

Patterns of language acquisition: the diffusion of languages

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In my presentation I shall focus to considerations and decisions made by individuals who consider whether to acquire languages in addition to one's mother tongue. For example, it may be beneficial for an individual to acquire one or several languages spoken by important trade partners of her own country. If there existed a lingua franca spoken by everybody, it would be easy for traders to communicate. According to many authors (e.g., Crystal, 2003), English may already be or become such a language. The following data (in millions of speakers) of the world most spoken language underlines the growing role of English:

	English	Mandarin	Hindi	Spanish	Bengali	Arabic	French	Russian
2022	1,503	1,113	601	553	277	270	268	257
1900	399	574	294	350	126	73	131	135

Thus, one may cautiously claim, as put by a noted Dutch linguist Abram de Swaan (2001): “The globalization proceeds in English”. However, this statement must be qualified by emergence of various dialects of English, such as Spanglish spoken by some 40 million of US residents. Moreover, many individuals, especially immigrants, acquire incomplete or partial acquisition of English (Brock et al. 2023). In fact, the number of immigrants to US, UK, and Australia, who do not speak English at all or speak it poorly ranges from 17 to 21 percent.

In making their language acquisition decisions, individuals are driven by various considerations. To large extent, the incentives are economical, since proficiency in languages has important consequences on earnings. Job opportunities are increasingly open to applicants who speak several languages, though not all languages are identical in that respect. The results of Ginsburgh and Prieto (2011) show that a second language (in most cases, English) raises wages in the range of five to fifteen percent in Austria, Finland, France, Germany, Greece, Italy, Portugal, and Spain, much less so in Denmark and the Netherlands, where English is known by 70 to 75 percent of the population. The benefits of language acquisition should be weighed against costs of the acquisition, and the peer pressure of one's community, where the acquisition of the native language could be considered as a negative signal of the lack of identification with the community.

In my presentation I will describe a model of language acquisition and examine the equilibrium in static and dynamic settings. It turns out that there is insufficient language learning in equilibrium that may require government's policy enhance language acquisition. We also find out that partial learning could be welfare-improving for the entire population and not only for immigrants.

This line of research is interdisciplinary in nature, which requires the effort and expertise from physicists, sociology, mathematicians, statisticians, historians, and economists, and we are looking forward for collaboration with colleagues from those fields.

References

Brock, W., Bo Chen, S. Durlauf, S. Lee, and S. Weber (2023). Everybody's talking at Me: Levels of Majority Language Acquisition by Minority Speakers. National Bureau of Economic Research Working Paper.

Crystal, D. (2003). English as a Global Language, Cambridge: Cambridge University Press.

De Swaan, A. (2001). Words of the World. Cambridge: Cambridge: Polity Press

Ginsburgh, V. and Juan Prieto (2011). Returns to foreign languages of native workers in the EU, International Labor Review.