

## MORPHOTACTICS

The study of morphology is central to linguistics, and morphotactics – the general principles by which the parts of a word form are arranged – is essential to the study of morphology. Drawing on evidence from a range of languages, this is a comprehensive and up-to-date account of the principles of morphotactic analysis. Gregory Stump proposes that the arrangement of word forms' grammatically significant parts is an expression of the ways in which a language's morphological rules combine with one another to form more specific rules. This rule-combining approach to morphotactics has important implications for the synchronic analysis of inflectional and derivational morphology, and it provides a solid conceptual platform for understanding both the processing of morphologically complex words and the paths of morphological change. Laying the groundwork for future research on morphotactic analysis, this is essential reading for researchers and graduate students in linguistics, and anyone interested in understanding language structure.

GREGORY STUMP is Emeritus Professor of Linguistics at the University of Kentucky. His research focuses on the structure of inflectional systems, the nature of inflectional complexity, and the logic of morphotactics. Notable publications include *Inflectional Morphology* (Cambridge University Press, 2001), *Morphological Typology* (Cambridge University Press, 2013, with R. Finkel), and *Inflectional Paradigms* (Cambridge University Press, 2016).

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MORPHOTACTICS  
A RULE-COMBINING APPROACH

GREGORY STUMP  
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## *Preface and Acknowledgments*

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In this book, I investigate the morphotactic patterns of natural languages – the ways in which languages arrange their word forms’ grammatically significant parts. Specifically, I propose a rule-combining approach to modeling these patterns. According to this approach, the arrangement of word forms’ grammatically significant parts is an expression of the ways in which rules of exponence combine with one another to form more complex rules. In general, patterns of rule combination are binary (one rule combines with another rule), such combinations may be nested (a combined rule may combine with another rule), and the modes of rule combination are varied, in the sense that the combinations into which rules of exponence enter may entail different kinds of formal or functional effects.

The rule-combining approach to morphotactics has specific implications for the analysis of both inflectional and derivational morphology. Each inflected word form is the expression of a single inflectional rule, its full exponence rule. In the limiting case, a full exponence rule is just a simple rule, but very often, a full exponence rule is a combination of more than one rule. Many such combinations are just composites of their component rules, but other modes of combination exist alongside composition, including aggregation (where one rule operates on the affixal exponent defined by the other rule) and holistic combination (where together, two rules realize more than just the sum of the content that they realize individually). I demonstrate a wide range of possibilities by presenting detailed analyses of a variety of inflectional systems, including those of Breton, Eastern Mari, Fula, Gurma, Italian, Latin, Limbu, Lithuanian, Murrinhpatha, Noon, Old English, Pengo, Sanskrit, Swahili, and Udmurt.

Derivational rules also enter into combinations. Some combinations are, again, merely composites, but others embody more specific relations between their component rules, as in cases of potentiation (e.g. the combined *-abil-ity* rule, which determines a pocket of high productivity in the use of the otherwise relatively unproductive *-ity* rule) and counterpotentiation (e.g. the combination

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of the *-ic* and *-al* rules that derives *whimsical* from *whimsy* in the absence of \**whimsic*).

As I show, the rule-combining approach to morphotactics provides a solid conceptual platform for understanding both the processing of morphologically complex words and the paths of morphological change. Moreover, it is sufficiently precise in its formulation to afford meaningful comparisons with current theories of morphology, including Paradigm Function Morphology, Construction Morphology, Distributed Morphology, and Information-based Morphology.

In developing these ideas, I have benefitted from the helpful suggestions of a great many students and colleagues over a period of several years. I must particularly thank Peter Arkadiev, Jeremy Bradley, Greville Corbett, Raphael Finkel, Brian Joseph, John Mansfield, Rachel Nordlinger, and Andrew Spencer for comments and advice pertaining to the manuscript itself.

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## Abbreviations

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1	first person
2	second person
3	third person
A	adjective (in labeled bracketings)
ABESS	abessive
ABL	ablative
ABS	absolute
ACC	accusative
ACT	active
ADJ	adjective
ADVBL	adverbial
AGR	agreement
AGT	agent
ANIM	animate
ANT	anterior aspect
AOR	aorist
APPROX	approximative
ASP	aspect
ATTR	attributive
CLF. <i>n</i>	classifier number <i>n</i> in Murrinhpatha
CNT	continuative
COMIT	comitative
COMPAR	comparative
CONJ. <i>n</i>	conjugation <i>n</i>
CONT.(i)	continuous-(i) aspect in Fula
CS	classifier stem in Murrinhpatha
DAT	dative
DEF	definite
DIM	diminutive
DNS	dual nonsibling

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DS	dual sibling
DU	dual
EGR	egressive
ELAT	elative
ERG	ergative
EXCL	exclusive
FEM	feminine
FG	final glottality in Fula
FIN	finite
FUT	future
FV	final vowel in Chichewa
GC <i>n</i>	gender class <i>n</i>
GEN	genitive
GEN.PST	general past
HAB	habitual
id.fcn	identity function
ILLAT	illative
IMPF	imperfect
IMPS	impersonal
IMP	imperative
INCL	inclusive
IND	indicative
INESS	inessive
INS	instrumental
LAT	lative
LOC	location
LS	lexical stem in Murrinhpatha
MASC	masculine
N	noun
NC <i>n</i>	noun class <i>n</i>
NEG	negative
NFUT	nonfuture
Nom	nominal
NOM	nominative
NONIND	nonindicative
NONSG	nonsingular
NUM	number
OBJ	object

PASS	passive
PAT	patient
PERMISS	permissive
PFTV	perfective
PFX	prefix
PL	plural
PNS	paucal nonsibling
POS	positive
POSS	possessor
PRET	preterite
PRF	perfect
PROLAT	prolative
PRS	present
PS	paucal sibling
PST	past
PTCP	participle
RA	relativized argument
REFL	reflexive
REL	relative
RSTR	restrictive
SBJ	subject
SBJV	subjunctive
SER. <i>n</i>	Series <i>n</i>
SET	inflecting with the union vowel <i>i</i>
SG	singular
SIG	sigmatic
STAT.(i)	stative-(i) aspect in Fula
TERM	terminative
THM	thematic
TNS	tense
V	verb

NB: In the formal specification of a property set, properties are given in lower-case characters (e.g. {nom sg} ‘nominative singular’).

## *Symbols and Operators*

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$\langle L, \rho \rangle$	the content cell pairing the lexeme $L$ with the property set $\rho$
$\langle Z, \rho \rangle$	the form cell pairing the stem $Z$ with the property set $\rho$
$\  \langle L, \rho \rangle \ $	the form correspondent of the content cell $\langle L, \rho \rangle$
$\llbracket \mathbf{x} \rrbracket$	label of a rule introducing exponent $x$
$\cap$	set intersection operator
$\in$	set membership operator
$\cup$	set union operator
$\sqcup$	unification operator
$ic$	function from stems to sets of inflection-class properties
PF	paradigm function
$X \rightarrow Y$	operation on $X$ to produce $Y$
$\Rightarrow$	derivation operator
$\textcircled{A}$	aggregation operator
$\circ$	composition operator
$\textcircled{CP}_n$	counterpotentiation operator associated with domain $\mu_n$
$\textcircled{P}$	potentiation operator
$\textcircled{S}_\gamma$	supplementation operator having $\gamma$ as its addend