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Optimal language policy for the preservation of a minority language*

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Abstract

We develop a dynamic language competition model with dynamic state intervention. Parents choose the language(s) to raise their children in based on the communicational value of each language as well as on their emotional attachment to the languages at hand. Languages are thus conceptualized as tools for communication as well as carriers of cultural identity. The model includes a high and a low status language, and children can be brought up as monolinguals or bilinguals. Through investment into language policies, the status of the minority language can be increased. The aim of the intervention is to preserve the minority language in a bilingual subpopulation at low costs. We investigate the dynamic structure of the optimally controlled system as well as the optimal policy, identify stable equilibria and provide numerical case studies.

Keywords: Language competition; Language dynamics; Intergenerational language transmission; Optimal control.

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