

Negation in Regional Varieties of Odia: Synchronic Patterns and Variations

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Abstract Odia, a major Eastern Indo-Aryan language, exhibits substantial internal diversity and forms a continuum of regional varieties. This paper synchronically analyses the patterns and variations in standard negation across eight Odia varieties, namely Katakai, Sambalpuri, Debagadia, Sundargadi, Singhbhumi, Baleswari, Desia, and Ganjami, focusing on the form, syntactic position, and functional properties of negative markers within the framework of (a)symmetry. The findings highlight synchronic variations by examining the pre-verbal and post-verbal negation strategies and their interaction with the components of the verbal complex in Odia.

Keywords Odia. Standard negation. Varieties. Typology. Synchronic variation.

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1 Introduction

Variability has long been recognised as a fundamental property of human language, permeating all levels of linguistic organisation (Sapir 1921). This variability encompasses subtle phonological distinctions, variations in syntactic structure, and semantic interpretation. As a consequence, the study of linguistic variation has developed into several interrelated subfields that seek to capture the complex and dynamic nature of language. A central concern of variationist research is the identification, description, and explanation of the formal, functional, and structural patterns that differentiate linguistic systems across speakers and communities (Sapir 1921). Following Labov (1966), linguistic variation can be investigated in relation to the social context of language use and the factors that contribute to linguistic differentiation and language change. Subsequent research has demonstrated that linguistic variation manifests systematically across phonology, morphology, syntax, and the lexicon, reflecting the interaction of structural constraints and sociolinguistic conditions (Labov 1972; 1994; Trudgill 1986; 2000; Chambers, Trudgill 1998). Processes such as dialect contact, divergence, and convergence further contribute to this variation, reinforced by migration patterns, settlement histories, and community identities (Bell 1984, 145-204; Boberg 2010; Wolfram, Schilling 2015).

Odia, a major language within the Eastern Indo-Aryan subgroup, provides a particularly productive context for examining such variation. Spoken by approximately 35 million speakers in the state of Odisha (Census of India 2011), Odia exhibits extensive internal diversity, with distinct regional varieties distributed across the northern, southern, western, and coastal regions of the state (Masica 1991; Cardona, Jain 2003). The coastal variety, commonly referred to as Katakia Odia or Standard Odia, functions as the official language of the state and serves as the principal medium of administration and education. Alongside this standard form, Odia encompasses several regional varieties, including Sambalpur, Sundargadi, Koraputia or Desia, Debagadia, Singhbhum, and Baleswari; each shaped by distinct sociolinguistic histories and contact ecologies (Grierson 1903; Mahapatra, Sivashanmugam, Bhattacharya 2002). Although these varieties are mutually intelligible to a considerable extent, they display systematic differences across phonological, syntactic, semantic, and discourse domains.

Negation constitutes one of the most salient domains of morphosyntactic variation among Odia varieties. The expression of negation exhibits notable regional differentiation in both form and structure, making it a particularly revealing site for investigating grammatical variation within the language. This paper examines

the negative markers attested across selected Odia varieties and analyses their position and function in the negation of declarative verbal clauses. It focuses on the interaction between negators and the verbal complex and explores the structural variation that arises from the use of preverbal and postverbal negation strategies. The study further aims to investigate whether areal patterns exist in negative constructions across eight Odia varieties, namely, Katakī, Sambalpuri, Sundargadi, Baleswari, Singhbhumi, Debagadia, Desia, and Ganjami and, if so, to account for their distribution. It also examines the extent to which these varieties exhibit heterogeneous behaviour in their negation systems. The present study is synchronic and based on current areal patterns, and does not focus on any historical reconstruction. This research adopts a synchronic and areal perspective on Odia negation. While dialect studies often engage in historical reconstruction to explain divergence, the present analysis does not attempt to trace the diachronic evolution of negation patterns. Instead, it documents the structural and positional variation of negative markers across eight contemporary Odia varieties, highlighting symmetric and asymmetric patterns as they appear in the current linguistic context of Odisha.¹

Negation is one of the most prominent distinguishing features of these varieties in Odisha, which manifests structural variations in its form and morpho-syntactic features across regions of the state. In Payne's (1985, 197-242) typology of negation strategies, negative markers may be realised either as bound morphemes, i.e., morphological negation or as independent negative particles. The Odia varieties examined in this study exhibit both strategies. Some varieties employ postverbal negative suffixes, while others use preverbal negative particles. Katakī, the standard variety of Odia, primarily expresses negation through postverbal markers, including *-n*, *-ni*, *-nɔ*, *-nah*, and *-nahĩ*, which are used to negate finite verbs (Neukom, Patnaik 2003, 339). The Baleswari variety primarily employs the postverbal markers *-ni* and *-n*, whereas the Ganjami variety likewise attests postverbal negation through markers such as *-n*, *-ni*, and, in certain contexts, *naĩ*. In contrast, several regional varieties employ markedly different strategies. Speakers of Koraputia or Desia variety rely on the preverbal negative particle *na*, while the Sundargadi variety makes use of *ni* and *niha* in the same syntactic position. Further west and north-western regions, varieties such as Sambalpuri, Debagadia, and Singhbhumi predominantly employ *naĩ* as their primary preverbal negator. These forms differ not only in

1 Explanations regarding historical development, cognitive motivations, or functional drivers of variation lie beyond the scope of this study and warrant dedicated diachronic investigation.

their phonological shape but also in their morphosyntactic status, illustrating how negation in Odia ranges from affixal strategies to free standing particles depending on regional linguistic ecologies. Figure 1 illustrates the geographical distribution of these negative markers across the eight Odia varieties included in the study. By undertaking a comparative analysis of these varieties, the present study seeks to demonstrate how distinct negation strategies give rise to morphosyntactic variation within the Odia language.

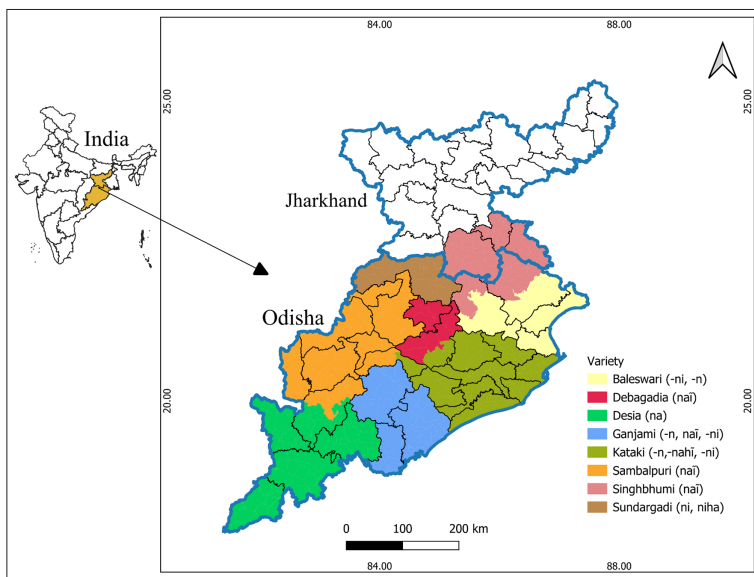


Figure 1 Geographical distribution of negative markers in Odia.
Source: Authors' own elaboration

The regional distribution of these varieties reflects well established sociolinguistic and areal patterns. Katak Odia, spoken primarily in the coastal districts, functions as the standard and official variety used in administration and formal education. Sambalpuri is used predominantly in the western regions of Odisha and is characterised by distinct structural features shaped by prolonged language contact with Chhattisgarhi (Dasgupta 1964, 147-61). The Singhbhumi and Baleswari varieties extend across northern Odisha and into adjoining areas of Jharkhand and West Bengal, reflecting long standing patterns of migration and areal convergence (Grierson 1903). The Sundargadi variety is mainly spoken in the northwestern part of Odisha, while the Koraputia variety, also known as Desia, is spoken in southern Odisha and in parts of neighbouring districts of Andhra Pradesh. Desia functions primarily as an informal medium of communication

in southern Odisha, and exhibits features distinct from both coastal and western varieties. The northwestern Debagadia variety and the south-eastern Ganjami variety also demonstrate significant structural contrasts in their negative constructions.

Although earlier research has documented specific phonological and syntactic features of Standard Odia and Sambalpuri, comprehensive analyses of their morphosyntactic properties, particularly in the domain of negation, remain limited. Research on Odia and its regional varieties has developed gradually, beginning with early grammatical descriptions by Sutton (1831) and Hallam (1874), who recorded both standard and colloquial forms of the language. Later studies by Mahapatra (2007) and Dalei (2009) provided more detailed accounts of phonological, lexical, and morphological variation, yet did not offer systematic analyses of negation. Subsequent work has largely focused on the western variety, with studies examining the phonology and morphology of Sambalpuri.² More recent research has expanded the comparative scope, with Behera, Dash and Pattanayak (2021, 55-71) analysing lexical and syntactic differences between Standard Odia and Sambalpuri, and Kushal and Padra (2021, 50-9) describing agreement patterns in Sambalpuri. Nevertheless, systematic comparative research across multiple Odia varieties remains scarce. The functional behaviour, structural distribution, and typological significance of negative markers across these varieties have not yet been adequately explored. Addressing this gap, the present study investigates patterns of negation across eight Odia varieties using synchronic data from an areal-variation perspective based on the (a) symmetry framework by Miestamo (2005), highlighting the structural contrasts they produce and contributing to a broader understanding of morphosyntactic variation within the Odia negation system. In this paper, the term Standard Negation (SN) is used in the sense of Miestamo (2005) to refer to the negation of declarative verbal main clauses, which serves as the basis for comparing affirmative and negative constructions across the Odia varieties examined.

The organisation of the paper is as follows. Section 2 outlines the methodology and data sources used in the study. Section 3 presents the negation systems of eight regional varieties of Odia and examines the structural variation observed in their negative constructions, with particular attention to patterns of symmetry and asymmetry in standard negation. Section 4 discusses the implications of these findings in relation to typological and areal perspectives on negation. Section 5 concludes the paper by summarising the main findings and highlighting their significance for the study of negation in Odia varieties.

2 See Bahidar 1977; Dash 1990; Tripathy 1992; Panigrahi, Tripathy 2001.

2 Methodology

This study documents the forms and positional distribution of negative markers across selected Odia varieties and examines their interaction with affirmative constructions to determine whether the resulting negative structures are symmetric or asymmetric. The analytical framework is informed by Miestamo's (2005; 2007) typology of negation, which conceptualises Standard Negation (SN) as the basic structural operation used to negate declarative clauses. Within this framework, negation is classified as symmetric when the negative construction differs from its affirmative counterpart only by the presence of a negator, and as asymmetric when the introduction of a negative marker triggers morphosyntactic changes in the verbal structure. As illustrated in example (1b), the negative particle *nəhĩ* in Hindi does not bring any morphosyntactic modification to the affirmative construction in (1a), representing symmetric negation. On the other hand, Bagirmi exhibits a symmetric pattern of negation in examples (2a) and (2c). However, in the negative construction in (2c), the completive marker *ga* is absent, resulting in the neutralisation of the distinction between the affirmative forms shown in (2a) and (2b). Consequently, the construction is analysed as an instance of asymmetric negation.

Hindi (Indo-Aryan)

- (1a) *māṅ* *kiṭab* *lik^h* *rəha* *hũ*
1SG[NOM] book write PROG 1SG.PRS
'I am writing a book.'
[Data ID: HIN-S1]

- (1b) *māṅ* *kiṭab* *nəhĩ* *lik^h* *rəha* *hũ*
1SG[NOM] book NEG write PROG 1SG.PRS
'I am not writing a book.'
[Data ID: HIN-S1]

Bagirmi (Nilo-Saharan, Bongo-Bagirmi)

- (2a) *ma* *m-'de*
1SG 1SG-come
'I came.'
(Miestamo 2017, 10)

- (2b) *ma* *m-'de* *ga*
1SG 1SG-come CMPL
'I have come.'
(Miestamo 2017, 10)

(2c)	<i>ma</i>	<i>m-'de</i>	<i>li</i>
	1SG	1SG-come	NEG
	'I did not come.'		
	(Miestamo 2017, 10)		

Although Miestamo (2005) further subdivides asymmetric negation based on the locus of structural change, including alterations in tense-aspect-mood (TAM) or person-number-gender (PNG) marking, emphasis, or finiteness,³ the present study restricts the analysis to a binary distinction between symmetric and asymmetric negation. This delimitation is motivated by the primary aim of the paper, which is to describe variation in the form and position of negative markers and their interaction with verbal structure, and to highlight diversity in negation strategies across regional Odia varieties.

This study adopts a synchronic approach, examining the current distribution and structural properties of negative markers across Odia varieties based on their areal occurrence. In this respect, the analysis aligns partially with recent typological work on negation in South Asian languages, such as Peterson and Chevallier (2022), which examine the structural properties of negative markers and classify languages according to their symmetric or asymmetric negation systems. While such studies group languages into typological clusters according to shared negation strategies, the present paper adopts a more narrowly focused comparative approach. It concentrates exclusively on the position of negative markers and patterns of symmetry and asymmetry between affirmative and corresponding negative constructions in Odia varieties, without attempting broader typological classification beyond the language.

A deductive approach was employed for data collection and analysis. While the dataset includes negation data from a wide range of TAM categories of each variety, only representative examples relevant to the analysis of symmetric and asymmetric negation are discussed in the present study. The heterogeneous dataset comprises speech data from 125 native speakers. Data were collected from speakers in the northern, eastern, western, and southern regions of Odisha, as well as from native Odia speakers residing in Jharkhand, in order to capture regional variation. Specifically, 18 participants were drawn from the Cuttack and Khordha districts for the Kataki or Standard variety; 16 participants from Baleshwar and eastern Mayurbhanj for the Baleswari variety; 14 participants from the Singhbhum region of Jharkhand for the Singhbhumi variety;

3 For a comprehensive understanding of the subtypes of asymmetry, consult the typological dataset and its analysis by Miestamo (2005).

16 participants from Koraput, Nabarangpur, and Rayagada districts for the Desia variety; 15 participants from Sundargarh district for the Sundargadi variety; 13 participants from Debagarh district for the Debagadia variety; 15 participants from selected areas of Ganjam and Gajapati districts for the Ganjami variety; and 18 participants from Sambalpur, Bargarh, and Jharsuguda districts for the Sambalpuri variety. One Hindi example cited in the study was obtained through telephonic elicitation with a native Hindi speaker. Table 1 presents the distribution of speakers across the eight Odia varieties, including the field sites, number of participants, and gender composition of the dataset. Although both male and female speakers were represented in the dataset, gender was not observed to affect the morphosyntactic encoding of negation in the varieties examined.

Table 1 Composition of the Speaker sample by variety, field site, and gender

Variety	Location(s)	Number of Speakers	Male	Female
Kataki	Cuttack and Khordha	18	10	8
Baleswari	Baleswar and eastern Mayurbhanj	16	9	7
Singhbhumi	Singhbhum region, Jharkhand	14	8	6
Desia	Koraput, Nabarangpur, and Rayagada	16	9	7
Sundargadi	Sundargarh	15	9	6
Debagadia	Debagarh	13	7	6
Ganjami	Ganjam and Gajapati	15	10	5
Sambalpuri	Sambalpur, Bargarh, and Jharsuguda	18	9	9

Data collection was guided by the negation questionnaire developed by Miestamo,⁴ which was adapted to the objectives of the present study. The questionnaire served as a reference framework for conducting semi-structured interviews and eliciting negation data across the selected varieties. The dataset comprises both elicited responses and spontaneous conversational speech collected during fieldwork. Participants ranged in age from 18 to 60 years and represented diverse educational backgrounds, including peasantry, masonry, weaving, teaching, and cooking, and included both formally educated and less educated speakers. To ensure traceability while

⁴ Questionnaire for Describing the Negation System of a Language. https://www.researchgate.net/publication/306039181_Questionnaire_for_describing_the_negation_system_of_a_language.

maintaining speaker anonymity, each participant was assigned an anonymised identification code indicating the variety and speaker number. These codes accompany the examples presented in the paper, allowing readers to determine whether examples originate from the same or different speakers. The examples discussed in the analysis are illustrative of the major negation patterns attested in the corpus and are drawn from both elicited and spontaneous speech data. Although some regional and register-based differences were observed, these were largely restricted to phonological variation and lexical choice. The core morphosyntactic patterns of negation remained remarkably consistent across speakers and varieties. Consequently, such sociolinguistic factors had minimal impact on the structural encoding of negation examined in the present study. All interviews were recorded using a Sony wireless recording device to ensure clarity and accuracy. The recorded data were subsequently verified, transcribed, and annotated. Interlinear morphological analysis was conducted following the Leipzig Glossing Rules, which were consistently applied throughout the transcription and annotation process.

3 Negation in Regional Varieties of Odia

Patterns of standard negation in Odia exhibit considerable regional variation, with each variety drawing on a distinct inventory of negative markers (cf. § 1). The sections that follow offer a detailed examination of these patterns across individual varieties. Each subsection analyses the negative markers attested in a given variety and explores their interaction with the verbal complex, with particular attention to their syntactic position, scope, and effects on person, number, tense, aspect, and mood marking within the domain of SN.

3.1 Katakī Variety

Katakī Odia has traditionally been regarded, both in popular perception and in earlier linguistic descriptions, as the basis of Standard Odia, and it is the variety employed in formal education, media, and administrative communication. The Katakī variety is predominantly spoken in the formerly undivided Cuttack region, encompassing the districts of Cuttack, Jajpur, Kendrapara, and Jagatsinghpur, as well as other eastern districts such as Khordha, Puri, Nayagarh, Dhenkanal, and parts of Angul. The prominence of Katakī Odia can be attributed to the longstanding political and cultural dominance of the undivided Cuttack region, which

historically functioned as the administrative nucleus of Odisha and as a central hub of eastern Odisha. The concentration of literary production, bureaucratic activity, and urban elite culture in Cuttack facilitated the preservation, codification, and dissemination of the local speech variety, which subsequently acquired prestige and came to shape the standard norm of the language (Dalei 2009).

In Katakī Odia, SN is expressed through suffixal markers such as *-n*, *-nahĩ*, and *-ni*, which attach to the main verb across different TAM categories, functioning as postverbal negators. As shown in examples (3b) and (3d), adding the negative markers *-nahĩ* or *-ni* does not change the morphosyntactic structure of the affirmative constructions in any way other than adding the negator itself. Consequently, negation in Katakī Odia in these examples conforms to the pattern of symmetric negation.

- (3a) *mũ* *Odisha* *dʒa-e*.
1SG.NOM Odisha go-1SG.PRS
'I go to Odisha.'
[Data ID: KAT-S2]
- (3b) *mũ* *Odisha* *dʒa-e-nahĩ/-ni*
1SG.NOM Odisha go-1SG.PRS-NEG
'I do not go to Odisha.'
[Data ID: KAT-S2]
- (3c) *mũ* *kamɔ* *kar-i-l-i*
1SG.NOM work do-PERF-PST-1SG
'I did the work.'
[Data ID: KAT-S5]
- (3d) *mũ* *kamɔ* *kar-i-l-i-nahĩ/-ni*
1SG.NOM work do-PERF-PST-1SG-NEG
'I did not do the work.'
[Data ID: KAT-S5]

However, in the Katakī variety, certain tense-aspect categories, notably the present perfect and present progressive, also exhibit instances of asymmetric negation. As illustrated in examples (3f) and (3h), when the postverbal negator *-n* is applied to the corresponding affirmative constructions, the verbal structure undergoes a morphosyntactic change whereby the present auxiliary *-c* is omitted.

- (3e) *mũ cakiri kar-u-c-i*
1SG.NOM job do-PROG-AUX.PRS-1SG
'I am doing a job.'
[Data ID: KAT-S5]
- (3f) *mũ cakiri kar-u-n-i*
1SG.NOM job do-PROG-NEG-1SG
'I am not doing a job.'
[Data ID: KAT-S5]
- (3g) *mũ b^haṭṭo k^ha-i-c^h-i*
1SG.NOM rice eat-PERF-AUX.PRS-1SG
'I've eaten rice.'
[Data ID: KAT-S8]
- (3h) *mũ b^haṭṭo k^ha-i-n-i*
1SG.NOM rice eat-PERF-NEG-1SG
'I've not eaten rice.'
[Data ID: KAT-S8]

In these contexts, the negator *-n* assumes the functional role of a negative copula rather than behaving as a simple suffixal marker.⁵ This pattern contrasts with the behaviour of negation in other TAM categories in Kataki Odia, where negation remains structurally symmetric, thereby highlighting internal variation within the standard variety itself.

3.2 Sambalpuri Variety

Sambalpuri functions as the primary informal medium of communication in the western region of Odisha. Speakers typically use Sambalpuri in informal and intra-community contexts, while switching to the standard variety in formal domains such as education, administration, and official communication. The Sambalpuri variety is predominantly spoken in the districts of Sambalpur, Bargarh, Sonepur, Jharsuguda, Nuapada, Balangir, and Boudh, and is used by approximately 2.63 million speakers according to the Census of India (2011).

⁵ Neukom, Patnaik (2003, 342-3) analyse *-n* as a shortened form of the negative copula *nahī*. The analysis adopted here is consistent with their interpretation.

Sambalpuri exhibits notable morphosyntactic variation in the expression of negation, with patterns that differ systematically across tense and aspectual categories. The preverbal negative particle *naĩ* frequently triggers structural changes within the verbal complex, resulting in the loss of specific grammatical features. These changes include the omission of tense markers, auxiliaries, aspectual markers, and agreement morphology, as illustrated in examples (4b), (4d), and (4f).

For instance, in example (4b), the insertion of the preverbal negative particle *naĩ* leads to the omission of the present tense marker *-es* found in the corresponding affirmative construction in example (4a). The absence of a one-to-one structural correspondence between the affirmative and negative clauses shows that SN in this context is asymmetric.

- (4a) *ʈume Sambalpur-ke dʒa-es-ʃ*
2SG.NOM Sambalpur-DAT go-PRS-2SG
'You visit Sambalpur.'
[Data ID: SBP-S2]
- (4b) *ʈume Sambalpur-ke naĩ dʒa-ɔ*
2SG.NOM Sambalpur-DAT NEG go-2SG
'You do not visit Sambalpur.'
[Data ID: SBP-S2]

Similarly, in examples such as (4d), the Sambalpuri variety exhibits the omission of multiple grammatical features following the application of the negative marker. When the preverbal negative particle *naĩ* is introduced into the affirmative construction, the verbal complex loses the aspectual marker *-u*, the auxiliary marker *-c*, and the agreement morphology, resulting in an infinitival form of the verb in the negative clause. Likewise, in example (4f), the insertion of the preverbal negator *naĩ* leads to the omission of the past tense marker *-l* present in the corresponding affirmative construction in example (4e). The negative construction instead consists of the verbal root *dʒa-* followed by the perfective aspect marker *-i* in (4f).

- (4c) *muĩ Sambalpur-ke dʒa-u-c-ẽ*
1SG.NOM Sambalpur-DAT go-PROG-AUX.PRS-1SG
'I am going to Sambalpur.'
[Data ID: SBP-S10]

- (4d) *muĩ Sambalpur naĩ dʒi-bar*
1SG Sambalpur NEG go-INF
'I am not going to Sambalpur.'
[Data ID: SBP-S10]
- (4e) *ame Sambalpur-ke go-l-ũ*
1PL.NOM Sambalpur-DAT go-PST-1PL
'We went to Sambalpur.'
[Data ID: SBP-S10]
- (4f) *ame Sambalpur-ke naĩ dʒa-i*
1PL.NOM Sambalpur-DAT NEG go-PERF
'We did not go to Sambalpur.'
[Data ID: SBP-S10]

These patterns indicate that Sambalpuri systematically exhibits asymmetric negation across TAM categories when negation is realised through a preverbal particle.

3.3 Debagadia Variety

The Debagadia variety is a northwestern regional variant of Odia and remains relatively underdescribed in the existing literature. It is predominantly spoken in the Debagarh district of Odisha, which has an estimated population of approximately 312,000 according to the Census of India (2011), and is also used in the Bonai region, the Redhakhol subdivision of Sambalpur, and the Athmallik area of Angul district. Employing the preverbal negative particle *naĩ*, Debagadia exhibits a symmetric pattern of SN. As illustrated in examples (5b) and (5d), the negative particle *naĩ* precedes the main verb but does not trigger any morphosyntactic alterations in the verbal complex. The absence of structural changes in the negative construction indicates that negation in Debagadia remains symmetric.

- (5a) *se ambɔ kʰa-e-l-a*
3SG.NOM mango eat-PERF-PST-3SG
'He ate the mango.'
[Data ID: DBG-S1]

- (5b) *se* *ambɔ* *naĩ* *kʰa-e-l-a*
3SG.NOM mango NEG eat-PERF-PST-3SG
'He did not eat the mango.'
[Data ID: DBG-S1]
- (5c) *muĩ* *ekʰni* *ambɔ* *kʰa-u-dʒ-i*
1SG.NOM now mango eat-PROG-AUX-1SG
'I am eating mango now.'
[Data ID: DBG-S4]
- (5d) *naĩ* *gɔ,* *muĩ* *ekʰni* *ambɔ* *naĩ* *kʰa-u-dʒ-i*
NEG EMP, 1SG.NOM now mango NEG eat-PROG-AUX-1SG
'No, I am not eating mango now.'
[Data ID: DBG-S4]

Furthermore, as shown in examples (5c) and (5d), Debagadia employs the auxiliary marker *-dʒ*, which represents a phonological variant relative to other Odia varieties, where the present auxiliary is typically realised as *-cʰ*. This phonological variation, however, does not affect the symmetric nature of negation in the Debagadia variety.

3.4 Sundargadi Variety

The Sundargadi variety is primarily spoken in the northwestern region of Sundargarh in Odisha. Geographically contiguous with Sambalpur speaking areas, Sundargadi has been shaped by sustained contact with neighbouring languages, most notably Sadri and Kharia, the latter belonging to the Austro-Asiatic language family (Grierson 1903). These contact influences are evident not only in the lexicon but also in patterns of everyday communication, intonation, and certain grammatical choices that distinguish Sundargadi from adjacent Odia varieties.

Sundargadi employs the negative markers *ni* and *niha*, with *ni* being the more frequently attested form. Examples (6a) to (6d) are representatives of the major SN patterns attested in this variety. Sundargadi consistently exhibits asymmetric negation, with negators occurring in preverbal position. As illustrated in example (6b), the insertion of the preverbal negative particle *ni* triggers morphosyntactic changes in the verbal complex, including the omission of the aspectual marker *-u*, the auxiliary *-cʰ*, and the agreement marker *-ẽ* present in the corresponding affirmative construction in example (6a). The resulting negative construction consists of the preverbal negator *ni* followed by an infinitival verb

form. Notably, this asymmetric negation pattern is structurally identical to that observed in examples (4c) and (4d) in Sambalpuri, involving the same morphosyntactic reorganisation of the affirmative construction under negation.

- (6a) *muĩ* *ek^hen* *kɔɖil* *k^ha-u-c^h-ẽ*
1SG.NOM now banana eat-PROG-AUX.PRS-1SG
'I am eating a banana now.'
[Data ID: SDG-S3]

- (6b) *muĩ* *ek^hen* *kɔɖil* *ni* *k^hae-bar*
1SG.NOM now banana NEG eat-INF
'I am not eating a banana now.'
[Data ID: SDG-S3]

- (6c) *Ramesh* *America* *dʒa-i-c^h-e*
3SG.NOM America go-PERF-AUX.PRS-3SG
'Ramesh has been to America.'
[Data ID: SDG-S11]

- (6d) *Ramesh* *ek^hen* *ʈɔk* *America* *niha* *dʒa-e*
3SG.NOM now till America NEG go-3SG
'Ramesh has not visited America till now.'
[Data ID: SDG-S11]

Likewise, in example (6d), the use of the preverbal negator *niha* leads to the loss of perfective aspect and auxiliary markers found in the affirmative construction in example (6c). The systematic omission of grammatical features in these instances of SN provides clear evidence that Sundargadi exhibits an asymmetric negation pattern.

3.5 Baleswari Variety

Baleswari Odia is the predominant variety in the northern region of Odisha, encompassing the districts of Balaswar, Bhadrakh, and many parts of Kendujhar, as well as the eastern areas of Mayurbhanj. The variety shares a border with West Bengal, where Bengali is the dominant language, and consequently retains several features resembling Bengali, such as the use of *-te* in non-finite constructions, e.g., *kɔr-te* (to do).

In terms of negation, Baleswari employs *-ni* and *-n* (see 7b and 7d), and these markers function as postverbal negators, attaching as suffixes to the verb stem. Furthermore, the standard past tense

marker *-l* in other Odia varieties undergoes a phonological change to *-n* in Baleswari exclusively in affirmative contexts (7a), which should not be mistaken for a negation marker.

- (7a) *tume mɔʔte k^hai-ʔe kɔh-u-t^hi-n-ɔ*
2SG.NOM 1SG.ACC eat-NONF tell-PROG-AUX.NPRS-PST-2SG
'You were asking me to eat.'
[Data ID: BLS-S5]

- (7b) *tume mɔʔte k^hai-ʔe kɔh-u-t^hi-l-ɔ-ni*
2SG.NOM 1SG.ACC eat-NONF tell-PROG-AUX.NPRS-PST-2SG-NEG
'You were not asking me to eat.'
[Data ID: BLS-S5]

- (7c) *mũ Baripada-re rɔh-u-c^h-i*
1SG.NOM Baripada-LOC live-PROG-AUX.PRS-1SG
'I am staying in Baripada.'
[Data ID: BLS-S9]

- (7d) *mũ Baripada-re rɔh-u-n-i*
1SG.NOM Baripada-LOC live-PROG-NEG-1SG
'I am not staying in Baripada.'
[Data ID: BLS-S9]

When the negative marker *-ni* is applied, as in example (7b), it does not induce any morphosyntactic changes in the affirmative verbal complex, indicating symmetric negation. In contrast, example (7d) illustrates an instance of asymmetric negation, where the present auxiliary is omitted in the negative construction and the negative marker *-n* acts as a negative copula. Thus, the Baleswari variety exhibits both symmetric and asymmetric patterns of negation.

3.6 Singhbhum Variety

Singhbhum is a historical region in present-day Jharkhand state, encompassing East Singhbhum, West Singhbhum, and Seraikela-Kharsawan. Traditionally, it was inhabited by tribal communities, including the Ho and Munda, under various local chiefdoms (Roy 1912, 42-113; Singh 1978). In Odisha, the region is sometimes referred to as *Bichhinanchala* (separated region), because a significant population of Odia speakers resides there, despite the area not being incorporated into modern Odisha due to historical

and political factors. According to Acharya (1935, 18), Odia speakers formed the predominant linguistic community in Singhbhum.

The Singhbhum variety, the northernmost Odia variant, has also influenced the western hilly regions of present-day Mayurbhanj and Kendujhar in Odisha, particularly through its negation strategies. This area historically belonged to a princely state and shares a border with Singhbhum. Singhbhum uses the preverbal negative particle *naĩ*. The insertion of pre-verbal *naĩ* in Singhbhum does not trigger any morphosyntactic changes in the verbal complex. Consequently, SN in the Singhbhum variety is symmetric, as illustrated in examples (8b) and (8d).

- (8a) *mɔ-r* *nɔna* *mɔʔe* *bul-ʔe* *dak-l-a*
1SG-GEN elder brother 1SG.ACC roam-NONF call-PST-3SG
'My elder brother called me to roam around.'
[Data ID: SNB-S10]

- (8b) *mɔ-r* *nɔna* *mɔʔe* *bul-ʔe* ***naĩ*** *dak-l-a*
1SG-GEN elder brother 1SG.ACC roam-NONF NEG call-PST-3SG
'My elder brother did not call me to roam around.'
[Data ID: SNB-S10]

- (8c) *semane* *Chakulia-re* *ruɦɔ-n*
3PL.NOM Chakulia-LOC live-3PL
'They live in Chakulia.'
[Data ID: SNB-S11]

- (8d) *semane* *Chakulia-re* ***naĩ*** *ruɦɔ-n*
3PL.NOM Chakulia-LOC NEG live-3PL
'They do not live in Chakulia.'
[Data ID: SNB-S11]

3.7 Desia Variety

Desia, also referred to as Koraputia or Desia Odia, is spoken in the southern parts of Odisha, specifically in the former undivided Koraput region, which includes the present-day Koraput, Rayagada, Malkangiri, and Nabarangpur areas, as well as the southern parts of Kalahandi district. This variety differs from other Odia varieties in phonology, lexicon, and morphosyntax, displaying features characteristic of a transitional or mixed linguistic zone (Grierson 1903). It exhibits simplification of verbal morphology, distinct case-marking tendencies, and a rich array of regional lexical

items reflecting both tribal and Odia influences. Although generally intelligible to speakers of other Odia varieties, Desia occupies a unique linguistic ecology, functioning as a lingua franca between Odia-speaking groups and the multilingual highland communities of southern Odisha (Anderson 2008).

Negation in Desia is realised through the invariant preverbal negative particle *na*. The insertion of *na* triggers morphosyntactic changes across TAM categories. For instance, as illustrated in examples (9b) and (9d), the negative particle induces the loss of grammatical features present in the corresponding affirmative clauses. In example (9a), the affirmative structure contains the verb root *dʒi* (go), the future tense marker *-b*, and the agreement marker *-i*. In the negative counterpart (9b), the future tense marker *-b* is omitted following the application of *na*. Similarly, in example (9d), the past tense marker present in the affirmative (9c) is deleted in the negative construction.

(9a) *muĩ koraput dʒi-b-i*
1SG.NOM Koraput go-FUT-1SG
'I will go to Koraput.'
[Data ID: DSA-S7]

(9b) *muĩ koraput na dʒa-i*
1SG.NOM Koraput NEG go-1SG
'I will not go to Koraput.'
[Data ID: DSA-S7]

(9c) *aʒe kɔbɔrkagɔdʒ pɔd-l-a*
3SG.NOM newspaper read-PST-3SG
'He read the newspaper.'
[Data ID: DSA-S9]

(9d) *aʒe kɔbɔrkagɔdʒ na pɔd-a*
3SG.NOM newspaper NEG read-3SG
'He did not read the newspaper.'
[Data ID: DSA-S9]

These patterns demonstrate that the Desia variety systematically exhibits asymmetric negation when forming SN.

3.8 Ganjami Variety

The Ganjami variety of Odia is spoken in the south-eastern region of Odisha, primarily encompassing the districts of Ganjam, Gajapati, and Kandhamal. Gauda (1989) has documented the grammatical characteristics of Ganjami, with particular attention to its phonological and morphological features. Situated in a transitional zone between Odia- and Telugu-speaking regions, Ganjami reflects influences from both Indo-Aryan and Dravidian languages, as well as interactions with Munda-speaking communities. Its distinctiveness is particularly evident in intonation patterns and lexical choices, which differentiate it from other Odia regional varieties (Gauda 1989).

In Ganjami, non-finite verb forms, such as *dʒ-ibarɔ* (to go), are used to mark habitual actions, a feature not commonly observed in the affirmative constructions of other Odia varieties. Negation is primarily expressed through the postverbal markers *-n* and *-ni*. The postverbal negative particle *naĩ* is also attested in the Ganjami data (see 10b); the same form occurs preverbally in several other Odia varieties discussed in this study (see §§ 3.2, 3.3, 3.6).

- (10a) *pila-ta* *ɔɔbudine* *skulu* *dʒ-ibarɔ*
boy-CL everyday school go-NONF
'The boy goes to school everyday.'
[Data ID: GJM-S13]

- (10b) *pila-ta* *muɽe* *skulu* *dʒ-ibarɔ* ***naĩ***
boy-CL everyday school go-NONF NEG
'The boy does not go to school everyday.'
[Data ID: GJM-S13]

- (10c) *ʈanke* *kali* *mence* *ambili* *gemp^h-i-c-i*
3SG.NOM yesterday a lot sour eat-PERF-AUX.NPRS-3SG
'He has eaten a lot of sour food yesterday.'
[Data ID: GJM-S12]

- (10d) *ʈanke* *kali* *ambili* *gemp^h-i-n-i*
3SG.NOM yesterday sour eat-PERF-NEG-3SG
'He has not had any sour food yesterday.'
[Data ID: GJM-S12]

Structurally, Ganjami exhibits both symmetric and asymmetric negation patterns: symmetric negation is illustrated in example (10b), where the negative marker does not alter the affirmative verbal complex, whereas asymmetric negation is demonstrated in example

(10d), where the insertion of the negator triggers morphosyntactic changes by omitting the auxiliary *-c*. In this respect, Ganjami demonstrates postverbal negation strategies and variability in (a)symmetry across TAM categories.

3.9 Structural Variations and (A)symmetry in the Standard Negation of Odia Varieties

Across the eight Odia varieties studied, negative markers in declarative clauses occupy two primary structural positions: postverbal and preverbal [fig. 2]. Postverbal negation is characteristic of the Kataki variety of eastern Odisha, the Baleswari variety of northern Odisha, and the Ganjami variety of southeastern Odisha. Baleswari is also in contact with the eastern Kataki variety, resulting in numerous structural similarities, though many lexical distinctions persist. In Kataki, the suffixes *-nahĩ*, *-ni*, and *-n* attach to the verbal stem. Baleswari and Ganjami employ *-ni* and *-n* suffixes; also *naĩ* in some cases of Ganjami as post-verbal negative particle. In these varieties, as illustrated in Figure 3, postverbal negators exhibit symmetric negation for most TAM categories. However, instances of asymmetric negation are attested in Kataki, Baleswari, and Ganjami, particularly in the present perfect and present progressive, where the auxiliary may be lost, revealing context-dependent structural variation. Preverbal negation is observed in the remaining five varieties: Singhbhumī, Sambalpuri, Sundargadi, Debagadia, and Desia/Koraputia [fig. 3]. Preverbal negators constitute a pervasive feature in Odia-speaking regions, extending from northwestern Odisha and the Odia diaspora in Jharkhand to the southern districts of the state. Lexically, the Singhbhumī variety differs from its neighbouring Baleswari variety, and it also contrasts in negation marking. While Baleswari employs postverbal negation, the negative particle *naĩ* in Singhbhumī precedes the verb without inducing morphosyntactic changes, resulting in consistently symmetric negation across TAM categories. By contrast, Sambalpuri and Sundargadi display preverbal negation that is systematically asymmetric. In Sambalpuri, *naĩ* triggers the omission of tense and aspect markers, auxiliary verbs, and person-number agreement features, producing a negative construction that diverges structurally from the affirmative. Sundargadi exhibits a comparable asymmetry with the preverbal particles *ni* and *niha*, where SN similarly entails the loss of aspectual and auxiliary markers. Compared to neighbouring varieties such as Sambalpuri, Sundargadi, and Kataki, Debagadia is primarily distinguished by lexical differences, while sharing several structural features with these varieties.

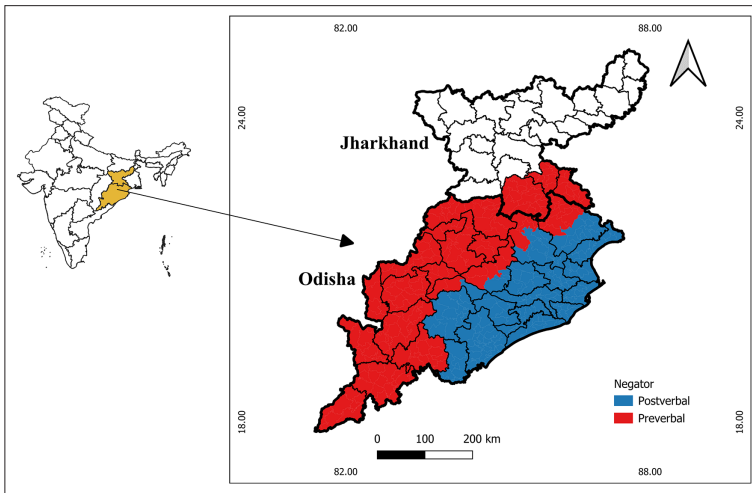


Figure 2 Distribution of preverbal and postverbal negators in Odia varieties.
Source: Authors' own elaboration

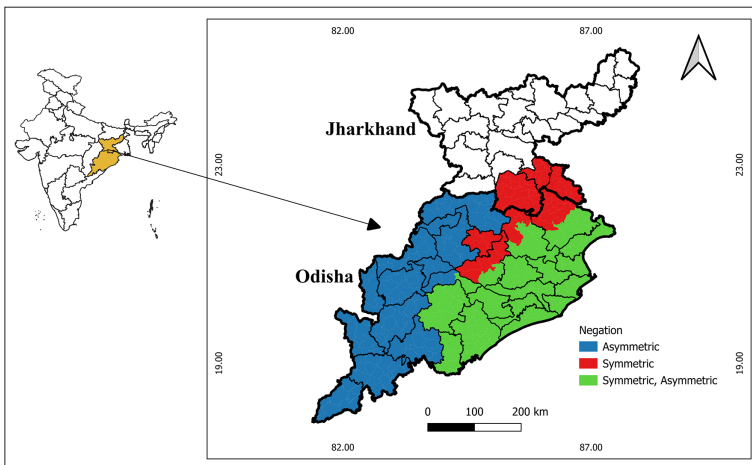


Figure 3 Symmetric and asymmetric negation in the regional varieties of Odia.
Source: Authors' own elaboration

Debagadia presents an intermediate pattern (cf. § 3.3). Although it employs the preverbal particle *naī* akin to Sambalpuri and Sundargadi, its negation remains symmetric, without morphosyntactic alterations to the affirmative. This pattern likely results from its unique sociolinguistic and geographical positioning: bordered by the majorly symmetric Kataki and Singhbhum varieties, yet in contact with the

asymmetric varieties to the west and south. Debagadia appears to have retained symmetric negation under the stabilising influence of its neighbouring standard and symmetric varieties. The Desia/ Koraputia variety of southern Odisha similarly employs a preverbal negative particle *na*, but exhibits asymmetric negation. Here, the application of the negative particle leads to the systematic omission of tense markers in the negative construction, aligning it typologically with Sambalpuri and Sundargadi. Table 2 provides an overview of the distribution of negator type, position, and (a)symmetry across the Odia varieties analysed in this study, and Figure 4 offers a visual representation of the observed patterns.

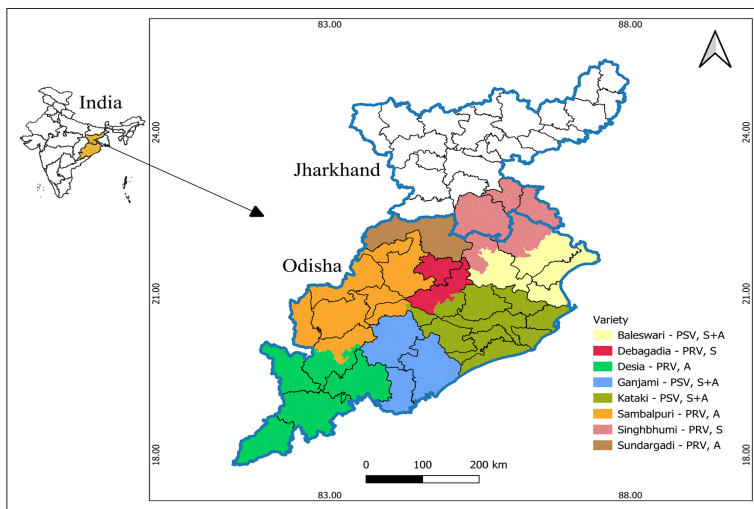


Figure 4 Representation of (a)symmetry in Odia varieties. Source: Authors' own elaboration.
(PRV= Pre-verbal, PSV=Post-verbal, S= symmetric, A= Asymmetric, S+A= both symmetric and asymmetric)

Table 2 Negator type, position, and (a)symmetry across Odia varieties

Variety	Negator type	Position	(A)symmetry
Kataki	Suffix	Postverbal	Symmetric, Asymmetric
Baleswari	Suffix	Postverbal	Symmetric, Asymmetric
Ganjami	Suffix, Negative particle	Postverbal	Symmetric, Asymmetric
Debagadia	Negative particle	Preverbal	Symmetric
Singhbhumi	Negative particle	Preverbal	Symmetric
Sambalpuri	Negative particle	Preverbal	Asymmetric

Variety	Negator type	Position	(A)symmetry
Sundargadi	Negative particle	Preverbal	Asymmetric
Desia	Negative particle	Preverbal	Asymmetric

As mapped in Figure 4, these patterns reveal a complex interplay of structural, areal, and contact-driven factors in shaping negation across Odia varieties. Symmetric and asymmetric negation exhibit distinct patterns of distribution across the Odia varieties examined, with variation observed in the form, position, and morphosyntactic behaviour of negative markers. The distinction between postverbal and preverbal negation, alongside the emergence of asymmetry in specific TAM categories, highlights the typological diversity within Odia and underscores the influence of both internal morphosyntactic tendencies and external sociolinguistic pressures. The patterns observed across the Odia varieties are consistent with Miestamo's (2005; 2007) typology of symmetric and asymmetric negation, demonstrating that negation may either preserve the structure of the corresponding affirmative construction or involve morphosyntactic restructuring. Overall, the findings contribute to a broader understanding of linguistic variation in South Asian languages, demonstrating how regional varieties negotiate the interface between structural uniformity and areal differentiation.

4 Discussion

Negation constitutes a central and diagnostically significant feature across the regional varieties of Odia, revealing both structural diversity and areal differentiation. In the eastern and northern regions of Odisha, located on the eastern side of the Eastern Ghats, speakers predominantly employ postverbal negators. In contrast, communities on the western side, including the northwestern zones of Singhbhum and Sundargarh and extending to the western and southern districts, primarily use preverbal negative particles. This contrast establishes negation as a key distinguishing characteristic among colloquial Odia varieties. Understanding these patterns requires a typologically informed approach that integrates morphosyntactic structure, geographical distribution, and the influence of language contact.

Foundational typological studies of South Asian languages, including Bloch (1934), Emeneau (1956, 3-16), and Masica (1976), have demonstrated that linguistic features can vary independently of genealogical affiliation. This variation has given rise to heterogeneous linguistic areas rather than uniform linguistic zones. Subsequent

research on language contact and areal typology⁶ has reinforced the view of South Asia as a region of sustained linguistic diversity and dynamic interaction. Within this framework, Peterson and Chevallier (2022) provide a systematic account of negation in South Asian languages. Their classification is based on a set of formal binary features of negation, from which four typological clusters emerge, allowing genealogical and areal tendencies to be observed. They argue that the similarities and differences in negation strategies across these clusters emerge from long-term contact, demonstrating the critical role of areal factors in shaping morphosyntactic patterns.

The present study situates the variation in Odia negation within the broader dynamics of regional contact, historical interaction, and areal diffusion. Odisha is home to numerous Austroasiatic tribal languages, particularly in the northern, western, and southern regions, as well as several Dravidian languages in select areas. Sustained interaction between Odia-speaking populations and speakers of these languages has persisted for centuries. The observed differences in negation, including postverbal strategies in Katakī, Baleswari, and Ganjami, and preverbal strategies in Singhbhumi, Sambalpuri, Sundargadi, Debagadia, and Desia/Koraputia, likely reflect both historical influence and contact-driven adaptation, as inferred from the synchronic analysis of the data.

This study represents an initial effort to examine such syntactic convergence and divergence in Odia negation. It highlights the interaction between internal structural tendencies and external sociolinguistic pressures. The coexistence of symmetric and asymmetric negation patterns across the Odia varieties suggests that multiple factors may underlie the morphosyntactic realisation of negation. While the present study identifies and describes these patterns, it does not attempt to determine the historical or contact-induced mechanisms responsible for their distribution. In particular, the question of why certain varieties employing preverbal negators maintain symmetric negation whereas others exhibit asymmetry requires a more detailed investigation of language contact and influence of linguistic area. Such an analysis lies beyond the scope of the present study and constitutes an important direction for future research of the authors. Future research will investigate how prolonged contact with neighbouring Austroasiatic, Dravidian, and other Indo-Aryan languages has shaped negation strategies in Odia. Such work will advance understanding of both the typology of negation and the processes of linguistic variation in South Asia,

⁶ See Abbi 1997, 131-48; Peterson 2010, 56-86; 2015, 149-62; 2017, 211-57; Ebert 1993, 83-110; 2006, 557-64; Saxena 2015; Osada 1991, 99-119; Bickel 2017, 40-54; Matras 2020.

illustrating how regional varieties balance structural uniformity with areal differentiation.

5 Conclusion

The analysis of eight Odia varieties demonstrates that negation strategies are systematically distributed across the state, shaped by both structural tendencies and areal factors. Eastern and northern varieties, including Katak, Baleswari, and Ganjami, predominantly employ post-verbal negators, which largely preserve the morphosyntactic structure of affirmative clauses, resulting in symmetric negation. Instances of asymmetric negation in these varieties occur primarily in specific tense-aspect-mood contexts, such as the present perfect and present progressive, where auxiliary loss is observed. In contrast, pre-verbal negation is dominant in the remaining varieties, Singhbhum, Sambalpur, Sundargarh, Debagarh, and Desia/Koraput, though its structural consequences vary. Singhbhum and Debagarh retain affirmative verbal morphology, exemplifying symmetric negation, whereas Sambalpur, Sundargarh, and Desia exhibit asymmetric negation, with the application of pre-verbal particles triggering systematic loss of tense, aspect, auxiliary, and agreement markers. The findings reveal variation in the form, position, and morphosyntactic properties of negative markers across the eight Odia varieties examined. In particular, the distribution of preverbal and postverbal negators and the occurrence of symmetric and asymmetric negation patterns exhibit distinct regional tendencies. Importantly, this study adopts a synchronic, areal perspective, documenting the contemporary distribution of negation strategies without reconstructing historical development. By focusing on present-day regional patterns, the analysis provides a synchronic account of the diversity of negation strategies across Odia varieties and the structural variation underlying symmetric and asymmetric negation. By systematically mapping symmetric and asymmetric negation across multiple regional varieties, this research contributes to the typological study of negation in Eastern Indo-Aryan languages, a domain that has received relatively limited attention. The findings underscore that negation in Odia functions as a significant marker of underlying linguistic convergence, divergence, and prolonged language contact. This work therefore advances our understanding of areal variation in South Asian languages and establishes a foundation for further comparative and contact-driven studies, illuminating how morphosyntactic structures interact with regional and social factors to shape language variation.

Abbreviations

1	1 st person
2	2 nd person
3	3 rd person
ACC	accusative
ASP	aspect
AUX	auxiliary
BLS	Baleswari
DAT	dative
DBG	Debagadia
DSA	Desia
FUT	future
GJM	Ganjami
IA	Indo-Aryan
INF	infinitive
KAT	Kataki
LOC	locative
NEG	negation
NOM	nominative
NONF	non-finite
NPRS	non-present
SBP	Sambalpur
SDG	Sundargadi
SNB	Singhbhumi
PERF	perfective
PL	plural
PNG	person-number-gender
PROG	progressive
PRS	present
PST	past
SG	singular
SN	standard negation
TAM	tense-aspect-mood

Bibliography

- Abbi, A. (1997). "Languages in Contact in Jharkhand". Abbi, A. (ed.), *Languages of Tribal and Indigenous Peoples of India. The Ethnic Space*. Delhi: Motilal Banarsidass, 131-48.
- Acharya, K. (1935). *Singhbhum and the History of the Odia Language*. Cuttack: The Utkal Sahitya Press.
- Anderson, G.D.S. (2008). *The Munda Languages*. London: Routledge. <https://doi.org/10.4324/9781315822433>.
- Bahidar, S.N. (1977). *Samkshipta Sambalapuri Byākaraṇa o Racanā* (A Concise Grammar and Composition of Sambalpur). Cuttack: Cinmaya Sāhitya Samśada.
- Behera, P.; Dash, B.; Pattanayak, D.P. (2021). "An Exploratory Study of Lexico-Syntactic Variations in Sambalpur and Odia". *International Journal of Dravidian Linguistics*, 50(1), 55-71. <https://doi.org/10.5281/ZENODO.4519791>.
- Bell, A. (1984). "Language Style as Audience Design". *Language in Society*, 13(2), 145-204. <https://doi.org/10.1017/S004740450001037X>.
- Bickel, B. (2017). "Areas and Universals". Hickey, R. (ed.), *The Cambridge Handbook of Areal Linguistics*. Cambridge: Cambridge University Press, 40-54. <https://doi.org/10.1017/9781107279872.004>.
- Bloch, J. (1934). *L'Indo-aryen: Du Veda aux temps modernes*. Paris: Librairie d'Amérique et d'Orient.
- Boberg, C. (2010). *The English Language in Canada: Status, History, and Comparative Analysis*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CB09780511781056>.
- Cardona, G.; Jain, D. (eds) (2003). *The Indo-Aryan Languages*. London: Routledge. <https://doi.org/10.4324/9780203945315>.
- Census of India (2011). *Language*. New Delhi: Office of the Registrar General and Census Commissioner, India. https://censusindia.gov.in/nada/index.php/catalog/42458/download/46089/C-16_25062018.pdf.
- Chambers, J.K.; Trudgill, P. (1998). *Dialectology*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/CB09780511805103>.
- Dalei, U.N. (2009). *Odia Bhasara Shrusti o Bikasa* (The Origin and Development of Odia Language). Cuttack: A.K. Mishra Publishers.
- Dasgupta, D. (1964). "Report on the Preliminary Survey of Oriya Dialects". *Bulletin of the Anthropological Survey of India*, 13(3-4), 147-61.
- Dash, A.K. (1990). *Evolution of Sambalpur Language and Its Morphology* [PhD Dissertation]. Sambalpur: Sambalpur University.
- Ebert, K. (2006). "South Asia as a Linguistic Area". Brown, K. (ed.), *Encyclopedia of Languages and Linguistics*. 2nd ed. Oxford: Elsevier, 557-64. <https://doi.org/10.1016/B0-08-044854-2/00214-5>.
- Ebert, K.H. (1993). "Kiranti Subordination in the South Asian Areal Context". Ebert, K.H. (ed.), *Studies in Clause Linkage: Papers from the First Köln Zürich Workshop*. Zurich: Universität Zürich, 83-110.
- Emeneau, M.B. (1956). "India as a Linguistic Area". *Language*, 32(1), 3-16. <https://doi.org/10.2307/410649>.
- Gauda, D. (1989). *A Study of the Ganjami Dialect of Oriya* [PhD Dissertation]. Pune: Deccan College Post-Graduate and Research Institute.
- Grierson, G.A. (1903). *Linguistic Survey of India*. Vol. 5, *Indo-Aryan Family, Eastern Group*. Calcutta: Government of India, Central Printing Office.
- Hallam, E.C.B. (1874). *Oriya Grammar for English Students*. Calcutta: Baptist Mission Press.

- Kushal, G.; Padra, B. (2021). "Agreement in Sambalpuri: A Lesser-Known Language". *International Interdisciplinary Research Journal*, 11, special issue, 50-9.
- Labov, W. (1966). *The Social Stratification of English in New York City*. Washington, D.C.: Center for Applied Linguistics.
- Labov, W. (1972). *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
- Labov, W. (1994). *Principles of Linguistic Change*. Vol. 1, *Internal Factors*. Oxford: Blackwell.
- Mahapatra, B.P. (2007). *A Synchronic Grammar of Oriya: Standard Spoken and Written*. Mysore: Central Institute of Indian Languages (CIIL).
- Mahapatra, B.P.; Sivashanmugam, C.; Bhattacharya, S.S. (2002). *Linguistic Survey of India Special Studies: Orissa*. Kolkata: Language Division, Registrar General of India.
- Masica, C.P. (1976). *Defining a Linguistic Area: South Asia*. Chicago; London: University of Chicago Press.
- Masica, C.P. (1991). *The Indo-Aryan Languages*. Cambridge: Cambridge University Press.
- Matras, Y. (2020). *Language Contact*. 2nd ed. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108333955>.
- Miestamo, M. (2005). *Standard Negation: The Negation of Declarative Verbal Main Clauses in a Typological Perspective*. Berlin; New York: Mouton de Gruyter. <https://doi.org/10.1515/9783110197631>.
- Miestamo, M. (2007). "Negation – An Overview of Typological Research". *Language and Linguistics Compass*, 1, 552-70. <https://doi.org/10.1111/j.1749-818X.2007.00026.x>.
- Miestamo, M. (2017). "Negation". Aikhenvald, A.Y.; Dixon, R.M.W. (eds), *The Cambridge Handbook of Linguistic Typology*. Cambridge: Cambridge University Press, 405-39. <https://doi.org/10.1017/9781316135716.013>.
- Neukom, L.; Patnaik, M. (2003). *A Grammar of Oriya*. Zurich: University of Zurich.
- Osada, T. (1991). "Linguistic Convergence in the Chotanagpur Area". Mullick, S.B. (ed.), *Cultural Chotanagpur: Unity in Diversity*. New Delhi: Uppal Publishing House, 99-119.
- Panigrahi, N.; Tripathy, P. (2001). *Sambalpuri-Kosli Byakarana* (A Sambalpuri-Kosli Grammar). Sambalpur: Sambalpur University.
- Payne, J.R. (1985). "Negation". Shopen, T. (ed.), *Language Typology and Syntactic Description*. Vol. 1, *Clause Structure*. Cambridge: Cambridge University Press, 197-242.
- Peterson, J. (2010). "Language Contact in Jharkhand: Linguistic Convergence Between Munda and Indo-Aryan in Eastern Central India". *Himalayan Linguistics*, 9(2), 56-86. <https://doi.org/10.5070/H99223479>.
- Peterson, J. (2015). "Introduction – Advances in the Study of Munda Languages". *Journal of South Asian Languages and Linguistics*, 2(2), 149-62. <https://doi.org/10.1515/jsall-2015-0008>.
- Peterson, J. (2017). "Fitting the Pieces Together: Towards a Linguistic Prehistory of Eastern Central South Asia (and Beyond)". *Journal of South Asian Languages and Linguistics*, 4(2), 211-57. <https://doi.org/10.1515/jsall-2017-0009>.
- Peterson, J.; Chevallier, L. (2022). "Towards a Typology of Negation in South Asian Languages". *Bhasha*, 1(1), 17-62. <https://doi.org/10.30687/bhasha/8409-3769/2022/01/005>.
- Roy, S.C. (1912). *The Mundas and Their Country*. Calcutta: Asia Publishing House.

- Sapir, E. (1921). *Language: An Introduction to the Study of Speech*. New York: Harcourt, Brace & Co.
- Saxena, A. (ed.) (2015). "Micro-Linguistic Areas in South Asia", special issue, *Journal of South Asian Languages and Linguistics*, 2(1).
- Singh, K.S. (1978). *The Ho Tribe of Singhbhum*. New Delhi: Classical Publications.
- Sutton, A. (1831). *An Introductory Grammar of the Oriya Language*. Calcutta: W. Thacker.
- Tripathy, P.K. (1992). *A Linguistic Survey of Sambalpur* [PhD Dissertation]. Sambalpur: Sambalpur University.
- Trudgill, P. (1986). *Dialects in Contact*. Oxford: Blackwell.
- Trudgill, P. (2000). *Sociolinguistics: An Introduction to Language and Society*. London: Penguin.
- Wolfram, W.; Schilling, N. (2015). *American English: Dialects and Variation*. Malden, MA: Wiley-Blackwell. <https://doi.org/10.1017/S0047404507260063>.

