

Non-Canonical Argument Marking: Beyond Volitionality, Specificity and Animacy

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1 Introduction

It has been firmly established in linguistic theory that

- Spatial concepts are fundamental to language and the structuring of events (cf. Roman and modern Localist Approaches).
 - Jackendoff (1990): *place* and *path* are of particular importance.
- Degree of Control over an action is important (e.g., Silverstein’s (1976) *NP hierarchy*, Hopper and Thompson’s (1980) notion of *Transitivity*, Wierzbicka’s (1981) idea that experience/affectedness (lack of control) is central).

Observation: Most theories of case (and linking) focus on **either** the spatial metaphors **or** the animacy/control hierarchy, but not both.

Hypothesis: Need both *spatial concepts* **and** *notions of control* for understanding of case.

- Case markers are primarily derived from spatial terms and adverbials.
- As new case markers enter into the system, they are interpreted *simultaneously* on a **spatial** and an **agentive** dimension, thus giving rise to the typical “case functions” such as markers of *goal/beneficiary*, *agency*, *affectedness/patienthood*, etc.

Note: Jackendoff combines both space and agency, but does not focus on case.

Claim: In order to achieve a better understanding of case in interaction with word order and prominence, factors from both space and agency need to be considered simultaneously, rather than separately (i.e., factors such as animacy, volitionality, affectedness, specificity/definiteness in combination with spatial relations such as source, goal, location, accompaniment).

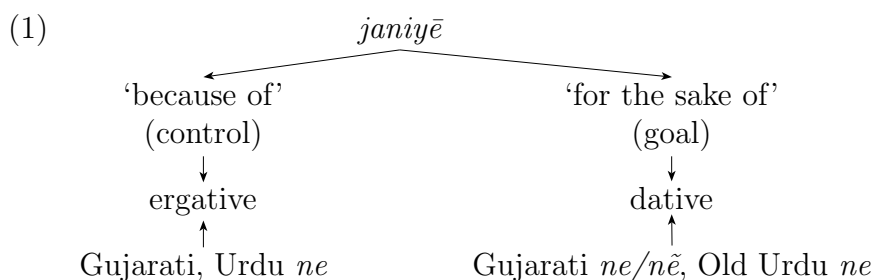
Data: We investigate non-canonical object marking in Urdu/Hindi, Punjabi and Nepali.

2 Previous Work

2.1 The Dative-Ergative Connection

Butt (2006) claims that there is a close connection between dative and ergative.

- The modern Urdu/Hindi ergative =*ne* is likely to be related to a dative form.
- The possible ancestor is derived from the Sanskrit locative *janiyē* (from *janiyā*) ‘for the sake of, because of’ (Aditi Lahiri, p.c.; Chatterji 1926).
- This can have given rise to both goal (dative) and control (ergative) readings.



- Compare German (*wegen* is derived from a spatial concept, the dat. pl. of *Weg* ‘way’) (Ingrid Kaufmann, p.c.):

(2) wegen ihm zerbrach die Vase
 because he.Dat broke the vase
 ‘Because of him the vase broke’ (**cause/control**) German

(3) wegen ihm schaffte ich einen Hund an
 because he.Dat acquired I.Nom a.Acc dog at.Prt
 ‘For him I got a dog.’ (**for/goal**) German

Here an adverbial is interpreted on both the spatial and agency dimension simultaneously — thus giving rise to both agentive (ergative) and locational (dative) meanings in parallel.

2.2 Dative Subjects

Butt, Grimm and Ahmed (2006) argue that experiencers can be interpreted both:

1. *spatially* as locatives (goals) on a spatial dimension (see Figure 1)
2. as *participants* in an action (orientationally) on a control dimension (see Figure 1), in which case they are neither quite a Proto-Agent or a Proto-Patient (cf. Dowty 1991).

	MORE CONTROL	PLACE	PATH
↑	Ergative	■	□
	Genitive	■	□
	Instrumental	■	■
	Dative	□	□
	Accusative	□	■
↓	LESS CONTROL		

Figure 1: Space and Agency

Note: Nominative is taken to be default: absence of directly encoded information.

These different interpretative possibilities result in conflicting preferences: one set of preferences yields dative subjects, the other accusative/dative objects. Situations are also predicted to arise in which both possibilities are synchronically available.

Butt, Grimm and Ahmed (2006) show how the differing interpretive possibilities play out with respect to diachronic and synchronic data in Urdu and Marathi.

Example: *milna* ‘to find’

Take the case of *milna* ‘to touch > to meet, to find, to get’.

Spatial Use (in these cases the dative is an object):

- (4) a. darya samandar=ko mīl-a
 river.M.Sg.Nom sea.M.Sg=Dat meet-Perf.M.Sg
 ‘The river met/touched the sea.’ Urdu
- b. afisār logō=ko mīl-a
 officer.M.Sg.Nom people.M=Dat meet-Perf.M.Sg
 ‘The officer met (with) the people.’ Urdu

Dative Subjects/Experiencers (Interpretation on Agency/Control Dimension):

- (5) a. nadya=ko xābar mīl-i
 Nadya.F.Sg=Dat news.F.Sg.Nom meet-Perf.F.Sg
 ‘Nadya got the news.’ Urdu
- b. nadya=ko xūši mīl-i
 Nadya.F.Sg=Dat happiness.F.Sg.Nom meet-Perf.F.Sg
 ‘Nadya got happiness.’ Urdu

3 Non-Canonical Object Marking

3.1 State of the Art

- Most of the work on Object Marking in South Asian Languages has concentrated on DOM (Differential Object Marking) phenomena.
- Particularly, researchers have concentrated on animacy and definiteness/specificity (cf. Blake 2001, Butt 1993, Mohanan 1994, Dayal 2003 for some basic data patterns).

Nominative/Inanimate vs. Accusative/Animate

- (6) a. ti **keel** k^haa-t-e
she.Nom banana.Nom eat-Pres-3.Sg.F
'She eats a banana.' Marathi (based on Blake 2001:128)
- b. ti **ravi=laa** k^haa-t-e
she.Nom Ravi=Acc eat-Pres-3.Sg.F
'She tortures Ravi.' Marathi (based on Blake 2001:128)

Nominative/Nonspecific vs. Accusative/Specific

- (7) a. nadya **kitab** xarid-e-g-i
Nadya.F.Sg.Nom book.F.Sg.Nom buy-3.Sg-Fut-F.Sg
'Nadya will buy a/the book.' Urdu/Hindi
- b. nadya **kitab=ko** xarid-e-g-i
Nadya.F.Sg.Nom book.F.Sg=Acc buy-3.Sg-Fut-F.Sg
'Nadya will buy a particular book.' Urdu/Hindi

- Some work has also focused on the “affectedness alternation” found in causatives (cf. Saksena 1980, Butt 1998 for the basic data).

Accusative/Affected vs. Instrumental/Non-Affected

- (8) a. anjum=ne saddaf=**ko** masala cak^h-va-ya
Anjum.F=Erg Saddaf.F=**Acc** spice.M.Nom taste-**Caus**-Perf.M.Sg
'Anjum had Saddaf taste the seasoning.' Urdu
- b. anjum=ne saddaf=**se** masala cak^h-va-ya
Anjum.F=Erg Saddaf.F=**Inst** spice.M.Nom taste-**Caus**-Perf.M.Sg
'Anjum had the seasoning tasted by Saddaf.' Urdu

3.2 Extending the Picture

- The Urdu/Hindi instrumental *=se* is used for a number of other functions (see (9)).
 - (9) 1. Instruments
 2. Agents of passives
 3. Expressions of (dis)ability
 4. Non-affected and indirect causees
 5. Sociative (e.g., ‘speak with’, ‘love’, ‘meet’)
 6. Temporal and spatial expressions with the meaning of source (ablative)
 7. Made of Material (‘made with brick’)
 8. Comparison
 9. Manner
- The instrumental is just one among several non-canonical object markers.
- **Claim:** Only by studying the larger pattern can we really understand the semantic factors involved in pulling new case markers into a system of contrasts (such as found with DOM).

In this talk, we focus on case markers expressing argument (not adjunct) relations such as ‘with, by, through, on, from’.

3.3 Examples of Usage

3.3.1 Some Uses of *=se*

With *=se* the following are relevant (note most of these, but not all, are formed with N-V Complex Predicates (cf. Mohanan 1994):

Sociative

- (10) a. *nadya=ne sita=se [bat ki]*
 Nadya.F.Sg=Erg Sita.F.Sg=Inst talk do.Perf.F.Sg
 ‘Nadya talked to Sita.’ Urdu/Hindi
- b. *ram=ne sita=se [jadi ki]*
 Ram.M=Erg Sita.F.Sg=Com marriage.F do.Perf.F.Sg
 ‘Ram married Sita.’ Urdu/Hindi
- (11) a. *ram=ne sita=se [pyar ki-ya]*
 Ram.M.Sg=Erg Sita.F.Sg=Inst love do-Perf.M.Sg
 ‘Ram loved Sita.’ Urdu/Hindi
- b. *ram sita=se ml-a*
 Ram.M.Sg Sita.F.Sg=Inst meet-Perf.M.Sg
 ‘Ram met Sita.’ Urdu/Hindi

Abstract Source

- (12) jamil sâp=se dar-ta hε
 Jamil.M.Sg.Nom snake.M.Sg=Inst fear-Impf.M.Sg be.Pres.3.Sg
 ‘Jamil fears snakes.’ Urdu/Hindi
- (13) ram=ne sita=se sawal puc^h-a
 Ram.M.Sg=Erg Sita.F.Sg=Inst question.M.Sg ask-Perf.M.Sg
 ‘Ram asked Sita a question.’ Urdu/Hindi

The marker =se also marks concrete spatial and temporal usages.

Spatial Usage

- (14) nadya lahor=se a-yi
 Nadya.F.Sg.Nom Lahore=Abl come-Perf.M.Sg
 ‘Nadya came/arrived from Lahore.’

Temporal Usage

- (15) nadya=ne sūbah=se kam ki-ya
 Nadya.F.Sg=Erg morning=Abl work.M.Sg.Nom come-Perf.M.Sg
 ‘Nadya has been working since morning.’

3.3.2 Some Uses of =par ‘on’**Abstract Location**

- (16) muḡaraf=ne adalat=par ilzam laḡa-ya
 Muḡarrāf.M.Sg=Erg court.F.Sg=on blame.M.Sg stick-Perf.M.Sg
 ‘Muḡarrāf blamed the court.’
- (17) muḡaraf=ne adalat=par ḡak ki-ya
 Muḡarrāf.M.Sg=Erg court.F.Sg=on doubt.M.Sg do-Perf.M.Sg
 ‘Muḡarrāf doubted the court.’

Concrete Location

- (18) muḡaraf=ne mez=par pistol rak^h-a
 Muḡarrāf.M.Sg=Erg table.F.Sg=on pistol.M.Sg put-Perf.M.Sg
 ‘Muḡarrāf put the/his pistol on the table.’

3.4 Comparison with Closely Related Languages

Punjabi and Nepali are both also modern Indo-Aryan languages whose modern case marking system developed around the same time as that of Urdu/Hindi.

Interestingly, however, they do not necessarily use the same non-canonical marking to denote the same semantic space.

Same Verb, Different Crosslinguistic Markers (se ‘from/with’, nal ‘with’, sanga ‘with’)

- (19) a. ram=ne sita=se fadi ki
 Ram.M.Sg=Erg Sita.F.Sg=Com marriage.F do.Perf.F.Sg
 ‘Ram married Sita.’ Urdu/Hindi
- b. ram=ne sita=nal fadi kī-ti
 Ram.M.Sg=Erg Sita.F.Sg=Com marriage.F do-Past.F.Sg
 ‘Ram married Sita.’ Punjabi
- c. ram=le sita=sanga biha gar-yo
 Ram.M.Sg=Erg Sita.F.Sg=Com marriage do-Past.M.Sg
 ‘Ram married Sita.’ Nepali

3.4.1 Punjabi

Furthermore, Punjabi uses two case markers for Urdu/Hindi’s single =se.

- *nal* (‘with’)
 - Instruments
 - Sociative (e.g., ‘speak with’, ‘love’)
 - Manner
 - Made of Material (‘made of brick’)
- *tō* (‘from’)
 - Agents of passives
 - Expressions of (dis)ability
 - Non-affected and indirect causees
 - Temporal and spatial expressions with the meaning of source (ablative)
 - Comparison

3.4.2 Nepali

Nepali uses three case markers for Urdu/Hindi's single *=se* (and does not span the entire spectrum, but includes others).

- *baṭa/dek^hi* ‘from’
 - Spatial expressions with the meaning of source (ablative)
 - Agents of passives
 - Non-affected and indirect causees
 - Made of Material (‘made of steel’)
- *sanga* (‘with’)
 - Sociative (e.g., ‘speak with’, ‘fight’)
- *le* (also the ergative marker)
 - Instruments
 - Made of Material (‘made of brick’)
- *sanga le*
 - Manner

3.5 Historical Sources

Table (20) provides an abbreviated comparison of which functions are marked by which case markers.

(20)	Case Function				
	Locative ‘on’	Ablative	Comitative	Instrument	Dative/Accusative
Urdu/Hindi	par	se	se	se	ko
Punjabi	te	tō	nal	nal	nū
Nepali	ma	baṭa	sanga	le	lai

Historical Source:

Most (if not all) of the case markers are drawn from originally spatial expressions.

- The Urdu/Hindi *se* may either be connected with Sanskrit *sam* ‘with’ or with the locative singular noun *sañge* ‘in attachment to’ (Kellogg 1893:132)
- Nepali *sanga* is probably also related to Sanskrit *sañge* ‘in attachment to’.
- Urdu/Hindi *par* is from Sanskrit *upari* ‘above’ (Oberlies 1998).
- Urdu/Hindi *ko* is from Sanskrit *kakṣam* ‘side/arm-pit’ (Kellogg 1893).
- Punjabi *te* is from MIA *tahī* ‘from there’ (Oberlies 1998).
- Nepali *baṭa* comes from ‘road/path’.

4 Analysis

Hypothesis: Noncanonical Object Markers are drawn into the system from originally spatial expressions that are interpreted **simultaneously** on the *control dimension*.

Observation: In order to understand case alternations and case patterns, the precise clausal and lexical semantics involved need to be understood.

The range of data we have studied clearly shows that there are 6 different basic patterns of non-canonical objects at work.

(21)

Marking on Subject	Marking on Object	Example Verbs
1. Nom, Dat	Source (Urdu <i>se</i> , Punjabi <i>tõ</i> , Nepali <i>dek^hi</i>)	fear
2. Nom/Erg	Source (Urdu <i>se</i> , Punjabi <i>tõ</i> , Nepali <i>sanga</i>)	ask, beg
3. Nom/Erg	Locative ‘on’	bless, capture, govern, attack, sign, blame
4. Nom, Erg/Dat	Locative ‘on’	trust, doubt, suspect, believe
5. Nom/Erg	Comitative (Urdu <i>se</i> , Punjabi <i>nal</i> , Nepali <i>sanga</i>)	marry, fight
6. Nom, Erg/Dat	Comitative (Urdu <i>se</i> , Punjabi <i>nal</i> , Nepali <i>sanga</i>)	love, hate

4.1 Subject vs. Object Marking

- Data from Urdu/Hindi clearly shows that non-canonical subject marking functions independently of non-canonical object marking.
- Classes 2, 3 and 5 participate in the normal nominative/ergative alternation that is governed by tense/aspect (perf/past=ergative marking).
- Classes 1, 4 and 6 allow either simple verbs or N-V complex predicates.
- With N-V complex predicates, a Dative/Ergative alternation goes hand-in-hand with an active/stative distinction.
- Typical Example for Class 4 with N-V complex predicate:

- (22) a. jamil=**ne** zahid=**par** b^harosa **ki-ya**
 Jamil.M.Sg=Erg Zahid.M.Sg=on trust.M.Sg. do-Perf.M.Sg
 ‘Jamil trusted Zahid.’ (activity) Urdu/Hindi
- b. jamil=**ko** zahid=**par** b^harosa **hu-a**
 Jamil.M.Sg=Dat Zahid.M.Sg=on trust.M.Sg become-Perf.M.Sg
 ‘Jamil trusted Zahid.’ (stative/achievement) Urdu/Hindi

4.2 Semantically Motivated Verb Classes

- The six major patterns in (21) hold crosslinguistically across at least 5 languages (Urdu/Hindi, Punjabi, Siraiki, Sindhi, Nepali) despite:
 - differences in the particular non-canonical case marker that is instantiated
 - (non-)availability of N-V complex predications or simple verbs
- **NB:** Not all verbs across the languages in exactly the same verb class, but the same general kinds of clusters obtain.

We show that the case marking patterns can be analyzed systematically by means of the following semantic features

1. spatially motivated features: *source, attached/involved*
2. transitivity/control features: *control, affected, logically impinged/touched but not affected* (the latter property is based on Beavers 2006).

The table in (21), thus follows from the semantic feature analysis in (23).

(23)	Subject	Object	Example Verbs
1.	[+goal]	[+src]	fear
2.	[+src] [+control]	[+src]	ask, beg
3.	[+src] [+control]	[+impinge]	bless, capture, govern, attack, sign, blame
4.	[+goal] [+control]	[+impinge]	trust, doubt, suspect, believe
5.	[+src] [+control]	[+attached]	marry, fight
6.	[+goal] [+control]	[+attached]	love, hate

- The feature [**+goal**] allows for dative/experiencer subjects.
- The feature [**+control**] allows for agentives (ergative).
- The feature [**+src**] marks source arguments (location or action).
- The feature [**+impinge**] marks arguments which are not affected as such, but only impinged — these tend to be marked by locatives (placing a book on a table does not affect the table, but does impinge it in some way).
- The feature [**+attached**] marks arguments which are connected to the action or subject in some way, i.e., what has been called *sociative* or *comitative* in the literature.

Conclusion: Data from non-canonical object marking in South Asian languages thus shows that quite a range of semantic factors are involved and that these semantic factors go beyond than just the more well known ones of volitionality, animacy and specificity.

4.3 Space and Control Dimensions

- All of the non-canonical case markers analyzed here come from originally spatial expressions.
- **Claim:** In order to go from marking adjunct spatial relations to marking argument participants of an action, these spatial expressions are simultaneously interpreted with respect to a control dimension.
- The semantic feature analysis suggests a gradience of control that fits in nicely with Butt’s (2006) original idea and helps to explicate the dimensions further.

	MORE CONTROL	PLACE	PATH	Typical Case Markers
↑	[+control]	■	■	Ergative
	[+control]	■	□	Genitive
	[+control]	□	■	Instrumental/Ablative
	[+affected]	■	□	Dative
	[+affected]	□	■	Accusative
	[+involved]	■	□	Comitative/Sociative
	[+impinge]	■	□	Locative
↓	LESS CONTROL			

Figure 2: Revised Space and Agency Dimensions

5 Summary and Outlook

- A close study of non-canonical object/argument marking showed that other semantic factors beyond volitionality, animacy and specificity are involved.
- These semantic factors need to be studied more closely.
- A crosslinguistic comparison of closely related sister languages seems to identify at least: source, attachment/involvement, and logically impinged.
- As spatial expressions are drawn into a case system, they are interpreted **simultaneously** on a control dimension — this leads to marking of participants of an action by originally spatial expressions.

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