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EDUCATED POZNAŃ SPEECH 30 YEARS LATER¹

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Abstract

The study compares educated Poznań speech on the basis of a study by Witaszek-Samborska (1985, 1986) and a corpus compiled 30 years later. The features of Poznań speech, examined on 14 speakers from the corpus, include: voicing of obstruents before heterolexical sonorants (*okszyszg_emoćji*), realization of word-final <-ą> as [-ɔm] (*idom tom drogom*), realization of /stʂ tʂ dz/ as /st̪ʂ̪ t̪ʂ̪ dz̪/ (*szczelać*), the presence of the velar nasal [ŋ] before a heteromorphemic velar plosive /k/ (*okienko*), realization of word-final <-ej> as /-i(j)/ or /-i(j)/ (*lepi(j)*), presence of prothetic [w] before word-initial /ɔ/ (*łojciec*), presence of voiced /v/ in clusters with preceding voiceless consonants (*trwały*), and realization of <-śmy> as [zmi] (*słyszeliśmy*). The results suggest a change in Poznań speech and point towards dialect levelling.

¹ We would like to thank our audience at the 47th Poznań Linguistic Meeting, in particular to Katarzyna Dziubalska-Kończak, Raymond Hickey and Peter Trudgill for their comments and suggestions. We have included the implicational hierarchy and the result is, we believe, a stronger article. Our three anonymous reviewers deserve special mention as their insights prompted exacting revisions to our original manuscript. Last but not least, we gratefully acknowledge the financial support of the Ministry of Higher Education which contributed to corpus collection (grant number: 0113/NPRH2/H11/81/2013).

1. Introduction

One of the recurring themes of dialect research is the issue of dialect levelling, i.e. the disappearance of regional or social dialectal variants in favour of standard dialect forms. In the study of American English dialects, Labov et al. (2006) found that local varieties tend to disappear in favour of dialects whose range is much wider.

The aim of this contribution is twofold: to compare Poznań speech within the time span of 30 years and to establish the prevalence of different pronunciation variants in a corpus-based study. Two works by Witaszek-Samborska (1985, 1986) will serve as the point of reference.

The variables considered in the present study, and discussed and illustrated with examples in the following section, have received scholarly attention across various research strands, e.g. Gruchmanowa (2006 for an overview of phonetic as well as grammatical features of Poznań speech), Gussmann (1973 for the discussion of nasality, 1992 for the discussion of voicing), Rubach (1996 for the discussion of voicing), Michalski (2008 for the discussion of voicing), Bloch-Rozmej (1997 for the discussion of nasality), and have also been tested experimentally (e.g. Poznań-Cracow voicing in Strycharczuk 2012 and Urban et al. 2017). From the normative perspective, the issue of variation in pronunciation is discussed by Zajda (1977), Mizerski (2000) and Dunaj (2006). Madejowa (1987) carried out several studies in the spirit of prescriptive linguistics with a view to establishing the norms for the pronunciation of nasal vowels as well as consonants, including consonant sequences (Madejowa 1990, 1993). Variation in casual speech has been previously studied by, e.g. Dunaj (1985) who investigated the realization of consonant clusters in spoken Polish, and Madelska (2005) who registered the speech of Polish students in spontaneous interactions and documented variability in pronunciation in the form of a dictionary.

2. Poznań speech

Polish has two pronunciation norms: the Warsaw speech and the Poznań-Cracow speech, also known as the north-eastern and south-western dialects, respectively. The two varieties differ from each other with respect to several variables.

The current shape of Poznań speech is strongly related to the history of the region as well as the structure and development of the city (Gruchmanowa 2006). External factors which affected the Poznań variety of Polish include, among others, the annexation of the region to Prussia, the process of germanization, elementary education in German from 1887, Polish-German bilingualism at the beginning of the 20th century, the administrative, artisanal and mercantile character of the city, the lack of Polish intelligentsia as well as a limited influence of the literary language. After 1945 Poznań changed its character and became an industrial and educational centre, resulting in an influx of inhabitants from the region. Consequently, the structure of the society changed: the population of craftsmen and tradespeople diminished

whereas the representation of the working class and intelligentsia increased. The new social structure entailed language change. The Poznań dialect is one of the casual varieties used in the city on a daily basis. It is characteristic not only of uneducated speakers (largely of rural origin), but also of a part of intelligentsia (an older generation of speakers over 60 demonstrating old Poznań features and a generation of 35–60 year-olds maintaining speech variants of the previous generation to varying degrees) (Gruchmanowa 2006).

The speech of Polish intelligentsia in Poznań was characterized, among others, by Witaszek-Samborska (1985, 1986). Polish intelligentsia was defined as a population with secondary or higher education, and comprised representatives of such professions as chemists, pharmacists, economists, engineers, librarians, teachers, secretaries and others. All of the respondents were divided into three groups: the oldest generation (aged 60–80; later referred to as group I), the middle generation (aged 35–59; later referred to as group II), the youngest generation (aged 20–34; later referred to as group III).

Witaszek-Samborska draws a line between the features characteristic of the Poznań dialect present in all generations (widespread features) and those found only in the speech of older speakers (recessive features). The former group includes the following (Witaszek-Samborska 1986: 31ff; transcription added):

1. pre-sonorant voicing as in *ptak odfrunął* ‘the bird flew away’ /ptakɔtfrunɔw/ → /ptagotfrunow/, *szybkość roweru* ‘the speed of the bicycle’ /ʂipkɔɕtɛrɔvɛru/ → /ʂipkɔɕdzɛrɔvɛru/, *początek nocy* ‘the beginning of the night’ /pɔɕɕɔntɛknɔɕsi/ → /pɔɕɕɔntɛgnɔɕsi/
2. the realization of word-final /ɔ̃/ as [ɔm], rather than [ɔw̃], e.g. *idą tą drogą* ‘they are going this way’ [idɔw̃tɔw̃drɔgɔw̃] → [idɔmtɔmdrɔgɔm] (stigmatized)
3. the simplification of <łu> and <u> sequences by deleting the semivowel, e.g. *długi* ‘long’ /dwugi/ → /dugi/, *głupi* ‘stupid’ /gwupi/ → /gupi/, *spółdzielnia* ‘cooperative’ /spuwdzɛlna/ → /spudzɛlna/ and *półtorej* ‘one and a half’ /puwtɔrej/ → /putɔrej/
4. the simplification of plosive + fricative consonant groups of the type /tʂ/, /dz/ to affricates, e.g. /tʂ/ → /tʂ/ as in *trzeba* ‘one has to’ or *strzelać* ‘to shoot’; /dz/ → /dʒ/ as in *drzewo* ‘tree’
5. velar realization of the nasal preceding heterosyllabic /k/, e.g. *okienko* ‘window’-dim. /ɔcɛnkɔ/ → /ɔcɛŋkɔ/, *panienka* ‘maid’ /paɲenka/ → /paɲɛŋka/, *sukienka* ‘dress’ /sucɛnka/ → /sucɛŋka/. This process is referred to as unstable, as the velar variant competes with a dental pronunciation, characteristic of the Warsaw dialect.
6. the pronunciation of prepositions *w* ‘in’ and *z* ‘with’ with an epenthetic /ɛ/ in the context of following /v s z ɕ z/, *we Warszawie* ‘in Warsaw’, *ze solą* ‘with salt’, *ze siostrą* ‘with a sister’
7. geminate simplification, e.g. *willa* ‘villa’ /villa/ or more often /vilʌ/ → /vila/, *lekki* ‘light’ /lekki/ or /leki/ → /leki/, *wyższy* ‘higher’ /viʂʂi/ or /viʂʂi/ → /viʂi/
8. the use of *tej* ‘you’ for *ty* ‘you’ in the vocative
9. the pronunciation of emotionally tinged interjections *o!* and *e!* as /wɔ/ and /wɛ/.

Apart from the aforementioned variables, some phonetic features apply solely to selected vocabulary items, e.g. *pięć* 'five' /pjɛntɕ/ → /pɪntɕ/, *pieniądze* 'money' /pjɛjɔndzɛ/ → /pɪjɔndzɛ/, *imieniny* 'nameday' /imjɛjɪnɪ/ → /imɪjɪnɪ/, *sześć* 'six' /ʂɛçɕɕ/ → /ʂɛjçɕɕ/, *weź* 'take' /vɛç/ → /vɛjç/ (and 19 other words).

Among the recessive features, characterizing the speech of the older generation, Witaszek-Samborska enumerates the following:

1. lowering of /i/ and /i/ to /ɛ/ before /r/, e.g. *firanki* 'net curtains' /firanki/ → /fjɛranɕki/, *dyrektor* 'headmaster' /dɪrɛktɔr/ → /dɛrɛktɔr/
2. raising of /ɛ/ to /i/ or /i/, e.g. *dzień* 'day' /dʑɛɲ/ → /dʑɪɲ/, *takiego* 'such'-gen.sg /taceɟɔ/ → /taciɟɔ/, *jedzenie* /jɛdʑɛɲɛ/ → /jɛdʑɪɲɛ/, especially in the context of a following /j/, e.g. *lepiej* 'better' /lɛpjɛj/ → /lɛpi(j)/, *bardziej* 'more' /bardʑɛj/ → /bardzi(j)/, *więcej* 'more' /vjɛɲɕɛj/ → /vjɛɲɕi(j)/
3. raising and rounding of /a/ to /ɔ/, e.g. *pan* 'Mr' /pan/ → /pɔɲ/, *mam* 'I have' /mam/ → /mɔm/, *słyszał* 'he heard' /swiʂaw/ → /swiʂɔw/
4. raising of /ɔ/ to /u/, e.g. *do domu* 'to the house' /dɔ dɔmu/ → /dɔ dumu/, *koniec* 'the end' /kɔɲɛɕ/ → /kupɛɕ/
5. /w/ insertion before word-initial /ɔ/, e.g. *okno* 'window' /ɔkɲɔ/ → /wɔkɲɔ/, *ojciec* 'father' /ɔjtɕɛɕ/ → /wɔjtɕɛɕ/
6. retention of voiced /v/ in consonant clusters after voiceless consonants, e.g. *twój* 'your' /tfuj/ → /tvuj/, *sweter* 'sweater' /sfɛɕɛr/ → /svɛɕɛr/, *krwawy* 'bloody' /krfavɪ/ → /krvavɪ/
7. the voicing of /ç/ in the inflectional ending /-ɕmɪ/, e.g. *widzieliśmy* 'we saw' /vidʑɛlicmɪ/ → /vidʑɛlizmɪ/, *słyszeliśmy* 'we heard' /swiʂɛlicmɪ/ → /swiʂɛlizmɪ/
8. the palatalization of 'hard' fricatives as in *szpital* 'hospital' /ʂpʲital/ → /çpʲital/, *drzwi* 'door' /dzvʲi/ → /dʑvʲi/
9. idiosyncratic pronunciation of selected vocabulary items, e.g. *zaraz* 'in a moment' /zaraɕ/ → /zara/, *teraz* 'now' /teras/ → /tera/, *papierki* 'slips of paper' /papjɛrki/ → /papjurki/.

A quantitative summary of the frequency of general phonological variables is given in Table 1. The notation reads as follows: [+] = the feature is present in most respondents' speech, [[]] = the feature is present in the minority of respondents' speech, 1 = the feature is present in the speech of one respondent only.

In terms of prescriptive evaluation, as registered in *Słownik wymowy polskiej* [Polish pronouncing dictionary] (Karaś, Madejowa 1977), of all the aforementioned pronunciation variants, only 3 were acknowledged as the norm, next to the Warsaw pronunciation, namely, the pronunciation of /v/ in clusters as in *kwaśny* 'sour', as-similated realization of /nk/ as /ɲk/ in *słonko* 'sun'-dim., and word-internal voicing as in *tysiącletcie* 'millennium' or in *liczymy* 'let's count' (the last feature represents the word level, as opposed to pre-sonorant voicing at the phrase level in Witaszek-Samborska's work). A selection of the features described above has been investigated quantitatively on the basis of a nascent corpus of Greater Poland speech, as described in the following section.

| Feature | Generation | | |
|---|------------|----|-----|
| | I | II | III |
| pre-sonorant voicing | + | + | + |
| /ɔ/ as [ɔm] | + | + | + |
| the simplification of /tʂ/, /dz/ | + | + | + |
| /ŋ/ before /k/ and /g/ | + | + | |
| prepositions <i>w</i> and <i>z</i> with an epenthetic /ɛ/ | | | |
| geminate simplification | | | |
| the use of <i>tej</i> for <i>ty</i> in the vocative | | | + |
| interjections <i>o!</i> and <i>e!</i> as /wɔ/ and /wɛ/ | | | + |
| lowering of /i/ and /i/ to /ɛ/ before /r/ | | | |
| raising of /ɛ/ to /i/ or /i/ before /r/ | | | |
| raising of /ɛ/ to /i/ or /i/ before /j/ | + | | 1 |
| raising and rounding of /a/ to /ɔ/ | + | 1 | |
| raising of /ɔ/ to /u/ | | | |
| /w/ insertion before word-initial /ɔ/ | | 1 | |
| /v/ in clusters after voiceless consonants | + | | |
| voicing before /-mi/ | | | 1 |
| the palatalization of 'hard' fricatives | | | |
| tera, zara | | | |
| selected lexicalized items: <i>pieniądze</i> /pjinɔndzɛ/, <i>imieniny</i> /imjinini/, <i>sześć</i> /ʂɛjɕtɕ/, <i>weż</i> /vɛjɕ/ | + | + | + |

Table 1. Frequency of Poznań features across three generations (adapted from Witaszek-Szamborska (1985: 102–103)

3. Methodology

3.1. Source of data

The material for the study comes from the Greater Poland Speech Corpus² (henceforth GPSC), which contains audio recordings of 94 speakers of Polish (63 female, 31 male) from the area of Greater Poland (16 residents of Poznań, 78 speakers from other places of residence in Greater Poland). The speakers were recorded in two types of tasks: an interview (mostly in a 2 participants + 2 interviewers format, occasionally in a 1 participant + 2 interviewers format), recorded in a quiet room at university, at their workplace or at home, and a sentence reading task, recorded individually in an anechoic chamber. The recordings were transcribed orthographically in Praat (Boersma, Weenink 2017). A pronunciation dictionary was then generated in that all orthographic words from the transcripts were converted to IPA by means of a perl script (Jarosz, Johnson 2013; Jarosz et al. 2016). Using the transcripts and the pronunciation dictionary, force-aligned word and segment annotations were then created in LaBB-CAT (Fromont, Hay 2012), based on acoustic models trained on the speech of individual participants.

In order to ensure an adequate comparison with Witaszek-Samborska's description of Poznań speech, we narrowed down the pool of speakers to residents of Poznań only (14 altogether, 11 females and 3 males, born between 1993 and 1996). The lack of gender balance in the sample stems from a stronger representation of women in the student body from which participants were recruited, and therefore in the whole corpus. Consequently, this gender structure is reflected in the sample composed of Poznań residents only. The speakers were middle-class undergraduate university students. At the time of data collection, they were aged between 19 and 23. Table 2 presents participant metadata. *M* in speaker ID stands for *mówca* 'speaker' and *age* indicates age at the time of the interview. For the *social class* score, educational level of the speakers' parents served as a proxy, and it was calculated as follows. For both parents of each speaker a numerical value was assigned based on their educational level: 1 = higher, 2 = secondary, 3 = vocational. The scores for both parents were then summed, and 1 was subtracted from this sum. This calculation results in a 1:5 scale, where 1 indicates the highest summed educational level, and 5 the lowest.

3.2. Selection of variables

In the present study, only general, phonological variables are examined. Hence, a number of lexicalized features from Table 1, such as “prepositions *w* and *z* with an epenthetic /*ɛ*/” or the realization of *sześć* as /*ʂɛjɕtɕ*/ are left out of consideration. Next, only the variables that were attested in respondents from at least two generational groups were kept, leaving out, e.g. the lowering of /*i*/ and /*ɨ*/ to /*ɛ*/ before /*r*/.

² <http://wa.amu.edu.pl/korpuswlp/>

| ID | Gender | Age | Social class |
|-----|--------|-----|--------------|
| M6 | female | 19 | 1 |
| M8 | female | 20 | 3 |
| M20 | male | 21 | 1 |
| M21 | female | 19 | 1 |
| M22 | male | 19 | 2 |
| M24 | female | 19 | 3 |
| M31 | female | 19 | 3 |
| M36 | male | 19 | 1 |
| M43 | female | 23 | 5 |
| M44 | female | 21 | 1 |
| M55 | female | 21 | 2 |
| M62 | female | 19 | 3 |
| M65 | female | 20 | 3 |
| M69 | female | 19 | 1 |

Table 2. Participants: demographic information

After this theoretically motivated pruning of the pool of variables, all remaining variables were queried in the subcorpus available at the time (4 speakers), and only variables with at least 20 hits were selected. In this way, variables whose prevalence is decidedly too low to allow a quantitative analysis were excluded (e.g. /o/ → /u/ raising or degemination). The summary of the 8 variables that have made the cut and so are the subject of this study is given in Table 3. Additionally, variables labeled as *regionalizmy* (i.e. as prescriptively neutral) in Witaszek-Samborska (1985) are labeled “non-stigmatized” in the Table, whereas those labelled there as *dialektyzmy* (i.e. as violating the prescriptive norm), are labelled “stigmatized”. Variants violating prescriptive norms are likely to be subject to metalinguistic commentary in all educational settings, starting with elementary school, and hence may warrant the “stigmatized” label. This may not be without importance for the survival of these variants.

The relevant contexts for each variable were extracted automatically from forced-aligned interview speech. The data was analyzed auditorily, with acoustic support if need be.

| Variable | Example | Realizations | Stigma- tized |
|----------------------|---|---|------------------|
| /tʂ/ or /tʂ̥/ | <i>trzeba</i> 'one has to' | [tʂɛba] or [tʂ̥ɛba] | Yes |
| /dz/ or /d͡z/ | <i>drzewo</i> 'tree' | [dzɛvɔ] or [d͡zɛvɔ]* | |
| /n+k/ or /ŋk/ | <i>roślina</i> 'plant'-dim. | [rɔɕlinka] or [rɔɕliŋka] | No |
| /i/ in /ɛj/ | <i>lepiej</i> 'better' <i>dobrej</i> 'good'-gen. | [lɛpjɛj] or [lɛpi(j)] [dɔbrej] or [dɔbri(j)] | Yes |
| /w/ before /ɔ/ | <i>otwarty</i> 'open' | [ɔtfarti] or [wɔtvarti] | Yes |
| [v] in clusters | <i>trwa</i> 'it lasts' | [trfa] or [trva] | No |
| «-śmy» | <i>byliśmy</i> 'we were' | [bʲilʲiɕmi] or [bʲilʲizmi] | Yes |
| word-final ⟨ɶ⟩ | <i>są</i> 'they are' | [sɔw̃], [sɔm], [sɔw] or [sɔ]** | Yes |
| pre-sonorant voicing | <i>tak jak</i> 'like' | [takjak] or [tagjak] | No |

Table 3. Summary of the variables investigated in the study

* To be precise, in spontaneous speech we may observe three pronunciation variants of ⟨trɶ⟩ (the same holds true for ⟨drɶ⟩, ⟨strɶ⟩) sequences: unaffricated, unasimilated [tʂɛba], reduced/simplified affricated [tʂ̥ɛba] as well as assimilated and affricated, but not simplified [tʂ̥ɛba].

** The pronunciation variants [ɔw] or [ɔ] are not considered to be the norm in Warsaw speech, but were considered as potential realizations of ⟨ɶ⟩ word-finally.

4. Results

In the course of analysis, we treated most of our variables as having two variants: one in which a speaker had realized the dialectal feature of interest (e.g. affricate for realization of /tʂ/ or /dz/ as /tʂ̥/ or /d͡z/) and the other variant without it (e.g. no affricate for realization of /tʂ/ or /dz/ as /tʂ/ or /d͡z/). Only word-final /ɶ/ has a list of four variants. In the following, the proportion of dialectal variants of each variable is expressed as a percentage of all cases in which it might have surfaced. Let affrication (realization of /tʂ/ or /dz/ as /tʂ̥/ or /d͡z/) serve as an illustration: the LaBB-CAT search for /tʂ/ and /dz/ sequences yielded 92 tokens containing them in citation forms. We coded 71 tokens as not showing affrication and 21 tokens as showing it. As a result, 92 is the total number (100%) of contexts in which affrication might have occurred. 77% of tokens (71/92) had no affrication, 23% of tokens (21/92) did have affrication. For individual variation (the rate use of a variant per speaker), for Speaker 8 the number 16 (the sum of affricated and unaffricated variants) was taken as total. Relative to this total, the speaker's productions contained 25% of affricated variants (N=4) and 75% of unaffricated variants (N=12).

Due to the preliminary character of the study and low number of subjects considered, we cannot perform a robust statistical analysis of the obtained results. Instead, we aim to illustrate certain tendencies as percentages by which we hope to stimulate further discussion on how Poznań speech has changed within the span of 30 years, as well as further research.

a) Realization of /tʂ/ and /dz/ as /tʂ̥/ and /dz̥/

Within the variable (N=92), we found 23% of affricated variants (N=21) and 77% of unaffricated variants (N=71). Figure 1 illustrates the distribution of variants:

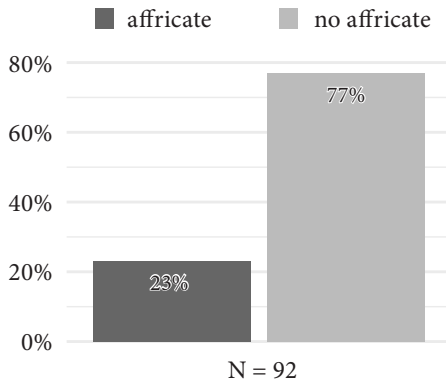


Figure 1. Realization of /tʂ/ and /dz/ as /tʂ̥/ and /dz̥/

The results indicate that the affricated variants were rather rare among Poznań speakers.

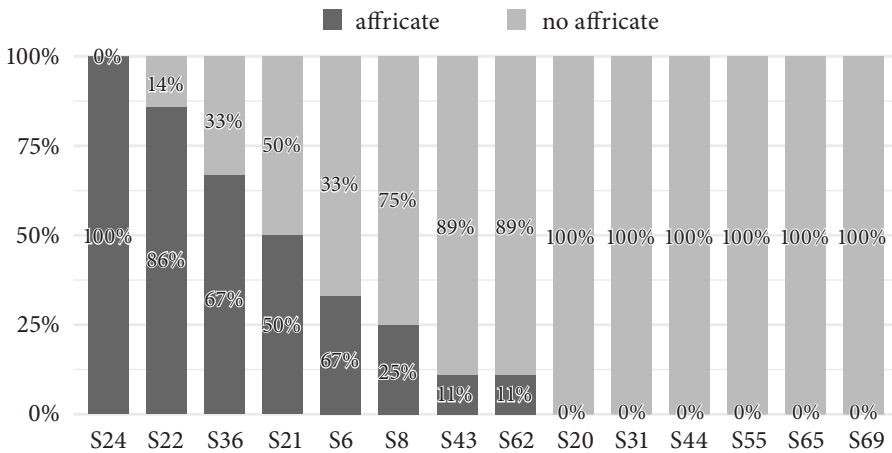


Figure 2. Individual variation of /tʂ/ or /tʂ̥/ as /dz/ or /dz̥/

From Figure 2 it follows that Speakers 20, 31, 44, 55, 65 and 69 produced exclusively the variants where affrication was not realized. Speakers 22, 24 and 36, on the other hand, seem to display a considerable proportion of the affricated variant in their speech: above 50%. However, the total numbers per speaker were extremely low (7, 1, and 3, respectively), and considerably more would be needed to obtain meaningful counts.

b) Realization of /n+k/ as /ŋk/

71% of velar variants of the clusters (N=37) and 29 of dental realizations (N=15) were identified. Figure 3 serves to depict their usage:

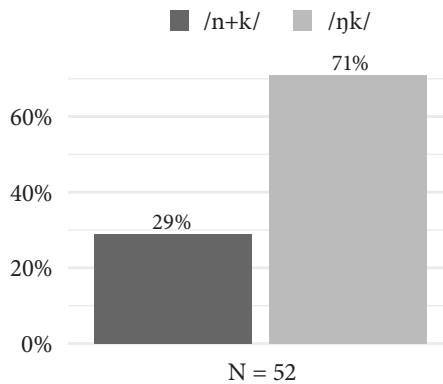


Figure 3. Realization of /n+k/ as /ŋk/

With regard to velar/alveolar variant of /n/, the results obtained in this study provide strong support for the one by Witaszek-Samborska (1985) as the great majority of speakers choose the velar variant.

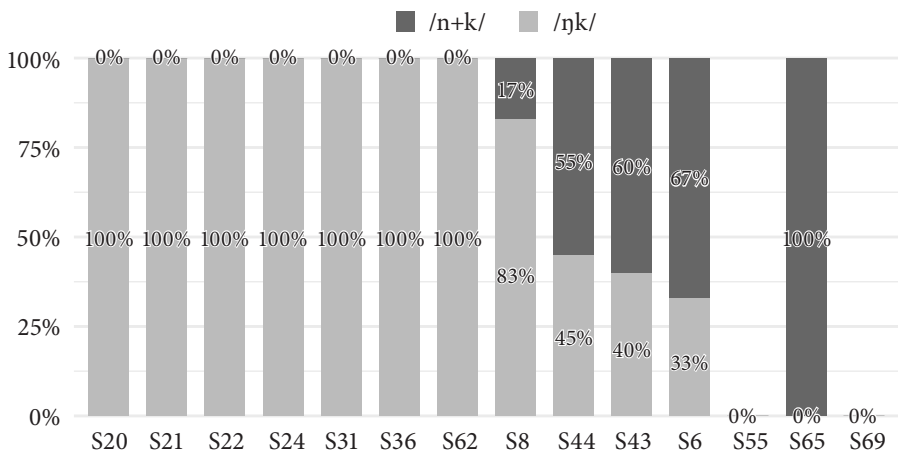


Figure 4. Individual variation of /n+k/ as /ŋk/

While the velar variant is absent from the speech of Speakers 65, 6, 43, 44 (above 50% of /n+k/), it is the variant of choice for Speakers 20, 21, 22, 24, 31, 36 and 62 (100%).

c) Realization of /ɛ/ in /-ɛj/ as [i]

Out of 307 potential realizations of /ɛ/, only 13% were slightly raised (N=40) whereas the remaining 87% of variants (N=267) were the standard ones. The variants are demonstrated in Figure 5:

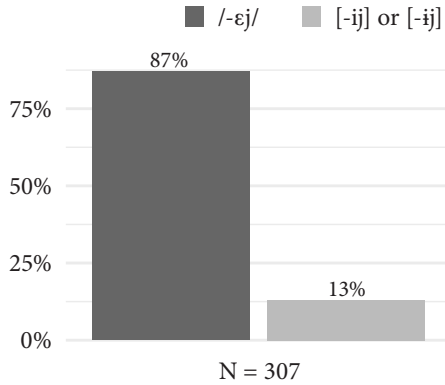


Figure 5. Realization of /-ɛj/ as [-ij]

Figure 5 suggests that the use of the raised variant of /ɛ/ is marginal nowadays in comparison with the 1980s. It has to be noted that within the raised variants, none was realized as [-ij]. More often, we observed the /ij/ realization or an approximation towards /ij/.

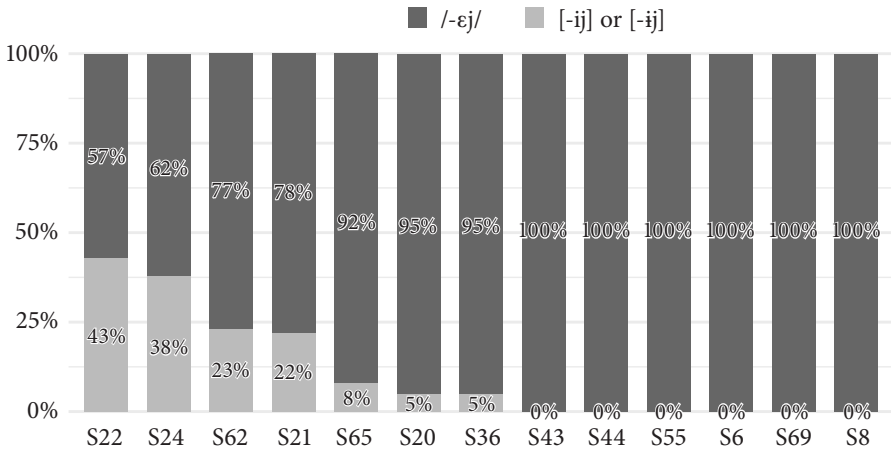


Figure 6. Individual variation of /ɛ/ in /-ɛj/ as [-ij]

The speakers who often raised /ɛ/ were: 22, 24, 62, and 21. Six speakers (43, 44, 55, 6, 69 and 68) never raise /ɛ/ word finally before /j/.

d) Insertion of /w/ before /ɔ/

Among the 400 cases of word-initial /ɔ/ in the subset of the corpus, we have not found a single instance of prothetic /w/ before /ɔ/. Thus, one may consider this variable to be non-existent in modern Poznań speech in comparison with Witaszek-Samborska (1985).

e) Retention of [v] in clusters after voiceless consonants

Turning to retention of [v] in clusters after voiceless consonants (N=67), captured in Figure 7, we observed only 4% of voiced variants (N=3) while the remaining 96% were voiceless (N=64).

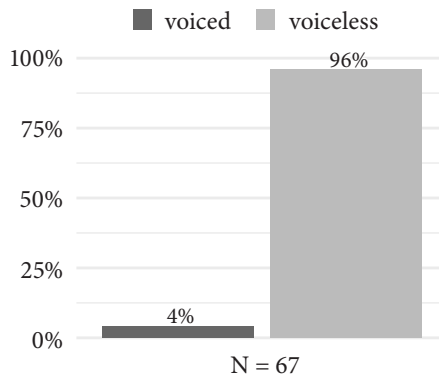


Figure 7. Retention of [v] in clusters after voiceless consonants

In comparison with the Poznań speech from the 1980s, very few instances of the voiced variant occurred in the speech of modern Poznań inhabitants. Thus, the use of the variable nowadays may be termed marginal.

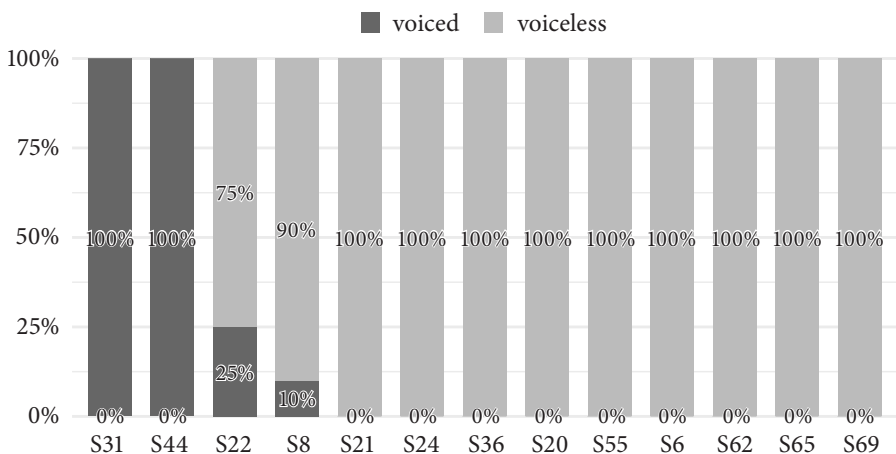


Figure 8. Individual variation of [v] in clusters

Figure 8 reveals that Speakers 31 and 44 voiced the sound in the cluster whereas Speakers 21, 24, 36, 20, 55, 6, 62, 65 and 69 never did.

f) Realization of /-ɕmi/ as [zmi]

As to various ways of realizing <śmy>, we sought to test two factors: voicing of /ɕ/ and stress shift. All 20 variants from the speech of 16 speakers were supposed to be realized in one of the four ways: (i) voiced fricative + penultimate stress (ii) voiceless fricative + penultimate stress (iii) voiceless fricative + antepenultimate stress (iv) voiced fricative + antepenultimate stress. Their distribution was as follows: variant (ii) had 80% of occurrences (N=16), variant (iv) had 20% of occurrences (N=4).

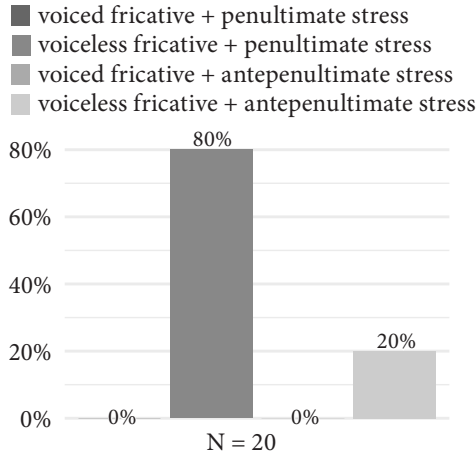


Figure 9. Realization of <śmy>

According to Figure 9, not a single instance of [zmi] was found; the apparent lack of voicing is a new development in Poznań speech 30 years later. Stress shift from antepenultimate to penultimate was present in 80% of cases which is in line with Witaszek-Samborska. Since the focus of our study is on segments rather than suprasegmentals, individual variation of <śmy> with regard to stress is therefore not shown.

g) Realization of word-final /ɕ/ as [ɔw̃], [ɔm], [ɔw] or [ɔ]

We looked for the following variants: (i) V + nasalized glide: [ɔw̃], (ii) V + stop: [ɔm], (iii) V + oral glide: [ɔw], (iv) oral V only: [ɔ].

According to the obtained results, Poznań realization of word-final /ɕ/ as [-ɔm]: only 25% of tokens (N=80). This outcome suggests that it is not the dominant variant in present-day Poznań speech. Instead, the Warsaw standard V + nasalized glide: [ɔw̃] dominates (71% tokens, N=229). This contrasts somewhat with Witaszek-Samborska (1986): “In Poznań [...], it is common to realize a word-final -q as -om, e.g. *idom tom drogom* [‘they’re going this way’], *piszom* [‘they write’], *czytajom* [‘they read’], *muwiom*, [‘they speak’], *grajom* [‘they play’], *widzom małom białom mysz* [‘they see a little white mouse’] [...]”³ An interesting observation here was

³ Authors’ translation.

that we have not quite expected to find the two remaining variants in the speech of the speakers, i.e. [ɔw] and [ɔ] which scored 3 and 1%, respectively. They are substandard pronunciations, unreported for both Poznań and Warsaw speech.

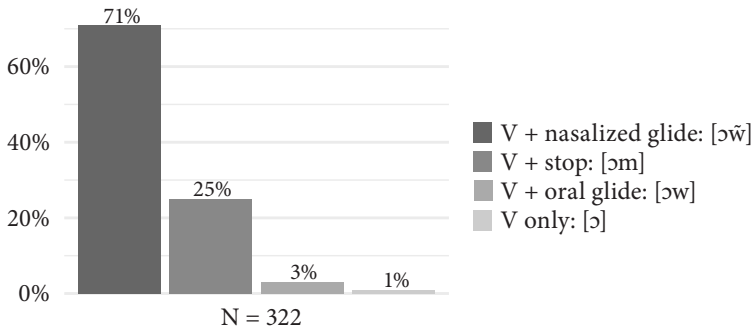


Figure 10. Realization of word-final <ą>

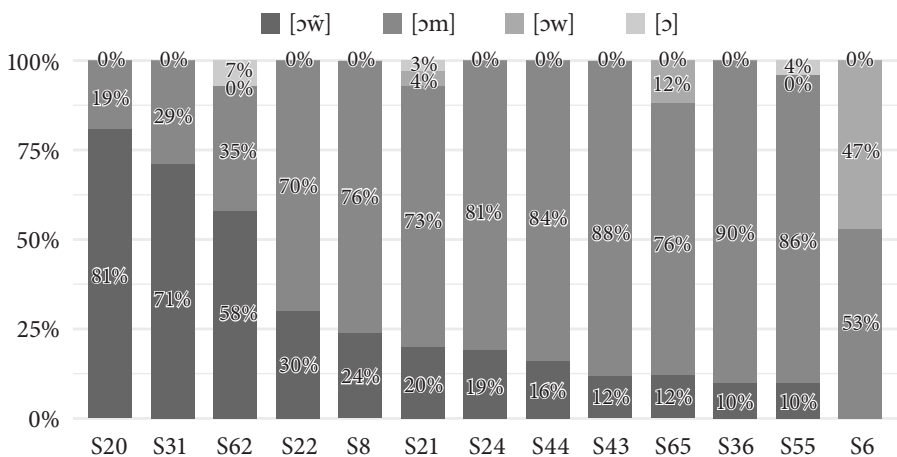


Figure 11. Individual variation of word-final /ɔ/

From Figure 11, the following distribution appears: Speakers 20, 31 and 63 seem to prefer the [ɔm] variant; Speakers 36, 43, 55, 44 and 24 choose the [ɔw̃] variant (all above 80%); the [ɔw] variant was favoured by Speaker 6 (46% of use) and Speakers 65 and 55 leaned towards the [ɔ] variant. Speakers 6, 55 and 36 seem to avoid the Poznań variant [ɔm] to the highest degree.

h) Pre-sonorant voicing

Within the analyzed subset of the corpus, we found 42% of the voiced variant (N=301) and 58% of the unvoiced variant (N=422). Again, our results may suggest that educated Poznań speech has been changing in comparison with the trends observed 30 years ago.

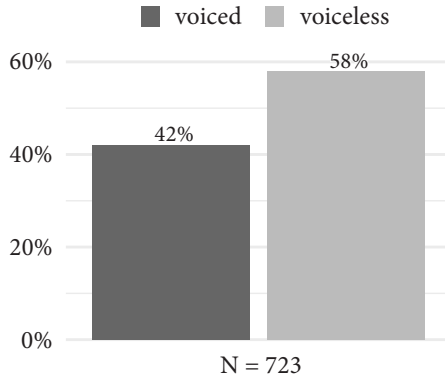


Figure 12. Realization of pre-sonorant voicing

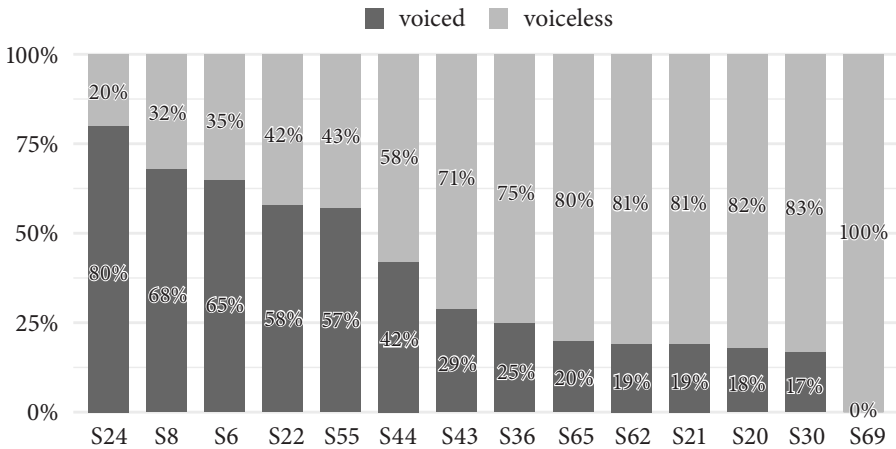


Figure 13. Individual variation of pre-sonorant voicing

With regard to individual variation, Speakers 24, 8, 6, 22, 55 display a tendency towards presonorant voicing (above 50%) whereas for Speakers 69, 31, 20, 21, 62, 65 lack of presonorant voicing dominated the realization (above 80%).

Summing up the Results section, we have identified a number of differences in the speech of modern, educated Poznań inhabitants compared to the outcomes reported by Witaszek-Samborska (1986). The overall results, divided into strong (top four rows) and recessive (bottom four rows) based on the original survey, are presented in Table 4.

Another finding which merits particular interest is that 16 speakers from the corpus did not use the Poznań variables to a similar extent. This may point to a tendency that certain speakers were more “dialectal” than others, feeding the discussion on the role of interspeaker variability in language theories (as hinted in Piroth, Janker 2004).

| Variable | Witaszek-Samborska (1985) | Present study |
|----------------------|-----------------------------|---------------|
| /ŋ+k/ | | 71% (37/52) |
| pre-sonorant voicing | Widespread | 42% (301/723) |
| /-ʃ/ as /ɔm/ | (present in all age-groups) | 25% (80/323) |
| /tʂ dz/ as /tʂ dʒ/ | | 23% (21/92) |
| raising in /-ej/ | | 13% (40/307) |
| /v/ in clusters | Recessive | 4% (3/67) |
| prothetic /w/ | (in older age-groups only) | 0% (0/400) |
| /-ɕmi/ as [zmi] | | 0% (0/20) |

Table 4. Summary of the selected variables

5. Discussion

The four variables which were categorized as recessive in 1986 (i.e. raising of the vowel in /-ej/, retention of voiced fricative /v/ in clusters after voiceless plosives, insertion of a prothetic /w/ before word-initial /ɔ/, and voicing /ç/ to /ʒ/ in /-ɕmi/) are either marginally represented or nonexistent. As the original survey classified them as widespread in the speech of older speakers only, their weak representation in the speech of young speakers down the line is a logical continuation, without being an indication of a linguistic change.

Somewhat surprisingly, the variable with the highest incidence within the group of recessive features is the raising of the vowel in /-ej/. It has to be pointed out that 65% of cases for which it was coded to occur (26 out of 40 cases) involve a pre-palatal, palatal or palatalized consonant immediately preceding the vowel (e.g. *później* ['puzɲi] 'later', *angielskiej* [aɲ'jɛlski] 'English', *lepiej* ['lɛp'ji] 'better', respectively). The raising of the vowel in these cases can be plausibly interpreted as a coarticulatory phonetic effect, rather than as evidence of the speakers having a representation of the suffix with /i/ instead of /ɛ/. The remaining cases, however, were not preceded by palatal segments, and so arguably are instances of a representation with a raised vowel. Some support to the notion that a raised vowel is indeed a manifestation of the use of a local variant is provided by the fact that [i(j)] for /-ej/ in non-palatal contexts is exclusively employed by speakers (Speakers 21, 22, 24, 62) who use all of the non-recessive local variants at the rate of at least 10% (cf. Table 4 below).

What is more relevant to the issue of dialect levelling, local variants of the four variables which were categorized as widespread in all age groups in 1986 (i.e. /ŋ+k/, pre-sonorant voicing, /-ʃ/ as /ɔm/ and affrication) show rates of use which are not indicative of their dominance in the present study. Only one of the variables

(/ŋ+k/) was realized with its local variant in more than a half of the contexts in which it was expected (71% of the time), and so its use could arguably be still seen as “widespread”, with no decline compared to the 1980s. The remaining three variables, however, including the perhaps most famous feature of Greater Poland speech, presonorant voicing, seem to be on the decline, with rates of incidence below 50%. Caution, however, needs to be taken with regard to this conclusion for several reasons. First, with regard to the state of affairs in the 1980s, the original survey does not present quantitative data, and it is not straightforward how to interpret the impressionistic category of “widespread” in numerical terms. Variants judged as widespread were obviously prevalent enough to attract attention and comment, but there are no numbers to directly compare the two time periods. Second, the present study is based on speech collected by conducting interviews. Care was taken by the interviewers to create conditions conducive to eliciting informal speech (e.g. by the typically used 2 × 2 interview format, locales known to the participants, and a convivial atmosphere of the interviews). Still, a certain degree of self-consciousness of the participants leading to speech-monitoring cannot be completely ruled out, due to the fact that these were not naturally occurring conversations among close acquaintances. If the rates are lowered by conscious suppression of local variants by the speakers, however, such style-shifting might be an indication of stigmatization of these variants. This usually implies a “change from above”, i.e. a change towards a socially prestigious norm. Out of the four variables at the top in Table 4, widespread in the mid 1980s and still most frequent today, two are not prescriptively “stigmatized” (as per Table 3), namely /n+k/ and pre-sonorant voicing, but two are, namely affrication and /-/ as [m]. Out of the four variables at the bottom in Table 4, recessive in the mid 1980s and very infrequent today, three are prescriptively “stigmatized”, namely the raising of /-j/, prothetic /w/ before /ɔ/ and fricative voicing in *-śmy*, but one is not, namely the retention of voiced /v/ in clusters with voiceless obstruents. Thus, there is at most a weak link between stigmatization and retention of the features. Alternatively, attitudes towards the features have changed. Still, there is no indication that voiced /v/ in clusters has reached social awareness and become stigmatized, and yet it seems to be declining nonetheless. Further light could be cast on the issue of awareness and style shifting by annotating the recordings with regard to style (e.g. by coding the parts in which participants answer the questions closely, and those parts in which they “go off script” and deliver detailed personal anecdotes). This, however, goes beyond the scope of the present study.

Interestingly, the variables whose realization with the Poznań variant is noticeable (>10% of all contexts for a given speaker) remain in an implicational relationship to one another (see Table 4), in that having a local realization of a variable higher up in the Table implies having a local realization of all the variables below (the two variables at the bottom are tied). This generalization holds with no exceptions. And so, for example, having affrication (fɕ for /tʃ/ and [d͡z] for /dz/) implies having local variants for all the other variables (all the speakers that appear with a check mark (✓) in the “affrication” row appear with a check mark in all remaining rows). Having

the velar nasal /ŋ/ before heterosyllabic /k/ implies having both pre-sonorant voicing and /ɔm/ for /-ʒ/. This is an indication that the variables differ in the degree to which they are associated with Poznań speech.

| | Speaker | | | | | | | | | | | | | |
|----------------------|---------|---|----|----|----|----|----|----|----|----|----|----|----|----|
| | 6 | 8 | 21 | 22 | 24 | 36 | 43 | 62 | 20 | 31 | 44 | 55 | 65 | 69 |
| affrication | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | |
| /ŋ+k/ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| pre-sonorant voicing | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| /ɔm/ for /-ʒ/ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Table 5. Implicational relationship between variables. A check mark (✓) means that the speaker has realized in excess of 10% of tokens with the Poznań variant

One more reason for caution when trying to answer the question of whether Poznań speech is undergoing dialect levelling is that the method applied here, i.e. taking dialectal features attested in the past and tracing their prevalence in the present day, can, by definition, only trace the development of the variables present in the dialect at the time of the initial study. What it does not do is take into account any potential new developments. Possible new developments counteracting levelling have yet to be uncovered. One area of investigation could be the realization of the pre-palatal sibilants /ç ʒ ʧ ʤ/. In Warsaw Polish, a phonetic change is underway in which this set of obstruents is showing spectral peaks at higher frequencies than before (Czaplicki et al. 2016). Finding evidence of the adoption of this change in Poznań speech, or of resistance to it, could shed some light on the relationship between these two varieties of Polish, as well as on the overall distribution of the features which have been termed dialectal in the past.

Directions for further research

This preliminary study gives a clear indication as to which variables warrant further studies. To make for good candidates for studying factors underlying variability, a variable has to a) occur with sufficient frequency and b) display sufficient variability. Two variables which clearly satisfy both criteria are pre-sonorant voicing and the realization of word-final /-ʒ/. They appeared with considerable frequency in the sub-part of the corpus selected here. If one included in the analysis the speech of Greater Poland residents from outside Poznań who are a part of the corpus, the rates would reach levels allowing for reliable quantitative analysis. At the same time, they clearly display variability, and so truly are variables in the present state

of Greater Poland speech.⁴ The third variable that warrants further study is /ŋ+k/. Somewhat surprisingly perhaps, just like the other variables that still show some of their dialectal variants, it did not show fully categorical behaviour. Therefore, the factors behind its variability can be investigated. In the present state of the corpus, however, the frequency of occurrence of words with this variable is rather low. A full-blown investigation of it would therefore have to be preceded by the extension of the corpus. This (already planned) extension will consist in a) providing annotations to the hitherto untranscribed parts of the corpus (so far, only 15 minutes of most of the recordings have been transcribed) and b) collecting and transcribing further recordings (to correct for the present gender imbalance, with most recordings being of female speakers). Last but not least, the affrication of /tʂ/ and /dz/ should be investigated further as well, since it seems to be a core feature in Poznań speech, in that it sits at the top of the implicational hierarchy presented in Table 4. As with /ŋ+k/, however, a quantitative analysis of this variable will only be possible after an extension of the corpus, as the rates of incidence of the relevant environment are at present rather low.

The variables with sufficient prevalence and sufficient variability can serve as a testing ground for hypotheses regarding the influence of word-frequency, predictability, production planning, speech tempo, word-specific phonetics, speaker gender, and speaker attitudes on variable processes. This is precisely the use to which the compilers are going to put the corpus. As the corpus is publicly available, other researchers are encouraged to do the same.

Finally, results based on studying our corpus could be compared with those gleaned from other varieties of Polish. As Polish is often described as having de facto two standard norms, the fate of local features in one of the standard varieties is potentially different than the fate of local features in other varieties. This is an open empirical question, and it could relate to the issue of retention of local features as a function of the status of the variety in question.

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⁴ This cannot be said for the the prothetic /w/, for example. Though word-initial /ɔ/ words are robustly represented in the corpus, there is no variability to explore.

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