Chapter 16

On mechanisms by which languages become [nominative-]accusative

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New Indo-Aryan languages are characterized by accusative (DOM) objects in ergative, perfective clauses. This paper traces the emergence of this ergative—accusative marking pattern with the goal of determining whether it is to be considered part of a single "de-ergativization" trajectory, in which languages gradually lose aspects of their ergative orientation in analogy to the non-ergative portion of the grammar. Data from Middle Indo-Aryan suggests that accusative marked objects — a deviation from the classic ergatively-oriented sub-system — cannot be analyzed in terms of the analogical extension of any existing nominative-accusative model or as a reduction of markedness. In contrast, the empirical facts of Indo-Aryan diachrony align better with the possibility that such deviations have to do with independent changes in the broader argument realization options for the language. This is consistent with Anderson's (1977; 2004) claim that a significant part of the explanation for ergativity-related patterns lies in patterns of diachronic change rather than abstract structural considerations of Universal Grammar.

1 Introduction

The term *ergative* is used to refer to a grammatical relation marking pattern in which the object of a transitive verb patterns with the single argument of an intransitive verb (surfacing with absolutive case), while the transitive subject patterns distinctly (surfacing with ergative case) (Dixon 1979; 1994; Comrie 1978; Plank 1979). It has sometimes been claimed that there is a clear asymmetry between the pervasiveness of ergative–absolutive vs. nominative–accusative marking systems across sub-domains of grammars in languages.

No ergative language is fully consistent in carrying through the ergative principle throughout its entire morphology, syntax, and lexicon: all languages that exhibit ergative patterning in their commonest case-marking system also exhibit some accusative pattern somewhere in the rest of their grammar. (Moravcsik 1978, p.237)



A possible way of interpreting this stated generalization is to take it to refer to the presence of accusative case-marking in ergative languages – that is, that every language with an ergative-nominative case marking or agreement pattern also exhibits a nominativeaccusative pattern in some subsystem of the grammar. However, this interpretation is clearly not borne out since several languages exist that have ergative case but lack accusative case marking altogether.¹ Coon & Preminger (to appear) interpret the above claim to mean that even in languages which show a high number of ergative characteristics, there can generally be found some portion of the grammar in which the ergative pattern is lost, and transitive and intransitive subjects are treated alike. In this case, the term "ergative pattern" seems to refer, not to surface morphological properties, but more broadly to syntactic properties like control and binding with respect to which the highest arguments of a clause may pattern alike. Split-ergativity is a term reserved specifically for morphological marking patterns and refers to the systematized occurrence of a mixed indexing system, which is ergatively organized in well-defined syntactic-semantic configurations with nominative-accusative marking elsewhere in the language. The question of how such systems arise in natural languages and change (or persist) through time, as well as the possible diachronic reasons for the parameters on which the split is based, can only be answered by an investigation of split-ergative languages for which we have some clear diachronic record available.

Anderson (1977, and later in 2004)has suggested that to the extent we have such information, changes involving ergative orientation seem to be "consequences of relatively superficial phenomena." According to him, ergative patterning is not a deep syntactic property of linguistic systems but rather an emergent effect arising from several distinct trajectories in the morphological systems of languages. In effect, there is no principle that determines an "ergative" or "accusative" pattern; rather languages may innovate or lose specific cases such as ergative or accusative, with such patterns arising more as emergent effects of the change and not as abstractly determined invariant objects. This paper examines one such emergent effect in trajectories associated with systems containing ergative case - the emergence of overt accusative (object) marking in ergative clauses. New data from Late Middle Indo-Aryan (MIA) and Early New Indo-Aryan (NIA) suggests that transitions resulting in deviations from the classic ergatively-oriented sub-system in a split ergative language cannot be analyzed uniformly in terms of the analogical extension of any existing nominative-accusative model or as a reduction of markedness. In contrast, the empirical facts of Indo-Aryan diachrony align better with the possibility that such deviations have to do with independent changes in the broader argument realization options for the language. This is consistent with Anderson's claim that a significant part of the explanation for ergativity-related patterns lies in patterns of diachronic change rather than abstract structural considerations of Universal Grammar (contra Delancey 1981; Dixon 1994; Tsunoda 1981).

¹ An anonymous reviewer points to languages like Chukchi, Tabassaran, Chamalal, Tzutujil, Central Yupik Eskimo, and Burushaski that lack an accusative case, and therefore lack nominative-accusative "patterning" in terms of case marking.

2 Morphosyntactic changes in Middle Indo-Aryan

2.1 The emergence of ergativity

One well-discussed source for ergative marking in natural languages is a passive clausal structure that gets reanalyzed as active. Oblique marking on the optionally surfacing agent is reanalyzed as ergative case while the unmarked subject of the passive clause surfaces as absolutive object, identical to the subjects of intransitive clauses. Indo-Aryan languages bear the most concrete diachronic record for such a passive—to-ergative shift scenario. In the history of these languages, a passive construction with resultative semantics was reanalyzed as an active, ergative clause with perfective aspectual reference at least by the time of Epic Sanskrit (Old Indo-Aryan (OIA)) and Early MIA (Andersen 1986; Peterson 1998; Condoravdi & Deo 2014 a.o.).² In the oldest Vedic texts, the *-ta-*affixed form of the verb serves to describe a result-state brought about by a preceding event when it is used predicatively in an adjectival passive construction. The *-ta* forms (bold-faced) in (1a) agree with the nominative patient while the agent remains unexpressed. In (1b), the agents and instruments are overtly expressed in the instrumental case.

- (1) a. stīr-ņám te barhíḥ su-tá
 strew-perf.n.sg you.dat.sg Barhis.nom.n.sg press-perf.m.sg
 indra sóma-ḥ kṛ-tấ dhānấ át-tave
 Indra.voc.sg Soma-nom.m.sg do-perf.m.pl barley.nom.m.pl eat-inf
 te hári-bhyāṃ
 you.gen.sg horse-dat.sg
 - 'The Barhis has been strewn for thee, O Indra; the Soma has been pressed (into an extract). The barley grains have been prepared for thy two bay-horses to eat.' (Rgveda 3.35.7)
 - b. nṛ-bhir dhū-táḥ su-tó áśna-iḥ áv-yo man-inst.pl wash-perf.m.sg press-perf.m.sg stone-inst.pl wool-gen.sg vára-iḥ páripū-taḥ filter-inst.pl strain-perf.m.sg

'It (the Soma) has been washed by men, pressed with the help of stones, strained with wool-filters.' (Rgveda 8.2.2)

As shown in (2), the *-ta* form agrees with the sole (nominative) argument of intransitive verbs. This results in a difference in the marking of the subject arguments of transitive and intransitive verbs. In (1) the verb does not agree with the instrumental agentive arguments. In (2), in contrast, the verb $\dot{s}ri-ta\dot{h}$ has a nominative subject soma and agrees with it in number and gender.

² The Indo-Aryan branch of Indo-European inherits the deverbal result stative form with the affix *-ta* (allomorph *-na*) (reconstructed for Indo-European as **-to/-no*). *-ta*, attested at all stages of OIA and MIA, attaches directly to the root, and the resulting stem is adjectival, inflecting for number and gender like any other adjectival forms.

(2) div-i somo adhi śri-taḥ heaven-loc.sg soma.nom.m.sg on rest-perf.m.sg 'Soma rests (is supported) in the heaven.' (Rgveda 10.85.1)

This resultative -ta construction (sometimes in periphrasis with tense auxiliaries) is the source of the ergative pattern observed in the perfective aspect in the later languages. In later stages of OIA, the construction was extended to marking the perfect aspect and it exhibited existential as well as universal perfect readings (Condoravdi & Deo 2014). By the time of Epic Sanskrit (late stage of OIA), the -ta construction became a frequently used device for marking past perfective reference. The agent argument in these cases is most frequently overt and marked with instrumental case. Past eventive reference is indicated by the presence of past referring frame adverbials like *purā* 'formerly' and *tadā* 'then'. Perfective clauses containing intransitive verbs occur with nominative subjects (3c). All the examples below are from the *Mahābhārata*, one of two epics that constitute the record for this stage of the language.

- (3) a. purā devayug-e ca eva dṛṣ-ṭaṃ sarvaṃ mayā formerly god.age-loc.sg and PTCL see-PERF.N.sg everything I-INST.sg vibho lord-voc.sg 'Lord, formerly, in the age of the Deva (Gods), I saw everything.'
 - b. hṛ-tā gau-ḥ sā tadā t-ena steal-perf.f.sg cow-nom.f.sg that-nom.f.sg then he-inst.3.sg prapāta-s tu na tark-itaḥ fall-nom.m.sg ptcl neg consider-perf.m.sg

(*Mahābhārata* 3.92.6a; Deo 2012)

'Then he *stole* that cow, but *did* not *consider* the fall (consequences).' ($Mah\bar{a}bh\bar{a}rata$ 1.93.27e; Deo 2012)

c. jaratkāruḥ ga-taḥ svarga-ṃ sahitaḥ Jaratkāru.NOM.M.SG gO-PERF.M.SG heaven-ACC.SG accompanied sva-iḥ pitāmaha-iḥ self-INST.M.PL ancestor-INST.M.PL 'Jaratkāru went to heaven accompanied by his ancestors.' (Mahābhārata 1.130.43c)

The main change between Epic Sanskrit (OIA) and the later MIA stage of the language concerns the erosion and simplification of the rich tense-aspect system (Pischel 1900; Bloch 1965). Inflectional past referring forms such as the aorist, the inflectional perfect, and the imperfect disappeared from the language, leaving the *-ta* construction as the only past referring device.³ This loss of the inflectional system has often been cited as a reason for the increase in the frequency and scope of the participial construction, which

³ Traditional grammarians do provide instances of the inflectional perfect and the aorist during this period, but they only occur as isolated, unanalyzed forms for a few verbs like āha-'say-Aor' and akāshi -'do-Aor'.

in turn led to the unmarking of the stative nature of the construction. The change to an ergative alignment was certainly complete at the Mid to Late MIA stage (Hock 1986; Bubenik 1998). The examples below from an archaic MIA Mahāraṣṭrī text *Vasudevahimḍī* (ca. 500 AD) shows this ergative alignment. The verb agrees with the nominative subject in (4a). In (4b) the verb agrees with the nominative marked object while the agentive argument ('that running one') appears in the instrumental.

(4) a. pat-to ya seṇiyo rāyā ta-m reach-perf.m.sg and Seṇiya.nom.m.sg king.nom.m.sg that-acc.sg paesa-m place-acc.sg

'And King Seṇiya reached that place.' (Vasudevahiṃḍī KH. 17.1)

b. t-eṇa palāyamāṇ-eṇa purāṇakuv-o that-INST.sg running-INST.sg old.well-nom.m.sg
taṇadabbhaparichinn-o diṭ-ṭho grass.covered-nom.m.sg notice-perf.m.sg

'That running one noticed an old well covered with grass.' (Vasudevahiṃḍī KH. 8.6)

Indo-Aryan diachrony after the MIA stage has often been characterized as involving a progressive loss of ergative alignment and gradual drift towards a nominative-accusative marking in perfective clauses. There are three observed ways in which the descendent systems deviate from the proto-ergative system of MIA: (a) Loss of ergative morphology in pronominal and nominal paradigms⁴; (b) Subject agreement (replacing or in addition to object agreement); (c) Accusative marking on a privileged class of objects, i.e. the spread of differential object marking.

It is logical to think of the implementation of any of these changes independently or together as the "de-ergativization" of an ergative system in analogy to the non-ergative portion of the grammar. Indeed, the patterns seen in individual NIA languages, such as suppression of overt ergative case (e.g. in Old Hindi and Marathi); nominative subjects (e.g. in Bangla) and agreement with overt ergative subject (e.g. in Nepali) are all analogizable to existing marking patterns in the language such as unmarked subjects, nominative subjects, and subject agreement. However, the emergence of accusative marking on objects of transitive, perfective clauses poses a puzzle for a straightforward analogical

⁴ In fact, data from some Early NIA languages, e.g. Hindi, reveals that the original instrumental marking observed on transitive subjects for the MIA ergative system is entirely lost for *all* nominal and pronominal expressions in some stages of Indo-Aryan. The ergative pattern of agreement is nevertheless retained. The example in (i) is from the work of Kabir, a poet from the 15th century CE. There is no overt ergative marking on the 3rd person subject but the agreement on the verb is with the feminine object argument (explicit or unpronounced) *chādar* 'sheet'.

 ⁽i) jo chādar sura-nara-muni oḍh-i
which sheet.NOM.F.SG gods-men-sages. ØERG wrap-PERF.F.SG
 'Which sheet the Gods, men, and sages, all wore, (that sheet)...'

extension narrative for de-ergativization. The puzzle arises from the evolution of case marking in MIA, to which we now turn.

2.2 Syncretism in nominal case marking

A critical change between the OIA and MIA stages, particularly in the Late MIA period, is the restructuring of the nominal case system. Notable here is the loss of morphological contrast between nominative and accusative as well as between the genitive and the dative cases. The syncretized set of case-endings for full nouns are given in Table 1.

	Singular	Plural
Nominative/Accusative Instrumental/Ergative	-и, а, ат -ет, іт, hе, hі	-a, aĩ -e(h)ĩ, ehi, ahĩ
Ablative	-hu, ahu, aho	-hũ, ahũ
Genitive/Dative Locative	-ho, aho, ha, su, ssu -i, hi, hiṃ	-na, hã -hĩ

Table 1: Case-endings for full nouns.

Table 2 contains an example of inflected -a stems with the noun putta 'son'.

Stem	Case	Singular	Plural
a-stems	Nominative/Accusative	putt-u	putt-a
	Instrumental/Ergative	putt-eṃ	putta-him/ehim
	Genitive/Dative	putt-aho/ahu	putta-ham

Table 2: Inflected *a*-stems with *putta* 'son'.

The pronominal system retains more contrasts and syncretism between the nominative and accusative is observed only in the plural sub-part of most pronominal paradigms. Table 3 (culled from Clercq 2010) provides inflectional forms for some pronominal expressions to illustrate.

The loss of contrast between the nominative and accusative cases in most paradigms in a relatively free-word order language leads to heavy reliance on semantic cues from the linguistic material to determine grammatical relations. Consider the following examples from the *Paumacariu*, an 8th century text in verse, to illustrate the syncretic nominative-accusative marking (glossed NOM).⁵ In (5), a sequence of parallel clauses,

⁵ This is a Jaina rendition of the Epic Sanskrit text *Rāmāyana*. The edition used is the H.C. Bhayani edition published by the Bharatiya Vidya Bhavan between 1953 and 1960. The text is available in searchable electronic format, input by Eva De Clercq at Ghent University. The reason for using a late MIA text is to identify properties of the system that is as close to the grammars of the Early NIA system as possible.

Stem	Case	Singular	Plural
1st pronoun	Nominative	hauṃ	amhẽ, amhaiṃ
	Accusative	mai(ṃ)	amhẽ, amhaiṃ
	Genitive/Dative	mahu, majjhu	amha, amhaha
2nd pronoun	Nominative	tuhuṃ	tumhẽ
	Accusative	paiṃ, taiṃ	tumhẽ
	Genitive/Dative	tahu, tujjha	tumha, tumhaha
3rd pronoun MASC;FEM	Nominative Accusative Genitive/Dative	so, su; sā taṃ; sā taho, tahu; tāhe	te, tāu te; tāu tāhaṃ; tāhaṃ

Table 3: Inflectional forms for pronominals.

whether the first-occurring nominative expression realizes the grammatical subject or the grammatical object is determined by the meaning of the clause.⁶ In (6), the relative pronoun, which refers to a human participant, disambiguates the grammatical structure.

- (5) #kim tamu han-ai na vālu ravi# QUES darkness.Nom.sg destroy-IMPF.3.sg NEG young sun.Nom.sg #kim vālu davaggi na dah-ai QUES young fire.NOM.SG NEG burn-IMPF.3.SG forest.NOM.SG #kim kari dal-ai na vālu **hari**# QUES elephant.NOM.SG shatter-IMPF.3.SG NEG young lion.NOM.SG #kim vālu na daīk-ai uragamanu# QUES young 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?' (Paumacariu 2.21.6.9)
- (6) **jo** ghañ nisi-bhoyanu ummah-ai who.rel.nom.m.sg ptcl night.loc-meal.nom.m.sg give.up-impf.3.sg vimalattanu vimala-gottu spotless.body.nom.m.sg spotless.name.nom.m.sg attain-IMPF.3.sg 'One who gives up eating in the evening (he) attains a spotless body and name.' (*Paumacariu* 2.34.8.8)

Accusative marking is clearly visible only on first and second person singular pronouns in imperfective clauses as shown in the examples in (7).

⁶ The #...# marks clause boundaries in the sequence.

- (7) a. suggīu deva **paiṃ** sambhar-ai
 Suggiu.Nom.m.sg deva.nom.m.sg you.acc.sg remember-impf.3.sg
 'Lord Suggiu remembers you.' (*Paumacariu* 3.45.10.8)
 - b. jai na vihāṇa-e paim vandhāv-ami if NEG tomorrow.Loc.sg you.Acc.sg bind-impf.1.sg
 'If I do not capture you tomorrow...' (Paumacariu 3.49.20.3)
 - c. jo maiṃ muevi aṇṇu who.rel.nom.m.sg I.acc.sg besides another.nom.m.sg jayakār-ai adore-ɪmpf.3.sg

'(The one) who adores another one besides me...' (Paumacariu 2.25.1.9)

Syncretism rooted in sound change is also observed between the nominative and instrumental forms (the case form that gets re-interpreted as ergative when appearing with agentive arguments in perfective clauses) of the first and second person plural pronouns as in Table 4.

Aspect	Person -	Number		
		Singular	Plural	
Non-perf	1	hauṃ	amhaĩ/amhẽ	
Perf	1	maiṃ	amhaĩ/amhẽ/amhe-hiṃ	
Non-perf	2	tuhuṃ	tumhaĩ/tumhẽ	
Perf	2	taiṃ	tumhaĩ/tumhẽ/tumhehiṃ	
Non-perf	3	so	te	
Perf	3	teṃ, teṇẽ	tehĩ/tāhaṃ	

Table 4: Nominative and instrumental pronominal forms.

Despite this syncretism, agreement is uniformly with the nominative argument – with the nominative object in constructions based on the *-ta* form and with the nominative subject elsewhere. The examples in (8) illustrate this pattern with the first and second person plural pronouns $amh\tilde{e}$ and $tumh\tilde{e}$. (8a) contains the syncretized pronoun $amh\tilde{e}$ which triggers agreement in the imperfective aspect while the same form fails to trigger agreement in (8b). In (8c) the second person plural syncretic form used in an imperative clause triggers agreement while it fails to trigger verb agreement in the perfective (8d).

(8) a. amhē jāe-va vaṇavāsa-ho
we.syncr go-impf.1.pl forest.dwelling-dat.sg
'We are going to our forest-exile.' (*Paumacariu* 2.23.14.3)

- b. ki-u amhē ko avarāh-o do-perf.m.sg we.syncr what crime-nom.m.sg 'What crime have we done?' (*Paumacariu* 1.2.13.9)
- c. jiha sakk-aho tiha utthar-aho **tumhẽ** 'Save in.which.way can-imp.2.pl in.that.way save-imp.2.pl you.syncr.pl yourselves in the way that you can.' (*Paumacariu* 5.82.12.4)
- d. tumhẽ jaṃ cint-iu taṃ you.syncr.sg what.rel.m.sg think-perf.m.sg that.correl.m.sg hū-a happen-perf.m.sg

'That, which you thought (would happen), happened.' (Paumacariu 3.47.9.6)

These patterns of syncretization within the nominal inflectional system of MIA are difficult to reconcile with a story in which there is a straightforward extension of an existing alignment pattern in the language to a marked sub-system of the grammar. Although there is a contrast between the nominative and accusative cases in MIA, it is exhibited only in selected parts of the pronominal system (a subset of the singular pronouns) and therefore seems to be rather weak evidence for extending the accusative marking pattern to ergative clauses. A reviewer argues that the regular presence of such a case-marking pattern in imperfective clauses, however limited in terms of its application, should not be seen as "weak" evidence for a nominative accusative pattern. I concede that it is indeed theoretically possible that the pattern observed in a small subset of imperfective non-ergative clauses gets extended to perfective, ergative clauses. However, neither existing grammars of MIA (Pischel 1900; Vale 1948; Clercq 2010) nor an examination of the textual data indicate any presence of accusative marked object arguments in perfective transitive clauses at this stage in the language. Even pronominal objects (9a)-(9b) and human-denoting full noun phrase objects (9c)-(9d) of canonical transitive verbs, which obligatorily appear with overt accusative marking in the NIA languages, are uniformly marked nominative at this stage.⁷

- (9) a. haum nikkārane ghall-iya rām-em I.Nom.sg without.reason drive.out-perf.f.sg Rām-erg.sg 'Rām drove me out (of Ayodhya) without any reason.' (*Paumacariu* 5.81.13.8)
 - b. cakkesar-eṇa kema tuhũ di-tṭhī
 Cakkesara-ERG.M.SG how you.NOM.SG see-PERF.F.SG
 'How were you noticed by Cakkesara (Rāvana)?' (Paumacariu 2.4.2.1.5)
 - c. viṇivār-iu **rāvaṇu** rāhav-eṇa dissuade-PERF.M.SG rāvaṇa.NOM.M.SG rāhava-ERG.M.SG 'Rāhava (Rāma) dissuaded Rāvaṇa' (*Paumacariu* 4.66.14.6)

⁷ Thus, there are no positive instances with pronominal forms maim, taim, tam etc. being used instead of haum, tuhum, or so/su etc. in ergative clauses with pronominal objects at even the latest stages of Middle Indo-Aryan.

d. di-ṭṭhu jaṇaddaṇu rāhavacand-eṃ see-PERF.M.SG jaṇaddaṇa.NOM.M.SG rāhavacanda-INS.SG 'Rāhavacanda saw Janaddana.' (*Paumacariu* 2.29.8.1)

Moreover, no language of the later stage (Early NIA) has an ergative-accusative marking pattern which uses the pronominal forms of late MIA in ergative clauses that accusative marking on objects. While the issue needs to be more closely investigated, it seems reasonable to look for an alternative source for accusative marking in ergative clauses than the template offered by MIA.

3 Differential object marking: A New Indo-Aryan innovation

The previous subsection established that accusative marking of the MIA variety is both weakly present and shows no evidence of being extended to perfective ergative clauses at later stages of Indo-Aryan. This leaves the possibility that the incidence of object marking in ergative clauses – a pervasive phenomenon in the Modern NIA languages – begins with the Differential Object Marking pattern – which is considered to be an NIA innovation. Differential Object Marking (henceforth DOM) in Indo-Aryan languages is sensitive to animacy and referentiality features of arguments. It is obligatory on 1st and 2nd pronominal objects, and on 3rd person animate-denoting pronominals. It is optional with animate-denoting full NPs where the absence of object marking correlates with a non-referential interpretation of the NP. In the Modern NIA languages, this semantically driven pattern of object marking does not distinguish between ergative and non-ergative clauses; i.e. the case marking on objects is entirely independent of any overt or covert presence of case on the subject.

Logically, one can imagine two ways in which an ergativity-insensitive object marking pattern can emerge in a system. It could be that the DOM pattern first emerges in Late MIA or Early NIA in non-ergative clauses. Such a pattern is then later extended analogically to ergative clauses as part of the de-ergativization trajectory characterizing Indo-Aryan diachrony. The second possibility is for the DOM pattern to emerge simultaneously in both ergative and non-ergative clauses and gradually extend to different classes of verbs. On this latter scenario, the presence of DOM in ergative clauses is not part of the larger de-ergativization trajectory that characterizes NIA diachrony, but rather attributable to independent developments that introduce overt marking on direct objects into the case system. The empirical facts of Late MIA and Early NIA texts support the second scenario. In what follows, I will suggest that the emergence of DOM in both ergative and non-ergative clause types of MIA amounts to the extension of an inherited OIA marking pattern observed with the class of so-called "double object" verbs.

⁸ The effects on agreement in languages which exhibit such a changed case-marking pattern may be different. In Modern NIA we see both default agreement in ergative clauses when both subject and object are case-marked (e.g. in Hindi, Marathi) or continued object agreement despite overt accusative marking on the object (e.g. in Gujarati, Marwari).

3.1 Double object verbs in Old Indo-Aryan

A class of verbs in OIA exhibits a double object pattern in which the theme or goal and another participant of the denoted event are marked in the accusative case. Semantically, this is a diverse class and includes at least the subclasses in Table 5.

Class	Verbs
Verbs of speaking	brū 'speak', vac 'say', kath 'tell'
Verbs of asking	pṛcch 'ask', yāc 'request, solicit', bhikṣ 'beg', prārth 'plead'
Verbs of teaching	upa-diś 'teach', anu-śās" 'teach', ā-diś 'direct'
Causatives of some transitives	khād-aya 'cause to eat', pā-yaya 'cause to drink', darś-aya 'cause to see', śrāv-aya 'cause to hear'
Miscellaneous ditransitives	$j\bar{\imath}$ 'win, duh 'milk', $dand$ 'punish', $n\bar{\imath}$ 'lead'

Table 5: Double object verbs in Old Indo-Arvan.

(10) contains examples from OIA (Epic Sanskrit) involving verbs of speaking in imperfective, non-ergative clauses. In (10a), the pronominal denoting the addressee if the verb of speaking event $tv\bar{a}m$ is accusative as is the information communicated, $nidar\acute{s}anam$ 'the teaching'. (10b), from a proximal location in the text, is similar.

(10)a. atas tvā-m kathay-e karna nidarśan-am hence you-ACC.sG tell-IMPF.1.sG karna.voc.sG teaching-ACC.N.sG punah this.Acc.N.sg again 'Hence, O Karna, I tell you this teaching (advice) again.' (Mahābhārata 8.28.8e) b. śalyo 'brav-īt punah karn-am śalya.nom.m.sg speak-impfct.3.sg again karna-acc.m.sg nidarśan-am udāhar-an teaching-ACC.N.SG announce-PART.NOM.M.SG

An alternative realization for pronominal animate-denoting higher arguments of double object verbs is as DAT/GEN clitics.

'Śalya again spoke out his advice to Karna' (*Mahābhārata* 8.28.1c)

(11) a. hanta **te** kathay-iṣy-āmi nām-āni iha PTCL you.DAT/GEN.CL tell-FUT-1.SG name-ACC.N.PL here manīṣi-ṇām wise-one-gen.m.pl

'Ah, I will tell you the names of the wise ones.' (Mahābhārata 1.48.4a)

b. ... īś-ate bhagavān ekaḥ saty-am reign-impf.3.sg Lord.nom.m.sg alone.nom.m.sg truth.acc.n.sg etad brav-īmi te this.acc.n.sg speak-impf.1.sg you.dat/gen.cl

'The Lord alone reigns [over time and death and this universe of mobile and immobile objects], this truth I tell you.' (*Mahābhārata* 5.66.13c)⁹

In ergative, perfective clauses, this higher argument may surface variably: either as the nominative subject of the passivized verb form (examples in (12)) or as a DAT/GEN marked clitic pronoun (examples in (13)).¹⁰

- (12) a. uk-to rātr-au mṛg-air as-mi speak-perf.m.sg night-loc.sg animal-inst.pl be-impf.1.sg 'I was spoken to by the beasts at night.' (Mahābhārata 3.244.11a)
 - b. ta-yā... śr-āv-ito vacan-āni **saḥ** she-ins.sg hear-caus-perf.m.sg word-acc.n.sg he.nom.sg 'He was made to hear (these) words by her.' (*Mahābhārata* 2.2.6a)
 - c. sa mayā varadaḥ kām-aṃ he.NOM.M.SG I.INS.SG boon.granting.NOM.M.SG desire-ACC.M.SG yāc-ito dharmasaṃhit-am solicit-PERF.M.SG virtue.bound-ACC.M.SG 'He, the boon-granting one, was solicited by me for (fulfilling my) virtuous desire.' (Mahābhārata 1.78.3c)
- (13) a. sāṃkhyadarśan-am etāvad uk-taṃ **te**sāṃkhyadarśan-nom.n.sg so far speak-perf.n.sg you.dat/gen.sg
 nṛpasattama
 best.king.voc.sg
 'Thus far, the Sāṃkhyadarśana was spoken to you, O best of kings.'
 (Mahābhārata 12.295.1a)
 - b. tad etat kath-itaṃ sarv-aṃ mayā **vo**thus, this.nom.n.sg tell-perf.n.sg all-nom.n.sg I.ins.sg you.dat/gen.pl
 munisattamāḥ
 great.sage.voc.pl

'Thus, I have told you all this, O great sages.' (*Mahābhārata* 1.20.12a)

⁹ The previous line of verse completes the translation: kālasya ca hi mṛtyoś ca jangamasthāvarasya ca (Mahābhārata 5.66.13a)

¹⁰ In (12a), the passivized subject is covert and the nominative case marking of the pro-dropped subject is inferred from the agreement on the auxiliary verb asmi.

- c. upadiṣ-ṭo hi **me** pitr-ā yogo
 teach-PERF.M.SG PTCL I.DAT/GEN.CL father-INST.3.SG method.NOM.M.SG
 'nīka-sya bhedan-e
 array-GEN.M.SG penetration-LOC.N.SG

 'The method of penetrating into this (military) array has been taught
 - 'The method of penetrating into this (military) array has been taught to me by my father.' (*Mahābhārata* 7.34.19a)
- d. brahmacary-am idaṃ bhadr-e mama celibacy-nom.n.sg this good.lady-voc.sg I.gen.sg dvādaśavārṣik-am dharmarāj-ena ca ādiṣ-ṭaṃ twelve.years-nom.n.sg Dharmarāja-ins.sg and command-perf.n.sg 'Good lady, this twelve-year celibacy has been commanded of me by Dharmarāja.' (Mahābhārata 1.206.21a-c)

The argument realization pattern illustrated in (11) and (13), where the higher argument of a double object verb surfaces with dative or genitive marking in both ergative and non-ergative clauses, is fairly robust in OIA. The alterations to the nominal case system in MIA described in Section 2.2, have no effect on this pattern, since the syncretized DAT/GEN remains available for overt marking throughout the period. Crucially, given the organization of the MIA case system, this dative/genitive marking is the only reliably present overt marking on non-subject arguments in both ergative and non-ergative clauses at this later stage. Based on the data from MIA, it seems most reasonable to conjecture that this template triggers the reanalysis of DAT/GEN as accusative marking on a subset of direct objects.

3.2 Double object verbs in Middle Indo-Aryan

In (14) are given examples of the OIA double object verbs in their MIA incarnations. Notice that themes surface with the syncretized nominative–accusative case (glossed NOM) while the non-theme higher argument (the addressee of the speech verb in (14a)–(14b) and the causee in (14c)) appear with the syncretized DAT/GEN marking.¹¹

- (14) a. sabbhāv-eṃ rāma-ho kah-ai ema goodwill-INS.SG rāma-DAT/GEN.SG tell-IMPF.3.SG this.NOM.N.SG 'He said this to Rāma with goodwill.' (*Paumacariu* 2.40.13.7)
 - b. mārui kah-ai vatta valadeva-ho
 Mārui.Nom.sg tell-impf.3.sg news.nom.sg valadeva-dat/gen.sg
 'Māruti told the news to Valadeva.' (*Paumacariu* 3.55.9.1)
 - c. ta-ho daris-āv-ami ajju jamattaņu he-dat/gen.sg see-caus.impf.1.sg now yama.prowess.nom.n.sg
 'Now, I will show him the prowess of Yama (the god of death).' (*Paumacariu* 1.11.10.6)

^{11 (14}a) and (14c) have subject pro-drop.

A look at perfective, ergative clauses in MIA containing double object verbs reveals overt DAT/GEN marking on the non-theme argument and unmarked themes. (15a) contains the causative of a perception verb, while (15b)–(15c) contain verbs of speaking. Just like OIA, there is no difference between ergative and non-ergative clauses vis-à-vis the realization of non-subject arguments.

- (15) a. paḍ-e paḍima... sīya-he... daris-āv-iya screen-loc.sg image.nom.f.sg Sita-dat/gen.sg see-caus-perf.f.sg bhāmaṇḍala-ho
 Bhāmaṇḍala-dat/gen.sg

 '(He) showed the image of Sita on a screen (painting) to Bhāmaṇḍala-dat/gen.sg
 - '(He) showed the image of Sita on a screen (painting) to Bhāmaṇḍala.' (*Paumacariu* 2.21.8.9)
 - b. kah-iu āsi **ma-hu** parama-jiṇind-eṃ tell-perf.m.sg be.pst.3.sg I.dat/gen.sg great-Jinendra-erg.m.sg 'The great Jinendra told (this) to me.' (*Paumacariu* 1.1.12.8)
 - c. ta-ho maim parama-bheu ehu you.dat/gen.sg I.erg.sg great.secret.nom.sg this.nom.sg akkh-iya tell-perf.n.sg

'I have told you this great secret.' (Paumacariu 1.16.8.9)

In addition to the non-theme arguments of double object verbs, the syncretized DAT/GEN marking also appears on possessor and goal arguments of standard ditransitives (examples in (16)) and on themes of verbs that describe a reciprocal experience (examples in (17)).

- (16) a. **kikkindha-ho** ghall-iya māla tāe kikkindha-dat/gen.sg put-perf.f.sg garland.f.sg she.erg.sg 'She garlanded Kikkindha (lit. put a garland on)' (*Paumacariu* 1.7.4.1)
 - b. paripes-iu lehu pahāṇā-ho aṇaraṇṇa-ho send-perf.m.sg letter.nom.m.sg chief-dat/gen.sg Anaraṇṇa-dat/gen.sg ujjha-he rāṇā-ho Ayodhyā-dat/gen.sg king-dat/gen.sg
 '(He) sent a letter to Anaranya, the king of Ayodhya' (Paumacariu 1.15.8.4)
 - c. aṅgutthala ṇav-evi samapp-iu tāvahñ mahu finger.ring.nom.m.sg bow-ger hand-perf.m.sg then I.dat/gen.sg cūḍāmaṇi app-iu precious.gem.nom.m.sg give-perf.m.sg '(After) I handed her the finger ring, having bowed to her, (she) gave m

'(After) I handed her the finger ring, having bowed to her, (she) gave me this precious gem.' (*Paumacariu* 3.55.9.7)

- d. diṇṇa kaṇṇa maiṃ dasaraha-taṇay-aho give-perf.f.sG daughter.nom.f.sG I.erg.sG dasaraha-son-dat/gen.sG 'I have given my daughter to the son of Dasaraha (Daśaratha).' (*Paumacariu* 2.21.11.4)
- (17) a. salil-u samudd-aho jiha milai water-nom.sg ocean-dat/gen.sg as meet-impf.3.sg 'Just as the water meets the ocean' (*Paumacariu* 3.56.1.12)
 - tāvehñ gayaṇa-ho oar-evi añjaṇa-he vasantamāla then, sky-abl descend-ger Añjanā-dat/gen.sg Vasantamāla.nom mil-iya meet-perf.f.sg
 'Then, having descended from the sky, Vasantamālā met Añjanā.' (Paumacariu 1.19.8.10)

Critically, the syncretized DAT/GEN marking is the only reliable signal of non-subject arguments in MIA and it appears without discernible difference in distribution in both ergative and non-ergative clauses. It does not however appear, for the most part, on theme/patient arguments of canonical transitive or ditransitive verbs – animate or otherwise. (18a)–(18b) are examples of ergative clauses with animate-denoting subjects while (18c) contains a non-ergative clause.

- (18) a. hā vahue-vahue mañ bhantiy-ae **tuhũ**alas bride.voc I.erg.sg unthinking-INST.sg you.nom.sg
 ghall-iya aparikkhantiy-ae
 drive.out-perf.f.sg without.testing-erg.f.sg
 'Alas, O bride, I drove you out without testing you in any way.' (*Paumacariu* 1.19.15.7)
 - b. ni-u tihuaṇa-paramesaru tettahe sapparivāru take-perf.m.sg three.worlds.lord.nom.m.sg there with.family.nom.m.sg purandaru jettahe purandara.nom.m.sg where '(She) took the lord of the three worlds there where Purandara was with his family.' (Paumacariu 1.2.2.8)
 - c. muṇivara ghall-es-ai rajjesar-u sage.NOM.M.PL drive.out-FUT-3.sG king-NOM.SG

 'The king will drive out the sages.' (*Paumacariu* 2.35.9.1)

3.3 The emergence of DOM

The key suggestion I make here is that the Indo-Aryan differential object marking pattern emerging between late MIA and Early NIA amounts to the generalizing reanalysis of syncretic dat/gen marking on non-subject non-theme arguments as accusative marking

on (a privileged class of) objects. The data that provide evidence to enable such a reanalysis are clauses containing double object and other ditransitive verbs which either have implicit (non-overt) theme arguments or where the arguments (in the case of verbs of speech) are propositional. Such clauses are not very frequent but they do occur quite reliably in MIA. Examples of non-ergative clauses are given in (19) and ergative clauses are in (20).

- (19) a. akkh-ai sīya **samīraṇa-putt-aho** tell-impf.3.sg Sita.nom.sg Samīraṇaputta-dat/gen.sg 'Sita told Samīraṇa-putta (this).' (*Paumacariu* 3.50.10.7)
 - b. kahai mahārisi gayaṇa-gai say-impf.3.sg great.sage.nom.m.sg sky.traveling.nom.m.sg taho lavaṇ-aho samar-e samatth-aho that.dat/gen.sg Lavaṇa-dat/gen.sg battle-loc.m.sg capable-dat/gen.sg 'The great sage said to that Lavaṇa, who was capable in battle (thus).' (*Paumacariu* 5.82.8.9)
- (20) a. aṭṭhāvaya-giri-kampāvaṇ-aho paḍihār-eṃ akkh-iu eight.regions.trembling-dat/gen.sg messenger-erg.sg tell-регг.м.sg rāvaṇ-aho

rāvana-dat/gen.sg

vijaya-king-dat/gen.sg

'The messenger told (this) to Ravana, who was capable of causing the eight territories (*aṣṭapada*) to tremble.' (*Paumacariu* 1.15.4.1)

b. to **pamiṇipura-paramesar-aho** daris-āv-iya then pamiṇipura-lord-dat/gen.sg see-caus-perf.m.pl vijaya-mahīhar-aho

'They showed (the boys) to the lord of Pamiṇipura (Padminipura), the king Vijayaparvata.' (*Paumacariu* 2.33.2.1)

c. añjaṇ-ahe samapp-iu jāya dih-i
Añjanā-DAT/GEN.SG hand-PERF.M.SG birth day-LOC.SG
 'They handed him (the baby Hanumān) to Añjanā on the day of his birth.'
(Paumacariu 1.19.11.6)

In clauses such as those in (19) and (20), the only overt non-subject argument carries DAT/GEN marking. Moreover, this pattern of marking does not differentiate between whether the subject carries ergative marking or is unmarked (nominative).

Consider a learner that must arrive upon the case inventory of a language based on the observable input. The MIA system provides reliably present morphological evidence for nominative, ergative, and dative/genitive case but no reliable evidence for accusative case. It also provides robust data in which the only non-subject argument overtly expressed in a clause carries case marking (the syncretic dat/gen marking). It is possible that the learner takes this subset of data as evidence for extending the dat/gen marking,

reserved for non-theme arguments, to theme and patient arguments as well. The Differential Object Marking pattern evidenced in Early NIA emerges because the analogical extension of the overt DAT/GEN marking is constrained by the semantic properties associated with the original class of arguments marked by it – animacy and referentiality. If this hypothesis is correct, then we expect that there may be early data supporting this extension of DAT/GEN case marking to direct objects – in effect, the reanalysis of dative marking as accusative case, restricted to arguments meeting the criteria of high animacy and referentiality.

In the previous subsection, it was claimed that as far as the MIA stage is concerned, direct arguments of canonical transitive verbs do not, for the most part, surface with DAT/GEN marking (examples in (18)). The caveat was provided precisely because the MIA stage itself seems to exhibit some data which is possibly analyzable as emergent DOM. The tentativeness with which this claim can be made emerges from three uncertainties about the data: (a) Although the lexical verbs appearing with the DAT/GEN marked objects arguably have an argument structure corresponding to transitive verbs and their translational equivalents in English are realized as canonical transitives, given the semantics of these verbs, it seems possible that they pattern either with ditransitives or with "reciprocal" verbs" or with intransitives having accusative goal arguments in Sanskrit. Thus, it is necessary to investigate more closely whether these cases are early DOM-instances or whether they should be reclassified as exhibiting previously occurring patterns (b) The object-marking pattern is very infrequent outside of the class of double-object verbs, other ditransitives, and "reciprocal verbs". (c) There is absolutely no example of perfective clauses with ergative subjects in which the object appears with DAT/GEN marking.

It is possible therefore that the human-denoting DAT/GEN marked NPs in the data below are not the theme/patient arguments in a standard transitive template as they appear to be; they may be better analyzed as recipient or goal arguments. I will leave the adjudication of this issue for further research. But regardless of their status, they provide further surface evidence to the language acquirer for an object marking case "accusative" in the language.

In (21) and (22), we see that the human-denoting non-subject arguments of the transitive verbs *khama* 'forgive', *pekkha* 'look at', *garaha* 'denounce, curse', *abhiṭṭa* 'attack', *dhukka* 'approach' and *bhiḍ* 'battle' appear with DAT/GEN marking. The examples in (21) contain non-perfective clauses ((21b) is an imperative) while those in (22) illustrate the argument realization pattern in perfective clauses.

- (21) a. ekkavāra **ma-hu** khama-hi bhaḍār-ā one.time I-DAT/GEN.SG forgive-IMP.2.G warrior-voc.sG
 - 'O warrior (Lakshmana), please forgive me one time' (Paumacariu 3.44.4.7)
 - b. sundari pekkhu pekkhu **jujjh-ant-aho** beautiful.one.voc.sg see.imp.2.sg fight-part.dat/gen.sg
 - 'O beautiful one, look at the battle.' (Paumacariu 2.31.12.3)

- c. ema jāma garah-anti **jiṇind-aho** āsaṇu
 thus when denounce-IMPF.3.PL jiṇinda-DAT/GEN.SG seat.NOM.M.SG
 cal-iu tāma dharaṇind-aho
 shake-PERF.M.SG then dharaṇinda-DAT/GEN.SG
 'When they were denouncing Jininda thus, the seat of Dharaninda started to
- shake.' (*Paumacariu* 1.2.14.5)

 d. ham abbhiṭṭ-ami dūsaṇ-aho
 I.NOM.SG attack-IMPF.1.SG Dūsaṇa-DAT/GEN.SG
 'I will attack Dūsana' (*Paumacariu* 2.40.4.10)
- (22) a. dhā-iu aṅkusu lakkhaṇ-aho abbhi-ṭṭu run-perf.m.sg aṅkusu.nom.m.sg lakṣmaṇa-dat/gen.sg attack-perf.m.sg lavaṇu raṇ-e rām-aho lavaṇa.nom.m.sg battlefield-loc.sg rāma-dat/gen.sg 'Aṅkuṣa ran to Lakshmaṇa (while) Lavaṇa attacked Rāma' (*Paumacariu* 5.82.14.13)
 - b. kattha vi bhaḍ-aho sivaṅgaṇa some.place PTCL warrior-DAT/GEN.SG she-jackal-group.NOM.M.PL ḍhukk-iya approach-PERF.M.PL
 - 'At some places (on the battlefield), she-jackals approached the (dead) warriors.' (*Paumacariu* 1.17.13.8)
 - c. indai bhiḍ-iu samar-e battle-PERF.M.SG battlefield-LOC.SG

hanuvant-aho

Indai.nom.m.sg hanuvant-dat/gen.sg

'Indai (Indrajit) battled with Haṇuvanta in the battlefield.' (*Paumacariu* 3.53.10.9)

3.4 The DOM pattern in Early New Indo-Aryan

Turning to the Early New Indo-Aryan stage (illustrated here with Old Marathi), we see a clearly established animacy- and referentiality-sensitive DOM pattern in both ergative and non-ergative clauses from the earliest period. The syncretic DAT/GEN marking of MIA appears as a generalized oblique case and it is augmented with innovated postpositions that correspond to accusative and dative case markers. This trajectory, in which the MIA case-system reduces to a nominative/oblique contrast and new postpositions are innovated to convey the semantic and structural information associated with the older cases, is shared across Indo-Aryan languages (Masica 1991; Bubenik 1996; 1998 a.o).

¹² This period is represented here by two texts – Līļācharitra (ca. 1286 CE, prose) and the Dnyāneśvarī (ca. 1287 CE, verse).

Direct objects in Old Marathi surface with an innovated postpositional accusative clitic, *-teṃ*, attached to the oblique stem (the reflex of the MIA DAT/GEN marker). The examples selected for presentation here contain transitive verbs whose animate-denoting theme arguments in both ergative and non-ergative clauses appear with overt accusative marking in (23)–(25).

- (23) a. āmhīṃ **tuma=teṃ** ne-unuṃ I.NOM.PL you.PL-ACC take-FUT.1.PL
 - 'We will take you (to Varanasi).' (*Līlācaritra* 1.25)
 - b. aiseṃ mhaṇ-auni yā=teṃ śrīkarī-ṃ dhar-ūni āpuleyā thus speak-ger this.obl=acc hand-ins.sg hold-ger self.obi gharā=si ne-leṃ house.obl=dat take-perf.n.sg
 - 'Having spoken thus, taking him by the hand, she took him to her house.' ($L\bar{l}$ \bar{l} $\bar{$
- (24) a. mhaṇoni prakāśā=ce=ni=hi dehabaļ-eṃ na dekh-atī therefore light.obl=of=by=ptcl strength-ins.sg neg see-impf.3.pl mā=teṃ
 LOBL=ACC
 - 'Therefore, even by the strength of light, they do not see me.' (*Dnyāneśvarī* 7.25.158)
 - b. tehīṃ yāṃ=teṃ uparīye-varauni dekh-ileṃ he-erg.sg this.m.sg-acc upper.storey.obl-from.top see-perf.n.sg 'He saw this one from the upper story (of the house).' (*Līḍācaritra* 1.6)
- (25) a. āṇi te **āma=teṃ** dhari-tī
 And they.NOM.PL we-ACC catch-IMPF.3.PL
 'And they (honorific) would catch us.' (*Līḍācaritra* 1.18)
 - b. ekī-m ākāś-īm sūryā=tem dhar-ilem one-erg.sg sky-loc.sg sun.obl=acc catch-perf.n.sg
 'Someone (might) catch the sun in the sky.' (*Dnyāneśvarī* 10.0.37)

The examples in (26) contain the same non-animate denoting but referential argument jaga 'world' that also receives accusative marking in both imperfective and perfective, ergative clauses ((26a) and (26b) respectively).

(26) a. maga āpu-leṃ keleṃ phokār-itī āṇī jagā=teṃ then self-gen.n.sg deed.nom.n.sg proclaim-impf.3.pl and world-acc dhikkār-itī denounce-impf.3.pl.

'Then they proclaim their own deeds and denounce the world.' (*Dnyāneśvarī* 16.10.328)

b. prabamdhavyāj-em jagā=tem rakṣ-ilem jāṇa literary.work.inst.sg world-ACC save-PERF.3.n.sg know.imp.2.sg
 'Know that (the Guru) has saved the world through this literary work.' (Dnyāneśvarī 18.78.1765)

It is necessary to take a much closer look at the pattern of DOM seen in Old Marathi languages and compare it on a verb-by-verb and argument-type by argument-type basis with the MIA pattern. It is only such an investigation that can accurately establish the nuanced differences between the impoverished accusative marking of Late MIA and the innovated accusative marking of Old Marathi. Noteworthy is the fact that no reflexes of the MIA accusative marking survive in the pronominal system of Old Marathi; only traces of the syncretized GEN/DAT marking remain.

4 Conclusion

At first glance, the presence of accusative marking (DOM) in NIA ergative clauses could be considered to be a case in which an existing template from the imperfective domain is extended by analogy to the perfective ergative domain. However, a closer study of the case-marking patterns of Late MIA reveals that there is no evidence for any direct extension of the MIA accusative marking to ergative clauses. It is more likely the case that the DOM pattern emerges in NIA languages as a reanalysis of the MIA DAT/GEN marking that appears systematically on a specific subset of non-subject arguments into a marker of accusative case. This reanalyzed accusative case is attested in both ergative and non-ergative clauses in the earliest texts of Old Marathi, supporting the hypothesis that accusative marking in ergative clauses is not part of any "de-ergativization" trajectory in the history of Indo-Aryan but rather an emergent effect of across-the-board changes in argument realization options for the languages.

Abbreviations

Glosses are as follows. "-" stands for a morpheme boundary, "=" for a clitic boundary.

ABL	ablative	IMPF	imperfective
ACC	accusative		(Old Indo-Aryan Present)
AOR	aorist	IMPFCT	Old Indo-Aryan Imperfect
DAT	dative	INF	infinitive
ERG	ergative	INST	instrumental
F	feminine	LOC	locative
FUT	future	M	masculine
GEN	genitive	N	neuter
GER	gerund	NEG	negation
IMP	imperative	NOM	nominative

PASS passive PROG progressive
PERF perfective PV verb particle
PFCT perfect SG singular

PL plural SYNCR syncretic (NOM/INST)

PTCL discourse particle voc vocative

PTCPL participle

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