

---

# Language-competition models

---

TORSTEN TEMPLIN and BENGT-ARNE WICKSTRÖM

WORKING PAPER NO. 19-4

REAL

Research group “Economics, policy analysis, and language”



# Language-competition models\*

TORSTEN TEMPLIN<sup>†</sup> and BENGT-ARNE WICKSTRÖM<sup>‡</sup>

## Abstract

The modeling of the long-run dynamics of language competition as well as of the survival of (minority) languages is reviewed. One can thereby distinguish three basic types of models in the literature.

In macro models the transmission of the involved languages by the family and public institutions from one generation to the next is in the center of the analysis. This transmission is generally determined by the aggregate number of speakers of the different languages as well as by status and acquisition planning. The implicit or explicit parental choice of the language(s) in which their children are socialized involves a trade-off between emotional attachment to a language and its practical usefulness. This trade-off is influenced by the relative status of the idioms, which in turn is a result of language policy. We present a meta model of this approach.

In micro models the chief driving force behind language choice and change is imitation during random encounters of single individuals. This approach allows the analysis of the spatial distribution of language use and the changes thereof. This approach can also be used to analyze changes in corpus and structure of the language as a system.

The third approach consists of various hybrids of the other two.

**Keywords:** language dynamics, language death, status planning, acquisition planning, inter-generational transmission, language change

This essay has been published as:

TEMPLIN, Torsten & Bengt-Arne WICKSTRÖM (2024). “Language competition models”. In: *The Routledge handbook of language policy and planning*. Edited by Michele GAZZOLA, François GRIN, Linda CARDINAL, & Kathleen HEUGH. Abingdon: Routledge. Chapter 3: 66–86. ISBN: 978-1138328198. DOI: [doi.org/10.4324/9780429448843-5](https://doi.org/10.4324/9780429448843-5).

---

\*Part of this work was carried out in the Research group “Economics and language” in Berlin, with which both authors are associated. The group received funding from the European Union’s Seventh Framework Program (Project MIME – grant agreement 613344). This support is gratefully acknowledged.

<sup>†</sup>Humboldt-Universität zu Berlin

Research group “Economics, policy analysis, and language” (REAL)

Email: [templin@math.hu-berlin.de](mailto:templin@math.hu-berlin.de)

<sup>‡</sup>Andrássy-Universität Budapest

Research group “Economics, policy analysis, and language” (REAL)

Email: [bengt-arne.wickstroem@andrassyuni.hu](mailto:bengt-arne.wickstroem@andrassyuni.hu)