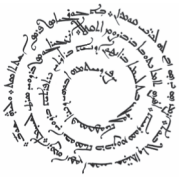
From Ancient Manuscripts to Modern Dictionaries



Perspectives on Linguistics and Ancient Languages

9

Perspectives on Linguistics and Ancient Languages (PLAL) contains peer-reviewed essays, monographs, and reference works. It focuses on the theory and practice of ancient-language research and lexicography that is informed by modern linguistics.

From Ancient Manuscripts to Modern Dictionaries

Select Studies in Aramaic, Hebrew, and Greek

Edited by

Tarsee Li

Keith Dyer

GORGIAS PRESS

2017

Gorgias Press LLC, 954 River Road, Piscataway, NJ, 08854, USA

www.gorgiaspress.com

2017 ط

ISBN 978-1-4632-0608-6 **ISSN 2165-2600**

Library of Congress Cataloging-in-Publication Data

Names: Society of Biblical Literature. International Meeting. | Li, Tarsee,
editor. | Dyer, Keith D., 1951- editor.
Title: From ancient manuscripts to modern dictionaries : select studies in
Aramaic, Hebrew and Greek / edited by Tarsee Li & Keith Dyer.
Description: Piscataway, NJ : Gorgias Press, [2017] |
Series: Perspectives on
linguistics and ancient languages, ISSN 2165-2600 ; 9 | Includes
bibliographical references.
Identifiers: LCCN 2017004614 | ISBN 9781463206086 (alk. paper)
Subjects: LCSH: Aramaic language--Lexicography--Congresses. | Hebrew
language--Lexicography--Congresses. | Greek
language--Lexicography--Congresses.
Classification: LCC PJ5487 .S63 2017 | DDC 492.2--dc23
LC record available at https://lccn.loc.gov/2017004614

Printed in the United States of America

Table of Contents

PREFACE

—a life's work in the agony and sweat of the human spirit,
not for the glory and least of all for profit,
but to create out of the materials
of the human spirit
something
which did not exist before.

William Faulkner

Perspectives on Linguistics and Ancient Languages contains peer-reviewed essay collections, monographs, and reference works. It is a publication of the International Syriac Language Project (ISLP), an interdisciplinary and multidisciplinary group which meets annually to reconsider the theory and practice of ancient-language research and of ancient-language lexicography.

The study of ancient languages is a time-honoured field of endeavour. Lexicography is an equally venerable and even more ancient tradition. Modern lexicography, the art and science of dictionary making, began about four centuries ago. But prescientific lexicography has ancestors in many ancient languages and stretches back four millennia. Yet as old as lexicography and ancient-language study are, on the time-line of history they were conceived only recently when compared to the emergence of human language, which may go back, say, 100,000 years: lexicography about an hour ago and modern lexicography around five minutes if we reduce the life span of language to a twenty-four hour period.

The related discipline of modern linguistics is more recent still, beginning in the mid-nineteenth century and experiencing rapid growth in the latter half of the twentieth century. Because it is the science of the study of language, it became an integral part of ancient-language inquiry and adopted the lexicography of ancient and contemporary languages as one of its sub-disciplines.

Today, lexicography, no less than ancient-language research, is a mature discipline in its own right. All three—linguistics, ancient-language study, and lexicography—therefore stand beside each other rather than one being subordinate to the other.

For ancient-language research the dictionary is a primary resource. For its part, ancient-language lexicography in its microscopic probing, quest for the larger perspective, and provision of various forms of information, must draw on all aspects of ancient-language study. In contemporary inquiry, both disciplines are inextricably linked to developments in modern linguistics. Sound lexicography requires sound linguistic theory. Linguistic theory and practice are implicit in a methodology for

ancient-language study. The aim of this series is therefore to address the disciplines of ancient-language research, lexicography, and issues of linguistics as they relate to a contemporary approach to the other two.

The aim of the ISLP to be also interdisciplinary and multidisciplinary in its research is motivated by three primary factors. The first is that many linguistic disciplines meet in the investigation of ancient languages and in the making of modern lexica. The second is that developments in the study of one language, theoretical and applied, are often pertinent to another. The third is that the development of electronic ancient-language data and lexica require attention to advances in computational linguistics. Thus, our planning for a lexicon for a particular language for a new generation is not pursued in isolation, but embraces an understanding of what is taking place in the study of other ancient languages and in the wider worlds of lexicography, linguistics, and digital technologies.

Terry C. Falla

ABBREVIATIONS

acc.	according (employed by BAG, BAGD, BDAG)
act. pt. act.	participle (employed by cited lexical entry)
AAT	Goodspeed, *The New Testament: An American Translation*
acc. with	[in] accordance with (employed by cited lexical entry)
AEINT	*Aramaic-English Interlinear New Testament*
AfO	*Archiv für Orientforschung*
AOAT	Alter Orient und Altes Testament
appar.	apparently (employed by cited lexical entry)
ASM	American Standard Version
Audo	Audo's Syriac-Syriac Lexicon
BAG	*A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, 1957
BAGD	*A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, 1979
BBah	Duval, ed., *Hassan bar Bahlul*
BDAG	*A Greek-English Lexicon of the New Testament and Other Early Christian Literature*, 2000
BDB	Brown, Driver, and Briggs, *A Hebrew and English Lexicon of the Old Testament with an appendix containing the Biblical Aramaic*
BSOAS	*Bulletin of the School of Oriental and African Studies*
Bover	*Novi Testamenti Biblia Graeca et Latina*
Brockelmann	*Lexicon Syriacum*
Brun	*Dictionarium Syriaco-Latinum*
BZAW	Beihefte zur Zeitschrift für die alttestamentliche Wissenschaft
cent.	century (employed by cited lexical entry)
comp. n.m.	compound noun masculine (employed in lexical entry)
Constant. Porphyrogenitus/Constantinus Porphyrog.	in lexicons refer to Constantine Porphyrogenitus
Costaz	*Dictionnaire syriaque-français*, *Syriac-English Dictionary*, *Qamus suryani-'arabi*.

CSD	Payne Smith, Jessie, *A Compendious Syriac Dictionary*
cstr.	Construct state act. pt. fol. by prep. ܕ pref. to n.)
Danker	*The Concise Greek-English Lexicon of the New Testament*
DCH	Clines, *Dictionary of Classical Hebrew*
DEG	Chantraine, *Dictionnaire étymologique de la langue grecque*
DGE	Adrados, et al. *Diccionario griego-español*
EDNT	Balz and Schneider, *Exegetical Dictionary of the New Testament*
et al.	(Latin *et alii*) and others
Ferrer and Nogueras	*Breve Diccionario Siríaco: Siríaco-Castellano-Catalán*
GELS	Muraoka, Takamitsu, *A Greek-English Lexicon of the Septuagint*
Goodsp.	Goodspeed = *AAT*
Goshen-Gottstein	*A Syriac-English Glossary with Etymological*
HALAT	Koehler and Baumgartner, *Hebräische und aramäische Lexikon zum Alten Testament*
HALOT	Koehler, L., W. Baumgartner, and J. J. Stamm. *The Hebre wand Aramaic Lexicon oft he Old Testament*. Translated and edited under the supervision of M. E. J. Richardson. 4 vols. Leiden, 1994–1999
Hdt.	Herodotus of Halicarnassus, see Hude, C., ed. *Herodoti Historiae*
IEJ	*Israel Exploration Journal*
IGL	Liddell and Scott, *An Intermediate Greek Lexicon*
IGNTP	International Greek New Testament Project
JAOS	*Journal of the American Oriental Society*
JB	Jerusalem Bible
JBL	*Journal of Biblical Literature*
JRAS	*Journal of the Royal Asiatic Society*
JSNTSup	Journal for the Study of the New Testament: Supplement Series
JSS	*Journal of Semitic Studies*
JTS	*Journal of Theological Studies*
KJB	King James Bible
KPG	Falla, *A Key to the Peshitta Gospels*
Köbert	*Vocabularium Syriacum*
KwD²	Schulthess, *Kalīla and Dimnah*
LCL	Loeb Classical Library
Legg	*Novum Testamentum Graece … Marcum*, and … *Matthaeum*

LEH	Lust, Eynikel, and Hauspie, *Greek-English Lexicon of the Septuagint*
LfgrE	Snell, Meier-Brügger, et al. *Lexikon des frühgriechischen Epos*
LSJ	Liddell, Scott, Jones, and McKenzie, *A Greek-English Lexicon*, 9th ed.
LXX	Septuagint
Manna	ܗܕܝܐ ܕܠܫܢܐ ܐܪܡܝܐ ܡܠܒܒܐ / *Vocabulaire chaldéen-arabe* / دليل الراغبين في لغة الآراميين
Merk	*Novum Testamentum Graece et Latine*
Meyer	*Critical and Exegetical Commentary on the New Testament*
mid.	middle
Mlt-H	Moulton and Howard, *A Grammar of New Testament Greek*
M-M	Moulton and Milligan, *The Vocabulary of the Greek New Testament*
mng.	meaning (employed by cited lexical entries)
Moffatt	James Moffatt, *The New Testament: A New Translation*
n.	noun
NEB	New English Bible
Newman	*A Concise Greek-English Dictionary of the New Testament*
NICNT	New International Commentary on the New Testament
NIV	New International Version
NJB	New Jerusalem Bible
NRSV	New Revised Standard Version
objs.	objects (employed in cited lexical entry)
OED	Simpson and Weiner. *The Oxford English Dictionary*, 2nd ed. Oxford: Clarendon Press, 1989. Also, see Simpson *OED Online.*
OLD	Glare, et al. *The Oxford Latin Dictionary*
ON	Hoffman, *Opuscula Nestorius syriace tradidit*
pass.	passive
Pazzini	*Lessico Concordanziale del Nuovo Testamento Siriaco*
perh.	perhaps (employed by cited lexical entries)
Perseus	Perseus Digital Library. Editor-in-chief, Gregory R. Crane, Tufts University. http://www.perseus.tufts.edu/hopper/
pl.	plural (employed in cited lexical entry)
prob.	(employed by cited lexical entry)
PsC	Budge, *The History of Alexander the Great*
pt.	participle (employed in cited lexical entry)

REB	Revised English Bible
ref.	reference (employed by some lexical works)
Rienecker and Rogers	*Linguistic Key to the Greek New Testament*
RPS	(used in *KPG*) = *Thesaurus Syriacus*
RSV	Revised Standard Version
SFG	Aland, *Synopsis of the Four Gospels*
sing.	singular
SL	Sokoloff, *A Syriac Lexicon*
SQE	Aland, *Synopsis Quattuor Evangeliorum*, 5th revised ed.
s.v.	*sub verbo*, under the word
Swanson	*New Testament Greek Manuscripts*
TDNT	*Theological Dictionary of the New Testament*
Thesaurus Syriacus	Payne Smith, *Thesaurus Syriacus*
Thelly	*Syriac-English-Malayalam Lexicon*
Theophyl. Sim.	*Theophylactus Simocatta Epistulae* (employed by BDAG)
Tischendorf	*Novum Testamentum Graece*
Tit. Bostra.	Lagarde, ed., *Titi Bostreni contra Manichaeos libri quatuor Syriace*
TLG	Thesaurus Linguae Graecae® Digital Library. Editor Maria C. Pantelia. University of California, Irvine. http://www.tlg.uci.edu
TLL	Thesaurus Linguae Latinae. Bayersiche Akademie der Wissenschaften. Online (Berlin: De Gruyter) at http://www.degruyter.com/view/db/tll
TLNT	*Theological Lexicon of the New Testament*
t.t.	technical term (employed by cited lexical works)
Tregelles	*The Greek New Testament*
UBS	United Bible Societies
Vg. and Vulg.	Vulgate (employed by cited lexical works)
Vogels	*Novum Testamentum Graece et Latina*
Von Soden	*Die Schriften des Neuen Testaments in ihrer ältesten erreichbaren Textgestalt*. 2 vols. Göttingen: Vandenhoeck und Ruprecht, 1913.
VT	*Vetus Testamentum*
VTSup	Supplements to Vetus Testamentum
w.	with (employed by cited lexical works)
WBC	Word Biblical Commentary
writ.	writers, writings (employed by lexical entry in Grimm-Thayer)

W-S	Winer, *Grammatik des neutestamentlichen Sprachidioms*, ed. Schmiedel, but see Winer, *A Grammar of the New Testament Diction*
WUNT	Wissenschaftliche Untersuchungen zum Neuen Testament
Zerwick & Grosvenor	*A Grammatical Analysis of the Greek New Testament*
ZA	*Zeitschrift für Assyriologie*
ZDMG	*Zeitschrift der Deutschen Morgenländischen Gesellschaft*
ZAW	*Zeitschrift für die alttestamentliche Wissenschaft*
ZWT	*Zeitschrift für Wissenschaftliche Theologie*

A Re-Examination of Grammatical Categorization in Biblical Hebrew[1]

Cynthia L. Miller-Naudé and Jacobus A. Naudé
University of the Free State

The question of grammatical categories and how to determine them is an ancient one. Panini divided Sanskrit into four categories based upon inflection: nouns and verbs are inflected, whereas prepositions and particles are uninflected. Dionysius Thrax (2nd century B.C.E.) divided words into eight categories based upon both inflection and meaning: nouns (naming), interjections, adverbs, verbs (speaking), participles, prepositions, conjunctions, pronouns. The threefold division of Hebrew grammar into nouns, verbs and particles by the medieval Hebrew grammarians was based on the work of the Arabic grammarians who, in turn, were following the Classical Greek (Platonic) view of categorization. Contemporary Hebrew grammars have generally followed some combination of these approaches. Waltke and O'Connor (1990), for example, follow Richter (1978–1980) in using the categories verb, verbal noun (infinitive, participle), nomen (substantive, adjective, numeral), proper name, pronoun, particle (adverb, preposition, conjunction, modal word). A notable exception is the work of Andersen and Forbes (2012), which classifies parts of speech using primarily paradigmatic specification and distributional specification and, to a lesser extent, ostensive specification (e.g. the major free pronouns) and derivational specification (the locative -h and the adverbial suffix –ām). Their categorization results in seven major categories (verbals, substantives, substantive-verbals, adverbials, conjunctions, prepositions, and

[1] We are grateful for the comments of the participants in the conference as well as those of two anonymous reviewers. We thank our research assistant, Ms Jacqueline Smith, for her assistance in collecting and checking the data. This work is based on research supported in part by the National Research Foundation of South Africa (Cynthia L. Miller-Naudé UID 95926 and Jacobus A. Naudé UID 85902). The grantholders acknowledge that opinions, findings and conclusions or recommendations expressed in any publication generated by the NRF supported research are those of the authors, and that the NRF accepts no liability whatsoever in this regard.

"miscellany"), thirty-seven "more fine-grained categories" and seventy-six "even finer categories."

In contemporary linguistics, there are multiple approaches to categorization. In generative grammar, categorization is part of universal grammar and each item in the mental lexicon is identified as a member of a particular grammatical category. By contrast, in cognitive linguistics, categorization, namely, the ability to judge that a particular thing is or is not an instance of a particular category, is an essential part of cognition. In Radical Construction Grammar (Croft 2001), for example, categories are derived from the constructions in which they appear. Linguistic typology provides another vantage point for considering categorization, since typologists use either semantic relations or functions in their work of comparing linguistic structures across languages.

In this article we re-examine the question of grammatical categorization in Biblical Hebrew with respect to linguistic theory, typology, and universals. We conclude by a preliminary examination of the category of "adjective" in Biblical Hebrew with respect to the data involving טוֹב.

1 INTRODUCTION

Linguistic analysis is necessarily and unavoidably perspectival – how do we identify the data, how do we segment the data, how do we describe the data, and how do we categorize them as tokens of one linguistic phenomenon or another? One of the most basic ways in which linguists identify, segment, describe and categorize linguistic phenomena is that of the basic grammatical categories such as noun, verb, adjective, etc. These are sometimes referred to as word classes, or, in traditional grammar, the parts of speech. These grammatical categories play a critical role in linguistic analysis, in the writing of grammars, and in the compiling of dictionaries.

The problem of grammatical categories and how to determine them is an ancient one. Panini (4th century B.C.E.) divided Sanskrit into four categories based primarily upon inflection: nouns and verbs are inflected, whereas prepositions and particles are uninflected. At nearly the same time in the West, Plato divided the sentence into *onoma* and *rhema* and his student, Aristotle, added a third category, *syndesmoi*, grammatical words.[2] Dionysius Thrax (2nd century B.C.E.) divided words into eight categories based upon both inflection and meaning: nouns (naming), interjections, adverbs, verbs (speaking), participles, prepositions, conjunctions, pronouns. His work provided a foundation for subsequent approaches to Greek and Latin grammar. As a result, in English and many European languages, the stand-

[2] R. L. Trask, "Parts of Speech," in *Concise Encyclopedia of Grammatical Categories* (ed. K. Brown and J. Miller; Oxford: Elsevier, 1999), 278.

ard/traditional parts of speech have been the following: *noun*, *pronoun*, *verb*, *adjective*, *adverb*, *preposition*, *conjunction* and *interjection*.[3]

The medieval Hebrew grammarians made a threefold division of Hebrew grammar into nouns, verbs and particles, based upon the work of the medieval Arabic grammarians who divided the parts of speech (*ʾaqsām l-kalām*) into substantives (*ism*), verbs (*fiʿl*), and particles (*ḥarf*).[4] Contemporary grammars of Biblical Hebrew have generally followed some combination of these approaches. Waltke and O'Connor, for example, follow Richter (1978–1980) in using the categories verb, verbal noun (infinitive, participle), nomen (substantive, adjective, numeral), proper name, pronoun, particle (adverb, preposition, conjunction, modal word).[5] A notable exception is the work of Andersen and Forbes, which classifies parts of speech using primarily paradigmatic specification and distributional specification and, to a lesser extent, ostensive specification (e.g. the major free pronouns) and derivational specification (the locative *-h* and the adverbial suffix *-ām*).[6] Their categorization results in seven major categories (verbals, substantives, substantive-verbals, adverbials, conjunctions, prepositions, and "miscellany"), thirty-seven "more fine-grained categories," and seventy-six "even finer categories."[7] Since their categories relate to their syntactic database and it is, as they note, infinitely easier for the computer to join

[3] Alan Reed Libert, "Word Classes (Parts of Speech)," in *The Cambridge Encyclopedia of Language Sciences* (ed. Patrick Colm Hogan; Cambridge: Cambridge University Press, 2011), 915. See also the historical overview in Georg Bossong, "Reflections on the History of the Study of Universals: The Example of the *partes orationis*," in *Meaning and Grammar: Cross-linguistic Perspectives* (ed. Michel Kefer and Johan van der Auwera; Berlin: Mouton de Gruyter, 1992), 3–16.

[4] See Dan Becker, "Grammatical Thought: Influence of the Medieval Arabic Grammatical Tradition," in *Encyclopedia of Hebrew Language and Linguistics* (ed. Geoffrey Khan; 4 vols; Leiden: Brill, 2013), 2:113–128, esp. 124.

[5] Bruce K. Waltke and M. O'Connor, *An Introduction to Biblical Hebrew Syntax* (Winona Lake: Eisenbrauns, 1990), 67; see W. Richter, *Grundlagen einer althebräischen Grammatik. I: Das Wort (Morphologie)* (Arbeiten zu Text und Sprache im Alten Testament, 8; St. Ottilien: EOS Verlag, 1978); *Grundlagen einer althebräischen Grammatik. II: Die Wortfügung (Morphosyntax)* (Arbeiten zu Text und Sprache im Alten Testament, 10; St. Ottilien: EOS Verlag, 1979); *Grundlagen einer althebräischen Grammatik. III: Der Satz (Satztheorie)* (Arbeiten zu Text und Sprache im Alten Testament, 13; St. Ottilien: EOS Verlag, 1980).

[6] Francis I. Andersen and A. Dean Forbes, *Biblical Hebrew Grammar Visualized* (Linguistic Studies in Ancient West Semitic 6; Winona Lake: Eisenbrauns, 2012), 20–42. See also A. Dean Forbes, "Squishes, Clines, and Fuzzy Signs: Mixed and Gradient Categories in the Biblical Hebrew Lexicon," in *Syriac Lexicography I: Foundations for Syriac Lexicography* (ed. A. D. Forbes and D. G. K. Taylor; Piscataway, NJ: Gorgias, 2006), 105–139; and "How Syntactic Formalisms Can Advance the Lexicographer's Art," in *Foundations for Syraic Lexicography III* (ed. Janet Dyk and Wido van Peursen; Piscataway, NJ: Gorgias, 2009), 139–158.

[7] Andersen and Forbes, *Biblical Hebrew Grammar Visualized*, 24.

categories later rather than to split them, it is reasonable for them to be the ultimate "splitters" rather than "lumpers."[8]

In contemporary linguistics, there are multiple approaches to categorization.[9] In generative grammar, categorization is part of universal grammar and each item in the mental lexicon is identified as a member of a particular grammatical category. By contrast, in cognitive linguistics, categorization, namely, the ability to judge that a particular thing is or is not an instance of a particular category, is an essential part of cognition. Categories are language-specific and category membership is based on prototypicality rather than essential features. Linguistic typology provides another vantage point for considering categorization, since typologists use either semantic relations or functions in their work of comparing linguistic structures across languages.

Although the problem of grammatical categories does not loom large for many Hebraists, it is one of the most hotly debated topics within contemporary linguistics. How should grammatical categories be identified – by semantics, function, morphological inflection, syntactic distribution or cognition? What is the nature of grammatical categories – are they monolithic, gradient, overlapping or flexible? Are grammatical categories cross-linguistically valid or are they language specific? Do all languages distinguish grammatical categories, especially the most basic categories of noun and verb, or are there languages which lack these most basic distinctions?

In this article we re-examine the question of grammatical categorization in Biblical Hebrew with respect to linguistic theory, typology, and universals. We conclude by a preliminary examination of the category of "adjective" in Biblical Hebrew with respect to the data involving טוֹב.

2 CATEGORIES IN GENERATIVE GRAMMAR

The rise of generative grammar in the 1960s had important implications for the way in which grammatical categories were viewed. Earlier in the century, the work of American structuralists in analysing the Native American languages, which were so different from European languages, had resulted in the view that grammatical categorization is language specific. Franz Boas's famous statement in 1911 that "in a discussion of the characteristics of various languages, different fundamental catego-

[8] Andersen and Forbes, *Biblical Hebrew Grammar Visualized*, 24–26. In an earlier article, Forbes suggests that the overall structural of a hierarchical lexicon for Biblical Hebrew can "finesse" the "lumping-splitting dilemma"; see A. Dean Forbes, "Distributionally Inferred Word and Form Classes in the Hebrew Lexicon: Known by the Company They Keep" in *Syriac Lexicography II* (ed. Peter Williams; Piscataway, NJ: Gorgias, 2009), 1–34.

[9] For an indication of the wide-ranging issues involved in parts-of-speech systems, both theoretically and practically, see the collection of essays in a special issue of *Studies in Language* (2008) and the introductory essay by Umberto Ansaldo, Jan Don and Roland Pfau, 'Parts of Speech: Particulars, Universals and Theoretical Constructs," *Studies in Language* 32 (2008): 505–508.

ries will be found"[10] is representative of the structuralists' view that the differences between languages are deep and ultimately unbridgeable. By contrast, one of Chomsky's central claims is that the differences between languages are shallow. All languages have the same Universal Grammar even though they have different surface shapes and children world-wide are able to learn any language because of their innate language facility.[11] Generative grammar has gone through a variety of incarnations since the 1960s; the variety of generative grammar that we describe here is based on the developments since the conceptual shift towards Principles and Parameters and the Minimalist Programme.[12]

In generative grammar, "all grammatical operations are structure-dependent" in the sense that they can only apply to specific kinds of grammatical structure.[13] The principle of structure-dependence means that "all grammatical operations in natural language are category-based (that is, they apply to whole categories of words or phrases rather than to individual expressions)."[14] Furthermore, all words within a language belong to a restricted set of grammatical categories. Categories are "not

---

[10] Franz Boas, *Handbook of American Indian Languages*, vol. 1 (Bureau of American Ethnology, Bulletin 40; Washington: Government Print Office [Smithsonian Institution, Bureau of American Ethnology], 1911), 43.

[11] See, for example, the introductory explanation and description of Chomsky's theory in Andrew Radford, *Transformational Grammar: A First Course* (Cambridge Textbooks in Linguistics; Cambridge: Cambridge University Press, 1988), 1–46, and especially 28–30 and 34–39.

[12] We omit from consideration here the theoretical perspective of Distributed Morphology in which a root is in a local relation with a category defining morpheme. For example, a noun is a root which is licensed by a determiner; a verb is a root licensed by, for example, aspect and tense. As a result, a particular vocabulary item may appear in different morphological categories depending upon the syntactic contexts of the item's root. See Morris Halle and Alec Marantz, "Distributed Morphology and the Pieces of Inflection," in *The View from Building 20* (ed. Kenneth Hale and S. Jay Keyser; Cambridge, MA: MIT Press, 1993), 111–176; Morris Halle and Alec Marantz, "Some Key Features of Distributed Morphology," in *Papers on Phonology and Morphology* (ed. Andrew Carnie and Heidi Harley; MIT Working Papers in Linguistics, 21; Cambridge, MA: MIT Working Papers in Linguistics, 1994), 275–288; Alec Marantz, "No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon," *University of Pennsylvania Working Papers in Linguistics* 4.2 (1997): 201–225.

[13] Andrew Radford, *Syntax: A Minimalist Introduction* (Cambridge: Cambridge University Press, 1997), 12–13; the discussion is similar in Andrew Radford, *Minimalist Syntax: Exploring the Structure of English* (Cambridge Textbooks in Linguistics; Cambridge: Cambridge University Press, 2004), 33–65. A similar view of categorization is assumed, but not discussed in any detail, in Andrew Radford, *Analysing English Sentences: A Minimalist Approach* (Cambridge Textbooks in Linguistics: Cambridge: Cambridge University Press, 2009).

[14] Radford, *Syntax: A Minimalist Introduction*, 29.

primitive elements, but rather are composites of grammatical features."[15] As a result, a grammatical category is comprised of the set of expressions which share a common set of grammatical properties.[16] The four primary categories – noun, verb, adjective, preposition – were differentiated by Chomsky on the basis of two primitive features [± Verb] and [± Noun]:[17]

(1) noun [+N, -V]
verb [-N, +V]
adjective [+N, +V]
preposition [-N, -V]

In this approach, the noun and verb are primary lexical categories. The adjective is designated as having some noun-like features (e.g. nominal inflection and adjectival inflection are the same or similar in many languages, including Hebrew) and some verb-like features (e.g. adjectives can also serve as predicates in many languages, including Hebrew). Prepositions, however, are viewed as having neither nominal nor verbal features.

A different approach to lexical categories within a generative perspective is provided by Baker, who also views the noun and the verb as primary lexical categories.[18] However, in his view, there are only three lexical categories – nouns, verbs and adjectives. Nouns uniquely have the criterion of identity; in other words, only nouns are referential. As a result, only nouns play syntactic roles within binding constructions, within movement constructions, and as the antecedent of anaphoric relations.[19] Verbs uniquely take a specifier and assign agent and theme roles; in other words, the verb necessarily has a subject and it assigns the syntactic-semantic roles of agent and theme (i.e. subject and object) to other constituents in the sentence.[20] Adjectives differ from nouns and verbs in that they do not inherently refer (as nouns do) and they do not inherently predicate (as verbs do). Adjectives do, however, appear in three distinct syntactic environments in which nouns and verbs do not: (1) as the direct modifiers as nouns, (2) as the complements of degree heads (e.g. English *so*, *as*, *to*, *how*), and (3) as secondary resultative predicates in some languages.[21]

---

[15] Andrew Radford, *Syntactic Theory and the Structure of English: A Minimalist Approach* (Cambridge Textbooks in Linguistics; Cambridge: Cambridge University Press, 1997), 69.

[16] Radford, *Syntactic Theory and the Structure of English*, 37.

[17] Noam Chomsky, *Lectures on government and binding* (Studies in Generative Grammar 9; Dordrecht: Foris Publications, 1981). A different approach to categorization with generative grammar is that of Jackendoff, who saw the relevant features as [±Subject] and [±Object]; see R. Jacken-doff, *X-Bar Syntax* (Cambridge: MIT Press, 1977).

[18] Mark C. Baker, *Lexical Categories: Verbs*, *Nouns*, *Adjectives* (Cambridge: Cambridge University Press, 2003).

[19] Baker, *Lexical Categories*, 95–189.

[20] Baker, *Lexical Categories*, 23–94.

[21] Baker, *Lexical Categories*, 191, 226.

In generative linguistics, words are assigned to grammatical categories primarily on the basis of their morphological and syntactic structural properties, involving both distributional (or, configurational) properties and internal structure; these are language specific. For nouns, these morphosyntactic structural properties may involve distributional properties such as how they are distributed within phrases and clauses, for example, whether as heads of noun phrases or as subjects or objects of clauses. They also involve internal structure such as case marking, number marking and gender marking.[22] For verbs, these morphosyntactic structure properties may involve distributional properties within phrases and clauses, for example, as the head of a verb phrase, and internal structure such as subject agreement and marking for tense, aspect and modality.[23] As an illustration, Biblical Hebrew inflectional nominal properties include gender marking, number marking, marking for the absolute and construct state, and definite article marking. Distributional nominal properties involve distribution at the head of a noun phrase or a relative clause and distribution as the subject or object of a clause or the complement of a preposition.

Some grammatical categories are lexical categories, which means that their members have descriptive content (namely, nouns, verbs, adjectives, adverbs, prepositions). Other grammatical categories are functional categories; their members lack descriptive content and serve instead to mark grammatical properties (for example, determiners, pronouns, auxiliaries).

Grammatical categories may also be described as open or closed; open categories are those whose membership is, in principle, unlimited and to which additional members may be added. Closed categories are those with a small group of fixed membership.[24] Functional categories are always closed categories; it is possible for other categories to be closed within a specific language.

The feature system of generative grammar is able to handle subcategories in a straightforward way. For example, the category of nouns may be subdivided into nouns that are count nouns as opposed to mass nouns by the feature [± count]. Similarly, cross-categorial features can be easily assigned to categories that share features. For example, the lexical category of nouns and the functional category of pronouns share the features of [+N -V] but are distinguished by the feature [± Functor] – nouns are [-Functor] whereas pronouns are [+Functor].

3 CATEGORIES IN FUNCTIONAL GRAMMAR

In functional grammar, lexical categories are identified on the basis of semantic and/or pragmatic distinctions. As a representative of a functional grammar ap-

---

[22] Thomas E. Payne, *Describing Morphosyntax: A Guide for Field Linguists* (Cambridge: Cambridge University Press, 1997), 33.

[23] Payne, *Describing Morphosyntax*, 47.

[24] Paul Schachter, "Parts of Speech Systems," in *Clause Structure* (vol. 1 of *Language Typology and Syntactic Description*; ed. Timothy Shopen; Cambridge: Cambridge University Press, 1985), 4–5.

proach to categories, we examine briefly the viewpoints first of Hopper and Thompson and then of Hengeveld.

In 1984, Hopper and Thompson wrote an influential article entitled "The Discourse Basis for Lexical Categories in Universal Grammar."[25] They argue that the basic lexical categories of noun and verb are prototypically related to their functions within discourse – nouns are "discourse-manipulable participants" whereas verbs are "reported events."

Other functionalists, among them Hengeveld, view lexical categories as based upon the prototypical functions of communication. Nouns are used to refer, verbs are used to predicate, and adjectives are used to modify. Hengeveld's contribution in 1992 was to introduce the concept of flexible and rigid languages with respect to parts of speech.[26] A flexible language means that it employs one part of speech for two functions; in a rigid language, a part of speech can only be used for one function. As an example, compare the use of the Dutch word *mooi* in the two examples:[27]

(2a) een **mooi** kind
a beautiful child
"a *beautiful* child"

(2b) het kind danst **mooi**
the child dances beautifully
"the child dances *beautifully*"

In (2a), the word *mooi* is a modifier of a nominal head, whereas in (2b) it is the modifier of a verbal head. In traditional terms, in (2a) it is functioning as an adjective and in (2b) it is functioning an adverb. In functional grammar, its part of speech is flexible – it is used for two functions.

Hengeveld also presents a predicate hierarchy, as indicated in (3):

(3) verb > noun > adjective > adverb

This implicational hierarchy indicates that a category of predicates on the left is more likely to occur in a language than a category on the right.

By combining the notions of flexible versus rigid categories with the predicate hierarchy, seven types of parts of speech system were identified:

---

[25] Paul Hopper and Sandra Thompson, "The Discourse Basis for Lexical Categories in Universal Grammar," *Language* 60 (1986): 703–752.

[26] Kees Hengeveld, "Parts of Speech" in *Layered Structure and Reference in a Functional Perspective* (ed. Michael Fortescue, Peter Harder and Lars Kristoffersen; Pragmatics and Beyond New Series 23; Amsterdam: Benjamins, 1992), 29–55.

[27] Hengeveld, "Parts of Speech," 42.

	Parts of Speech				*Examples of Languages*
Flexible	V / N / A / Adv				Tongan, Mundari, Cuna
	V	N / A / Adv			Quechua, Tagálog, Turkish
	V	N	A / Adv		Dutch, Jamaican Creole, Lango
Rigid	V	N	A	Adv	English, Mam, Kobon
	V	N	A	–	Wambon, Babungo, Nkore Kiga
	V	N	–	–	Mandarin Chinese, !Xũ, Tuscarora
	V	–	–	–	Cayuga

Table 1. Parts-of-speech Systems (from Hengeveld 1992, Figure 5)

The first row of the chart illustrates a language in which all grammatical categories are flexible: verb, noun, adjective and adverb. The last row of the chart illustrates a language in which only the category of verb is found.[28] In the intervening rows, various arrangements of flexible and rigid categories are shown in accordance with the predicate hierarchy.

In 2010, Hengeveld and van Lier published a further development to his theory in the form of a two-dimensional implicated map for parts of speech.[29]

[28] The claim that Cayuga has only a verb has been disputed by, e.g., Marianne Mithun, "Noun and Verb in Iroquoian Languages," in *Approaches to the Typology of Word Classes* (ed. Petra M. Vogel and Bernard Comrie; Empirical Approaches to Language Typology 23; Berlin and New York: Mouton de Gruyter, 2000), 397–420.

[29] Kees Hengeveld and Eva van Lier, "An Implicational Map of Parts-of-speech," in *Semantic Maps: Methods and Applications* (ed. Andrej Malchukov, Michael Cysouw and Martin Haspelmath; special issue of *Linguistic Discovery* 8 [2010]), 129–156. See also Kees Hengeveld and Eva van Lier, "Connectivity in Implicational Maps: Authors' Reply to Caterina Mauri" in *Semantic Maps: Methods and Applications* (ed. Andrej Malchukov, Michael Cysouw and Martin Haspelmath; special issue of *Linguistic Discovery* 8 [2010]), 160–161.

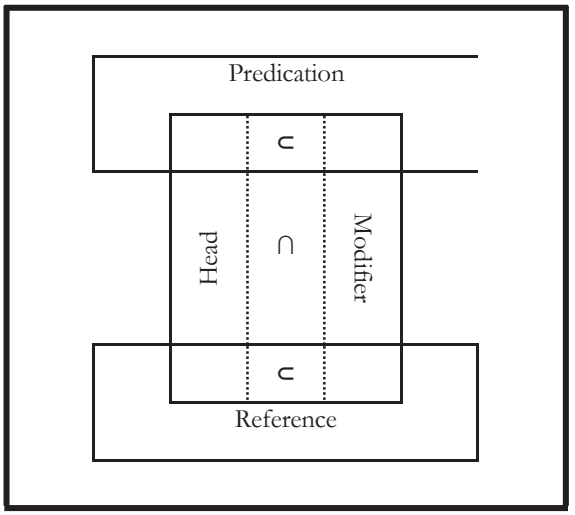


Table 2. Implicational Map of Parts of Speech (from Hengeveld and Van Lier 2010, Figure 7)

The function of predication (which is shared by verbs as head of predications and by adverbs as modifiers of predication) is privileged over the function of reference (which is shared by nouns and adjectives as the modifiers of nouns). The function of head is privileged over the function of modifier. The implicational map also schematizes three implicational constraints:

(4a) If a language has nouns, it must have verbs
If a language has nominals or non-verbs, it must have verbs or predicatives

(4b) If a language has modifiers, then it must have verbs.
If a language has modifiers, then it has nouns.

(4c) If a language has distinct (specialized or flexible) classes of lexemes for heads and modifiers within any phrase, then it also has distinct (specialised or flexible) classes of lexemes for heads of predicates and referential phrases.

Using the implicational map, 13 parts of speech systems are possible and the other configurations are excluded. The part of speech system of an individual language can be schematized by extracting the four quadrants from the implicational map as follows for English, which has all four categories:

	Head	Modifier
Predicate	Verb	Adverb
Referential	Noun	Adjective

Table 3. Implicational Map for English

By comparison, the system of Dutch, which has a flexible category combining Adverb and Adjective, can be schematized in the following table:

	Head	Modifier
Predicate	Verb	Modifier
Referential	Noun	

Table 4. Implicational Map for Dutch

In Biblical Hebrew, the categories of verb and noun are major, open categories and very well attested. The category of adverb is a much smaller category. The category adjective is more problematic in that there are not distinctive inflectional indications to differentiate it from nouns. Are nouns and adjectives really one category, as suggested by the Medieval Hebrew grammarians? If the adjective is not a category, then the implicational hierarchy of Hengeveld suggests that the adverb may not be a category either. We will consider the problem of the category of adjective in Biblical Hebrew below in section 7.

4 CATEGORIES IN COGNITIVE GRAMMAR

Categories in cognitive grammar are seen as prototypical entities based upon human cognition.[30] Cognitive linguists are therefore critical of the generative view of categories.[31] Taylor provides the following summary and criticism of generative categories: First, in generative grammar "categories are defined in terms of a conjunction of necessary and sufficient features."[32] To determine whether an entity X should be assigned to category Y, one must check whether the entity has the defining features of the category. Second, "features are binary… a feature is either involved in the definition of a category or it is not; an entity either possesses this feature or it does not."[33] Third, "categories have clear boundaries … there are no ambiguous cases."[34] Fourth, all features of a category "have equal status… there are no degrees of membership in a category, i.e. there are no entities which are better members of the category than others."[35]

The development of prototype theory began with the linguist-anthropologists Berlin and Kay who examined the question of the perception and categorization of color terms in the 1960s.[36] In a vast cross-cultural study, they determined that if people are given large numbers of color chips and asked to trace the boundaries of

[30] John R. Taylor, "Categorization" in *The Cambridge Encyclopedia of Language Sciences* (ed. Patrick Colm Hogan; Cambridge: Cambridge University Press, 2011), 146.

[31] For a critique of the cognitive linguistics approach to lexical categories, see Cynthia L. Miller-Naudé and Jacobus A. Naudé, "Is the Adjective Distinct from the Noun as a Grammatical Category in Biblical Hebrew?" *In Luce Verbi* (forthcoming).

[32] John R. Taylor, *Linguistic Categorization: Prototypes in Linguistic Theory* (2d ed.; Oxford: Oxford University Press, 1995), 22.

[33] Ibid.

[34] Ibid.

[35] Taylor, *Linguistic Categorization*, 23.

[36] Brent Berlin and Paul Kay, *Basic Color Terms: Their Universality and Evolution* (Berkeley: University of California Press, 1969).

what is perceived of as "red," a bewildering array of variety results. However, if people are asked to identify the "best example" of "red" then there is an astonishing amount of cross-cultural and cross-linguistic uniformity. In an analysis of color terms in 98 languages, they determined that most languages have only 11 "focal colors" and these have a great deal of similarity in their central or best members. Similar studies involving semantic categorization were conducted in the 1970s by the psychologist Eleanor Rosch involving semantic prototypes.[37] She asked subjects to identify good examples of the semantic categories FURNITURE, FRUIT, VEHICLE, WEAPON, etc. She found that things belong to a category by virtue of exhibiting some similarities with the prototype. Some members are "better" or more representative examples of the category than others. In looking at all of the members of the category, not all of them exhibit the same features. Instead, they may be related by "family resemblances" in the same way that members of a family may exhibit a variety of physical features but not every member has precisely the same assortment of features.

In linguistics, prototype theory provides a semantic means for the identification of categories. Membership in a category is gradient – some examples of the category will be central or prototypical, others will be peripheral.[38] For example, in differentiating the category of Noun from Verb, a prototypical noun can be viewed as expressing "time-stable" concepts, whereas a verb can be viewed as expressing the least "time-stable" concepts, that is, events.[39] For example, a word such as *city* is a prototypical noun, whereas a word such as *arrival* is not. Categories are viewed as primes with central members and peripheral members and typically have fuzzy edges.

We can illustrate the use of prototypes for grammatical categorization with the work of Croft.[40] He views grammatical categories as follows:[41]

---

[37] See Eleanor Rosch, "Cognitive Representation of Semantic Categories," *Journal of Experimental Psychology* 104 (1975): 192–233; and "Principles of Categorization" in *Cognition and Categorization* (ed. Eleanor Rosch and Barbara B. Lloyd; Hillsdale, NJ: Erlbaum, 1978), 27–48.

[38] Joan Bybee, *Language, Usage and Cognition* (Cambridge: Cambridge University Press, 2010), 79.

[39] Payne, *Describing Morphosyntax*, 33, 47.

[40] See William Croft, *Syntactic Categories and Grammatical Relations: The Cognitive Organization of Information* (Chicago: University of Chicago Press, 1991); William Croft, *Radical Construction Grammar: Syntactic Theories in Typological Perspective* (Oxford: Oxford University Press, 2001); William Croft, "Word Classes, Parts of Speech and Syntactic Argumentation," *Linguistic Typology* 9 (2005): 431–441; William Croft and Keith T. Poole, "Inferring Universals from Grammatical Variation: Multidimensional Scaling for Typological Analysis," *Theoretical Linguistics* 34 (2008): 1–37. For a different cognitive linguistic approach to lexical categories, see John R. Taylor, *Cognitive Grammar* (Oxford Textbooks in Linguistics; Oxford: Oxford University Press, 2003).

[41] Croft, "Word Classes, Parts of Speech and Syntactic Argumentation," 438.

(5) Propositional act	Prototypically coordinated lexical semantic class
a. reference	objects (nonrelational, stative, inherent, non-gradable)
b. predication	actions (relational, dynamic, transitory, non-gradable)
c. modification	properties (relational, stative, inherent, gradable)

In this theory, grammatical categories are restricted typological universals rather than language-specific. Croft furthermore advocates for an exhaustive distributional analysis of all data in all constructions for the determination of grammatical classes. He views generative grammarians as being "opportunistically selective" in using only some distributional facts for the determination of grammatical categories.[42] He has labelled his approach "radical construction grammar" because of its emphasis on the radically exhaustive analysis of all constructions in the language for grammatical analysis and description.

The notion of prototypes is used by Wierzbicka to propose natural semantic lexical categories for parts of speech.[43] She posits intuitively intelligible (non-technical) conceptual primitives as exemplars for each grammatical category. For example, for the category "verb" she suggests that the cross-linguistic identification of the category should be based on universal lexical prototypes SEE, HEAR, SAY, DO, MOVE. For "nouns" she suggests the lexical prototypes PEOPLE and THINGS. For "adjectives" she suggests BIG and SMALL, GOOD and BAD and for "adverbs" VERY and LIKE THIS.

Wierzbicka's approach uses the natural semantic exemplars of prototypical categories as a way to compare categories across languages. It forms part of her larger approach for using Natural Semantic Metalanguage for the description of languages.

5 CATEGORIES IN TYPOLOGICAL LINGUISTICS

Linguistic typology refers to the "systematic study of the ways in which the languages of the world vary structurally and of the limits to this variation."[44] While

[42] Croft, "Word Classes, Parts of Speech and Syntactic Argumentation," 435.

[43] Anna Wierzbicka, "Lexical Prototypes as a Universal Basis for Cross-Linguistic Identification of Parts-of-Speech Systems" in *Approaches to the Typology of Word Classes* (ed. Petra M. Vogel and Bernard Comrie; Berlin: Mouton de Gruyter, 2000), 285–317.

[44] Bernard Comrie, Matthew S. Dryer, David Gil and Martin Haspelmath, "Introduction," in *The World Atlas of Language Structures*, ed. Martin Haspelmath, Matthew S. Dryer, David Gil and Bernard Comrie (Oxford: Oxford University Press, 2005), 1. Another definition is that linguistic typology involves the endeavor to describe and explain the unity and diversity of languages with respect to linguistic form or the relationship between form and meaning (see Johan van der Auwera and Jan Nuyts, "Cognitive Linguistics and Linguistic Typology," in *The Oxford Handbook of Cognitive Linguistics* [ed. Dirk Geeraerts and Hubert Cuyckens; Oxford: Oxford University Press, 2010], 1074–1075).

parts-of-speech systems are not the same across languages, it is also the case that the world's languages do not show infinite variation in their categorization systems.[45]

With regard to linguistic typology and grammatical categories, Haspelmath has argued forcefully that cross-linguistic categories do not exist. Instead "categories represent language-particular generalizations and cannot be carried over from language to another one."[46] Furthermore, categories have a purely semantic basis, in contrast to the generative and functonal perspectives. Haspelmath identifies the three most important grammatical categories (traditionally the noun, verb and adjective, respectively) as follows:[47]

(6) a. thing-root: a root that denotes a physical object (animate or inanimate)

b. action-root: a root that denotes a volitional action

c. property-root: a root that denotes a property such as age, dimension or value

By taking as his basis for comparison only words that fit a prototypical description of noun as things denoting a physical object, whether animate or inanimate, Haspelmath excludes nouns such as *arrival* or *war* that are not prototypically noun-like from a semantic point of view.

Haspelmath bases cross-linguistic typological comparison of categories on *roots* rather than on words because he wants to exclude inflection and derivation as the basic determiner of classes.[48] This means that he would include the English word *king* (which is a root) but not *kingdom* (which involves a root plus a derivational affix). By limiting his cross-linguistic comparisons to roots which are semantically close to the prototypical meanings of their respective categories, he argues that methodologically rigorous cross-linguistic comparisons can be made across languages even though languages are compared with respect to only a part of their vo-

---

[45] Jan Anward, Edith Moravcsik, and Leon Stassen, "Parts of Speech: A Challenge for Typology," *Linguistic Typology* 1 (1997): 170–171.

[46] Martin Haspelmath, "How to Compare Major Word-classes across the World's Languages," in *Theories of Everything: In Honor of Edward Keenan* (ed. Thomas Graf, Denis Paperno, Anna Szabolcsi, and Jos Tellings; UCLA Working Papers in Linguistics 17; Los Angeles: UCLA, 2012), 109. See also "Word Classes/Parts of Speech," in *International Encyclopedia of the Social and Behavioral Sciences* (ed. Paul B. Baltes and Neil J. Smelser; Amsterdam: Pergamon, 2001), 16538–16545; "Does Linguistic Explanation Presuppose Linguistic Description?" *Studies in Language* 28 (2004): 554–579; "Pre-established Categories Don't Exist: Consequences for Language Description and Typology," *Linguistic Typology* 11 (2007): 119–132; "Comparative Concepts and Descriptive Categories in Cross-linguistic Studies," *Language* 86 (2010): 663–687; "The Interplay between Comparative Concepts and Descriptive Categories (Reply to Newmeyer)," *Language* 86 (2010): 696–699; "Escaping Ethnocentrism in the Study of Word-Class Universals," *Theoretical Linguistics* 38 (2012): 91–102.

[47] Haspelmath, "Escaping Ethnocentrism in the Study of Word-Class Universals," 122.

[48] Haspelmath, "Escaping Ethnocentrism in the Study of Word-Class Universals," 122–123.

cabulary. Language comparison, as he notes, is "a different enterprise from language description, which must be all-encompassing (all aspects of a language have to be described)."[49]

6 EVALUATION OF APPROACHES TO GRAMMATICAL CATEGORIES

The various theories that were sampled above differ in a variety of ways with respect to the critical questions concerning grammatical categorization. First, are grammatical categories primes or are they composed of clusters of features? In approaches using prototype semantics, grammatical categories are primes with central members and peripheral members. In approaches using formal grammar such as generative linguistics, grammatical categories are clusters of features, which may differentiate both sub-categories and cross-categories.

Second, how should grammatical categories be identified? We have seen that there are major differences of opinion between theories that place an emphasis on semantics (especially prototype semantics) as the basis of grammatical categories as opposed to theories that place an emphasis on formal features such as morphological features of inflection and derivation and syntactic features of constructions. Many theories use distributional features of grammatical constructions as well as semantics to provide empirical data concerning grammatical categories.

Third, the nature of grammatical categories as monolithic, gradient, overlapping or flexible is directly related to the previous two questions. Prototype theory allows for gradient categories. Functional grammar allows for flexible as well as rigid categories. Generative grammar has monolithic categories in a formal sense, but the complexity of language data can be described through sub-categorization of categories through the addition of features as well as through cross-categorial features.

Fourth, are grammatical categories cross-linguistically valid or are they language specific? From a generative point of view, grammatical categories are notionally valid cross-linguistically with language specific features which are identified on the basis of language specific morphosyntactic properties and distributional facts. In other words, grammatical categories relate to universal grammar, the innate knowledge that humans have about language, but the instantiation of the grammatical categories within a particular language is specific. For typological linguistics such as Haspelmath, grammatical categories are language-specific. He describes formal linguistic approaches to grammatical categories as "ethnocentric" because in his view the grammatical categories are based upon English and other European languages and do not allow for the range of variation found among more "exotic" languages elsewhere in the world. Haspelmath's criticism of formal linguistics has been answered by Chung and Newmeyer.[50] Chung suggests that English and major world

[49] Haspelmath, "Escaping Ethnocentrism in the Study of Word-Class Universals," 123.

[50] See Sandra Chung, "Reply to the Commentaries." *Theoretical Linguistics* 38 (2012): 137–143; and Frederick J. Newmeyer, "Linguistic Typology Requires Crosslinguistic Formal Categories," *Linguistic Typology* 11 (2007): 133–157.

languages should also contribute to typological studies; Haspelmath's view she describes as running the "real danger of romantizing the exotic."[51] Newmeyer argues that cross-linguistic categories are necessary for typology since universal concepts (the semantic prototypes) without universal cross-linguistic categories lead to a solipsistic view of grammar in which even related dialects of a language would not share categories.[52]

Finally, do all languages distinguish grammatical categories, especially the most basic categories of noun and verb, or are there languages which lack these most basic distinctions? While the grammatical categories of noun and verb are widely considered to be universally attested among the world's languages, a few languages have been hotly debated concerning whether they have only one category or grammatical categories whatsoever. For example, Chamorro, an Austronesian language, has been argued to have only two unusual grammatical categories: Category 1 consisting of transitive verbs and Category 2 consisting of intransitive verbs, nouns, and adjectives.[53] Using formal linguistic tests, Chung demonstrates, however, that Chamorro does in fact have the usual grammatical categories of noun, verb and adjective.[54] In addition, Chamorro exhibits multifunctionality in the sense that a lexical word may have membership as both a noun and a verb or as a verb and an adjective. The question, then, of languages without basic categories has not yet been answered in the affirmative.

7 APPLICATION TO A HEBREW PROBLEM

7.1 General Approach

In this section, aspects of the theories examined above are applied to a deceptively simple but particularly vexing problem of Hebrew morphology and syntax – the grammatical categorization of טוֹב. Is טוֹב a noun, an adjective or a verb? All three? Or none of them?[55]

---

[51] Chung, "Reply to the Commentaries," 143.

[52] Newmeyer, "Linguistic Typology Requires Crosslinguistic Formal Categories," 146–149.

[53] Donald M. Topping, *Chamorro Reference Grammar* (assisted by Bernadita C. Dungca; Honolulu: University of Hawaii Press, 1973).

[54] Sandra Chung, "Are Lexical Categories Universal? The View from Chamorro," *Theoretical Linguistics* 38 (2012): 1–56.

[55] In his extensive research on Hebrew adjectives, Werner used a "strictly pragmatic manner" of identification; namely, any word classified as either "adjective" or "noun or adjective" in a monolingual Hebrew dictionary was included in his analysis of adjectives; see Fritz Werner, "Adjective" in *Encyclopedia of Hebrew Language and Linguistics* (ed. Geoffrey Khan; 4 vols.; Leiden: Brill, 2013), 1: 35–44 and *Wortbildung der hebräischen Adjektiva* (Weisbaden: Harrassowitz, 1983). This approach has the advantage of including every word ever identified in some Hebrew dictionary as an adjective, but does not result in a coherent set of data for analysis.

In general, the category of adjective in Biblical Hebrew is a small lexical class as compared to the class of nouns.[56] Instead of adjectival modification, Hebrew prefers to use construct phrases or appositional phrases.[57] Furthermore, there is superficial morphological overlap in the inflectional morphology of nouns and adjectives; adjectives differ from nouns in their inflection only in not having dual morphology (but the dual in Biblical Hebrew is also not fully productive).[58] There is also overlap in the inflectional morphology of the adjective with the cognate stative verbal root. Given these limitations, is it possible to differentiate טוֹב as an adjective from טוֹב as a noun from טוֹב as a verbal form?

In the following discussion, we approach this issue from a primarily syntactic perspective, utilizing the generative viewpoint of Baker as described above (section 2.0). In our view, syntax provides the most certain way to differentiate lexical categories, especially when examining an ancient language. Because lexical categories bear a direct relationship to the syntactic constructions in which they are found, syntax can serve as an important heuristic device. By contrast, cognitive and functional approaches depend upon determining first the semantics and pragmatics of the usage in question before a functional or cognitive category can be assigned. In employing a formal approach to categories, we see categories as composed of clusters of features, thus allow for both sub-categories and cross-categoriality. We view grammatical categories as cross-linguistically valid and see the basic categories as features of all languages.

7.2 Attributive and Predicative Adjectives

Adjectives in Biblical Hebrew have two main functions – they modify nouns (as attributive adjectives) and they serve as the predicates of verbless sentences (as predicative adjectives).[59] Attribute adjectives follow the noun that they modify and

---

[56] The same is true cross-linguistically; languages typically have many more nouns than adjectives.

[57] Waltke and O'Connor, *Introduction to Biblical Hebrew Syntax*, 255–256.

[58] As we have demonstrated previously, the morphological similarities between noun and adjective are only superficial. An adjective exhibits agreement features with its noun in terms of number and gender, whereas nouns are inherently masculine or feminine and exhibit singular or plural morphology for referential reason. See Miller-Naudé and Naudé, "Is the Adjective Distinct from the Noun as a Grammatical Category in Biblical Hebrew?" and Amikam Gai, "The Category 'Adjective' in Semitic Languages," *JSS* 40 (1995): 1–9.

[59] We accept the usual syntactic distinction of attributive and predicative adjectives as described by the grammars, e.g. Ronald J. Williams, *Williams' Hebrew Syntax* (3rd ed.; revised and expanded by John C. Beckman; Toronto: University of Toronto Press, 2007), §§73, 75; P. Joüon and T. Muraoka, *A Grammar of Biblical Hebrew* (2d reprint of the 2d edition with corrections; Rome: Gregorian Biblical Press, 2009), §§141, 154d; Waltke and O'Connor, *An Introduction to Biblical Hebrew Syntax*, 258–263; and C.H.J. van der Merwe, Jackie A. Naudé and Jan H. Kroeze, *A Biblical Hebrew Reference Grammar* (Biblical Languages: Hebrew; Shef-

agree with it in number, gender and definiteness. As noted above, Baker has shown that adjectives are unique among the lexical categories in functioning as direct, attributive modifiers of nouns. In the following example, the adjective functions to modify a noun (i.e., it is an attributive adjective):

(7) Exodus 3:8

וָאֵרֵ֜ד לְהַצִּילוֹ֙ מִיַּ֣ד מִצְרַ֔יִם וְלְהַעֲלֹתוֹ֙ מִן־הָאָ֔רֶץ הַהִוא֙ אֶל־אֶ֣רֶץ טוֹבָ֔ה וּרְחָבָ֑ה אֶל־אֶ֗רֶץ זָבַת֙ חָלָ֣ב וּדְבַ֔שׁ אֶל־מְק֗וֹם הַֽכְּנַעֲנִי֙ וְהַחִתִּ֣י וְהָאֱמֹרִ֔י וְהַפְּרִזִּ֖י וְהַחִוִּ֣י וְהַיְבוּסִֽי׃

I have come down to deliver them (lit. him) out of the hand of the Egyptians and to bring them (lit. him) up out of that land *to a good and broad land*, to a land flowing with milk and honey, to the place of the Canaanites, the Hittites, the Amorites, the Perizzites, the Hivites, and the Jebusites.

In this example the noun אֶרֶץ is modified by two conjoined adjectives, both of which agree with it in gender, number and definiteness.

In contrast to the attributive function of adjectives (which is unique to the lexical category of adjectives), predication is a secondary, non-inherent function of adjectives and requires an overt or covert copula (the latter realized in Hebrew as the so-called verbless or nominal clause). Predicate adjectives in Hebrew agree in number and gender with the subject noun phrase but are not definite. The predicate adjective usually precedes the subject, as in (8):[60]

(8) 1 Kings 2:38

וַיֹּ֤אמֶר שִׁמְעִי֙ לַמֶּ֔לֶךְ טֽוֹב־הַדָּבָ֖ר כַּאֲשֶׁ֣ר דִּבֶּ֔ר אֲדֹנִ֥י הַמֶּ֖לֶךְ כֵּ֣ן יַעֲשֶׂ֑ה עַבְדֶּ֣ךָ וַיֵּ֥שֶׁב שִׁמְעִ֖י בִּירוּשָׁלִַ֣ם יָמִ֔ים רַבִּ֖ים׃ ס

And Shimei said to the king, "*The matter is good*; just as my lord the king has said, so will your servant do." So Shimei lived in Jerusalem many days.

The predicate adjective may also follow the subject, as in (8):[61]

(9) 1 Samuel 25:15

וְהָאֲנָשִׁ֥ים טֹבִ֛ים לָ֖נוּ מְאֹ֑ד וְלֹ֤א הָכְלִמָ֙נוּ֙ וְלֹא־פָקַ֣דְנוּ מְאוּמָ֔ה כָּל־יְמֵ֥י הִתְהַלַּכְנוּ אִתָּ֖ם בִּֽהְיוֹתֵ֥נוּ בַשָּׂדֶֽה׃

---

field: Sheffield Academic Press, 1999), 232–235. Rarely adjectives may have adverbially functions; see Joüon and Muraoka, *A Grammar of Biblical Hebrew*, §102c.

[60] See also, for example, Exod 2:2 and Isa 41:7 (טוֹב הוּא "he is good"); 1 Sam 9:10 (טוֹב דְּבָרְךָ "your word is good"); 1 Kgs 2:38 and 1 Kgs 18:24 (טוֹב הַדָּבָר "the word (matter) is good"); Jer 33:11, Nahum 1:7, Ps 34:9; 100:5; 135:3; 145:9; Lam 3:25 (טוֹב יְהוָה "the LORD is good").

[61] See also, for example, Gen 2:12 (וְזָהָב הָאָרֶץ הַהִוא טוֹב "the gold of that land is good"); 2 Kgs 2:19 (מוֹשַׁב הָעִיר טוֹב "the situation of the city is good"); Ps 119:39 (מִשְׁפָּטֶיךָ טוֹבִים "your judgements are good").

The men were very good to us, and we were not harmed, and we did not miss anything all the days we were going around with them when we were in the open country.

In this example, the verbless clause is also modified by the adverb מְאֹד thus strengthening the identification of טֹבִים as a predicate adjective.[62]

The predicate adjective may also be identified by its presence in comparative constructions:[63]

(10) 2 Samuel 17:14

וַיֹּאמֶר אַבְשָׁלוֹם וְכָל־אִישׁ יִשְׂרָאֵל טוֹבָה עֲצַת חוּשַׁי הָאַרְכִּי מֵעֲצַת אֲחִיתֹפֶל

And Absalom and all the men of Israel[64] said, "The counsel of Hushai the Archite is better than the counsel of Ahithophel."

An additional indication of the predicative status of the adjective is its position preceding the noun phrase עֲצַת חוּשַׁי הָאַרְכִּי "the counsel of Hushai the Archite"; the adjective cannot be understood as adjectivally modifying the noun phrase.

7.3 Verbal Forms

We can also differentiate the clear cases of verbal forms. Forms involving the Hiphil derivational stem can easily be identified:[65]

(11) 2 Kings 10:30

וַיֹּאמֶר יְהוָה אֶל־יֵהוּא יַעַן אֲשֶׁר־הֵטֵיבֹתָ לַעֲשׂוֹת הַיָּשָׁר בְּעֵינַי כְּכֹל אֲשֶׁר בִּלְבָבִי עָשִׂיתָ לְבֵית אַחְאָב בְּנֵי רִבֹּעִים יֵשְׁבוּ לְךָ עַל־כִּסֵּא יִשְׂרָאֵל׃

And the LORD said to Jehu, "Because *you have acted well* by doing what is right in my eyes according to all that was in my heart to the house of Ahab, four generations of your sons will sit on the throne of Israel."

A few Qal perfect forms are also attested with clear inflectional morphology:

---

[62] See also Jer 24:3 הַתְּאֵנִים הַטֹּבוֹת טֹבוֹת מְאֹד "the good figs are very good." In Jer 24:2, the adjectives should also be understood as predicate adjectives because of the adverbial modification: הַדְּוִד אֶחָד תְּאֵנִים טֹבוֹת מְאֹד כִּתְאֵנֵי הַבִּכֻּרוֹת וְהַדְּוִד אֶחָד תְּאֵנִים רָעוֹת מְאֹד אֲשֶׁר לֹא־ תֵאָכַלְנָה מֵרֹעַ׃ "As for one basket, *the figs were very good* like first-ripe figs; as for the other basket, *the figs were very bad*, *which could not be eaten for badness*."

[63] See also, for example, Song 1:2 (כִּי־טוֹבִים דֹּדֶיךָ מִיָּיִן "for your love is better than wine").

[64] The quantifier כֹּל with a singular definite noun has the meaning "the totality of the individual members of the entity" (see Jacobus A. Naudé, "Syntactic Patterns of Quantifier Float in Biblical Hebrew," *Hebrew Studies* 52 [2011]: 121–136). In this verse, the meaning in English is approximately "the totality of the group comprising the manhood of Israel."

[65] See also 1 Kgs 8:18; 2 Chron 6:8. Zeph 1:12 has an imperfect Hiphil form.

(12) Numbers 24:5[66]

מַה־טֹּבוּ אֹהָלֶיךָ יַעֲקֹב מִשְׁכְּנֹתֶיךָ יִשְׂרָאֵל׃

How *lovely* are your tents, O Jacob, your encampments, O Israel!

However, since the form טוֹב could be understood as a finite Qal perfect 3ms verb, as a Qal infinitive construct, a Qal infinitive absolute or a Qal active participle, we must examine the syntactic context very carefully to try to determine which form is involved.[67] One of the most problematic examples is found in (13):

(13) Judges 11:25

וְעַתָּה הֲטֹוב טוֹב אַתָּה מִבָּלָק בֶּן־צִפֹּור מֶלֶךְ מוֹאָב הֲרֹוב רָב עִם־יִשְׂרָאֵל אִם־נִלְחֹם נִלְחַם בָּם׃

Now are you really any better than Balak the son of Zippor, king of Moab? Did he ever really contend against Israel, or did he ever really go to war with them?

The repetition of טוֹב at the beginning of the sentence has been widely understood to involve the infinitive absolute form of the verb by analogy to the two sentences later in the verse which exhibit infinitive absolute forms (הֲרֹוב רָב and נִלְחֹם נִלְחַם).[68] If that is the case, then we would expect the second instance of טוֹב in (13) to be a finite form. However, a finite form is out of the question because the independent personal pronoun that follows is second person not third person. It is also conceivable that the second form is the Qal active participle,[69] but it is very rare for an infinitive absolute to modify a predicative participle. Predicative adjectives also are not modified by the infinitive absolute form. However, Gesenius-Kautzsch-Cowley prefer instead to argue that טוֹב is an adjective which is "specially intensified by repetition."[70] In this viewpoint, the repeated adjective is both *semantically* similar to finite predications modified by the infinitive absolute and *formally* similar to the infinitive absolute construction. Although no identification of the grammatical category of the

[66] See also Songs 4:10.

[67] As noted in the standard lexica, distinguishing the forms of the verb from those of the adjective is difficult: "for most forms (of the verb) distinction from טוֹב adj. unclear" (David J.A. Clines, *The Concise Dictionary of Classical Hebrew* [Sheffield: Sheffield Phoenix, 2009], 139); "it (the verb) cannot always be distinguished with certainty from adv." (Ludwig Koehler and Walter Baumgartner, *The Hebrew and Aramaic Lexicon of the Old Testament* [rev. Walter Baumgartner and Johann Jakob Stamm; trans. M.E.J. Richardson; Leiden: Brill, 2001], 370).

[68] This is the approach of *HALOT*, s.v. טוֹב.

[69] This is the approach of BDB s.v. טוֹב, while noting that it is often difficult to decide between verb and adjective.

[70] W. Gesenius; E. Kautzsch, and A. E. Cowley, *Gesenius' Hebrew Grammar* (2d English edition; Oxford: Clarendon, 1910), §133a n. 2.

two instances of טוֹב in this verse is completely satisfactory, the analysis of Gesenius-Kautzsch-Cowley provides the best syntactic interpretation.

7.4 Expressions with "Good in the Eyes of"

A second problematic construction for identifying the grammatical category of טוֹב involves the expression "in the eyes of." We begin with the use of טוֹב with the definite article, as in the following example:

(14) 2 Samuel 19:28

וַיְרַגֵּל בְּעַבְדְּךָ אֶל־אֲדֹנִי הַמֶּלֶךְ וַאדֹנִי הַמֶּלֶךְ כְּמַלְאַךְ הָאֱלֹהִים וַעֲשֵׂה הַטּוֹב בְּעֵינֶיךָ׃

He has slandered your servant to my lord the king. But my lord the king is like the angel of God; *do the good (thing) in your eyes*.

Many Hebrew grammarians consider adjectives to be nominal (or substantival) when they occur in contexts like this one; in other words, in contexts where the adjective neither modifies a noun nor is used predicatively. Waltke and O'Connor are representative of this viewpoint: "Because the boundary between adjectives and substantives is not fixed or rigid, it is common to find nouns that are most often used as adjectives in substantive slots."[71] However, we have previously argued that such adjectives are neither nouns nor noun-like (i.e. substantives) because they are not referential, an essential quality of the lexical category of nouns.[72] Instead, adjectives in these constructions modify a null (or covert) noun – a noun which is phonologically unexpressed but grammatically present. The fact that the unexpressed noun is grammatically present can be clearly seen in those cases where the adjective inflectionally agrees with the underlying noun, as illustrated in (15):[73]

(15) Genesis 42:13

וַיֹּאמְרוּ שְׁנֵים עָשָׂר עֲבָדֶיךָ אַחִים׀ אֲנַחְנוּ בְּנֵי אִישׁ־אֶחָד בְּאֶרֶץ כְּנָעַן וְהִנֵּה הַקָּטֹן אֶת־אָבִינוּ הַיּוֹם וְהָאֶחָד אֵינֶנּוּ׃

They said, "We your servants were twelve brothers, sons of a certain man in the land of Canaan; look, *the young (one)* is now with our father, and one is no more."

In some cases, there is an explicit antecedent for the null noun in the preceding context. In other cases, however, the null noun must be pragmatically inferred from the interpretation of the passage:

---

[71] Waltke and O'Connor, *Introduction to Biblical Hebrew Syntax*, 261.

[72] Miller-Naudé and Naudé, "Is the Adjective Distinct from the Noun as a Grammatical Category in Biblical Hebrew?"

[73] See also, for example, Gen 29:16; Lev 27:10; Num 16:7; 1 Sam 16:11.

(16) 2 Chronicles 18:30

וּמֶלֶךְ אֲרָם צִוָּה אֶת־שָׂרֵי הָרֶכֶב אֲשֶׁר־לוֹ לֵאמֹר לְא תִלָּחֲמוּ אֶת־הַקָּטָן וְאֶת־הַגָּדוֹל כִּי אִם־
אֶת־מֶלֶךְ יִשְׂרָאֵל לְבַדּוֹ׃

The king of Aram had given these instructions to his chariot officers, "Do not attack *an insignificant (soldier)* or an *important (soldier)*, but only the king of Israel."

Frequently, the null noun makes a generic reference to a person (or people), word(s) or thing(s), as in the example of טוֹב modifying a definite null noun in (14) above. Another example is found in (17), where the adjective modifies an indefinite null noun:[74]

(17) Genesis 31:24

וַיָּבֹא אֱלֹהִים אֶל־לָבָן הָאֲרַמִּי בַּחֲלֹם הַלָּיְלָה וַיֹּאמֶר לוֹ הִשָּׁמֶר לְךָ פֶּן־תְּדַבֵּר עִם־יַעֲקֹב מִטּוֹב
עַד־רָע׃

But God came to Laban the Aramean in a dream by night and said to him, "Be careful yourself not to say anything to Jacob, *either good or bad [lit. from a good (word) to a bad (word)]*."[75]

Another argument for understanding a null noun involves the fact that adjectives without nouns may be modified by the quantifier כֹּל, as in (18):

(18) 1 Samuel 11:10

וַיֹּאמְרוּ אַנְשֵׁי יָבֵישׁ מָחָר נֵצֵא אֲלֵיכֶם וַעֲשִׂיתֶם לָּנוּ כְּכָל־הַטּוֹב בְּעֵינֵיכֶם׃

The men of Jabesh said, "To-morrow we will come out unto you, and you will do to us *according to all that seems good* (lit. all of the good) in your eyes."

Since nouns can be quantified but adjectives cannot, there must be a null noun which is quantified with כֹּל.

Adjectives with pronominal suffixes must also be understood as modifying a null noun, as in (19):

(19) Nehemiah 6:19

גַּם טוֹבֹתָיו הָיוּ אֹמְרִים לְפָנַי וּדְבָרַי הָיוּ מוֹצִיאִים לוֹ אִגְּרוֹת שָׁלַח טוֹבִיָּה לְיָרְאֵנִי׃

Also they were speaking about *his good [deeds]* in my presence and they were reporting my words to him. And Tobiah sent letters to frighten me.

---

[74] See also Hosea 8:3.

[75] For the translation "be careful yourself," see Jacobus A. Naudé, "Dative: Biblical Hebrew," in *Encyclopedia of Hebrew Language and Linguistics* (ed. Geoffrey Khan; 4 vols.; Leiden: Brill, 2013), 1: 655–658.

Indefinite adjectives may also modify a null noun, as exemplified in (20) in which the bare indefinite adjective is preceded by כֹּל. The quantifier demonstrates that there is a null indefinite noun which is modified by the adjective:

(20) Psalm 34:11

כְּפִירִים רָשׁוּ וְרָעֵבוּ וְדֹרְשֵׁי יְהוָה לֹא־יַחְסְרוּ כָל־טּוֹב׃

The young lions lack, and suffer hunger; but those who seek the LORD do not lack *any good [thing]*.

An alternative interpretation of examples (17) through (20) would argue that the adjective טוֹב has become grammaticalized as an abstract noun. We doubt that such is the case in light of the fact that Hebrew has other abstract nouns related to the same root, e.g., טוֹבָה "goodness, good thing," טוּב "goodness, well-being." Further evidence for טוֹב as an adjective modifying a null noun rather than as a grammaticalized noun comes from the use of טוֹב as the construct member of a construct phrase, as in the following two examples:

(21a) 1 Kings 1:6

וְלֹא־עֲצָבוֹ אָבִיו מִיָּמָיו לֵאמֹר מַדּוּעַ כָּכָה עָשִׂיתָ וְגַם־הוּא טוֹב־תֹּאַר מְאֹד וְאֹתוֹ יָלְדָה אַחֲרֵי אַבְשָׁלוֹם׃

His father had never at any time displeased him by saying, "Why have you done thus and so?" *He was also a very handsome man (lit. very good of appearance)*, and he was born after Absalom.

(21b) 1 Samuel 25:3

וְשֵׁם הָאִישׁ נָבָל וְשֵׁם אִשְׁתּוֹ אֲבִגַיִל וְהָאִשָּׁה טוֹבַת־שֵׂכֶל וְיִפַת תֹּאַר וְהָאִישׁ קָשֶׁה וְרַע מַעֲלָלִים וְהוּא כְלִבִּו [כָלְבִי]׃

Now the name of the man was Nabal, and the name of his wife Abigail. *The woman was discerning (lit. good of intelligence)* and beautiful (lit. beautiful of appearance), but the man was harsh and badly behaved and he was a Calebite.

In both examples, the construct phrase functions as the predicate of a verbless sentence. In 1 Kings 1:6, the bound member of the construct phrase agrees with the masculine subject; in 1 Samuel 25:3, the bound member of the construct phrase agrees with the feminine subject. It is therefore clear that the adjective occurs within the construct phrase, rather than a form of טוֹב in which the adjective has become grammaticalized as a noun. Further evidence for this identification of טוֹב as an adjective is the fact that in (21a) it is modified by מְאֹד.

To return to the expression of טוֹב with "in the eyes of", we have demonstrated that the expression may occur with a definite noun (as in [14]) or an indefinite noun (as in [20]). The expression may also occur with a finite verbal form from the cognate verbal root:

(22) 2 Samuel 3:36

וְכָל־הָעָם הִכִּירוּ וַיִּיטַב בְּעֵינֵיהֶם כְּכֹל אֲשֶׁר עָשָׂה הַמֶּלֶךְ בְּעֵינֵי כָל־הָעָם טוֹב׃

> And all the people took notice of it, *and it was good in their eyes*, just as everything that the king did *was pleasing* in the eyes of all the people.

In the first example of the expression in this verse, a finite verbal form is found with the expression. In the second example, only טוֹב is found. On the basis of the parallel structure with the first half of the verse, it is probably the case that טוֹב should be understood as the Qal perfect 3ms of the same verbal root; however, it is equally possible from a grammatical point of view that טוֹב could be understood as a predicate adjective.

In a number of cases, טוֹב in this expression follows כַּאֲשֶׁר, as in (23):

(23) 2 Samuel 15:26

וְאִם כֹּה יֹאמַר לְא חָפַצְתִּי בָּךְ הִנְנִי יַעֲשֶׂה־לִּי כַּאֲשֶׁר טֹוב בְּעֵינָיו׃

> But if he says as follows, 'I have no pleasure in you,' behold, here I am, let him do to me *according to what is good in his eyes*.

The construction with כַּאֲשֶׁר requires a finite verbal form or a participle; therefore, טוֹב in this context should be interpreted as a Qal perfect 3ms. However, it is less clear that a verbal form is in view after the simple relative אֲשֶׁר, as in (24):[76]

(24) 2 Samuel 3:19

וַיְדַבֵּר גַּם־אַבְנֵר בְּאָזְנֵי בִנְיָמִין וַיֵּלֶךְ גַּם־אַבְנֵר לְדַבֵּר בְּאָזְנֵי דָוִד בְּחֶבְרֹון אֵת כָּל־אֲשֶׁר־טֹוב בְּעֵינֵי יִשְׂרָאֵל וּבְעֵינֵי כָּל־בֵּית בִּנְיָמִן׃

> Abner also talked with the Benjaminites; then Abner also went to inform David in Hebron of *all that was good in the eyes of Israel and of the whole House of Benjamin*.

The relative clause has the quantifier כָּל modifying a null noun as its head. The instance of טוֹב within the relative clause seems to be a predicative adjective rather than a verb. For comparison, we can note that other adjectives may also appear in this construction, as illustrated in (25):

(25) Exodus 11:3

וַיִּתֵּן יְהוָה אֶת־חֵן הָעָם בְּעֵינֵי מִצְרָיִם גַּם׀ הָאִישׁ מֹשֶׁה גָּדֹול מְאֹד בְּאֶרֶץ מִצְרַיִם בְּעֵינֵי עַבְדֵי־פַרְעֹה וּבְעֵינֵי הָעָם׃

> The LORD gave the people favor in the eyes of the Egyptians. Moreover, the man Moses was very *great* in the land of Egypt, in the eyes of the servants of Pharaoh and in the eyes of the people.

In some ambiguous cases, however, it may be best to understand טוֹב as a Qal perfect finite verb, rather than as a predicative adjective. This is the case in (26) for two reasons. First, if טוֹב is identified as a predicate adjective, it would not have a subject.

---

[76] Similarly, 2 Sam 19:38.

Second, identifying טוֹב as a finite verb provides a matrix verb for the infinitival complement that follows it:

(26) Numbers 24:1

וַיַּרְא בִּלְעָם כִּי טוֹב בְּעֵינֵי יְהוָה לְבָרֵךְ אֶת־יִשְׂרָאֵל וְלֹא־הָלַךְ כְּפַעַם־בְּפַעַם לִקְרַאת נְחָשִׁים וַיָּשֶׁת אֶל־הַמִּדְבָּר פָּנָיו׃

Balaam saw that *it was pleasing in the eyes of the LORD to bless Israel*, and he did not go, as at other times, to look for omens, but set his face toward the wilderness.

The infinitival clause "in order to bless Israel" is dependent upon טוֹב as a finite verb. In the Hebrew Bible, only verbal forms of טוֹב serve as the matrix verb for infinitival complements, as illustrated in (27), where a participial form of טוֹב has this function:[77]

(27) 1 Samuel 16:17

וַיֹּאמֶר שָׁאוּל אֶל־עֲבָדָיו רְאוּ־נָא לִי אִישׁ מֵיטִיב לְנַגֵּן וְהֲבִיאוֹתֶם אֵלָי׃

Saul said to his servants, "Provide for me a man *who can play well (lit. doing well to play)* and bring him to me."

However, other predicative adjectives are attested in the Hebrew Bible serving as the matrix predicate for an infinitival complement:

(28) Jeremiah 4:22

כִּי־ אֱוִיל עַמִּי אוֹתִי לֹא יָדָעוּ בָּנִים סְכָלִים הֵמָּה וְלֹא נְבוֹנִים הֵמָּה חֲכָמִים הֵמָּה לְהָרַע וּלְהֵיטִיב לֹא יָדָעוּ׃

For my people are foolish; they do not know me; they are stupid children; they have no understanding. They are *wise in doing evil (lit. to do evil)*. But to do good they do not know.

It is therefore possible that טוֹב as an adjective could be used in a similar construction. But, as noted above, טוֹב as a predicative adjective in (26) would not have a subject; as a result, the interpretation of טוֹב as a finite verb remains preferable:

A different kind of infinitival clause is found in the following example, in which the infinitival clause functions as the subject of the sentence (note the absence of a preposition before the infinitives construct) and טוֹב is probably the predicate adjective:

(29) 1 Samuel 29:6

וַיִּקְרָא אָכִישׁ אֶל־דָּוִד וַיֹּאמֶר ׀ אֵלָיו חַי־יְהוָה כִּי־יָשָׁר אַתָּה וְטוֹב ׀ בְּעֵינַי צֵאתְךָ וּבֹאֲךָ אִתִּי בַּמַּחֲנֶה ׀ כִּי לֹא־מָצָאתִי בְךָ רָעָה מִיּוֹם בֹּאֲךָ אֵלַי עַד־הַיּוֹם הַזֶּה וּבְעֵינֵי הַסְּרָנִים לֹא־טוֹב אָתָּה׃

[77] See also Jer 1:12 and Ezek 33:32 (without the preposition *lamed* preceding the infinitival complement).

> Then Achish called David and said to him, "As the LORD lives, you have been honest, *and your going out and your coming in with me in the battle is good in my eyes*. For I have found nothing wrong in you from the day of your coming to me to this day. Nevertheless, the lords do not approve of you."

What we have seen is that in order to determine the categorial status of טוֹב, it is important to move beyond simply the morphosyntactic features to a syntactic understanding of the broader context. This allows the analyst to curtail the possible categorial assignments.

7.5 טוֹב Followed by a Preposition Phrase with *lamed*

Another problematic expression involves טוֹב followed by a prepositional phrase with the preposition lamed, as in (30):

(30) Deuteronomy 15:16

וְהָיָה֙ כִּֽי־יֹאמַ֣ר אֵלֶ֔יךָ לֹ֥א אֵצֵ֖א מֵעִמָּ֑ךְ כִּ֣י אֲהֵבְךָ֗ וְאֶת־בֵּיתֶךָ֙ כִּֽי־ט֥וֹב ל֖וֹ עִמָּֽךְ׃

> But if he says to you, "I will not go out from you," because he loves you and your household, *since it is good for him with you*….

Should טוֹב be identified as a Qal 3ms verb or as a predicate adjective?

A similar example with a comparative meaning is also found:

(31) Numbers 11:18

וְאֶל־הָעָ֖ם תֹּאמַ֑ר הִתְקַדְּשׁ֣וּ לְמָחָ֔ר וַאֲכַלְתֶּ֖ם בָּשָׂ֑ר כִּ֣י בְכִיתֶ֗ם בְּאָזְנֵי֙ יְהוָ֣ה לֵאמֹ֔ר מִ֥י יַאֲכִלֵ֖נוּ בָּשָׂ֑ר כִּי־טֽוֹב ל֥וֹ בְמִצְרָ֖יִם וְנָתַ֧ן יְהוָ֛ה לָכֶ֥ם בָּשָׂ֖ר וַאֲכַלְתֶּֽם׃

> And to the people you will say, 'Consecrate yourselves for tomorrow, and you shall eat meat, for you have wept in the hearing of the LORD, saying, "Who will give us meat to eat? *For it was better for us in Egypt*." Therefore, the LORD will give you meat, and you shall eat.'

In these two examples, there is no subject constituent if we identify טוֹב as an adjective, thus suggesting that perhaps it is better to identify it as a verbal form. However, there are cases in which a subject is specified in the form of a verbal complement, as in (32):

(32) Psalm 119:71

טֽוֹב־לִ֥י כִֽי־עֻנֵּ֑יתִי לְ֝מַ֗עַן אֶלְמַ֥ד חֻקֶּֽיךָ׃

> *It is good for me that I was afflicted*, in order that I might learn your statutes.

The complement "that I was afflicted" serves as the syntactic subject of the sentence, making it possible for טוֹב to be understood as a predicate adjective. It is also possible for the subject to be an infinitival complement, as in (33):

(33) Qoheleth 11:7

וּמָתוֹק֙ הָאֹ֔ור וְט֥וֹב לָעֵינַ֖יִם לִרְאֹ֥ות אֶת־הַשָּֽׁמֶשׁ׃

The light is sweet, and it is good for the eyes to see the sun.

In this example, the infinitival clause governed by the preposition *lamed* serves as the subject of the sentence and טוֹב may be the predicate adjective. It is also possible to have an infinitival clause that is not governed by the preposition *lamed* as the subject of the sentence:

(34) Exodus 14:12

הֲלֹא־זֶה הַדָּבָר אֲשֶׁר דִּבַּרְנוּ אֵלֶיךָ בְּמִצְרַיִם לֵאמֹר חֲדַל מִמֶּנּוּ וְנַעַבְדָה אֶת־מִצְרָיִם כִּי טוֹב לָנוּ עֲבֹד אֶת־מִצְרַיִם מִמֻּתֵנוּ בַּמִּדְבָּר׃

Is not this what we said to you in Egypt: 'Leave us alone that we may serve the Egyptians'? *For it would have been better for us to serve the Egyptians than to die in the wilderness.*

The absence of the preposition *lamed* in this example probably relates to the fact that the preposition *min* introduces the infinitival complement.

In yet another example of this construction, the subject is a noun phrase and again טוֹב may be understood as the adjective:

(35) Psalm 73:28

וַאֲנִי | קִרְבַת אֱלֹהִים לִי־טוֹב שַׁתִּי | בַּאדֹנָי יְהוִה מַחְסִי לְסַפֵּר כָּל־מַלְאֲכוֹתֶיךָ׃

But as for me it is good for me to be near God; I have made the Lord GOD my refuge to tell of all your works.

7.6 Two Instances of טוֹב in Qoheleth 7:1

Another syntactically problematic example is the following:

(36) Qoheleth 7:1

טוֹב שֵׁם מִשֶּׁמֶן טוֹב

וְיוֹם הַמָּוֶת מִיּוֹם הִוָּלְדוֹ

A name is *better* than precious (lit. *good*) ointment
and the day of death [is better] than the day of his birth.

The sentence in the first line of the verse has two occurrences of טוֹב; we will therefore carefully consider the possible syntactic interpretations of the verse based upon how these two instances of טוֹב (labelled TOV#1 and TOV#2) are interpreted. Note, first, however, that almost every English translation of the verse implies three instances of טוֹב in the first line, rather than two – the nouns "name" and "oil" are modified as "good" (or "precious" or "fine") in addition to the predicate "better":

(36a) Qoheleth 7:1a

A good name is better than good ointment (NAB)

A good name is better than precious ointment (NRSV)

A good name is better than fine perfume (NIV)

These translations must therefore infer one instance of טוֹב, regardless of the syntactic interpretation that the translators accept.

The following interpretations of the syntax must be considered. In the first interpretation, the first טוֹב is a predicative adjective and second טוֹב is an attributive adjective:

(36b) Interpretation 1

TOV#1=predicative adjective, TOV#2 = attributive adjective

good (is) a name more than *good* oil = A name is better than fine (or, precious) oil.

This interpretation is syntactically unproblematic. The predicate (TOV#1) precedes "name"; this is the normal position for the predicative adjective.[78] Most English translators who accept this syntactic interpretation of the Hebrew are inferring that the "name" is qualified as "good" ("a good name") from the context, as explicitly indicated by the italicized adjective in the ASV:[79]

(36c) A *good* name is better than precious oil (ASV)

However, it is not necessary to infer that a "*good* name" is meant in this verse. Instead, the sense of "name" as "reputation" need not be modified as "good," as, for example, in Prov 22:1 (see also Job 30:8).[80] Put differently, the concept of "name" in the Hebrew Bible should be viewed "in a dynamic sense as the sum of a person's deeds and accomplishments, means and reputation"; the verse then can be translated "an (honored) name (*šēm*) is better than fine ointment."[81]

---

[78] Delitzsch views the first instance of טוֹב as predicative; the sentence indicates that a name is better than a sweet scent (F. Delitzsch, *Proverbs*, *Ecclesiastes*, *Song of Solomon* [Commentary on the Old Testament 6; Reprint; Grand Rapids: Eerdmans, 1976], 313). Similarly, Aalders indicates that it is not necessary for טוֹב modify שֵׁם because the adjective can be inferred from context (G. Ch. Aalders, *Het Boek de Prediker*: *Vertaald en Verklaard* [Commentaar op het Oude Testament; Kampen: J.H. Kok, 1948], 140–141).

[79] German translations are similar, see, for example "Ein guter Ruf ist besser denn gute Salbe (feines Öl)" (Helmut Lamparter, *Das Buch der Weisheit* [Die Botschaft des Alten Testaments 46.1; Stuttgart: Calwer Verlag, 1955], 92 n. 6); and "Wertvoller ist ein (guter) Name als großer Reichtum" (Aarre Lauha, *Kohelet* [Biblischer Kommentar Altes Testament 19; Neukirchen-Vluyn: Neukirchener Verlag, 1978], 124).

[80] On the uses of שֵׁם to refer to a good or bad "reputation" and then for "memory" or "fame" after death in the Old Testament and Hellenistic Judaism, see H. Bietenhard, "*Ónoma* [name, person], *onomázō* [to name], *eponomázō* [to nickname], *pseudonymos* [bearing a false name]," in *Theological Dictionary of the New Testament* (ed. Gerhard Kittel and Gerhard Friedrich; abridged by Geoffrey W. Bromiley; Grand Rapids: Eerdmans, 1985), 695–698.

[81] A.S. van der Woude, "שֵׁם *šēm* Name," in *Theologisches Handwörterbuch zum Alten Testament* (ed. Ernst Jenni and Claus Westermann; Munich: Chr. Kaiser Verlag, and Zurich: Theologischer Verlag, 1976), 947. See also Michael V. Fox, *A Time to Tear Down and a Time to Build Up* (Grand Rapids: Eerdmans, 1999), 251.

In the second interpretation, the first טוֹב is an attributive adjective modifying "name" and the second טוֹב is a predicative adjective:

(36d) Interpretation 2

TOV#1 = attributive, TOV#2 = predicative

A good name (is) more than oil *good* (predicate) = A good name is better than oil.

This syntactic interpretation involves seeing טוֹב שֵׁם as an unusual noun phrase in which the adjective precedes the noun; this is very problematic from the standpoint of Hebrew syntax.[82]

In the third interpretation, the first טוֹב is an adjective in construct with the noun and the second טוֹב is a predicative adjective:

(36e) Interpretation 3

TOV#1 = adjective in construct state, TOV#2 = predicative

good of name (is) more than oil *good* (predicate) = A good name is better than oil.

This syntactic interpretation involves seeing טְוֹב שֵׁם as a construct phrase. A similar example involving טוֹב as a feminine adjective in a construct phrase occurs in Genesis 24:16 טֹבַת מַרְאֶה "beautiful (lit. good of appearance)." English translations that accept this syntactic interpretation would require inferring that the oil is good, since the טוֹב that follows "oil" (TOV#2) is the predicate of the sentence and not an attributive adjective modifying "oil."

In the fourth interpretation, the first טוֹב is non-predicative (either an anomalous attributive adjective as in Interpretation 2 or as an adjective in construct as in Interpretation 3) and the second טוֹב is an attributive adjective:

(36f) Interpretation 4

TOV#1 = non-predicative (either anomalous attributive adjective as in #2 or as an adjective in construct as in #3), TOV#2 = attributive

A good name (is) more than good oil = A good name is superior to fine oil.

This syntactic interpretation involves seeing TOV#2 as an attributive adjective and not as the predicate of the sentence. In this case, the preposition *min* only indicates that X is more than Y and "better" (טוֹב as a predicate) must be inferred from the

[82] Friedrich Eduard König, *Historisch-kritisches Lehrgebäude der hebräischen Sprache* (Band III; Teil 2; Hildesheim and New York: Georg Olms Verlag, 1979), §334*θ*. See also GKC §132 remark 1.

context.[83] This syntactic interpretation seems to be followed by many commentators, although not many of them explicitly address the syntactic issues.[84]

In the fifth and final interpretation, the first טוֹב is a verb (Qal perfect 3ms) and the second טוֹב is an attributive adjective:

(36g) Interpretation 5

TOV#1 = verb; TOV#2 = attributive

good (verb) is a name more than good oil

A comparable sentence with a form of טוֹב as a verb in a comparative construction with מִן occurs in Song 4:10.

We accept the first syntactic interpretation of the verse for the following reasons: (1) it does not involve an unusual order of TOV#1 as attributive adjective to head noun (as in the second interpretation); (2) TOV#1 as a predicative adjective is syntactically unproblematic. Two additional, non-syntactic arguments lend support, namely, the similar use of טוֹב in sentence-initial position as a predicative adjective in a comparative sentence occurs multiple times in the immediate context (Qoh 7:2, 7:3, 7:5, 7:8 [twice], 7:10 [with the copula הָיָה], 7:18); and the phrase הַשֶּׁמֶן הַטּוֹב "fine oil" which is a known phrase in the Hebrew Bible (Psalm 133:2; Isa 39:2).

8 SUMMARY AND CONCLUSIONS

We have examined a variety of syntactic contexts within which טוֹב appears in order to illustrate how attentiveness to morphosyntactic features can assist us in identifying the grammatical category of each occurrence. Although טוֹב is primarily an adjective, there are also homonyms which must be classified as verbs. We do not view any examples of טוֹב as nouns (or adjectives which have been grammaticalized as nouns). Instead, we have demonstrated that טוֹב, like adjectives in general, may modify a null noun in Hebrew.

We have demonstrated how differentiating the various homophonous forms can be done best by means of morphosyntactic facts as well as distributional syntactic facts relating to specific constructions. We are presently left with a number of indeterminacies. Are there instances of טוֹב which are ambiguous with respect to grammatical categorization or are there additional factors which we have not yet considered that may solve the puzzles? Should we consider a small subset of cases of טוֹב to be instances of gradient or flexible categories? Would such a description actually assist us with analysis or description of the phenomena we have identified? We are hopeful that further research involving the distributional facts of other

[83] In a few verses, the attribute of the comparative is not expressed; see GKC §133e; König, *Historisch-kritisches Lehrgebäude der hebräische Sprache*, §308a.

[84] See, for example, Murphy's translation "better is a good name than good ointment" (Roland E. Murphy, *Ecclesiastes* [WBC 23A; Dallas: Word Books, 1992]). So also Aalders, *Het Boek de Prediker*, 140–141.

noun-adjective-verb clusters in Biblical Hebrew will assist us in answering these questions.

In conclusion, we have attempted to provide a survey and overview to a variety of issues relating to grammatical categorization in linguistic theory. It is very important for scholars of ancient languages to be keenly aware of the linguistic methods and theories as a way to provide new perspectives with which to analyse the languages of ancient texts. Grammatical categorization, regardless of one's theoretical perspective, lies at the heart of the analysis and description of ancient texts. For that reason, we hope that more scholars of ancient languages will self-consciously consider how and why we categorize as we do.

BIBLIOGRAPHY

Aalders, G. Ch. *Het Boek de Prediker*: *Vertaald en Verklaard*, Commentaar op het Oude Testament. Kampen: J.H. Kok, 1948.

Andersen, Francis I., and A. Dean Forbes. *Biblical Hebrew Grammar Visualized*. Linguistic Studies in Ancient West Semitic 6. Winona Lake: Eisenbrauns, 2012.

Ansaldo, Umberto, Jan Don, and Roland Pfau. "Parts of Speech: Particulars, Universals and Theoretical Constructs." *Studies in Language* 32 (2008): 505–508.

Anward, Jan, Edith Moravcsik, and Leon Stassen. "Parts of Speech: A Challenge for Typology." *Linguistic Typology* 1 (1997): 167–184.

Baker, Mark C. *Lexical Categories: Verbs*, *Nouns*, *Adjectives*. Cambridge: Cambridge University Press, 2003.

Becker, Dan. "Grammatical Thought: Influence of the Medieval Arabic Grammatical Tradition." Pages 113–128 in *Encyclopedia of Hebrew Language and Linguistics*, Vol. 2. Edited by Geoffrey Khan. 4 volumes. Leiden: Brill, 2013.

Berlin, Brent, and Paul Kay. *Basic Color Terms: Their Universality and Evolution*. Berkeley: University of California Press, 1969.

Bietenhard, H. "*Ónoma* [name, person], *onomázō* [to name], *eponomázō* [to nickname], *pseudōnymos* [bearing a false name]." Pages 694–700 in *Theological Dictionary of the New Testament*. Edited by Gerhard Kittel and Gerhard Friedrich. Abridged by Geoffrey W. Bromiley. Grand Rapids: Eerdmans, 1985.

Boas, Franz. *Handbook of American Indian Languages* (Vol. 1). Bureau of American Ethnology, Bulletin 40. Washington: Government Print Office (Smithsonian Institution, Bureau of American Ethnology), 1911.

Bossong, Georg. "Reflections on the History of the Study of Universals: The Example of the *partes orationis*." Pages 1–16 in *Meaning and Grammar: Cross-linguistic Perspectives*. Edited by Michel Kefer and Johan van der Auwera. Berlin: Mouton de Gruyter, 1992.

Brown, Francis, S.R. Driver and Charles A. Briggs. *A Hebrew and English Lexicon of the Old Testament*. Oxford: Clarendon, 1906. Abbreviated BDB.

Bybee, Joan. *Language*, *Usage and Cognition*. Cambridge: Cambridge University Press, 2010.

Chomsky, Noam. *Lectures on Government and Binding*. Studies in Generative Grammar 9. Dordrecht: Foris Publications, 1981.

Chung, Sandra. "Are Lexical Categories Universal? The View from Chamorro." *Theoretical Linguistics* 38 (2012): 1–56.

———. "Reply to the Commentaries." *Theoretical Linguistics* 38 (2012): 137–143.

Clines, David J.A. *The Concise Dictionary of Classical Hebrew*. Sheffield: Sheffield Phoenix, 2009.

Comrie, Bernard, Matthew S. Dryer, David Gil, and Martin Haspelmath. "Introduction." Pages 1–8 in *The World Atlas of Language Structures*. Edited by Martin Haspelmath, Matthew S. Dryer, David Gil and Bernard Comrie. Oxford: Oxford University Press, 2005.

Croft, William. *Radical Construction Grammar: Syntactic Theories in Typological Perspective*. Oxford: Oxford University Press, 2001.

———. *Syntactic Categories and Grammatical Relations: The Cognitive Organization of Information*. Chicago: University of Chicago Press, 1991.

———. "Word Classes, Parts of Speech and Syntactic Argumentation." *Linguistic Typology* 9 (2005): 431–441.

Croft, William, and Keith T. Poole. "Inferring Universals from Grammatical Variation: Multidimensional Scaling for Typological Analysis." *Theoretical Linguistics* 34 (2008): 1–37.

Delitzsch, F. *Proverbs*, *Ecclesiastes*, *Song of Solomon*. Commentary on the Old Testament 6. Reprint. Grand Rapids: Eerdmans, 1976.

Forbes, A. Dean. "Distributionally Inferred Word and Form Classes in the Hebrew Lexicon: Known by the Company They Keep." Pages 1–34 in *Syriac Lexicography II*. Edited by Peter Williams. Piscataway, NJ: Gorgias, 2009.

———. "How Syntactic Formalisms Can Advance the Lexicographer's Art." Pages 139–158 in *Foundations for Syraic Lexicography III*. Edited by Janet Dyk and Wido van Peursen. Piscataway, NJ: Gorgias, 2009.

———. "Squishes, Clines, and Fuzzy Signs: Mixed and Gradient Categories in the Biblical Hebrew Lexicon." Pages 105–139 in *Syriac Lexicography I: Foundations for Syriac Lexicography*. Edited by A. D. Forbes and D. G. K. Taylor. Piscataway, NJ: Gorgias, 2006.

Fox, Michael V. *A Time to Tear Down and a Time to Build Up*. Grand Rapids: Eerdmans,1999.

Gai, Amikam. "The Category 'Adjective' in Semitic languages," *JSS* 40 (1995): 1–9.

Gesenius, W.; Kautzsch, E. and Cowley, A. E. *Gesenius' Hebrew Grammar*. 2nd English edition. Oxford: Clarendon, 1910.

Halle, Morris, and Alec Marantz. "Distributed Morphology and the Pieces of Inflection." Pages 111–176 in *The View from Building 20*. Edited by Kenneth Hale and S. Jay Keyser. Cambridge, MA: MIT Press), 1993.

———. "Some Key Features of Distributed Morphology." Pages 275–288 in *Papers on Phonology and Morphology*. Edited by Andrew Carnie and Heidi Harley. MIT Working Papers in Linguistics 21. Cambridge, MA, 1994.

Haspelmath, Martin. "Comparative Concepts and Descriptive Categories in Cross-Linguistic Studies." *Language* 86 (2010): 663–687.

———. "Does Linguistic Explanation Presuppose Linguistic Description?" *Studies in Language* 28:3 (2004): 554–579 (special issue on linguistic evidence, guest edited by Martina Penke and Anette Rosenbach).

———. "Escaping Ethnocentrism in the Study of Word-Class Universals." *Theoretical Linguistics* 38 (2012): 91–102.

———. "How to Compare Major Word-Classes across the World's Languages." Pages 109–130 in *Theories of Everything: In Honor of Edward Keenan*. Edited by Thomas Graf, Denis Paperno, Anna Szabolcsi, and Jos Tellings. UCLA Working Papers in Linguistics 17. Los Angeles: UCLA, 2012.

———. "Pre-established Categories Don't Exist: Consequences for Language Description and Typology." *Linguistic Typology* 11 (2007): 119–132.

———. "The Interplay between Comparative Concepts and Descriptive Categories." (Reply to Newmeyer). *Language* 86 (2010): 696–699.

———. "Word Classes/Parts of Speech." Pages 6538–6545 in *International Encyclopedia of the Social and Behavioral Sciences*. Edited by Paul B. Baltes and Neil J. Smelser. Amsterdam: Pergamon, 2001.

Hengeveld, Kees. "Parts of Speech." Pages 29–55 in *Layered Structure and Reference in a Functional Perspective*. Edited by Michael Fortescue, Peter Harder and Lars Kristoffersen. Pragmatics and Beyond New Series 23. Amsterdam: Benjamins, 1992.

Hengeveld, Kees, and Eva van Lier. "An Implicational Map of Parts-of-speech." Pages 129–156 in *Semantic Maps: Methods and Applications*. Edited by Andrej Malchukov, Michael Cysouw and Martin Haspelmath. *Linguistic Discovery* 8 (2010).

———. "Connectivity in Implicational Maps: Authors' Reply to Caterina Mauri." Pages 160–161 in *Semantic Maps: Methods and Applications*. Edited by Andrej Malchukov, Michael Cysouw and Martin Haspelmath. *Linguistic Discovery* 8 (2010).

Hopper, Paul and Sandra Thompson. "The Discourse Basis for Lexical Categories in Universal Grammar." *Language* 60 (1986): 703–752.

Jackendoff, R. *X-Bar Syntax*. Cambridge, MA: MIT Press, 1977.

Joüon, P. and T. Muraoka. *A Grammar of Biblical Hebrew*. 2d reprint of the 2d edition with corrections. Rome: Gregorian Biblical Press, 2009.

Koehler, Ludwig and Walter Baumgartner, *The Hebrew and Aramaic Lexicon of the Old Testament*. Revised by Walter Baumgartner and Johann Jakob Stamm. Translated by M.E.J. Richardson. Leiden: Brill, 2001. Abbreviated *HALOT*.

König, Friedrich Eduard. *Historisch-kritisches Lehrgebäude der hebräische Sprache*. Band III, Teil 2. Hildesheim and New York: Georg Olms Verlag, 1979.

Lamparter, Helmut. *Das Buch der Weisheit*. Die Botschaft des Alten Testaments 46.1. Stuttgart: Calwer Verlag, 1955.

Lauha, Aarre. *Kohelet*. Biblischer Kommentar Altes Testament 19. Neukirchen-Vluyn: Neukirchener Verlag, 1978.

Libert, Alan Reed. "Word Classes (Parts of Speech)." Pages 915–917 in *The Cambridge Encyclopedia of Language Sciences*. Edited by Patrick Colm Hogan. Cambridge: Cambridge University Press, 2011.

Marantz, Alec. "No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon." *University of Pennsylvania Working Papers in Linguistics* 4.2 (1997): 201–225 (issue titled, *Proceedings of the 21st Annual Penn Linguistics Colloquium*, edited by Alex Dimitriadis et al.).

Miller-Naudé, Cynthia L. and Jacobus A. Naudé, "Is the Adjective Distinct from the Noun as a Grammatical Category in Biblical Hebrew?" *In Luce Verbi* (forthcoming).

Mithun, Marianne. "Noun and Verb in Iroquoian Languages." Pages 397–420 in *Approaches to the Typology of Word Classes*. Edited by Petra M. Vogel and Bernard Comrie. Empirical Approaches to Language Typology 23. Berlin and New York: Mouton de Gruyter, 2000.

Murphy, Roland E. *Ecclesiastes*. WBC 23A. Dallas: Word Books, 1992.

Naudé, Jacobus A. "Dative: Biblical Hebrew." Pp 655–658 in *Encyclopedia of Hebrew Language and Linguistics*, vol. 1. Edited by Geoffrey Khan. 4 volumes. Leiden: Brill, 2013.

———. "Syntactic Patterns of Quantifier Float in Biblical Hebrew." *Hebrew Studies* 52 (2011): 121–136.

Newmeyer, Frederick J. "Linguistic Typology Requires Crosslinguistic Formal Categories." *Linguistic Typology* 11 (2007): 133–157.

Payne, Thomas E. *Describing Morphosyntax: A Guide for Field Linguists*. Cambridge: Cambridge University Press, 1997.

Radford, Andrew. *Analysing English Sentences: A Minimalist Approach*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press, 2009.

———. *Minimalist Syntax: Exploring the Structure of English*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press, 2004.

———. *Syntactic Theory and the Structure of English: A Minimalist Approach*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press, 1997.

———. *Syntax: A Minimalist Introduction*. Cambridge: Cambridge University Press, 1997.

———. *Transformational Grammar: A First Course*. Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press, 1988.

Richter, W. *Grundlagen einer althebräischen Grammatik. I: Das Wort (Morphologie)*. Arbeiten zu Text und Sprache im Alten Testament 8. St. Ottilien: EOS Verlag, 1978.

———. *Grundlagen einer althebräischen Grammatik. II: Die Wortfügung (Morphosyntax)*. Arbeiten zu Text und Sprache im Alten Testament 10. St. Ottilien: EOS Verlag, 1979.

———. *Grundlagen einer althebräischen Grammatik. III: Der Satz (Satztheorie)*. Arbeiten zu Text und Sprache im Alten Testament 13. St. Ottilien: EOS Verlag, 1980.

Rosch, Eleanor. "Cognitive Representation of Semantic Categories." *Journal of Experimental Psychology* 104 (1975): 192–233.

———. "Principles of Categorization." Pages 27–48 in *Cognition and Categorization*. Edited by Eleanor Rosch and Barbara B. Lloyd. Hillsdale, NJ: Erlbaum, 1978.

Schachter, Paul. "Parts of Speech Systems." Pages 3–61 in *Clause Structure*. Vol. 1 of *Language Typology and Syntactic Description*. Edited by Timothy Shopen. Cambridge: Cambridge University Press, 1985.

Taylor, J. R. "Categorization." Page 146 in *The Cambridge Encyclopedia of Language Sciences*. Edited by Patrick Colm Hogan. Cambridge: Cambridge University Press, 2011.

———. *Linguistic Categorization: Prototypes in Linguistic Theory*. 2nd edition. Oxford: Oxford University Press, 1995.

———. *Cognitive Grammar*. Oxford Textbooks in Linguistics. Oxford: Oxford University Press, 2003.

Topping, Donald M. *Chamorro Reference Grammar*. Assisted by Bernadita C. Dungca. Honolulu: University of Hawaii Press, 1973.

Trask, R. L. "Parts of Speech." Pages 278–284 in *Concise Encyclopedia of Grammatical Categories*. Edited by K. Brown and J. Miller. Oxford: Elsevier, 1999.

van der Auwera, Johan and Jan Nuyts. "Cognitive Linguistics and Linguistic Typology." Pages 1074–1091 in *The Oxford Handbook of Cognitive Linguistics*. Edited by Dirk Geeraerts and Hubert Cuyckens. Oxford: Oxford University Press, 2010.

van der Merwe, C. H. J.; Jackie A. Naudé and Jan H. Kroeze. *A Biblical Hebrew Reference Grammar*. Biblical Languages: Hebrew. Sheffield: Sheffield Academic Press, 1999.

van der Woude, A. S. "שֵׁם *šēm* Name." Pp. 935–963 in *Theologisches Handwörterbuch zum Alten Testament*, edited by Ernst Jenni and Claus Westermann. Munich: Chr. Kaiser Verlag and Zurich: Theologischer Verlag, 1976.

Waltke, Bruce K. and M. O'Connor. *Introduction to Biblical Hebrew Syntax*. Winona Lake: Eisenbrauns, 1990.

Werner, Fritz. "Adjective." Pages 35–44 in *Encyclopedia of Hebrew Language and Linguistics*, Vol. 1. Edited by Geoffrey Khan. 4 volumes. Leiden: Brill, 2013.

———. *Wortbildung der hebräischen Adjektiva*. Weisbaden: Harrassowitz, 1983.

Wierzbicka, Anna. "Lexical Prototypes as a Universal Basis for Cross-Linguistic Identification of Parts-of-Speech Systems." Pages 285–317 in *Approaches to the Typology of Word Classes*. Edited by Petra M. Vogel and Bernard Comrie. Berlin: Mouton de Gruyter, 2000.

Williams, Ronald J. *Williams' Hebrew Syntax*. 3rd edition. Revised and expanded by John C. Beckman. Toronto: University of Toronto Press, 2007.