

A Historical Perspective on Dative Subjects in Indo-Aryan

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Introduction

- ▶ **Recent Proposal:**
 - ▶ Oblique Subjects (particularly Dative Subjects) are a common Indo-European inheritance.
 - ▶ Moreover, particular **Constructions** in which case frames, grammatical relations and thematic information are associated with one another in a fixed manner are inherited by the Indo-European daughters.
- ▶ **Problem:**
 - ▶ Data from Indo-Aryan does not support this hypothesis.
 - ▶ Rather — a complex interaction of factors.

Indo-Aryan and Oblique Subjects

- ▶ Next to no (or weak) evidence for Oblique Subjects in Old Indo-Aryan (OIA)
- ▶ Loss of original case forms from OIA to Middle Indo-Aryan (MIA)
- ▶ Followed by development of a robust (split) ergative system from MIA to New Indo-Aryan (NIA)
- ▶ With a current robust use of oblique subjects in NIA, including dative subjects.
- ▶ No evidence for a direct link between OIA dative “subjects” or “subject-like” constructions and modern ones.

The LFG Perspective

The data is consonant with the modular LFG perspective in which it is assumed that various parts of a grammar are changing and realigning.

Separate specification of:

- ▶ lexical thematic content of a verb
- ▶ inventory of grammatical relations
- ▶ inventory of case markers (with lexical semantic approach to case, Butt and King 1991, 2004)
- ▶ complex and variable relationship between the three

This Talk

- ▶ Summary/Overview of the Construction Grammar Perspective
- ▶ Data from Indo-Aryan with special focus on Marathi
- ▶ Alternative LFG-based Analysis
 1. No direct continuation of an old pattern or Construction.
 2. Sanskrit verbs receive new meanings as part of historical change.
 3. Meaning change goes hand in hand with change in case and subcategorization frame.
 4. New object case marking drawn into the system.
 5. Rise of oblique subjects in analogy with (split) ergative pattern.
 6. Former nominative experiencers become dative

Historical Reconstruction in Construction Grammar

- ▶ Barðdal (2013) lays out a program of historical reconstruction based on the notion of constructions and constructicons in Construction Grammar
- ▶ Concrete examples come from Dative Subjects.
- ▶ Starting from the observation that Dative Subjects in Icelandic appear to be an old part of the language, Barðdal and Eythórsson (2009), Barðdal and Smitherman (2012), Barðdal and Eythórsson (2012), a.o., argue that the Dative Subject Construction can be reconstructed for Proto Indo-European (PIE).

⇒ Oblique Subject/Semantic Alignment Hypothesis

Historical Reconstruction in Construction Grammar

- ▶ There are several problems with this line of research.
- ▶ Here we focus on just a few:
 - ▶ Type of Constructions that are Reconstructed
 - ▶ Assumption that case marking is uniform across the millenia (there is a “dative” that is handed down over the millenia)
 - ▶ The particular data from Indo-Aryan that does not support the hypothesis.
- ▶ Our Alternative:
 - ▶ Oblique Subjects in Indo-Aryan become possible after the establishment of ergative subjects.
 - ▶ Oblique Subjects are part of a larger, semantic-based Differential Case Marking (DCM) system that is a Middle/New Indo-Aryan innovation – not an older inheritance.

Barðdal and Smitherman (2012) look for a number of cognates across Indo-European that are likely to have had dative subjects: *know*, *shine* (Skt. *roc*) *luck/fortune*, *be in need*, *be sweet*, *woe*.

(their claim: few number of cognates means it is an old pattern)

Note on Dat-Subj-know Construction just seen:

- ▶ No specific encoding of grammatical relations.
- ▶ However, the leftmost argument in the subcategorization frame is considered to be the subject.
- ▶ No separation of case and grammatical relations.
- ▶ No generalization over semantic roles (e.g., thematic roles, Proto-Roles, ...).

In comparison, a sample Construction from Goldberg (2005).

Semantics:	CAUSE-MOTION (source	theme	direction)
			⋮	⋮
	<i>contribute</i>	(contributor	<i>contribution</i>	<i>goal</i>)
Syntax:		Subj	∅	Oblique

Figure 3: The Implicit Theme Construction with *contribute*

- ▶ Separate encoding of grammatical relations.
- ▶ Case not associated in one-to-one maner with grammatical relations.
- ▶ Representation of semantic roles.

Other types of things posited for historical reconstruction.

- ▶ Raising-to-Object (Barðdal and Eythórsson 2012)
- ▶ Control (Barðdal and Eythórsson 2012)

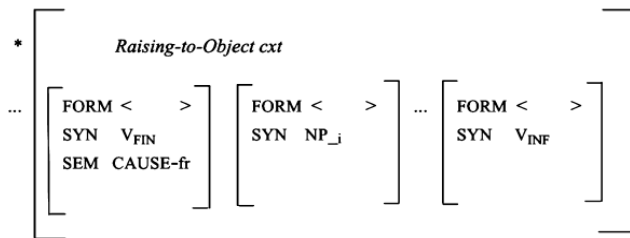


Figure 4. A reconstruction of raising-to-object for Proto-Germanic

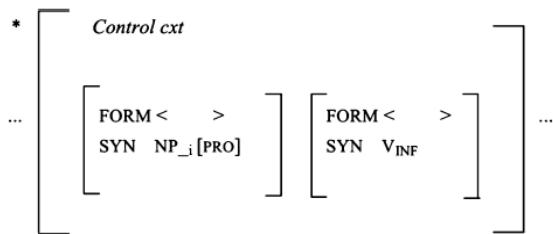


Figure 6. A reconstruction of control constructions for Proto-Germanic

Case in OIA

Old Indo-Aryan (Vedic and Sanskrit) had an inflectional case marking system much like the sister language Latin.

Number	Declension	Western Name
1	<i>devas</i>	nominative
2	<i>devam</i>	accusative
3	<i>devena</i>	instrumental
4	<i>devāya</i>	dative
5	<i>devāt</i>	ablative
6	<i>devasya</i>	genitive
7	<i>deve</i>	locative

Declension of Sanskrit *deva*- ‘god’

Case in OIA

- ▶ The standard case marking pattern is nominative–accusative.
- ▶ Some verbs lexically specify non-accusative objects (e.g., ‘sacrifice’).
- ▶ Differential Object Marking (DOM) exists.

(1) a.

pibā somam
 drink.Imp soma.**Acc**
 ‘Drink soma.’

Sanskrit

(Ṛgveda VIII.36.1, from Jamison 1976)

b.

pibā somasya
 drink.Imp soma.**Gen**
 ‘Drink (of) soma.’

Sanskrit

(Ṛgveda VIII.37.1, from Jamison 1976)

Subject Tests

- ▶ Keenan (1976) discusses a number of tests across languages for the establishment of subjecthood (cf. also Cole et al. 1980).
- ▶ The applicability of these tests depends on the overall structure of the individual languages.
- ▶ For the Indo-Aryan languages, the following tests are usually assumed across different stages of the language (Hook, p.c., April 2012)
 1. Antecedency of the possessive reflexive.
 2. Control of a gerundial phrase/clause.
 3. Realization of genitive case in nominalizations.
 4. Agreement with the finite verb (not always applicable).
 5. Position in clause (very seldom applicable, more a weak indication than a test).

Oblique Subjects in NIA I

- ▶ NIA languages tend to have a range of oblique subjects (ergatives, datives, locatives, genitives, instrumentals).
- ▶ The examples below are from Urdu/Hindi (cf. Mohanan 1994).

(2) a.

amra=ne kela k^ha-ya
 Amra.F=Erg banana.M.Sg.Nom eat-Perf.M.Sg
 ‘Amra ate a/the banana.’ Urdu/Hindi

b.

amra=ko kela k^ha-na t^h-a
 Amra.F=Dat banana.M.Sg.Nom eat-Inf.M.Sg be.Past-M.Sg
 ‘Amra had to eat a banana.’ Urdu/Hindi

c.

amra=ko kahani yad a-yi
 Amra.F=Dat story.F.Sg.Nom memory come-Perf.F.Sg
 ‘Amra remembered a/the story.’ Urdu/Hindi

Non-nominative experiencers in OIA

A class of OIA intransitive verbs may optionally appear with genitive experiencers – e.g. *ruc* ‘shine’ (non-psych) or ‘please’ (psych).

- (1) sumukh-o **bhava-taḥ** pautr-o
 beautiful.faced-NOM.SG you-GEN.SG grandson-NOM.SG
 roca-te
 shine-PRES.3.SG
 Your beautiful-faced grandson shines (Mbh. 5.102.6c)
- (2) vākya-ṃ na **me** roca-te yat
 utterance-NOM.N.SG NEG I.GEN.SG please-PRES.3.SG which
 tva-yā uktaṃ
 you-INS.SG say-PERF.N.SG
 The utterance which was spoken by you does not please me.
 (Mbh. 2.51.14a)

Non-nominative experiencers in OIA

Non-verbal predicates expressing emotions may appear with genitive experiencers.

(3) na **me** bhaya-m vidya-te rākṣas-ebhyaḥ
 NEG I.GEN.SG fear-NOM.N.SG be-PRES.3.SG demonABL.PL
 I have no fear of demons (Mbh. 12.78.25c)

(4) ma-yi ced asti **te** prīti-r
 I-LOC.SG if be-PRES.3.SG you.GEN.SG affection-NOM.SG
 If you have love for me... (Mbh. 1.161.14c)

OIA does not have oblique subjects

- ▶ No evidence that these genitive expressions are lexically specified arguments of predicates – much less subjects.
- ▶ Hock (1990, 1991) concludes that genitives as below can indeed be considered subjects.

(3) a.

mama ekaḥ putro (vartate/asti)

my one.Nom boy.Nom is

‘I have one boy.’ (Hock 1991, 57)

Sanskrit

b.

mer-a ek laṛka he

my-M.Sg one boy.M.Sg.Nom be.Pres.3.Sg

‘I have one boy.’

Urdu/Hindi

Upshot

- ▶ OIA has no dedicated verbal predicates with experiencer roles linked to subject via dative case.
- ▶ Subjects are generally nominative.
- ▶ So no ancient Dative/Oblique-Subject Construction can be reconstructed as ancestor for the modern Oblique Subjects.

So what did happen?

[**NB:** This is part of on-going work....]

Change over Time

- ▶ The inflectional case endings of OIA erode away and collapse into one another in the course of Middle Indo-Aryan (MIA).
- ▶ Crucially, structural case marking fails to be evidence for subjecthood in MIA.
- ▶ Erosion in the verbal system leads to reanalysis of participial clauses as ergative (cf. Butt 2001, Butt and Ahmed 2011 for an analysis and overview).

Hypothesis: This opens the path for non-nominative subjects in Indo-Aryan (IA).

Rough Time Line

- A. Old Indo-Aryan
1200 BCE — 600 BCE (Vedic)
600 BCE — 200 BCE (Epic and Classical Sanskrit)
- B. Middle Indo-Aryan (Aśokan inscriptions, Pāli, Prākṛits, Apabhraṃśa—Avahaṭṭha)
200 BCE — 1100 CE
- C. New Indo-Aryan (Bengali, Hindi/Urdu, Punjabi, Nepali, Marathi, Gujarati and other modern North Indian languages)
1100 CE — Present

The Chronology and sources for Marathi and Gujarati

TIMELINE	STAGE	SAMPLE SOURCE
OIA		
200 BCE-400 CE	Epic Sanskrit	<u>Mahābhārata (Mbh.);</u> ~ 967,000 words
MIA		
300 BCE-500 CE	Mahārāṣṭrī	Vasudevahiṃḍi (VH 609CE)
500 CE-1100 CE	Apabhraṃśa	<u>Paumacariu (PC ~ 880CE);</u> ~ 135,000 words
Old NIA		
1000–1350 CE	Old Marathi	<u>Dnyāneśvarī (Dny 1287CE);</u> ~ 103,000 words <u>Līlācaritra (LC 1278CE);</u> ~ 57,000 words
	Old Gujarati	<u>Saḍāvaśyakabālāvabodhavṛtti (SB)</u>

Loss of nominative–accusative contrast (880 CE)

- (5) #kiṃ **tamu** haṇ-ai na vālu
 QUES darkness.NOM.SG destroy-IMPF.3.SG NEG young
ravi# #kiṃ vālu **davaggi** na ḍah-ai
 sun.NOM.SG QUES young fire.NOM.SG NEG burn-IMPF.3.SG
vaṇu# #kiṃ kari dal-ai
 forest.NOM.SG QUES elephant.NOM.SG shatter-IMPF.3.SG
 na vālu **hari#** #kiṃ vālu na ḍaiḱ-ai
 NEG young lion.NOM.SG QUES young NEG bite-IMPF.3.SG
 uragamaṇu#
 snake.NOM.SG
*Does the young (rising) sun not destroy darkness? Does the young
 fire (spark) not burn down the forest? Does a young lion (cub) not
 shatter the elephant? Does the young snake not bite? (PC 2.21.6.9)*

Early Ergative Pattern with Agent Marking (609 CE)

- (6) **tiy-e** vi avaloi-o di-ṭṭho ya
 she-INS.SG also look-PERF.M.SG notice-PERF.M.SG and
ṇā-e so puriso cakkhuraṃaṇo
 she-INS.SG that.NOM.SG man.NOM.SG eye-beautiful.NOM.SG

‘She (the maidservant) also *looked*, and she *noticed* that man, attractive to the eye.’ (VH:K:9.8)

Late Ergative Pattern without Agent Marking (Old Hindi)

masi kāgad chū-yo nahī kalam gahī nahi hāth
 ink.Nom paper.M.Nom touch-Perf.M.Sg not **pen.F.Sg take.Perf.F.Sg** not hand
 jāro juga māhātma jehi **kabir** jan-ā-yo nāth
 four.Pl age.Pl glory.Nom who.Sg.Acc **Kabir.Obl** know-Caus-Perf.M.Sg lord.Nom
 ‘Kabir touched not ink nor paper, he took not pen in hand; He made known
 the lord to whom is glory in the four ages.’ Old Hindi
 (Kabir, Sakhi 183; (Beames 1872–79, 269))

Development of New Case Inventory

- ▶ From around 1200 on, one finds new case markers being drawn into the system in New Indo-Aryan (NIA).
- ▶ In the modern languages, the case markers are mostly clitics, some markers are inflectional (these tend to reflect the old material).

	Hindi/Urdu	Marathi	Gujarati
Ergative	ne	∅/ne	-ē
Accusative	ko	lā	ne
Dative	ko	lā	ne
Instrumental	se	ne	thi
Nominative	∅	∅	∅

Taking Stock

- ▶ No evidence for Dative Subject Construction that has been inherited over the ages.
- ▶ Evidence for non-subject dative/genitive marking of experiencers in OIA.
- ▶ MIA showed dative/genitive syncretism.
- ▶ The modern languages tend to show a dative/accusative homonymy.
- ▶ The modern languages tend to mark experiencers with datives (e.g., Urdu/Hindi, Marathi, Gujarati) or genitives (e.g., Bengali).

Question: How did modern experiencer subjects arise?

Current Hypothesis

- ▶ Deo (2013) shows that accusative marking in New Indic (both the Nom-Acc and Erg-Acc pattern) developed on the basis of secondary object marking.
- ▶ That is, overt marking of goal/beneficiary/experiencers survived in the form of the syncretic dat/gen marking.
- ▶ By analogy, direct objects became to be overtly case marked.
- ▶ This new marking for direct objects was initially formally recruited from the syncretic dat/gen of MIA.
- ▶ Often, this was (eventually) realized in the form of a system of Differential Object Marking (DOM).
- ▶ On relevance of DCM for innovation of new case markers, also see Butt and Ahmed (2011) on an ergative/dative connection.

Getting Experiencer Subjects

Changes in experiencer verbs from Sanskrit to Modern Marathi reflect the following paths of change

- ▶ Nom-Acc change of state predicates in Sanskrit shift to a Dat-Nom pattern with experiencer semantics.
- ▶ A new class of experiencer verbs with dative subjects verbs evolves from Sanskrit intransitive (non-psych) verbs
- ▶ A change in the case marking of nominative experiencers to dative.

Sanskrit Change of State Predicates: Nom-Acc

(4) a.

na=enam dahati pāvakaḥ
 NEG=this.MAS.ACC.SG burn-PRES.3.SG fire-MAS.NOM.G
 ‘The fire does not burn him (the soul)’. (Mbh. 6.24.23a)
 (**Sanskrit — non-psych**)

b. haṁs-ānām vacanam yat=tu
 swan-MAS.GEN.PL word.NEU.NOM.SG which
 tad **mām** dahati pārthiva
 that.NEU.NOM.G I.ACC.SG burn-PRES-3-SG king.MAS.VOC.SG
 ‘O King, those words of the swans torment me.’
 (Mbh. 3.53.3a)
 (**Sanskrit — psych**)

Modern Indic: DAT-NOM pattern

(5)

mulī-lā āī-ca rāgāvṇa ḍāj-ta
girl-DAT mother-GEN scolding-NOM.N.SG trouble-PRES.N.SG
'The mother's scolding torments the girl.' (**Marathi — Psych**)

Sanskrit change of state predicates as Marathi dative experiencer verbs

SANSKRIT			MODERN MARATHI		
ROOT	ARG-ST	CASE	ROOT	ARG-ST	CASE
jambh <i>snap</i>	<cause, pt>	nom-acc	jhomb <i>hurt</i>	< exp, th>	dat-nom
dah <i>burn</i>	<cause, pt>	nom-acc	ḍāj <i>torment</i>	< exp, th>	dat-nom
bādh <i>pain</i>	<cause, pt>	nom-acc	bādh <i>pain</i> <i>be detrimental</i>	< exp, th>	dat-nom
sañ-tap <i>heat</i>	<cause, pt>	nom-acc	satav <i>bother</i>	< exp, th>	dat-nom
tud <i>prick</i>	<cause, pt>	nom-acc	ṭoch <i>prick</i>	< exp, th>	dat-nom

- ▶ Change in meaning over time \iff change in a-structure
- ▶ Further changes to conform with other changes in the language:
 - ▶ dative generally marks goal/experiencer semantics (part of lexical specification of the dative, cf. Butt and King 2004).
 - ▶ Experiencers generally linked to subject (old pattern).

Sanskrit intransitives as Marathi dative experiencer verbs

SANSKRIT			MODERN MARATHI		
ROOT	ARG-ST	CASE	ROOT	ARG-ST	CASE
<i>ruc shine, like</i>	<th>	nom	<i>ruc like</i>	<exp, th>	dat-nom
<i>bhās shine, appear</i>	<th>	nom	<i>bhās appear</i>	<exp, th>	dat-nom
<i>vṛt be</i>	<th>	nom	<i>vāṭ feel</i>	<exp, th>	dat-nom
<i>drś be seen</i>	<th>	nom	<i>dis appear</i>	<exp, th>	dat-nom
<i>gam go</i>	<th>	nom	<i>gam like</i>	<exp, th>	dat-nom
<i>pac mature</i>	<th>	nom	<i>pac digest</i>	<exp, th>	dat-nom
<i>sam-pad occur</i>	<th>	nom	<i>sāpaḍ find</i>	<go, th>	dat-nom

- ▶ Intransitive predicates acquire a transitive psych verb reading.
- ▶ The experiencer is again associated with dative and with subjects.

Sanskrit nom experiencers → Marathi dat experiencers

SANSKRIT			OLD MARATHI			MODERN MARATHI		
ROOT	ARG-ST	CASE	ROOT	ARG-ST	CASE	ROOT	ARG-ST	CASE
smṛ <i>recall</i>	<ex,th>	N-A	smar <i>recall</i>	<ex,th>	N-A	smar <i>remember</i>	<ex,th>	N-A, D-N
ut-kal <i>expel</i>	<ag,th>	N-A	ukal <i>solve</i>	<ex,th>	N-A	ukal <i>solve</i>	<ex,th>	N-A, D-N
sādh <i>obtain</i>	<go,th>	N-A	sādh <i>obtain</i>	<go,th>	N-A	sādh <i>obtain</i>	<go,th>	N-A, D-N
pra-ir <i>propel</i>	<ag,th>	N-A	pel <i>direct</i>	<ag,th>	N-A	pel <i>bear</i>	<ex,th>	N-A, D-N
sam-jñā <i>know</i>	<ex,th>	N-A	samaj <i>understand</i>	<ex,th>	N-A D-N	samaj <i>understand</i>	<ex,th>	N-A D-N
budh <i>perceive</i>	<ex,th>	N-A	bujh <i>realize</i>	<ex,th>	N-A D-N	bujh <i>realize</i>	<ex,th>	N-A D-N
sūc <i>reveal</i>	<ex,th>	N-A	suc <i>reveal</i>	<ex,th>	N-A D-N	suc <i>occur to</i>	<ex,th>	D-N
kal <i>perceive</i>	<ex,th>	N-A	kaḷ <i>realize</i>	<ex,th>	N-A D-N	kaḷ <i>realize</i>	<ex,th>	D-N
mānaya <i>think</i>	<ex,th>	N-A	mānav <i>suit</i>	<ex,th>	N-A D-N	mānav <i>suit</i>	<ex,th>	D-N

The historical data suggest an on-going change, verb class by verb class.

1. Verbs like *suc* ‘reveal’ are leading the change.
2. Verbs like *smar* ‘recall’ and *samaj* ‘understand’ are in flux,
3. with verbs like *samaj* ‘understand’ having begun earlier.

Example of Change

- ▶ Sanskrit: transitive verbs with nominative-accusative
- ▶ Marathi: transitive verbs with dative-nominative

(6) a.

kanyā pāṭham sañ=jānā-ti
 girl.FEM.SG.NOM lesson.MASC.SG.ACC know-PRES.3.SG
 ‘The girl knows the lesson.’ (Sanskrit)

b.

mulī-lā abhyās samaj-to
 girl-FEM.SG.DAT lesson.MASC.SG.NOM understand-PRES.MASC.SG
 ‘The girl understands the lesson.’ (Marathi)

Reorganization of Case System

Old Pattern (Sanskrit)

a-structure:	<i>verb</i> <	experiencer/goal	theme	>
		[-o]	[-r]	
f-structure:		SUBJ	OBJ	
case marking		NOM	ACC	
		indicates subj	indicates default obj	

Reorganization of Case System

Change in Progress

- ▶ A new case marker — let's call it DAT — is recruited into the system.
- ▶ The lexical semantics of DAT are compatible with goal semantics (originally spatial semantics of 'at, to').
- ▶ DAT in general becomes associated with goal and experiencer arguments.
- ▶ The old accusative has eroded down to zero marking.
- ▶ This zero marking (let's call it NOM) is now the default for indicating objects.
- ▶ **Result:** Two competing patterns.

Pattern 1 (inherited pattern)

a-structure:	<i>verb</i> <	experiencer/goal	theme	>
		[−o]	[−r]	
f-structure:		SUBJ	OBJ	
case marking		NOM	ACC	
		indicates subj	indicates default obj	

Pattern 2 (new pattern)

a-structure:	<i>verb</i> <	experiencer/goal	theme
		[−o]	[−r]
f-structure:		SUBJ	OBJ
case marking		DAT	NOM
		indicates goal/experiencer (semantic case)	default case for subj/obj (default case)

Reorganization of Case System

- ▶ Eventually, the new pattern completely replaces the old pattern.
- ▶ This change is still in progress in Marathi.

Taking Stock Again

- ▶ Observed changes:
 - ▶ OIA case system eroded away.
 - ▶ New case markers came into the system.
 - ▶ These new case markers are almost all spatial in origin (cf. Butt and Ahmed 2011).
- ▶ Butt and Ahmed (2011) assume the lexical semantic approach to case articulated in Butt and King (1991, 2004).
 - ▶ case associated with particular semantics (agentivity, goal, specificity/telicity, etc.)
 - ▶ the case semantics interact with the general linking principles
 - ▶ also have notions of default and configurational case (cf. Artoni and Magnani this conference, King 1995).

Summary and Conclusion

Marathi dative subjects arose in three ways:

1. Sanskrit change of state predicates become experiencer verbs, experiencer is marked with dative.
2. Originally intransitive verbs acquire a psych verb reading, experiencer is marked with dative.
3. Nominative experiencers of transitive predicates reanalyzed as dative experiencers.

No evidence at all for a Dat-Subj Construction that is inherited over the ages.

Rather: overall move towards newly innovated dative experiencer subjects.

References I

- Barðdal, Jóhanna. 2013. Construction-Based Historical-Comparative Reconstruction. In Thomas Hoffmann and Graeme Trousdale (eds.), Oxford Handbook of Construction Grammar, pages 438–457, Oxford: Oxford University Press.
- Barðdal, Jóhanna and Eythórsson, Thórhallur. 2009. The Origin of the Oblique Subject Construction: An Indo-European Comparison. In Vit Bubenik, John Hewson and S. Rose (eds.), Grammatical Change in Indo-European Languages, pages 179–193, Amsterdam: John Benjamins.
- Barðdal, Jóhanna and Eythórsson, Thórhallur. 2012. ‘Hungering and Lusting for Women and Fleshly Delicacies’: Reconstructing Grammatical Relations for Proto-Germanic. Transactions of the Philological Society 110(3), 363–393.
- Barðdal, Jóhanna and Smitherman, Thomas. 2012. The Quest for Cognates: A Reconstruction of Oblique Subject Constructions in Proto-Indo-European. Language Dynamics and Change 3(1).
- Beames, John. 1872–79. A Comparative Grammar of the Modern Aryan Languages of India. Delhi: Munshiram Manoharlal, republished 1966.

References II

- Butt, Miriam. 2001. A Reexamination of the Accusative to Ergative Shift in Indo-Aryan. In Miriam Butt and Tracy Holloway King (eds.), Time Over Matter: Diachronic Perspectives on Morphosyntax, pages 105–141, Stanford: CSLI Publications.
- Butt, Miriam and Ahmed, Tafseer. 2011. The Redevelopment of Indo-Aryan Case Systems from a Lexical Semantic Perspective. Morphology 21(3), 545–572.
- Butt, Miriam and King, Tracy Holloway. 1991. Semantic Case in Urdu. In L. Dobrin, L. Nichols and R.M. Rodriguez (eds.), Papers from the 27th Regional Meeting of the Chicago Linguistic Society, pages 31–45.
- Butt, Miriam and King, Tracy Holloway. 2004. The Status of Case. In Veneeta Dayal and Anoop Mahajan (eds.), Clause Structure in South Asian Languages, pages 153–198, Berlin: Kluwer Academic Publishers.
- Cole, Peter, Harbert, Wayne, Hermon, Gabriella and Sridhar, S.N. 1980. The Acquisition of Subjecthood. Language 56(4), 719–743.

References III

- Deo, Ashwini. 2013. Accusative Object Marking in Indo-Aryan Ergative Clauses, talk presented at the Workshop on Patterns of Alignment in IA Languages: Towards a Typology, Ann Arbor, Michigan.
- Goldberg, Adele E. 2005. Constructions, Lexical Semantics and the Correspondence Principle: Accounting for Generalizations and Subregularities in the Realization of Arguments. In Nomi Erteschik-Shir and Tova Rapoport (eds.), The Syntax of Aspect, pages 215–236, Oxford: Oxford University Press.
- Hock, Hans Henrich. 1990. Oblique Subjects in Sanskrit. In Manindra Verma and KP Mohanan (eds.), Experiencer Subjects in South Asian Languages, pages 119–139, Stanford, CA: CSLI Publications.
- Hock, Hans Henrich. 1991. Possessive Agents in Sanskrit? In Hans Henrich Hock (ed.), Studies in Sanskrit Syntax, pages 55–70, Delhi: Motilal Banarsidass Publishers.
- Jamison, Stephanie. 1976. Functional Ambiguity and Syntactic Change: The Sanskrit Accusative. In Papers from the Parasession on Diachronic Syntax, 12th Regional Meeting of the Chicago Linguistic Society, pages 126–135.

References IV

- Keenan, Edward. 1976. Towards a Universal Definition of Subject. In Charles N. Li (ed.), Subject and Topic, pages 303–333, Academic Press.
- King, Tracy Holloway. 1995. Configuring Topic and Focus in Russian. Stanford: CSLI Publications.
- Mohanan, Tara. 1994. Argument Structure in Hindi. Stanford: CSLI Publications.
- Nordlinger, Rachel. 1998. Constructive Case: Evidence from Australian Languages. Stanford: CSLI Publications.