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# Are there speakers of the /ɛ/ vs. /e/ dialect in Budapest?<sup>1</sup>

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## Introduction

Standard (Budapest) Hungarian has a high and a low short front vowel, but certain dialects also have a mid /e/ as shown in Table 1. We call the Standard Hungarian system the one-*e* system, and the dialects with /e/ and /ɛ/ the two-*e* system. In Standard Hungarian, the words [menték] ‘you guys are going’ and [mentek] ‘they went’ are homophones, but the two-*e* dialects distinguish [mentek] ‘you guys are going’ and [menték] ‘they went’.

Table 1: Standard Hungarian front vowels (Siptár & Törkenczy 2000: 51) with the /e/ of two-*e* dialects added

	[–round]		[+round]	
[+high, –low]	i	i:	y	y:
[–high, –low]	»e«	e:	Ø	Ø:
[–high, +low]	ɛ			

According to Papp (1966:69), historically, /e/ may have been more generally used. One of the most significant changes in post-15th century Hungarian dialects was the lowering of /e/ toward /ɛ/. In the north-eastern dialect and in the Transylvanian Mezőség (modern-day Romania), the lowering eliminated /e/. The one-*e* Standard Hungarian variety emerged as a result of the one-*e* north-eastern dialect (spoken around the towns of Sárospatak and Sátoraljaújhely) becoming the standard variety by the second half of the 19th century.

Currently, approximately half of Hungarian speakers have a two-way /i:/:ɛ/ opposition in the category of short front unrounded vowels, and the number of

1 A considerable portion of this paper draws significantly on Hattyár, Kontra, and Vargha (2009).

such speakers —under considerable pressure to speak Standard Hungarian— is growing. Most dictionaries, grammars, and schoolbooks present only the Standard Hungarian /ɛ/, although a seven volume dictionary of Standard Hungarian indicates /e/ and /ɛ/ in the pronunciation section of headwords in its entries (*A magyar nyelv értelmező szótára*, 1959-1962).

Most language cultivators and many schoolteachers have divided thoughts about the phenomenon. While they usually promote the use of the dialect phoneme in speech, they would not accept its use in writing. Although there is no general survey on the phenomenon, it is safe to assume that a speaker using /e/ and /ɛ/ is marked as speaking dialect, and may well be exposed to negative comments by speakers of Standard Hungarian. There is considerable stigma attached to two-*e* speech, especially in the case of certain phonetic realizations. School-age children in-migrating to Budapest, especially if their /ɛ/ is considerably lower than Budapest /ɛ/, are usually mocked by their peers and adults. With some notable exceptions, two-*e* speech is not heard from stage actors or newscasters on radio and television. A professional Hungarian radio newscaster from a region where two-*e* speech is acceptable on radio, such as Vojvodina, Serbia, would not be hired by a radio station in Hungary because of her/his ‘unbroadcastable’ accent (Kontra 2010). It is not, however, necessary to know a two-*e* dialect to communicate with its speakers; context typically provides enough clues to enable communication between dialect and standard speakers.

## Research questions

A sociolinguistically important historical-demographic factor concerning Budapest is the large-scale in-migration from the provinces, several of them two-*e* regions, starting after World War II and continuing to this day. In this paper, we address the following research questions:

- i. In a ‘same or different?’ listening test, do respondents report that [hed<sup>y</sup>eš] ‘pointed, sharp’ and [hed<sup>y</sup>ɛš] ‘mountainous’ have different meanings?<sup>2</sup>
- ii. What are the effects of the independent variables on the results of the ‘same or different?’ test?
- iii. To what extent do the linguistic biographies of respondents explain the responses of in-migrants and Budapest natives?
- iv. Are there respondents who, in various kinds of production data, show evidence that they know the /ɛ/ ~ /e/ phonemic distinction?

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<sup>2</sup> Following Siptár and Törkenczy (2000), the symbol *d<sup>y</sup>* denotes the voiced palatal stop as in *gyár* ‘factory’; *š* represents the voiceless palatal fricative as in *sár* ‘mud’.

## Data and methods

### The Budapest sociolinguistic interviews

The data analyzed in this paper were gathered for the Budapest Sociolinguistic Interview (BSI) project in 1987-1989 (see Kontra 1995; Kontra & Borbély 2010; and <http://www.nytud.hu/buszi/>).<sup>3</sup> In version 2 of BSI (henceforth: BSI-2), 50 interviews were recorded in 1987. In versions 3 and 4 (BSI-3 and BSI-4), 200 interviews were recorded in 1988 and 1989, with a random sample of Budapest residents stratified by age, sex, and education. This paper concentrates on the data from BSI-2.

### Methodology

Using headphones, each respondent was administered a ‘same or different?’ listening test recorded by a native two-*e* speaker. The instructions for the test lasted 3 minutes and 13 seconds. They included five trials, mock test items which were administered to teach respondents to tell apart words with the same meaning from those with different meanings. Trials included such pairs as *ráz* [ra:z] ‘(it) shakes’ ~ *rész* [re:z] ‘copper’ (different), a minimal pair, and *papír* [papi:r] ~ *papir* [papir], pronunciation variants meaning ‘paper’ (same). Twenty-one pairs of words were tested, including [hed<sup>y</sup>eš] ‘pointed, sharp’ and [hed<sup>y</sup>eš] ‘mountainous’. The F1 for [e] was 462 Hz (F2 = 2175 Hz); for [ɛ] it was 574 Hz (F2 = 2085 Hz). The test lasted 2 minutes and 35 seconds.

### The independent variables

There are four independent variables: sex, age, occupation, and in-migration. Of the 50 participants in BSI-2, 29 were male and 21 were female. 11 respondents were between age 15 and 17, 15 were between 18 and 23, 10 were between 24 and 50, and 12 were aged 50 years and more. The ages of two sales clerks are unknown. With regard to the occupation, 10 respondents were teachers (aged 50 years and more), 10 were university students, 10 were sales clerks, 10 were blue-collar workers, and 10 were vocational trainees (aged 15–16).

In-migration is operationalized because it may furnish data for the investigation of dialect maintenance and loss in the urban ‘melting pot’ of Budapest.

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<sup>3</sup> The BSI project is the only sociolinguistic study of Hungarian urban speech. The BSI database was created by linguists in the Department of Sociolinguistics of the Research Institute for Linguistics, Hungarian Academy of Sciences, between 1987 and 2007. From 1985 through 2010 the project was directed by the first author.

Seventy years ago, Bárczi (1943) observed that /e/ was used only by in-migrants to Budapest, and perhaps by their children. Elekfi (1966:238) noted some degree of levelling of /e/ and /ɛ/ in the speech of in-migrants from two-*e* regions. We know from Payne (1980) that the generation of in-migrants to which a respondent belongs may have a significant effect on his/her acquisition of phonological rules. For instance, the acquisition of Philadelphia ‘short-a’ takes at least two generations for those born in the Philadelphia suburb King of Prussia. However, in-migration interacts importantly with age: Children seven or under will almost certainly acquire a new dialect perfectly, people over 14 years old almost certainly will not, and accent acquisition between ages 7 and 14 is unpredictable (Chambers 2003:179). Table 2 shows our respondents by in-migration.

*Table 2: BSI-2 respondents by in-migration*

<i>In-migration status</i>	<i>n</i>
born and raised in Budapest	29
born and raised in Budapest; spent considerable time in the provinces before age 14	4
in-migrated between 7 and 14 years old	3
in-migrated after age 14	14
	21

There is no significant correlation between in-migration and sex ( $N = 50$ ,  $\chi^2$  [ $df = 1$ ] = 1.602,  $p = 0.206$ ). Five teachers, six students, three sales clerks, and seven blue-collar workers are in-migrants; all vocational trainees are natives of Budapest.

## Results

Of the 50 respondents in BSI-2, 14 judged the two test words as different in meaning. When a respondent responded ‘different’, the interviewer asked for the word meanings in order to decide whether or not these were identical to those of true two-*e* speakers. Typical answers included ‘one is hilly, the other sharp, like a pencil’ and ‘a region can be mountainous, and a pencil can be sharp’.

However, the perception data are not fully reliable. First, our fieldworkers did not ask for the meaning difference in all the cases when a ‘different’ response was given (of the 14 respondents who marked the words ‘different’, 8 explained the difference in the way two-*e* speakers do). Second, ex post facto we realized that a one-*e* speaker who hears the two acoustically different words on the tape as the ‘same’ can also mark the two words as ‘different’ because even a

one-*e* speaker can recall that a pencil can be sharp (Hungarian spelling: *hegyes*) and a region can be mountainous (Hungarian *hegyes*). In this case, the obvious answer is ‘different’. In order to check the reliability of our BSI-2 data from a quota sample ( $N = 50$ ), we compared them to the BSI-3 and BSI-4 data of the representative sample ( $N = 200$ ). In BSI-2, 36 respondents (72%) gave ‘same’ answers; in BSI-3 and BSI-4, 142 respondents (71%) did so. Thus, the answer to our first research question is that some speakers in Budapest do know perceptually the /e/ versus /ɛ/ dialect distinction.

The chi-square statistic for the effect of two independent variables (age and occupation) cannot be computed because some cells have an expected count less than five. Sex has a significant effect: 10 out of 21 females (47.6%) judged the words ‘different’, but only 4 males out of 29 (13.8%) did so ( $\chi^2 [df = 1] = 6.913$ ,  $p < 0.01$ ). We have no explanation to offer for this effect.<sup>4</sup>

In-migration has a significant effect on judging the meaning of the test words: Only 17% of Budapest natives but 43% of the in-migrants judged [hed<sup>y</sup>eš] ( $F_1 = 462$  Hz) and [hed<sup>y</sup>ɛš] ( $F_1 = 574$  Hz) as ‘different’ ( $N = 50$ ;  $\chi^2 [df = 1] = 3.964$ ,  $p < 0.05$ ). This, then, can be regarded as some evidence of the maintenance of dialect competence in the ‘melting pot’ of Budapest. Table 3 demonstrates the judgments of the meanings of the two test words by the categories of in-migration. As can be seen, 8 of the 14 respondents answering ‘different’ are in-migrants; another respondent spent considerable time in the provinces before age 14.

*Table 3: Judgements of the meaning of the test words [hed<sup>y</sup>eš] ‘pointed, sharp’ and [hed<sup>y</sup>ɛš] ‘mountainous’ according to native/in-migrant status*

	<i>Born and raised in Budapest</i>	<i>Considerable time in provinces &lt;14</i>	<i>In-migrated between 7-14 years old</i>	<i>In-migrated &gt;14 years</i>	<i>total</i>
‘same’	24 (82.8%)	3 (75%)	1 (33.3%)	8 (57.1%)	36 (72%)
‘different’	5 (17.2%)	1 (25%)	2 (66.7%)	6 (42.9%)	14 (28%)
total	29 (100%)	4 (100%)	3 (100%)	14 (100%)	50 (100%)

When looking in their biographies for explanations of the in-migrants’ responses, we assumed that those who in-migrated from two-*e* regions (e.g. marked • in Figure 1) would perceive and/or produce the difference while those who came from one-*e* regions would not (e.g. marked □ in Figure 1). Let us now look at the biographies of the 17 in-migrants and 4 natives of Budapest respondents

4 However, 10 of the 29 males are 15-16-year-old vocational trainees, none of whom are in-migrants. Eight of the 21 females are teachers.

who spent considerable time in the provinces. One of the 3 who in-migrated between age 7 and 14 came from a one-*e* region; another came from a region where some two-*e* effect can be assumed. As regards those who in-migrated after age 14, all 6 who gave a ‘different’ answer came from a two-*e* region. One more respondent among those giving a ‘different’ answer migrated from region to region but was exposed to a considerable amount of two-*e* dialects.

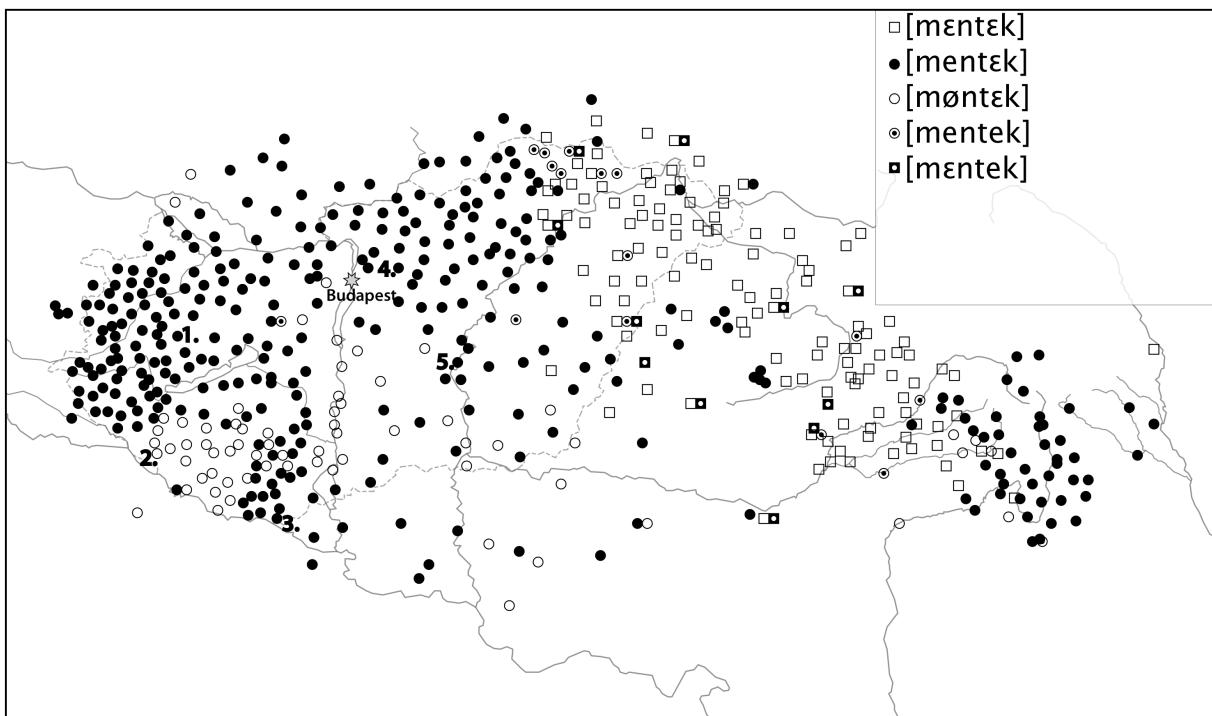


Figure 1: Map of dialect realizations of Standard Hungarian *mentek* ‘(they) went’ in the *Atlas of Hungarian Dialects* (Deme & Imre 1968-1977)

As regards the 12 respondents in the top right three cells giving a ‘same’ answer, their biographies explain fairly well why they judged the test words as meaning the same thing. The respondent who migrated to Budapest between ages 7 and 14 came from the north-east and had never lived in a two-*e* region. The biographies of seven of the eight respondents who in-migrated after age 14 support our hypothesis: They came to Budapest from one-*e* regions. Finally, none of the three Budapest-born respondents who spent considerable time in the provinces spent it in two-*e* regions.

In the case of Budapest natives who judged the test words to be ‘different’, we may hypothesize that s/he may have been exposed to two-*e* speech at some point, or that s/he did not hear any difference between the acoustically different test words but nonetheless realized that *hegyes* can have two different meanings.

One of our respondents (no. 7213) reported the effects of earlier exposure, as shown in the simplified transcript in (1).

1. *Respondent*: Oh, one means mountainous region and the other something sharp. I probably pronounce both words the same way. However, if I am angry, I would use the ‘á’ sound [i.e. the low ε].

*Interviewer*: Does this perhaps have to do with your parents?

*Respondent*: I think so. My mom comes from Veszprém [i.e. a two-*e* region] and so does my grandma.

Another respondent (no. 7511) judged the words to be the ‘same’ but the interviewer, a trained linguist and phonetician, reported that the respondent could both hear and produce the /e/ ~ /ε/ difference but did not know how he had learned to do so. However, the respondent had spent several summer holidays with grandparents in a two-*e* region.

We also have several reports supporting the second hypothesis. For instance, one respondent (no. 7105) could neither perceive nor produce the /e/ ~ /ε/ difference, but realized that *hegyes* can have two different meanings, (2).

2. *Respondent*: One can be a mountainous region, the other a sharp pencil.

*Interviewer*: Yes, but you marked them as meaning the same.

*Respondent*: Yes, ’cause I didn’t hear the pronunciation very clearly.

All in all, we conclude that the perceptual ‘different’ responses given by the natives of Budapest are less well explained by their linguistic biographies than are those given by the in-migrants.

*Table 4: The mean F1 and F2 values in Hz of the vowels in lehet [lehet] ‘maybe’ in five locations in Hungary (marked 1, 2, 3, 4 and 5 in Table 4 and in Figure 1); respondents were aged 63–68 in the mid-1960s (save the 30-year-old respondent in Szenta); males are marked ○ and females are marked ●*

	1 Somló- vásárhely, Veszprém County ○	2 Szenta, Somogy County ○	3 Old, Baranya County ●	4 Hévízgyörk, Pest County ●	5 Tiszakécske, Bács-Kiskun County ○					
	F1	F2	F1	F2	F1	F2	F1	F2	F1	F2
[e]	600	1837	682	1505	509	2120	527	2352	497	1918
[ε]	703	1625	695	1505	706	1852	667	2271	585	1724

Before we turn to our final research question, which concerns evidence of the /e/ ~ /ε/ distinction in different types of production data, let us review some typical dialect realizations of /e/ and /ε/ as demonstrated by the *Talking Books of the Atlas of Hungarian Dialects* (MNyHK). Table 4 reports the mean F1 and F2

measurements of the vowels in the word *lehet* [lehɛt] ‘maybe’ in five locations across Hungary. In the speech of those respondents who make a distinction between the two vowels, the difference is very clear in both the F1 and F2 measurements. The respondent in Szenta, however, pronounced both vowels almost alike; the F1 and F2 measurements are almost identical. Figure 2 demonstrates nine tokens of the vowels in [lehɛt] as pronounced by a 64-year-old woman in Old, Baranya County. As shown in Table 4, the F1 differences between the vowels are around 100 Hz or more (save the data in Szenta), therefore we also expect a 100 Hz difference in the F1 values of /e/ and /ɛ/.

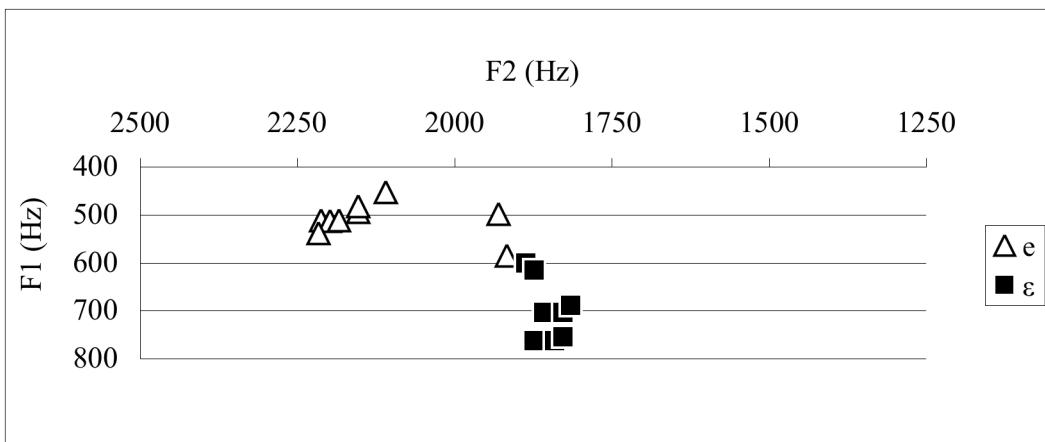


Figure 2: The vowels in nine tokens of [lehɛt] ‘maybe’ as pronounced by a 64-year-old woman in Old, Baranya County

Do respondents in Budapest provide production evidence that they know the /e/ ~ /ɛ/ phonemic distinction? Yes. We analyzed the vowels in two oral sentence-completion tasks (nos. 5850 and 5920) with Praat.<sup>5</sup> Two of the 14 respondents who judged the test words as ‘different’ pronounced the vowels with a considerable difference in F1, as reported in Table 5. Both respondents migrated to Budapest from a two-e region, the female at age 26 and the male at age 19. To compare contextual styles, we measured 5 tokens of *lehet* [lehɛt] ‘maybe’ in the guided conversations of each of the 14 respondents who judged the test words ‘different’, one minimal pair [lehɛt] ‘maybe’ ~ [lehɛtɛt:] ‘may have been’ (item 1740), the word [lehɛt] in word list style (item 2490), and the same word in a slow reading passage (item 3480).

5 *Az olyan vidéket, ahol sok a hegy, ... vidéknek hívjuk* ‘A region with a lot of mountains is called a ... region’, expected answer: [hedyɛš] ‘mountainous’; *Adj egy kést, amelyiknek nem tompa a vége, hanem ...* ‘Give me a knife that has a ... tip, not a blunt one’, expected answer: [hedyɛš] ‘sharp’. Item numbers identify the tasks (and hence the analyzed pieces of data) in the BSI database; see Kontra and Borbély (2010).

*Table 5: F1 and F2 values in Hz for the vowels in [hed<sup>y</sup>eš] ‘mountainous’ in oral sentence-completion task no. 5850*

Respondent no.	F1 for /e/	F2 for /e/	F1 for /ɛ/	F2 for /ɛ/
7314 (female)	589	2394	684	2180
7330 (male)	564	2385	693	2257

Table 6 reports the differences in F1 for [leh<sup>e</sup>t] in the four contextual styles and those for [hed<sup>y</sup>eš] in the oral sentence-completion task. A minus value (–) shows differences in the expected direction according to Labov’s audiomonitoring axiom (1972:99, 208); positive values indicate unexpected differences. The interview results report the means of 5 tokens; other styles are represented by one token. The first 14 respondents in the Table judged [hed<sup>y</sup>eš] ‘sharp’ and [hed<sup>y</sup>eš] ‘mountainous’ ‘different’; the final one (no. 7411) judged them ‘same’.

*Table 6: F1 differences in Hz in [leh<sup>e</sup>t] in four contextual styles and in [hed<sup>y</sup>eš] produced in an oral sentence-completion task*

Respondent no.	Minimal pair	Word list	Slow reading passage	Oral sentence-completion	Interview
7103	–12	5	81	73	–42
7105	–12	0	21	16	–8
7125	–49	0	–102	193	34
7202	137	24	94	7	26
7203	–24	0	74	–31	46
7204	13	0	–21	127	–4
7206	–100	0	–2	–7	2
7213	13	126	53	–32	–23
7303	–37	–27	19	0	..
7314	0	0	–1	–95	19
7330	–13	–42	–51	–129	4
7408	–74	0	–147	18	–10
7505	12	40	1	24	7
7514	–124	–53	–13	24	–30
7411	0	–121	–26	–31	–95

The data in Table 6 do not support the Labovian expectation that the more informal the style, the more vernacular (i.e., two-e) forms will be used by speakers. That said, the ‘chaotic’ character of our data may be due, at least in part, to

the difference between the interview (5 tokens for each speaker) and the other styles (one token only per speaker). It is noteworthy, however, that the natives of Budapest (e.g. respondent no. 7105, and to some extent nos. 7213 and 7408) and the in-migrants from one-*e* regions (e.g. respondent no. 7303, from the north-east) exhibit limited style differences compared to the in-migrants from two-*e* regions (e.g. respondents nos. 7125, 7314, and 7330). Respondent 7206, who was born and raised in a two-*e* region, made a 100 Hz difference in the minimal pair style, but no differences in the other styles.

A remarkable respondent is no. 7411, whose word list and interview data suggest a two-*e* speaker, but he was born and raised in Kispest, a working-class district of Budapest. He produced the difference in F1 shown in Tables 6 and 7, but he marked the test words as ‘same’. Such speakers exhibit near-mergers (Labov 1994; see also Kontra 1993 for Hungarian-Americans). Respondent 7511, described above, also is a near-mergerer. These two respondents belong to cell b in Labov’s (1994:354) four-cell table of the minimal pair test, that is, they pronounce two words differently but judge them to be the same in meaning.

*Table 7: The F1 and F2 measurements of the vowels in lehet [lehet] ‘maybe’ and szembe [sembe] ‘face to face’ in interview style, respondent no. 7411<sup>6</sup>*

<i>F1 in [sem-]</i>	<i>F2 in [sem-]</i>	<i>F1 in [-be]</i>	<i>F2 in [be]</i>
670	1825	724	1608
640	1725	757	1508
582	1871	707	1641
<i>F1 in [le-]</i>	<i>F2 in [le-]</i>	<i>F1 in [-het]</i>	<i>F2 in [-het]</i>
640	1676	740	1676
674	1825	757	1725

## Conclusion

The quota sample of BSI-2 used here does not make it possible to generalize the results to the residents of Budapest, but we have shown the existence of important social differences in the use or non-use of two-*e* speech in the city, which has traditionally been described as a one-*e* variety. Further analyses based on the representative sample of BSI-3 and BSI-4 could eliminate this shortcoming in generalizability.

6 Because fewer than 5 tokens of *lehet* were used by the respondent in the interview, three tokens of *szembe* were also analyzed. The recorded audio material did not allow a better choice with regard to the consonantal context.

### *References*

- A magyar nyelv értelmező szótára*, 7 volumes. 1959-1962. Budapest: Akadémiai Kiadó.
- Bárczi, Géza. 1943. *Jegyzetek a Budapesti népnyelvről. Különlenyomat a Magyar Népnyelv 4. Kötetéből*. Debrecen: Magyar Népnyelvkutató Intézet.
- Chambers, J.K. 2003. *Sociolinguistic Theory: Linguistic variation and its social significance*. 2<sup>nd</sup> ed. Oxford: Blackwell.
- Deme, László and Samu Imre (eds.). 1968-1977. *A magyar nyelvjárások atlasza*. I-VI. Budapest: Akadémiai Kiadó.
- Elekfi, László. 1966. Köznyelvi kiejtésünk és az Értelmező Szótár. In L. Országh (ed.), *Szótártani tanulmányok*. Budapest: Tankönyvkiadó. 227-278.
- Hajdú, Mihály, Miklós Kázmér, Csanád Bodó, Fruzsina Sára Varga, Lehel Ambrus, Elvira Eris, and Mariann Pukánszky. 2005-2009. *Magyar Nyelvjárási Hangoskönyv (MNyHK) 1-9. CD-ROM*. Budapest: ELTE Magyar Nyelvtörténeti, Szociolingvisz-tikai, Dialektológiai Tanszék.
- Hattyár, Helga, Miklós Kontra, and Fruzsina Sára Varga. 2009. Van-e Budapesten zért ő? *Magyar Nyelv* 105: 453-468.
- Kontra, Miklós. 1993. The messy phonology of Hungarians in South Bend: A contribution to the study of near-mergers. *Language Variation and Change* 5: 225-231.
- Kontra, Miklós. 1995. On current research into spoken Hungarian. *International Journal of the Sociology of Language* 111: 9-20.
- Kontra, Miklós. 2010. *Hasznos nyelvészeti*. Somorja: Fórum Kisebbségkutató Intézet.
- Kontra, Miklós and Anna Borbély. 2010. *A Budapesti Szociolingvisztikai Interjú (BUSZI-2) egydimenziós tesztadatai*. Budapest: MTA Nyelvtudományi Intézet, Élőnyelvi Kutatócsoport. [http://www.nytud.hu/buszi/B2\\_tesztadatok.pdf](http://www.nytud.hu/buszi/B2_tesztadatok.pdf)
- Labov, William. 1972. *Sociolinguistic patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, William. 1994. *Principles of linguistic change. Vol. 1. Internal Factors*. Oxford: Blackwell.
- Papp, István. 1966. *Leíró magyar hangtan*. Budapest: Tankönyvkiadó.
- Payne, Arvilla. 1980. Factors controlling the acquisition of the Philadelphia dialect by out-of-state children. In W. Labov (ed.), *Locating language in time and space*. New York: Academic Press. 143-178.
- Siptár, Péter and Miklós Törkenczy. 2000. *The phonology of Hungarian*. Oxford: Oxford University Press.