Effects of mobility on dialect change: Introducing the Linguistic Mobility Index

Péter Jeszenszky, Carina Steiner, Adrian Leemann

Center for the Study of Language and Society, University of Bern, Bern, Switzerland

Connection patterns across space – therefore potential contact among people with different dialect backgrounds – are crucial drivers of dialect change (Chambers, 2002). Through the ever-increasing mobility of society in the last century, the effects of diverse linguistic connections on dialects have been intensifying (Milroy, 2002). The quantitative effects of mobility itself have been, however, under-researched in sociolinguistics (Beaman, 2019), partly due to the lack of quantitative mobility data about survey participants.

Our contribution introduces the *Linguistic Mobility Index* (LMI). Based on various items of metadata elicited about survey participants' linguistic biography, LMI aims to quantify the kind of mobility that allows a participant to be exposed to linguistic influences from outside their reference locality, potentially impacting their dialect.

LMI's concept is implemented based on the SDATS corpus (Leemann et al. 2020). The corpus includes structured interviews with 1000 participants (belonging to two age cohorts, 20-35 y.o. and 60+) in 125 reference localities (Jeszenszky, Steiner & Leemann, 2021) in German-speaking Switzerland. The SDATS survey elicits ~300 linguistic items, and participants fill out a 300+ item metadata questionnaire. Part of this metadata reveals linguistic influences related to the participant's mobility.

LMI models the effects of localities associated with the following factors, constructed from metadata items: the origins of parents (Cheshire et al., 1999), the origin of the long-term life partner, places of residence in other dialect areas along with their duration, and the places of current education or workplace (e.g., Britain, 2013), age and education level. The weights of these factors are determined using the volume of the exposure, the type of relationship the participant has (had) with the local dialect the factors are associated with, and its linguistic distance to the participant's reference location, based on the Language Atlas of German-speaking Switzerland (SDS, 1962-2003).

In practice, a participant having low LMI means that the person is little exposed to direct linguistic influences outside their reference locality, never lived, studied or worked outside the reference locality, and both of their parents grew up in the reference locality. Linguistically it would correspond to an idealistic sedentary scenario, which would ease the preservation of the *local default dialect* spoken at their reference locality. In turn, high LMI means a parent or partner from, residence in or long exposure to other dialect areas, including reasons of work or (higher) education.

The meaningfulness of LMI is validated by testing its predictive power on dialect change between this local default dialect (items recorded in SDS) and items recorded in SDATS. Using mixed-effects models, we analysed the effects of LMI on dialect change considering the SDATS survey's design variables (age, sex, educational background) and show that LMI performs well at predicting lexical change: higher mobility as measured by the LMI predicts higher odds for lexical change. This success allows us to suggest the adoption of LMI in other studies of language variation and change. Among others, LMI could potentially test if linguistically mobile people become leaders of language change.

REFERENCES

Beaman, K. V. (2019). Identity and mobility in linguistic change across the lifespan: the case of Swabian German. In A. Ziegler, S. Edler, & G. Oberdorfer (Eds.), Urban Matters. Current Approaches of International Sociolinguistic Research (Studies in Language Variation) (pp. 1–42).

Britain, D. (2013). The role of mundane mobility and contact in dialect death and dialect birth. In M. Hundt & D. Schreier (Eds.), English as a Contact Language (pp. 165–181). https://doi.org/10.1017/CBO9780511740060.010

Chambers, J. K. (2002). Dynamics of dialect convergence. Journal of Sociolinguistics, 6(1), 117–130. https://doi.org/10.1111/1467-9481.00180

Cheshire, J., Gillett, A., Kerswill, P., & Williams, A. (1999). The role of adolescents in dialect levelling. In Social Research.

Cheshire, J. (2005). Age and generation-specific use of language. In U. Ammon, N. Dittmar, K. Mattheier, & P. Trudgill (Eds.), Sociolinguistics: an introductory handbook of the science of language and society. (2nd ed., pp. 1552–1563). Berlin: Mouton de Gruyter.

Jeszenszky, P., Steiner, C., & Leemann, A. (2021). Reduction of Survey Sites in Dialectology : A New Methodology Based on Clustering. Frontiers in Artificial Intelligence, 4(642505), 1–23. https://doi.org/10.3389/frai.2021.642505

Milroy, L. (2002). Introduction: Mobility, contact and language change - Working with contemporary speech communities. Journal of Sociolinguistics, 6(1), 3–15. https://doi.org/10.1111/1467-9481.00174

SDATS = Leemann, A., Jeszenszky, P., Steiner, C., Studerus, M., & Messerli, J. (2020). SDATS Corpus – Swiss German dialects across time and space. Retrieved from https://osf.io/s9z4q

SDS = Sprachatlas der deutschen Schweiz. (1962–2003). Hotzenköcherle, R. Schläpfer, R., Trüb, R., and Zinsli, P. (Eds.). Bern: Francke (Vols. 1–6), Basel: Francke (Vols. 7, 8)