24.956
Topics in the Syntax of the Modern Indo-Aryan Languages
February 21, 2003
Discussion of Deo and Sharma (2002)

1 The Ergative Construction in Indo-Aryan Languages

(1) (from Plank (1979))

    a. A grammatical pattern or process shows ergative alignment if it identifies intransitive subjects (S_i) and transitive direct objects (dO) as opposed to transitive subjects (S_t).

    b. It shows accusative alignment if it identifies S_i and S_t as opposed to dO.

1.1 The Chronology of the Indo-Aryan Language Family

• The Indo-Aryan languages arise from a common Old Indo-Aryan ancestor, Sanskrit (or a related dialect).

• They inherited morphological ergativity from Middle Indo-Aryan dialectal variants of Sanskrit.

• Synchronic variation in ergativity as the result of either retention or innovation in the domain of ergative morphology within each of the daughter languages.

(2) **Chronological Progression of the Indo-Aryan Languages**

Period	Linguistic stage	Term
Until 600 BC	Vedic	
600BC-200AD	Epic and Classical Sanskrit	Old Indo-Aryan (OIA)
200 BC-700AD	Pālī and Prākrit languages	
700-1100AD	Apabhraṃśa	Middle Indo-Aryan (MIA)
1000AD- present	Nepali, Bengali, Maraṭhi, Hindi	New Indo-Aryan (NIA)

1.2 The Emergence of the Ergative Clause

• Aspect-based split ergativity in Indo-Aryan (IA) languages has been presented as a classic case of the passive to ergative reanalysis seen cross-linguistically (Dixon (1994)).

(3)   a. The agent, or the logical subject, which is an oblique grammatical function in the passive construction, is reinterpreted as the grammatical subject, while retaining its oblique morphology.

    b. The passive subject, loses its grammatical subjecthood, and is mapped onto the object function.

Aspects of Old Indo-Aryan (OIA)

(4)   a. No active, ergative construction in OIA.

    b. The precursor of the ergative clause was, in OIA, a passive, periphrastic perfect construction, which involved the use of a non-finite form of the verb (a deverbal adjective in the perfect aspect).

    c. This construction was one of the multiple devices in OIA of expressing the perfect aspect and the past tense.

    d. The rich tense-aspect system of OIA, underwent a radical process of simplification in MIA (Pischel 1981). Most inflectional forms such as the aorist and the inflectional perfect, were lost, and by late MIA, even the non-perfect inflectional past disappeared.

    e. This loss of the inflectional system has often been cited as a reason for the increase in the frequency and the scope of this passive construction. (Hock (1986); Bubenik (1998)).

Ergativity in Middle Indo-Aryan

(5)   a. The agent, marked in the instrumental case, showed subject properties.

    b. The object of the transitive and the subject of intransitive clauses showed nominative case marking.

    c. The verb, based on the earlier passive participle, showed gender and number agreement with the nominative object.

    d. In intransitive clauses, the verb agreed in number and gender with the sole argument of the clause.

A New Indo-Aryan (NIA) feature:

(6) a. Variable case marking for direct objects in transitive, perfect clauses, allowing both nominative and accusative marked objects.

b. This pattern of object marking developed in the non-perfect aspects and spread to the ergative construction in the perfect.

2 The Typology of Variation in NIA

• Reduction of the original MIA pattern of perfect subject marking to differing degrees.

• the agreement pattern of each language is related to, but not fully determined, by the subject-marking pattern.

2.1 Hindi

(7)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	maĩ	ham
Perf	1	**mai-ne**	**ham-ne**
Non-perf	2	tu:/tum	tum/āp
Perf	2	**tu:-ne/tum-ne**	**tum-ne/āp-ne**
Non-perf	3	vah, yah	ve, ye
Perf	3	**is-ne, us-ne**	**inho-ne, unho-ne**

(8) a. **sītā**   rām-ko   **pīṭ-tī**   **hai**
Sītā-FEM-NOM Rām- MASC-ACC hit-PRES-FEM-SG aux-3RD-SG

'Sita hits Ram.'

b. rām-ne   **chiḍiyā**   dekh-ī
Rām- MASC-ERG bird-FEM-NOM see-PERF-FEM-SG

'Ram saw a sparrow.'

c. sītā-ne   rādhā-ko   pīṭ-**ā**
Sītā-FEM-ERG Rādhā- FEM-ACC hit-PERF-MASC-SG

'Sita hit Radha.'

2.2 Nepali

Nepali, like Hindi, has ergative marking on the subject in all three persons.

(9)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	ma	hāmī
Perf	1	**mai-le**	**hāmī-le**
Non-perf	2	ta	timī
Perf	2	**tai-le**	**timī-le**
Non-perf	3	ū	unī
Perf	3	**usu-le**	**un-le**

Unlike other IA-languages, in Nepali overt case-marking on the subject does not block subject agreement.

(10) a. **ma**   bas-**en**
I-NOM sit-PST-1-SG

'I sat.'

b. **mai-le** mero lugā   dho-**en**
I-ERG my   clothes-NOM wash-PST-1-SG

'I washed my clothes.'

2.3 Gujarati

Gujarati also shows subject marking in all three persons, like Hindi and Nepali, but only in the singular.

(11)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	hũ	ame
Perf	1	**meñ**	**ame**
Non-perf	2	tu	tame
Perf	2	**teñ**	**tame**
Non-perf	3	te	te-o
Perf	3	**teṇe**	**temṇe**

The other point at which Gujarati differs from most other IA verb agrees in number and gender with the object, irrespective of whether it is in the nominative or the accusative.

(12) Overt case-marking on object does not block agreement:

    a. Seeta-e   **kāgal**   vāc-**yo**
       Sītā-FEM-SG-ERG letter-MASC-SG-NOM read-PST-MASC-SG

    'Seeta read the letter.'

    b. Sītā-e   **rāj-ne**   pajav-**yo**
       Sītā-FEM-SG-ERG Rāj-MASC-SG-ACC harass-PST-MASC-SG

    'Seeta harassed Rāj.'

(adapted from Mistry (1997))

• In Gujarati, case marking doesn't block agreement with the object, but it does block agreement with the subject.

• This contrasts with Hindi, which shows default agreement if there is no non-overtly case-marked argument in the clause.

2.4 Marathi

The facts for Punjabi are identical to Marathi.
Ergative and nominative are distinguished only in the third person.

(13)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	mī	āmhī
Perf	1	mī	āmhī
Non-perf	2	tū	tumhī
Perf	2	tū	tumhī
Non-perf	3	to/tī/te	te
Perf	3	**tyā-ne, ti-ne**	**tyā-nī**

However, in spite of overt morphological syncretism with the nominative case, first and second person perfect subjects in Marathi/Punjabi do not agree with the verb.

(14) a. **mī**   sītā-lā   bagha-**to**
       I-MASC-NOM Sītā-FEM-ACC see-PRES-MASC-SG

    'I see Sita.'

    b. mī   ek **chimṇī**   baghit-**lī**
       I-MASC-ERG one sparrow-FEM-NOM see-PRES-FEM-SG

    'I saw a sparrow.'

    c. mī   sītā-lā   baghit-**la**
       I-MASC-ERG Sītā-FEM-ACC see-PERF-NEUT-SG

    'I saw Sita.'

2.5 Bengali

Old Bengali had an ergative construction in the perfect aspect (Chatterji (1970):947-8), which showed properties similar to the MIA ergative clause.
Modern Bengali, however, has lost this pattern, and shows the same kind of subject case-marking for its non-perfect and perfect subjects.

(15)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	āmi	āmrā
Perf	1	āmi	āmrā
Non-perf	2	tui, tumī	torā
Perf	2	tui, tumī	torā
Non-perf	3	o	orā
Perf	3	o	orā

Nominative-accusative pattern of case and agreement marking in all tenses and aspects:

(16) a. **āmī** sītā-ke dekh-**chī**
       I-NOM Sītā-ACC see-1-SG-PRES

    'I see Sita.'

    b. **āmī** sītā-ke dekh-**lām**
       I-NOM Sītā-ACC see-1-SG-PAST

    'I saw Sita.'

    c. **anu**   sītā-ke dekh-**lo**
       Anu-FEM-NOM Sītā-ACC see-3-SG-PAST

    'Anu saw Sita.'

Complete loss of ergative marking is correlated with subject agreement in Bengali.

3 Cross-Classification of the Indo-Aryan Languages

3.1 Subject Marking

(17) Overt subject marking in perfect constructions:

SUBJECT	HINDI	NEPALI	GUJARATI	MARAṬHI/PUNJABI	BENGALI
1st SG	√	√	√	∅	∅
1st PL	√	√	∅	∅	∅
2nd SG	√	√	√	∅	∅
2nd PL	√	√	∅	∅	∅
3rd SG	√	√	√	√	∅
3rd PL	√	√	√	√	∅

3.2 Agreement marking typology

The agreement patterns cannot always be described as agreement with the most prominent non-overtly case-marked argument.

(18) Agreement in perfect constructions:

AGREEMENT	HINDI	MARAṬHI/PUNJABI	GUJARATI	NEPALI	BENGALI
SAgr (nom)	∅	∅	∅	∅	√
SAgr (non-nom)	∅	∅	∅	√	∅
OAgr (non-nom)	∅	∅	√	∅	∅
OAgr (nom)	√	√	√	∅	∅

• Different case-marking patterns but similar agreement:
Hindi and Maraṭhi/Punjabi
Nepali and Bengali
• Similar case-marking patterns, similar subject (non-)agreement, but different object agreement:
Hindi and Gujarati

4 Subject case constraints

4.1 Faithfulness

4.1.1 Distinction between Morphological and Abstract Case

• Ergative subjects that do not bear case in the Gujarati and Maraṭhi systems do not trigger subject agreement in the way that Bengali null-marked subjects do.

• Nominative subjects and non-overtly marked ergative subjects behave differently with respect to the case of their modifiers.

(19) Obliqueness Marking

   a. mī **ek āmbā** khā-**llā**
      I-ERG one mango-NOM eat-PERF-3.SG
      'I ate a mango.'

   b. vedyā ashā mī **ek āmbā** khā-**llā**
      foolish-OBL like-OBL I-ERG one mango-NOM eat-PERF-3.SG
      'Foolish me ate a mango.'

   c. **vedī ashī mī** ek āmbā khā-**te**
      foolish-NOM like-NOM I-NOM one mango-NOM eat-PRES-1.SG
      'Foolish me eats a mango.'

(Maraṭhi)

• the case of the Maraṭhi dialect of Gowari

4.1.2 Faithfulness Constraints

(20) CS-FS: Case in the f-structure of an argument must be
              identical with the case-marking in the c-structure of the argument

• Favors candidates with identical morphological and abstract case.
• Asymmetry: surface case informs abstract case, not vice-versa.

(21) FAITH-LEX$_{perf}$: A lexically-specified inherent Case licensing feature
                  must be checked in perfect clauses

• Favors association of abstract ergative with subjects of perfects.

4.2 Markedness Constraints

(22)

UNIVERSAL SCALES	HARMONIC ALIGNMENT	CONSTRAINT ALIGNMENT
Subject > Object	Su/loc ≻ Su/3	*SU/3 ≫ *SU/LOC
local (1st,2nd) > 3rd	Oj/3 ≻ Oj/loc	*OJ/LOC ≫ *OJ/3

The ordering of these constraints w.r.t. each other is universal.

(23) *SU/3 & *ϕ_c ≫ *SU/LOCAL & *ϕ_c (Aissen (1999):673)

States that 3rd person subjects are universally more marked than 1st and 2nd person subjects.

(24) *STRUC$_c$: Avoid (case specification) structure
              (Prince & Smolensky 1993:25; Aissen (1999))

Penalizes any morphological structure; specifically penalize case morphology.

5 The Constraints at Play

(25)

SU/3 & *ϕ_c $\longleftarrow$ *STRUC$_c$ (**Bengali:** No subjs marked)

       $\longleftarrow$ *STRUC$_c$ (**Maraṭhi/Punjabi:** Only 3p subjs marked)

SU/LOC & *ϕ_c $\longleftarrow$ *STRUC$_c$ (**Nepali, Hindi, MIA:** All subjs marked)

5.1 Full Paradigms

(26) **Nepali, Hindi, MIA**

		*SU/3 & *ϕ_c	*SU/LOC & *ϕ_c	*STRUC
INPUT: Subj(loc)				
☞a.	S-erg			*
b.	S-ϕ		*!	
INPUT: Subj(3rd)				
☞c.	S-erg			*
d.	S-ϕ	*!		

(27) **Bengali**

		*STRUC	*SU/3 & *ϕ_c	*SU/LOC & *ϕ_c
INPUT: Subj(loc)				
a.	S-erg	*!		
☞b.	S-ϕ			*
INPUT: Subj(3rd)				
c.	S-erg	*!		
☞d.	S-ϕ		*	

5.2 Person Neutralization

(28) **Maraṭhi, Punjabi**

		FAITH-LEX$_{perf}$	*SU/3 & *ϕ_c	*STRUC	*SU/LOC & *ϕ_c	CS-FS
INPUT: Subj(loc)						
a.	S-erg(overt)			*!		
b.	S-nom(ϕ)	*!			*	
☞c.	S-erg(ϕ)				*	*
INPUT: Subj(3rd)						
☞d.	S-erg(overt)			*		
e.	S-nom(ϕ)	*!	*			
f.	S-erg(ϕ)		*!			*

5.3 Number Neutralization

(29)   *SYNCRET/SG Avoid syncretism of case-marking in the singular number.

Intuition: The plural is more susceptible to syncretism or neutralization in marked contexts than the singular.

(30)   **Gujarati**

		FAITH-LEX$_{perf}$	*SYNCRET/SG	*SU/3 & *ϕ_c	*STRUC	*SU/LOC & *ϕ_c	CS-FS
	INPUT: Subj(loc-pl)						
a.	S-erg(overt)				*!		
b.	S-nom(ϕ)	*!				*	
☞c.	S-erg(ϕ)					*	*
	INPUT: Subj(3rd-pl)						
☞d.	S-erg(overt)				*		
e.	S-nom(ϕ)	*!		*			
f.	S-erg(ϕ)			*!			*
	INPUT: Subj(loc-sg)						
☞a.	S-erg(overt)				*		
b.	S-nom(ϕ)	*!				*	
c.	S-erg(ϕ)		*!			*	*
	INPUT: Subj(3rd-sg)						
☞d.	S-erg(overt)				*		
e.	S-nom(ϕ)	*!		*			
f.	S-erg(ϕ)		*!	*			*

6   Agreement Constraints

(31)   EXPRESS AGR: A predicate agrees with some argument

Agreement is good.

(32)   *NON-CORE GF/AGR ≫ *OJ/AGR ≫ *SU/AGR

Agreement with subjects is better than agreement with objects, and so on.

(33)   *ERG/AGR ≫ *ACC/AGR ≫ *NOM/AGR

Agreement with nominatives is best, followed by agreement with accusatives, followed by agreement with ergatives.

Agreement constraints are ranked lower than Case constraints. So only the candidates with the 'correct' cases are available to the Agreement constraints.

6.1   Hindi, Marathi, and Punjabi

(34)   **Hindi, Marathi, Punjabi**

		*ERG/AGR *ACC/AGR	EXP AGR	*OJ/AGR	*SU/AGR	*NOM/AGR
	INPUT: S O(spec) V(perf)					
a.	S-erg O-acc V-Sagr	*!			*	
b.	S-erg O-acc V-Oagr	*!		*		
☞c.	S-erg O-acc V-default		*			
	INPUT: S O(nonspec) V(perf)					
d.	S-erg O-nom V-Sagr	*!			*	
☞e.	S-erg O-nom V-Oagr			*		*
f.	S-erg O-nom V-default		*!			
	INPUT: S O V(nonperf)					
☞g.	S-nom O-nom V-Sagr				*	*
h.	S-nom O-nom V-Oagr			*!		
i.	S-nom O-nom V-default		*!			

6.2 Gujarati

The faithfulness constraint EXPRESS AGR is promoted above *ACC/AGR

(35) Gujarati

		*ERG/AGR	EXP AGR	*ACC/AGR	*OJ/AGR	*SU/AGR	*NOM/AGR
	INPUT: S O(spec) V(perf)						
a.	S-erg O-acc V-Sagr	*!				*	
☞b.	S-erg O-acc V-Oagr			*	*		
c.	S-erg O-acc V-default		*!				
	INPUT: S O(nonspec) V(perf)						
d.	S-erg O-nom V-Sagr	*!				*	
☞e.	S-erg O-nom V-Oagr				*		*
f.	S-erg O-nom V-default		*!				
	INPUT: S O V(nonperf)						
☞g.	S-nom O-nom V-Sagr					*	*
h.	S-nom O-nom V-Oagr			*!	*		
i.	S-nom O-nom V-default		*!				

The reranking only affects the first input in (35).

6.3 Nepali, (Bengali)

EXP AGR is ranked highest.

(36) Nepali, (Bengali)

		EXP AGR	*OJ/AGR	*SU/AGR	*ERG/AGR *ACC/AGR *NOM/AGR
	INPUT: S O(spec) V(perf)				
☞a.	S-erg O-acc V-Sagr			*	*
b.	S-erg O-acc V-Oagr		*!		*
c.	S-erg O-acc V-default	*!			
	INPUT: S O(nonspec) V(perf)				
☞d.	S-erg O-nom V-Sagr			*	*
e.	S-erg O-nom V-Oagr		*!		*
f.	S-erg O-nom V-default	*!			
	INPUT: S O V(nonperf)				
☞g.	S-nom O-nom V-Sagr			*	*
h.	S-nom O-nom V-Oagr		*!		*
i.	S-nom O-nom V-default	*!			

Bengali has no subject marking at all, so although the ranking in (36) is identical for Bengali agreement, candidates with nominative subjects would be the winners.

7 The Typology of Variation in Maraṭhi Dialects

• The variation found in Indo-Aryan is also reflected in dialectal variation in Maraṭhi.
• The dialects of Maraṭhi discussed here derive from their historical ancestor, Old Maraṭhi (1000-1400 AD). The variation observed in these dialects turns out to be constrained by the typological features of Old Maraṭhi (OM).

7.1 Old Maraṭhi

• Old Maraṭhi OM and Middle Indo-Aryan (MIA) are identical w.r.t agreement; the verb agrees with the highest nominative argument.
• In OM, there is a syncretism between the ergative and the nominative marking of pronouns in the plural of the first and second person pronouns (like modern Gujarati). In contrast, in MIA, ergative and nominative pronouns are distinct throughout the paradigm.

7.2 The Dialect Data

Source: Volume VII of the Linguistic Survey of India (Grierson (1969)).

Generalization: the syncretism in the nominal paradigm of OM never reverts to a *more differentiated* or more MIA-like paradigm in any of its daughter dialects.

• a uni-directional promotion of the *STRUC constraint

7.2.1 Warhaḍhi Brahmaṇi, Akola

Most conservative, identical to OM both in terms of subject marking and agreement.

(37)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	mi	āmi
Perf	1	**myā**	āmi
Non-perf	2	tu	tumi
Perf	2	**tyā**	tumi
Non-perf	3	to	te
Perf	3	**tyā-na**	**tyā-ni**

• Identical in form to Modern Gujarati, but unlike Gujarati, does not permit agreement with overtly case-marked objects.

• Patterns with Modern Puṇe Marathi w.r.t. agreement.

7.2.2 Kõkaṇi, Savantwaḍi

Paradigm is structurally identical to the Warhaḍhi Brahmaṇi paradigm.

(38)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	hav	ami
Perf	1	**haven**	ami
Non-perf	2	tu	tumi
Perf	2	**tuven**	tumi
Non-perf	3	to	te
Perf	3	**tā-nen**	**ta-ni**

• Agreement pattern is identical to Gujarati: overtly marked objects can trigger agreement.

7.2.3 Standard Maraṭhi, Puṇe

Ergative marking is distinct only in the third person.

(39)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	mī	āmhī
Perf	1	mī	āmhī
Non-perf	2	tū	tumhī
Perf	2	tū	tumhī
Non-perf	3	to	te
Perf	3	**tyā-ne**	**tyā-nī**

• Agreement pattern like that of Hindi (and Warhaḍhi Brahmaṇi)

7.2.4 Gowari, Bhaṇḍara

Gowari has a nominal inflectional paradigm that is identical to the Puṇe dialect (Standard Maraṭhi) i.e. ergativity is distinctly marked only in the 3rd person.

(40)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	mī	āmiī
Perf	1	mī	īmī
Non-perf	2	tū	tumī
Perf	2	tū	tumī
Non-perf	3	to	te
Perf	3	**tyā-n**	**tyā-nnī**

However unlike Standard Maraṭhi, unmarked subjects of perfect clauses (i.e. 1st and 2nd person pronouns) trigger agreement.

(41) a. **mī** devā-javaḷ tudjyaa-sāmne pāp **ke-lo**.
I-NOM-SG God-near you-in-front-of sin-NEU-SG do-MAS-1-SG-PAST
'I committed a sin near God and in front of you.'

b. mag tyā-n baapā-lā **uttar** **di-lan**.
then he-ERG-SG father-DAT-SG answer-NEU-NOM-SG give-NEU-3-SG-PAST
Then he gave an answer to his father.'

Third person subjects of perfect clauses are overtly case-marked and do not trigger agreement.

7.2.5 Marheṭhi

Identical nominal case marking pattern as the Puṇe dialect (Standard Maraṭhi), in that overt ergative case is present only in the third person.

(42)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	mī	āmhī
Perf	1	mī	āmhī
Non-perf	2	tū	tumī
Perf	2	tū	tumī
Non-perf	3	to	te
Perf	3	**tyā-ni**	**tyā-nni**

• However, agreement is always with the subject (as in Nepali).

7.2.6 Dharwari, Dharwar

No morphological distinction between perfect and non-perfect transitive subjects in any person.

(43)

ASPECT	PERSON	NUMBER	
		singular	*plural*
Non-perf	1	mī	āmhī
Perf	1	mī	āmhī
Non-perf	2	tū	tumī
Perf	2	tū	tumī
Non-perf	3	to	tyāni
Perf	3	to	tyāni

• Dharwari shows agreement with the subject in person in perfect, transitive clauses, thus maintaining a nominative-accusative pattern of case and agreement marking in all its tenses and aspects.

• Like Bengali

8 Cross-Classification of the Maraṭhi Dialects

(44)

DIALECT	PATTERN	
	SUBJECT MARKING	AGREEMENT
WARHAḌHI BRAHMAṆI	*Gujarati*	*Maraṭhi*
KŌKAṆI	*Gujarati*	*Gujarati*
PUṆE	*Maraṭhi*	*Maraṭhi*
GOWARI	*Maraṭhi*	*????*
MARHEṬHI	*Maraṭhi*	*Nepali*
DHARWARI	*Bengali*	*Bengali*

8.1 Subject Marking

(45)

SUBJ MKG	DHARWARI	PUṆE	GOWARI	MARHEṬHI	WB	KŌKAṆI
1-SG	∅	∅	∅	∅	√	√
1-PL	∅	∅	∅	∅	∅	∅
2-SG	∅	∅	∅	∅	√	√
2-PL	∅	∅	∅	∅	∅	∅
3-SG	∅	√	√	√	√	√
3-PL	∅	√	√	√	√	√

8.2 Agreement Marking Typology

Dialects which group together with respect to subject marking patterns do not necessarily show similar agreement marking properties.

(46)

AGREEMENT	DHARWARI	GOWARI	MARHEṬHI	PUṆE	WAR.BRAH.	KŌKAṆI
AgrS (nom)	√	√	√	NA	NA	NA
AgrS (non-nom)	NA	∅	√	∅	∅	∅
AgrO (nom)	NA	√	NA	√	√	√
AgrO (non-nom)	NA	UN	NA	∅	∅	√

NA - not applicable

UN - data unavailable

9 OT Analysis of Dialectal Variation

(47)

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                      ←— *STRUC   (Dharwari, Haḷbi)
  *Su/3 & *φc
                      ←— *STRUC   (Puṇe, Gowari, Marheṭhi)
  *SYNCRET/SG
                      ←— *STRUC   (OM, Kōkaṇi, Warhaḍhi Brahmaṇi)
  *Su/loc & *φc
                      ←— *STRUC   (Hindi)
```

- *STRUC is never lower in any Marathi dialect than it is in Old Marathi (OM).

9.1 Subject-marking in Marathi Dialects

With respect to subject-marking:
- Dharwari is identical to the Bengali system;
- Puṇe and Marheṭhi are identical to the standard Marathi system;
- Kōkaṇi and Warhaḍhi Brahmaṇi are identical to Gujarati.
- Gowari is similar on the surface to Standard Marathi, but not in terms of abstract case.

OT analysis: the order of the two faithfulness constraints is switched, with CS-FS being high-ranked and FAITH-LEX$_{perf}$ being lower. As a result, Gowari does not retain abstract ergative case aside from when it is driven by overt morphology.

(48) **Gowari**

		CS-FS	*SU/3 & *φc	*STRUC	*SU/LOC & *φc	FAITH-LEX$_{perf}$
	INPUT: Subj(loc)					
a.	S-erg(overt)			*!		
☞b.	S-nom(ϕ)				*	*
c.	S-erg(ϕ)	*!			*	
	INPUT: Subj(3rd)					
☞d.	S-erg(overt)			*		
e.	S-nom(ϕ)		*!		*	
f.	S-erg(ϕ)	*!	*			

9.2 Agreement in Marathi Dialects

(49) Puṇe and Warhaḍhi Brahmaṇi (repeated from §6.1)

		*ERG/AGR *ACC/AGR	EXP AGR	*OI/AGR	*SU/AGR	*NOM/AGR
	INPUT: S O(spec) V(perf)					
a.	S-erg O-acc V-Sagr	*!			*	
b.	S-erg O-acc V-Oagr	*!		*		
☞c.	S-erg O-acc V-ϕagr		*			
	INPUT: S O(nonspec) V(perf)					
d.	S-erg O-nom V-Sagr	*!			*	
☞e.	S-erg O-nom V-Oagr			*		*
f.	S-erg O-nom V-ϕagr			*!		
	INPUT: S O V(nonperf)					
☞g.	S-nom O-nom V-Sagr				*	*
h.	S-nom O-nom V-Oagr			*!		
i.	S-nom O-nom V-ϕagr			*!		

(50) Gowari

		*ERG/AGR *ACC/AGR	EXP AGR	*OI/AGR	*SU/AGR	*NOM/AGR
	INPUT: S(3rd) O(spec) V(perf)					
a.	S-erg O-acc V-Sagr	*!			*	
b.	S-erg O-acc V-Oagr	*!		*		
☞c.	S-erg O-acc V-ϕagr		*			
	INPUT: S(3rd) O(nonspec) V(perf)					
d.	S-erg O-nom V-Sagr	*!			*	
☞e.	S-erg O-nom V-Oagr				*	*
f.	S-erg O-nom V-ϕagr			*!		
	INPUT:S(loc)O V(perf)/S O V(nonperf)					
☞g.	S-nom O-nom V-Sagr				*	*
h.	S-nom O-nom V-Oagr			*!		
i.	S-nom O-nom V-ϕagr			*!		

9.3 Recap

- No dialect 'adds' additional case distinctions not present in Old Marathi.

• Gowari fills a typological gap.

10   Discussion

• The agreement constraints apply to the output of the case constraints.

10.1   The Stipulations

The basic stipulations

(51) a. Some non-overtly case-marked NP's cannot trigger agreement. (Marāṭhi, Punjabi, Gujarati)

    b. Some overtly case-marked NP's can trigger agreement. (Nepali subjects, Gujarati objects)

Markedness constraints tell us that 1st and 2nd person pronouns and plural pronouns tend to syncretize more often that 3rd person or singular pronouns.

10.2   Expectations and Possibilities

Case 1: The constraint system proposed allows for a constraint ranking where there is no ergative case-marking and yet we have an ergative agreement paradigm.

(52)

(53) a. *STRUC$_c$ $\gg$ FAITH-LEX$_{perf}$ $\gg$ CS-FS

    b. *FAITH-LEX$_{perf}$ $\gg$ STRUC$_c$ $\gg$ CS-FS

    (the ordering of STRUC$_c$ and FAITH-LEX$_{perf}$ does not affect the output.)

It is unclear if such a system exists (within Indo-Aryan).

Case 2: A system where there is no overt ergative case-marking and we have person-based split ergativity: unattested.
Not clear that this can be generated with the above constraints.

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