# Morphosyntactic gambits (or: 'don't assume syntacticians will do your morphological washing')<sup>1</sup>

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# **Outline of the paper**

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# **1** The intellectual landscape

## 1.1 The Set-theoretical School

Linguists who worked on mathematical models in linguistics, starting in Moscow in 1956, in response to questions posed by Andrej Kolmogorov. A detailed survey is given by van Helden (1993); Meyer (1994) provides a helpful review of van Helden. The work of Zaliznjak is particularly relevant to our topic (e.g. Zaliznjak 1973/2002).

## 1.2 Simple syntax

- impact of Generalized Phrase Structure Grammar (Gazdar, Klein, Pullum & Sag 1985)
- syntax is phonology free (Pullum & Zwicky 1988)
- and morphology free (Zwicky 1996: 301, Corbett & Baerman 2006)

# 1.3 Canonical Typology

## 1.4 Why this matters here

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# 2 The issue

# 2.1 There are some remarkably interesting problems at the interface of syntax and morphology

Russian (as in writings of Platonov)

- (1) skuča-l-a po rebenk-u miss-PST-SG.FEM for child-SG.DAT 'missed (her) child'
- (2) skuča-et po nem miss-3sG for 3sG.LOC 'is missing him'

#### 2.2 They are sometimes missed

#### 2.3 'Gambits'

recall Pullum's (1976) 'Duke of York Gambit'

#### 2.4 Morphosyntactic features

A morphosyntactic feature must be relevant both to morphology and to syntax.

German (Findreng 1976: 159)

(3)	Heide	und	Moor	dehn-en	sich	endlos	weit.
	heath	and	moor	stretch-PL	REFL	endlessly	far
	'Heath	and m	oor stre	etch into the	e endless	distance.'	

- (4) ... daß wieder Zucker und Kaffee herauskam.
   that again sugar and coffee came.out[SG]
   ... 'that sugar and coffee came out again.'
- (5) Agreement with conjoined noun phrases in German (calculated from Findreng (1976: 145, 165-166, 197))

	animate		inanimate	
	N % PL		Ν	% PL
subject-predicate	1095	96	1702	67
predicate-subject	379	93	925	40

Thus number is a morphosyntactic feature in German, animacy is not.

# **3** Canonical typology

#### 3.1 Basic ideas

Adopting a canonical approach means that we take definitions to their logical end point, and this enables us to build theoretical spaces of possibilities. Only then do we investigate how this space is populated with real instances. Canonical instances are those that match the canon: they are the best, clearest, the indisputable ones.

# 3.2 Research to date

Inflectional morphology has been treated by Baerman, Brown & Corbett (2005: 27-35), Spencer (2005), Stump (2005, 2006), Corbett (2007a, 2007b, forthcoming d), Nikolaeva & Spencer (2008), Stump & Finkel (2008) and Thornton (2008), and phonology by Hyman (2009). In syntax, agreement has occupied centre stage, for instance in Corbett (2003, 2006), Comrie (2003), Evans (2003), Polinsky (2003), Seifart (2005: 156-74) and Suthar (2006: 178-98).

A working bibliography of this growing body of research can be found at http://www.surrey.ac.uk/LIS/SMG/CanonicalTypology/index.htm.

## 3.3 Levels of analysis

# 4 Canonical morphosyntactic features and their values

Canonical morphosyntactic *features* and *values* have been described in terms of two overarching principles (covering ten converging criteria), described and illustrated in Corbett (2008: 6-14).

Principle I (morphological):

Features and their values are clearly distinguished by formal means (and the clearer the formal means by which a feature or value is distinguished, the more canonical that feature or value).

- Criterion 1: Canonical features and their values have a dedicated form (are 'autonomous').
- Criterion 2: Canonical features and their values are uniquely distinguishable across other logically compatible features and their values.
- Criterion 3: Canonical features and their values are distinguished consistently across relevant parts of speech (word classes).
- Criterion 4: Canonical features and their values are distinguished consistently across lexemes within relevant parts of speech.

Principle II (syntactic):

The use of canonical morphosyntactic features and their values is determined by simple syntactic rules.

Criterion 5: The use of canonical morphosyntactic features and their values is obligatory.

- Criterion 6: Canonical use of morphosyntactic features and their values does not admit syntactic conditions.<sup>2</sup>
- Criterion 7: Canonical use of morphosyntactic features and their values does not admit semantic conditions.
- Criterion 8: Canonical use of morphosyntactic features and their values does not admit lexical conditions from the target (governee).
- Criterion 9: Canonical use of morphosyntactic features and their values does not admit additional lexical conditions from the controller (governor).
- Criterion 10: The use of canonical morphosyntactic features and their values is sufficient (they are independent).

# 5 Classic gambits: the two principles in conflict

SINGULAR PLURAL					
azg	azgk'	NOMINATIVE			
azg	azgs	ACCUSATIVE			
azgi	azgs	LOCATIVE			
azgi	azgac'	DATIVE			

Figure 1: Classical Armenian azg 'people' (from Baerman 2002)

Compare Zaliznjak (1973/2002: 628-632) on case; fully analogous instances with other morphosyntactic features are given in Corbett (forthcoming c).

## 6 A canonical space for morphosyntax

§4 gave previous work on canonical morphosyntactic features and their values. §6 gives new morphosyntactic criteria.

#### 6.1 Canonical government: governors govern

Criterion 11: A canonical rule of government consists of what the governor requires and the domain of government.

## 6.2 Canonical agreement: controllers control agreement

Criterion 12: A canonical rule of agreement consists of the feature specification of the controller and the domain of agreement.

<sup>&</sup>lt;sup>2</sup> Of course there is a syntactic outcome, but canonically there are no *additional* syntactic conditions (for instance, concerning topicality or word-order).

## 6.3 Canonical interaction: morphosyntactic features 'mind their own business'

Criterion 13: The distribution of morphosyntactic feature values is constrained by the rules of government and agreement; it is not canonical for the values of other morphosyntactic features to have a role.

# 6.4 Canonical interaction of part of speech classifications and features: no effect on feature values

Criterion 14: Part of speech classification is accessible to morphosyntactic features; it is not canonical for it to be accessible to determine their values.

# 6.5 Canonical limit on lexical eccentricity

Criterion 15: Lexical items may have idiosyncratic inherent specification but may not canonically have idiosyncratic contextual specification.

For the inherent/contextual distinction:

(6) My friend plays the banjo.

Number on *friend* is an 'inherent' feature; number on *plays* is an 'imposed' feature, according to Zwicky (1986). 'Imposed' is often replaced by 'contextual', following Booij's (1996) use in his distinction of types of inflection; Corbett (2006: 123-124) transposes Booij's distinction to the features as such.

## 6.6 Remaining problems are not self-evidently the syntactician's problem

# 7 How such issues "ought" to be resolved

Russian

- (7) ja viž-u star-yj dom I see-1SG old-? house[?] 'I see an old house'
- (8) tam sto-it star-yj dom there stand-3 SG old-SG.M.NOM house(M)[SG.NOM] 'there stands an old house'

Compare the following pair:

- (9) ja viž-u star-ogo drug-a I see-1SG old-? friend-? 'I see an old friend'
- (10) žen-a star-ogo drug-a wife(F)-SG.NOM old-SG.M.GEN friend(M)-SG.GEN 'the wife of an old friend'

(11) Partial paradigms of two Russian nouns

	<i>žurnal</i> 'magazine' (inflectional class I)	<i>komnata</i> 'room' (inflectional class II)
	SINGULAR	SINGULAR
NOMINATIVE	žurnal	komnata
ACCUSATIVE	?	komnatu
GENITIVE	žurnala	komnaty

- (12) ja viž-u star-ogo dedušk-u I see-1SG old-? grandfather-SG.ACC 'I see (my) old grandfather'
- (13) Partial paradigm of the adjective *staryj* 'old'

	SINGULAR MASCULINE
NOMINATIVE	staryj
ACCUSATIVE	as nominative / genitive
GENITIVE	starogo

To show what is going on, the sentences are repeated with full glossing (according to the Leipzig Glossing Rules, where '()' indicates an inherent specification, and '[]' shows information inferable from the bare stem):

(14)	ja	viž-u	star-yj	dom
	Ι	see-1SG	old-M.INAN.SG.ACC	house(M.INAN)[SG.ACC]
	ʻI s	ee an old h	nouse'	
(15)	ja	viž-u	star-ogo	drug-a
	Ι	see-1sG	old-M.ANIM.SG.ACC	friend(M.ANIM)-SG.ACC
	ʻI s	ee an old f	riend'	

(16) ja viž-u star-ogo dedušk-u I see-1SG old-M.ANIM.SG.ACC grandfather(M.ANIM)-SG.ACC 'I see (my) old grandfather'

## 8 Examples of morphosyntactic gambits

#### 8.1 Canonical government: governors govern

Criterion 11: A canonical rule of government consists of what the governor requires and the domain of government.

We set aside 'conditions', involving non-morphosyntactic features: a famous example Georgian (Harris 1981, 1985, 2008).

Russian numerals like *pjat'* 'five' show different case requirements according to their own case:

Russian

- (17) Na ulic-e sto-it pjat' dom-ov on street-SG.LOC stand-3SG five[NOM] house-PL.GEN 'There are five houses on the street.'
- (18) k pjat-i dom-am towards five-DAT house-PL.DAT 'towards five houses'

We may treat this as a part of speech problem: the numeral's part of speech varies, in that it has noun-like properties in the direct cases and adjective-like properties in the oblique cases.

Russian numerals are of legendary complexity; for discussion and key references see Corbett (1978; 1983: 215-240, 1993), Pesetsky (1982), Babby (1987), Mel'čuk (1985) and Franks (1995: 93-129).

		odin	dva	tri	pjať	sto	tysjača	million
		'1'	'2'	<b>'</b> 3'	·5'	ʻ100'	·1,000'	<i>`1,000,000'</i>
1.	agrees with noun in syntactic number	+	-	-	-	-	-	-
2.	agrees in case in the direct case	+	-	-	-	-	-	-
3.	agrees in gender	+	(+)	-	-	-	-	-
4.	agrees in animacy	+	+	+	-	-	-	-
5.	has no semantically independent plural	+	+	+	+	(-)	-	-
6.	fails to take agreeing determiners	+	+	+	+	+	-	-
7.	does not take noun in genitive plural throughout paradigm	+	+	+	+	+	±	-

(19) The simple cardinal numerals of Russian (Corbett 1978)

# 8.2 Canonical agreement: controllers control agreement

Criterion 12: A canonical rule of agreement consists of the feature specification of the controller and the domain of agreement.

There are non-canonical instances, but these tend to be also non-canonical in respect of criterion 14, and so we deal with them there.

#### 8.3 Canonical interaction: morphosyntactic features 'mind their own business'

Criterion 13: The distribution of morphosyntactic feature values is constrained by the rules of government and agreement; it is not canonical for the values of other morphosyntactic features to have a role.

Romanian (Anca Sevcenco, personal communication)

(20)	student student(M)[SG 'a tall (male) s	înalt ] tall[M.SG] student'	(23)	studenţ-i student(M)-PL 'tall students'	înalţ-i tall-м.pL
(21)	scaun chair(N)[SG] 'a tall chair'	înalt tall[M.SG]	(24)	scaun-e chair(N)-PL 'tall chairs'	înalt-e tall-F.PL
(22)	student-ă student(F)-SG 'a tall (female	înalt-ă tall-F.SG e) student'	(25)	student-e student(F)-PL 'tall (female) s	înalt-e tall-F.PL students'



Figure 2: Romanian gender agreement (inalt 'tall')

Mian: gender distinguishing articles (Fedden 2007)

(26)

(a)	naka=e 'a/the man'	naka=i '(the) men'
(b)	unăng=o 'a/the woman'	unăng=i '(the) women'
(c)	imen=e 'a/the taro'	imen=o '(the) taros'
(d)	am=o 'a/the house'	am=o '(the) houses'

Foley proposed a two-gender analysis (1986: 81), see Fedden (2007: 189).

gender	agreement patterns		example
	singular	plural	
masculine	=е	i	naka 'man'
feminine	=0	-1	unăng 'woman'
neuter 1	=e	=0	imen 'taro'
neuter 2	=0		am 'house'

Figure 3: Mian agreement patterns for a *four*-gender analysis (Fedden's preferred analysis, 2007: 188)

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Russian (Corbett 1993 and references there)

- (27) četyre bol'š-ie knig-i four[NOM] large-PL.NOM book(F)-SG.GEN 'four large books'
- (28) četyre bol'š-ix knig-i four[NOM] large-PL.GEN book(F)-SG.GEN 'four large books'
- (29) četyre bol'š-ix žurnal-a (*bol'š-ie*, NOM, is rare and less preferred) four[NOM] large-PL.GEN magazine(**M**)-SG.GEN 'four large magazines'

# 8.4 Canonical interaction of part of speech classifications and features: no effect on feature values

Criterion 14: Part of speech classification is accessible to morphosyntactic features; it is not canonical for it to be accessible to determine their values.

Jarawara (Arawá family, Dixon 2000: 494, 497)

- (30) Okomobi tafa-ka Okomobi eat-DECL.M 'Okomobi (a man) is eating'
- (31) Manira tafa-ke Manira eat-DECL.F 'Manira (a woman) is eating'

gender value depends on part of speech

(32) ee tafa-ke 1INCL eat-DECL.F 'We (inclusive) are eating'

"Split ergativity": case value dependent on part of speech

	ERG	NOM-ABS	ACC
PRONOUN 1SG	ngayu	ngayu	nganhi
NOUN 'girl'	gabiirrngun	gabiir	gabiir

Figure 4: Guugu Yimidhirr (Baerman, Brown & Corbett 2005: 42-45, based on Haviland 1979: 47–51, 66–67); and compare Goddard (1982)

Agreement in number dependent on part of speech

Bulgarian (Katina Bontcheva, personal communication)

- (33) Vie ste razbra-l-i vsičko. you AUX.2PL understand-PST-PL everything 'You (polite) have understood everything.'
- (34) Vie ste ljuboznatelen / ljuboznateln-a. you COP.2PL inquisitive[M.SG] / inquisitive-F.SG 'You (polite) are inquisitive.'

- (35) Vie ste poet. you COP.2PL poet(M)[SG] 'You (polite) are a poet.'
- (36) Semantic agreement with honorific *Vie* 'you' in Bulgarian (Dončeva-Mareva 1978)

finite verb	active participle	adjective	noun
[0%]	4% (N=167)	97% (N=163)	[100%]

The data fit well with Comrie's Predicate Hierarchy (1975), discussed in Corbett (2006: 230-231).

#### 8.5 Canonical limit on lexical eccentricity

Criterion 15: Lexical items may have idiosyncratic inherent specification but may not canonically have idiosyncratic contextual specification.

English-prime (Corbett 2000: 66-67: \*peesh 'cloned sheep')

- (37) This peesh has been fed. [Hypothetical] (one peesh)
- (38) This peeshes has been fed. [Hypothetical, claimed excluded] (more than one)

Russian: distributive po

(39)	ро	dva	ро	tri	ро	pjať	
	by	two.ACC	by	three.ACC	by	five.ACC	
	'two each'		'three	e each'	'five each'		

(40) po odn-omu by one-DAT 'one each'

## 9 The classic morphosyntactic gambit: Latvian

The Baltic language Latvian shows 'star' gambit behaviour:

- it is mentioned by Zaliznjak (1973/2002: 630-631) in his discussion of non-autonomous values, and has been the subject of intermittent discussion since then, with contributions by Fennell (1975), Lötzsch (1978), Matthiassen (1997: 41), Holvoet (2000); Andronov (2001) gives an explicit account following Zaliznjak's set-theoretical method.
- it is a genuinely challenging gambit, since there are several conflicting lines of argument.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> I am extremely grateful to Axel Holvoet, for his expert explanations of Latvian over several years, also to Terje Matthiassen and Jānis Valdmanis for help with the Latvian data and to Matthew Baerman for useful discussion of the issues.

(41) Latvian nominal paradigm (typical presentation: Veksler & Jurik 1978: 25)

galds 'table'	singular	plural
nominative	gald-s	gald-i
genitive	gald-a	gald-u
accusative	gald-u	gald-us
instrumental	gald-u	gald-iem
dative	gald-am	gald-iem
locative	gald-ā	gald-os

Latvian (Veksler & Jurik 1978: 87):

- (42) Skolotāji runā par grāmat-u teachers talk about book-SG.ACC 'The teachers are talking about a book.'
- (43) Skolotāji runā par grāmat-ām teachers talk about book-PL.DAT/INS 'The teachers are talking about books.'
- (44) Grūti dzīvot bez draug-a hard live.INF without friend-SG.GEN 'It's hard to live without a friend.'
- (45) Grūti dzīvot bez draug-iem hard live.INF without friend-PL.DAT/INS 'It's hard to live without friends.'

Latvian postpositions (Axel Holvoet, personal communication):

- (46) man-a draug-a dēļ 1SG.POSS-SG.GEN.M friend-SG.GEN because.of 'because of my friend'
- (47)man-udraug-udēļ1SG.POSS-PL.GENfriend-PL.GENbecause.of'because of my friends''because.of

## 9.1 Comparison with Turkish

	noun		pronoun						
	'house'		1st person		2nd person		3rd person		
	SG	PL	SG	PL	SG	PL	SG	PL	
NOM	ev	ev-ler	ben	biz	sen	siz	0	onlar	
GEN	ev-in	ev-ler-in	ben-im	biz-im	sen-in	siz-in	onun	onların	

Figure 5: Turkish forms governed by *gibi* 'like' (Matthew Baerman, p.c., Lewis 1967: 85-86, Kornfilt 1997: 423-424, Jaklin Kornfilt p.c.)

# **10** Conclusion

- the data present some remarkable analytical challenges
- they are thrown into relief by the Canonical Approach
- in terms of canonical morphosyntax, many languages are canonical much of the time
- these very interesting 'gambits' should not escape us

#### References

- Andronov, Aleksey V. 2001. A survey of the case paradigm in Latvian. Sprachtypologie und Universalienforschung (STUF) 54.197-208.
- Babby, Leonard H. 1987. Case, pre-quantifiers, and discontinuous agreement in Russian. *Natural Language and Linguistic Theory* 5.91-138.
- Baerman, Matthew. 2002. Armenian. In: Surrey Syncretisms Database. Available at: http://www.smg.surrey.ac.uk/
- Baerman, Matthew, Dunstan Brown & Greville G. Corbett. 2005. *The Syntax-Morphology Interface: A study of syncretism.* Cambridge: Cambridge University Press.
- Booij, Geert. 1996. Inherent versus contextual inflection and the split morphology hypothesis. In: Geert Booij & Jaap van Marle (eds) *Yearbook of Morphology 1995*, 1-15. Dordrecht: Kluwer.
- Comrie, Bernard. 1975. Polite plurals and predicate agreement. Language 51.406418.
- Comrie, Bernard 1986. On delimiting cases. In: Richard D. Brecht & James S. Levine (eds) *Case in Slavic*, 86–106. Columbus, Ohio: Slavica.
- Comrie, Bernard. 2003. When agreement gets trigger-happy. In: Dunstan Brown, Greville Corbett & Carole Tiberius (eds) *Agreement: a typological perspective*. Special issue of *Transactions of the Philological Society* 101 no. 2, 313-37. Oxford: Blackwell.
- Corbett, Greville G. 1978. Universals in the syntax of cardinal numerals. *Lingua* 46.355-368.
- Corbett, Greville G. 1983. *Hierarchies, Targets and Controllers: Agreement Patterns in Slavic*. London: Croom Helm.
- Corbett, Greville G. 1993. The head of Russian numeral expressions. In: Greville G. Corbett, Norman M. Fraser & Scott McGlashan (eds) *Heads in grammatical theory*, 11-35. Cambridge: Cambridge University Press.
- Corbett, Greville G. 2000. Number. Cambridge: Cambridge University Press.
- Corbett, Greville G. 2003. Agreement: Canonical instances and the extent of the phenomenon. In: Geert Booij, Janet DeCesaris, Angela Ralli & Sergio Scalise (eds) *Topics in Morphology: Selected papers from the Third Mediterranean Morphology Meeting (Barcelona, September 20-22, 2001)*, 109-128. Barcelona: Universitat Pompeu Fabra.
- Corbett, Greville G. 2006. Agreement. Cambridge: Cambridge University Press.
- Corbett, Greville G. 2007a. Canonical typology, suppletion and possible words. *Language* 83.8-42.
- Corbett, Greville G. 2007b. Deponency, syncretism and what lies between. In: Matthew Baerman, Greville G. Corbett, Dunstan Brown & Andrew Hippisley (eds) *Deponency and Morphological Mismatches* (Proceedings of the British Academy, 145), 21-43. Oxford: British Academy and Oxford University Press.

- Corbett, Greville G. 2008. Determining morphosyntactic feature values: the case of case. In: Greville G. Corbett & Michael Noonan (eds) *Case and grammatical relations: papers in honor of Bernard Comrie*, 1-34. Oxford: Oxford U. Press.
- Corbett, Greville G. Forthcoming a. Higher order exceptionality in inflectional morphology. To appear in: Horst J. Simon & Heike Wiese (eds) *Expecting the unexpected: Exceptions in grammar*. Berlin: Mouton de Gruyter. [With comments by Stephen Anderson.]
- Corbett, Greville G. Forthcoming b. Features: essential notions. To appear in: Anna Kibort & Greville G. Corbett (eds) *Features: perspectives on a key notion in linguistics*. Oxford: Oxford University Press.
- Corbett, Greville G. Forthcoming c. The penumbra of morphosyntactic feature systems. Paper at the Workshop on Markedness and Underspecification in the Morphology and Semantics of Agreement (MUMSA), Harvard University, 29 February 2 March 2008. [To appear in: Jonathan Bobaljik, Uli Sauerland & Andrew Nevins (eds) *Markedness in the Morphosemantics of \varphi-Features* (special issue of *Morphology*).]
- Corbett, Greville G. Forthcoming d. Canonical inflectional classes. To appear in: Gilles Boyé, Nabil Hathout & Fabio Montermini (eds) Proceedings of Décembrettes 6: Morphologie et classes flexionnelles, Université de Bordeaux 3, 4-5 December 2008. Cascadilla Proceedings Project.
- Corbett, Greville G. Forthcoming e. Morphology-free syntax: two potential counterexamples from Serbo-Croat. In: Steven Franks, Vrinda Chidambaram & Brian Joseph (eds) *A Linguist's Linguist: Studies in South Slavic Linguistics in Honor* of E. Wayles Browne. Bloomington, Indiana: Slavica.
- Corbett, Greville G. & Matthew Baerman. 2006. Prolegomena to a typology of morphological features. *Morphology* 16.231-246.
- Corbett, Greville G. & Norman M. Fraser. 1993. Network Morphology: A DATR account of Russian inflectional morphology. *Journal of Linguistics* 29.113–42. [Reprinted 2003 in: Francis X. Katamba (ed.) *Morphology: Critical Concepts in Linguistics, VI: Morphology: Its Place in the Wider Context*. London: Routledge, 364-396.
- Dixon, R. M. W. 2000. Categories of the Noun Phrase in Jarawara. *Journal of Linguistics* 36.487-510.
- Dončeva-Mareva, Liljana 1978. Săglasuvaneto na učtivoto *Vie* săs skazuemoto v bălgarskija i ruskija ezik ot kvantitativno gledište. S*ă postavitelno ezikoznanie* no. 3.70-75.
- Evans, Nicholas. 2003. Typologies of agreement: some problems from Kayardild. In: Dunstan Brown, Greville G. Corbett & Carole Tiberius (eds) *Agreement: a typological perspective* (Special issue of *Transactions of the Philological Society* 101, no. 2) 203-234. Oxford: Blackwell.
- Fedden, Sebastian. 2007. Women, houses, and plural objects? Homophony in the Mian gender system. In: Robyn Loughnane, Cara Penry Williams & Jana Verhoeven (eds) *In Between Wor(l)ds. Transformation and Translation* (=School of Languages and Linguistics Postgraduate Research Papers on Language and Literature, vol. 6). Melbourne: University of Melbourne, School of Language and Linguistics: 183-198.
- Fennell, Trevor G 1975. Is there an instrumental case in Latvian? *Journal of Baltic Studies* 6.41-48.
- Findreng, Ådne. 1976. Zur Kongruenz in Person und Numerus zwischen Subjekt und finitem Verb im modernen Deutsch. Oslo: Universitetsforlaget.

- Foley, William A. 1986. *The Papuan Languages of New Guinea*. Cambridge: Cambridge University Press.
- Franks, Steven. 1995. *Parameters of Slavic Morphosyntax* (Oxford Studies in Comparative Syntax). New York: Oxford University Press.
- Gazdar, Gerald, Ewan Klein, Geoffrey K. Pullum & Ivan A. Sag. 1985. *Generalized Phrase Structure Grammar*. Blackwell: Oxford
- Goddard, Cliff. 1982. Case systems and case marking in Australian languages: a new interpretation. *Australian Journal of Linguistics* 2.167-196.
- Halle, Morris. 1992. The Latvian declension. In: Geert Booij & Jaap van Marle (eds) *Yearbook of Morphology 1991*, 33–47. Dordrecht: Kluwer.
- Harris, Alice C. 1981. *Georgian Syntax: A Study in Relational Grammar*. Cambridge: Cambridge University Press.
- Harris, Alice C. 1985. *Diachronic Syntax: The Kartvelian Case* (Syntax and Semantics, 18). New York: Academic Press.
- Harris, Alice C. 2008. On the explanation of typologically unusual structures. In: Jeff Good (ed.) *Linguistic Universals and Language Change*, 54-76. Oxford: Oxford University Press. .
- Haviland, John. 1979. Guugu Yimidhirr. In: R. M. W. Dixon & Barry J. Blake (eds), *Handbook of Australian languages*, 27-180. Canberra: Australian National University Press.
- Helden, W. Andries van. 1993. *Case and gender: Concept formation between morphology and syntax (II volumes)* (Studies in Slavic and General Linguistics 20). Amsterdam: Rodopi.
- Holvoet, Axel. 2000. Review of Terje Matthiassen (1997) A short grammar of Latvian, Columbus, Ohio: Slavica Publishers. *Linguistica Baltica* 8.214-18.
- Hyman, Larry M. 2009. How (not) to do phonological typology: the case of pitch-accent. Language Sciences 3.213-128 (Language Sciences 3 = Michael J. Kenstowicz (ed.) Data and Theory: Papers in Phonology in Celebration of Charles W. Kisseberth, Amsterdam: Elsevier).
- Iomdin, Leonid L. 1991. Slovarnaja stat'ja predloga "PO". Semiotka i informatika 32.94-120.
- Janda, Richard D. & David Kathman. 1992. Shielding morphology from exploded INFL. In: Jeanette Marshall Denton, Grace P. Chan, & Costas P. Canakis (eds) Papers from the 28th Regional Meeting of the Chicago Linguistic Society 1992. Volume 2: The Parasession: the Cycle in Linguistic Theory, 141-157. Chicago: Chicago Linguistic Society.
- Kornfilt, Jaklin. 1997. Turkish. London: Routledge.
- Lewis, G. L. 1967. Turkish Grammar. Oxford: Oxford University Press.
- Libert, Alan R. 2008. The limits to variation in Turkish nominal morphosyntax. In: Timothy J. Curnow (ed) *Selected papers from the 2007 Conference of the Australian Linguistic Society*. [Available at: http://www.als.asn.au.]
- Lötzsch, Ronald. 1978. Zur Frage des sog: Instrumentals im Lettischen. Zeitschrift für Slavistik 23.667-671.
- Matthiassen, Terje. 1997. A Short Grammar of Latvian. Bloomington, IN: Slavica.
- Mel'čuk, Igor A. 1985. *Poverxnostnyj sintaksis russkix čislovyx vyraženij*. Vienna: Institut für Slawistik der Universität Wien. (Wiener Slawistischer Almanach, Sonderband 16).
- Meyer, Peter. 1994. Grammatical categories and the methodology of linguistics: Review article on van Helden, W. Andries (1993) *Case and gender: concept formation between morphology and syntax. Russian Linguistics* 18.341-377.

- Nikolaeva, Irina & Andrew Spencer. 2008. Nouns as Adjectives and Adjectives as Nouns. Ms.
- Pesetsky, David. 1982. Paths and categories. PhD dissertation, MIT.
- Polinsky, Maria. 2003. Non-canonical agreement is canonical. In: Dunstan Brown, Greville Corbett & Carole Tiberius (eds) *Agreement: a typological perspective* (Special issue of *Transactions of the Philological Society* 101 no. 2), 279-312. Oxford: Blackwell.
- Pullum, Geoffrey K. 1976. The Duke of York gambit. *Journal of Linguistics* 12.83-102.
- Pullum, Geoffrey K. & Arnold Zwicky. 1988. The syntax-phonology interface. In: Frederick J. Newmeyer (ed.) *Linguistics: The Cambridge Survey: I: Linguistic Theory: Foundations*, 255-280. Cambridge: Cambridge University Press.
- Seifart, Frank. 2005. The Structure and Use of Shape-based Noun Classes in Miraña (North West Amazon). PhD thesis, Radboud University, Nijmegen.
- Spencer, Andrew. 2005. Extending deponency. In: Matthew Baerman, Greville G. Corbett, Dunstan Brown & Andrew Hippisley (eds) Deponency and Morphological Mismatches (Proceedings of the British Academy, 145), 45-70. Oxford: British Academy and Oxford University Press.
- Stolz, Thomas. 2001. On Circum-Baltic instrumentals and comitatives: To and fro coherence. In: Östen Dahl & Maria Koptjevskaja-Tamm (eds) Circum-Baltic languages: Typology and contact: II: Grammar and Typology (Studies in Language Companion Series 55), 591-612. Amsterdam: Benjamins.
- Stump, Gregory T. 2001. *Inflectional Morphology: A Theory of Paradigm Structure*. Cambridge: Cambridge University Press.
- Stump, Gregory T. 2005. A non-canonical pattern of deponency and its implications. In: Matthew Baerman, Greville G. Corbett, Dunstan Brown & Andrew Hippisley (eds) *Deponency and Morphological Mismatches* (Proceedings of the British Academy, 145), 71-95. Oxford: British Academy and Oxford University Press.
- Stump, Gregory T. 2006. Heteroclisis and paradigm linkage. Language 82.279-322.
- Stump, Gregory T. & Raphael Finkel. 2008. Stem alternations and principal parts in French verb inflection. Paper presented at Décembrettes 6: Colloque International de Morphologie, «Morphologie et classes flexionnelles», December 4-5, 2008, Université de Bordeaux, France.
- Suthar, Babubhai Kohyabhai. 2006. Agreement in Gujarati. PhD Dissertation, University of Pennsylvania.
- Thornton, Anna. 2008. A non-canonical phenomenon in Italian verb morphology: double forms realizing the same cell. Paper read at the First Oxford Workshop On Romance Verb Morphology, 27-28 August, Oxford.
- Veksler, Bunim X. & Jurik, Vladimir A. (1978). Latyškij jazyk (samoučitel'). Riga: Zvajgzne. [Third edition.]
- Zaliznjak, Andrej A. 1973. O ponimanii termina 'padež' v lingvističeskix opisanijax.
  In: Andrej A. Zaliznjak (ed.) Problemy grammatičeskogo modelirovanija, 53-87.
  Moscow: Nauka. [Reprinted in: Andrej A. Zaliznjak. 2002. Russkoe imennoe slovoizmenenie: s priloženiem izbrannyx rabot po sovremennomu russkomu jazyku i obščemu jazykoznaiju, 613-647. Moscow: Jazyki slavjanskoj kul'tury..]
- Zwicky, Arnold M. 1986. Imposed versus inherent feature specifications, and other multiple feature markings. In *The Indiana University Linguistics Club 20th Anniversary Volume*. Bloomington: Indiana University Linguistics Club, 85-106.
- Zwicky, Arnold. 1996. Syntax and phonology. In: Keith Brown & Jim Miller (eds) Concise Encyclopedia of Syntactic Theories, 300-305. Oxford: Elsevier Science.