

# **The Language-Cognition Interface in Bilinguals:**

**An evaluation of the Conceptual Transfer Hypothesis**



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Jolanta Latkowska

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Wydawnictwo Uniwersytetu Śląskiego



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## Introduction

The literature on bilingualism abounds in reports of individuals who on learning to speak another language acquired a new perspective on life, a new mode of thinking and responding to the world at large, and a new blueprint for expressing themselves and understanding others (Grosjean 1982; Hoffman 1989; Pavlenko 2003, 2005; Wierzbicka 1997, 2005, 2008). Apart from ecological validity manifesting itself in the personal testimonies of numerous bilinguals, and indeed the histories of bilingual communities, these reports must have an empirical basis. The Conceptual Transfer Hypothesis provides a suitable testing ground for probing the language-thought interface, and thus interpreting the experiences of so many. However, to have explanatory power, the hypothesis needs theoretical and empirical validation. Accordingly, this project evaluates the claims of the hypothesis by examining relevant theoretical positions and conducting research based on its recommendations.

The book opens with an overview of theoretical positions and pertinent research concerned with the architecture of the bilingual mental lexicon and levels of representation. Accordingly, special attention is paid to the question of whether semantic and conceptual representations constitute one and the same level or two separate ones, and to theories of concepts that have evolved over the years as a result of intensive research and theoretical speculation. These encompass the idea of lexicalized concepts, i.e. conceptual representations with lexical labels, which is subsequently elaborated on through the prism of Anna Wierzbicka's Natural Semantic Metalanguage (NSM) and semantic explications.

The bilingual mental lexicon maintains its functionality due to linguistic and non-linguistic processes operating within and across its various levels. Some of them are assumed to function at the language-cognition interface, bringing into existence what Jarvis and Pavlenko (2008) have termed *conceptual transfer*. As it involves cross-modal influence of linguistic categories on cognition, the discussion focuses on language-mediated processes within the lexicon, including those predicted by the Theory of Linguistic Relativity and its modified versions in the form of the Thinking for Speaking Hypothesis (Slobin 1996, 2003) and von Stutterheim's

Event Conceptualization Paradigm (von Stutterheim 2003). The theoretical overview ends with a chapter devoted to the Conceptual Transfer Hypothesis proper and an evaluation of its theoretical and empirical bases. This constitutes a springboard for research which was conducted in accordance with the recommendations of the hypothesis and is presented in Studies 1 and 2.

Study 1 takes as its point of departure Wierzbicka's (1997) explications for friendship terms in Polish and English. Because the explications are hypothesized to illustrate prototypical cognitive scenarios and thus show the thinking behind particular words, Wierzbicka argues they reflect underlying conceptual categories. Study 1a examines naming patterns through a set of explication-based scenarios in each of the participants' languages. The obtained data are used for inter- and intra-group comparisons to assess the influence of bilingualism and the context of L2 learning and use on verbal categorization in the L1 and L2. Study 1b examines correlations between verbal categorization and similarity judgments.

Study 2 explores pre-linguistic conceptualization, drawing on a dataset collected during a film-retelling task. The study is based on a four-stage model developed by Habel and Tappe (1999) and modified by von Stutterheim and Nüse (2003). Study 2a focuses on the selection stage of conceptualization and examines the process in terms of Slobin's Thinking for Speaking Hypothesis (Slobin 1996) and Talmy's (2000, 2003) typology of verbs of motion. Structuring and segmentation are investigated in Study 2b, which is based on von Stutterheim's Event Conceptualization Paradigm. The study has a comparative character and uses both bilingual and monolingual data.

The concluding chapter appraises the strengths and weaknesses of the project and expands on its practical merits, as well as looking at areas in need of clarification and improvement. It also suggests some avenues for future research and L2 learning, thus highlighting those cognitive and linguistic processes that previous research did not seem to be aware of.

The interpretations proposed in this work are consistent with the theory of multi-competence (Cook 2003) and the Dynamic Model of Multilingualism (Herdina and Jessner 2002), which, for reasons of space, have not been presented here. Following Pavlenko (1999, 2005), the terms *bilingual memory* and the *bilingual mental lexicon* are used interchangeably, while the abbreviation SLA refers to both second and foreign language learning. Whenever relevant, the type of L2 learning and use is specified by means of terms such as *immersion*, *naturalistic*, *formal* and *foreign language learning*. Small capitals denote cognitive/conceptual categories, members of categories, image schemas and metaphors. Despite the criticism that the notion of the *native speaker* has received from bilingualism-oriented researchers (Cook 2003; Davies 2006; Romaine 1995), it has been applied a few times in this work for lack of convincing alternatives and for stylistic reasons. A related term and more precise yardstick for evaluating bilinguals is the socially and educationally comparable *monolingual*, which has been used in contexts where it ensured clarity and precision

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of description. As regards *bilingualism*, the way the word is applied in this book corresponds to the definition set forth by Weinreich (1953), who saw bilingualism as an alternate use of more than one language. Since both the immigrants and the students participating in this research had advanced proficiency in L2 English and used the language for (various forms of) communication regularly, it is assumed that they met the definitional criteria and were bilingual. Finally, earlier drafts of some of the sections in Chapters 1 and 2 have been presented elsewhere as work in progress (Latkowska 2009, 2010, 2011\*).

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## **Na styku myśli i dwujęzyczności Ocena hipotezy transferu konceptualnego**

### Streszczenie

Praca podejmuje temat wpływu języka na kategorie konceptualne u osób dwujęzycznych. Poruszana problematyka omawiana jest na podstawie najnowszych teorii pamięci bilingwalnej oraz stworzonej na ich kanwie hipotezy transferu konceptualnego autorstwa Scotta Jarvisa i Anety Pavlenko.

Część teoretyczna przedstawia strukturę pamięci bilingwalnej, zwanej również słownikiem wewnętrznym, modele sfery konceptualnej oraz istniejące pomiędzy poziomem językowym i konceptualnym zależności. Te ostatnie rozpatrywane są przez pryzmat teorii względności językowej i jej zmodyfikowanych wersji: teorii „myślenie dla mowy” (ang. *Thinking for Speaking*) Dana Slobina, jak również hipotezy Christiane von Stutterheim. Ostatnim elementem dyskusji jest prezentacja hipotezy transferu konceptualnego oraz jej ocena pod kątem merytorycznym i empirycznym.

Część badawcza przedstawia dwa projekty zrealizowane zgodnie z zaleceniami autorów hipotezy transferu konceptualnego. Projekt 1. dotyczy kategoryzacji semantycznej oraz niewerbalnej. Badane kategorie semantyczne oparte są na eksplikacjach Anny Wierzbickiej i dotyczą relacji międzyludzkich (przyjaciół, *friend*, kolega itd.). Projekt 2. to analiza ram konceptualizacyjnych pod kątem wydarzeń przedstawiających ruch ukierunkowany oraz konstrukcji narracji w pisemnych relacjach z obejrzanego filmu animowanego. Uzyskane dane w języku polskim i angielskim stanowią podstawę wniosków, które zaprezentowano w ostatnim rozdziale pracy.

Badania przeprowadzono w Polsce i krajach anglojęzycznych (w Anglii i Irlandii). W skład badanych populacji weszli monolingwalni Polacy i rodzimi użytkownicy języka angielskiego (ang. *native speakers*) oraz Polacy posługujący się językiem angielskim w warunkach naturalnych (emigranci) i szkolnych (studenci filologii angielskiej). Każda z grup monolingwalnych uczestniczyła w sesjach badawczych dotyczących odpowiednio języka polskiego i angielskiego. Osoby dwujęzyczne testowane były w obydwu językach. Dane zebrano za pomocą scenariuszy sytuacyjnych, kwestionariuszy, oceny podobieństwa, a także opisu narracyjnego krótkometrażowego filmu animowanego pt. *Katedra* w reżyserii Tomasza Bagińskiego.

Jolanta Latkowska

## **An der Berührungfläche zwischen dem Denken und der Zweisprachigkeit Die Bewertung von der Hypothese des konzeptuellen Transfers**

### Zusammenfassung

In ihrer Monografie befasst sich die Verfasserin mit dem Einfluss der Sprache auf konzeptuelle Kategorien der zweisprachigen Personen. Sie bespricht die neuesten Theorien über bilinguales Gedächtnis und die auf dessen Grundlage von Scott Jarvis und Aneta Pavlenko aufgestellte Hypothese des konzeptuellen Transfers.

Der theoretische Teil der Arbeit bringt uns die Struktur des bilingualen Gedächtnisses, auch ein inneres Wörterbuch genannt, die Modelle des konzeptuellen Bereiches und die zwischen der sprachlichen und konzeptuellen Ebene bestehenden Zusammenhänge näher. Letztgenannte werden hier unter dem Gesichtspunkt der Theorie der Sprachrelativität und deren modifizierten Varianten: der Theorie „Denken für Sprechen“ (engl.: *Thinking for Speaking*) von Dan Slobin und der Hypothese von Christiane von Stutterheim dargestellt. Das letzte in dem Teil diskutierte Element ist die Darstellung der Hypothese des konzeptuellen Transfers und deren sachliche und empirische Beurteilung.

Der Forschungsteil beinhaltet zwei den Empfehlungen der Autoren von der Hypothese des konzeptuellen Transfers gemäß ausgearbeiteten Projekte. Der erste von ihnen betrifft semantische und nonverbale Kategorisierung. Die hier untersuchten Kategorien basieren auf Erläuterungen von Anna Wierzbicka und betreffen zwischenmenschliche Beziehungen (Freund, Kollege usw.) Im anderen Projekt werden konzeptualistische Rahmen hinsichtlich der Lexikalisierung von den eine zielführende Bewegung darstellenden Ereignissen und der Erzählungsstruktur in schriftlichen Rezensionen des Zeichentrickfilms untersucht. Die im Polnischen und in Englischen erreichten Daten sind die Grundlage für die im letzten Kapitel der Monografie dargestellten Schlussfolgerungen.

Die Untersuchungen wurden in Polen und in englischsprachigen Ländern (England und Irland) durchgeführt. Unter Untersuchungspersonen waren einsprachige Polen, englische Muttersprachler (engl.: *native speakers*) und die die englische Sprache auf natürlichem Wege (Emigranten) und in der Schule (Studenten der englischen Philologie) beherrschten Polen. Jede einsprachige Gruppe nahm an den die polnische oder englische Sprache betreffenden Forschungssitzungen teil. Bilinguale Personen waren in den beiden Sprachen während separater Sitzungen getestet. Die Daten wurden mittels Situationsprogramme, Fragebögen, der Ähnlichkeitsbeurteilung und des Zeichentrickkurzfilms Katheder unter der Regie von Tomasz Bagiński erreicht.



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