## The speech of immigrants and its imitation: Sociophonetic variation in Swiss German

Stephan Schmid, University of Zurich

stephan.schmid@uzh.ch

The aim of this contribution is twofold. On the one hand, the notion of 'ethnolect' will be discussed, which has been a major topic of sociophonetic research in Western Europe in the last ten years or so. On the other hand, data from two unpublished pilot studies on voicing and on temporal measures in different types of Swiss German ethnolects will be presented.

The social variation of speech has been a subject of scientific inquiry for many decades, starting with the variationist paradigm of Labovian sociolinguistics in the 1960s (for an overview of findings from the perspective of language change see [1]), which has led to a multitude of studies that now go under the heading of 'sociophonetics' (for an illustration of the state of the art see [2]). Among the social factors that may affect phonetic variation, the manualistic literature generally lists space, social class, age, gender, and ethnicity ([1], [3]). Whereas in American sociolinguistics the factor 'ethnicity' traditionally included either broad categories like 'Afro-American' and 'Hispanics' or narrow categories referring to particular nationalities of immigrants (e.g., Italo-Americans), in Europe the study of 'ethnolects' only started towards the year 2000 and assumed a somewhat different orientation. As witnessed by a number of contributions to a special issue of the International Journal of Bilingualism published in the year 2008 [4], in several metropolitan areas of Western Europe (in particular in Great Britain, Norway, Sweden, Denmark, The Netherlands, and in Germany) new language varieties emerged among adolescents with an immigrant background. Nevertheless, the relationship between ethnic groups and linguistic features appeared to be less clear than in the US, as some features were adopted also by speakers lacking an immigrant background – a phenomenon labeled as 'crossing' [5, 3]. As a matter of fact, some scholars prefer the term 'speaking style' [6] to the more traditional sociolinguistic notion of 'variety', which is connotated with determinism and structural stability.

Probably the most elaborated approach to 'multiethnolects' was proposed by Auer in 2003 [7]. This dynamic model distinguishes three types of (multi-)ethnolects: 'primary ethnolects' are spoken by second generation immigrants, whereas 'secondary ethnolects' are exaggerated representations of these primary ethnolects created in the mass media. Finally, 'tertiary ethnolects' appear as style shifts of non-immigrant speakers who imitate the mediatised representations of secondary ethnolects mainly for hilarious purposes.

In German-speaking Switzerland, new ways of speaking among youngsters with an immigrant background have been reported since the year 2000. Due to the strong immigration from the former republic of Yugoslavia, such ethnolectal speech has sometimes been referred to as *Jugotüütsch* or *Balkan-Slang* – labels that derive from hetero-representations and underpin the multiethnic character of the emerging varieties. Not much is known about the auto-representations of the speakers, but it is safe to assume that these ways of speaking do not signal adherence to any specific ethnic group. Rather, they express a more general identity (immigrant vs. autochthonous): the term 'multiethnolect' therefore seems to be more appropriate than simply 'ethnolect'. All in all, the sociolinguistic dynamics of the emerging varieties in Switzerland resemble the ethnolectal chain described by Auer for Germany to a great extent, including common structural patterns such as morphosyntactic simplification and the use of particular discourse markers.

The sociophonetic features of Swiss German multiethnolects have so far been described in a rather impressionistic manner, i.e. by means of phonetic transcriptions and spectrograms of single utterances [8, 9]. In particular, a number of segmental features have been discovered, whereby the speech of young immigrants departs from the pronunciation of the autochthonous dialect. Among these are (i) the voiced pronunciation of stops and fricatives instead of the typical unvoiced 'lenis' or lax obstruents of Swiss German, (ii) the occurrence of tense fricatives in word-initial position which are banned by a phonotactic constraint in these dialects, and (iii) the lack of the typical sandhi processes at word boundaries. The present contribution aims at gaining additional sociophonetic evidence through an acoustic analysis, which is provided by two pilot studies.

The first pilot study compares the Swiss German of three speakers, namely (i) Patricia, a female adolescent without immigrant background (autochtonous dialect), (ii) Osman, a male adolescent with immigrant background (primary ethnolect), (iii) Mr. Berisha, a Swiss comedian who imitates the speech of young immigrants (secondary ethnolect). To begin with, we will look at the most salient

sociophonetic variables mentioned above, i.e. the voicing of lax obstruents. Using the Praat [10] Voice Report function, we calculated the locally unvoiced frames of the potentially voiced obstruents in the speech of our three speakers Patricia (N=42), Osman (N=26), and M. Berisha (N=29); a oneway ANOVA yields a significant effect of the factor 'speaker' on the voicing of these consonants (F(2, 95) =7.1, p = .0013\*). Voicing is rather consistent in Osman and particularly evident in the case of /g/ (which is voiced in 6 out of 7 tokens), whereas Mr. Berisha's obstruents display a certain amount of variance and lie between those of Osman and Patricia, who has the lowest degree of voicing among the three subjects. On the segmental level, thus, this pilot study seems to confirm the previous impressionistic characterization of the primary and secondary ethnolect [8, 9].

Moreover, our first pilot study also compares temporal features in the Swiss German of the same three speakers, in particular speech rate and rhythm metrics. Measuring speech rate as segments per second, we find that Osman's speech (primary ethnolect) is slightly slower than Patricia's (autochthonous dialect), whereas Mr. Berisha (secondary ethnolect) speaks even slower, thus exaggerating what he seems to have individuated as a typical feature of primary ethnolects. Regarding the speech rhythm of primary ethnolects, previous studies mentioned an alleged tendency towards syllable-timing [9], observing that unstressed syllables are often less reduced than in the traditional, more stress-timed Swiss German. The results of our pilot study reveal that Osman indeed displays a lower variability of vocalic and consonantal intervals than Patricia, whereas Mr. Berisha shows a higher variability of vocalic and consonantal intervals, due to a particular emphasis laid on specific words. Thus, we conclude that Mr. Berisha is quite successful in imitating primary ethnolects with regard to obstruents voicing and speech rate, whereas his speech rhythm is rather inconsistent.

Turning to tertiary ethnolects of Swiss German, we find that such speaking styles have been documented in a youth language corpus, where Swiss adolescents imitate phonetic features of secondary ethnolects, playing with them in a sort of verbal duelling [8, 9]. Our second pilot study takes a more experimental approach, analyzing data from a corpus gathered for the purpose of speaker identification. Four speakers of autochthonous Swiss German (two males and two females) read 74 sentences both in their native variety and in a free voice disguise condition, for which they chose 'ethnolectal speech'. From the automatic detection of periodicity and intensity peaks in Praat, five temporal measures were derived: Varco Peak, nPVI Peak, % Voiced, Varco Voiced, nPVI voiced. The results yield significant effects both for the intensity peaks (lower median for Varco and PVI in the disguised version) and for the voicing measures, as %, Varco and nPVI were higher in the imitation of ethnolectal speech. The latter result needs further investigation, as it can be determined both by a higher %Vocalic (a feature of syllable-timing) and by obstruent voicing.

The two pilot studies conducted in our lab seem to confirm the claims about the sociophonetic features of Swiss German ethnolects made in the literature. Nevertheless, more research is needed on this topic, extending the analysis of the data to more speakers.

## References

- [1] Labov W. 2001. Principles of language change. Social factors. Oxford: Blackwell.
- [2] Celata C. & Calamai, S. 2014. Advances in sociophonetics. Amsterdam: Benjamins.
- [3] Calamai S. 2015. Introduzione alla sociofonetica. Roma: Carocci.
- [4] Nortier J. 2008. Ethnolects? The emergence of new varieties among adolescents. International Journal of Bilingualism 12(1-2): 1-5
- [5] Coupland N. 2007. Style: language variation and identity. Cambridge: Cambridge University Press.
- [6] Kern F. & Selting M. 2011. Ethnic styles of speaking in European metropolitan areas. Amsterdam: Benjamins.
- [7] Auer P. 2003. 'Türkenslang' ein jugendsprachlicher Ethnolekt des Deutschen und seine Transformationen. In Häcki Buhofer A. (ed.). Spracherwerb und Lebensalter. Tübingen: Francke. 255-264.
- [8] Schmid S. 2011. Pour une sociophonétique des ethnolectes suisses allemands. Travaux neuchâtelois de linguistique 53: 90-106.
- [9] Schmid S. 2012. Segmental features of Swiss German ethnolects. In Calamai S., Celata C. & Ciucci L. (eds.). Proceedings of "Sociophonetics, at the crossroads of speech variation, processing and communication" (Pisa, December 14th-15th 2010). Pisa: Edizioni della Scuola Normale Superiore. 69-72. http://edizioni.sns.it/it/downloadable/download/sample/sample\_id/19/
- [10] Boersma P. & Weenink D. 2016. Praat: doing phonetics by computer [Computer program]. Version 6.0.20, retrieved 3 September 2016 from http://www.praat.org/
- [11] Dellwo V., Leemann A. & Kolly, M.J. 2012. Speaker idiosyncratic rhythmic features in the speech signal. Electronic Proceedings of Interspeech. Portland (USA).