

Andreas Wirag

The Construction and Efficiency of Prototype
Definitions for the EFL Learner's Dictionary

An Empirical Study in Applied Cognitive Linguistics

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WVT Wissenschaftlicher Verlag Trier
Bergstraße 27, 54295 Trier
Postfach 4005, 54230 Trier
Tel.: (0651) 41503
Fax: (0651) 41504
Internet: <http://www.wvttrier.de>
E-Mail: wvt@wvttrier.de

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Format

Style

<i>italics</i>	(a) for emphasis, (b) for dictionary lemmata, (c) for words as items of the lexicon, (d) for foreign terms
SMALL CAPITALS	for words that denote superordinates (e.g., FURNITURE)
CAPITALS	for conceptual metaphors (e.g., ANGER IS A HOT FLUID), for semantic primes (e.g., I, YOU, SOMEONE)
‘single quotes’	for English translations of foreign terms (e.g., <i>bleich</i> , ‘pale’)
“double quotes”	(a) for citations, (b) for terms that are defined or operationalised
/slash brackets/	for phonological representations using the IPA (e.g., /gri:n/)
[SMALL CAPITALS]	for semantic features, or sense elements (e.g., [BULKY])

Abbreviations

α	Cronbach’s alpha
adj.	Adjective
ANCOVA	analysis of covariance
ANOVA	analysis of variance
Applied CL	Applied Cognitive Linguistics
BNC	British National Corpus
CEFR	Common European Framework of Reference for Languages
cf.	compare
CIDE1	<i>Cambridge International Dictionary of English</i> , 1st ed. (1995)
CIDE4	<i>Cambridge Advanced Learner’s Dictionary</i> , 4th ed. (2013)
CL	Cognitive Linguistics
COB1	<i>Collins COBUILD English Language Dictionary</i> , 1st ed. (1987)
COB2	<i>Collins COBUILD English Dictionary</i> , 2nd ed. (1995)
COB8	<i>Collins COBUILD Advanced Learner’s Dictionary</i> , 8th ed. (2015)
<i>d</i>	Cohen’s <i>d</i>
EFL	English as a Foreign Language

<i>f</i>	frequency
FL	foreign-language
Fr.	French
Germ.	German
L1	first language; native language
L2	second language; target language
LDOCE1	<i>Longman Dictionary of Contemporary English</i> , 1st ed. (1978)
LDOCE3	<i>Longman Dictionary of Contemporary English</i> , 3rd ed. (1995)
LDOCE6	<i>Longman Dictionary of Contemporary English</i> , 6th ed. (2014)
<i>M</i>	mean
MC	multiple-choice
<i>Mdn</i>	median
MEDAL1	<i>Macmillan English Dictionary for Advanced Learners</i> , 1st ed. (2002)
<i>N</i>	total number of cases
<i>n</i>	number of cases
n.	noun
OALD1	<i>Oxford Advanced Learner's Dictionary of Current English</i> , 1st ed. (1948)
OALD5	<i>Oxford Advanced Learner's Dictionary of Current English</i> , 5th ed. (1995)
OALD9	<i>Oxford Advanced Learner's Dictionary / Oxford Advanced Learner's Dictionary of Current English</i> , 9th ed. (2015)
<i>p</i>	<i>p</i> -value
<i>r</i>	Pearson product-moment correlation
<i>SD</i>	standard deviation
SLA	second language acquisition
<i>t</i>	Student's <i>t</i> distribution
v.	verb
VKS	Vocabulary Knowledge Scale
VST	Vocabulary Size Test
<i>W</i>	Mann–Whitney <i>U</i> test statistics
* / ** / ***	levels of statistical significance: $p < .05$ / $p < .01$ / $p < .001$

1. Introduction

An “Applied Cognitive Linguistics” discipline, which is concerned with the application of cognitive-linguistic (CL) theories, concepts, and models to the area of foreign-language (FL) instruction, is an emerging field. In recent articles, the cognitive-didactic framework is described as a “very new area” in “second language learning” (Littlemore & Juchem-Grundmann, 2010b, p. 1), a paradigm change for language acquisition (Roche & Suñer-Muñoz, 2014, p. 120; cf. Appendix), and, hyperbolically perhaps, as the “emergence of new horizons in language pedagogy” (Roche, 2014, p. 329).¹

It is this recent, cognitive-didactic approach to the study of foreign-language instruction that the dissertation adopts. Accordingly, the thesis explores the transfer of a cognitive-linguistic Prototype Semantics to the learner’s dictionary, or, rather, to the dictionary for non-native, foreign-language learners. More specifically, as suggested by the title *The Construction and Efficiency of Prototype Definitions for the EFL Learner’s Dictionary*, the thesis examines the creation (... *Construction* ...) of a cognitive-didactic definition style (... *Prototype Definitions* ...) for the L2 English learner’s dictionary (... *EFL Learner’s Dictionary* ...). This novel, cognitive-linguistic “prototype” definition for the learner’s dictionary could, as a research prospect of the thesis, be able to increase the efficiency of the dictionary to support L2 learners (... *Efficiency* ...).

At the outset, to frame the following, book-length discussion of Prototype Semantics and the learner’s dictionary, note that the thesis intends to contribute to the broader nexus of Cognitive Linguistics, Lexicography, and foreign-language teaching and learning. Overall, therefore, it aims to inform research in Applied Cognitive Linguistics, which is concerned with the use of cognitive-linguistic theories or concepts in foreign-language instruction (e.g., Pütz et al., 2001a; 2001b; Knop et al., 2010; Littlemore, 2011; Tyler, 2012). Within Applied Cognitive Linguistics, specifically, the thesis intends to contribute to research that examines the use of cognitive-linguistic concepts to revise, refine, and, ideally, improve the efficiency of the dictionary (e.g., Lindstromberg, 1991; Jehle, 2004; Geeraerts, 2010a; Hanks, 2013; Ostermann, 2015).² Also, for Lexi-

1 The framework of Cognitive Linguistics itself is of a more recent origin and dates back to a departure from a Chomskian approach to Linguistics in the 1970s / 1980s. Cognitive Linguistics, like Applied Cognitive Linguistics, has been described as “major innovation” (Taylor, 1993, p. 201), “far-reaching paradigm shift” (Geeraerts & Kristiansen, 2014, p. 203), “cognitive turn” (Taylor, 2010, p. 570), or even “revolution” (Nerlich & Clarke, 2010, p. 592) for Linguistics. See, for a diachronic outline of Cognitive Linguistics, e.g., Nerlich & Clarke, 2010; see, for the major tenets and research foci of CL, Evans & Green, 2009, ch. 1, 2, 3 & 4; Croft & Cruse, 2009, ch. 1; Geeraerts & Cuyckens, 2010.

2 Ostermann (2015), for instance, suggests the paradigm of a “Cognitive Lexicography”, which she defines as follows: “Cognitive Lexicography is the application of cognitive linguistic theories to traditional lexicographic practice. It is a new approach to lexicogra-

cography, since the thesis compares the efficiency of a “traditional” / “prototype” definition format in an empirical dictionary user study, the thesis is directed at an empirical Lexicography, which evaluates the effect of different types of dictionaries and / or types of definitions (e.g., Cumming et al., 1994; Summers, 2000; Nesi, 2000, ch. 3; Lew, 2004). Finally, the thesis aims to inform Lexicography in a specifically applied, practical manner. In this fashion, the thesis puts forward a series of suggestions for a practical Lexicography, which, ideally, contribute to the development and improvement of the learner’s dictionary.³

Accordingly, to explore the transfer of a cognitive-linguistic concept to the learner’s dictionary, the thesis sets out with an introduction of its research framework, i.e., Applied Cognitive Linguistics (ch. 2). After that, the theoretical background of the thesis is established in the two following chapters. First, the “source” notion from Cognitive Linguistics, which is transferred to the L2 dictionary, is described in detail, i.e., Prototype Semantics (ch. 3). Then, the “target” for this transfer, from the field of L2 teaching and learning, is introduced, i.e., the learner’s dictionary (ch. 4). Next, following the theory chapters, the thesis presents its study section (or empirical section). Here, in the classic order for empirical research, it introduces a set of research questions and a corresponding study design (ch. 5), followed by an exploratory Pilot Study (ch. 6), and, finally, a conclusive Main Study (ch. 7). After that, the thesis details implications for a practical Lexicography that arise from the Main Study (ch. 8). Finally, the last chapter offers a summary of its contribution to the different research fields and sketches avenues for further research (ch. 9). In greater detail, then, the thesis pursues the following outline.

At first, **Chapter 2 (“Applied Cognitive Linguistics”)** introduces the framework of Applied Cognitive Linguistics (Applied CL), to focus the research outlook of the thesis on the application of cognitive-linguistic theories, models, and concepts to L2 instruction. First, to introduce the emerging field, the chapter suggests a general towards-a-definition account of Applied Cognitive Linguistics (2.1). After that, the chapter discusses two axioms that substantiate the towards-a-definition and prepare the discussion of a usage-based Prototype Semantics – the “cognitive commitment” and “usage-based commitment” (2.2). Finally, the chapter suggests a more fine-grained division of Applied CL research, and introduces a “theoretical–empirical” / “non-curricular–curricular” dimension for the cognitive-didactic field (2.3).

Chapter 3 (“Prototype Semantics”) is concerned with the discussion of the CL theory of Prototype Semantics, which, in the thesis, is transferred to the learner’s dictionary. At the outset, as a “foil” for Prototype Semantics, the chapter introduces a traditional,

phy focusing on a language description according to theories and findings from cognitive linguistics” (p. 67).

3 Atkins (2010), for instance, distinguishes a “practical lexicography”, which relates to “the real, hard world of dictionary-making”, from a “theoretical lexicography”, which refers to “a body of theory related to lexicography” (p. 31).