Trends in Linguistics

Studies and Monographs 29

Editor

Werner Winter

Mouton Publishers
Berlin · New York · Amsterdam

Historical Semantics
Historical Word-Formation

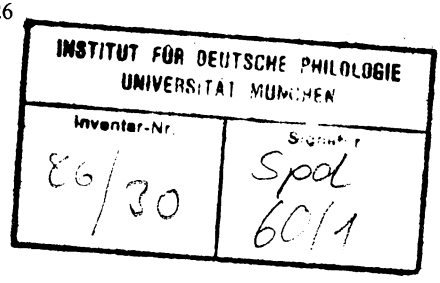
edited by

Jacek Fisiak

Mouton Publishers
Berlin · New York · Amsterdam

Institut für Deutsche Philologie

Professor Jacek Fisiak
Institute of English
Adam Mickiewicz University
Marchlewskiego 124/126
PL-61-874 Poznań
Poland



Library of Congress Cataloging in Publication Data

Main entry under title:
Historical semantics · Historical word-formation.
(Trends in linguistics. Studies and monographs ; 29) Includes indexes.
1. Lexicology — Addresses, essays, lectures.
2. Historical linguistics — Addresses, essays, lectures. I. Fisiak, Jacek. II. Series.
P 326. H 55 1985 412 85—18 764
ISBN 0-89925-115-3

CIP-Kurztitelaufnahme der Deutschen Bibliothek

Historical semantics · Historical word-formation / ed. by Jacek Fisiak. — Berlin ; New York ; Amsterdam : Mouton, 1985.
(Trends in linguistics : Studies and monographs ; 29)
ISBN 3-11-010467-9
NE: Fisiak, Jacek [Hrsg.]; Trends in Linguistics / Studies and monographs 29

Printed on acid free paper

© Copyright 1985 by Walter de Gruyter & Co., Berlin. All rights reserved, including those of translation into foreign languages. No part of this book may be reproduced in any form — by photoprint, microfilm, or any other means — nor transmitted nor translated into a machine language without written permission from Mouton Publishers, Division of Walter de Gruyter & Co., Berlin.
Typesetting: Arthur Collignon, Berlin. — Printing: Druckerei Gerike, Berlin. — Binding: Lüderitz & Bauer Buchgewerbe GmbH, Berlin.

Printed in Germany

Preface

The present volume contains a selection of papers prepared for the International Conference on Historical Semantics and Historical Word-Formation held at Błażejewko near Poznań from March 28 to 31, 1984. The papers discuss numerous problems in the vast areas of historical semantics and historical word-formation. Some of them are more central for the field, other could be considered more peripheral, perhaps more important for the analysis of particular languages than as contributions to the formation of general theories.

The material contained in the volume and the discussion at the conference seem to reflect adequately the present state of the disciplines in question, i. e. a lot remains still to be done both as regards a general semantic theory as well as in historical semantics, and the area of historical word-formation requires more investigations in particular languages before some crucial issues could be explained more definitely.

The theoretical bias of the conference contributions was not restricted in any way and representatives of various linguistic persuasions have expressed their ideas. The languages analyzed include Korean, Bantu, and Chukchi next to Indo-European ones.

It is hoped that the conference and the present volume have contributed in some sense at least to the development of historical semantics and word-formation, if not by solving any issues, at least by posing numerous questions which have to be answered if any progress in the field is to be made.

Finally it is our duty to express our sincere thanks to all conference members for their active participation and in particular to all those whose contributions have been included in this volume. Special words of thanks go to the Vice Rector of Adam Mickiewicz University, Professor Stefan Paszyc, for providing the necessary funding. Last but not least thanks are due to the Conference Secretary, Ms. Barbara Płocińska whose devotion to the cause and

skillful handling of administrative matters during and long before the conference has contributed to its success.

Poznań, August 1984 Jacek Fisiak

Table of contents

Preface V

List of conference participants XI

Anders Ahlqvist
The ordering of nominal compounds in Irish 1

Karin Aijmer
The semantic development of *will* 11

Eung-Jin Baek
Semantic shifts in Korean honorification 23

Philip Baldi, Victor Broderick and David S. Palermo
Prefixal negation of English adjectives: psycholinguistic dimensions of productivity 33

Joan L. Bybee and William Pagliuca
Cross-linguistic comparison and the development of grammatical meaning 59

Bernard Comrie
Derivation, inflection, and semantic change in the development of the Chukchi verb paradigm 85

Wolfgang U. Dressler
Suppletion in word-formation 97

Thomas Fraser
Etymology and the lexical semantics of the Old English preverb *be-* 113

Dirk Geeraerst
Cognitive restrictions on the structure of semantic change . 127

Claude Guimier
On the origin of the suffix *-ly* 155

Robert K. Herbert
Gender systems and semanticity: two case histories from Bantu 171

Raymond Hickey
Segmental phonology and word-formation: agency and abstraction in the history of Irish 199

Dieter Kastovsky
Deverbal nouns in Old and Modern English: from stem-formation to word-formation 221

Ekkehard König
Where do concessives come from? On the development of concessive connectives 263

Adrienne Lehrer
The influence of semantic fields on semantic change 283

Barbara Lewandowska-Tomaszczyk
On semantic change in a dynamic model of language 297

Charles N. Li
Contact-induced semantic change and innovation 325

Leonhard Lipka
Inferential features in historical semantics 339

Helmut Lüdtke
Diachronic irreversibility in word-formation and semantics 355

Witold Mańczak
Semantic development of borrowings 367

Francisco Marcos-Marin
Etymology and semantics. Theoretical considerations apropos of an analysis of the etymological problem of Spanish *mañero, mañeria* 377

Anatolij M. Mukhin
Lexical and syntactic semantics in historical aspect 397

Herbert Pilch
The synchrony-diachrony division in word-formation 407

Elizabeth M. Riddle
A historical perspective on the productivity of the suffixes *-ness* and *-ity* 435

William C. Ritchie
Word-formation, learned vocabulary and linguistic maturation 463

Hans Sauer
Laȝamon's compound nouns and their morphology 483

Susan Shepherd
On the functional development of repetition in Antiguan Creole morphology, syntax, and discourse 533

Carmen Silva-Corvalán
Modality and semantic change 547

Jürgen Strauss
The lexicological analysis of older stages of languages 573

Werner Winter
'Left' or 'right'? 583

Index of authors 597

Index of languages 605

List of participants

at the International Conference on Historical Semantics and Historical Word-Formation held at Błażejewko, Poland, March 28 – 31, 1984

Director

Professor Jacek Fisiak	Adam Mickiewicz University, Poznań

Conference Secretary

Ms. Barbara Płocińska, M. A.	Adam Mickiewicz University, Poznań

Participants

Dr. Anders Ahlqvist	National University of Ireland, Galway
Docent Karin Aijmer	University of Lund
Professor Frank Anshen	State University of New York, Stony Brook
Docent Wiesław Awedyk	Adam Mickiewicz University, Poznań
Dr. Eung-Jin Baek	University of Toronto
Professor Philip Baldi	Pennsylvania State University
Professor Gero Bauer	University of Vienna
Professor Peter Bierbaumer	University of Graz
Professor Joan L. Bybee	State University of New York, Buffalo
Professor Bernard Comrie	University of Southern California, Los Angeles
Professor Jan Cygan	University of Wrocław
Dr. Barbara Dancygier	University of Warsaw
Docent Bernhard Diensberg	University of Bonn
Professor Klaus Dietz	Free University, West Berlin
Mrs. Katarzyna Dziubalska-Kołaczyk	Adam Mickiewicz University, Poznań
Dr. Thomas Fraser	University of Lille III

Professor Udo Fries	University of Zürich
Dr. Dirk Geeraerts	University of Leiden
Mrs. Marinel Gerritsen	Royal Dutch Academy, Amsterdam
Professor Johannes Gerritsen	University of Groningen
Dr. Heinz. J. Giegerich	University of Edinburgh
Dr. Antonina Grybosiowa	University of Silesia, Katowice
Mr. Claude Guimier	University of Caen
Docent Edmund Gussmann	Catholic University of Lublin
Mr. Camiel Hamans	University of Leiden
Professor Robert K. Herbert	Adam Mickiewicz University, Poznań
Dr. Raymond Hickey	University of Bonn
Professor Ernst H. Jahr	University of Tromsø
Docent Roman Kalisz	University of Gdańsk
Professor Dieter Kastovsky	University of Vienna
Docent Göran Kjellmer	University of Göteborg
Docent Veronika Kniezsa	University of Budapest
Dr. Roman Kopytko	Adam Mickiewicz University, Poznań
Dr. Günter Kotzor	University of Munich
Mr. Jerzy Krzyszpień	Jagiellonian University of Cracow
Dr. Barbara Lewandowska-Tomaszczyk	University of Łódź
Professor Charles N. Li	University of California, Santa Barbara
Professor Leonhard Lipka	University of Munich
Professor Magnus Ljung	University of Stockholm
Ms. Ingegard Lohmander	University of Göteborg
Professor Helmut Lüdtke	University of Kiel
Professor Witold Mańczak	Jagiellonian University of Cracow
Professor Francisco Marcos-Marin	University of Madrid
Professor Manfred Markus	University of Innsbruck
Mr. Arthur Mettinger, M. A.	University of Vienna
Dr. Michael Miller	Jagiellonian University of Cracow
Professor Anatolij M. Mukhin	Academy of Sciences of the USSR, Leningrad
Professor Ruta Nagucka	Jagiellonian University of Cracow
Mrs. Barbara Nykiel-Herbert	Poznań

Professor William Pagliuca	State University of New York, Buffalo
Professor Herbert Pilch	University of Freiburg, Freiburg i. Br.
Dr. Michał Post	University of Wrocław
Professor Elizabeth Riddle	Ball State University, Muncie, Ind.
Professor William C. Ritchie	Syracuse University
Docent Jerzy Rubach	University of Warsaw
Professor Kari Sajavaara	University of Jyväskylä
Dr. Hans Sauer	University of Munich
Professor Charles T. Scott	University of Wisconsin, Madison
Dr. Susan C. Shepherd	Free University, West Berlin
Professor Carmen Silva-Corvalán	University of Southern California, Los Angeles
Professor Jürgen Strauss	University of Trier
Docent Aleksander Szwedek	Pedagogical University, Bydgoszcz
Dr. Bogdan Szymanek	Catholic University of Lublin
Ms. Małgorzata Tecław, M. A.	University of Gdańsk
Mr. Jerzy Tomaszczyk, M. A.	University of Łódź
Dr. Alicja Wegner	Adam Mickiewicz University, Poznań
Dr. Jerzy Wełna	University of Warsaw
Professor Werner Winter	University of Kiel
Mr. Adam Wójcicki	University of Warsaw
Mrs. Anna Zbirska-Sawala, M. A.	Adam Mickiewicz University, Poznań

LEONHARD LIPKA

Inferential features in historical semantics

1.1. After a time of uncritical adoption and use of the concept of feature – during the heyday of Transformational Grammar – semantic features and componential analysis have recently come under attack, as witnessed in publications by Lyons (1977: 317–335), Leech (^{2}1981: 117–122), and summarized by Sprengel (1980). In the following I shall try to show that, in spite of all remaining problems and difficulties, a subclass of features, viz. inferential semantic features, may be applied profitably and successfully to historical semantics. For this purpose a number of examples from the history of English will be discussed.

1.2.1. Before coming to the actual illustration of my points, it is necessary to clarify a few basic issues. First of all I should like to point out that more than ten years ago I investigated the use and status of semantic features and the related question of semantic tests in my book on *Semantic structure and word-formation* (1972). Moreover, on the basis of this theoretical discussion, I carried out extensive empirical research in this monograph, establishing semantic features inherent in all contemporary verb-particle constructions with *out* and *up*. In a later article on semantic components of English verbs and nouns (Lipka 1979) the field of application was further extended, and the justification of metalinguistic elements was again treated explicitly. I considered three general methods of establishing underlying semantic elements:

1. morphological evidence from complex lexemes, i. e. compounds, prefixal and suffixal derivatives;
2. the extraction of semantic components on the basis of paraphrase relationships; and
3. the use of semantic tests including logical relations such as implication, tautology, and contradiction.

These procedures, however, are not applicable to the so-called inferential features.

1.2.2. In the article just mentioned I have set up a taxonomy of seven types of semantic features: denotative, connotative, inferential, relational, transfer, deictic, and distinctive features. I cannot go into details here. Suffice it to say that except for the very important class of inferential features, all others function as distinctive features. Only some of them are binary. Like connotative features such as [+ ARCHAIC] in *steed* and *smite*, inferential features are supplementary in nature. They differ, however, from the former in being optional, not obligatory and inherent, and they usually depend on context. In my definition the class of inferential features covers not only properties usually associated with a referent – such as slyness with a fox, clumsiness with an ox etc. – but also the influence of co-text and extralinguistic context.

1.2.3. In dictionaries inferential features in my use of the term are normally marked by labels such as "especially" or "usually", or simply brackets. Thus *beat* is often defined as 'hit (especially with a stick)' or 'not hard'. In the following I will use braces as a notational device for marking such optional features, a convention taken over from Lehrer (1974). There is a two-fold advantage in the recognition of optional semantic elements as opposed to strictly inherent features, based on yes/no-decisions and the principle of the all-or-none. First, they can be used to capture the fuzziness of meaning and linguistic variation in synchrony. Secondly – and more important here – they open a door for describing, formalizing, and explaining semantic change in historical linguistics.

2.1. A good example of the parallelism of regional and stylistic synchronic variation and language change is the case of *starve* discussed in Lyons (1968: 452), Pyles ([2]1971: 348), and Görlach ([2]1982: 124). All three authors also mention the genetically related German *sterben*, but do not explicitly draw any possible contrastive conclusions[1]. Lyons makes the point that frequent syntagmatic modification (such as *starve of hunger*) may lead to incorporation of the sense 'hunger' into *starve*, and that in the English spoken in some areas of Northern England *starve* may incorporate 'with cold'. Görlach explains the semantic change in Norghern England and Middle English by restriction to certain contexts and the beginning opposition to the superordinate *die*. He uses a simplified feature notation which will be adapted in schema (1) together with Lyons' remarks and information from the *LDCE* and the *COD 6*:

(1)

OE *steorfan* [BECOME NOT ALIVE] >
NE *starve* [BECOME NOT ALIVE] + {of COLD}[2]
ModE *starve* [BECOME NOT ALIVE] + {of HUNGER}[3]

(OE = Old English; NE = Northern English; ModE = Modern English)

Since the Old English period the inferential features {of COLD} and {of HUNGER} have been added in Northern English and standard Modern English respectively, denoting the cause of the process. It was unspecified in Old English, as it still is in German *sterben*, but the result (death) seems to be an obligatory inherent feature in both languages. The Modern English collocation *starve to death* would have been tautological in Old English. This demonstrates that a complex semantic component [DIE] is not today a necessary element of *starve* as we will discuss presently. We could therefore postulate an inferential feature {to DEATH} in Modern English in some contexts. That the inferential feature {of HUNGER} has not been obligatory for a long time is proved by the possibility of syntagmatic modification in the formerly existing compound verb *hunger-starve*[4]. According to Lyons (1968: 452), the collocation *starve with cold* is still possible in Northern England, so that – with an incorporated inferential feature {of COLD} – *I'm starving* is roughly equivalent to Standard English *I'm freezing*. Obviously, in the standard expression *I'm starving*, meaning 'I'm very hungry', the result *to death* is neither obligatory nor even possible. This also holds for other contexts where, in addition, the inferential feature {of HUNGER} is missing, e. g., *She is starving for companionship, The engine was starved of petrol, He's completely sex-starved.* They might be accounted for on the basis of a metaphorical relationship and explained with the help of transfer features. Leaving aside this problem here, I should like to illustrate some aspects of semantic change involving metaphorical shift from Old to Modern English in the following diagram:

(2)

OE *steorfan* [DIE] + {SUFFER} >
↓ ↓
ModE *starve* ∅ [SUFFER] [from LACK] + {of FOOD}
(met.) {of LOVE}
⋮

(OE = Old English, ModE = Modern English)

The component [DIE] has disappeared completely in these polysemous uses of *starve*. For Modern English *die*, the semantic equivalent of Old English *steorfan*, none of the standard dictionaries mention *suffer* in their definitions. It can therefore not be established as an inherent feature of *die* on the basis of paraphrase relationships, as discussed at the beginning. *Suffer* is defined in *LDCE* as 'experience pain'. This is certainly what happens normally when someone dies. We are consequently justified in postulating an inferential feature {SUFFER} for Old English *steorfan*. This changes into an obligatory inherent feature in all metaphorical uses of the polysemous Modern English verb *starve*, where the component [DIE] has disappeared. Further inferential features are added from cotext or situational context, such as {of FOOD} etc. The new inherent component [from LACK] might perhaps be related to the complex element [DIE], paraphrasable as 'stop living, no longer have life, lack life'. However, this is rather speculative.

2.2.1. Let us now turn to a more pleasant subject, viz., the example of the semantic change of *holiday*, which Leech (1974: 123–124) discusses in the first edition of this book on semantics only, in connection with the problem of the fuzziness of meaning. He uses the following diagram (3) for explaining the gradual transition from state 'A', where the expression had the meaning 'holy day, viz. Sunday or religious feast', to state 'D', the Modern English meaning 'a period when one is not required to work'.

(3) *holiday*: A 'holy day, viz. a Sunday or religious feast' > D 'a period when one is not required to work'

STATE 'A'	→	STATE 'B'	→	STATE 'C'	→	STATE 'D'
1. period		1. period		1. period		1. period
2. of a day		2. (of a day)		2. (of a day)		2. – – –
3. holy		3. (holy)		3. – – –		3. – – –
4. (no work)		4. no work		4. no work		4. no work

His main point is a distinction between what he calls "criterial components", i. e. obligatory semantic features, and "non-criterial" or "optional features", which are enclosed in brackets. These are identical with my inferential features, viz., {NO WORK}, {of a DAY}, and {HOLY}. They are intended to account for the fact that

the same word, at a given time, can have "two or more overlapping definitions" (Leech 1974: 123). Such inferential features may either become obligatory or disappear completely. In combination, the result of such a "step-by-step progression" may be "a complete shift in the reference of the expression" (Leech 1974: 124). According to Leech the inferential feature {NO WORK} was optional in the original meaning, corresponding to the Modern English collocation *holy day*.[5] This would not be an adequate paraphrase for the lexicalized compound *holiday* today. Since the optional feature was frequently associated with the expression, it became gradually obligatory. On the other hand, the obligatory components 'of a day' and 'holy' are lost in Modern English, by transition through the states 'B' and 'C' in which they had become optional inferential features. Such a extension of meaning, can be termed 'semantic shift' (cf. Görlach ²1982: 119; Ullmann 1972: 227; Berndt 1982: 81, 87).

2.2.2. Leech's schematic representation looks very convincing. Nevertheless, it is tempting to follow up the actual linguistic development with the help of the *OED*. First of all it is not surprising to find that the dictionary registers considerable variation, both formally and semantically. Let us first consider the formal side (neglecting phonological developments) as summarized in simplified form in schema (4):

(4) Old English (a) *haligdæg* dat. pl.: *haligdagum* (b) *halig dæg* dat. pl.: *halgum dagum*

from 15th century: *hallidai, halliday* (and in northern dialects);
from 14th century: *holidai, holidaie, holiday.*

The *OED* makes a distinction between a "combined form" (4a) and an "uncombined form" (4b), in modern terminology 'compound' vs. 'syntactic group' or 'collocation'. The basis is a purely formal criterion, viz., inflection of the first constituent or its lack. Various spellings are given. As is well known, the Northern English form *halliday* survives in personal names.

Basically three different meanings are distinguished, as quoted in abbreviated form in (5), of which the first is the oldest and the other two have earliest recordings around 1300:

(5) 1. A consecrated day, a religious festival – c. 950
...
2. A day on which ordinary occupations ... are suspended;
of exemption or cessation from work;
of festivity, recreation, or amusement
– a 1300 ...
3. A time or period of cessation from work ...
(= *collect. pl.* or *sing.*) – 13.. ...

I have marked relevant semantic material by spacing. This shows that Leech's analysis is basically correct, and that meanings with or without the inferential feature {of a DAY} coexist from about 1300 onwards. State 'A' in diagram (3) is further justified by the remark in the dictionary that meaning 2 in (5) is "in early use not separable from 1". It is interesting to note that, according to the *OED*, form (4b) became more frequent "as the distinction in signification between sense 1 and sense 2 became more marked". In spite of some difficulties the following quotations (6) may illustrate how the inferential feature {NOW WORK} came in and {of a DAY} and {HOLY} went out:

(6) *For meaning 2*:
a 1300 *Iesus went him for to plai Wit childir on a halidai*
1478 *One for the halydays ... and a nothyr for the workyng days*
1601 *Hence: home you idle Creatures, get you home: Is this a Holiday?* (Shakespeare, *Julius Caesar*)

For meaning 3:
13.. *Er þe halidayez holly were halet out of toun*
1667 *The Christmas holidays giving more leave and licence to all kinds of people.*

2.2.3. The *OED* also mentions two further subsidiary meanings of *holiday* which I shall now discuss. One is contained in the obsolete or extinct phrase *to speak holiday* defined as 'to use choice language, different from that of ordinary life'. This could lead us to introduce an additional inferential feature {EXTRAORDINARY} (cf. also meaning 2 in (5)), related to the feature {HOLY}. Such an inferential feature could be supposed to have been present already in state 'A'

of diagram (3), while all the other features of that stage must have disappeared in the phrase.

The second use of *holiday* is characterized as colloquial and nautical by the dictionary and defined as 'a spot carelessly left uncoated in tarring or painting'. The following diagram (7) may explain the semantic change and again illustrates the usefulness of an inferential feature {EXTRAORDINARY}:

(7)

(a) [TIME / {of a DAY} / {HOLY} / {EXTRAORDINARY} / NO WORK] → (b) [PLACE / – – – / – – – / EXTRAORDINARY / NO WORK]

Holiday in this specific nautical register can be defined as 'extraordinary place where no work has been done', which is crudely formalized in (7b). The starting-point of the semantic change, viz., (7a), can be compared to state 'B' in (3). I have replaced 'period' by [TIME] and added the inferential feature {EXTRAORDINARY}. This is converted into an obligatory component. The other inferential features have disappeared, while the feature [NO WORK] is retained in (7b).

The most radical semantic change from [TIME] to [PLACE] cannot be interpreted with the help of inferential features. In my opinion it must be regarded as an abrupt conversion or replacement rather than a gradual transition, or step-by-step progression for which Leech set up his model. Obviously, we here reach the limits of inferential features. Furthermore, the actual process of the shift of meaning of *holiday* may have been quite different from the reconstruction given in (7). Perhaps the situation of coining the new meaning was something like an officer saying: "Is this were you took a holiday?" to a lazy sailor, pointing to the spot in question.

It is well known that not all shifts of meaning are gradual, but some are rather sudden, accidental, and anecdotal. Possibly the best examples of unique changes are those of the history of ModE *mint* and *money* and F *croissant*, denoting a milk-roll, as explained by Ullmann (1972: 197). The four fundamental "types" of change: metaphor, metonymy, popular etymology, and ellipsis may all involve cases of sudden shift of meaning. On the other hand it is quite

normal that a word gradually acquires a new sense, which then coexists with the old one for some time or even indefinitely.

2.2.4. If we now look at *holiday* from a strictly synchronic point of view, we can state that some inferential features are relevant for Modern English as well, not only for a historical approach. Thus the inferential feature {of a DAY}, postulated for the transition from meaning 2 to 3 in schema (5), is not at all obligatory in Modern English, but optional. This is evident in the following definition of *holiday* from the *LDCE*: 'time of rest from work, a day ... or longer' (cf. also (7a)). Another possible inferential feature is {RE-CREATION}, derived from sense 2 and 3 in (5) and the following definition in *COD 6*: 'day of festivity or recreation, when no work is done ... period of this'. Its optionality is supported by the fact that recreation is not mentioned in the *LDCE*.

2.3.1. Turning away from our holiday to serious work, it may not seem out of place, in the context of a conference on historical semantics and word-formation, to make a few remarks on lexicalization (cf. Lipka 1977; 1981). As I understand this term (cf. Lipka 1981: 120 f.) lexicalization is a multi-layered historical phenomenon, in which a complex lexical item, through frequent use, gradually loses the character of a syntagma and formally and semantically tends to become a single, specific, lexical unit. This process may involve graphemic and phonological changes, sometimes referred to as demotivation, but also morphological and syntactic alterations, and especially semantic modifications. The latter may be largely captured by the theoretical construct of loss or addition of semantic features, which describe the gradual process of idiomatization. In *holiday* both processes can be found, as well as phonological and morphological changes that isolate the lexicalized compound from its constituents and a parallel syntactic group (cf. 2.2.2. and Bloomfield 1933: 434). In other cases such as *blackboard* or *watchmaker*, which are perfectly analysable today, demotivation has been caused by developments in the extralinguistic world, something I have referred to (Lipka 1981: 124) as 'referential change' ("Referenzwandel").

2.3.2. I distinguish lexicalization from what may be called 'instantaneous' or 'individual coining', a phenomenon I once termed "Einzelprägung" (Lipka 1981: 122). This is tied up with the naming function of simple and complex lexical items and must be considered

as a singular act, in which new concepts or concrete extralinguistic referents are given a name. This may lead to instanteneous idiomaticity – a fact already noted by Hermann Paul (cf. Lipka 1981: 122) – but does not necessarily do so. Examples for the former are *streaker* 'person running naked across a public place' and G *Geisterfahrer* 'car going in wrong direction on a motorway'. Examples of unidiomatic unique coinings may be *pedestrianization* or G *Windabweiser* 'part of car that keeps wind away'.

3.1. I will now turn – in less detail – to some other examples of semantic change that have been repeatedly used in the literature (cf. Bloomfield 1933: 426, 431–432, 440–441; Pyles ²1971: 347 ff.; Ullmann 1982: 227 ff.; Görlach ²1982: 118–119; Berndt 1982: 76 ff.; Nöth 1979: 27 ff.). As Pyles (²1971: 347) points out, many of them can already be found in a book by Greenough and Kittredge published in 1901, but have been adopted since "they make their point better than less familiar ones would do". I will here concentrate on two fundamental "categories" (cf. Ullmann 1972: 227) of semantic change, to which a feature approach is most amenable, and which are based on the result of change and the range of words, viz., extension and restriction of meaning as illustrated in schema (8):

(8) (a) Restriction (features added):
deer, fowl, hound, liquor, starve;

(b) Extension (features subtracted):
barn, bird, dog, meat, mill, tail.

In the following, I shall distinguish two groups of authors who have dealt with these examples and will try to review the most important points they make. With all of them the analyses of specific items do not differ much.

3.2.1. Bloomfield, Pyles, and Ullmann belong together in that they do not draw on the concept of feature. Bloomfield surveys previous research, notably Paul, with his distinction between general and occasional meaning and Sperber, with his stress on the context of new meanings. In this connection Bloomfield uses the term "extension of meaning"; otherwise the speaks of "narrowing" and "widening". For him (Bloomfield 1933: 440 f.) finding the context or situation in which a linguistic form may be used with both the old

and new meanings is the key for explaining semantic extension. At the same time the paradigmatic and syntagmatic co-text – in modern terminology – must be considered, e. g., the competition of *meat* and *flesh*, and possible unfavourable connotations[6].

3.2.2. Pyles distinguishes between "specialization" and "generalization" of meaning, a classification "based on scope". He treats some examples that are not discussed in the other books, viz., *barn, mill, tail,* and *liquor*, and also makes reference to regional semantic variation between British English and American English. Thus *barn* was originally a compound of OE *bere* 'barley' and *ærn* 'house'. We may therefore postulate an inferential feature {BARLEY} for the specific kind of cereal or grain that disappeared in the development to modern British English *barn* 'storehouse for grain'. In American English and some other varieties of English even the feature [GRAIN] is no longer obligatory, since *barn* may be defined as a 'building for storing hay, livestock, vehicles, etc.' (cf. *COD 6*). Finally, the feature [for STORING] may also be absent in some other uses of *barn* as in the definition of $barn_3$ in the *LDCE* as 'a big bare plain building'. On the synchronic level we can therefore postulate two inferential features {GRAIN} and {for STORING}.

Pyles ([2]1971: 347) further points out that a *mill* was formerly a place for making things by grinding, viz., *meal* (etymologically related), and that it is now only "a place for making things", because "the grinding has been eliminated"[7]. As evidence he cites the syntagmatic modifications in "woolen mill" (sic!), *steel mill*, and even *gin mill*. The situation is, however, more complicated and we might be induced to postulate inferential features such as {GRINDING}, {BUILDING}, and {GRAIN} both for diachronic and synchronic purposes.

The third item considered by Pyles alone is *tail*, from OE *tægl*, which he defines as probably having meant 'hairy caudal appendage, as of a horse'. According to him the "hairiness" and "horsiness" have been eliminated in the development to ModE *tail*, which could be represented by the inferential features {HAIR} and {HORSE}, or {EQUINE}, the latter found as inherent features in ModE *horse, stallion, mare, gelding, foal, filly, colt* etc. The semantics of *tail* are far more complex if we include metaphorical and metonymic extensions, as a glance at the dictionaries will show. Thus, for example, we probably need an inherent feature [BACK] to account for *tail* in the sense of 'reverse of coin'.

I therefore turn to the last item, *liquor*, which is also special in being a case of semantic restriction. Pyles ([2]1971: 348) claims that originally it simply meant 'fluid', but that "we have added 'alcohol' ". This is not borne out if we look up *liquor* in the *COD 6*, where alcohol plays a very small role. On the other hand the *LDCE* is much more alcoholic, since the first definition is plainly 'alcoholic drink', and the second one, labelled American English, even reads 'strong alcoholic drink'. It is therefore probably not unwise to postulate an inferential feature {ALCOHOL} both synchronically and diachronically.

3.2.3. Ullmann (1972: 195) draws attention to the fact that many semantic changes arise in "ambiguous contexts" and notes (Ullmann 1972: 229) that "extension of meaning" is apparently "a less common process than restriction". He gives some very interesting examples for extension (Ullmann 1972: 231), viz. F *pigeon, dindon* 'turkey-cock', *hêtre* 'beech', and ModE *bird* from OE *brid* 'young bird'. In all these cases, which denote whole species, the original meaning was 'young animal or plant' (cf. also G *Schößling* 'young plant'). We can therefore postulate an inferential feature {YOUNG} that has disappeared. It was formerly an inherent distinctive feature, and still is in a number of Modern English lexical items, such as *boy, girl, foal* and its hyponyms, etc.[8].

The reverse process, viz. restriction of meaning, is illustrated by Ullmann (1972: 229) with the help of the examples *deer*, earlier meaning 'beast', *hound*, formerly 'dog', *fowl*, once denoting 'bird' in general, and *starve*. He notes that G *Tier, Hund, Vogel,* and *sterben* have "retained the wider meaning". We might postulate the additional inferential feature {family CERVIDAE}[9] added to the sense of OE *dēor*, {for HUNTING} in *hound*, and {family GALLUS} incorporated in the sense of earlier OE *fugol*. It would seem that German always retains the original sense and is thus less susceptible to semantic change. However, Pyles ([2]1971: 350, fn. 10), giving the further items G *Knabe, selig, Knecht* (to which we might add *Korn* and *Mühle*), had already warned against jumping to this conclusion, and argued that the impression would not be the same with a different choice of examples.[10] To finish the review of this group of linguists, let me state that all three, viz. Bloomfield, Pyles, and Ullmann, draw on relevant German material and do not diverge much in their opinion on particular lexical items.

3.3.1. Görlach (1974: 118 f.) was to my knowledge the first to use a simplified feature notation for the explanation of semantic change in the history of English, if we disregard Leech's isolated schema for *holiday*. He illustrates extension of meaning by an inherent feature [+ jung], becoming optional in ModE *bird*, which corresponds to our inferential feature {YOUNG}. For restriction of sense Görlach uses [+ zur Jagd] and [+ fleischl.] in ModE *hound* and *meat* respectively, which were missing in OE *hund* and *mete*.

He gives detailed chronological tables (Görlach ²1982: 123) for the semantic development of ModE *sad, silly, nice,* and *stout*, where the overlap of particular senses at certain times is clearly shown. This could also be captured with the notion of inferential feature, something Görlach does not attempt to do. Finally, his approach is exceptional in that he does not confine himself to the investigation of single lexical items in isolation, but tries to analyse a whole word-field in its semantic development (Görlach ²1982: 126 f.). Thus, the interdependence between ModE *farm, hamlet, village, town, city* and their earlier equivalents are studied on the basis of a text corpus. This field of 'a collection of dwellings', for which an archilexeme is missing, also includes, e. g., OE *wīc, hām, castel, ceaster,* and *burg*, for which semantic continuations in Modern English do not exist.

3.3.2. Berndt (1982: 81–87) also takes into account paradigmatic lexical relationships in his discussion of semantic change, but in addition includes syntagmatic context by quoting extensive syntagmas or full sentences. He argues that "changes in the meaning of a word ... have to be seen from the point of view of their effects upon the relation of this word to other words in the same semantic field or the same subsystem" (Berndt 1982: 80), and therefore jointly investigates the history of *fowl* and *bird* (81–82), *deer, beast,* and *animal* (82–83), *meat, flesh,* and *fodder* (83–84), *hound* and *dog* (86), and the co-occurrence of ME *sterven, swelten,* and *dīen* (85–86). In many cases he demonstrates overlap and even synonymy at some time during the Middle English period. He explicitly deals with meaning differences between "cognate words in English and German (partly) due to narrowing of the range of reference in the history of the English items" (86–87) Berndt (1982: 81) generally explains "specialization" and "generalization" as due to the "addition of certain structural components" and the "suppresion or loss of certain structural components"[11], with substitution combin-

ing the two processes (81). However, he never makes an attempt to isolate or formalize these components with a feature notation.

3.3.3. Our last author, Nöth, is exceptional because he applies such a notation to both diachronic and contrastive semantics at the same time. Using many of the English and German examples already treated here, and a considerable number of others, his aim is to find out the affinities and differences between the two branches of semantics. He argues for a more dynamic view of the interrelation between the two systems, which is quite compatible with my conception of inferential features.

4. This brings us back to my own proposal and the conclusions one can draw from it. I believe that the notion of the inferential feature is both necessary and inevitable, if one accepts the idea of semantic components at all. It is furthermore extremely useful for descriptive adequacy and possible generalization, as well as for descriptive and didactic purposes. In synchrony, it can account for fuzziness of meaning, for polysemy, and for regional, stylistic, and other variation (cf. 2.2.4.). On the diachronic scale, it can capture semantic restriction, extension, and shift and possibly other changes of meaning. A number of specific features have been established in the course of this paper, as summarized in (9), with (9a) and (9b) following the same order as (8a) and (8b), and (9c) containing the inferential features mentioned alsewhere in the order of appearance in the text:

(9) (a) {family CERVIDAE}, {family GALLUS}, {for HUNTING}, {ALCOHOL}, {of HUNGER}

(b) {BARLEY}, {GRAIN}, {for STORING}; {YOUNG}; {particular BREED}; {FLESH}; {GRINDING}, {BUILDING}, {GRAIN}; {HAIR}, {HORSE} = {EQUINE}[12]

(c) {of COLD}, {CAUSE}, {of HUNGER}, {to DEATH}, {SUFFER}, {of FOOD}, {of LOVE}, {NO WORK}, {of a DAY}, {HOLY}, {EXTRAORDINARY}, {RECREATION}.

Obviously, the items discussed in section 3 and listed in schema (8) have not been treated in the same detailed way that was reserved for our crucial example *holiday*. Nevertheless, I am convinced that

if they were followed up in *OED* in the same manner, this would further support my argument and prove the value of inferential features for synchronic and historical semantics.

Notes

* I should like to thank Elspeth Davidson and Helmut Gneuss for very helpful comments on an earlier version of this paper. The term "inferential feature" ultimately derives from Nida (cf. Lipka 1979) and denotes non-obligatory meaning components which may be "inferred" from the use of an expression.

1. Berndt (1982: 86), however, states: "The semantic differences between ModE *starve* and its modern German cognates, HG *sterben* and Low German /*sta*:vn/, arose as a result of addition of further structural components to the underlying structure of the earlier meaning shared with ME *dīen*." Cf. Lipka (1980: 102–103) for hyponyms of *sterben* and *die*, contrastive equivalents, and the problem of choosing between analytical paraphrases.
2. *Cold* and *hunger* may be further analysed as 'absence or lack of heat/food', cf. *LDCE* $starve_1$ and $starve_3$ 'to (cause to) suffer from not having come stated thing'. For possible approaches to the optional causativity in all three meanings of *starve* cf. Lipka (1982). We might postulate an inferential feature {CAUSE}.
3. ME *sterve(n)*, according to Görlach (^{2}1982: 124), is already characterized by an obligatory feature [+ durch Hunger]. However, the six occurences of the verb in Chaucer's works (cf. Skeat 1912: 381, 431, 435, 479, 557, 653) all clearly show the lack of this feature. Although the editor in his glossary (Skeat 1912: 105) in one instance explicitly defines *sterve* as 'die of famine', a look at the passage immediately shows that this is not correct, since we find: *sholde hir children sterve for famyne*. We have a clear case of syntagmatic modification, which is the best test for non-incorporation of the meaning 'of famine' in *sterve*. Of the 50 entries in the Chaucer Concordance under *starve* not a single one justifies [of HUNGER]. The earliest date for the sense 'to die of hunger' in the *OED* is 1578.
4. Cf. Pyles (^{2}1971: 348). The *OED* gives 1390 and 1879 as the earliest and latest dates respectively for this verb. For the general problem of the interrelation between syntagmatic modification and paradigmatic lexical structuring cf. Lipka (1981).
5. If we follow Liebermann (1903–1916; 1960: 399, 656 f., s. v. *Feiertag* 5), *Sonntag* 3) and 4)) this is not correct, since there were strict laws that prohibited work on a holiday in the Anglo-Saxon world.
6. In another connection Bloomfield (1933: 432, 440) mentions *meat and drink, sweetmeats,* and *counted one's bedes* (more currently *tell one's beads*). The co-existence of the former cases with ModE *meat* 'flesh-food' could be accounted for by an inferential feature {FLESH} cf. also the Modern English saying *one man's meat is another man's poison*. In the expression *tell one's beads* the noun *bead* 'prayer' is synchronically unrelated to *bead* 'small object' and there is only an etymological connection.
7. Cf. the definitions in *SDCE*: 1. '(a building containing) a machine for crushing corn or grain into flour'; 2. 'a factory or workshop', and in *COD 6*: 1. 'Building fitted with machinery for grinding corn'; 2. 'Any mechanical apparatus for grinding corn ... any solid substance ...'; 3. 'Any machine, or building fitted with machinery, for manufacturing-processes etc.'. Nöth's (1979: 33) treatment

of the "metaphorical extension" of the meaning of *mill* is apparently based on the *COD* or *OED*. Cf. also the syntagmatic modification in: a) *flourmill, watermill, windmill,* b) *coffee-mill, pepper-mill,* c) *cotton-mill, paper-mill* as a test.

8. As a binary feature it is also relevant for the system of address in many languages, e. g., as one of the factors involved in the distinction between *tu, du* (for children) and *vous, Sie* (for adults).
9. Cf. *COD 6* s. v. *deer*; Nöth (1979: 31); Pyles (²1971: 348), who points out that the feature was not yet present in Shakespeare's "Mice, and Rats, and such small Deare".
10. Cf. also Berndt (1982: 92–95) for *boor* and G *Bauer; boy, knave, child* and G *Knabe; silly* and G *selig*; and *knight* and G *Knecht*.
11. Pejoration and (a)melioration are accounted for by "gain or loss of evaluative meaning components" (Berndt 1982: 93 ff.). Thus e. g. *knave, silly,* and G *Knecht* are said to have acquired "negative evaluative components", while *knight* is a case of additional "positive evaluative components". For a semantic feature Negative Evaluation [+ NegEv] in G *stinken* and participial adjectives like *choked up, snowed up, mixed up, glued up, inked up* cf. Lipka (1972: 136–138, 208).
12. For ME *dogge* 'dog of a particular breed' cf. Bloomfield (1933: 426) and also G *Dogge*. This leads to an inferential feature {particular BREED}. For *meat* cf. Bloomfield (1933: 425–426, 431, 440–441), Pyles (²1971: 348).

References

Berndt, Rolf
1982 *A history of the English language* (Leipzig: VEB Verlag Enzyklopädie).

Bloomfield, Leonard
1933; 1935 *Language* (London etc.: George Allen & Unwin).

Brekle, Herbert E. – Kastovsky, Dieter (eds.)
1977 *Perspektiven der Wortbildungsforschung* (Bonn: Bouvier).

Görlach, Manfred
1974 *Einführung in die englische Sprachgeschichte* (Heidelberg: Quelle & Meyer).
1982 *Einführung in die englische Sprachgeschichte*, 2nd edition (Heidelberg: Quelle & Meyer).

Kastovsky, Dieter, ed.
1980 *Perspektiven der lexikalischen Semantik. Beiträge zum Wuppertaler Semantikkolloquium vom 2. bis 3. Dezember 1977* (Bonn: Bouvier).

Leech, Geoffrey
1981 *Semantics. The study of meaning*, 2nd edition (Harmondsworth: Penguin).

Lehrer, Adrienne
1974 *Semantic fields and lexical structure (= North-Holland Linguistic Series* 11) (Amsterdam etc.: North-Holland).

Liebermann, Felix, ed.
1903–1916; 1960 *Die Gesetze der Angelsachsen*, Vol. II, (Berlin; Aalen: Scientia).

Lipka, Leonhard
1972 *Semantic structure and word-formation. Verb-particle constructions in contemporary English (= International Library of General Linguistics* 17) (München: Fink).

1977 "Lexikalisierung, Idiomatisierung und Hypostasierung als Problem einer synchronischen Wortbildungslehre", *Perspektiven der Wortbildungsforschung*, edited by Herbert E. Brekle & Dieter Kastovsky (Bonn: Bouvier), 155–164.

1979 "Semantic components of English nouns and verbs and their justification", *Angol Filológiai Tanulmányok* 12 / *Hungarian Studies in English* 12: 187–202.

1980 "Methodology and representation in the study of lexical fields", *Perspektiven der lexikalischen Semantik*, edited by Dieter Kastovsky (Bonn: Bouvier), 93–114.

1981 "Zur Lexikalisierung im Deutschen und Englischen", *Wortbildung*, edited by Leonhard Lipka & Hartmut Günther (Darmstadt: Wiss. Buchgesellschaft), 119–132.

1982 "Causatives and inchoatives in English and their treatment in recent lexicographic practice", *Studia Anglica Posnaniensia* 14: 3–16.

Lyons, John

1968 *Introduction to theoretical linguistics* (Cambridge: Cambridge University Press).

1977 *Semantics* (Cambridge etc.: Cambridge University Press).

Nöth, Winfried

1979 "Contrastive semantics in the light of the theory of semantic change", *Anglistik & Englischunterricht* 8: 25–39.

Pyles, Thomas

1971 *The origins and development of the English language*, 2nd edition (New York etc.: Harcourt – Brace – Jovanovich).

Skeat, Walter W., ed.

1912 *The complete works of Geoffrey Chaucer* (London etc.: Oxford University Press).

Sprengel, Konrad

1980 "Über semantische Merkmale", *Perspektiven der lexikalischen Semantik*, edited by Dieter Kastovsky (Bonn: Bouvier), 145–177.

Tatlock, John S. P. – Kennedy, Arthur G.

1927 *A concordance to the complete works of Geoffrey Chaucer and to the Romaunt of the Rose* (Washington: Carnegie Institution).

Ullmann, Stephen

1972 *Semantics. An introduction to the science of meaning* (Oxford: Basil Blackwell).

Dictionaries

COD 6

1976 *The Concise Oxford dictionary of current English*, 6th edition, edited by J. B. Sykes (Oxford: Oxford University Press).

LDCE

1978 *Longman dictionary of contemporary English*, edited by Paul Proctor (London: Longman).

OED

1933 *The Oxford English Dictionary*, edited by James A. H. Murray, Henry Bradley, William A. Craigie & Charles T. Onions (Oxford: Oxford University Press).

Index of authors

Abelson, R. 302
Acson, V. 108 n. 1, n. 7
Akmaijan, A. 463
Akmaijan, A. – Heny, F. 463
Ahlqvist, A. 1, 101
Ahn, P. 30 n. 2
Aijmer, K. 148
Akatsuka, N. 280 n. 3
Alarcos Llorach, E. 549
Albertos Firmat, M. L. 381, 386, 387
Alexandre, P. 186-188, 195 n. 15
Alinei, M. 392 n. 8
Alleyne, M. 533, 534
Andersen, H. 297, 300
Anshen, F. 430, 435, 436, 443, 444, 457
Anshen, F. – Aronoff, M. 435, 436, 443, 444, 457
Anttila, R. 109 n. 17
Aronoff, M. 33, 55 n. 1, 201, 435, 436, 440, 443, 444, 451, 454, 457
Aronoff, M. – Schvaneveldt, R. 55 n. 1, 435, 457
Arbois de Jubainville, H. d' 385, 387, 388
Ard, J. 67
Asín Palacios, M. 392
Atlas, J. D. 275
Atlas, J. D. – Levinson, S. C. 275

Baist 389
Baker, C. L. 464, 465, 470–473
Baker, W. J. 55 n. 1
Bamberg, M. 540
Barney, S. A. 168 n. 2
Baron, N. S. 171, 192, 193, 194 n. 1
Bately, J. 526 n. 80
Battan, P. L. 286, 294
Bauer L. 486, 487, 522 n. 20-22, n. 24, n. 25, n. 28, 523 n. 38, 525-526 n. 74, 527 n. 91, n. 94
Baudouin de Courtenay, J. 109 n. 13
Baugh, A. C. 454, 529 n. 110
Baugh, A. C. – Cable, T. 529 n. 110
Beard, R. 109 n. 13, n. 14
Beaugrande, R. de 303, 304
Behagel, O. 271
Bello, A. 549
Bellugi, U. 471
Bennett, J. 270, 280 n. 2
Benveniste, E. 4
Bergsten N. 523 n. 39, 527 n. 89, n. 94, 529 n. 110
Berndt, R. 343, 347, 350, 352 n. 1, 353 n. 10, n. 11
Berwick, R. C., 470, 472, 474, 480 n. 3, n. 4
Bhaldraithe, T. de 1, 2, 4, 7 n. 4, n. 14, 209, 217
Bickerton, D. 304
Bily, I. 102
Binchy, D. A. 7 n. 9
Birkhan, H. 388
Björkstam, H. 12
Black, M. 287
Blenner-Hassett, R. 491, 509, 526 n. 75, n. 79, n. 80
Bloomfield, L. 346, 347, 349, 352 n. 6, 353 n. 12, 521 n. 10
Bøgholm, N. 492, 523 n. 45
Bokamba, E. B. 188, 189
Bolinger, D. 570 n. 11
Borden, A. R. 452
Bosworth, J. 222, 223, 227, 573, 578
Bosworth, J. – Toller, T. N. 222, 223, 227, 573, 578
Bowerman, M. 264
Braine, M. D. S. 471
Brook, G. L. 520 n. 1, 529 n. 112
Brook, G. L. – Leslie, R. F. 520 n. 1, 529 n. 112
Brown, R. 471
Brown, R. – Cazden, C. B. – Bellugi, U. 471
Brown – Hanlon 471

Brüch, J. 389
Brugman, C. M. 127
Brugmann, K. 458 n. 14
Bruner 142
Buck, C. D. 330, 591
Burnham, J. M. 263, 272
Burt, M. K. 463
Buttler, D. 298
Bwantsa – Kafungu, S. P. 189
Bynon, T. 40
Bybee, J. 59, 76, 76 n. 4, 114, 151 n. 29, 458 n. 14, 563, 564, 570 n. 9
Bybee, J. – Moder, C. L. 151 n. 29
Bybee, J. – Pagliuca, W. 114, 563, 564, 570 n. 9

Cable, T. 529 n. 110
Caix 389
Campbell, A. 523 n. 39, 524 n. 49
Campbell, R. N. 440
Cappello, T. 102
Cappello, T. – Tagliavini, C. 102
Carlson, G. 464, 465
Carlson, G. – Roeper, T. 464, 465
Carr, C. T. 489, 490, 521 n. 13, 522 n. 20, n. 25, n. 28, 524 n. 55, 526 n. 70, n. 71, n. 78
Cartagena, N. 549, 550
Castro, A. 389
Cawdrey, R. 456
Cazden, C. B. 471
Cejador, J. 391 n. 3
Chao, Y. R. 359
Chen, M. 449
Chevallet, A. de 458 n. 14
Chomsky, N. 109 n. 11, 142, 201, 408, 431 n. 3, 463, 466, 468 – 470, 472, 474, 478, 479, 480 n. 1, n. 4
Chomsky, N. – Halle, M. 201, 408, 431 n. 3
Christian Brothers 7 n. 5
Clark, E. V. 443
Clark, E. V. – Clark, H. H. 443
Clark, H. H. 443
Clark, R. 458
Clark Hall, J. R. 113, 119, 223, 227
Close, R. A. 15
Coates, J. 14, 20, 64, 65, 73, 74, 77 n. 6, n. 8, n. 9
Collinson, W. E. 115
Comrie, B. 60, 61, 76 n. 1, 86, 87, 91 – 93, 191, 194, 195 n. 17
Corominas, J. 383, 389, 390
Corominas, J. – Pascual, J. A. 389, 390
Couvreur, W. 585, 590, 592
Coyaud, M. 267
Coyaud, M. – Hamou, K. 267
Creider, C. A. 177, 178
Crider, K. 437
Cutler, A. 435, 443, 444, 457
Czepluch, H. 463, 465, 468, 479

Dahlgren, K. 301
d'Ardenne, S. R. T. O. 524 n. 26
d'Ardenne S. R. T. O. – Dobson, E. J. 524 n. 6
Delbrück, B. 114
Dell, F. 109 n. 13
Dell, F. – Selkirk, E. O. 109 n. 13
Derwing, B. 55 n. 1
Derwing, B. – Baker, W. J. 55 n. 1
Denny, J. P. 177, 178
Denny, J. P. – Creider, C. A. 177, 178
Diez 392
Dishington, J. 168 n. 3
Dobson, E. J. 524 n. 6, 528 n. 19, 542 n. 46
Doke, C. M. 175, 176, 179, 182, 191
Dottin, G. 3, 388
Dressler, W. 105, 106, 108 n. 1, n. 2, n. 6, n. 7, 109 n. 16, 431 n. 6
Dressler, W. – Acson, V. 108 n. 1, n. 7
Dressler, W. – Mayerthaler, W. – Panagl, O. – Wurzel, W. U. 108 n. 1, n. 7, 109 n. 16
Dryden, J. 455

Earle, J. 124 n. 2
Earle, J. – Plummer, C. 124 n. 2
Eaton, H. 375
Edgerton, F. 589
Einstein, A. 358
Einstein, A. – Infeld, L. 358
Eisenberg, P. 267
Evans, D. E. 7 n. 11, 387, 388
Eys, W. J. 567

Faiß, K. 362, 494, 524 n. 48, 527 n. 84, n. 94
Fararo, T. J. 319
Fawcett, R. P. 306
Fehling, D. 5
Fill, A. 362
Fillmore, C. J. 127, 573 – 575
Fisiak, J. 259 n. 3
Fleischmann, S. 17, 60, 67, 73, 78 n. 13, n. 14, 566
Fraser, T. 124 n. 7

Gadde, F. 450
Gaffmann 438
García E. C. 391
García González, J. 378
Gardner, T. J. 522 n. 24, 525 n. 64
Gauger, H.-M. 361
Geeraerts, D. 128, 142, 143
Gerritsen, J. 55 n. 6
Gili Gaya, S. 549, 570 n. 5
Gillies, W. 2
Givón, T. 5, 60, 176, 177, 194 n. 8, n. 12, 276, 565
Görlach, M. 340, 343, 347, 350, 352 n. 3
Götz, D. 527 n. 94
Gonda, J. 106
Gonzáles Ollé 378
Goossens, J. 127, 143, 145, 146, 148
Greenbaum, S. 523 n. 38, 524 n. 49
Greenberg, J. H. 1, 62, 76 n. 3, 109 n. 19, 171, 182, 194 n. 3, n. 4, 305
Greenberg, J. H. et al. 305
Greenough 347
Greenough – Kittredge 347
Grein 573, 576, 578
Grice, H. P. 275, 304
Grimm 113
Günthner, C. 417
Guilbert, L. 109 n. 15
Guillaume, G. 118–120, 124 n. 1, n. 7, 156, 158–160, 163, 165, 168 n. 9
Guimier, C. 114, 124 n. 7, 162, 168 n. 7, 432 n. 11, 526 n. 66
Gumperz, J. J. 567
Gumperz, J. J. – Wilson, R. 567
Guthrie, M. 175

Haegeman, L. 13, 18
Haiman, J. 102, 267
Hall, J. 521 n. 15, 527 n. 96, 578
Halle, M. 201, 408, 431 n. 3
Halliday, M. A. K. 541
Halliday, M. A. K. – Hasan, R. 541
Hammarström, G. 407
Hamou, K. 267
Hancock, I. 533, 534
Hansen, B. 229, 487, 521 n. 8, 522 n. 25, 523 n. 38
Hansen, B. et al. 229, 487, 521 n. 8, 522 n. 25, 523 n. 38
Harris, M. 5
Hasan, R. 541
Hayek, F. A. v. 355
Heath, S. B. 541, 542
He, W. 30 n. 2
Heny, F. 463
Herbert, R. K. 194 n. 7
Heringer, H. J. 318
Hervey, S. 418, 419, 424, 427
Hewson, J. 162, 163
Hickey, R. 201, 209, 218 n. 3, n. 9
Hinnebusch, T. J. 179, 182
Hirtle, W. H. 160
Hockett, C. 427
Holder, A. 387
Hopper, P. 336 n. 7
Hopper, P. – Thompson, S. A. 336 n. 7
Horn, L. 64, 65
Householder, F. W. 299
Hualde, J. I. 570 n. 15
Hübner, E. W. E. 381
Huld, M. E. 7 n. 9

Inėnlikėj, P. I. 94 n. 1
Infeld, L. 358
Ingersoll, S. M. 526 n. 78

Jacobi, H. 5
Jakobson, R. 62, 305
Jespersen, O. 33, 221, 426, 436, 450–452, 455
Jönsjö, J. 522 n. 20, n. 21
Johansson, S. 527 n. 89
Johnson, M. 574
Joly, A. 120
Jones, M. 7 n. 12
Jones, M. – Thomas, A. R. 7 n. 12
Joos 123

Kärre, K. 526 n. 70
Karlsson, F. 20
Karttunen, L. 280 n. 1
Karttunen, L. – Peters, S. 280 n. 1
Kastovsky, D. 109 n. 16, 218 n. 2, 229, 247, 259 n. 5–7, n. 10, 260 n. 14–16, n. 20, 423, 484, 486, 521 n. 8, n. 15, n. 18, 522 n. 19, 524 n. 56–58, n. 60, 525 n. 60, n. 62–64, 527 n. 94
Katz, J. J. 300, 301
Katz, R. 113
Keenan, E. O. 542
Keil, H. 386
Keller, R. 355
Keller, J. E. 380, 391 n. 4
Keller, J. E. – Linker, R. W. 380, 391 n. 4
Keniston, H. 549
Ker, N. R. 520 n. 2
Kernan, K. T. 541

Kilani-Schoch, M. 108 n. 1, n. 7
Kilani-Schoch, M. – Dressler, W. 108 n. 7
Kington-Oliphant, T. L. 450, 452, 455, 458 n. 11
Kittay, E. 295 n. 4
Kittay, E. – Lehrer, A. 295 n. 4
Kittredge 347
Klegraf, J. 581 n. 1
Kluge, F. 156
Kluge, F. 365 n. 3
Kluge, F. – Mitzka, W. 365 n. 3
Kökeritz, H. 417, 422
Kölver, B. 592, 593
König, E. 267, 270, 280 n. 5
König, E. – Eisenberg, P. 267
König, E. – Traugott, E. C. 280 n. 5
Kövecses, Z. 574
Kohler, K. 365 n. 1
Koj, L. 97
Konow, S. 584, 592
Koskenniemi, K. 109 n. 21
Kotzer, G. 432 n. 9
Koziol, H. 221, 423, 436, 487, 505, 522 n. 20, 524 n. 47, n. 49
Krahe, H. 233
Krahe, H. – Meid, W. 233
Krause, W. 584, 589, 590
Krause, W. – Thomas, W. 589, 590
Kretschmer 383
Kühlwein, W. 577
Kuhlmann, H. 263
Kuhn, S. 452
Kunene, E. C. L. 179, 185, 195 n. 13
Kurath, H. 452
Kurath, H. – Kuhn, S. 452

Labov, W. 301, 365 n. 2, 574
Lacarra, J. M. 379
Lakoff, G. 127, 302, 574
Lakoff, G. – Johnson, M. 574
Lakoff, G. – Kövecses, Z. 574
Lambermont, H. 149 n. 2
Langacker, R. W. 127, 304–306, 308, 320 n. 3
Lanham, L. W. 180
Lapesa, R. 377
Laszlo, E. 302
Lauchert 391 n. 4
Lavandera, B. 548, 566
Lawler, J. 18
Leech, G. 14, 20, 339, 342–345
Leech, G. – Coates, J. 14, 20
Lees, R. B. 222
Lehmann, C. 363, 364
Lehmann, W. P. 5
Lehnert, M. 445
Lehrer, A. 283, 284, 293, 294, 295 n. 4, 340
Lehrer, A. – Battan, P. L. 294
Leisi, E. 573, 574
Lenneberg, E. H. 466
Lenze, J. 113
Lerch, E. 263
Leslie, R. F. 520 n. 1, 529 n. 112
Levi, J. N. 521 n. 7
Levinson, S. C. 273, 275
Lewandowska-Tomaszcyk, B. 297, 300, 302, 304, 320 n. 2
Lewandowska-Tomaszcyk, B. – Machova, S. 300, 304
Li, C. N. 326, 336 n. 6
Li, C. N. – Thompson, S. A. 336 n. 6
Liebermann, F. 352 n. 5
Lightfoot, D. 20 n. 3, 109 n. 11, 480 n. 4
Lightner, T. M. 55 n. 1, 109 n. 13
Lindemann, J. W. R. 124 n. 9
Lindheim, B. v. 241
Lindner, S. 127
Linell, P. 19
Linker, R. W. 380, 391 n. 4
Lipka, L. 23, 339, 346, 347, 352 n. 1, n. 2, 353 n. 11, 527 n. 94
Loewenthal, J. 389
Lüdtke, H. 355, 358, 362–364, 407
Luhmann, A. 528 n. 101
Lyons, J. 16, 17, 64, 65, 103, 108 n. 3, 283, 339–341, 549, 573, 576, 579

MacEoin, G. S. 218 n. 7, n. 8
Machova, S. 300, 304
MacKay, D. G. 97
Madden, F. 523 n. 35, 524 n. 59
Maetzner, E. 436
Malkiel, Y. 568
Mańczak, W. 374, 375
Marchand, H. 33, 34, 113, 165, 168 n. 1, 221–223, 228, 410, 411, 414, 423, 424, 429, 432 n. 9, 436, 440, 484, 486, 487, 499, 521 n. 10, n. 12, 523 n. 38, 524 n. 47, n. 49, 525 n. 61, n. 63, n. 72, 526 n. 82, 527 n. 91, 528 n. 100
Marchese, L. 61, 67, 78 n. 15
Marcos-Marín, F. 377, 382, 390, 563, 569 n. 4
Maria de Azkue, R. 390
Markarjan, R. A. 108 n. 3
Martinet, A. 424

Matsch, W. 259 n. 10
Matthews, P. H. 109 n. 14
Mayerthaler, W. 99, 108 n. 1, n. 3, n. 7, 109 n. 16, n. 17, n. 21
Meid, W. 115
Meillet, A. 336 n. 5
Meinhof, C. 175
Mel'čuk, I. A. 95 n. 1, 97, 103, 108 n. 3
Menéndez Pidal, R. 377, 378, 384, 385
Mensing, O. 263, 271
Meritt, H. D. 113, 119
Mervis, C. B. 11, 127
Métivier 392
Meyer-Lübke, W. 383, 388
Miller, D. G. 2, 193
Miodunka, W. 301
Miranda, R. V. 193
Mitchell, B. 113
Mitzka, W. 365 n. 3
Moignet, G. 166
Moll, T. A. 94 n. 1
Moll, T. A. – Inėnlikėj, P. I. 94 n. 1
Monod, J. 356
Moravcsik, E. A. 173, 191, 193, 533
Mossé, F. 157, 452, 455, 458 n. 11
Mustanoja, T. F. 505, 523 n. 40, n. 45
Mühlhäusler, P. 533
Mulder, J. 419, 424, 427
Mulder, J. – Hervey, S. 419, 424, 427
Mullenhof, K. 385
Muret, E. 367
Muret, E. – Sanders, D. 367
Muxin, A. M. 397

N'Diaye, G. 567
Nesfield, J. C. 436, 458 n. 4
Nöth, W. 302, 305, 347, 351, 352 n. 7, 353 n. 9
Nyrop, K. 458 n. 14

Oakden, J. P. 483–485, 509, 520 n. 3, n. 5, 526 n. 71, 529 n. 113
Ochs, E. 542
Ochs, E. – Schieffelin, B. B. – Platt, M. L. 542
Oehrle, R. T. 463, 465, 472, 478
Okhotina, N. V. 185
Orton, H. 520 n. 1, n. 2
Osselton, N. E. 448

Pagliuca, W. 76, 114, 563, 564, 570 n. 9
Palmer, F. R. 18
Palomar Lapesa, M. 382
Panagl, O. 108 n. 1, n. 7, 109 n. 16, 229
Pascual, J. A. 389, 390
Paul, H. 347
Pauly, A. v. – Wissowa, G. 384
Pedersen, H. 3, 7 n. 10, n. 12
Peirce, C. 108 n. 4
Pennanen, E. V. 486
Perkins, R. 59, 77 n. 5, n. 12
Peters, S. 280 n. 1
Piaget 142
Pictet 387
Pilch, H. 7 n. 12, 232, 259 n. 3, 418, 421, 422, 425, 430, 431 n. 5
Pinker, S. 467
Pisarek, W. 299
Pisani, V. 591
Plank, F. 104, 105, 108 n. 3
Platt, M. L. 542
Plummer, C. 124 n. 2
Pottier, B. 364
Priebsch, R. 115
Priebsch, R. – Collinson, W. E. 115
Pohl, A. 108 n. 3
Pokorny, J. 158, 384
Pyles, T. 340, 347–349, 352 n. 4, 353 n. 9, n. 12

Quirk, R. 259 n. 3, 263, 264, 272, 409, 421, 523 n. 38, 524 n. 49
Quirk, R. et al. 264
Quirk, R. – Greenbaum, S. 523 n. 38, 524 n. 49
Quirk, R. – Wrenn, C. L. 259 n. 3

Randall, J. 435, 436
Real Academia Española 392 n. 5, 549, 569 n. 4, 570 n. 6
Reichl, K. 440
Reisman, K. 537, 543
Renwick, W. L. 520 n. 1, n. 2
Renwick, W. L. – Orton, H. – Wakelin, M. F. 520 n. 1, n. 2
Rettig, W. 361
Rey, A. 391 n. 2
Richardson, I. 181, 184, 185, 190, 194 n. 7
Rickford, A. 543
Rickford, J. 543
Rickford, A. – Rickford, J. 543
Rinsland, H. D. 479
Ritchie, W. C. 374, 476
Robinson, F. 455, 458 n. 12
Roeper, T. 464, 465
Romaine, S. 304

Rosch, E. 11, 127, 136, 137, 139–141, 301
Rosch, E. – Mervis, C. B. 11, 127
Rudes, B. A. 108 n. 3

Sachs, G. 392
Safarov, Š. 400
Sajavaara, K. 101, 309
Sanders, D. 367
Sauer, H. 429
Saussure, F. de 124 n. 1, 431 n. 1
Schank, R. 302
Schank, R. – Abelson, R. 302
Schapera, I. 179
Schapera, I. – van der Merwe, D. F. 179
Scheidweiler 295 n. 1
Schieffelin, B. B. 542
Schlauch, M. 454, 455
Schmidt 574
Schmidt, K. H. 6, 7 n. 15, 387, 388
Schoning, G. 385
Schot, E. 377
Schrack, D. 525
Schuchardt 389
Schützeichel, R. 390
Schulten, A. 385
Schulze, W. 584
Schvaneveldt, R. 55 n. 1, 435, 457
Schwarze, C. 108 n. 3, 109 n. 12, n. 13
Scollon, R. 542
Seebold, E. 524 n. 56 n. 58, n. 60
Seiler, H. 109 n. 16, 364
Selkirk, E. O. 55 n. 1, 109 n. 13
Seltén, B. 525 n. 73
Serjeantson, M. S. 451
Seybold, C. F. 377
Shelly, P. V. D. 451
Shepherd, S. 535
Shipley, J. T. 454, 455
Shook, L. K. 168 n. 8
Sieg, E. 584, 587, 592
Sieg, E. – Siegling, W. – Schulze, W. 584
Siegling, W. 584
Silva-Corvalan, C. 566
Silverstein, M. 336 n. 5
Sjœstedt-Jonval, M. L. 4, 7 n. 7
Skalička, V. 97, 100
Skeat, W. W. 352 n. 3
Skorik, P. J. 94 n. 1
Skvoretz, J. 319
Skvoretz, J. – Fararo, T. J. 319
Sławski, F. 106
Smith, A. H. 523 n. 38, 525 n. 74, 526 n. 75, n. 79
Spence, N. C. W. 295 n. 1
Sperber 347
Sprengel, K. 339
Standop, E. 12, 20 n. 1
Stanley, E. G. 527 n. 87
Steele, S. 64, 65
Steels, L. 310, 313
Stegmüller, W. 109 n. 10
Stemberger, J. 56 n. 8
Stern, G. 16, 259, 283, 285, 574
Stolz-Leumann 392
Strang, B. M. H. 520 n. 2
Strauß, J. 148, 579, 581 n. 1
Strauss, J. W. 490, 492
Sundén, K. F. 528 n. 107
Suzman, S. M. 185, 190
Sweet, H. 165
Szemerényi, O. 107

Tagliavini, C. 102
Tauli, V. 109 n. 21
Tellier, A. 20 n. 1
Teske, M. 292
Thiele 450
Thomas, A. R. 7 n. 12
Thomas, W. 584, 589, 590, 592, 593
Thomas, W. – Krause, W. 584
Thomason, S. G. 336 n. 3
Thompson, S. A. 336 n. 6, n. 7
Thurneysen, R. 2, 3, 199, 200, 211, 214, 215, 219 n. 12
Thurnwald, R. 106
Tindale 290
Tobler – Lommatzsch 526 n. 81
Tolkien, J. R. R. 528 n. 109
Toller, T. N. 222, 223, 227, 573, 578
Tomaszczyk, J. 308
Toth, K. 524 n. 51
Tovar, A. 383-387, 389, 390, 392
Traugott, E. C. 193, 270, 280 n. 5
Trier, J. 284, 295
Tucker, S. I. 455

Uhler, K. 163
Ullmann, S. 140, 143, 283, 343, 345, 347, 349
Ultan, R. 67, 70

Valente, J. F. 182, 186
Van Dale 131
Van der Mewe, D. F. 179
Van Windekens, A. J. 584, 590–592

Vendryes, J. 3
Venneman, T. 569 n. 2
Verner 233
Vising, J. 451
Visser, F. T. 12-18, 272, 465, 479, 526 n. 70
Vries, M. de 149 n. 1

Walker, J. 156-158, 164, 168 n. 1, n. 2, 445
Wakelin, M. F. 520 n. 1, n. 2
Wang, W. 449, 451
Warren, B. 484, 526 n. 67
Wartburg, W. v. 431 n. 7
Weida, G. 16, 17, 20 n. 1
Weiland 128
Weinreich, U. 329, 330
Wellander 363
Wellmann, H. 526 n. 78
Welmers, W. E. 173, 175, 181, 194 n. 6
Wełna, J. 431 n. 8
Werner, O. 108 n. 3
Westphalen, T. 581 n. 1
Whinnom, K. 567
White, L. 109 n. 11
Whiteley, W. H. 177
Wierzbicka, A. 311
Willemyns, R. 146
Williams, J. M. 283, 293, 295
Wilson, R. 567
Winter, W. 107, 587, 590
Wittgenstein, L. 138, 573, 574
Wolf, P. P. de 173
Wolff, D. 528 n. 102
Wrenn, C. L. 259 n. 3
Wright, J. 259 n. 3
Wurzel, W. U. 108 n. 1, n. 2, n. 7, 109 n. 16
Wyld, H. C. 520 n. 2, n. 3, 523 n. 35, n. 37, 524 n. 46

Zemskaja, E. A. 109 n. 15
Zeuss, J. C. 3, 4
Ziervogel, D. et al. 191
Zimmer, K. E. 33
Žukova, A. N. 93, 94 n. 1, 95 n. 1

Index of languages

Abkhaz 267
Accadian 106
Acoma 70
Ainu 64, 77
Albanian 381, 383, 384, 390
Algerian 106
Alutor 85, 86, 91, 95
Arabic 67, 105, 106, 181, 268, 389, 390
Arabic, Egyptian 279
Aramaic 106
Aranese 383
Avestan 106, 590
Aveyron 383
Aztec 105

Balto-Slavic 168
Bantu 172, 174–176, 179–181, 184, 185, 187, 189–195
Bantu, Proto- 175–178, 183, 184, 192, 194
Bantu, Southern 179, 180, 185
Baonan 326–336
Basque 61, 64, 65, 77, 105, 383, 384, 388–390, 566, 567, 570
Bearnese 383
Breton 106, 384, 386
Bulgarian 383
Burushaski 61, 62, 77

Cahuilla 364
Cambodian (Khmer) 64, 65, 77, 268
Cantal 383
Car 64, 77
Castillian 378, 386
Catalan 383, 386
Celtic 106, 388, 390, 391, 500, 521
Chavchuven 85, 86, 89, 91, 93
Chinese 267, 268, 334, 335
Chinookan, Proto- 336
Chukchi 85–94
Cornish 106, 386
Corsican 383

Creole, Antiguan 533–544
Cretan 383

Danish 106
Diegueño 64, 70, 77
Doric 383
Dutch 77, 102, 105, 128–134, 144, 149–151, 268, 274, 279, 422

Egyptian, Old 105
Engadinish 383
English 6, 7, 13, 15, 16, 33–43, 47, 48, 53–57, 61, 65–67, 72–77, 88, 97–99, 101, 103, 104, 108, 113, 129, 155, 161, 163, 164, 168, 171, 173, 181, 193, 194, 199, 208–210, 218, 221–223, 227, 229, 230, 240, 246, 253, 255–259, 263–268, 270–280, 283, 285–292, 294, 301, 302, 308, 309, 315, 326, 339–343, 345–353, 357, 362, 364, 367–371, 373, 374, 397–399, 401–404, 408–432, 435–457, 463–465, 467–469, 471, 472, 477–480, 484–490, 492, 493, 496, 498–500, 502, 504, 506, 508, 521–526, 569
English, Black 541
English, Middle 20, 115, 155, 193, 218, 221–223, 271, 277, 285, 340, 344, 350, 352, 353, 405, 426, 429, 430, 446–448, 450–456, 458, 483–529, 573
English, Northern 340, 341, 343
English, Old 12–18, 34, 113–119, 121–125, 155, 156, 158, 162–165, 168, 192, 193, 221–225, 227, 229–253, 255–260, 263, 271, 272, 280, 285, 301, 341–343, 348–350, 364, 400, 401, 405, 422, 423, 425, 429, 430, 432, 446–448, 451–456, 458, 465, 479, 483, 485, 487–500, 502, 503, 506–529, 573–579, 581

Estonian 105
Ethiopian 106
Ewe 267
Ewondo 192
Ewondo populaire 187, 188

French 33, 34, 55, 66, 67, 101, 103, 104, 106, 124, 128, 134, 135, 151, 160, 221, 223–225, 256, 259, 263, 267, 268, 270, 272, 274, 276, 278, 279, 345, 349, 357–361, 371–373, 409, 413, 414, 425–427, 451–455, 458, 506, 507, 569
French, Old 263, 290, 361, 527, 528

Gaelic, Scottish 2, 7, 60, 62, 384
Galician 382, 388
Gallic 381, 387, 388, 392
Garo 69–71, 74, 77
Gascon 382, 388, 392
Georgian 61, 64, 77
German 101, 102, 104–106, 115, 151, 171, 231, 256, 258–260, 263, 267, 268, 270–273, 278, 279, 284, 326, 340, 347, 349–353, 356, 362, 364, 365, 367–373, 375, 383, 389, 414, 419, 421, 422, 424, 426, 431, 479, 502, 521, 523, 526, 527
German, Low 352
German, Middle High 271
German, Old High 124, 263, 271, 390, 591
German, Swiss 414
Germanic 3, 5, 67, 77, 106, 108, 113, 115, 155–157, 168, 236, 246, 383, 389, 390, 414, 521, 525
Gothic 114, 115, 156, 157, 168, 280
Greek 3, 33, 55, 67, 102, 106, 114, 125, 128, 156, 157, 172, 295, 364, 371, 383–385, 387, 390, 420, 429, 454

Haitian 64–67, 77
Haussa 106
Hui 326–329, 334–336
Hungarian 101, 106, 267, 268
Hopi 308

Iatmul 61, 62, 64, 77
Igbo 61, 105
Illyrian 387
Indo-European, Proto- 33, 114, 115, 158, 193, 233, 235, 236, 590
Indonesian 269, 362
Indonesian, Bahasa 362
Irish 1–6, 199, 200, 202–218, 384
Irish, Connemara 209, 218
Irish, Middle 3, 6, 386
Irish, Old 1–3, 6, 200–202, 206, 214, 218, 219
Italian 101–103, 274, 364, 372–374, 383, 388, 392, 455, 567

Japanese 267, 268, 467, 469

Khatyr 87
Khoisan 180
Khotanese Saka 592
Kiwai 61, 62, 64, 70, 74, 77
Korean, Modern 23–27, 29, 30, 70
Korean, Middle 23, 26–30
Koryak 85–91, 93, 94, 105, 106
Kru 61, 66, 67, 78
Kutenai 77
Kuwaa 61

Latin 33–44, 54–56, 102, 103, 106, 108, 109, 114–117, 124, 128, 134, 168, 200, 221, 223, 256, 259, 267, 268, 274, 356, 361, 364, 372, 374, 381, 382, 384–386, 388–392, 409, 413–415, 420, 421, 426, 427, 429, 431, 452, 454, 458, 506, 507, 522, 526, 528
Lingala 188–190, 192
Lithuanian 106
Logbara 61
Luiseño 64, 65, 77
Luvale 186, 187

Maasai 61, 64, 77
Malayalam 69–71, 77, 267
Mandarin 64, 77, 334
Maori 105, 362
Mongolian 105, 106
Mongolian, Khalkha 326
Monguor 330, 336
Mundari 269

Nahuatl 61, 62, 77, 269
Navaho 64, 77
Norse, Old 114, 115, 155, 156, 506, 507, 526, 528

Occitan 383
Ojibwa 70

Palana 85, 86, 91
Palaung 64, 77
Pawnee 61, 62, 69–71

Polish 101, 102, 106, 172, 173, 194, 267, 297–301, 308, 309, 313–317, 320, 372, 373
Portuguese 372, 382, 388, 389

Romance 67, 74, 76, 78
Rumanian 67, 383, 384, 389, 569
Russian 102, 267, 274, 373, 397, 411, 414

Salar 336
Samoan 362
Sanskrit 114, 268, 590, 591
Santa 336
Sardinian 383
Saxon, Old 114
Scotch 364
Semitic 5
Senoi 61, 62
Serbian 61, 62, 64, 66, 67, 75, 77
Serbo-Croatian 267
Shona 182
Sierra Miwok 61, 62, 67, 69, 71
Slavic 106, 414
Slavic, Old Church 67, 102, 106
Somali 67
Sotho 268
Sotho, Northern 179
Sotho, Southern 179
Spanish 62, 66, 173, 268, 364, 371, 374–386, 388, 390–392, 547–565, 567–570
Spanish, Corravubias 548, 550–552, 555, 556, 558, 561–564
Spanish, Medieval 563
Subia 179
Suomi-Finnish 101, 106, 267
Susu 268
Swahili 181, 188
Swazi 195
Swedish 101, 106

Tagalog 67
Tarascan 61, 70
Temne 191
Thai 64, 77
Tibetan 268
Tibetan, Amdo 326, 330, 336
Tirolese 383
Tiwi 69, 71
Tocharian A 584–594
Tocharian B 584–594
Touareg 61, 62
Turkish 69, 71, 77, 101, 105, 267, 268, 279
Tsonga 179
Tswa 172, 173, 176

Ukrainian 67
Umbundu 182, 186, 187

Vedic 106
Venda 191, 192
Vietnamese 77
Vogul 105, 106

Wallon 383
Welsh 7, 61, 364, 384, 386, 498
Wutun 326, 330–332, 336

Xhosa 180

Yanomana 61
Yao 177
Yiddish 329
Yoruba 61
Yukaghir 61, 70

Zapotec 61, 70, 77
Zulu 74, 180, 191
Zyryen 106