## APPROACHES TO GRAMMATICALIZATION

# VOLUME I FOCUS ON THEORETICAL AND METHODOLOGICAL ISSUES

edited by

ELIZABETH CLOSS TRAUGOTT and BERND HEINE

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Elizabeth Closs Traugott and Bernd Heine (eds)

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## Table of contents

## **VOLUME I**

	Foreword	хi
	Introduction Elizabeth C. Traugott and Bernd Heine	1
	Section A: General Method	15
$\checkmark$	On some principles of grammaticization  Paul J. Hopper	17
	On the gradualness of grammaticalization  Frantisek Lichtenberk	37
ibrary of Congress Cataloging-in-Publication Data  pproaches to grammaticalization / edited by Elizabeth Closs Traugott and Bernd Heine.	Serial verbs and the mental reality of 'event': Grammatical vs. cognitive packaging  T. Givón	81
p. cm (Typological studies in language, ISSN 0167-7373; v. 19)  Contents: v. 1. Focus on theoretical and methodological issues v. 2. Focus on types of rammatical markers.	Grammaticalization as retextualization  Johanna Nichols and Alan Timberlake	129
cludes bibliographical references and index.  Grammar, Comparative and general Grammaticalization. I. Traugott, Elizabeth Closs.	Section B: Directionality	147
. Heine, Bernd, 1939 III. Series. 299.G73A6 1991 15dc20 91-3650	From cognition to grammar: Evidence from African languages  Bernd Heine, Ulrike Claudi and Friederike Hünnemeyer	149
BN 90 272 2901 5 (set)/90 272 2895 7 (Vol. I)/90 272 2899 X (Vol. II) (Eur.; hb; alk. paper) BN 90 272 2902 3 (set)/90 272 2896 5 (Vol. I)/90 272 2900 7 (Vol. II) (Eur.; pb; alk. paper)	The semantics-pragmatics of grammaticalization revisited  Elizabeth C. Traugott and Ekkehard König	189
SBN 1-55619-404-8 (set)/1-55619-400-5 (Vol. I)/1-55619-402-1 (Vol. II) (US; hb; alk. paper) SBN 1-55619-405-6 (set)/1-55619-401-3 (Vol. I)/1-55619-403-X (Vol. II) (US; pb; alk. paper)	The de dicto domain in language  Zygmunt Frajzyngier	219
Copyright 1991 - John Benjamins B.V. o part of this book may be reproduced in any form, by print, photoprint, microfilm, or any ther means, without written permission from the publisher.	/ my it is a Calantamian assertions in Tomil	253

	vi TABLE OF CONTENTS		TABLE OF CONTENTS	vii
Χ.	Some grammaticalization changes in Estonian and their implications  Lyle Campbell	285	Section C: Subordination  From postposition to subordinator in Newari  Carol Genetti	<b>225</b> 227
/	The last stages of grammatical elements; contractive and expansive desemanticization  Joseph H. Greenberg		The evolution of dependent clause morpho-syntax in Biblical Hebrew T. Givón	257
X	Substrates, calquing and grammaticalization in Melanesian pidgin Roger M. Keesing	315	Section D: Modality	311
	VOLUME II		A quantitative perspective on the gramaticization of epistemic parentheticals in English  Sandra A. Thompson and Anthony Mulac	313
X	Foreword	<sub>xi</sub> ×	The grammaticization of the German modal particles  Werner Abraham	331
X	Introduction  Elizabeth C. Traugott and Bernd Heine	1	Section E: Spectra of grammaticalization patterns	381
	Section A: Verbal structure	15	Areal and universal dimensions of grammatization in Lahu  James A. Matisoff	383
	Back to the future  Joan L. Bybee, William Pagliuca, Revere D. Perkins	17	Ways to go in Rama: a case study in polygrammaticalization  Colette Craig	455
K	The emergence of perfective aspect in Indo-Aryan languages  Peter Edwin Hook	59 X	Grammaticalization and related changes in contemporary German  Christian Lehmann	493
	Section B: Argument structure	91		
/	Grammaticization of topic into subject  Masayoshi Shibatani	93		
,	From V/2 to subject clitics: evidence from Northern Italian John Haiman	135		
,	The role of motivation in the emergence of grammatical categories: the grammaticization of subjects  Marianne Mithun	159		
ζ	Verbs to promotional suffixes in Sahaptian and Klamath  Noel Rude	185		
χ	Grammaticalization of postpositions and word order in Senufo languages  Robert Carlson	201		
	AUDELL CHIMOL			

## **ABBREVIATIONS**

	ABL	ablative	<b>EMPH</b>	emphatic
	ABS	absolutive	ERG	ergative
	ACC	accusative	EXCL	exclusive
	ACT	active, actor	<b>EXCLAM</b>	excalamative
	ADV	adverb		
	AF	actor focus	FEM	feminine
	AGR	agreement	FIN	finite
	AOR	aorist	FOC	focus
	ART	article	FUT	future
	ASSOC	associative		
	ASP	aspect	GEN	genitive
	AUX	auxiliary	GEN.OBL	general oblique
		benefactive		preposition
	BEN	beneractive	GER	gerund
a back transference between the best of the	CAUS	causative		
o colonia	COMP	complementizer	IMP	imperative
	COMPL	complement	<b>IMPERF</b>	imperfect
	COMPAR	comparative .	<b>IMPFV</b>	imperfective
	COND	conditional	INCL	inclusive
Š	CONJ	conjunction	INCONS	inconsequential
	COP	copula	INDEF	indefinite
		1.41	INF	infinitive
ì	DAT	dative	INFL	verbal inflection
::	DEC	declarative	INT	intensifier
i.	DEF	definite	INTR	intransitive
Ų.	DEM	demonstrative	IO	indirect object
•	DET	determinator	IRR	irrealis
	DIR	directional		
	DO	direct object	LOC	locative
•	DS	directional		
	~**	subject	MASC	masculine
	DU	dualis	MED	medial
	DUB	dubitative	MID.VCE	middle voice
	DUR	durative	MIID. VCE	11110010 10.00

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NEG NOM	negative nominative nominalizer	Q QUOT	interrogative quotative
NOMI NONFUT NONPAST NP	nominanzer nonfuture nonpast noun phrase	REAS RED REFL REL	reason reduplicative reflexive relative clause
OBJ	object	KLL	marker
OBL	oblique	REP	repetitive
PART PARTCP PARTV PASS PAST PERF PFV PL POS.PURP POSS	particle participle partitive passive past perfect perfective plural positive purpose possessive	SEQ SG SS STAT SUB SUBJ SUBJUNCT TNS TOP TRANS	sequential singular same subject stative subordinate subject subjunctive tense topic transitive
PRE PREC	verbal prefix precaution/ negative purpose	VB VOC	verb vocative
PRED PREP PRES	predicate preposition present	1 <b>S</b> G	first person singular
PROG PROH PURP	progressive prohibitive purposive	1PL 2SG	first person plural third person singular

## **Foreword**

The papers in these volumes grow out of a symposium on grammaticalization organized by Talmy Givón, and held at The University of Oregon at Eugene in May 1988. The purpose of this symposium was to "present and discuss ... a broad range of empirical and theoretical issues concerning the genesis of morphosyntactic structure". We wish to acknowledge the inspiration provided by Talmy Givón's leadership of the symposium.

Many people helped bring these volumes into final shape. Especial thanks are due to John McWhorter and Gillian Ramchand for their assistance in commenting on and copy-editing papers, and to Ulrike Claudi and Friederike Hünnemeyer for preparation of the final materials.

## Introduction

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### I. INTRODUCTION

Although not everyone who uses the term would agree, "grammaticalization" as we define it refers to that part of the theory of language that focuses on the interdependence of langue and parole, of the categorial and less categorial, of the fixed and the less fixed in language. Grammaticalization is the linguistic process, both through time and synchronically, of organization of categories and of coding. The study of grammaticalization therefore highlights the tension between relatively unconstrained lexical expression and more constrained morphosyntactic coding, and points to relative indeterminacy in language and to the basic non-discreteness of categories.

These volumes present a number of diverse theoretical viewpoints on grammaticalization and give some detailed insights into specific grammaticalization phenomena in a number of languages. However, no attempt is made at completeness; for more comprehensive studies of the field of grammaticalization as a whole, see Lehmann (1985), Heine and Reh (1984), Hopper and Traugott (In progress), Heine et al. (1991). The diversity of perspectives is manifest in a number of ways. For example, disagreement about how to approach the subject starts with disagreements about what to call it. Some authors prefer "grammaticization" or even "grammatization" to "grammaticalization". There is more significant disagreement about whether grammaticalization is primarily a diachronic phenomenon to be studied from a "source and pathway" perspective, or primarily a syntactic, discourse-pragmatic phenomenon, to be studied from the point of view of fluid patterns of language use across time or at a synchronically segmented moment in time. In so far as there is any correlation between perspective and terminology, those who espouse the latter view of the subject tend to call it grammaticization. However, since the majority of participants used "grammaticalization", whatever

INTRODUCTION

their perspective, we have chosen to use this term in the title and in this introduction. We have not imposed uniform terminology on the contributors, and both terms will be found in the volumes.

Together the papers suggest answers to a number of questions, some of which focus on testing the boundaries of grammaticalization, others of which test the assumptions of linguistic theory in general. We outline here some of the models of grammaticalization that the authors use, challenge, or develop, and some of the main issues that the papers highlight.

## 2. THE LEXICAL ITEM>MORPHEME MODEL

Early work on grammaticalization viewed it as a diachronic phenomenon. Although many examples were discussed by nineteenth century scholars (e.g. Bopp, 1816; Humboldt, 1825; Gabelentz, 1891), the term was apparently first used by Meillet (1948 [1912]). He defined it as the evolution of grammatical forms (function words, affixes, etc.) out of earlier lexical forms, and much subsequent work has been conducted within this framework. Later researchers have emphasized that morphemes may also arise out of other morphemes. For example, Lehmann, acknowledging Kuryłowicz (1965), says: "Under the diachronic aspect, grammaticalization is a process which turns lexemes into grammatical formatives and makes grammatical formatives still more grammatical..." (1985:303), and Heine and Reh define grammaticalization as "...an evolution whereby linguistic units lose in semantic complexity, pragmatic significance, syntactic freedom, and phonetic substance..." (1984:15).

In the present volumes papers by Abraham, Bybee et al., Campbell, Carlson, Craig, Greenberg, Heine et al., Keesing, Lehmann, Matisoff, Rude, Traugott and König owe much to this perspective, although all have also been influenced to greater or lesser degree by the discourse > morphosyntal perspective outlined in 3.

## 3. THE DISCOURSE>MORPHOSYNTAX PERSPECTIVE

Alongside the lexical item>morpheme tradition which derives from Meillet, there has been a more recent tradition associated with Talmy Givón Charles Li, Sandra Thompson and others that focuses on the "packaging" of discourse and evolution of syntactic and morphological structure through

fixing of discourse strategies. For example, Givón (1979:209) characterizes the process as one of cyclic waves involving

 $Discourse \rightarrow Syntax \rightarrow Morphology \rightarrow Morphophonemics \rightarrow Zero$ 

cf. also Bybee (1985), Hopper (1988), Li and Thompson (1974), among others. Papers in these volumes that develop this morphosyntactic perspective particularly clearly are those by Genetti, Givón on the development of dependent clauses in Hebrew, Haiman, Herring, Hook, Hopper, Lichtenberk, and Shibatani. It should be noted that in many cases the source item or items discussed by these authors is not lexical but morphological (a possibility clearly permitted by the definitions of grammaticalization cited in 2.).

## 4. THE GRAMMATICAL CODING PERSPECTIVE ON GRAMMATICALIZATION

So far we have reviewed issues of grammaticalization that are one way or another issues related to language change. Yet another perspective on grammaticalization asks not so much how grammatical coding comes into being, but what grammatical coding is possible typologically in a language or in languages, and how it is organized either at one period in time (Givón on serial verbs, Mithun, Thompson and Mulac) or panchronically (Frajzyngier, Nichols and Timberlake).

The answers to the question whether certain categories must be obligatorily grammaticalized challenge some of the fundamental assumptions some linguists bring to linguistic theory, for example, that there are universal "primitives" such as Subject, Object, Tense (cf. also DuBois, 1985).

## 5. THE RELATION OF DIACHRONIC GRAMMATICALIZATION TO LANGUAGE CHANGE

For those who see grammaticalization as a diachronic process, the question naturally arises: How can we distinguish grammaticalization from language change? The answer is that grammaticalization is a kind of language change, subject to certain general processes and mechanisms of change (see section 8.), and characterized by certain consequences such as changes in grammar. These are increased syntacticization in its early stages, and increased loss of morphosyntactic independence in its later stages, ultimately leading

to zero, i.e. increased morphologization, and phonologization. Like other changes, grammaticalization spreads gradually across linguistic contexts on the one hand (Lichtenberk, Nichols and Timberlake), and across social contexts on the other (cf. Labov, 1972, and much of the sociolinguistic literature on variation and language change in progress). But that does not mean that all change is grammaticalization. To take an obvious example, the semantic change from Middle English bede 'prayer' to its modern meaning of a small spherical object often used in necklaces ('bead'), is an example of change by metonymy, but not of grammaticalization. Papers in this volume that particularly address this issue are those by Hopper and Lehmann.

#### 6. THE UNIDIRECTIONALITY OF GRAMMATICALIZATION

Firmly entrenched in diachronic perspectives on grammaticalization is the assumption of a cline of unidirectionality; or more specifically of a pathway that channels change through a limited number of structures that are minimally different from one another. This does not mean that all unidirectionality involves grammaticalization; for example, the well-known tendency for [sy] to become [š] but not vice versa is in itself not an instance of grammaticalization. However, if it results from morpheme boundary loss, then it is an instance of a stage in grammaticalization. The question is precisely what kinds of unidirectionality are necessary or at least typical of grammaticalization, and whether any kinds of reversals of grammaticalization are usefully considered as examples, albeit rare, of grammaticalization (see 7, below).

One kind of unidirectionality often associated with grammaticalization is increase in abstractness. This notion is appealed to in discussions of metaphorical change (Heine et al. on PERSON>OBJECT>SPACE>TIME>PROCESS>QUALITY, Traugott and König on temporal>causal>concessive). However intuitively attractive and widely agreed upon such a cline of abstractness may be, it is essentially a pre-theoretical notion. Certainly, increased abstractness does not in itself require grammaticalization. For example, the shift in meaning from grasp in the sense 'seize' to 'understand' is not a case of grammaticalization, although it is an example of what many linguists would consider increased abstractness in meaning.

Much of the literature on unidirectionality characterizes the development of grammatical from lexical meaning in terms of desemanticization, bleaching and emptying or loss of semantic or pragmatic meaning (see the definitions

of grammaticalization in 2. above). Traugott and König challenge this concept and argue that in its early stages grammaticalization actually often involves an increase in pragmatic meaning (though semantic content, strictly speaking, may be reduced as pragmatic meaning increases). For example, a shift from temporal to concessive while does not involve primarily bleaching of semantic meaning, but rather increase of pragmatic significance pertaining to the speaker's attitude to what is being said. If this is correct, then we need to modify the standard view of semantic unidirectionality in the process of grammaticalization. It is not always a simple case of more > less semantic, but more often of an implicational hierarchy of the type semantic>pragmatic>less semantic-pragmatic. Note that although this is not a characterization of bleaching it is nevertheless unidirectional, since the claim is that one would not expect to find pragmatic>semantic>less semantic-pragmatic, e.g. concessive while > temporal. As Traugott and König indicate, the meaning changes outlined here for grammaticalization are characteristic of meaning change in general, and are therefore not diagnostic for grammaticalization (any more than bleaching is, for that matter).

Sometimes it has been proposed that the lexical item>morpheme and the discourse>morphosyntax perspectives come into conflict with respect to unidirectionality in the earliest stages of grammaticalization (Herring). However, there is actually no inconsistency when we consider that discourse presupposes lexicon; discourse uses lexical items in ways that endow them with pragmatic meaning, and if they have the properties salient to grammaticalization outlined above, and are used more frequently, they may well come to be syntacticized in the kinds of way Givón illustrates. The two formulae "lexical item>morpheme", "discourse>morphosyntax" can therefore be combined as: lexical item used in discourse>morphosyntax.

Another kind of unidirectionality often considered characteristic of grammaticalization is increase in bondedness. Typically, at the clause level independent clauses are combined, and a cline may develop from independent clauses through some kind of loose juxtaposition and coordination to subordination (cf. Wiegand, 1987). At the phrasal level, forms may become less free and more bound via grammaticalization; for example, postpositions become affixes (Craig, Greenberg). Although not confined to grammaticalization, one of its effects is that morphemes undergoing this process move away from cardinal categoriality, and in their later stages lose the ability to refer and to associate with the inflectional and derivational trappings of their morphosyntactic category (cf. Hopper and Thompson, 1984). This leads to the emergence of "linguistic hybrids" which show the properties of several morpheme classes.

Nouns which develop into adpositions, for example, lose nominal characteristics such as the ability to be marked for definiteness or number (Genetti), or verbs which are grammaticalized to case markers tend to lose the ability to be inflected for person, tense, aspect, and mood. Loss of categoriality may also lead to the kind of development of multiple grammaticalization chains in different functional domains that Craig discusses in connection with Rama.

Unidirectionality may suggest a single path of evolution. However, approaches referring to multiple functional domains (cf. Kemmer 1988) or to correlated processes seem closer to reality (cf. Heine and Reh, 1984; Lehmann, 1985; Croft, Forthcoming: Ch. 8). Heine and Reh suggest a tripartite classification of correlations of change: Semantic-pragmatic status, grammatical behavior, and phonological substance. Lehmann uses a bipartite classification according to paradigmatic and syntagmatic processes, i.e. according to the alternatives available on the one hand and the effect of linguistic context on the other. Lehmann's characterization is somewhat theory-bound and leads to the incorrect claim that grammaticalization involves reduction in scope (1985:309), despite the fact that the development of subordinators from pronouns or verbs of saying, for example, clearly involves expansion of the scope of these forms. However, its focus on correlations is of crucial importance. In these volumes, most of the papers alert us to correlations.

It is the phenomenon of correlatable parameters that allows us to project diachronic grammaticalization onto synchronic data. Consider for example, the grammaticalization of body part nouns. If arrayed simply as a case of OBJECT>SPACE>TIME>QUALITY the examples of megbė in Heine et al. would not qualify as a case of grammaticalization. They do so precisely because the semantic changes are correlated with a shift from nominal to prepositional structure, and with different syntactic privileges of occurrence.

#### 7. COUNTEREXAMPLES TO UNIDIRECTIONALITY

The discussion so far has focused on unidirectionality, and what kinds of unidirectionality are characteristic of grammaticalization. Virtually nothing is exceptionless, and there are of course instances of change in languages that are counterexamples of tendencies that can be characterized as "less>more grammatical", "main clause>subordinate clause", etc. In these volumes the papers by Campbell and Greenberg explicitly raise counterexamples to unidirectionality (cf. also Matsumoto, 1988). The well-known phenomenon of

"lexicalization" is also a counterexample, for example when phonological changes result in morphological loss and the development of idiosyncratic lexical items, such as the English pairs lie-lay, sit-set, stink-stench, all of which have their origins in i-umlaut.

It is likely that all these examples are strictly speaking actually not cases of grammaticalization (although once they have occurred they may be subject to the generalization, reduction, loss, and other changes typical of grammaticalization). Rather, the examples Campbell and Greenberg cite can be regarded as instances of reanalysis (Greenberg actually refers to "reinterpretation which...goes beyond what is usually called reanalysis in discussions of grammaticalization"). Nevertheless, since they test the boundaries of what may be considered bona fide cases of grammaticalization, they provide an important perspective on the other papers in these volumes.

## 8. MECHANISMS OF LANGUAGE CHANGE RELEVANT TO GRAMMATICALIZATION

A number of mechanisms of language change have already been alluded to as being relevant to grammaticalization. This is hardly surprising if indeed grammaticalization is a subset of phenomena occurring in change. Of particular importance for these volumes are: Metaphorical transfer (Heine et al.), metonymic transfer (Traugott and König), reanalysis (Heine et al., Lehmann, cf. also Langacker, 1977), and analogy (Greenberg, Lehmann, Matisoff). Another mechanism is the incorporation of grammatical material from the substrate languages, as illustrated by evidence from Melanesian Pidgin (Keesing). All these are mechanisms that make change possible, but none are restricted to grammaticalization and all are independent of the unidirectionality associated with grammaticalization.

#### 9. CONDITIONS LICENSING GRAMMATICALIZATION

A further set of questions for the diachronic perspective on grammaticalization pertains to what conditions have to apply for grammaticalization to take place, in other words, given that a form A exists, what is its potential for becoming grammaticalized, and how do we know when this is happening?

papers by Campbell and Greenberg explicitly raise counterexamples to unidirectionality (cf. also Matsumoto, 1988). The well-known phenomenon of revealed extensive and robust evidence that only certain lexical classes are likely to become grammaticalized. For example, it seems unlikely that wallpaper would become grammaticalized. This is not to say that such a change is impossible, but rather that it is extremely unlikely. What we find in language after language is that for any given grammatical domain, there is only a restrictive set of lexical fields, and within them only a restricted set of lexical items, that are likely to be sources. For example, case markers, including prepositions and postpositions, typically derive from terms for body parts or verbs of motion; tense and aspect markers typically derive from specific spatial configurations; modals from terms for possession, or desire; middles from reflexives, etc. Furthermore, the paths of change are themselves highly restricted, and suggest step-by-step developments, not discrete leaps across semantic or pragmatic domains. Accounts of why these restrictions apply appeal to cognitive constraints. Whereas some have regarded these cognitive constraints as hard-wired (i.e. essentially arbitrary, cf. Bickerton, 1981), authors represented in these volumes regard them as functionally constrained by salience, communicative strategies, etc. For example, if one is attempting to express something abstract using the resources already available, or attempting to express communicative intent, also using resources already available, then the purposes to which one puts language in part determine the choices one makes. Therefore, one answer to the question concerning what potential a form A has for becoming grammaticalized is: This depends on whether its semantic content or the inferences one can draw from it serve the purposes of creating text, that is, of producing discourse. Ultimately, the question is, can the form be used to serve the metalinguistic purposes of textconstruction in a natural and therefore easily understood way? It is hard to imagine a context in which wall paper could be used to serve such a purpose.

The fact that a lexical item A has potential for solving the problem of expression does not in itself predict that it is a candidate for grammaticalization. We need to look for additional factors. An example is corner, a term which is used metaphorically in temporal expressions (cf. go round a corner in time). However, corner does not appear to be grammaticalized into tense or aspect. Why might this be? It has been suggested that the operative constraint is perceptual salience: Topological spaces only are grammaticalized (Talmy, 1983; Sweetser, 1988). Although the expected end of a process of grammaticalization is usually zero, in fact there are "graveyards", such as beclefts (Givón) and frozen idioms or lexicalizations (Hopper) that appear to block or at least delay the process of total loss (see especially Greenberg).

It would seem that the point at which grammaticalization stops may be determined by the typological characteristics of the language concerned. There

is, for example, a well established channel of grammaticalization leading from postpositions to nominal case inflections. To our knowledge, however, such a development has not been documented for languages of the analyticisolating type, where grammaticalization is unlikely to lead to the development of inflectional morphology. Observations like these suggest that there may be typological language-internal constraints that block grammaticalization from proceeding beyond a certain point. Mithun suggests that some very specific factors such as the internal shape of the grammar of a particular language may make certain grammatical markers such as subject redundant and may therefore serve to block their development.

Given that a form A is a candidate for grammaticalization both because of its semantic context and its salience, a further condition has to apply for grammaticalization to take place: The form has to be used frequently. The more grammaticalized a form, the more frequent it is (Bybee et al., Givón on serial verbs, Hook). The seeds of grammaticalization are therefore in a correlated set of phenomena: Semantic suitability, salience, and frequency. Only the third actually leads to grammaticalization and hence to fixing, freezing, idiomatization, etc.

## 10. SOME QUESTIONS FOR THE FURTHER STUDY OF GRAMMATICALIZATION

Among a number of questions still to be answered is what the languageexternal motivation for grammaticalization may be. If semantic suitability, salience and frequency are among the prerequisites for grammaticalization to start, then the question still remains as to what motivates the beginning of the process. Is it discourse-pragmatic pressure, that is, the need to be informative and processable and expressive all at the same time (cf. Langacker, 1977), the phenomenon of gaps in grammatical paradigms or in the universe of abstract concepts, a "natural propensity" for signaling metalinguistic relations in non-lexical ways (cf. Bybee and Pagliuca, 1985), or some other factor or factors? These questions all point to linguistic problem-solving as a clue to motivations for grammaticalization. Any claim about problem-solving and functional purpose raises issues of teleology. Because grammaticalization does not necessarily happen in any given instance of potential grammaticalization, considerable caution needs to be taken in proposing teleological explanations. Clearly we do not know enough yet about communication to argue that "communicative necessity" motivates the development of grammatical categories. It is primarily through the study of what prevents grammaticalization, or simply fails to trigger it, that we can begin to hope to answer the question of motivation.

Also, what are the social and psychological dynamics that are present in the initial and final stages of grammaticalization? How far is it induced by individuals, and to what extent does it form an act of human creativity, rather than being the result of language-internal drifts or forces? Hardly any answers are available thus far to this type of question, despite extensive sociolinguistic research on the development of morphology. The question in most of this literature has been posed primarily in terms of variation and continua (e.g. Bickerton, 1975; Sankoff, 1980: Part II, Rickford, 1987), or of contact (e.g. Romaine, 1988), but for the most part not in terms of psychological or cognitive motivation (see, however, Slobin's (1985) suggestions regarding cross-linguistic operating principles in child language acquisition).

Yet another unsolved puzzle is what motivates the differential speed with which grammaticalization takes place in different functional domains. Observations on African languages suggest that some kinds of developments proceed faster than others. For example, new categories of tense and aspect have emerged within a relatively short period, and in some cases a new morphology evolving along the same grammaticalization pattern is already emerging competing with the old one. The development of noun class systems or of verbal derivation, on the other hand, has been much more conservative morphological paradigms found today can be reconstructed as having already existed in a similar form and function several millennia ago.

Another important question for any theory of language that grammaticalization poses is whether lexical morphemes are by nature different from grammatical ones. If it is true that diachronically grammatical forms ultimately arise out of lexical items (although their immediate sources are often other grammatical items), does this lead to the logical conclusion that they cannot be innovated, whereas lexical items can? Among the highly stable grammatical forms with no certain lexical origin are such forms as the Indo-European to- of the demonstrative pronoun (later further grammaticalized to a third person agreement marker). Are we justified in hypothesizing that this form was once derived from a lexical item, as the diachronic perspective on grammaticalization would suggest, or does it provide evidence that grammatical items can arise full-fledged, and if so, under what conditions? These and other questions remain for future empirical study.

#### 11. ORGANIZATION OF THE VOLUMES

Arranging the many papers in a meaningful way turned out to be a difficult task, and the result is to some extent arbitrary. In view of the number and size of the contributions available we decided to divide the work up into two volumes. This division, too, is to some extent arbitrary.

Volume I focuses on theoretical and methodological issues, and is mainly concerned with developing the major themes for the study of grammaticalization outlined above.

Section A deals with some new perspectives on the development and structure of grammatical categories. Hopper discusses five principles which are relevant for describing grammaticalization. Lichtenberk draws attention to the role played by diachrony in explaining synchronic facts, and to gradualness in grammaticalization. By looking at the relationships between temporal packaging and information processing in serial verb constructions, Givón concludes that grammaticalization is not a gradual process, but rather an instantaneous one. Nichols and Timberlake develop a panchronic analysis of morphological realignments resulting from the tension between innovation and conventionalization.

In Section B, various perspectives on directionality are discussed. The first two argue for unidirectionality. The papers by Heine, Claudi and Hünnemeyer and by Traugott and König deal, among other things, with cognitive factors in directionality, especially the role of inference in metaphor and metonymy. Frajzyngier studies directionality of fit in grammar between the domain of the real world and that of speech. Unidirectional views on grammaticalization are challenged in a number of different ways. Herring argues for the independence of the development of grammatical elements out of lexical items and out of discourse-contexts, and the bi-directionality of some changes. Contributions by Greenberg and Campbell suggest that typically unidirectional processes may be reversed under certain conditions. And Keesing shows how areal influence may lead to the elaboration of grammatical structures through borrowing that is socially directional (from substrate to superstrate), but not linguistically so.

The papers in Volume II are for the most part detailed studies of distinct areas of language structure in particular languages or language families.

Section A focuses on the genesis of verbal categories such as tense and aspect. Bybee, Pagliuca, and Perkins summarize their cross-linguistic findings on future marking, and Hook discusses the notion of aspectogenesis in some Indo-Aryan languages.

Section B is concerned with various aspects of the development of argument structure. Shibatani resumes earlier discussion on the development of topic into subject, using evidence from Japanese and Philippine languages. And Haiman explores further the relationship between word order and the development of subject clitics. In a rather different vein, Mithun demonstrates why in some languages, specifically Cayuga (Iroquoian) and Selayarese (Austronesian), there was no need for the development of a subject category at all. In the final part of this section, Rude and Carlson show how non-subject marking arises out of verbal structures in Sahaptian and Klamath and in Senufo respectively.

Two different patterns in the development of subordinate structures are discussed in Section C. Genetti describes the transition from case postpositions to clausal subordinators in Newari (Tibeto-Burman). Givón reconstructs the transfer from relative clause structure to verbal complement subordination in Biblical Hebrew.

Section D is devoted to expressions of modality. Thompson and Mulac present the case of certain English "main clauses" (I think (that)) which are reinterpreted as epistemic phrases, and Abraham deals with the development of a set of modal particles in German.

Papers in Section E demonstrate a spectrum of cases of grammaticalization and a diverse array of factors at play. Matisoff investigates the development of a number of verbal and nominal particles, as well as of verbal concatenations in the Southeast Asian linguistic area. Craig shows how in Rama (Chibchan) one verb in different contexts develops multiple grammatical functions, one relating to argument structure, the other relating to tense, aspect and mood; she proposes the term "polygrammaticalization" for this kind of process. Lehmann discusses a number of emergent grammatical patterns in modern German which may or may not be instances of incipient grammaticalization, thereby pushing on the question of how one recognizes an instance of grammaticalization.

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## **SECTION A: GENERAL METHOD**

## On Some Principles of Grammaticization

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### 1. INTRODUCTION1

The earliest known use of the word grammaticalization<sup>2</sup> was apparently by Meillet, who defined it as "the attribution of a grammatical character to a previously autonomous word" (1912:131), and noted that in every case where the ultimate historical source of a grammatical form was known, this source could be shown to be an ordinary lexical word. While the search for the origins of grammar was not new (see Lehmann, 1982:1-8), in retrospect we are tempted to see in Meillet's formulations and in his use of the term grammaticalization a sense that a specific kind of historical change was at work which went beyond the neo-grammarian preoccupation with sound change, Wortgeschichte, and analogy, and that he was concerned to explicate in broad terms "the history" of "grammar", i.e. the historical antecedents to structure, in a language. Such an interpretation is certainly sympathetic to those who view grammatical structure as a self-contained component; and presumably Meillet, who refers frequently to "le système grammatical [d'une langue]", would in theory have agreed. Yet there are also indications in his writings that what is distinctively grammatical in a language is not its broader structures but the individual grammatical forms which comprise this structure. He notes (Meillet, 1925:25) that the specific identity of a language is not its grammar in the broad sense; French and English are not distinct from one another in showing a relationship between two nouns by means of a particle. but by the form and position of the particle (preposed de in French, postposed -s in English). Meillet's own philological investigations always emphasized the history of individual grammatical forms, which are referred to unmistakably as 'singular facts' (faits singuliers), 'particular facts' (faits particuliers), 'specific features' (traits spécifiques), and 'particular processes of expression of morphology' (procédés particuliers d'expression de la morphologie) (Meillet,

1925:22-25). Moreover, these comparative grammatical studies were interspersed with etymological works on Indo-European cultural vocabulary without any sense that the one or the other aspect of reconstruction and history was more important. Meillet's work, in other words, stressed the *particular* over the general in practically all aspects of change.

It is not that Meillet did not hold a Saussurean view of structure. There are plenty of references in his work to the grammatical system, and to the system of [the] language. Yet this system consists almost exclusively of morphology, and Meillet's diachronic bias rarely allows him to dwell on its stability and systematicity; almost always when he uses the word 'grammar' (la grammaire), it is in a phrase which stresses comparison and historical relationships (grammaire comparée, grammaire historique) rather than a synchronic system. It is a phenomenon of a later time that linguists came to accord grammar (i.e. morphology and syntax) a privileged status in the study of language, and that as a consequence grammaticization came to be seen as the study of the origins of grammar (rather than of the origins of the array of grammatical forms constituting its morphology, which is how Meillet usually presents it). Indeed, in his presentation of grammaticization Meillet includes such clearly lexical examples as German heute 'today' from a presumed \*hiu tagu 'this day (instr.)' alongside such evidently grammatical examples as Modern Greek tha (future tense formative) from thelo hina 'I want that', showing that what was at issue was not whether this or that form was "in" the grammar, but the more important question of the processes it had undergone to attain grammaticization. That these processes were the same for lexical forms as for forms which were unambiguously (i.e. by general agreement) 'in' the grammar suggests that for Meillet the notion of grammaticalisation did not rest ultimately on a clear definition of a grammatical system as such.

The broadened scope of the study of grammaticization as exemplified, for example, in the work of Givón (1971,1979), Heine and Reh (1984), and others, has shown that the range of phenomena to be studied is not restricted to morphology, but includes what Givón has called *syntacticization*, the fixing of pragmatically motivated word orders into syntactic constructions and agreement patterns. (Meillet had in fact presented the change from free word order in Latin to fixed word order in French (1912:147–8) as an example of grammaticization, and by implication, in saying that in early Indo-European "l'ordre des mots avait une valeur expressive, et non syntaxique; il relevait de la rhétorique, non de la grammaire" (1937:365), made it clear that at least in some languages word order was to be seen as part of grammar.) The more

extensive definition of grammaticization implicit in this work raised the question of whether, when grammaticization had done its work, there would in the end be any room left at all for the notion of grammar in the sense of static structural relationships (Hopper, 1987; 1988a; 1988b). If grammar is not a discrete, modular set of relationships, it would seem to follow that no set of changes can be identified which distinctively characterize grammaticization as opposed to, say, lexical change or phonological change in general. The only way to identify instances of grammaticization would be in relation to a prior definition of grammar; but there appear to be no clear ways in which the borders which separate grammatical from lexical and other phenomena can be meaningfully and consistently drawn. Consequently, there seems to be no possibility of constructing a typology of grammaticization, or of constructing principles which will discriminate between grammaticization and other types of change.

Support for such a conclusion comes from research into semantic change. Traugott (1989) examines the kinds of semantic changes which accompany grammaticization as well as semantic change in general, and shows that grammaticization is not distinct from other kinds of semantic change, but that several tendencies, perhaps to be subsumed under an even smaller number of much broader tendencies, seem to govern most semantic change whether thought of as lexical or as grammatical. Later in this paper, I return to the question of the ultimate validity of the principles which I present here.

#### 2. GRAMMAR: SOME WORKING ASSUMPTIONS

While a definition of grammar, and hence of grammaticization, is problematical for an individual language taken in isolation, some working assumptions about grammar are possible from a cross-linguistic perspective. These assumptions may provide an entry-point for an investigation of emergent regularities that have the potential for being instances of grammaticization:

a. Categories which are *morphologized* might safely be said to be part of grammar. Bybee (1985) has shown that aspect, number, tense, and case, among others, occur frequently across languages as affixal morphology. But some of these may also occur in looser collocations in the form of adverbials and other free elements. Therefore categories which are commonly morphologized in one language may be candidates for emergent grammatical constructions in

another; an example is Thompson and Mulac's suggestion (these volumes) that the vernacular English 'I think' has assumed neargrammatical status as an evidential.

b. Certain types of lexical items are known typically to evolve into grammaticalized clitics and affixes. Such changes are now so richly documented that only a few examples need be mentioned: Demonstrative pronouns become articles and class markers; copular verbs and verbs of motion become aspectual morphemes; nouns denoting a location become adpositions and eventually case affixes of various kinds. The detailed list of such changes given by Heine and Reh (1984:269-81) for African languages is of universal relevance. The occurrence of certain lexical items in frequent collocations (for example, when the word 'foot' repeatedly occurs in phrases like 'at the foot of the hill', etc.) may be prima facie evidence of incipient grammaticization.

The application of such cross-linguistic generalizations about grammaticization is a standard, if usually tacit, technique to guide an investigation of grammaticization in a particular language. Such generalizations are especially necessary if direct historical data are not available, a situation which may occur not only for languages which have no historical records, but even for languages with ample documented histories. Again, the English evidential 'I think' analyzed by Thompson and Mulac provides a good example: Historical data on this construction were sparse because it has presumably always been restricted to the spoken language. Yet many languages possessed morphologized evidentials, and it seemed natural both to look for its pragmatic beginnings in vernacular English and to focus on an epistemic verb like 'think' as a possible candidate. But are there any "intra-language" principles by which we can identify instances of constructions that might be said to be caught up in grammaticization? Can we discriminate in a single-language (i.e. noncomparative, non-historical) context between accidental collocations and ones which are moving toward some kind of grammatical status, however defined?

One approach to this question has been suggested by Lehmann in his 1985 paper, in which several concomitants of grammaticization are described. These are:

Paradigmatization (the tendency for grammaticized forms to be arranged into paradigms);

- Obligatorification (the tendency for optional forms to become obligatory);
- Condensation (the shortening of forms);
- Coalescence (collapsing together of adjacent forms);
- Fixation (free linear orders becoming fixed ones).

Such principles are useful, indeed indispensable, as guides to historical change, and have repeatedly proven their value in the study of grammaticization. They are, however, characteristic of grammaticization which has already attained a fairly advanced stage and is unambiguously recognizable as such. They work best, in fact, when the stage of morphologization has been reached. It is then usually possible to see that the kinds of changes typified by these labels have indeed occurred. By the time forms and constructions reach the stage of grammaticization implicit in being able to apply this typology, the question whether grammaticization has occurred is usually already answered. The problem of identifying grammaticization when it is not already obvious is precisely that the form or construction in question has not yet reached a stage of being "obligatory", "fixed", and so on. When Lehmann's principles are applied to the more labile sorts of phenomena that typically confront the linguist, they are either not applicable (e.g. Paradigmatization), or else are not distinctively examples of grammaticization (e.g. Coalescence.)

In this paper I will suggest some further principles, ones which (let it be said at the outset) share some of the same defects as Lehmann's, in that they also characterize aspects of change in general, and are not distinctive for grammaticization. In fact, the earlier discussion has made it clear that we should expect that distinctive "principles of grammaticization" can be formulated only to the extent that regularities in language can in principle be isolated which are unambiguously grammatical. Nevertheless I hope that these principles will supplement those suggested by Lehmann in being characteristic of grammaticization not only at the later, more easily identifiable stages, but also at the incipient stages where variable phenomena occur, and where the question more cogently arises as to whether we might speak of grammaticization. Like Lehmann's principles, too, they are not intended as novel insights into the nature and course of linguistic change; on the contrary, they are to a large extent part of the general lore about language change as it has been elaborated by linguists since the Neogrammarians, or simple extrapolations from that lore. But they assume a special relevance in the context of grammaticization as being potentially diagnostic of the emergence of grammatical forms and constructions out of already available material,