, Esztufuj (Stufu). Other mentioned locations were taken from other areas: Szabófalva / Săbăoani (1), Klézse / Cleja (1), Nagypatak / Valea Mare (0.9), Kákova / Făřoani (0.8).

It can be deduced from the results presented above that respondents from locations situated between two dialect areas (Lujzikalagor / Luizi-Călugăra and Lészped / Lespezi) find those dialects more beautiful that came out to be closer to theirs in dialectometry. In Ketrís (Chetriș) – a settlement situated geographically nearer to another dialect area than its own – there were only six informants who responded to the question, but they named only one location (Lujzikalagor, third) belonging to the same dialect area. The other locations might have been chosen because of their perceived prestige. Klézse (Cleja) is mentioned in 12 locations (21.7 times in other locations and 9.9 times in Klézse / Cleja itself), it turned out to be the most popular among the settlements named in the answers. Lujzikalagor (Luizi-Călugăra), Külsőrekecsin ((Fundu Răcăciuni) and Gyoszény (Gioseni) are also among the most popular localities, they are mentioned in 11, 7 and 6 locations respectively.

In Gajdár (Coman) naming Lujzikalagor (Luizi-Călugăra) first might be explained also by the higher prestige of the latter locality and thus its dialect. Answers to the second question in Gajdár (Coman) follow the same pattern as those presented above for the first question concerning linguistic similarity. The geographic position of this locality, marginal within its dialect area, might play a role in the shaping of the results. Comparing this pattern to the answers in Vizánta / Vizantea Mănăstirească (a settlement relatively distant from the dialect area it belongs to according to dialectometry), the situation is quite similar. In Vizánta (Vizantea Mănăstirească) only one location was named from the same dialect area, the nearest location, Prálea / Pralea (second), there were two instances of self-naming in the first place, and the other mentioned settlements were taken from other dialect areas: Gyoszeny / Gioseni (1), Klézse / Cleja (1), Nagypatak / Valea Mare (0.7), Pusztina / Pustiana (2), Ketris / Chetriş(0.8).

Prestige relations might be reflected by the choice of the locations named in the answers to the second question: the more prestigious a dialect, the more often it is considered to be beautiful. The most popular location is Klézse (Cleja), as it was mentioned in 12 settlements, closely followed by Lészpéd (Lespezi), Lujzikalagor (Luizi-Călugăra) and Pusztina (Pustiana) that were mentioned in 11-11 and in 8 locations respectively. It is also important to note that Szabófalva / Săbăoani (a town sized locality), which is linguistically distant from all the locations involved in the analysis, was mentioned four times at the first place in three locations: Szőlőhegy (Pângăreşti), Ketris (Chetriş) and Gajdár (Coman).

## 6. Conclusions

Dialectometry leads to a new type of classification of Hungarian dialects in Moldavia as opposed to the traditional methods based on isoglosses. Four areas emerged from the analysis: 1. Northern; 2. valley of the river Szeret (Siret); 3. valley of the brook Tázló (Tazlău); 4. valley of the river Tatos (Trotuş). These dialect areas do not correspond entirely to their geographic counterparts, a number of settlements situated geographically nearer to the river Szeret (Siret) being classified, according to dialectometry, in the area named the valley of Tázló (Tazlău).

Answers to the question “Where is a similar Hungarian dialect spoken in Moldavia?” coincide, as a rule, with the dialectometric classification: informants tend to name locations that are in the same dialect area. The geographic position and prestige of the settlements might be also reflected in the answers: in some locations that are situated between two areas (or geographically located far from the central zone of their dialect group) the settlements enumerated by the informants are not necessarily always from the same dialect area. In settlements where the prestige of the local dialect is lower, localities from other dialect areas are named more often.

The aesthetic value of the dialects was measured by the answers to the question: “Where is the most beautiful Hungarian dialect spoken in Moldavia?” Our findings have provided information about the Hungarian dialect identity of Moldavian bilingual speakers. The following generalizations can be drawn from these data: self-naming is common; in general, settlements from the same dialect area are enumerated, even in Lujzikalagor (Luizi-Călugăra) where the informants classified themselves in a different dialect area than which they belong to based on the analysis. One can deduce from the results that in Hungarian-speaking communities language users have a positive attitude towards their own dialect.

## References

BAKER, Robin

1997 On the origin of the Moldavian Csángós. *The Slavonic and East European Review* 75. 658–680.

BENKŐ Loránd

1990 *A csángók eredete és települése a nyelvtudomány szemszögéből*. Magyar Nyelvtudományi Társaság, Budapest

BENŐ Attila – MURÁDIN László

2002 Csángó dialect–Csángó origins. In: DIÓSZEGI László (ed.): *Hungarian Csángós in Moldavia: Essays on the Past and Present of the Hungarian Csángós in Moldavia*. Teleki László Foundation–Pro Minoritate Foundation, Budapest, 163–175.

BODÓ Csanád – VARGHA Fruzsina Sára

2007 *Jelenségtérképek A moldvai csángó nyelvjárás atlaszából*. Eötvös Loránd Tudományegyetem, Budapest. CD-ROM.

CHAMBERS, Jack K. – TRUDGILL, Peter

1998 *Dialectology*. Cambridge University Press

GÁLFFY Mózes

1964a A moldvai csángó nyelvjárás hangrendszere. *Nyelv- és Irodalomtudományi Közlemények* (Editura Academiei Republicii Socialiste România, Cluj) 8. 31–44.

1964b A moldvai csángó nyelvjárás mássalhangzó-rendszere. *Nyelv- és Irodalomtudományi Közlemények* (Editura Academiei Republicii Socialiste România, Cluj) 8. 157–167.

1965 A moldvai csángó nyelvjárás fonéma-variáns rendszere. *Nyelv- és Irodalomtudományi Közlemények* (Editura Academiei Republicii Socialiste România, Cluj) 9. 257–269.

GÁLFFY Mózes – MÁRTON Gyula – SZABÓ T. Attila (eds.)

1991 *A moldvai csángó nyelvjárás atlasza*. Vol. 1-2. Magyar Nyelvtudományi Társaság, Budapest

GOEBL, Hans

2006 Recent Advances in Salzburg Dialectometry. *Literary and Linguistic Computing* 21. 411–35.

GOOSKENS, Charlotte – HEERINGA, Wilbert

2004 Perceptive evaluation of Levenshtein dialect distance measurements using Norwegian dialect data. *Language Variation and Change* 16. 189–207.

HEERINGA, Wilbert

2004 *Measuring Dialect Pronunciation Differences using Levenshtein Distance*. Groningen Dissertations in Linguistics 46. Groningen.

JUHÁSZ Dezső

2001 A nyelvjárési régiók. In: KISS Jenő (ed.): *Magyar dialektológia*. Osiris Kiadó, Budapest, 262–316.

KRETZSCHMAR, William A., Jr

2006 Art and science in computational dialectology. *Literary and Linguistic Computing* 21. 399–410.

MÁRTON Gyula

1974 *Igetövek, igei jelek és személyragok a moldvai csángó nyelvjárásban*. Kriterion, Bukarest

MURÁDIN László

1965 Az *ly* hang a moldvai csángó nyelvjárásban. *Nyelv- és Irodalomtudományi Közlemények* (Editura Academiei Republicii Socialiste România, Cluj) 9. 79–98.

NERBONNE, John – HEERINGA, Wilbert

2010 Measuring Dialect Differences In: SCHMIDT, Jürgen Erich – AUER, Peter (eds.): *Language and Space. An International Handbook of Linguistic Variation: Theories and Methods.* Mouton – de Gruyter, Berlin, 550–567.

PÉNTEK János

2007 A belső tagolódás kérdése a moldvai magyarban a szóföldrajz alapján. *Nyelv- és Irodalomtudományi Közlemények* (Editura Academiei Republicii Socialiste România, Cluj) 50. 31–55.

SÉGUY, Jean

1973 La dialectométrie dans l’atlas linguistique de la Gascogne. *Revue de linguistique romane* 37. 1–24.

SZABÓ T. Attila

1959 A moldvai csángó nyelvjáráskutatás története. *Magyar Nyelvjárások* (Debrecen) 5. 3–41.

VARGHA Fruzsina Sára – VÉKÁS Domokos

2009 Magyar nyelvjárási adattárak vizsgálata interaktív dialektometriai térképekkel. Előadás a Magyar Nyelvtudományi Társaság felolvasóülésén. 2009. március 24. [http://bihalboacs.hu/eloadas/dialektometria\\_20090324.pdf](http://bihalboacs.hu/eloadas/dialektometria_20090324.pdf)

Appendix. Linguistic similarity of Moldavian Hungarian-Romanian bilingual communities (dialectometry)

Hungarian locality name	Romanian locality name	Locality code	Dialect area	Similar localities	Similarity ‰
Bahána	Bahna	54	4		
Balanyásza	Bălăneasa	41	3	38, 39, 34, 31, 52	788, 782, 766, 764, 761
Balusest	Bălușești	74	1	68, 69, 43, 17, 23	743, 742, 718, 602, 583
Berzunc-Butukár	Berzunți	39	3–4	38, 31, 52, 59, 41	796, 788, 787, 783, 782
Bogdánfalva	Valea Seacă	1	2	4, 18, 13, 6, 7	783, 756, 754, 752, 749
Csik	Ciucani	11	2	10, 13, 6, 7, 38	822, 796, 788, 781, 766
Csügés	Chiugeș	66	4	52, 59, 45, 63, 60	813, 811, 809, 808, 799
Diószeg	Tuta	50	4	52, 49, 55, 59, 60	846, 841, 833, 833, 828
Dormánfalva	Dărmănești	63	4	66, 59, 45, 60, 52	808, 807, 806, 801, 799
Dózsa	Gheorghe Doja	10	2	11, 13, 6, 7, 38	822, 778, 777, 771, 768
Esztrugár	Strugari	32	3	31, 30, 28, 39, 37	790, 777, 772, 772, 770
Esztofuj	Stufu	38	3	34, 39, 31, 41, 19	806, 796, 792, 788, 774
Frumósza	Frumoasa	26	3	28, 25, 31, 30, 66	813, 796, 796, 794, 773
Gajdár	Coman	34	3	38, 39, 31, 22, 41	806, 771, 770, 769, 766
Gorzafalva	Grozești	55	4	50, 49, 52, 59, 60	833, 826, 825, 822, 810
Gyidráska	Verșești	37	3	39, 32, 38, 31, 41	781, 770, 767, 763, 752
Gyoszény	Gioseni	17	2	18, 11, 7, 13, 10	736, 731, 726, 726, 725
Kákova (Forrófalva)	Fărăoani	6	2	7, 11, 13, 4, 10	795, 788, 786, 781, 777
Kalugarény	Călugăreni	75	3	38, 32, 34, 31, 39	708, 706, 701, 699, 698
Kelgyest	Pildești	68	1	69, 74, 43, 17, 23	771, 743, 716, 608, 591

Hungarian locality name	Romanian locality name	Locality code	Dialect area	Similar localities	Similarity ‰
Ketris	Chetriş	19	3	31, 38, 15, 28, 26	775, 774, 769, 767, 767
Klézse	Cleja	7	2	13, 6, 11, 4, 10	804, 795, 781, 774, 771
Külsőrekecsin	Fundu Răcăciuni	13	2	7, 11, 6, 10, 4	804, 796, 786, 778, 774
Lábnik	Vladnic	16	3	28, 25, 31, 15, 19	781, 780, 771, 765, 764
Lészped	Lespezi	25	3	28, 26, 31, 16, 52	803, 796, 792, 780, 778
Lujzikalagor	Luizi-Călugăra	22	3	34, 38, 10, 15, 23	769, 759, 737, 737, 737
Magyarfalva	Arini	15	4	52, 59, 60, 38, 19	783, 779, 775, 770, 766
Nagypatak	Valea Mare	4	2	1, 6, 7, 13, 11	783, 781, 774, 774, 761
Onyest	Oneşti	48	4	52, 59, 50, 45, 49	829, 828, 821, 816, 813
Pakura	Păcurile	60	4	59, 52, 49, 50, 45	839, 836, 831, 828, 823
Ploszkucény	Ploscuţeni	43	1	74, 69, 68, 17, 22	718, 716, 716, 640, 622
Pokolpatak	Valea Mică	9	2		
Prálea	Pralea	78	4	49, 45, 52, 50, 60	783, 778, 778, 776, 775
Pusztina	Pustiana	28	3	26, 25, 31, 30, 52	813, 803, 803, 794, 785
Somoska	Şomuşca	8	2		
Szabófalva	Săbăoani	69	1	68, 74, 43, 17, 18	771, 742, 716, 595, 580
Szakatura	Pădureni	23	3	22, 34, 38, 32, 39	737, 724, 716, 704, 704
Szalánc (Templomfalva)	Cireşoaia	59	4	52, 60, 50, 45, 48	851, 839, 833, 828, 828
Szászkút	Sascut-Fântânele	44	4	49, 50, 45, 78, 59	788, 777, 775, 771, 770
Szerbek	Floreşti	31	3	28, 26, 25, 38, 32	803, 796, 792, 792, 790
Szítás	Nicoreşti	53	4		
Szólóhegy	Pârgăreşti	51	4		
Szoloncka	Tărăţa	30	3	28, 26, 31, 32, 25	794, 794, 785, 777, 768
Tatros	Târgu Trotuş	49	4	50, 60, 52, 59, 55	841, 831, 829, 828, 826
Trunk	Galbeni	18	2	1, 4, 7, 11, 13	756, 744, 744, 738, 736
Újfalu	Satu Nou	52	4	59, 50, 60, 45, 48	851, 846, 836, 831, 829
Válészáka	Valea Seacă	45	4	52, 59, 50, 60, 49	831, 828, 827, 823, 820
Vizánta	Vizantea Mănăstirească	79	4	78, 50, 55, 49, 45	745, 739, 735, 731, 727