

Gravitation program The Multilingualism Laboratory - Complete bibliography and abstract

Literature references

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Abstract - The Multilingualism Laboratory

This program proposes a **multilingual turn in linguistic research**, in particular in those domains traditionally colored by a strong monolingual bias. Monolingualism, the situation in which an individual or a community speaks and hears only one language, does not seem to exist in the real world. Even someone who grew up in a standard Dutch environment uses English in education, professional life and leisure time, and is in contact with speakers of, e.g., Frisian, regional varieties of Dutch and minority languages such as Berber, Turkish, Arabic, Sranan and Papiamentu. Linguistic reality should therefore be characterized as a spectrum of degrees of multilingualism. Even speakers at the monolingual end of the spectrum speak a language that is in a constant flux due to contact with other languages. Despite this dynamic multilingual reality, the monolingual perspective has dominated neurolinguistic, psycholinguistic, sociolinguistic, theoretical and computational linguistic research for the past decades. This is partly due to methodological reasons: because human language is a highly complex system with many different types of interacting information, researchers tend to abstract away from factors such as multilingual exposure. However, this is also due to the — often tacit — assumption that multilingualism is the exception and that it is possible to abstract away from multilingualism when studying language. The time is now ripe to bring the study of human language to the next level. Recent advances in linguistics with respect to methods and techniques, data and tools, and empirical and theoretical results make it possible to move on from the highly idealized monolingual perspective to a more realistic multilingual perspective. The central question of this research program is: **How does a multilingual perspective alter our current understanding of human language?**

A main strength of the present research program is that it has a **multi-layered and integrative** structure. It investigates language from a multilingual perspective at all relevant empirical levels, from the broadest to the narrowest: **the multilingual society, multilingual communication, multilingual language acquisition and learning, and the multilingual mind and brain**. A general question that cuts across all four levels is what happens when two or more languages meet: How does this influence and change the languages themselves, the social situation, communication, language acquisition, and processing and storage in the brain? An example of a more specific integrative question is how an asymmetric social status of two languages that are in contact co-determines the patterns of code-switching (i.e., the mixing of two languages) in a multilingual communicative situation, the process of multilingual acquisition and the neural patterns associated with code-switching. The experiments to be carried out at the various levels will be theoretically informed and the experimental results are expected to profoundly change existing theories of language, language variation and change. The integration culminates in computational modeling experiments that vary the strength of the linguistic and non-linguistic factors identified at the four empirical levels, to find out how different developmental conditions during language acquisition lead to different outcomes at the level of the individual and the community: (near) monolingualism, multilingualism, or a new language that mixes properties of the languages in contact. The program ties together into a coherent whole the strands of multilingualism research that have already started at the research institutes involved in the Multilingualism Laboratory consortium. In doing so, it also **brings together the state-of-the-art methodological expertise needed**: quantitative and qualitative sociolinguistic analysis, formal semantic, pragmatic, syntactic and phonological analysis, psycholinguistic and neuroimaging experiments, computational modeling and methods of applied linguistics. Dutch society is an ideal laboratory for the research program because it is highly multilingual, limited in size, and Dutch, Frisian and their regional varieties are among the best documented and described languages in the world.

It is clear that **multilingualism comes with societal and cognitive challenges and opportunities**. For example, growing up in a bilingual family and becoming fluent in two languages gives the child an advantage over its monolingual peers, whereas insufficient parental input in one or more languages may cause a language development deficit that is difficult to overcome later in life. An important

goal of this research program is to find the cut-off point on the spectrum of degrees of multilingualism. At which point on the spectrum does multilingualism cease to be advantageous, and how can language acquisition and learning be optimized such that every member of a multilingual society is offered equal chances? The novel insights resulting from this research will be put to use to improve education in general and language education more specifically, to develop language tests, diagnostics and therapies and to inform policy-makers and the general public on the fundamental multilingual nature of language in society.