

Assamese Case Alignment Shifts in Progress

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Abstract

This paper looks at case alignment in Assamese from both a synchronic and diachronic point of view. We take the task of tracing the development of the ergative case marker from the language's proto-period, and see how it evolved. This study, for the first time, provides a comparison of adult and child language data. Beyond the account of Assamese as a split ergative language, our study's results show that the semantic factor guiding this split is changing. From an ergative system based on split intransitivity determined by agentivity, thus realizing a split between unergative and unaccusative SUBJs, ERG marking is emerging on the ANIMATE subjects of unaccusatives. Interestingly, we also find that there are already traces of evidence of Assamese having had possibly the onset of an ANIMACY-based subject marking distinction in its proto-period.

1 Introduction

In this paper we determine that Assamese, an Indo-Aryan language spoken by 14 million native speakers in the northeastern state of Assam in India, is showing signs of change in its morphosyntax. Specifically we argue that the language is re-analysing its differential subject marking system guided by semantically-motivated case alternations that are changing the nature of the current status of the language which is one of split ergativity based on agentivity. In effect, we argue that what is taking place in Assamese very much parallels the situation in other New Indo-Aryan (NIA) languages, as argued in, for e.g. Ahmed (2010) and Butt & Ahmed (2011), where the language is recycling its current SUBJ case system to express distinct semantic factors.

Supporting the thrust of this study which is a discussion of a hypothesis that change is in progress, we incorporate a child language data-based study from Saikia (in prep.) and demonstrate that the direction in which change is progressing is magnified by what can be observed through child language data. The employment of child language data as a means which can guide our assessments on, and of, variation and change, is key to the views upheld in Lightfoot (2010). We also argue that the newly evolving split is conditioned by the semantic nature of the NPs, and which is in fact a reflection of the differential marking one finds with respect to objects in the language. Consequently we hypothesise that what is emerging can also be referred to, in parallel, as differential subject marking.

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[†]Abbreviations used: ACC: accusative CLF: classifier; DAT: dative; ERG: ergative; F: feminine; GEN: genitive; IMP: imperative; INS: instrumental; M: masculine; NOM: nominative; PRES: present; PROG: progressive; PERF: perfect; PST: past; PASS: passive; PTCP: participle; PL: plural; SG: singular

This paper is organised as follows. In section 2 we provide a characterisation of case marking in Assamese. In section 3 we integrate the child language data and its corresponding adult data studies to our overall assessment of the language's grammar and pinpoint the change in progress. In section 4 we then provide a summary of our conclusions.

2 Distribution of case in Assamese

2.1 Assamese as a split ergative language

Assamese is a head-final SOV dominant language that is syntactically accusative, i.e. its different subjects, as we will exemplify later, align in one pattern together with respect to control phenomenon, anaphoras, relativisation, and in particular agreement patterns. When it comes to the morphological characterisation of the case system, several terminologies to code case alignments are provided in the literature (cf. (Dixon, 1979, 1994; Comrie, 1978)), however, we specifically choose the terminologies used in Mohanan (1994), and refer to Assamese as a split ergative language, i.e. a language with two distinct cases associated with subjects, where one is inflected and the other remains uninflected or unmarked. The marked subject is referred to as being ergative, while the latter nominative.

Assamese is often mischaracterised as a NOMINATIVE-ACCUSATIVE (Kakati, 1941; Goswami & Tamuli, 2003; Nath, 2003; Haddad, 2011) or a (fully) ERGATIVE system (Devi, 1986; Butt & Deo, 2001; Zakharyin, 2015). However, what Assamese really demonstrates is a **split ergative system** with splits conditioned by **intransitivity**, i.e. based on whether the intransitive verb is unergative or unaccusative, which, synchronically, without yet considering the direction of the change in progress, is based purely on **agentivity** (Amritavalli & Sarma, 2002). Within the pronominal system, however differential case marking (DCM) (Aissen, 1999, 2003) is conditioned by PERSON and NUMBER (Saha & Patgiri, 2013).

To understand why we are referring to Assamese as a split ergative language, we provide the data below. NP subjects of (di)transitive verbs (A), irrespective of animacy, obligatorily take an overt ERG case marker in Assamese, as exemplified through the data in (1).¹

- (1) a. lora-tu=e bol-tu d^hor-i as-e
 boy-CLF=ERG ball-CLF hold-PROG be.PRES-3
 'The boy is holding the ball.'
 (ANIM ERG SUBJ **of transitive** PRED)
- b. bas-bur=e baik-k^hon k^hundi-a-l-e
 bus-PL=ERG bike-CLF knock down-CAUS-PST-3
 'The buses knocked down the motorbike.'
 (INANIM ERG SUBJ **of transitive** PRED)

¹The Assamese data, unless provided with a citation, is the native speaker author's own.

Among intransitive verbs, agent-like subjects of unergatives (S_a), irrespective of animacy, trigger an overt marker on the subject, while the patient-like subjects of unaccusative verbs (S_o) remain unmarked. For example, the S_a NP referent of unergative verbs like *jump*, *dance*, and *swim* control an activity, as opposed to the S_o NP referents of unaccusative verbs like *fall*, *sink*, and *burn* that have no control over the activity. Further, similar to referents of an O function, the referents of S_o could be affected by the event. Although certain intransitive verbs can be easily categorised as either S_a or S_o , the categorisation of some might vary across languages (see, for instance, Dixon (1979); van Valin Jr (1990); Handschuh (2008)). The contrast between S_a and S_o , in the context of unergative and unaccusative verbs respectively, is illustrated through (2) and (3).

- (2) a. roza-zon=**e** xātur-i as-e / xātur-is-e
king-CLF=ERG swim-PROG be.PRES-3 / swim-PERF-3
‘The king is / has been swimming.’
(ANIM ERG **NP** SUBJ **of unergative** PRED)
- b. botah-zak=**e** huhurija-is-e
wind-CLF=ERG whistle-PERF-3
‘The wind has been whistling.’
(INANIM ERG **NP** SUBJ **of unergative** PRED)
- (3) a. roza-zon.∅ boh-i as-e / boh-is-e
king-CLF.NOM sit-PROG be.PRES-3 / sit-PERF-3
‘The king is / has been sitting.’
(ANIM NOM **NP** SUBJ **of unaccusative** PRED)
- b. kat^h-sota.∅ upon-i as-e / upon-is-e
wood-CLF.NOM float-PROG be.PRES-3 / float-PERF-3
‘The piece of wood is / has been floating.’
(INANIM NOM **NP** SUBJ **of unaccusative** PRED)

Case marking is more complex in the pronominal system. On the basis of the discussion by Saha & Patgiri (2013), specifically in Assamese, only the 2nd and 3rd PERSON **plural pronouns** trigger ERG case marking in the form of an enclitic.²

- (4) a. tumaluk=**e** xātur-i as-a / xātur-is-a
2.PL=ERG swim-PROG be.PRES-2 / swim-PERF-2
‘You (PL) are / have been swimming.’
(2.PL ERG **pronoun** SUBJ **of unergative** PRED)

²In another Indo-Aryan language, Punjabi, the pronominal system appears to be sensitive *just* to 1st/2nd vs. 3rd PERSON based split, whereby only the latter set of pronouns (and NPs) take an ERG marking (Butt & Deo, 2001). This, thus differs from the seemingly more complex interaction between PERSON and NUMBER in Assamese.

- b. xīhot=e xātur-i as-e / xātur-is-e
 3.PL=ERG swim-PROG be.PRES-3 / swim-PERF-3
 ‘They are / have been swimming.’
 (3.PL ERG **pronoun** SUBJ of **unergative** PRED)

Supposedly, the rest of the pronominal SUBJ paradigm remains unmarked, i.e. it expresses NOM case, (as the \emptyset marking is meant to illustrate) demonstrated via the 1.SG and 3.SG.M pronominal subject forms in (5). In this respect, therefore, the split on the basis of PERSON and NUMBER within the pronominal system, in contrast to the neater nominal system, takes supremacy over the requirement of (A) SUBJs of transitive predicates to be ERG-marked as illustrated in (1).³

- (5) a. moi. \emptyset sur-tu=k d^hor-il-u
 1.SG.NOM thief-CLF=ACC hold-PST-1
 ‘I caught the thief.’
 (1.SG NOM **pronominal** SUBJ of **transitive** PRED)
- b. xi. \emptyset sur-tu=k d^hor-il-e
 3.SG.M.NOM thief-CLF=ACC hold-PST-3
 ‘He caught the thief.’
 (3.SG.M NOM SUBJ of **transitive** PRED)

An internal reviewer suggests that there is a probability that the observation of unmarked pronominal forms may look so only on the basis of their surface morphology, i.e. in the absence of an *-e* marking. For this reason, an alternative analysis would be to assume that these pronouns are in fact ‘old and have come down (for some reason) in an originally oblique form’. In support of this alternative analysis, we could argue, following Kakati (1941), that the PERSON and NUMBER based split in the pronominal system is itself a remnant from Middle Indo-Aryan (MIA). He observes how for instance, the 1.SG pronoun *moi* or the inferior 2.SG *toi*, and so on maintain the MIA proto-instrumental forms *-ē*, *-i* (synchronically interpreted as ERG) in their extended oblique pronominal bases. On the other hand, (Saha & Patgiri, 2013, pp. 39-40) argue that the split that results is a reflex of a morphophonological constraint, such that since the 1.SG/PL, 2.SG and 3.SG pronominal forms end with a high vowel /i/, ERG *-e* marking is blocked.

Given the above characterisation for the SUBJ case marking system for nominals, inclusive of a split intransitivity governed by the subject’s agentivity, along with an incorporation of the assumption that the pronominal system is actually characterised by DCM based on PERSON and NUMBER, the following table summarises the facts.⁴

³The same parallel behaviour follows for S_a subjects.

⁴It is worth mentioning that pronouns in Assamese have always been discussed with respect to animate reference; the distribution of which, in terms of case marking, is presented in Table (1). Reference to inanimate entities, on the other hand, involves a distinct pronominal device; a resort to the use of the demonstrative pronominal paradigm, such as *ei/hei* ‘this/that’ along with the attachment of the default classifier *-tu*, or any of the shape classifiers, such as *-dal* and *-k^hon*.

SUBJ	NP	1.SG/PL	2/3.SG	2/3.PL
A	ERG	NOM	NOM	ERG
S _a	ERG	NOM	NOM	ERG
S _o	NOM	NOM	NOM	NOM

Table 1: Distribution of case-marking on SUBJ GFs

Another instance where the ergative split discussed above for NPs as well as pronouns is overridden, is in contexts where a homophonous *-e* marker is present on SUBJs to express what Butt & Holloway King (1991), Butt (2006), Ahmed (2010), and Butt & Ahmed (2011) refer to, with respect to cognate *-ne* marker in Hindi/Urdu, as a marker of volitionality/intentionality. If we consider the contrast in the pair below, *lora* ‘boy’ is unmarked in the context of the intransitive unaccusative verb *por* ‘fall’, in line with our discussion above. Nevertheless, when the semantic interpretation expressed is such that the SUBJ deliberately/purposefully initiates the falling event, then an *-e* marker, which we presume to be the ERG marker, but which here is of a distinct semantic function is marked on the SUBJ. The end result is such that as illustrated in (6b), we have the presence of an ERG marker in the context of an unaccusative verb.

- (6) a. *lora-tu.∅ por-il(-e)*
 boy-CLF.NOM fall-PST(-3)
 ‘The boy fell down.’
- b. *lora-tu=e por-i di-l-e*
 boy-CLF=ERG fall-NF give-PST-3
 ‘The boy (deliberately/purposefully) fell down.’ (Chowdhary, 2014, p. 111)

Saha & Patgiri (2013, p. 40) argue that the same follows for pronouns, including the 1st PERSON.SG/PL and 2nd/3rd.SG pronouns, where NOM marking is overridden, and *-e* marking is present, as illustrated through the 1.SG pronominal *moi* ‘I’ in (7).⁵

- (7) *moi=e za-m tumar log-ot*
 1.SG=ERG go-FUT 2.SG.GEN company-LOC
 ‘It is I, who will accompany you’ (S.C. Chiring Phukan, p.c.)

Before proceeding further, a note on agreement behaviour vis-à-vis case is in order. In Assamese, NOM vs. ERG DCM on SUBJs does not block agreement with the subject on verbs, unlike what goes on in other Indo-Aryan ergative languages,

⁵Note that this particular use of the ERG form on the 1.SG pronominal can also be realised as *-ei* or *-(e)he*. The availability of alternations of this sort is also true for the 1.PL and 2/3.SG.

such as Hindi. This is exemplified, for instance, through data such as (4a) and (5a), where irrespective of ERG vs. NOM marking, respectively, the verb displays the relevant PERSON agreement with it. Notwithstanding this pattern, DCM *does* matter for SUBJ-verb agreement purposes beyond ERG/NOM-marked SUBJ contexts. Non-canonical subjects, which are expressed via non-ERG/NOM morphology, on the other hand trigger default 3rd PERSON agreement. In (8), we have an illustration of *lag* lit. ‘want’ functioning as a psych predicate, with the meanings ‘feel’ and ‘get (fear)’, respectively. This consequently requires a GEN-marked SUBJ, such as the 1.SG pronominal *mur*. The presence of such a subject triggers 3rd PERSON agreement on the verb, which is the form employed for default agreement contexts. A similar default agreement pattern also follows in the case of the predicate *lag* when used in a desiderative sense, meaning ‘want’, as in (9). In this case, the SUBJ is ACC/DAT-marked via the phonologically-conditioned allomorphs *-(o)k*.⁶

- (8) a. *mur* *ijat niz=ok asohua zen lag-e*
 1.SG.GEN here self=ACC stranger as if get.PRES-3
 ‘I feel as if I am a stranger here.’ (Chowdhary, 2014, p. 115)

- b. *mur* *b^hoi lag-is-e*
 1.SG.GEN fear get-PERF-3
 ‘I am scared’ (Lit: ‘I have got fear.’)
 (GEN SUBJ **of psych verb**)

- (9) *muk* *b^hat lag-e*
 1.SG.DAT/ACC rice want.PRES-3
 ‘I want rice.’
 (DAT/ACC SUBJ **of desiderative ‘want’**)

2.2 The historical development of the Ergative in Assamese

Ergativity was not an inherent grammatical feature of Sanskrit, which is the ancestor of all Indo-Aryan languages. Sanskrit, which is a NOM-ACC language, as highlighted in (10a), used the instrumental marker *-ena* on the semantic agent within the passive construction, yet where the subject remains NOM-marked, as in (10b) (Kakati, 1941; Butt & Deo, 2001; Verbeke & De Cuypere, 2009).

⁶Although not discussed in the literature, one could argue that what we have in the case of (9), is an instance of the verb’s agreement with the OBJ GF, rather than an instance of default agreement. This would in principle parallel Hindi in the sense that when ERG subjects are present in perfect contexts, the agreement which results on the verb is that with the object. While we won’t engage in this discussion here, although such an analysis is a possibility, we refer the reader to (8a), at least if it can be said to constitute a like with like instantiation, and argue that if what we have in (9) were an instance of OBJ-verb agreement, rather than default 3rd PERSON agreement, then we would have expected to see 1st PERSON agreement on the verb in (8a), given the *-ok*-marked reflexive OBJ.

- (10) a. devadatta-ḥ kaṭa-m ca-kār-a
 Devadatta-NOM mat-ACC PERF-make-3SG
 ‘Devadatta made a mat.’ (Verbeke & De Cuypere, 2009, p. 2)
- b. devadatt-ena kaṭa-ḥ kṛ-taḥ
 Devadatta-INS mat-NOM make-PST.PASS.PTCP
 ‘The mat is made by Devadatta.’ (Verbeke & De Cuypere, 2009, p. 3)

Although there are several accounts of how ergativity developed in Indo-Aryan languages, the reanalysis of a passive as an ergative construction is the most common hypothesis among scholars. Moreover, the evolution from the Sanskrit instrumental *-ena* or *-ī*, to the Assamese ergative marker *-e* seems highly probable (Kakati, 1941; Coghill, 2016; Kulikov, 2017). If we look at the timeline of this development, we find that Ashokan inscriptions from the Early Indo-Aryan (EIA) period show that the Sanskrit NOM marker *-ah* was being replaced by *-e*, as in *devānāmpiy-e* (*devānāmpri-yah*) ‘the one who is loved by God’ (Bloch, 1965; Devi, 1986).⁷ Tagore (1948), as cited in Devi (1986, p. 68), proposed that the Sanskrit term *putrah* ‘son’ changed to *putte* in the Middle Indo-Aryan (MIA) period, until it eventually became *putti*, due to vowel weakening during the Apabhramśa period.

The Caryā texts composed by the Buddhists between the 8th and 12th century are claimed to bear the earliest evidence of literature stemming from the eastern group of Indo-Aryan languages. Devi (1986) notes several similarities between the Assamese ERG *-e*, and the *-e* and *i* subject markers found in these texts. Since the use of the *-e* marker had not become stable until the New Indo-Aryan (NIA) period, these texts bear the expected inconsistencies of the transition stage. For example, both *-e* and *i* were used, at this stage of the language, with the agent of transitive verbs, as in *sur-e* ‘thief’, *kānhi* ‘Kānhā’.⁸ However, towards the end of the texts, the use of *-e* gets stabilised as the sole subject marker. Devi (1986) points out that there is only one exclusive instance of an unmarked subject of a transitive verb in Caryā 6 of these texts. The example is represented in (11) below, where we observe an instance involving the subject NP *harina* ‘deer’ not taking an ERG marking, in spite of being the subject of two coordinated transitive clauses.

- (11) tina na echupai hariṇa pibai na pāni
 grass not touch deer drink no water
 ‘The deer does not notch any grass nor does (the deer) drink any water.’
 (Devi, 1986, p. 70)

Apart from optionally-marked subjects of transitive verbs, there are also examples of optional *-e* marking on the subjects of intransitive verbs in these texts.

⁷Alternatively, as suggested by an internal reviewer this could potentially be a case of phonological change rather than (direct) replacement.

⁸Name of a Hindu God.

For example, in Caryā 48, the reflexive pronoun *apan*⁹ ‘self’, which is the subject of the unaccusative verb *bah* ‘sit’ is marked with the *-e* marker, while the subject of the clause in the first conjunct: *grāhaka* ‘customer’ is unmarked, in line with the synchronic facts when in context of unaccusative intransitive verbs, such as *ai* ‘come’.

(12) āilā grāhaka.∅ apan-e bahiā
 come customer.NOM self-ERG sit.PST

‘Customer came and (himself) sat down.’ (Devi, 1986, p. 71)

This sporadic use of the *-e* marker on the subject of transitive verbs, and some intransitive verbs, can be taken as the stage where a split ergative system started emerging in Assamese. Assamese developed simultaneously with other eastern Indo-Aryan languages, such as Odia (Oriya) and Bengali from the common ancestor: Eastern Magadhi, which branched out of Māgadhi Prakrit in the MIA period (Chatterji, 1926). There is evidence that such NIA languages from the eastern branch, including Maithili also once used *-e* markers on their subjects (Chatterji, 1926; Kakati, 1941).

However, synchronically, Assamese differs from other eastern Indo-Aryan languages, including Bengali, Oriya, Maithili, and Bhojpuri, which have now lost their erstwhile ergative case system, and have become reanalysed as NOM-ACC systems. In contrast, Assamese, together with Sylheti, and Nepali, are the only eastern Indo-Aryan languages that have retained the ERG alignment of their parent language, but which is not based upon an ASPECT-based ergative split system.¹⁰ Rather, they collectively display an intransitive-based split, which one could argue to be an influence akin to contact with neighbouring Tibeto-Burman languages. Devi (1986, p. 63) argues that the consistent use of *-e* that we see on agents in Assamese might be an influence from the Ahom (Tai) and Naga (Sino-Tibetan) languages, which mark their agents with a distinct marker. She further notes that texts from the 13th century that were composed just after the Ahoms conquered Assam show the use of an optional *-ko* marker with both NPs and pronouns. Moreover, the Nagas that were given place in the Ahom court used distinct agentive markers for their NPs and pronouns. The same can also be said for the Tangsa group of languages spoken to the east of Assam. Devi argues that the presence of such language systems in contact with Assamese must have accelerated the use, and later the consolidation of an agent marker in Assamese. A parallel can be drawn to Dakkhini (Stroński, 2010), which has lost its ERG case marking due to isolation from other Indo-Aryan languages, along with its long lasting influence from its neighbouring NOM-ACC Dravidian languages. Kakati (1941, p. 286), as mentioned earlier, on the other

⁹Note that Devi (1986) glosses the *-e* in this example as NOM. Here we gloss this morph as ERG. We additionally glossed the unmarked subject *grāhaka* ‘customer’ as a NOM and marked it with a ∅.

¹⁰Nepali *does* maintain an ASPECT-based split. However, this is only internal to the transitive sub-system (Li, 2007).

hand, argues that the ERG *-e* in Assamese is a reanalysis of the instrumental *-(er)e*¹¹ that is obligatorily present on the subjects of passive constructions built out of transitive verbs, as in: *hat-(er)e buwa kapur* ‘cloth woven by hand’. He further argues that it is this constant use of the INS *-(er)e* that has led to the habitual use of *-e* in the expression/realisation of agent subjects.

However, the synchronic analysis of the language shows that there is a distinction between the INS *-(er)e* and the ERG *-e*, even if the literature suggests that these were once the same *-(er)e* form in the past. Irrespective of the interchangeable use of the INS *-(er)e* and the ERG *-e*, it is the subjects with *-e* that render an agentive reading, and not the ones marked with *-(er)e*. The data in (13) is meant to demonstrate that although *kotari* ‘knife’ can be marked with *-e*, we still are glossing the morph as INS, as we cannot possibly assume two ERG-marked NPs in the clause. It is clear that in this active sentence, the ERG-marked 3.PL pronoun functions as the SUBJ.

- (13) *xīhot=e tak kotari=re kat-il-e*
 3.PL=ERG 2.SG.ACC knife=INS cut-PST-3
 ‘They cut him with a knife.’

Moreover, in sentences such as (14), *dak* ‘post’ can only be marked through the INS *-ere* marker. This suggests to us that an NP like *dak* ‘post’ can never be ascribed any agentive role, in contrast to the possibility with respect to *kotari* ‘knife’, which could be what is allowing us an *-e* morph to express the INS case in (13).

- (14) *sithi-k^hon dak=ere/*=e ah-il*
 letter-CLF post=INS/=ERG come-PST
 ‘The letter came by the post.’

2.3 Non-SUBJ case marking in Assamese

If we are to argue that DCM results in differential subject marking in Assamese, then we here present a context, where elsewhere in the grammar of the language we also observe distinct markings associated with the same GF. Here we consider the distribution of case in the context of non-SUBJ GFs. Just as it has been shown in the literature that the Animacy Hierarchy accounts for a good deal of the cross-linguistic variation in split ergative systems, with differences observed on the basis of the nature of the noun type (McGregor, 2009), the same premise can be applied to behaviours associated with OBJ GFs in Assamese, which come to be marked as ACC with the *-(o)k* marker.

The applicability of the Animacy Hierarchy scale may differ from language to another. It has, however been shown to have wider impact on a number of distinct

¹¹In the early Assamese period, the INS *-(k)ere* was also used to express accompaniment, as in *jāmāi-ere* ‘with my son-in-law’ (Kakati, 1941, p. 287). The Chittogong dialect takes both genitive *-ar* and instrumental *-di* on the same noun to express accompaniment as in *put-ar-di* ‘with the son’ (Kakati, 1941, pp. 286-287).

grammatical phenomena ranging from agreement to syntactic marking, and the like. Croft's (2003, p. 112) Animacy Hierarchy represented in (15), is indicative of the fact that, for instance, referents higher on the scale, such as 1st/2nd PERSON pronouns are more likely to receive overt case marking than inanimate common nouns lower on the hierarchy.

- (15) **first, second-person pronoun < third-person pronoun < proper names
< human common noun < nonhuman animate common noun < inanimate common noun**

While (animate-referring) pronouns in Assamese are always ACC-marked, as illustrated in (16), NPs do not display a uniform behaviour. For example, in (17a) the animate object *Rita* of the transitive verb *d^hor* 'hold' takes the ACC case marker *-(o)k*, while in (17b), the inanimate object *bol* 'ball', associated with the same transitive verb, remains unmarked. Leaving *Rita* unmarked in (17a), results in ungrammaticality. Such behaviours have been referred to as differential object marking (DOM) in the literature. DOM also exists in a number of typologically different languages, such as Turkish (Kornfilt, 2009), Maltese (Camilleri & Sadler, 2012), and Spanish (Comrie, 2013).

- (16) a. xi.∅ muk dek^h-il-e
 3.SG.M.NOM 1.SG.ACC see-PST-3
 'He saw me.'

- b. moi.∅ xihot=ok dek^h-il-u
 1.SG.NOM 3.PL=ACC see-PST-1
 'I saw them.'

- (17) a. nitu=e rita=k/*rita d^hor-il-e
 nitu=ERG rita=ACC/rita.∅ hold-PST-3
 (Lit. 'Nitu held Rita.')

- b. nitu=e bol-tu/*bol-tu=k d^hor-il-e
 nitu=ERG ball-CLF/*ball-CLF=ACC hold-PST-3
 (Lit. 'Nitu held the ball.')

Although non-human animates are higher on the Animacy Hierarchy than inanimates, in Assamese no distinction appears to be made between animate categories such as animals, birds, or trees and inanimates. This is illustrated through the data in (17b) and (18) that take no *-(o)k* ACC marking.

- (18) a. goru-zoni.∅/*=k band^h-il-i-ne
 cow-CLF.∅/=ACC tie-PST-1-Q
 ‘Did you tie the cow?’
- b. tamul-zupa.∅/*=k ne-kat-ib-i
 areca-nut-CLF.∅/=ACC NEG-cut-FUT-2
 ‘Do not cut the arica nut tree.’

As things stand, it seems therefore that DOM in Assamese is conditioned by a HUMAN feature. However, there is added intricacy to when and in which contexts does case marking appear even on non-HUMANS. For instance, if the *goru* ‘cow’ in (18a) is given a Proper Name, this will be *-(o)k* marked. If on the other hand, the Proper Name of an inanimate is in OBJ position, such as the *Taj Mahal* (a heritage monument), this will not get *-(o)k* marked (Chowdhary, 2014, p. 117). Beyond (ANIM) Proper Names (and pronouns), DOM on HUMAN NPs is interrelated with concerns that pertain to SPECIFICITY. This is infact something that has been discussed quite amply for Hindi (see e.g. Butt (1993) and Montaut (2018)).

Assamese is a numeral classifier language. This implies that once a classifier attaches onto the right-edge of an NP¹² OBJ (be it HUMAN or non-HUMAN) in the absence of a numeral, which would otherwise take the classifier, that NP becomes DEFINITE. While the behaviour of DEF/INDEF cuts across the board irrespective of whether a HUMAN or non-HUMAN OBJ is involved, as illustrated through (19) and (20 a-b) below, the addition of case becomes obligatory in the context of a [+SPEC] reading in association with HUMAN NPs, as illustrated in (20 c).

- (19) a. moi.∅ kitap.∅/*=ok porh-i b^hal pa-o
 1.SG.NOM book.∅/=ACC read-PROG good get.1
 (Lit: ‘I feel good reading book.’)
 ‘I love reading books.’ ([+/- DEF] [- SPEC])
- b. moi.∅ kitap-k^hon/*=ok porh-i b^hal pa-o
 1.SG.NOM book-CLF/=ACC read-PROG good get.1
 ‘I love reading the book.’ ([+ DEF] [+/- SPEC])
- (20) a. pulis=e sur.∅ d^hor-e
 police=ERG thief.∅ hold.PRES-3
 (Lit: ‘Police hold thief.’)
 ‘Police catches thieves.’ ([+/- DEF] [- SPEC])
- b. pulis=e sur-tu.∅ d^hor-il-e
 police=ERG thief-CLF.∅ hold-PST-3
 ‘Police caught the thief.’ ([+ DEF] [+/- SPEC])

¹²Note that when there is a classifier as well as a case marker attached onto an NP, the classifier always precedes the case marker.

- c. *pulis=e sur-tu=k d^hor-il-e*
 police=ERG thief-CLF=ACC hold-PST-3
 ‘Police caught the thief.’ ([+ DEF] [+ SPEC])

What this implies therefore is that HUMAN NPs are made SPECIFIC via the very presence of *-(o)k* marking; a strategy which is not morphosyntactically available for non-HUMAN NPs. In contrast, SPECIFICITY in non-HUMAN INANIM NPs such as *kitab* ‘book’ comes solely from the context. Furthermore, although the majority of the literature (e.g. Gundel et al. (1993), Enç (1991)) suggest that DEFINITENESS also implies SPECIFICITY, this does not hold true for Assamese, given that the numeral classifier *-tu* attached to the HUMAN NP *sur* ‘thief’ implies that it already takes a DEFINITE reference, but which is not yet made SPECIFIC, necessarily, until a case marker is present on OBJ. While DOM brings out SPECIFICITY effects in both Hindi and Assamese, with Assamese allowing this only in the context of HUMAN NP OBJs, there are other Indo-Aryan languages like Sinhala/Sinhalese, where an ANIMACY is all that matters in the determination of whether objects can be optionally ACC-marked or not (Thamloe, 2017).

It should finally be noted here that DOM in Assamese only applies to objects in neutral contexts. If the object is placed in a non-neutral context, such as in a topicalised position, typically left-adjacent to the verb (along with additional intonation cues) the inanimate indefinite NP must be ACC-marked. Such a behaviour is highlighted in (21) below through the inanimate, indefinite NPs *zibon* ‘life’ and *d^hopat* ‘tobacco’.

- (21) *zibon-ok ador-ok d^hopat-ok no-hoi*
 life-ACC welcome-IMP tobacco-ACC NEG-be.PRES
 ‘Welcome life, not tobacco’ (Chowdhary, 2014, p. 118)

The morphosyntax and the structure of (21) would imply that a structure such as (22), although displaying a parallel string, cannot be understood as a topicalisation structure. What we have in (22) is an instance where the INANIM *pani* ‘water’ and *mod* ‘alcohol’ are unmarked, unlike the ACC marking on the topicalised *zibon* ‘life’ and *d^hopat* ‘tobacco’. The non-marking of the NPs in (22) is in line with them being INANIM NPs sitting low on the Animacy Hierarchy. For this reason therefore, as also suggested by an internal reviewer, what we have here is a case of an SOV structure with the SUBJ dropped by virtue of the imperative mood of the structure.

- (22) *pani.∅ kha-ok mod.∅ no-hoi*
 water.NOM drink-IMP alcohol-NOM NEG-be.PRES
 ‘Drink water not alcohol.’

So far we have only considered what goes on with primary/direct objects, or OBJ GFs in LFG terms. When we turn our attention to indirect objects, i.e. those

GFs that function as recipients in ditransitive constructions, we have evidence, although not given any attention in the literature on Assamese that morphologically, the OBJ_θ takes a distinct case distribution, even if, the marker which we here, for expository convenience refer to as DAT, takes a homophonous *-(o)k* form just as the ACC, (as is also the case in Hindi/Urdu). What is key for us, in the light of the data paradigm in (23), is that the recipient, which can be a Proper Name, as in (23a), a HUMAN NP as in (23b), a non-HUMAN ANIM NP as in (23c), and an INANIM NP as in (23d) is that of a double object construction. Evidence that the recipient in Assamese maps onto an OBJ_θ, rather than onto an OBJ, is clear from the distribution of *-(o)k* ACC marking on the theme, which patterns exactly what we have just discussed above. On the other hand, *-(o)k* as a DAT marker on the OBJ_θ does not display a similar behaviour. Rather, such marking is present throughout. Note that in Assamese a clear constituent order preference holds whereby it is more likely to have the recipient argument preceding the theme.

- (23) a. tai.∅ pinki=k/*∅ puna=k/*∅ hop-il-e
 3.SG.NOM Pinki=DAT/∅ Puna=ACC/∅ entrust-PST-3
 ‘She entrusted (the custody of) Puna to Pinki.’ (Adapted from
 (Chowdhary, 2014, p. 119)
- b. tai.∅ mastor=ok/*∅ lora-tu(=k) hop-il-e
 3.SG.NOM teacher=DAT/∅ boy-CLF(=ACC) entrust-PST-3
 ‘She entrusted (the custody of) the boy to the teacher.’ (Adapted from
 (Chowdhary, 2014, p. 119)
- c. tɛɔluk=e kukur-tu=k//∅ b^hat/*∅ d-il-e
 3.PL=ERG dog-CLF=ACC/∅ rice/*∅ give-PST-3
 ‘They gave rice to the dog.’
- d. tɛɔluk=e xoŋgram-tu=k/*∅ notun ort^ho/*∅ d-il-e
 3.PL=ERG revolution-CLF=ACC/∅ new meaning/∅ give-PST-3
 ‘They gave new meaning to the revolution.’

We here, finally, consider prepositional objects that are GEN-marked via the phonologically-conditioned allomorphs *-(o)r*, as shown by the oblique objects *Pinki* in (24a), *deutak* ‘father’ in (24b), and *duwar* ‘door’ in (24c).

- (24) a. razu=e pinki=r karone p^hul kin-is-e
 razu=ERG pinki=GEN for flower buy-PERF-3
 ‘Razu has bought flowers for Pinki.’
- b. tai.∅ deutak=or karone sit^hi lik^h-is-e
 3.F.NOM father=GEN for letter write-PERF-3
 ‘She has written a letter for her father.’

- c. tai.∅ duwar-k^hon=or karone tola e-ta kin-il-e
 3.F.NOM door-CLF=GEN for lock one-CLF kin-PST-3
 ‘She bought a lock for the door.’

What this means for us is that OBL OBJs, i.e. the OBJ GFs which Ps subcategorise for, are special. Beyond the fact that they get GEN-marked, such GEN marking appears to ‘block’ a distribution that parallels what we have described above in the context of ACC-marked OBJs of Vs.

Table (2) below now provides a characterisation of the distribution of case marking across the non-SUBJ GFs.

Value	OBJS	OBJ _θ	OBL OBJs
Pronoun	ACC	DAT	GEN
Proper Names	ACC	DAT	GEN
HUMAN NP	(ACC)	DAT	GEN
ANIM/INANIM NPs	∅	DAT	GEN

Table 2: Distribution of case-marking on non-SUBJ GFs

From the above discussion it transpires that the observations associated with the OBJ GF, in relation to the distribution of case correlates with SPECIFICITY. One could say that the behaviours attributed to the Animacy Hierarchy fall out in an expected manner, since for instance personal pronouns and Proper Names are inherently specific, and hence precisely illustrate the contexts where we get to observe obligatory ACC marking. In contrast, OBJ_θ and OBL OBJs display a uniform behaviour and do not pertain to any Animacy Hierarchy-based observations.

2.4 Current predictions of change in progress

Focusing specifically on the SUBJ GF of intransitive verbs in Assamese, and the distribution of ERG case, it seems to us that change is in progress. The hypothesis of the change we envisage can be summarised as follows. The ERG-based split in intransitives does no longer seem to be *solely* motivated by agentivity, but rather, it has started infiltrating within the unaccusative domain, and wherein, it is being guided by a distinct semantic factor, namely ANIMACY. In support of this hypothesis is the child language data of Saikia (in prep.), as well as a young adult based study which was designed to function as a control group, but ended up interestingly displaying parallel results. A discussion of the study and its results follows below.

3 The study

3.1 Methodology

The research on which this study is based, is part of a larger study that aims to look at children's acquisition of split ergativity in Assamese (Saikia, in prep.). All the data for this study was collected from the districts of Tinsukia and Dibrugarh in eastern Assam. For the first part of this study, 40 children (2-6 years) whose primary language input is Assamese took part in a Contrastive Elicitation Task for Testing Case Marking (Ruigendijk, 2015). Further, to develop a set of comparable data, 22 Assamese speaking adults were asked to take part in the same elicitation task experiment. The participants in this control group were young adults (16-25 years) studying at a higher educational institute. All the participants of this production task were asked to describe 12 pairs of minimally contrastive images, some of which are shown in Figure 1.¹³

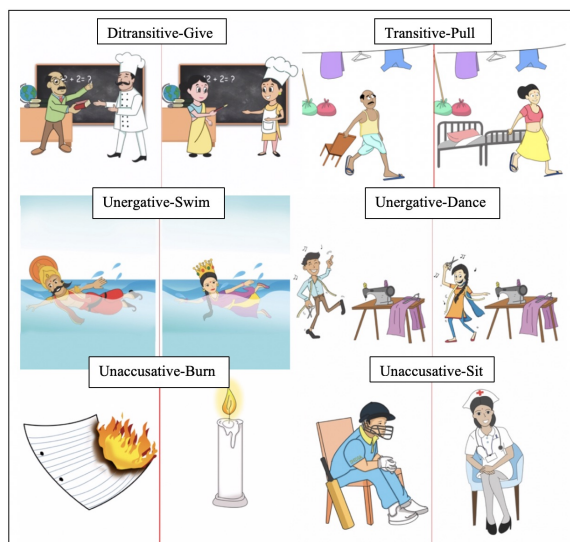


Figure 1: Contrastive Elicitation Task for Testing Case Marking (based on Ruigendijk (2015))

Ruigendijk (2015) Contrastive Elicitation Task was originally designed for two verb conditions: ditransitive and transitive. However, since what Saikia (in prep.) is after, which encompasses the whole case alignment in Assamese, and with the knowledge that Assamese has an intransitivity-based split, intransitives, specially four unergative, and four unaccusative verbs were included in the stimuli, and a new set of pictures were designed to suit any Indian language and culture. The

¹³The entire task involved describing the illustrations of twelve different verbs in both progressive and perfect structures. However, notwithstanding the incorporation of this grammatical ASPECTUAL distinction, no correlation was observed with respect to SUBJ case marking, and hence we do not discuss it further.

stimuli were controlled for conditions such as verb type, PERSON, NUMBER and ANIMACY to elicit target utterances for the specific case markers. The intransitive verb types, in particular, included the unergative *nas* ‘dance’, *xātur* ‘swim’, *zopia* ‘jump’, and ‘dour’ run, and the unaccusative *por* ‘fall’, *zol* ‘burn’, *boh* ‘sit’, and *dub* ‘sink’. Out of the set of these eight verbs, only the subjects of ‘fall’ and ‘sit’ were HUMAN. ANIM/HUMAN subjects for ‘burn’ and ‘sink’ were avoided given the projected violent nature, as majority of our participants were small children. All the unergative verbs in the study involved HUMAN subjects. We here deem important to reiterate why the task did not include any stimuli that involved unergative verbs with INANIM subjects in the elicitation task. This is because, as illustrated clearly in §2.1, through the pair in (2), ANIMACY plays no role in the assignment of ERG case marking. Moreover, as the hypothesis posited in §2.4 already mentions, the observed change is exclusively taking place in the domain of unaccusative verbs.

3.2 Results and discussion

All the participants of the elicitation task were observed to be adhering to the description of the transitive and ditransitive structures as provided in §2.3. However, we got a mixed response in the context of intransitive verbs. Since the stimuli were developed following the description in §2.1, we were expecting that the subjects of unaccusative verbs will be \emptyset , i.e. NOM, while the subjects of unergative verbs will maintain their *-e* ERG marking. However, our data did not reflect such a clear agentivity-based intransitive split. In fact, we found that both children and adult participants alike were ignoring the intransitivity split discussed as described earlier, and were rather embracing a new case marking pattern, which appears to be conditioned by a distinct semantic factor of the nominal.

The main evidence for this observed behaviour comes from the infiltration of the erstwhile ERG morph, as a marker of a [ANIMATE +] feature-value in the f-structure of the S_o SUBJ of unaccusative PREDs. This is in contrast to its previous canonical function as a marker of the S_a SUBJ of unergative PREDs, as a means with which to exhibit their agent thematic role.

The observed change is happening at an average of 20% of the time in the adult data, and 73% of the time in the child language data. We take this to be possibly demonstrating the impetus of the change in place, and its direction. This emergent ANIMACY-based split in the SUBJ system of unaccusatives is interestingly yet another semantic factor over and above the semantic factors that condition the splits that guide DOM in Assamese as discussed in §2.3.

The data in hand supporting this observation comes from the contrast presented in (25) vs. (26). Here we have the unaccusative predicates *boh* ‘sit’ and *por* ‘fall’ taking ANIM subjects where we observe the emergent *-e* ERG marking as opposed to the predicates *zol* ‘burn’ and *dub* ‘sink’ with INANIM subjects which in turn remain \emptyset -marked. In fact, all the participants consistently maintained a \emptyset marking in such instances.

- (25) a. k^heluwoi-zon=**e**/narse-goraki=**e** boh-i as-e
 sportsman-CLF=ERG/nurse-CLF=ERG sit-PROG be.PRES-3
 ‘The sportsman/nurse is sitting.’
- b. bimansalok-zon=**e**/bimansalika-goraki=**e** por-i as-e
 pilot.M-CLF=ERG/pilot.F-CLF=ERG fall-PROG be.PRES-3
 ‘The pilot (M/F) IS FALLING.’
 (**Emergent** ANIM ERG SUBJ **of unaccusative** PRED)
- (26) a. kagos-k^hɔn.∅/mom-dal.∅ zol-i as-e
 paper-CLF.NOM/candle-CLF.NOM burn-PROG be.PRES-3
 ‘The paper/candle is burning.’
- b. nao-k^hɔn.∅/bakos-tu dub-i as-e
 boat-CLF.NOM/box-CLF.NOM sink-PROG be.PRES-3
 ‘The boat/box is sinking.’
 (INANIM NOM SUBJ **of unaccusative** PRED)

The same pattern was also noticed in the case of unergative verbs, which should otherwise, in accordance with the ERG split system, take *-e* marked SUBJ.

We hypothesise this new emerging situation to have arisen as a result of a re-analysis of what the morphological form that is responsible for the unaccusative-unergative split, i.e. the *-e* that exists in the intransitive domain, comes to express. The ERG’s erstwhile agentive marking has, within the unaccusative domain of intransitives seemingly come to express an ANIMACY distinction. Consequently, the split is being overhauled, in the sense that it is now being conditioned by a semantic feature in the lexical entry, rather than by a theta-role - GF association at the argument-structure.

The emerging system is represented in Table (2).

Value	A	S _a	S _o
Animate	-e	-e	-e
Inanimate	-e	-∅	-∅

Table 3: **The emergent ANIMACY-based split**

4 Conclusion

The case alignment system in Assamese is currently undergoing change, and a shift appears to be taking place when SUBJs are marked. A representation of this illustrated in Figure (2).

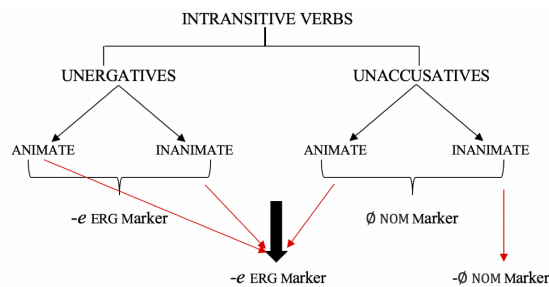


Figure 2: Current state and the change in progress within intransitives

While the split in ERG case on SUBJs (excluding any topicalisation or emphatic effects) depended exclusively on the thematic role of the SUBJ, as influenced by the nature of the verb, i.e. depending on whether it is unergative or unaccusative, synchronically a split is emerging. Internal to the unaccusative domain of the intransitive predicates there appears to be a split dependent on ANIMACY. It remains to be seen however, whether there may be any potential effects coming from the lexical aspect of the different intransitive verbs. Moreover, perhaps as a self criticism associated with the design of the study, a flaw is noticeable which could impinge on our findings. Since the ANIMATE SUBJs of the unaccusative predicates used in the study happened to be all HUMAN, the emerging distinct use of the ERG marker in the domain of the unaccusatives may well be more fine-grained. It may be one which solely considers HUMAN vs. non-HUMAN SUBJs, rather than a broader ANIMATE vs. INANIMATE distinction.

References

- Ahmed, Tafseer. 2010. The unaccusativity/unergativity distinction in Urdu. *Journal of South Asian Linguistics* 3(1).
- Aissen, Judith. 1999. Markedness and subject choice in optimality theory. *Natural Language & Linguistic Theory* 17(4). 673–711.
- Aissen, Judith. 2003. Differential object marking: Iconicity vs. economy. *Natural Language & Linguistic Theory* 21(3). 435–483.
- Amritavalli, R. & Partha P. Sarma. 2002. A case distinction between unaccusative and unergative subjects in Assamese. *Snippets* 5. 6–7.
- Bloch, Jules. 1965. *Indo-Aryan: From the Vedas to modern times*. Paris: Librairie d'Amérique et d'Orient Adrien-Maisonneuve.
- Butt, Miriam. 1993. Object specificity and agreement in Hindi/Urdu. In *29th Regional Meeting of the Chicago Linguistic Society*, vol. 1, 80–103.
- Butt, Miriam. 2006. The dative-ergative connection. *Empirical Issues in Syntax and Semantics* 6. 69–92.

- Butt, Miriam & Tafseer Ahmed. 2011. The redevelopment of Indo-Aryan case systems from a lexical semantic perspective. *Morphology* 21(3-4). 545–572.
- Butt, Miriam & Ashwini Deo. 2001. Ergativity in Indo-Aryan. *Kurdica* 5(3).
- Butt, Miriam & Tracy Holloway King. 1991. Semantic case in Urdu. In *27th Regional Meeting of the Chicago Linguistic Society*, vol. 27 1, 31–45.
- Camilleri, Maris & Louisa Sadler. 2012. On the analysis of non-selected datives in Maltese. In Miriam Butt & Tracy Holloway King (eds.), *Proceedings of the LFG12 Conference*, 118–138. Stanford: CSLI Publications (online publications).
- Chatterji, Suniti K. 1926. *The origin and development of the Bengali language*. Calcutta: Calcutta University Press.
- Chowdhary, Runima. 2014. Differential marking of cases in Asamiya. *North East Indian Linguistics* 6. 107–124.
- Coghill, Eleanor. 2016. *The rise and fall of ergativity in Aramaic: Cycles of alignment change*, vol. 21. Oxford: Oxford University Press.
- Comrie, Bernard. 1978. Ergativity. In Winfred P. Lehmann (ed.), *Syntactic typology: Studies in the phenomenology of language*, 329–394. Austin: University of Texas Press.
- Comrie, Bernard. 2013. Alignment of case marking of full noun phrases. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*, Leipzig: Max Planck Institute for Evolutionary Anthropology. <https://wals.info/chapter/98>.
- Croft, William. 2003. *Typology and universals*. Cambridge: Cambridge University Press.
- Devi, Jayantimala. 1986. *Ergativity: A Historical Analysis in Assamese*. New Delhi: University of Delhi dissertation.
- Dixon, Robert M. W. 1979. Ergativity. *Language* 55. 59–138.
- Dixon, Robert M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Enç, Mürvet. 1991. The semantics of specificity. *Linguistic Inquiry* 22. 1–25.
- Goswami, Golok C. & Jyotiprakash Tamuli. 2003. Asamiya. In George Cardona & Dhanesh Jain (eds.), *The Indo-Aryan Languages*, 391–443. London: Routledge.
- Gundel, Jeanette K., Nancy Hedberg & Ron Zacharski. 1993. Cognitive status and the form of referring expressions in discourse. *Language* 69. 274–307.
- Haddad, Youssef A. 2011. *Control into conjunctive Participle Clauses: The case of Assamese*. Berlin: De Gruyter Moutone.
- Handschuh, Corinna. 2008. Split Marked-S Case Systems. *Scales* 86. 73–82.
- Kakati, Banikanta. 1941. *Assamese: Its Formantion and Development*. Gauhati, Assam: Department of Historical and Antiquarian Studies.
- Kornfilt, Jaklin. 2009. DOM and two types of DSM in Turkish. In de Swart P. de Hoop H. (ed.), *Differential subject marking*, 79–111. Dordrecht: Springer.
- Kulikov, Leonid. 2017. Indo-aryan. In Mate Kapović (ed.), *The Indo-European Languages*, 214–262. London: Routledge.

- Li, Chao. 2007. Split ergativity and split intransitivity in Nepali. *Lingua* 117(8). 1462 – 1482.
- Lightfoot, David. 2010. Language acquisition and language change. *Wiley Interdisciplinary Reviews: Cognitive Science* 1(5). 677–684.
- McGregor, William B. 2009. Typology of ergativity. *Language and Linguistics Compass* 3(1). 480–508.
- Mohanan, Tara. 1994. *Argument Structure in Hindi*. Stanford: CSLI Publications.
- Montaut, Annie. 2018. The rise of differential object marking in Hindi and related languages. In Ilja A. Seržant & Alena Witzlack-Makarevich (eds.), *Diachrony of differential argument marking*, vol. 19, 281–313. Berlin: Language Science Press.
- Nath, Diganta. 2003. *Case in Assamese*. Hyderabad: Central Institute of English and Foreign Languages dissertation.
- Ruigendijk, Esther. 2015. Contrastive elicitation task for testing case marking. In Sharon Armon-Lotem, Jan de Jong & Natalia Meir (eds.), *Assessing multilingual children: Disentangling bilingualism from language impairment*, 38–54. Bristol: Multilingual Matters.
- Saha, Atanu & Bipasha Patgiri. 2013. Ergativity in Axomiya. *Language in India* 13(12). 35–46.
- Saikia, Pori. in prep. *Children's Acquisition of Assamese Split Ergativity*. Colchester: University of Essex dissertation.
- Stroński, Krzysztof. 2010. Variation of ergativity patterns in Indo-Aryan. *Poznań Studies in Contemporary Linguistics* 46(2). 237–253.
- Thampoe, Harold D. 2017. *Sinhala and Tamil: A case of contact-induced restructuring*. Newcastle: Newcastle University dissertation.
- van Valin Jr, Robert D. 1990. Semantic Parameters of Split Intransitivity. *Language* 66. 221–260.
- Verbeke, Saartje & Ludovic De Cuypere. 2009. The rise of ergativity in Hindi: Assessing the role of grammaticalization. *Folia Linguistica Historica* 30. 1–24.
- Zakharyin, Boris. 2015. Indo-Aryan ergativity and its analogues in languages of central and western eurasia. *Lingua Posnaniensis* 57(2). 63–76.