Case in Indo-Aryan: A Historical Perspective

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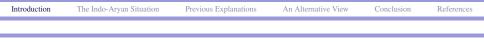
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Object of Inquiry

- Languages can (and do) innovate new case markers.
- These tend to be drawn from originally spatial terms.
- Question: How does an originally spatial term end up as a case marker for core event participant relations like:
 - Agents (typically Ergative/Instrumental)
 - Experiencers (typically Dative/Genitive)
 - Recipients (typically Dative)
 - Themes/Patients (typically Accusative)



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Diachronic Case Project(s)

- ► Focus on Indo-Aryan (with some newer work on Germanic)
- Lexical Semantic Approach to Case Markers
- Combined with Event Structural Analyses
- Many Contributors/Collaborators over the years:
 - Tafseer Ahmed Khan, Ashwini Deo, Scott Grimm, Tikaram Poudel, Christin Beck (neé Schätzle), Karin Schunk, Sebastian Sulger, Anila Varghese.
 - Many of the examples are owed to Ashwini Deo.
 - Special thanks to Gillian Ramchand for on-going discussions and the sharing of her insights.

Introduction	The Indo-Aryan Situation	Previous Explanations	An Alternative View	Conclusion	References

Indo-Aryan

- Longest diachronic record available (yet understudied)
- Old Indo-Aryan (OIA):
 - Inflectional case system
 - 7 cases
- Middle Indo-Aryan (MIA):
 - case distinctions collapsed (over several hundred years)
 - vestiges of former case system: nominative/oblique distinction
- ► As of around 1200 CE, new case markers developed.
- Most of these appear to have come from a small handful of spatial terms (former nouns).

See Beames (1872–79), Kellogg (1893), Trumpp (1872), Montaut (2006, 2009), Hewson and Bubenik (2006), Reinöhl (2106), a.o.

Previous Explanations	An Alternative View	Conclusion	References
gy and Sam	ple Sources	(from De	20)
TAGE SAM	PLE SOURCE		
Sanskrit Mah	ābhārata (Mbh.);		
~ 96	7,000 words		
hārāstrī Vasu	devahimdi (VH 6	09CE)	
bhraṃśa <u>Paur</u>	nacariu (PC ~ 88	<u>0CE);</u>	
~ 13	5,000 words		
Marathi Dny	āneśvarī (Dny 128	37 <u>CE);</u>	
~ 10	3,000 words		
Līļāc	caritra (LC 1278C	<u>'E);</u>	
~ 57	,000 words		
Gujarati Sadā	vasvakabālāvabo	dhavrtti (SB)	
	gy and SamTAGESAMSanskritMah ~ 96 hārāṣṭrīVasu bhraṃśabhraṃśaPaun ~ 13 MarathiDnyã ~ 10 Līļāc ~ 57	gy and Sample SourcesTAGESAMPLE SOURCESanskritMahābhārata (Mbh.); ~ 967,000 wordshārāṣṭrīVasudevahimḍi (VH 6 bhraṃśabhraṃśaPaumacariu (PC ~ 88 ~ 135,000 wordsMarathiDnyāneśvarī (Dny 128 ~ 103,000 wordsMarathiDnyāneśvarī (LC 1278C ~ 57,000 words	gy and Sample Sources (from DeTAGESAMPLE SOURCESanskritMahābhārata (Mbh.); ~ 967,000 wordshārāstrīVasudevahimdi (VH 609CE) Paumacariu (PC ~ 880CE); ~ 135,000 wordsMarathiDnyāneśvarī (Dny 1287CE); ~ 103,000 wordsMarathiDnyāneśvarī (LC 1278CE); ~ 57,000 words

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Inflectional case system, numbering due to Panini

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

Table: Declension of Sanskrit deva- 'god'

◆□ > ◆□ > ◆□ > ◆□ > ● □

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- ► The standard case marking pattern is nominative–accusative.
 - (1) (aham) brāhmaņam apaśyam.
 (I.Nom) brahman.Acc see.1Sg.Impf
 'I saw the brahman.' (Burrow 1965, 355)
- Some verbs lexically specify non-accusative objects (e.g., instrumental object with 'sacrifice').
- From Panini's grammar of Sanskrit:
 - (2) **Rule 2,3,3:** tritīyā ca hoś chandasi

Case 3 (instrumental) is also used for the <u>karman</u> (patient) of <u>hu</u> <i>'sacrifice' in the Chandas (Vedic Verse).'

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- Case Marking is additionally sensitive to semantic factors.
- Differential Object Marking (DOM) tends to express semantic contrasts.
 - (3) pibā somam drink.Imp soma.Acc 'Drink soma.'

(Rgveda VIII.36.1; Jamison 1976)

(4) pibā somasya drink.Imp soma.**Gen** 'Drink (of) soma.'

(Rgveda VIII.37.1; Jamison 1976)

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- Pāņini's grammar of Sanskrit mentions 23 possibilities of case alternations (Katre 1987, Böhtlingk 1839–40).
 - Some of these alternations have to do with formal morphophonological reasons.
 - Others are determined by lexical semantics/specifications.
- Some express DCM (Differential Case Marking), cf. the partitive in (4), but also alternations as in (5):
 - (5) Rule 2.3.12: The Dative and Accusative are used for verbs of movement, but the dative cannot be used if motion is abstract.

That is if a person named Ram goes to a village, the village can be marked either Accusative or Dative. But if only one's thoughts "go" towards a village, the Dative cannot be used. Introduction The Indo-Aryan Situation Previous Explanations An Alternative View Conclusion References

The Effect of Participles on Case

- Participles were being drawn into the verbal paradigm in OIA (Bynon 2005).
- ► The *-ta* adjectival participle was used in alternation with the aorist for the narration of events in the recent past or for past, culminated events (Kiparsky 1998, Condoravdi and Deo 2014).
 - Aorist: Usual Nom-Acc pattern
 - -ta participle: Agent in Instrumental
 - (6) aśrauşam ... ghoşam hear.1Sg.Aor noise.Acc
 'I heard a noise.' (Rāmāyana 2.57.16; Bynon 2005)
 - (7) şruto mayā śabdo hear.PP.Nom.M I.Inst sound.Nom
 'I heard a sound.' (Rāmāyana 2.58.13: Bynon 2005)

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Ergative "Alignment"

► The *-ta* participle is standardly analyzed as being the precursor/trigger from a shift of "accusative alignment" to "ergative alignment" (Dixon 1994).

Active		Participle		
Agent	Patient/Theme	Agent	Patient/Theme	
SUBJ _{nom}	OBJ <i>acc</i>	(Oblique)inst	SUBJ _{nom}	

The instrumental oblique/adjunct is seen as being reanalyzed as an ergative subject.

Reanalysis of Instrumental as Ergative				
Agent	Patient/Theme			
$SUBJ_{erg}$	OBJ _{nom}			



Ergative "Alignment"

- An object/patient oriented agreement pattern follows in what has been called ergative alignment.
 - (8) sruto mayā śabdo
 hear.PP.Nom.M I.Inst sound.Nom
 'I heard a sound.' (Rāmāyana 2.58.13: Bynon 2005)
- However, there are some things wrong with this picture:
 - There is no historical continuity between the instrumental and the ergative (Beames 1872–79, Butt 2001).
 - Agreement patterns differ wildly across the NIA ergative languages.
 - The larger case system is not accounted for (e.g., development of experiencer subjects).



A (Side) Note on Case and Agreement

- ► The NIA case systems all function quite similarly.
 - There is surface variation (which specific case markers, how many).
 - But the overall case systems are organized along a similar blue print.
- The NIA agreement systems, on the other hand, vary immensely (Subbarao 2001, Deo and Sharma 2006).

I have not seen a comprehensive, consistent and explanatory syntactic analysis of the space of agreement possibilities in New Indo-Aryan languages and how they co-vary with case and person/number marking. (pace Rajesh Bhatt, Patil-Grosz)



A (Side) Note on Case and Agreement

Some Examples

- ► In Hindi/Urdu there is an ergative and the verb never agrees with an overtly case-marked noun.
- In Nepali, there is an ergative and the verb agrees with the subject regardless of case marking.
- Bengali has no ergative, has only retained person agreement and the verb agrees with the subject regardless of case.
- In Gujarati the verb does not agree with case marked subjects and agrees with the object regardless of case marking.
- In some dialects of Western Indo-Aryan (including versions of Gujarati), the main verb (old participle) agrees with the object and the auxiliaries agree with the subject.



A (Side) Note on Case and Agreement

- Languages differ on which features of agreement they retain and which subset of the verbal complex expresses them.
 - There are differences between main verbs vs. auxiliaries.
 - But also differences among auxiliaries (past version of 'be' vs. present version of 'be' vs. future)
- ► Full set of features: gender, number, person.

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Back to Case: Non-nominative experiencers in OIA

- A class of OIA intransitive verbs may optionally appear with genitive experiencers.
- E.g. *ruc* means either 'shine' (non-psych) or 'please' (psych).
- The difference is signaled via case marking.
- (9) sumukh-o bhava-tah pautr-o roca-te
 beautiful.faced-NOM.SG you-GEN.SG grandson-NOM.SG shine-PRES.3.SG
 Your beautiful-faced grandson shines (Mbh. 5.102.6c)
- (10) vākya-m na me roca-te yat tva-yā utterance-NOM.N.SG NEG I.GEN.SG please-PRES.3.SG which you-INS.SG uktam say-PERF.N.SG The utterance which was spoken by you does not please me. (Mbh. 2.51.14a)



Interim Summary — OIA

OIA's case system was complex:

- Active transitive clauses are generally Nom-Acc.
- Subjects are generally nominative.
- But also:
 - Case determined by morphophonological constraints and lexical specifications.
 - Case alternations for semantic reasons (e.g., genitive/accusative for partitivity)
 - Case used to mark certain thematic/semantic roles (e.g., experiencers, agents of participles).

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Middle Indo-Aryan

- The case system underwent heavy syncretism in MIA.
- ► In some situations, no distinction could be found between subject and object (≈nominative/accusative), e.g. (11).
- Agreement is always with the nominative (or former nominative) argument.

	Singular	Plural
Nominative/Accusative	-и, а, ат	-a, aĩ
Instrumental	-eṁ, iṁ, he, hi	-e(h)ĩ, ehi, ahĩ
Ablative	-hu, ahu, aho	-hũ, ahũ
Genitive/Dative	-ho, aho, ha, su, ssu	-na, hã
Locative	-i, hi, hiṁ	-hĩ

Syncretized case paradigm in MIA, (Masica 1991, 231)

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Loss of nominative–accusative contrast (880 CE)

(11)#kim **tamu** han-ai na vālu QUES darkness.NOM.SG destroy-IMPF.3.SG NEG young ravi# #kim vālu davaggi na sun.NOM.SG QUES young fire.NOM.SG NEG #kim kari dah-ai vanu# burn-IMPF.3.SG forest.NOM.SG QUES elephant.NOM.SG dal-ai na vālu **hari**# #kim vālu shatter-IMPF.3.SG NEG young lion.NOM.SG QUES young na daĩk-ai uragamanu# NEG bite-IMPF.3.SG 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) イロト イポト イヨト イヨト

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Early Ergative Pattern with Agent Marking (609 CE)

(12) tiy-e vi avaloi-o di-ttho ya she-INST.SG also look-PERF.M.SG notice-PERF.M.SG and nā-e so puriso she-INST.SG that.NOM.SG man.NOM.SG cakkhuramano eye-beautiful.NOM.SG 'She (the maidservant) also *looked*, and she *noticed* that man, attractive to the eye.'(VH:K:9.8)

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Late Ergative Pattern without Agent Marking (Old Hindi)

(13)masi kāgad chū-yo nahī kalam ink.Nom paper.M.Nom touch-Perf.M.Sg not pen.F.Sg gahī nahi hāth jāro juga māhātma take.Perf.F.Sg not hand four.Pl age.Pl glory.Nom jehi kabir jan-ā-vo nāth 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)

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Interim Summary: MIA

- MIA saw massive syncretism of case forms.
- "Ergative alignment" is evidenced via agreement, even in the absence of overt agent marking.
- Additionally, MIA made use of Differential Case Marking (DCM).
- Aśokan inscriptions: in *-ta* participial clauses (Andersen 1986).

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- genitive only for animate agents
- instrumental otherwise
- Even though massive case syncretism, seem to have a functioning (albeit reduced) case system.

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Development of New Case Inventory

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

	Dative	Ergative	Instrumental	Genitive
Urdu/Hindi	ko	ne	se	ka/ki/ke
Gujarati	ne	-е	-e/thi	no/ni/nu/na/nã
Marathi	la	ne/ni	ne/ni	ca/ci/ce
Nepali	lai	le	le	ko/ka/ki
Punjabi	nũ	ne	kolõ	da/di/de
Sindhi	k ^h e	-e/-an/-in	-е	jo/ji/je/ja/jyu
Bengali	ke	—	te	-(e)r
Oŗiya	ku	—	-е	-rə

Case Markers Across Indo-Aryan (Masica 1991, Ahmed Khan 2009)

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New Case Inventory

- The genitive is the only one that inflects (put this aside for now).
- ► The various case markers all seem to be versions of some *n*-, *k* and *l* forms.

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- Common Homophonies Crosslinguistically:
 - Dative/Accusative
 - Ergative/Instrumental
- Additionally in Indo-Aryan:
 - Ergative/Dative

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Sample Look at Urdu/Hindi ko and ne

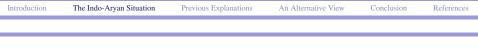
- ▶ Beames (1872–79:§56) reconstructs the Urdu *ko* to the locative of Sanskrit *kaksha* 'armpit, side' \rightarrow Old Hindi *kākha*, accusative *kākham* \rightarrow *kahũ* \rightarrow *kõ* \rightarrow *ko*.
- The most likely reconstruction of *ne* is due to Tessitori (1913, 1914).
 - Source: Apabhramśa form kannahī, related to the Sanskrit locative of 'ear' karne
 - ▶ Old Rajasthani: kanhaiN (or kanhai, kanhi, kanhali, kani) → (naī, nai)
 - Mostly meant 'aside, near'.

> Ablative 'from' > Agentive

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Skt. 'ear' > 'near'

> Dative (and Accusative)



Basic Questions

If the above is all correct, then:

- The origin of the modern case markers are spatial terms: how exactly does agent/patient marking result?
- Why draw new case markers into a system in the first place?

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Next to no proposals for the first question.

Some high profile proposals for the second one.



Markedness and Dependent Case

- An attractive notion is *markedness* (see Malchukov and de Swart (2009), de Hoop (2009) for surveys).
- New case markers are predicted to arise first in situations where it is difficult to distinguish agents (A) and other subjects (S) from patients/objects (O), i.e., in *marked* situations.

A O

S

- Typical As: animate, agentive (transitive), topical
- Typical Os: inanimate, indefinite
- Dependent Case (Baker, Marantz)
 - Similar focus on just a subset of core arguments.
 - Posits systematic asymmetries between external and internal arguments.

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Overmarking

However:

- No good explanation for "over-marking", i.e., when both subject and object are marked overtly with innovated case markers.
- ► The subject is already marked, so why mark the object?

(14)

nadya=ne **yasin=ko/*yasin** mar-a Nadya.F.Sg=Erg Yassin.M.Sg=Acc/Yassin.M.Sg.Nom hit-Perf.M.Sg 'Nadya hit Yassin.' Urdu/Hindi



Undermarking

- On the other hand, one also has instances of undermarking.
- Recall the lion/elephant example where one could not distinguish subject from object (both participants animate and nominative).
- In the example below, subject and object also need to be distinguished, but the example is questionable (both participants inanimate).

(15)

??**patt^har=ne** ʃiʃa toṛ-a stone.M=Erg glass.M.Sg.Nom break-Perf.M.Sg 'The stone/rock broke the glass.' Urdu/Hindi (based on Mohanan 1994, 75)

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Overmarking without Distinguishing

- In some Indo-Aryan languages, the same case marker is used for ergative and dative/accusative.
- Why mark both and yet not distinguish?
- (16) man=ne sahab=ne mar-a Pron.1.Sg=Acc/Dat Sahib.M.Sg=Erg hit-Perf.M.Sg 'The Sahib hit me.' (Shirani 1987) Haryani
- (17) va-ne ve-ne dek^h-y-u Pron.3Sg-Erg Pron.3Sg-Acc see-Perf-N 'He/she saw him/her.' (Phillips 2013) Kherwada Wagdi

Note: in Kherwarda Wagdi, ne and ne are variants of one another.



Symmetric DOM (Overmarking)

- DOM is expected to be mainly *asymmetric*, i.e., contrasting an unmarked object with a marked one.
- But one finds symmetric types of DOM.

More Direct (ko) vs. Indirect (se)

(18) a.

nadya **yasin=ko** mıl-i Nadya.F.Sg.Nom Yassin.M.Sg=Acc meet-Perf.F.Sg 'Nadya met Yassin.' Urdu/Hindi

b.

nadyayasin=semıl-iNadya.F.Sg.NomYassin.M.Sg=Inst meet-Perf.F.Sg'Nadya met Yassin.'Urdu/Hindi

Symmetric DOM (Overmarking)

Type of Path

(19) a.

us=le dilli=**dek**^h**i** kat^hmandu=samma baato banaa-yo Pron.3.Sg=Erg Delhi=Abl Kathmandu=to street.Nom make-Past 'He built a street from Delhi to Kathmandu.' Nepali Ahmed Khan (2009), **static path**

b.

u dilli=**baaṭa** kat^hmandu=samma kud-yo Pron.3.Sg.Nom Delhi=Abl Kathmandu=to ran-Past 'He ran from Delhi to Kathmandu.' Nepali Ahmed Khan (2009), **dynamic path**



Symmetric DOM (Overmarking)

Attainment of Endpoint (boundedness)

(20) a.

ek vilayat **me** poace one city in reached 'reached a city' (Dehalvi, 1804)

Old Urdu

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b.

1s manzıl ko kab poãco-ge
this destination Dat/Acc when reach.2-Fut.Pl
'When will (you) reach this destination?' (Dehalvi 1804) Old Urdu

(Recall the Sanskrit Dative/Accusative alternation for physical vs. non-physical movement.)

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Differential Subject Marking (DSM)

- DSM is similarly complex.
- One finds asymmetric DSM, but also with intransitives where there is no need to distinguish one argument from the other.
 - (21) a.

ram k^hãs-a Ram.M.Sg.Nom cough-Perf.M.Sg 'Ram coughed.'

Urdu

b.

```
ram=nekhās-aRam.M.Sg=Ergcough-Perf.M.Sg'Ramcoughed(purposefully).'(Tuite et al. 1985, 264)Urdu
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The ergative is generally associated with the initiation of an action (agency).

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DSM a	nd Modality				
(22)	a.				
	nadya=ko	zu ja-na	hε		
		zoo.M.Sg.Loc go-Inf ts to go to the zoo.'	M.Sg be.Pres.3.Sg	1	Urdu
	b.				
	nadya=ne	zu ja-na	hε		
	Nadya.F.Sg=Erg 'Nadya wants to	zoo.M.Sg.Loc go-Inf go to the zoo.'	.M.Sg be.Pres.3.Sg	1	Urdu
	2	0			
(23)	a.				
	ami toma=ke				
	I.Nom you=Acc			-	
	•	laiman 1980, 279)		Be	ngali
	b.				
	amar toma=ke				
	I.Gen you=Acc				
	'I need you.' (Kl	aiman 1980, 279)	_	Be	ngali

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Information Structure

- Dalrymple and Nikolaeva (2011) implicate information structural concerns in the rise of object marking.
- Focus particularly on DOM.
- Suggest that Urdu/Hindi dative/accusative ko arose as a secondary topic marker.
- Crosslinguistic development of secondary topic markers into specificity/definiteness markers.
- (20) nadya **kıtab/kıtab=ko** xarid-e-g-i Nadya.F.Sg.Nom book.F.Sg.Nom/book.F.Sg=Acc buy-3.Sg-Fut-F.Sg 'Nadya will buy a/the book.' Urdu/Hindi
 - Does not explain the full range of DOM found in Indo-Aryan.
 - Also no hard and fast historical evidence (so far).



Information Structure

- Still, Dalrymple and Nikolaeva (2011) are right that information structure is implicated in case marking patterns across South Asia.
- Hyslop (2010): One use of the ergative is to mark focus in Kurtöp (Tibeto-Burman)
- Need to take this into account in an analysis of case.

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Taking Stock

- Indo-Aryan contains DCM systematically.
- The patterns are not as simple as expected under a markedness/indexing view.
- There is no good explanation why new case markers are drawn primarily from spatial terms.
- See Reinöhl (2015) for a proposal on how various different types of spatial terms became spatial postpostions in Indo-Aryan in the first place.

But how does a spatial postposition become a core case marker?

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Case as a Multidimensional Phenomenon

The following dimensions of meaning/expression crop up over and over again in crosslinguistic generalizations:

- Participant Relations
 - Thematic Relations (agent, patient, goal)
 - ► A, O, S
- Information Structure (Given vs. not)
- Quantizability/Scalarity (event structure)
- Figure/Ground

Most approaches to case focus on a subset, with most attention devoted to the identification of participant relations.

But not:

how the participants relate to the structure of a given event.



Proposal for Case Innovation

- Spatial terms express Figure/Ground relations (Talmy 1975)
- Figure/Ground are generally in a static relationship to one another
 - adpositions (*The cat on the sofa*)
 - copula type of predications (*be, seem, contain*, e.g., *The girl is on the sofa*.)
- ► The static Figure/Ground relationships can be reinterpreted as relationships between a Figure/participant and a Ground/(sub)event → case marking develops.

Figure/Ground (Talmy 1975)

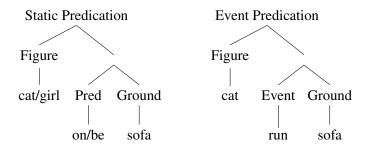
Figure: The FIGURE object is a moving or conceptually movable point whose path or site is conceived as a variable the particular value of which is the salient issue.

Ground: The GROUND object is a reference-point, having a stationary setting within a reference-frame, with respect to which the FIGURE's path or site receives characterization.

Figures have characteristics of Proto-Agents (Dowty 1991)

Proposal for Case Innovation

These static Figure/Ground relationships can be reinterpreted as relationships between event participants.



The cat is on the sofa. vs. The cat runs on the sofa.



Figure/Ground

- The structure and semantics of adpositions have given rise to interesting modern formulations of Talmy's original Figure/Ground proposal, e.g., Svenonius (2010).
- The Figure/Ground configuration is also taken as a basic in Ramchand's (2008) proposals for the representation of event structure in terms of subevents and participants.

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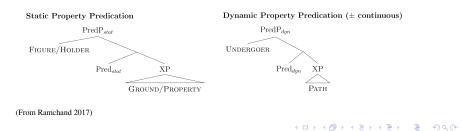
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- ► init (initiator)
- process (undergoer of process)
- result (changed/resulting entity)

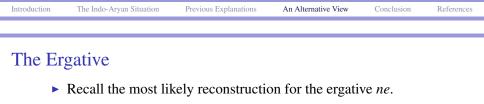
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The Key to Case: (Lexical) Semantics

- Spatial terms are fundamentally concerned with relating a entity (Figure) to a given space (Ground).
- Case is fundamentally concerned with the relationship participants have to a given event.
- There is parallelism in this relation that offers natural opportunities for language change.



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> Ablative 'from' > Agentive

Skt. 'ear' > 'near'

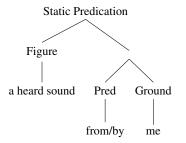
> Dative (and Accusative)

Relevant examples:

- (21) şruto mayā śabdo hear.PP.Nom.M I.Inst sound.Nom
 'I heard a sound.' (Rāmāyana 2.58.13: Bynon 2005)
- mε̃=ne awaz sunn-i
 I=Erg sound.F.Nom hear-Perf.F.Sg
 'I heard a sound.'
 Urdu/Hindi

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The Ergative



- ► The original Sanskrit instrumental is lost/reduced.
- ► A new marker is brought into the language to mark ablatives/source: *ne* (from *kanhaiN*).
- It is interpreted as a spatial marker, expressing a static Figure/Ground predication.

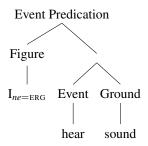
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The Ergative

- The stative predication is unnatural in several ways.
 - The actual event is expressed as a property of the Figure.
 - The sentient/animate participant is a Ground, but animates are preferred as Figures.

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- ► So an eventive reconfiguration takes place.
- And the formerly spatial marker becomes a core case marker.
- But it keeps its agentive (=source of action) semantics.





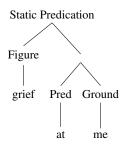
The Dative/Accusative

- ▶ *ko* first entered NIA around 1200 CE.
- It means something like *at/to*, derived from the Sanskrit for 'side'.
- First uses are for dative goals/experiencers ('give to the Brahmins', teach to life, grief is at me')
- Some first accusative/object uses with the verbs 'seek' (seek a husband) and 'rattle' (rattle the bones).
- ▶ ko in Urdu/Hindi today marks
 - 1. Indirect Objects: goals
 - 2. Subject: experiencer/goal
 - 3. Object: animacy & specificity (roughly)



The Dative/Accusative

As an originally spatial term, ko marked goals/locations and marked Ground arguments.

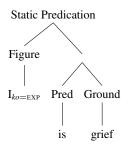


► For sentient goals/locations, this again resulted in a semantic mismatch → reanalysis of the sentient goal/location argument as a Figure.



Experiencer Subjects

- Because the originally locative argument was reanalyzed as a Figure, ko was drawn into the core case marking inventory.
- ► In Urdu it now marks experiencer subjects.

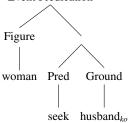


 See also Schätzle (2018) on the history of dative subjects in Icelandic.



The Dative/Accusative

- Differential Object Marking (animacy and specificity) is more difficult to account for.
- One would again begin with a Figure/Ground relationship.
- The predication is eventive, but the Ground is a location/goal. Event Predication





The Dative/Accusative

- The original Ground as a goal/location can be seen as a natural result or culmination for verbs like 'seek' or 'teach'.
- It is thus reanalyzed as instantiating the result subevent of those predicates.
- ► Over time it becomes associated with specificity → Differential Object Marking

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Case Polysemy

What accounts for polysemies such as Ergative/Dative or Ergative/Instrumental/Genitive?

- Clue lies in the original semantics of the spatial terms/adpositions.
 - (24) a. Amra opened the door with the key. (Means/Instrumental)b. Ravi sat with the teddy bear. (Locational)
- Need to delve into the semantics of adpositions (e.g., Kracht 2002, Zwarts 1997).
- Ahmed Khan (2009) has some interesting proposals that allow for underspecification and hence also polysemy.
- The different versions of the same adposition are drawn into the case system differently – so the same adposition could end up as an ergative but also as a dative.



Conclusion

- Several dimensions play a role in the deployment of case marking.
 - Figure/Ground
 - Event Semantics/Participant Relations
- Major difference with resepct to Dependent Case, where case assignment fundamentally depends on the configuration of two DPs with respect to one another.
- Here, case is understood as fundamentally relating participants to event structure (following Ramchand's overall system and insights).

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