

**A TYPOLOGICAL STUDY OF ADJECTIVES
IN SELECT EASTERN INDO-ARYAN LANGUAGES**

*Thesis submitted to Jadavpur University
for the award of the degree of
Doctor of Philosophy*

by
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2025

Certificate from Supervisor

This is to certify that the thesis entitled A TYPOLOGICAL STUDY OF ADJECTIVES IN SELECT EASTERN INDO-ARYAN LANGUAGES submitted by PROJITA GIRI, who got registered (D-7/ISLM/8/18, dated 16.01.2018) her name under the Faculty of Interdisciplinary Studies, Law & Management for the award PhD (Arts/Science/Engineering/Pharmacy) degree of Jadavpur University is absolutely based upon her own work under the supervision of DR. ATANU SAHA and that neither her thesis nor any part of the thesis has been submitted for any degree/diploma or any other academic award anywhere before.

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This thesis, titled “A Typological Study of Adjectives in Select Eastern Indo-Aryan Languages,” which I submitted for the award of the degree of Doctor of Philosophy, is an original work and has not been submitted so far in part or in full for any other degree or diploma of any university/institution.

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Dedication

ma ar b^haⁱke
mother and brother-ACC
'to my mother and brother'

Acknowledgement

This thesis is the outcome of the contributions of many people in varied forms, all of which deserve recognition.

First and foremost, I would like to extend my sincere gratitude to my Ph. D Supervisor, Dr. Atanu Saha, for giving me time and space to explore my research interest and for giving concrete shapes to those ideas. His unwavering and silent support, immense patience for reading draft after draft, insightful and constructive comments, invaluable guidance, and exceptional expertise have been crucial in molding my research and helping me grow as a scholar. Thanks for agreeing on the same topic in which I did my M.Phil under your supervision.

I also wish to acknowledge my thankfulness to the other faculty members Dr. Samir Karmar and Prof. Indranil Dutta, the former/present Secretary(s) and the former/present Dean(s) including Prof. Ratan Mandal of the Faculty of Interdisciplinary Studies, Law and Management as well as the former/present Vice-Chancellors of my university Prof. Suranjan Das, Prof. Buddhadeb Sau and Prof. Bhaskar Gupta for their time, attention and suggestions.

Thanks to the departmental staff Nasim *da* and Mamta *di*.

I have no words to thank the linguists/professors of India and/or Nepal: B. N. Patnaik, Probal Dasgupta, Awadesh Kumar Mishra, Ramawatar Yadav, Yogendra Yadava, Pabitra Sarkar, Ayesha Kidwai, Tanmoy Bhattacharya, Panchanan Mohanty, Mina Dan, Sibashish Mukherjee, Niladri Sekhar Dash, Bornini Lahiri, Ritesh Kumar, Deepak Alok, Tariq Khan, Sujoy Sarkar, Pankaj Diwedi, Dipamoni Haloi, Md. Asad, Chandan Kumar, Pitamber Behera, Manosh Jyoti Nirmalia, Sahjahan Ahmed and others for helping me in various capacities from sending study materials, and suggesting books to giving responses to my questions online and offline.

Thanks to all the professors Sabita Pradhan (Odia University), Bijaylaxmi Dash (Odia Department, Ravenshaw University), Pranita Devi and others (Assamese Department, Gauhati University) and Ashok Kumar Dash (Odia Department, Sambalpur University) for helping me to access libraries, and providing suggestions and guidance.

I thank my fellow Ph. D scholars Sagarika Saha, Monika Hansda, Nitu Sarkar and Mansi Nadkarni for their companionship. Special thanks to my dear *boudi* Mousumi Das for providing me with data.

I am indebted to my (language) friends Dr. Debolina Nath, Bidyabrata Majumdar, Supriya Chakraborty, Dr. Anubhav Tripathy, Pallabi Adhikary, Mijanur Rahman, Abhishek Rajput, Akanksha Suman, Gaurang Charan Jena, Bapi Kumar Ray, Asmina Khatun, Nilofar, Chinmayee Jena, Sudipta Mahapatra, Braja Mohan Jerai, Pritam, Kartik Mete,

Pranami, Rana, Mou, Setu Chowdhury for their spirit throughout this journey. Thanks to Suvam Sen for his steady support.

I truly appreciate the support that I received from my students Prakriti Saha, Binita Biswas, Chitradeep Dhar, Malini Chakraborty, Archishman Banerjee, Sambrita Dutta, Rajdeep Banerjee, Nilima Kisku, Subhalaxmi, Ditsa Dutta, Dwaipayan Roy, Sankha Murmu and Priyanka Bhowmick.

No thanks is enough for my data informants who always gave inputs timely.

Thanks to my former/present colleagues Dr. Ashutosh Kumar Jha, Amit Kumar Mishra, Dr. Nikhil Jain, Dr. Sanjay Kumar Bag and Ashok Kumar Mishra.

Many thanks to my language teachers Dr. Rabindra Kumar Das, Biswaranjan Mohanty and María Alonso Ruíz.

I would also like to convey my appreciation to Dr. Ravindra Kumar and Prof. Amarendra P. Behera from my present workplace.

A special note of thanks to Dr. Nabagopal Roy, the poet and artist Shamindra Bhowmik and Dr. Bir Bahadur Mahato (Nepal) for their strong support.

I would also like to express my gratitude to the *Indian Council of Social Science Research* (ICSSR), New Delhi for funding me with the Doctoral Fellowship.

I wish to thank all the librarians and library staff (especially Utpal *da* of Sahitya Academy, Kolkata) of the libraries I visited in India and Bangladesh for being generous to help me to reach to intended resources.

I am thankful to Arabinda Biswas, Santanu Sarkar and Subhashish Bhattacharya for assisting me again and again.

Finally and above all, I am at a loss for words to fully express my heartfelt gratitude towards my mother Pratima Giri and brother Debarshi Giri for their constant encouragement, unconditional love and endless patience. Your unwavering belief in me has been a source of strength and motivation, and I dedicate this work to you.

Thank you all for making this achievement possible.

New Delhi
January 2025

Projita Giri

Abstract

The present research focuses on the parts-of-speech *adjective* in the Eastern Indo-Aryan (EIA) languages Axomiya, Bangla, Maithili and Odia from the language typological perspective. The objectives of this study are to explicate the criteria for the recognition of the adjective class; to state the semanticity-cum-largeness of the adjective class; to elaborate on the openness-cum-productivity of the adjective class; to elucidate the word-formation processes related to the adjectives; to state the nature or grammatical properties of the adjective class; and to show the semantic orderings of adjectives in poly-adjectival noun phrases in the focus languages. To fill the research gap, a mixed method is employed with the help of two structured questionnaires to collect qualitative as well as quantitative data from native speakers. It is examined that five characteristics are established to recognise the adjective class in the selected EIA languages. These languages are designated as *large adjective class languages* possessing all the semantic types and also *open adjective class languages* as proposed by Dixon ((Dixon and Aikhenvald (eds.), 2004 and 2010). They exhibit various word-formation processes like inflection, derivation, and others. They are both *noun- and verb-like adjective class languages* owning both nominal and verbal features. Following Flanagan (2014) for the semantic ordering of adjectives but modifying them based on Dixon's (2004 and 2010) semantic types, the selected languages are found to share similarities and dissimilarities. Thus, this research makes cross-linguistic generalisations and variations in the EIA region. It develops a better understanding of the parts-of-speech system in general and within a language in particular.

Keywords: language typology, adjective class, Axomiya, Bangla, Maithili and Odia

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Abbreviations

Abbreviated Form	Full Form
1P	1st Person
2P	2nd Person
3P	3rd Person
ACC	Accusative
ADJ	Adjective
AF	Affix
CAUS	Causative
CC	Copula Complement
CLA	Classifier
COMP	Comparative Marker
CONT	Continuous
COMPL	Complementizer
EIA	Eastern Indo-Aryan
EMP	Emphatic Particle
ERG	Ergative
F/FEM	Feminine
FUT	Future
FV	Finite Verb
GEN	Genitive
H/HON	Honorific
IMPRF	Imperfective
IND	Indefinite
INF	Infinitive
INFL	Inflection
INST	Instrumental
INT	Intransitive
M/MAS	Masculine
NEG	Negation
NF	Non-Finite Verb
NH	Non-Honorific

NOM	Nominative
PLU	Plural
POSS	Possessive
POSTP	Postposition
PRE	Prefix
PRF	Perfect
PROX	Proximate
PRS	Present
PST	Past
RED	Reduplication
SG	Singular
SUF	Suffix
SUP	Superlative Marker
VCC	Verbless Copula Complement
TOP	Topicalization
S/SUBJ	Subject
AUX	Auxiliary
REL	Relativization
DEM	Demonstrative
ART	Article
N	Noun
NLP	Natural Language Processing

Chapter 1

Introduction

1.1. Research Background

Dixon (Dixon and Aikhenvald (eds.), 2004) claims that each lexical class possesses a typical conceptual foundation and grammatical functions. Haspelmath (2001) emphasizes the significance of morphology, syntax and lexical semantics for the classification of POS system in a language. During the first part of the 20th century, structural linguists coined the phrase ‘word class’. Compared to ‘word class’, ‘parts-of-speech’ is a far earlier phrase. It comes from the Latin *pars orationis*, which translates to ‘sentence constituents’. In today's context, this notion is no longer used. Moreover, Chomsky (1957) introduced the concept of ‘syntactic category,’ which includes both lexical categories (such as noun and verb) and phrasal categories (like noun phrase and verb phrase). The overlap of word classes and the unequal importance assigned to different word classes led him to distinguish between major word classes (noun, verb, adjective, and adverb) and minor word classes (the others). These are also known as ‘content words’ and ‘functional words.’ In Chomskyan theory, these are referred to as ‘lexical categories’ and ‘functional categories,’ respectively. Words and entire word classes are further categorized into two groups: content words and function words. Nouns, verbs, adjectives, and adverbs fall under content words, while the rest are categorized as function words. Generally, content words are numerous and open-ended, suggesting that it is also possible for there to be closed, small, or medium-sized content word classes. It is attested that all languages make a distinction between open and closed parts-of-speech classes. Schachter and Shopen (Shopen (ed.), v. 1, 2007) hold the view in line with Robins (1964) that open classes are those whose membership is fundamentally unlimited, changing over time and between different speakers, while closed classes consist of a fixed, typically small set of words, which remain the same for all speakers of the language or dialect. It is interesting to note that Dixon’s (2004) and (2010) studies on the adjective class since they reveal that some languages, like Igbo (Nigeria), contain small and closed adjective classes.

In the current study, I have selected four Eastern Indo-Aryan languages (henceforth EIA languages) Axomiya, Bangla, Maithili and Odia. It examines the type of these languages based on the nature and behaviour of the adjective class or in turn the type of adjective class in these languages. This entails the areal feature of the Eastern Indo-Aryan region focusing on the POS adjective. Moreover, it determines the cross-linguistic generalizations and variations; and aids in capturing the language universals in broader scenarios.

After setting the research background in section 1.1, section 1.2 narrows down the research topic of the thesis, that is, Adjective Class. Different approaches to the adjective class are presented in the section 1.3. The four EIA languages (Axomiya, Bangla, Maithili and Odia) which are selected for the current study are introduced in section 1.4. Section 1.5 manifests where the research gap lies. Then, the research aims and objectives are given in section 1.6. Section 1.7 presents the research statements of this thesis. To conclude, section 1.8 shows how the whole thesis is outlined.

1.2. Research Topic

The present research broadly encompasses the parts of speech *adjective* from the perspective of language typology. In simple words, adjectives describe attributes and properties of referents in a discourse. It is designated as one of the major POSs found in the languages of the world. While earlier studies claimed that not all languages possess the part of speech (POS) adjective, recent research by Dixon (2004 and 2010) shows that the adjective class is a universal category found in all languages. Moreover, the profile of the adjective class varies from one language to another.

Adjective class is a lexical category beside the noun, verb and adverb. Although each POS is differentiated based on distinct grammatical properties, it is found that they may share some common properties. This may happen between noun and verb, noun and adjective or verb and adjective and others. As a result, the identification of a POS becomes arbitrary (Schachter and Shopen (Shopen, ed.), v. 1, 2007). The similarity and distinction between the adjective class and other POSs are highlighted in the following sub-sections.

Similarity among Adjective, Noun and Verb Classes

Firstly, noun, verb, and adjective all three are lexical categories that contain semantic content (though semantic areas for these POS may vary from language to language). Secondly, stative vs. active/dynamic is such a property that is found in the mentioned three POSs (Lakoff, 1966) and (Schachter and Shopen (Shopen, ed.), v. 1, 2007).

Stative POSs

Stative noun/verb/adjective denote relatively permanent states as they are usually fixed and are not controlled by the entity in question. For example, brother, know and tall are stative noun, verb, and adjective respectively in (1), (4) and (7). They are not used in progressive construction as seen in (2), (5) and (8). Due to the feature of permanence and not being controlled, they are not able to be used in imperative construction as shown in (3), (6) and (9).

- **Stative noun:**

- 1) John is my brother.
- 2) *John is being my brother.
- 3) *Be my brother.

- **Stative verb:**

- 4) You know the answer.
- 5) *You are knowing the answer.
- 6) *Know the answer.

- **Stative adjective:**

- 7) John is tall.
- 8) *John is being tall.
- 9) *Be tall.

Active POSs:

On the contrary, the attributes or characteristics of this active/dynamic noun, verb, and adjective are controlled by the person, animal, or object which possesses them. The example in (10) and (11) show stative noun *boor* in complement clause and progressive construction separately.

- **Active Noun**

- 10) John is boor.

11) John is being a boor.

Likewise, verbs and adjectives can be dynamic in nature. They can be used in progressive constructions in (13) and (16) as well as imperative sentences in (14) and (17).

- **Active Verb**

12) You will do the task.

13) You are doing the task.

14) Do the task.

- **Active Adjective**

15) They are quiet.

16) Are they being quiet?

17) Be quiet.

Distinctions between Adjective, Noun and Verb Classes

Now focusing on the POS *adjective*, the differences are made between adjective and other POSs below.

Adjective vs. Noun

Adjective as a POS has a distinct semantic characteristic from nouns (Schachter and Shopen (Shopen, ed.), v. 1, 2007). Nouns refer to entities having a group of more conspicuous or permanent features, whereas adjectives contain a single less conspicuous characteristic contrastively. For example, the noun *cripple* specifies the physical state of the person and labels her permanently. On the other hand, the adjective *sick* expresses her sole temporary characteristic.

18) The woman is a cripple.

19) The woman is sick.

Therefore, nouns play the functions of reference and categorisation, and adjectives are applied attributively more easily than nouns. The given noun *woman* provides a broad categorization of the referent while the adjective *sick* serves to modify the categorization and indicates a set.

Adjective vs. Verb

To distinguish verbs and adjectives, Schachter and Shopen (Shopen (ed.), v.1, 2007) follow Langacker (1987) and highlight the prominence of temporal and atemporal relations, respectively. Verbs designate actions, states and processes anchored in time which are not foregrounded in adjectives. Besides, it is seen that only an adjective can build a comparative construction in unmodified form; adjective and verb behave differently while modifying a noun and making reduplication (Dixon, v. 2, 2010).

Adjective vs. Adverb

Carnie (2002 and 2013, 3rd ed.) differentiates the POSs adverb and adjective based on the syntactic criterion. Adverbs only appear in the verb domain whereas adjectives appear inside the noun phrase usually. He raises the question of whether the POSs adjective and adverb are of the same category. He stresses the characteristic *modification* by both adjective and adverb; and mentions their nature of appearing in complementary distribution. They can carry the same suffix [-ly] and can be modified by the same word *very*. That is why, he calls them *sub-categories* or *all-parts-of speech* of a *supercategory*. A somewhat similar phenomenon is also found in case of Bangla as stated by Chatterjee (1939). He groups *adjectives* and *adverbs* under the umbrella term *biśeṣana* because both of them (*adjectives* and *adverbs*) possess the characteristic modification.

1.3. Different Approaches to Adjective Class

1.3.1. Adjective Class in Traditional Grammar

In traditional grammar, adjectives are designated as words that modify or characterize nouns. They offer additional information about the noun they describe. They are essential for conveying details about the quality, quantity or condition of the head noun. Latin, Greek and Sanskrit adjectives are found to be inflected with gender, number and case markers. Adjectives in German take gender and number inflections. As a result, traditional grammar in Western (Greek and Latin) and Indian (Sanskrit and Tamil) views either did not recognise the adjective at all or assimilated with nominals, or considered as a sub-class of nouns (Panagiotidis and Mitrović, eds. 2022 and Dixon 2010, v. 2).

1.3.2. Adjective Class in Descriptive Study

There is a lot of literature on the adjective class in the EIA languages based on the descriptive study. Among them, there are two views. One is aligned with the traditional view where adjectives are subsumed under the noun class. The other view advocates establishing the adjective class as a separate class from the noun class. A detailed account of the adjective class in the selected EIA languages is presented in the chapter 2.

1.3.3. Adjective Class in Generative Study

Struckmeier (Panagiotidis and Mitrović (eds.), 2022) discusses the adjective class in generative syntax, focusing on categorical features and featurized categories. He critiques ‘essentialist’ word classes and challenges the idea of ‘grammar-wide’ categories, arguing that categoriality is a multi-layered concept. He emphasizes that not all categorial properties are universally present across languages, as linguistic categorization varies cross-linguistically. Struckmeier introduces the concept of ‘molds’, which are morpho-syntactic contexts where lexical items can occur. These molds define the categoriality of an item as a relational rather than an absolute concept. He demonstrates this by analyzing the attributive and predicative molds of adjectives in German, reconsidering the traits associated with ‘adjectivity’ through these distinct molds. Moreover, in case of Indian language families, there are very few works. Among them, the work on the adjective class of the Dravidian languages focusing on the generative typology by Hima S. (2017) is mentionworthy.

1.3.4. Adjective Class in Typological Study

Earlier typological studies (Dixon, 1977a and 1982) claimed that some languages have no adjective class at all. But later works like Dixon (Dixon and Aikhenvald (eds.), 2004) and 2010) demonstrate the adjective class as a universal category though there are cross-linguistic differences. There are some parameters based on which the grammatical sketch of a language becomes unique. Their size, productivity, and grammatical properties are important to set out the position in the broader picture of the POS adjective in the typological study. Schachter and Shopen (Shopen (ed.), v. 1, 2007) like others mention the

functions of adjectives. They show that adjectives can function as attributive modifiers of nouns (e.g. tall in the tall woman) and also as predicates (as in *The woman is tall*). Like predicate nouns, predicate adjectives may or may not be accompanied by a copula. Thus, English (Germanic) uses a copula while Ilocano (Austronesian) does not. A category for which adjectives are often specified is a degree, which includes the traditional distinctions positive, comparative, and superlative – for example English *tall/taller/tallest*; Ilocano *natayag* ‘tall’ / *nataytayag* ‘taller’ / *katatayagan* ‘tallest’. In Latin, for example, adjectives are marked for the case, gender, and number of nouns they modify (or are predicated of). Besides, Bhatt (1994) claims that adjectives of the Indo-Aryan language family possess noun-like features. A more comprehensive overview of the adjective class according to linguistic typology is provided in Chapter 2.

1.4. About the Languages Selected

1.4.1. Axomiya

Assamese is the anglicized name of the language *Asamīyā*. *Asama* ‘the name of the province’ + adjectival affix *-iyā* ‘of, relating, belonging to’ becomes *Asamīyā* (*Axomiya*) (Goswami and Tamuli, 2003 in Cardona and Jain). It narrates the history; and how the name of the land and people came in use (Goswami, 1982). *Axomiya*, an Indo-Aryan language (Goswami, 1982), is the easternmost member of the Indo-European family. It is one of the 22 scheduled languages in India. It is designated as *ISO 639-1 (as)*, *ISO 639-2 (asm)* and *ISO 639-3 (asm)* (*Wikipedia*); and in Glottolog, it is listed as *assa1263*. According to the 2011 census, the population of Assam is 31,169,272, which is 2.58 percent of India’s population. It is the official language of Assam. It is spoken mainly in Brahmaputra Valley (Goswami and Tamuli, 2003 in Cardona and Jain and Patgiri, 2014, 7th ed.). It is used as a lingua franca among various speech communities in Assam. It is also spoken in Meghalaya, Nagaland, and Arunachal Pradesh. Small pockets of *Axomiya* speakers can also be found in Bhutan and Bangladesh. Immigrants from Assam have carried the language with them to other parts of the world. Grierson (1903, Vol. 5, Part 1), Kakati (1941 & 1962), Goswami (1982), Dutta Baruah (2007) and Patgiri (2012, 2nd ed.) acknowledge two main regional dialects belonging to the east region or *ujani* (upper) Assam and west region or *namani* (lower) Assam. Accordingly, these are named Eastern Assamese (*Axomiya*) and Western

Assamese (Axomiya). The former spreads from Śadiyā down to Gauhati. It constitutes a homogeneous unit. Again, it can be divided into two varieties: Eastern (spoken in Sibsagara and Lakhimpur; east part of Darrang and Nowgong) and Central or Intermediate Assamese (used in the west part of Nowgong, little east of Gauhati in the Kamrup district). On the other hand, the Western variety spoken in the east of Gauhati, west Darrang and Goalpara is heterogeneous in nature. Now the standard language of Axomiya is based on the spoken variety of Sibsagara area situated in *ujani* Assam.

The earliest specimen of Axomiya literature is recorded in the mystic *dohās* (8th -12th c), popularly known as *Caryās* of the Buddhist Siddhārchāryas. Developed from Brahmi through Devanagiri, Axomiya script is mostly similar to Bangla except for the symbols for /r/ and /w/ and highly resembles the Devanagiri script of Hindi, Sanskrit and other Indic languages. Axomiya is surrounded by Sino-Tibetan (Bodo, Mikir, Chutiya), Austric (Khasi), and Dravidian languages (Goswami, 1982 and Goswami and Tamuli, 2003 in Cardona and Jain). Its vocabulary consists of the largest percent *tadbbhavas* derived from Sanskrit through Prakrit and Apabhramsha stages. It also possesses *tatsama*, *semi-tatsama* and *desiya* words. The non-Aryan languages of Assam have influenced Axomiya. There are words borrowed from Hindi and other northern Indian languages. Portuguese before English entered Assam. So, Portuguese loan words are found in Axomiya. There are also words from Persian and Arabic sources (Goswami, 1982). Axomiya retained only a minimum of inflection and became much more analytical (Goswami, 1982). The Ethnologue (2024, 27th ed.) marks Axomiya institutional on the scale of language vitality. This means Axomiya has evolved to the level where institutions outside the family and community utilize and maintain it. Patgiri (2012, 2nd ed.) shows that Axomiya has 8 vowels and 23 consonants and possesses nearly 20 diphthongs. Bangla has 7 vowels and 27 consonants. Odia has 6 vowels and 31 consonants.

1.4.2. Bangla

Bengali is commonly referred to by its endonym, Bangla. It is designated as *ISO 639-1 (ben)*, *ISO 639-2 (bn)*, and *ISO 639-3 (bn)*; and in Glottolog (Wikipedia), it is listed as *beng1280*. According to the 2011 Census, there are 9,72,37,669 Bangla speakers in India. They are mostly found in the states of West Bengal, Tripura, Assam, and Jharkhand. In addition, they are dispersed throughout the northeastern states, Delhi, Odisha, Bihar, the

Andaman & Nicobar Islands and other regions. Worldwide, there are more than 230 million Bangla speakers (Wikipedia). It is one of the 22 scheduled languages in India. Bangla is the official language of West Bengal and Tripura (Patgiri, 2012, 2nd ed.). It is the official national language of the neighbouring country Bangladesh. Bangla speakers are also found in the USA, Europe, Australia, and the Middle East apart from India and Bangladesh (Thompson 2010 & 2012). The United Nations Educational, Scientific and Cultural Organization popularly known as UNESCO declared February 21st to be International Mother Tongue Day in 1999, honoring the Bangla language martyrs of that era's Bangladesh, remembering the (Bangla) language movement that took place there in 1952, and encouraging multilingualism and linguistic-cum-cultural diversity around the world (Dasgupta 2003, Sikdar 2002, and Wikipedia). Bangla has been acknowledged as the honorary official language of Sereia Leone (Wikipedia). Bangla is linguistically a member of the eastern Indo-Aryan language family. Its first recorded instance is found in the Buddhist monks' *Charyāpada*. The scholar Haraprasad Shastri subsequently found this in the Royal Library in Nepal in 1907, and it went into print in 1916 (Chatterjee 1926, Klaiman 1987, and Bhattacharya 2012). Chatterjee (1926) noted four dialects of it. Rarhi, Bangali, Barendri and Kamrupi. The present scholars added Jharkhandi with them. Modern Bangla is divided into five major regional varieties, or dialects. Depending on the geographical divisions, they are called *Rār̥hī*, *Kām̥rūpī*, *Varendrī*, *Vangīya*, and *Jhārkhandī* (Islam 1998). The *Rār̥hī* is regarded as the usual colloquial variant of Bangla in India.

Bangla script is originated from *Brāhmī* (Shaw 1984/1390, Islam 2011, Bhattacharya 2012, and Klaiman, 1987). There are numerous origins of words from which they are categorized into four different groups. They are *deśī/añjātamūla* (unclassified), *maulika/saṃskṛtāja* (Sanskritised), *āguntuka/kṛtār̥ṇa* (loan/borrowed), and *navasṛṣṭa śabda* (newly created words). Words with unknown origins are grouped as unclassified. Three categories of Sanskritized words exist: *tatsama*, *semi-tatsama*, and *tadbhava*. Borrowed words have sources from other Indian languages (Indo-Aryan, Dravidian, and Austric) or foreign languages (English, French, Spanish, Dutch, Portuguese, Chinese). In addition, newly created words are formed by combining Bangla words with words from other (foreign) languages or through translation (Sikdar 2002). Bangla is an inflecting language morphologically. Syntactically, pro-drop and copula-drop phenomena are predominantly exhibited in Bangla. It has a Subject-Object-Verb word order.

Not only linguistically, but also socio-culturally, Bangla possesses a rich tradition. However, it is at the point of *institutional* on the scale of Language Vitality, that is, it is “developed to the point that it is used and sustained by institutions beyond the home and community” (Ethnologue). But a major concern is arising due to the closing of many Bangla medium schools all over India as indicated by recent surveys and reports. On the Digital Language Support scale, it is at the point of *vital*, that is, it is “supported by multiple tools in all of the above categories and as well as some speech processing” (Ethnologue). This indicates that there is still a huge scope for development for Bangla. Patgiri (2012, 2nd ed.) shows that Axomiya has 8 vowels and 23 consonants and possesses nearly 20 diphthongs. Bangla has 7 vowels and 27 consonants. Odia has 6 vowels and 31 consonants.

1.4.3. Maithili

Maithili, one of the Indo-Aryan languages, is listed in the 8th Schedule of the Indian Constitution among the 22 Indian languages. The word ‘Maithili’ is derived from Mithila, an ancient independent state. In Hindu tradition, it is considered the birthplace of Goddess Sita, the daughter of King Janak of Mithila, who later married Lord Ram (Asad 2015). The 2001 Census report indicates that Maithili is spoken by 12,179,122 native speakers in Bihar, making up 1.18% of India’s total population. It is primarily spoken in the Darbhanga, Tirhut, Kosi, Purnia, Bhagalpur, and Munger divisions of Bihar as well as in the Santhal Pargana division of Jharkhand. Yadav (Cardona and Jain (eds.), 2003) mentions that it is spoken by around 21 million people in the eastern and northern parts of Bihar in India and the southeastern plains of Nepal, known as the *tarāi*. It is the second most spoken language in Nepal, where it is officially recognized as one of the ‘languages of the nation’ in the country’s Constitution. Although Maithili is not yet an official language of Bihar, it has been acknowledged as an independent modern Indo-Aryan language by the Indian branch of P.E.N. since 1947 and recognized as the sixteenth largest language in India by the Sahitya Akademi (Academy of Letters) since 1965 (Singh (1979), Yadav (1997) and Yadav (Cardona and Jain (eds.), 2003). Surrounding Maithili, several other modern Indo-Aryan languages are spoken: Bangla to the east, Bhojpuri to the west, Nepali to the north, and Magahi to the south. Within its own region in India, Maithili has contact with Santhali, a Munda language. From the 14th to the early 18th centuries, Maithili also interacted with Newari, a Tibeto-Burman language spoken in the Kathmandu Valley, and held a prominent

place in the royal court of the Malla Kings of Nepal. Maithili boasts a rich literary history dating back to the 13th century. The *Varna-Ratnakara* of Pañjābī, a prose text dating to the early 14th century and preserved in a 1507 manuscript, is the earliest known work in Maithili. Some scholars argue that the Caryāpada hymns (circa 900-1200) are written in early forms of Maithili, though others, including prominent Bangla scholars, claim they were written in Old Bangla. The debate has expanded to include languages like Old Assamese and Old Oriya. The most celebrated poet in Maithili is Vidyāpati (c. 1350-1438), whose *Padāvalī* is a masterpiece of graceful lyrical writing in Maithili. *Mithilakshar*, *Kaithi* and *Devanagari* are three scripts associated with this language. It is taught in universities across India, including Calcutta, Patna, Bihar, Bhagalpur, Mithila, and Benares, as well as in Tribhuvan University and Nepal Sanskrit University. It is also part of the curriculum in secondary schools in both India and Nepal Yadav (Cardona and Jain (eds.), 2003). The *Ethnologue* (2024, 28th ed.) classifies Maithili as an institutional language on the vitality scale, indicating that it has evolved to be used and maintained by institutions outside of the home and community.

1.4.4. Odia

Odia is an Indo-Aryan language. It is one of the 22 scheduled languages in India. It is the official language of the state of Odisha and the second official language of the state of Jharkhand. Due to its lengthy literary tradition and lack of significant linguistic borrowing, Odia is the sixth Indian language to be classified as a classical language in the year 2014. As per the 2011 census, the number of Odia speakers in India is 37.52 million, representing 3.1% of the total population. Odia is previously rendered as Oriya/Uriya. Scholars find early Odia specimens in *Dohakoshas* and *Caryagitis* composed 8th to 12th c AD and some grammatical peculiarities (Dutta Baruah, 2007). It is mainly spoken in the state of Odisha (previously Orissa). Also, it is spoken in parts of West Bengal, Chattisgarh, Jharkhand and Andhra Pradesh. It has four dialects: south (Ganjam, Koraput), west (Sambalpur), north (Baleswar, Mayurbhanja) and middle/ central-coastal (Cuttack, Puri and Bhubaneswar). The middle variety has attained socio-cultural, literary predominance and has become the standard variety of Odia language because of the political, cultural, educational, and commercial centers (viz. Cuttack, Bhubaneswar, and Puri) (Tripathy (1962), Dutta Baruah (2007) and Patgiri (2012, 2nd ed.)). Mahapatra (2007) states that Odia language area is

bound by three distinct language areas; Telugu in the south and south-west; Hindi in the west (Chattishgarh); Bangla in the north. As a result, Odia gets influenced by neighbouring Indo-Aryan languages (Hindi, Bangla) and Dravidian languages (Kui, Khond/Kondh, Kisan, Kurukh/Oraon, Gondi, Koya etc.). Besides, there are some pockets of Munda languages like Santhali, Munda, Ho, Kheria, Mndari, Bhumij, Savara in the Odia speaking regions. There are two stylistic variations in Odia: standard spoken (*Kathita Oriya*) and standard written (*Likhita Oriya*). The oral standard variety is generally heard in radio, television, cinema, cassettes and public speaking while the written standard is in literature and news media. It is also used in the medium of instruction in education. This is why, the Ethnologue (2024, 27th ed.) labels it as institutional on the scale of language vitality. The script of Odia is called Oriya script / *Oriya Barnamala* / *Akhyaramala*. Brahmi script is the source of Ashokan inscription found in the Dhauli and Jaguar in 3rd BCE during the time of Ashoka. E.g., the Khandagiri inscription of King Kharabela (1st c CE). Odia script has come from Brahmi via Urjam inscription. Odia is an analytic language. It owns 38 segmental phonemes (pure vowel + nasalised = 6, consonant = 32), 2 suprasegmental phonemes and 2 juncture phonemes. Patgiri (2012, 2nd ed.) shows that Axomiya has 8 vowels and 23 consonants and possesses nearly 20 diphthongs. Bangla has 7 vowels and 27 consonants. Odia has 6 vowels and 31 consonants.

1.5. Research Gap

There is a lack of research on the typological study of adjective class in the Eastern Indo-Aryan languages covering the criteria for the recognition of adjective class, its semanticity-cum-largeness, openness-cum-productivity, and related word-formation processes. There is no significant study on the orderings of adjectives in the Poly-adjectival Noun Phrases in these languages. Even language-particular studies on adjective class did not address the issues extensively. Existing studies primarily concentrate on defining the adjective class, and classifying adjectives syntactically (attributive adjective and predicative adjective). Though some studies certainly discuss the semantic classification of the adjective class, there is a paucity of uniformity and also those are not extensive. Thus, there is a gap in understanding what characteristics are possessed by adjectives of the EIA languages and in which semantic ordering adjectives in PNPs appear. Addressing this gap could provide a

deeper understanding of cross-linguistic generalizations and variations that can be established in the region of the EIA region for the adjective class.

1.6. Research Aims and Objectives

This thesis aims to make a typological analysis of adjective class in the EIA languages Axomiya, Bangla, Maithili and Odia. In one way, it will help to understand the parts-of-speech system in the given languages. Thus, the grammar of individual languages will be benefitted. On the other hand, it will contribute to the body of knowledge of parts-of-speech system in general theoretically. Moreover, this study will help to establish areal features in the EIA region for the adjective class.

1.7. Research Statements

The following are research statements that will be investigated in this study:

- a. Explicate the criteria for the recognition of the adjective class in Axomiya, Bangla, Maithili and Odia.
- b. State the semanticity-cum-largeness of the adjective class in these languages.
- c. Elaborate on the openness-cum-productivity of the adjective class in all of them.
- d. Elucidate the word-formation processes related to the adjectives in the given languages.
- e. State the nature or grammatical properties of the adjective class in the above-mentioned languages.
- f. Explore the semantic orderings of adjectives in the poly-adjectival noun phrases in the focus languages.

1.8. Outline of the Thesis

This research work is divided into six chapters. Chapter 1, Introduction, describes the present work in brief. As it was seen it introduced the languages which were studied in this work. There was a brief introduction of various theories which have been used to describe the adjective class. Chapter 2 deals with the reviews of different kinds of literature concerning the adjective class in Axomiya, Bangla, Maithili and Odia and the theoretical

framework on language typology related to the adjective class. Chapter 3 exhibits the research methodology. Chapter 4 presents the characteristics of the adjective class. Chapter 5 displays the semantic ordering of adjectives in Poly-adjectival Noun Phrases. Chapter 6 summarizes the findings of the thesis and presents future implications.

Chapter 2

Literature Review & Research Works Concerned

2.1. Typological Study on Adjective Class in World Languages

Shopen (ed., 2007, v. 1 and v. 3) states that *adjective* is one of the open parts-of-speech in many languages of the world. Although each POS is differentiated based on distinct grammatical properties, they may share some of the common properties. This may happen between noun and verb, noun and adjective or verb and adjective. As a result, the identification of a POS becomes difficult. For example, both English *boisterous* and *tall* are adjectives, but *boisterous* is dynamic and *tall* is stative.

English

- 1) John is being boisterous.
- 2) *John is being tall.

Wierzbicka (2000) opines that adjectives as a POS has a distinct semantic characteristic from others. She proposes that nouns refer to entities with a group of more conspicuous or permanent features. Contrastively, adjectives contain a single less conspicuous characteristic. The noun *cripple* specifies the physical state of the person and labels her permanently. On the other hand, the adjective *sick* expresses a temporary state.

- 3) She is a cripple.
- 4) She is sick.

Therefore, nouns play the functions of reference and categorisation and adjectives are applied attributively more easily than nouns. The given noun *woman* provides a broad categorization of the referent while the adjective *sick* serves to modify the categorization and indicates a set. In Langacker's scheme, verbs and adjectives are distinguished by the

prominence of temporal and atemporal relations respectively. Verbs designate actions, states and processes which are not foregrounded in adjectives. Sopen continues to note that all the languages have the noun–verb distinctions as open classes. However, only certain languages make further distinctions and establish a third open class called an adjective. Traditionally, adjectives are known to express qualities or attributes. Functionally they modify nouns. Again, such words which modify nouns are classified into two types: limiting adjectives and descriptive adjectives. The limiting adjectives like *some*, *this* do not constitute an open class. Therefore, they are not treated as adjectives at all. On the other hand, descriptive adjectives functions as attributive modifiers of noun as well as predicates. They are called predicate adjectives. They are like predicate nouns which may or may not be accompanied by copula. Ilocano does not use copula with predicate adjectives but English requires it.

Ilocano

- 5) Natayag daydyay babae
 tall TOP woman
 ‘The woman is tall’

English

- 6) The woman is good.

The degree adjectives are classified as positive, comparative and superlative traditionally. For example,

English

- positive - comparative - superlative
 7) tall - taller - tallest

Ilocano

- 8) natayag ‘tall’ - nataytayag ‘taller’ - katatayagan ‘tallest’

Latin adjectives are marked with case, gender and number of nouns they modify or are predicated of.

- 9) Feminae procerae homines proceros amant
 Women tall men tall like
 ‘Tall women like tall men’

The adjective *procerae* ‘tall’ is a nominative feminine plural form agreeing with the noun *feminae* ‘women’ while *proceros* ‘tall’ is an accusative masculine plural form agreeing with

homines ‘men’. Not all languages in the world express the notion of adjectives in a similar way as mentioned above. There are some languages which possess a closed class of adjectives ranging from less than ten numbers to fifty-odd adjectives. Igbo, spoken in Nigeria belonging to the Niger-Congo language family has only eight adjectives. Swahili, a Bantu language has about fifty adjectives. Again, there are some languages which lack a distinct adjective word class. Dixon (1977b) observes that the closed class adjectives are consistent in expressing certain semantic types like *dimension*, *colour*, *age*, and *value*. They hardly include the semantic types such as position, physical property, human propensity or speed. A paradigm case by Welmers and Welmers (1969) supports the claim of Dixon as available in Igbo. Here eight adjectives are found to manifest four semantic types.

Dimension	Colour	Age	Value
<i>ukwu</i> ‘large’	<i>ojii</i> ‘black, dark’	<i>ohuru</i> ‘new’	<i>oma</i> ‘good’
<i>nta</i> ‘small’	<i>oca</i> ‘white, light’	<i>ocye</i> ‘old’	<i>ojoo</i> ‘bad’

It is noticed that specific types of adjectival meanings are attested by other open POSs like verbs and some specific types of nouns. The adjectives of physical property are expressed mostly by verbs but the adjectives of human propensity are manifested by nouns than verbs. Hausa, an Afroasiatic language and Bemba, a Bantu language tend to use nouns and verbs to capture adjectival meanings respectively. Again, these languages also use other less favoured POSs to denote adjectival meanings. Therefore, it can be claimed that nouns and verbs fill the gap of a paucity of adjectives in languages with closed adjective class. The adjectives involving human propensity or physical property are revealed in nouns as possessive modifiers and possessive predicates which are equivalent to attributive and predicative adjectives in English gradually.

Hausa

- 10) mutum mai alheri
 person having kindness
 ‘a kind person’

cf.

- 11) mutum mai doki
 person having horse
 ‘a person having a horse’

12) Yana da alheri
he. is with kindness
'He is kind.'

cf.

13) Yana da doki
he. is with horse
'He has a horse'

On the other side, Bemba exhibits adjectival meanings through verbs. The attributive (modifying) adjectives of open class are seen to be relativized in the following ways:

14) umuuntu ùashipa
person who. is. brave
'a brave person'

cf.

15) umuuntu ùalemba
person who. is. writing
'a person who is writing'

Contrastively, the predicative adjectives of open class adjectives are framed in non-relativised verbs in closed class adjective languages.

16) umuuntu áashipa
person is. brave
'The person is brave'

cf.

17) umuuntuáalemba
person is. writing
'The person is writing'

Interestingly, it is examined that languages having closed class adjectives may simply possess only the attributive adjectives, not the predicative ones. Hua is such a language.

Hua

18) Bura fu nupa fu baie
that pig black pig is
'That pig is a black pig'

19) *Bura fu nupa baie
that pig black is

It is claimed that languages with no adjective class; be it open or closed, express the adjectival meanings in two ways either via noun class or verb class. Thus, those languages are termed as adjectival-noun languages and adjectival-verb languages respectively. Quechua is an adjectival-noun language where object(s) noun embodies a specified quality. For example,

20) Rikaška: hatun-(kuna)-ta
 I saw big-(PLU)-ACC
 ‘I saw the big one(s).’

cf.

21) Rikaška: alkalde-(kuna)-ta
 I saw mayor-(PLU)-ACC
 ‘I saw the mayor(s).’

Bemba is an adjectival-verb language as shown above.

Again, there are some languages which barely distinguish verbs and adjectival meanings involving other (stative) verbs like ‘understand’ or ‘know’ as found in Mandarin Chinese. There are some other languages in which adjectivals with stative verbs are indiscernible when used as predicates. Mojave belonging to the River Yuman language family spoken in Arizona and California is such a language. For example,

22) ?i:pa-č homi:-k (iðu:m)
 man-SUBJ tall-PRS (AUX)
 ‘The man is tall’

23) ?i:pa-č su:paw-k (iðu:m)
 man-SUBJ know-PRES (AUX)
 ‘The man knows’

In the given examples, the adjectival stem *homi:* ‘tall’ and the stative verb stem *su:paw* ‘know’ carry the same tense–aspect suffixes when they are used as predicates. Besides, the same auxiliary occurs optionally with both of them. But adjectivals are distinct from verbs when they are applied as modifiers. When verbs function as modifiers, they are used as a relativized form and the prefix *k^w*- is added in relevant cases.

24) ?i:pa k^w-su:paw-n^y-č iva:k
 man REL-know-DEM-SUBJ is. here
 ‘The man who knows is here.’

On the contrary, adjectivals as attributive modifiers may or may not be accompanied by the relativizing prefix.

25) ?i:pa (k^w-) homi:-n^y-č iva:k
 man (REL-)tall-DEM-SUBJ is. here

‘The tall man is here.’

Adjectives may take a complement which is marked to indicate a subordinating clause by complementizers like *that*.

26) I am afraid that I must leave.

The relation between a subject and a predicate adjective may or may not be accompanied by copulas.

English

27) This book is interesting.

In Ilocano, such relation is indicated by juxtaposition.

28) Napintas daydyay babae
 beautiful that woman

‘That woman is beautiful.’

Verb-final languages like Lezgian (Northeast Caucasian language) show a distinctness in case of comparative constructions. Here the standard of comparison (St) precedes the marker of comparison (M) and finally, the adjective follows them.

29) sad müküda-laj žizwi ask’an-zawa
 one other-SUPER a.little low-imperf
 St M Adj

‘One is a little shorter than the other one.’

Affixes, distinct words, and, in the case of a separate word, different parts of speech are the forms in which the marker can be observed in different languages. For example, English, a verb-medial (SVO) language shows its comparative construction differently.

30) This room is bigger than that room.

Adj-M St

The order in comparative constructions in Fijian, an Austronesian language, and also a VOS language is adjective-marker-standard.

31) e	vina'a	ca'e	o	Waitabumai	Suva
3SG	good	more	ART	Waitabu from	Suva
	Adj			M	St

'Waitabu is better than Suva'

Interestingly, the order AdjMSt is not applicable to indicate comparative comparison rather may express equative comparison involving a single clause.

Turkana

32) a-wòs	ayòŋ	à	ni-konj
1SG-clever	1SG.NOM	PREP	LOC-your
Adj		M	St

'I am as clever as you.'

2.1.1. Openness of Adjective Class

The openness of an adjective class in a language is based on the parameter called productivity. The productivity of a word class can be demonstrated by means of various word formation processes found in that word class in a particular language.

Various Word Formation Processes

A. DERIVATION

Under derivation, three types, category changing, category preserving and category defining. Category-changing derivational processes involve alteration in word class. In this way, adjectives are derived from nouns and verbs and vice versa. Adverbs are derived sometimes from adjectives.

Category-changing derivations are usually found in languages where nouns, adjectives, and verbs are distinguished clearly. In languages Boumaa Fijian where adjectives make a separate open class, a verbal prefix *dau-* 'habitually, often' derives adjectives.

33) qito

'play a game'

34) dau-.qito

'habitually playing games'

Adjectives are likely to be verbalized in languages with noun-like adjectives. In Watjarri, an Australian Aboriginal language transitive and intransitive verbs are built from adjectives. Verb-like adjectives (independent closed class) as found in Longgu are nominalized like the verbs.

Interestingly, derived members of a word class may vary in their semantic and syntactic characteristics from underived counterparts. For instance, only derived adjectives in Kobon, spoken in Papua New Guinea can play the role of nonverbal predicates of a clause but simple adjectives cannot.

Category-preserving process:

There are temporal prefixes like *pre-* and *post-* in English which are used with adjectives and other word classes.

English

35) *pre-Victorian*

36) *post-independence*

Likewise, the negative prefix *ma-* is used with adjectives in the North Arawak languages Baniwa and Tariana.

Category-defining processes:

There is another morphological process of derivation known as **category-defining process**. “The same derivational device can behave differently with different word classes and thus be category-defining.” In Kabyle, an Afroasiatic (Berber) language spoken in Algeria the circumfix *t- . . . -t* stems the feminine of sex-distinguishable adjectives.

Kabyle

37) *amellal*

white-M

‘white’

38) *t-amellal-t*

white-F

‘white’

Splits are found with variable morphological alignment in case of different word classes. Attributive adjectives in Chechen differentiate solely nominative vs. oblique but nouns distinguish eight basic cases.

Chechen

Adjective *Noun*

	‘good’	‘person’
Nominative	dika	stag
Genitive	dikacha	stegan
Dative	dikacha	stegana
Ergative	dikacha	steguo
	etc.	

This is described as an instance of case syncretism where all oblique cases for the given adjective are converged.

Following (Shopen (Ed.), 2007) we now turn to the word-formation processes in case of adjectives are shown with examples from various languages of the world belonging to different language families.

(i) Incorporation:

Adjectives may appear in the process of incorporation. In Bouma Fijian language, an attributive noun phrase consisting of a noun and an adjective is incorporated within a VP.

Bouma Fijian

- 39) ‘ana-[waci-po’i]
 eat-[cooked.taro.leaves-rolled]
 ‘eat rolled taro leaves’

In Australian languages like Rembarrnga and Mayali, adjectival modifiers are incorporated when the head noun is the subject of an intransitive verb or a direct object.

Rembarrnga

- 40) Ø-kartpurr-man
 3.min.subj-wounded-went
 ‘He [buffalo] went away wounded’

Mayali

- 41) barri-darrgid-ma-ngi
 3.augm/3-alive-pick.up-pi
 ‘They pick [it, i.e. a crocodile] up alive’

(ii) Reduplication:

Reduplication is iconic in nature in some languages. For example, Turkish adjectives with partial reduplication express intensity.

Turkish

- 42) mavi ‘blue’ : masmavi ‘bright blue’

43) kara ‘black’ : kapkara ‘completely black’

Likewise, in Tamambo, an Ocean language the initial CVCV indicates the ‘intensive quality’ for adjectives expressing physical property, human propensity and value.

44) baru ‘fat’: baru-baru ‘very fat’

Adjectives are sometimes reduplicated to indicate intensity of the quality of the given adjectives as found in Longgu, native to Guadalcanal.

Longgu

45) muha

‘happy’

46) muha-muha

‘very happy’.

In English *-ish* suffix can freely occur with basic colour adjectives but not with their hyponyms. It also occurs with adjectives denoting age, speed, dimension and physical property (example?) type, but rarely with adjectives describing human propensity (*cruel-ish). Inchoative and causative marker *-en* is used with most adjectival types (e.g. quick – quicken, white – whiten), but not with the human propensity type: *rude-en.

Partial reduplication happens in the case of a few adjectives, usually colour adjectives in Xlg. Here the two final consonants of a base are reduplicated partially and result in the vocalic pattern C1C2V1C3C2V1C3 to mark lesser degree.

47) kaxol ‘blue’: kxalxal ‘blueish’

48) adom ‘red’: adamdam ‘reddish’,

49) samen ˇ ‘fat’: smanman ˇ ‘fattish

(iii) Compound adjectives:

The languages which constitute an open class adjective category possess compound adjectives. The languages having noun-like adjectives and the languages having verb-like adjectives form compounds differently. The noun-like adjectives form compound adjectives in the manner of compound nouns mostly. On the other hand, compound adjectives in case of verb-like adjectives are similar to verbal-compounds.

Most parallel verbal compounds in Mandarin Chinese contain ‘adjectival’ verb roots. Verb-subject compounds involve intransitive adjectival verbs.

Mandarin Chinese

50) xīn-ruǎn

heart-be.soft

‘be soft hearted’

51) *mìng-kǐ*

life-be.bitter

‘be unfortunate’

There is only one verb root in Tariana, Maipurean language spoken in Brazil to make verb compounding.

52) *mača* ‘be proper, good’.

Adjectives cannot modify the components of a compound separately.

Portuguese

53) *fin-de-semana* ‘weekend’

54) *fin-de-semana bonito*

end-MAS of week-FEM nice-MAS

‘nice weekend’

55) **fim bonito de semana*

end-MAS nice-MAS of week-FEM

56) **fim de semana bonita*

end-MAS of week-FEM nice-FEM

57) *Movie-watching* /**horror movie-watching*

Compounded adjectives indicate comparison in many languages. For examples,

English

58) *icy-cold*

‘cold as ice’

Estonian

59) *haud-vaikne*

grave-silent

‘silent as a grave’

60) *meie-taoline*

we-having.the.image.of

‘such as we’

Again, several coordinate compound adjectives denote tinges of colour as found in Russian.

Russian

61) *sero-goluboj*

‘grey-blue’

Adjectives can be formed by derivational processes of category changing. This is highly regular as found in case of English adjectives with *-able* in transitive verbs.

English

62) readable, understandable

(iv) ADJECTIVIZER:

Adjectives are formed by means of derivational processes where affixes are added to the units bigger than a stem. Suffixes (adjectivizers) *-an* and *-ery* in English make adjectives being added with NPs (especially fixed expressions).

63) South Australian

[South Australia]-an

64) fish and chippery

[fish and chip]-ery

the name of an establishment in Melbourne; note the absence of *-s* on chips

In Hungarian, the adjectivizer *-i* is affixed nouns to make adjectives.

65) ország

‘country’

66) ország-i

‘belonging to a country’

Besides, *-i* is also added to NPs consisting of noun and postposition.

67) ébed után

dinner after

‘after dinner’

68) ébed után-i

‘belonging to after dinner’ (e.g. after-dinner mints)

B. Inflection

Agreement

This happens in Portuguese where gender is used to mark agreement. E.g.

69) agu-a branc-a

water-FEM white-FEM.SG

‘white water’

In French, different gender agreement forms are formed with the doubling of *n* and the addition of *e*.

70) bon

good-MAS

71) bonne

good-FEM

Gender agreement is found in Ayacucho Quechua, spoken in Peru in case of a few adjectives borrowed from Spanish. They are as follows:

Ayacucho Quechua

72) loko	maqta
crazy-MAS	boy
73) loka	sipas
crazy-FEM	girl

Number

The number system is also encoded in the word class adjective. There is a very less number of languages where dual (two individuals), triple (three individuals), and paucal (a few individuals) are found. Old Church Slavic is one of them. It shows a singular/dual/plural opposition in adjectives.

Hajek (2004) summarised the chapter on the adjective class of the languages spoken in the Asia-Pacific region based on typological features in Dixon and Aikhenvald (eds., 2004). It is seen as similar to Russian, which is spoken in Europe, all four of the languages spoken in the Americas are known to possess adjective class. However, four of the seven languages spoken in the Asia-Pacific area—Lao, North-East Ambbe, Qiang, and Semelai—have adjectives that serve as a verb sub-class, according to the descriptions provided by each of these authors in this volume. According to reports, Mandarin and Japanese have split systems with at least one verb-like primary component, although Korean is said to contain an independent verb-like class of adjectives. The geographic concentration on (South-)East Asia and a strong tendency to attribute verb-like behavior to items belongs to the verb class in Sinitic and Austronesian linguistic descriptive traditions, which strengthen the Eurocentric tradition mentioned by Dixon.

Dixon (2004 (Dixon and Aikhenvald (eds.)) and 2010, v. 2)) outlines the criteria for the establishment of adjective class in terms of four characteristics. The first two involve semantic tasks: (A) State a property and (B) Specify the referent of a noun. Other two indicate syntactic features: (C) Appear in a comparative construction and (D) Function like an adverb in further specification of the reference of a verb. Now these are illustrated one by one.

“There are two major semantic tasks for an adjective to perform: (A) state a property, and (B) further specify the referent of a noun. In some languages an adjective has an additional function: (C) serving as the parameter in a comparative construction. And in

a number of languages we also find (D): an adjective may function like an adverb in further specification of the reference of a verb.” Dixon (2010, v. 2, pp. 70 - 72)

(A) State a property:

A property can be stated or coded by means of the following two syntactic techniques.

(A-i): Adjectives are placed in copula complement position in many languages. E.g.,
English

74) The chief is tall.

[The chief]_{CS} [is]_{COP.PREDICATE} [tall]_{CC}

(A-ii): Adjectives may play the role of a head of an intransitive predicate in many languages. E.g.,

Fijian (Austronesian, Fiji)

75) E balavlu a tuuraga

[E balavlu]_{INTRANSITIVE PREDICATE} [a tuuraga]_s
3sgS tall ARTICLE chief

‘The chief is tall.’

(B) Specify the referent of a noun:

Adjectives modify the referent of the head noun in an NP.

E.g., *English*

76) The tall chief laughed.

Fijian

77) E aa dredre a tuuraga balavu

[E aa dredre]_{INT.PREDICATE} [a tuuraga balavu]_s
3sgS PAST laugh ARTICLE chief tall

‘The tall chief laughed.’

Studies show that there are some languages where there are either of the above parameters available.

(C) Comparative construction:

Some languages have comparative constructions. Adjectives may function as the ‘parameter of comparison’. E.g.,

English

78) Suva is more beautiful than Nadi.

[Suva]_s [is]_{COP.PREDICATE} [more beautiful]_{CC} [than Nadi]_{STANDARD}

Fijian

79) E toto'a ca'e o Suva mai Nadi

[E] [toto'a ca'e] [o Suva] [mai Nadi]_{STANDARD}
3sgS beautiful more ART place FROM place

'Suva is more beautiful than Nadi.'

Comparative construction is an extension of the copula complement clause where an index of comparison and standard of comparison is added.

The order in comparative constructions can be seen from the point of two pairs of elements and their pattern. They are the order of standard (St) and marker (M) and the order of standard (St) and adjective (Adj). It is seen that these two pairs of elements, that is, the order MStAdj and AdjStM are distinguishable in few languages. As for example, Mandarin has MStAdj order which is related to VO languages.

80) Zhāngsān bī tā pàng
Zhangsan COMPAR 3SG fat
M St Adj

'Zhangsan is fatter than her/him'

Linguists establish basic word order on the basis of three criteria. They are frequency of usage, distribution test and pragmatics. Korowai, an Awju language spoken in Irian Jaya on New Guinea (Van Enk and De Vries (1997)) is such a language where all adjectives can precede the noun but few can also follow the noun. Here the AdjN order is considered as basic word order because of its less restricted distribution.

81) lembul nggulun
bad teacher
'a bad teacher'

82) yanop khonggél-khayan
man big-very
'a very big person'

In Ilocano, an Austronesian language spoken in the Philippines, adjectives can be placed prenominal or postnominal. The latter position is contrastive (Rubino (1998:40)). The more neutral order is given in (45a), the more contrastive order in (45b).

83) ti nalaíngga ubíng
ART smart LINK child
'the smart child'

84) ti ubíng a nalaíng

ART child LINK smart
 ‘the smart child (as opposed to the others)’

(D) Adjectives may be used to modify verbs:

In this case, the adjective may be used in unmodified form or derivational process. In the subsequent examples adjectives are used as adverbs.

Colloquial American English

85) He speaks *bad*.

Standard British English

86) He speaks *badly*.

Adverbs may be used to modify adjectives.

English

87) *Openly* hostile

Features	Techniques	Verb-like adjective	Noun-like adjective	Verb-like and Noun-like adjective	Distinct adjective
(A) State a property	A-i	-	Adjective functions as a complement in a copula clause or a verbless clause.	Occurs as copula complement.	appears in copula complement slot.
	A-ii	Adjective as a head of an intransitive predicate like verbs.	They cannot be used in a predicate.	Adjective as a head of an intransitive predicate like verbs.	Cannot function as an intransitive predicate.
	Grammatical agreement	Take similar grammatical features for some or all of tense, aspect,	-	Take inflections like a verb.	Do not take inflections of verbs.

		modality, mood of verbs.			
(B) Specify a head noun	modification	Adjectives like verbs modify a head noun only in a relative clause construction.	Adjectives modify a head noun within an NP.	Adjectives modify a head noun within an NP.	Adjectives modify a head noun within an NP.
	combination		An adjective can be a sole lexeme or accompany with nouns within an NP.		Cannot be a sole lexeme within an NP.
	Grammatical agreement	Do not share any morphological processes with nouns.	sometimes agree with the head noun in terms of inflectional features like gender, number, and/or case.	Take inflections like nouns.	Do not agree with noun in terms of grammatical features.
Examples		Mandarin Chinese, Thai, Vietnamese, Korean	Latin, Spanish, Finnish, Hungarian, Igbo, Quechua, Dyirbal	Berber languages, Tariana, Nunggubuyu, Takelma	English, Tunica, Mam, Teribe

Table 1

Excerpted from Dixon (2010, v. 2, p. 63–65 and 72 - 73) and Giri (2023, p. 67)

2.1.2. Largeness of Adjective Class

Dixon (2004 (Dixon & Aikhenvald, eds.) and 2010) while discussing the semantic classes of adjectives argues that there is a connection between each semantic category and certain parts of speech by emphasizing the relationship between the semanticity and the particular POS. He investigates the typology of adjective class across languages, stressing the differences in the nature and size of adjective classes. Additionally, he explores the universal parts of speech membership of semantic categories, providing insight into the circumstances in which adjectives disappear. Besides, he talks about the four fundamental semantic categories of adjectives (dimension, age, value and colour), which are important to comprehend the organization of small adjective classes. Dixon (2004, in Dixon & Aikhenvald and 2010) presents semantic types related to the adjective class and categorised them into three sets: SET A, SET B and SET C. The languages that exhibit four semantic types DIMENSION, AGE, VALUE and COLOUR of SET A are called small adjective class language.

SET A

DIMENSION	AGE	VALUE	COLOUR
'big', 'small', 'tall', 'short'	'new', 'young', 'old'	'good', 'bad', 'perfect', 'important'	'black', 'white', 'red', 'blue'

Again, some languages create adjectives from the semantic types PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED belonging to SET B along with the members from SET A. They are called middle adjective class languages.

SET B

PHYSICAL PROPERTY	HUMAN PROPENSITY	SPEED
'hard', 'soft', 'heavy', 'wet'	'happy', 'jealous', 'kind', 'clever',	'fast', 'quick', 'slow'

Finally, the languages possessing adjectives from SET C including SET A and SET B are called large adjective class languages.

SET C

DIFFICULTY	SIMILARITY	QUALIFICATION	QUANTIFICATION	POSITION	CARDINAL NUMBERS:	(ORDINAL NUMBERS):
‘easy’, ‘difficult’, ‘tough’, ‘simple’	‘similar’, ‘different’, ‘other’, ‘like’	‘definite’, ‘true’, ‘probable’, ‘possible’	‘all’, ‘many’, ‘some’, ‘few’	‘high’, ‘low’, ‘near’, ‘far’	‘one’, ‘two’, ‘three’	‘first’, ‘second’, ‘third’, ‘fourth’,

2.1.3. Adjective class on noun-verb continuum

The typological study on adjective class exhibits that there are four types of adjective class based on some semantic and syntactic features as proposed by Dixon (2010, v. 2, p 72 - 73). These are verb-like adjective class, noun-like adjective class, noun- and verb-like adjective class, and distinct adjective class. Depending on them, the languages in turn are also classified into four types and named accordingly: verb-like adjective class language, noun-like adjective class language, verb-like and noun-like adjective class language, and distinct adjective class language. Now the characteristics of four types of adjective classes are mentioned below.

a) Verb-like adjective class:

The adjectives have similar grammatical properties to those of verbs. Both verb and adjective may function as head of an intransitive predicate. Features like tense, aspect, mood, and modality of verbs may be marked on adjectives. They may modify a noun within an NP through relativization. E.g., Mandarin Chinese, Thai, Vietnamese, and Korean are verb-like adjective class languages.

b) Noun-like adjective class:

The adjectives have similar grammatical properties to those of nouns. Both noun and adjective may appear inside the NP, that is, they cannot be used in a predicate. An NP may consist of noun, noun with adjective, or just adjective. Adjectives may have similarities with nouns in bearing grammatical features like gender and number. E.g., Latin, Spanish, Finnish, Hungarian, Igbo, Quechan, and Dyirbal are noun-like adjective class languages.

c) Verb-like and noun-like adjective class:

The adjectives may occur inside an NP, then bear the grammatical features of nouns; and they may function as an intransitive predicate, then bear the grammatical features of verbs. E.g., Berber (North Africa), Tariana (Amazonia), Nunggubuyu (North Australia), Takelma (Oregon) belong to the language type of verb-like and noun-like adjective class.

d) Distinct Adjective Class:

The adjectives have grammatical properties different from those of nouns and verbs. Neither they can be the sole lexeme in an NP, nor do they function as intransitive predicates. The morphological processes are different nouns and verbs. Thus, they make a distinct category of adjectives. E.g., English, Tunica (Louisiana), Mam and Teribe (Central America) pertain to the language type of distinct adjective class.

The above diagram shows the position of an adjective class in the noun-adjective-verb continuum in case of various language types of the world.

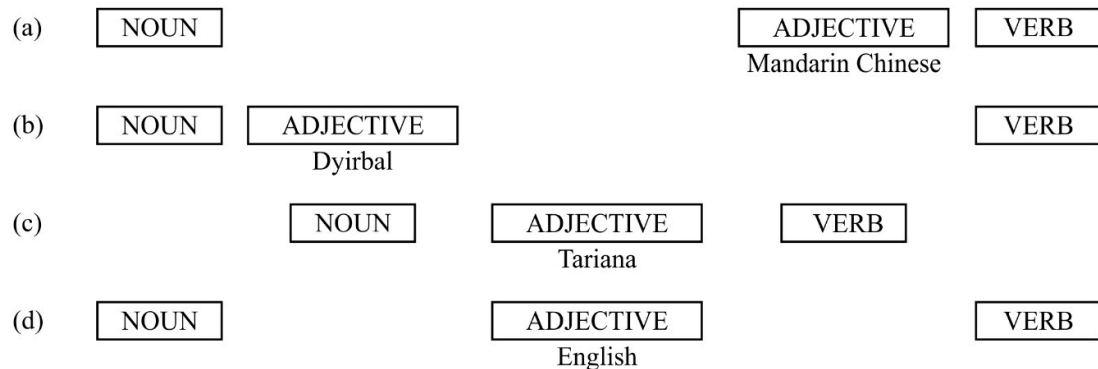


Diagram: 1

Extracted from Dixon (2010, v. 2, p. 67)

Moravcsik (2013) defines adjectives as words expressing properties of nouns, categorizing them into attributive (modifying nouns directly) and predicative (used in predicates). He also discusses their gradability, which enables comparisons of degrees across languages. He examines typological features of adjectives, noting significant syntactic variation in their placement—either preceding or following nouns—which affects semantic interpretation like definiteness. He also discusses morphological diversity, highlighting that some languages inflect adjectives for gender and number, while others keep them uninflected, revealing insights into adjectival meanings. He explores cross-linguistic

variations in adjectives, showing how cultures influence their adjectival lexicon. For instance, some languages have extensive colour terms where colour distinction matters culturally, while others have fewer. He highlights that cultural context shapes the quantity and semantic range of adjectives, especially in gradability and comparison. Thus, he analyzes adjectives, highlighting their characteristics, typological features, and cross-linguistic variations, emphasizing their complexity and integral role in language structure and use.

Velupillai (2012) noted that adjectives denoting qualities or attributes (colour, size, shape and others) may constitute an open class. She restricted her discussion to descriptive adjectives excluding quantitative or limiting adjectives (many, some, few) which never constitute an open class. She added that descriptive adjectives are not by far universal. She specifies grammatical characteristics for the adjective class. These are: firstly, usage for degree (positive, comparative and superlative) either morphologically or syntactically; secondly, occurrence with degree words that cannot combine with nouns and verbs (too cold_A, *too table_N, *too run_V). Besides, she mentions that adjectives may agree with nouns they modify. She notes two usages of adjectives which fall into two groups: modification of a noun (a big apple) and predication (the apple is big). While talking about language universality, she pointed out that “while nouns and verbs form near-universal open class categories, this is not the case with adjectives. (p. 127)”. Then, she presented statistical data for ‘open class’, ‘closed class’ and ‘no separate class’ for adjective class in 153 languages based on WALS 200-sample.

Bisang (Song (ed.), 2011) notes that the status of adjectives as a distinct word class is explored by Dixon (1977, 1982), Schachter (1985), Bhat (1994), and Dixon and Aikhenvald (2004). Adjectives, defined as property-denoting lexemes that modify, often exhibit degrees, categorized into positive, comparative, and superlative forms (Croft, 1991, 2000b, 2001). Dixon’s approach emphasizes different semantic types, establishing hierarchical relationships among them (Wierzbicka, 2000). Languages may have varying sizes of adjective classes or none at all, with semantic types organized hierarchically. Core types include DIMENSION, AGE, VALUE, and COLOUR, while additional types like PHYSICAL PROPERTY and HUMAN PROPENSITY are found in medium to large classes. Igbo features a small adjective class with antonymic pairs for each core type. In languages lacking

adjectives, properties are typically expressed via verbs or nouns (Schachter, 1985). Dixon (1977 and 2004) notes trends in languages with small adjective classes, where terms for PHYSICAL PROPENSITY often reside in the verb class, and HUMAN PROPENSITY can belong to either class.

Rijkhoff (Vogel and Comrie, eds., 2000) presents a detailed examination of the adjective class, highlighting its significance in linguistic typology. Adjectives are defined as words that describe qualities of nouns, encompassing both inherent (e.g., *English* red) and relational (e.g., *English* parental) attributes. The authors categorize adjectives into two main types: attributive, which modify nouns directly, and predicative, used in a predicate position. They explore variations in syntactic positioning across languages, noting that some languages allow flexible placement, influencing meaning. They also investigate morphological diversity, contrasting inflected languages with isolating ones. They examine the interaction of adjectives with other grammatical categories, revealing overlaps with adverbs that challenge traditional classifications. Cross-linguistic studies illustrate how cultural factors shape the lexicon of adjectives, particularly in areas like colour terminology. The discussion of gradability, including comparative and superlative forms, further underscores the complexity of adjectives. Overall, the book offers insights into the intricate roles adjectives play in language, encouraging further exploration of their syntactic and semantic dimensions.

Bhat (1994) states that there are three functions namely reference, predication, and modification to establish an adjective class in the continuum of noun-adjective-verb. He examines that in Indo-Aryan languages, adjectives often resemble nouns. Almeida (1989) notes that in Konkani, certain adjectives agree with their head noun when used as adverbs. Cardona (1965) classifies Gujarati adjectives as part of the nominal system due to their gender and number agreement. Marathi also groups adjectives under the nominal category. Bloch (1965) highlights that while complete concord is typical in Sanskrit, modern Indo-Aryan languages, like Kashmiri, exhibit reduced adjectival inflection. In Dravidian languages, adjectives differ from nouns and verbs. In Malto, adjectives lack markers in attributive positions but take personal suffixes in predicative positions (Mahapatra 1979). Similarly, Kui adjectives are unmarked attributively but acquire agreement markers for person, number, and gender in predicative positions (Winfield 1928). In Austro-Asiatic

languages, adjectives often overlap with nouns and verbs. In Mundari, lexical items can function as nouns, verbs, adjectives, or adverbs without suffixes (Hoffmann 1903; Cook 1965; Osada 1992). In Khasi, adjectives behave like verbs in predicative use, taking tense and aspect markers (Nagaraja 1985). In Tibeto-Burman languages, adjectives are often indistinguishable from verbs. Burling (1961) notes that Garo's verbal bases encompass both verbs and adjectives, sharing grammatical endings and constructions. Matisoff (1973) indicates that while Lahu possesses 'action verbs and 'adjectival verbs', the distinction is primarily semantic with minor syntactic differences.

2.1.4. Semantic ordering of attributive adjectives in Poly-adjectival Noun Phrases

Flanagan (2014) investigates the sequence in which attributive adjectives are positioned when they appear together modifying the same head noun. Noun phrases with multiple adjectives are analyzed across four languages Axomiya, Bangla, Maithili and Odia. The term 'Poly-adjectival Noun Phrase' was introduced by Bache (1978) to describe any noun phrase that includes more than one modifier (adjective). Bache (1978: 26) proposed that all modification in English noun phrases could be divided into three distinct 'modification zones.' These zones include adjectives that specify (Mod-I), characterize (Mod-II), and classify (Mod-III), with each zone being categorized by Bache according to their semantic properties and syntactic behavior. Flanagan (2014) primarily used quantitative data (with some qualitative data as well) and applied a mixed-method approach to data collection, combining corpus analysis and field methods. He investigated the phenomenon of adjective ordering in six languages of focus: English, Northern Sotho, Welsh, Polish, Tagalog, and Mandarin Chinese. He finds in English that it is uncommon to encounter noun phrases where altering the order of adjectives within a sequence results in ungrammaticality. The order of adjectives is primarily determined by the context and the overall meaning of the phrase. Northern Sotho possesses a semantic-based order for multiple adjectives within a modification string: *-ngwe* 'another' > NUMERALS > *-golo* (adjectival root) > OTHER

DIMENSION ADJECTIVES > EVALUATIVES > COLOURS. He demonstrates that the standard order for Mod-II adjectives in Welsh is as follows: SIZE > PHYSICAL QUALITY > COLOUR > NATIONALITY. Chinese displays the most rigid and limited adjective order. The adjective order in Polish closely resembles that of English. In Tagalog, word order within noun phrases is much more flexible, and in all the examples examined, multiple options are available. However, this study largely followed the semantic ordering of Poly-adjectival NPs in Axomiya, Bangla, Maithili and Odia keeping English from a cross-linguistic perspective.

Scontras (2023) states that languages like English, Greek, Mandarin, and Tagalog share a preference for a specific adjective order, such as ‘small brown box.’ This pattern exists in languages with both prenominal and postnominal adjectives, albeit reversed in postnominal languages (e.g., Arabic, Spanish). These preferences suggest a cognitive principle shaping language. Understanding them involves documenting cross-linguistic patterns, specifying knowledge, and identifying shaping pressures. This article reviews over 100 years of research, discussing predictors (Sweet 1898, Whorf 1945, Quirk et al. 1975, Cinque 1994, 2010, 2014), empirical data, and future directions in adjective ordering studies. The literature on adjective ordering often links preferences to lexical-semantic adjective classes. Dixon (1977) pioneers this approach, documenting seven adjective types in English: value, dimension, physical property, speed, human propensity, age, and color, ordered from closest to furthest from the noun. He suggests this ordering is universal, with evidence from languages like Hungarian, Telugu, and Selepet, where the English order is largely preserved, even in languages with postnominal adjectives. Despite over a century of research, many questions about adjective ordering remain. There is no single explanation for ordering preferences, as they arise from various factors like accessibility, processing cost, communicative success, and meaning. Hetzron (1978) states that multiple pressures, often conflicting, shape these preferences. Recent approaches, like Wulff (2003) and Futrell et al. (2020), use multifactor models, combining meaning and frequency. Future research aims to extend these models cross-linguistically to understand both similarities and differences in adjective ordering.

2.2. Adjectives in Indian Languages

Masica (1991) noted that affective adjectives are found in Bhojpuri (Tiwari), Rajasthani (Bahl) and Awadhi (Bahl). English word international is calqued in Hindi *antarrāstrīya* ‘international’ with the adjectival ending *-īya*. In Kashmiri, adjectives have a rich agreement system with gender, number and case. The distribution of the head and its surrounding elements show two different natures based on the positions of those elements.

Hindi

88) *chotā_A bāccā_N* ‘small child’

89) *bahut_{ADV} acchā_A* ‘very good’

90) *jaldī_{ADV} ānā_V* ‘come early’

The elements on the left-hand side of the heads (N, A, V) are attributive and sub-ordinate. They are syntactically related. However, the elements on the right-hand side of the lexical base limit it and contextualise it.

Hindi

91) *a* ‘come’

92) *ānā* ‘come-FUT’

93) *ātā hai* ‘he comes.’

94) *ā rahī hai* ‘she is coming’

In some NIA languages, nominal inflections are attached to adjectives along with noun, pronouns. In some other NIA languages, adjectives are marked with numerals and adverbs. Nominal inflectional categories are gender, number, case and definiteness. In NIA languages, gender is an inherent and classificatory property of nouns and a variable / inflectional property of adjectives, certain verbal forms, sometimes pronouns and adverbs and postpositions in some cases. In Literary Sinhala, adjectives are invariant. Maithili shows agreement of extended adjectives with extended nouns in the case of ordinary / diminutive and animate pairs with *-ā / -ī*. For examples,

95) *karikkā dālā, ghorā* ‘black basket, horse’,

96) *karikkī dālī, ghorī* ‘black basket, mare’

Angika also shows such distinction with *-o / ī* (Pandey, 1979). In Hindi and Marathi, number agreement is found in adjectives involving nominal markers. In Hindi, adjectives are marked for number but not for case of nouns.

97) *barā makān* 'large house',

98) *bare makān* 'large houses'.

Adjectives take layer-1 affixes when they are declined. In some languages mediating genitives are obligatorily with pronouns. Here the possessive adjectives are equivalent to the genitive ones.

Bengali

99) *āmār fātʰe* 'with me'

The form *āmār* does not belong to noun. The genitive is expressed as adjectival form of a noun in some languages. Adjectives which have inflections are called 'variable' but the rest are invariable. The 'variable' class is important as its inflections are showed by genitive postposition and by participles having role in verbal system. Generally adjectives show agreement in terms of gender, number and case but not for definiteness. Jha pointed out in Maithili there is 'definite adjectives' which are merely variable adjectives and/or adjectives used as nouns. The case inflection of adjectives is seen in layer-1 cases. In Hindi, direct or general oblique case is marked in adjectives.

Hindi

100) *chotā ghar* 'small house'

101) *chote ghar se* 'from the small house'

In Gujarati, adjectives reflect additional layer-1 cases. For examples,

102) *nanū ghar* 'small house'

103) *nana ghar-thi* 'from the small house'

104) *nane ghare* 'in the small house'

In Kashmiri, adjectives show agreement with case. It has different forms for number (SG vs. PLU), gender (M vs. F) and case (dative, ablative and agentive). In Hindi, number is neutralised in masculine oblique case.

Hindi

105) *chote ghar* 'in the small house',

106) *chote gharō mẽ* 'in the small houses'.

In Marathi, both number and gender are neutralised in oblique. They end in *-ya*. Number and case are neutralised in the feminine in Hindi and Gujarati.

Hindi

107) *barī kitāb* 'big book'

108) *barī kitābe* 'big books'

But this is not attested in Punjabi, Sindhi and Marathi. In Nepali, gender is neutralised in case of plural number of adjectives. NIA languages like Bangla, Assamese, Odia and Sinhala do not inflect adjectives. In languages of the transitional belt (Nepali, the Bihari group, the eastern Hindi group) inflection is truncated and often optional only for Gender and/ or Number not for case. In NIA comparative and superlative inflections of adjectives are not exhibited as OIA. It is expressed via syntactic construction. NIA languages exhibit personal or nominal (that is adjectival) or a combination of these. In the eastern group of I-A languages, adjectives do not have an agreement. Odia has *-anta* endings which are adjectival present participles. E.g., *jiṅṅā māchḥo* ‘the living fish’. This ending is used in the paradigm of the verb as a conditional. It may come from Sanskrit. The perfective form of the verb is formed with attributive adjectival form in Marathi. This is also used predicatively. NIA non-finite forms are basically of three kinds: with nominal functions, with adjectival functions and with adverbial functions. In Hindi, adjectives agree with gender variation.

109) *aisī citthi likhni hai*

In Odia and Sinhalese, infinitives may be used as either nouns or adjectives. In Bangla perfective (/past) adjectival participle is used. E.g.,

110) *tār lekhā ækkhānā boi*
‘a book written by him’

In Marathi desiderative adjectival form is found which has the function of nominal complement. Most NIA languages have adjectival participles. Bangla, Assamese and Odia have adjectival imperfectival participles based on MIA present participle. [Bangla: *-ontḥ*, Assamese: *-vnto* and Odia: *-ontā*]. Odia has imperfective adjectival form. In NIA compounds of adjectives with verbs like do and become play important roles. They are called conjunct verbs. Assertion marker is used in verbless constructions of eastern NIA and Sinhalese adjectives. The existential verb ‘have’ is used in Bangla and Odia with adjectives.

Odia

111) *se mo kāmōre khusi ṁch-ṁnti*
he mine work happy do-PRS.3
‘he is happy with my work.’

He highlights whether Maithili has agreement between verb and adjective is to be studied (Hook & Koul, 1984b).

Left branching phrasal syntax is seen in NIA languages where qualifiers of adjectives precede them. In NIA there is no inflection on adjectives for comparative constructions.

Superlative:

- 112) *ʃobar* *tʰeke* *boro*
 all-GEN from-POSTP big

In complex sentences, embedded sentences are either complete or reduced. They are sometimes in the role of a phrasal component (mainly as adjectival modifiers of nouns).

Adjectival predications take complements like verbs. In the case of English, this is called appositive. For example,

English

- 113) *It is true that he comes.*

In Hindi also it is found. *yah sach hai [ki...]* ‘it is true [that...]’. NIA languages possess two ways of embedding sentences as modifiers of nouns: relative clause and adjectival participle (/participle clause). Participle constructions have at least perfective (past) and imperfective (present) varieties. Sometimes, they have special markers of their adjectival status (as found in Hindi and Sindhi). Verbal adjectives are found in standard Bengali with two forms: *-ā* and *-no*. These are identical to verbal nouns. Assamese, Odia and Bangla indicate various forms (Tripathi, 1962).

Bengali

- 114) *āmi [tār lekhā] ekkʰāni boi porecʰi.*

In adjectival clauses, the relative pronouns may come second rather than at the beginning of the clause, especially in Bengali.

Shapiro and Schiffman (1975) discuss the similarity in the field of morphology of Indian languages, Bloch (1965) cited in Shapiro, Michael C.; Schiffman, Harold F. (1975) pointed out that there is an “absence of morphologically marked degrees of comparison of adjectives.” He continued with “the independent adoption in Marathi, Odia and Sinhalese of the Dravidian relative participle to their syntax, an invariable adjective admitting a subject in the nominative in any construction.” Andronov (1964b cited in Shapiro, Michael C.; Schiffman, Harold F. (1975)) considered that there are many I-A loan in Dravidian

ART	dog	black	clsfr-corn	white
N	Adj		N	Adj
	‘black dog’		‘white corn’	

Kachru (2006) observed in Indo-Aryan and languages adjectives always precede the head noun. In Manipuri which is a Tibeto-Burman language, adjectives can both follow and precede nouns. Hindi exhibits verbal agreement and adjectival agreement (participial agreement).

2.3. Adjectives in the Select EIA Languages

2.3.1. Adjectives in Axomiya

Kakati (1935) discussed pronominal adjectives, in Axomiya, which are classified into two categories – demonstrative adjectives and multiplicative adjectives. The demonstrative adjectives are also known as demonstrative pronouns which are preserved in Bangla and Magadhan dialects along with the emphatic particle /hi/. E.g. /ei, ei, eja, eiya, xei, xeja/ are few demonstrative adjectives with the definitive affix /-a/ attached to a few of their forms. /xei/ is parallel to OIA /sohi/ and MIA /sehi/. The multiplicative adjectives, in Axomiya, /kei/ can be found in OIA forms as in /kati/ plus emphatic /hi/. Affixal extensions like /-ba/ are found in /keiba/, another multiplicative adjective. He notes adjectives of manner or quality from the historical point of view like Chatterjee (1926). Axomiya pronominal adjectives of quantity and number, which have corresponding Bangla and Odia forms, are in four groups as follows: i. /εtek/, /εtek/, ii. /εti-, εti-, iii. /iman/, /imān/ and iv. /xəkəlo/, /sakalo/. The source of these form groups following Chatterjee (1926). These groups can be traced back to early and middle MIA and to OIA made up of pronominal base + affixal form –yant- + an adjectival –tya, >-tiya. The form like /εti-/ is followed by khjən to indicate

time; /-man/, /mān/ indicating measure, quantity; and /xəkəlo/ is derived from sakala + hu <-kkhu <khalu.

Goswami (1981) mentioned adjectives as modifiers and nouns which appear before nouns and after nouns in case of predicative position. He stated about the usage of adjectives as nouns. Besides, some nouns are used as adjectives. In this case, the *-i* ending of nouns becomes *-ī* in adjectives. He noted that nominal inflections are attached to adjectives. While words with neuter gender take adjectives, the adjectives are marked with a feminine marker. Adjectives are sometimes used as adverbs.

Medhi (1988) noted that in Axomiya, only the gender is indicated in a few *tatsama* and *tadbhava* words but not number and case. E.g., *ajalā larā* ‘artless boy’ : *ājalī sowalī* ‘artless girl’ and *ejan bhāl mānuha* ‘a good man’ : *ejanī bhāl tirutā* ‘a good woman’. It is a peculiarity of the Dravidian languages as of the Tibeto-Burman family that adjectives can never be declined to agree with the nouns they qualify as in Sanskrit. This rule has been borrowed in an altered form by Axomiya. A large number of Arabic and Persian words have found their way into the Axomiya language; such as, *kam* ‘short’. Practically no grammatical peculiarities have, however, been borrowed from such languages.

Medhi (1936) defined adjectives which express quality or attribute of nouns. From the point of form, adjectives of Axomiya have two forms: short (*dukhi*) and long (*dukhiya*). Again, the short forms of adjectives are of two types. They are weak and strong. Strong forms can be differentiated using gender (masculine vs. feminine). He mentioned that the gender of adjectives is assigned by the gender of nouns. But not all adjectives take gender markings. Based on gender, adjectives are classified into two types: uninflected and inflected. Uninflected adjectives are those which do not get changed while placed before nouns. But

inflected adjectives are marked based on the gender marking of the modified nouns; e.g., *sundar purus* ‘handsome man’ and *sundar suwali* ‘beautiful girl’. He also noted that if the modified nouns and the preceding adjectives are *tadbhaba* or native words, the adjectives do not undergo any change (*saru lara* ‘little boy’ and *saru suwali* ‘little girl’). But in case of modified nouns and the preceding adjectives belonging to *tatsama* and *semi-tatsama* groups, the adjectives go through change (e.g., *nimata garu* ‘silent cattle’: *nimati gai* ‘silent cow’, *satyabadi kumar* ‘truth prince’ and *satyabadini kumari* ‘truthful princess’). Here it can be pointed out that the data sets presented are wrongly described. Again, it is mentioned that in case of inanimate entities (nouns) *tatsama* or *tadbhaba* adjectives do not alter (e.g., *madhura bhasha* ‘sweet language’). Exceptions are also there; e.g., *acala bhakti* ‘steady devotion’. He talked on comparison of adjectives and showed how superiority and inferiority are indicated morphologically. He classified numerals separately from adjectives. These are divided into various types: cardinals, ordinals, fractionals, multiplicatives, collectives, indefinitives, denominatives, subtractives, and distributives. Moreover, there are pronominal adjectives which are grouped into several kinds. They are quantitative and qualitative. Besides, he talked about participle adjectives.

2.3.2. Adjectives in Bangla

Majumdar (1980) identified pronouns as specific types of adjectives. There are several types: pronominal adjectives (*aemon lok* ‘such man’), indefinite adjectives (*kon* ‘which’), adjectives of quality (*heno kaj* ‘such work’) and adjectives of quantity (*kajek* ‘some’) based on semanticity and pronominals.

Shaw (1984) distinguished adjectives from nouns. By adjectives, he indicates adjectives of nouns, adjectives of adjectives and adjectives of verbs. He points out the influence of gender on adjective class which is gradually decreasing. He presents examples where gender distinction is not prominent; *choto chele* ‘little boy’ and *choto meye* ‘little girl’, *baro*

bhai ‘elder brother’ and *baro bon* ‘elder sister’, *bhalo kaka* ‘good (paternal) uncle’ and *bhalo kakima* ‘good (paternal) aunty’. On the other hand, words are different in *tatsama* Bangla adjectives based on the gender of adjectives. E.g., *sundar purush* ‘handsome man’ and *sundari nari* ‘beautiful woman’. Besides, the grammatical feature *number* does not influence adjectives. E.g., *bhalo chele* ‘good boy’ and *bhalo chelera* ‘good boys’. By making reduplication, sometimes plurality is indicated. In this case, the plural suffix is not added to the noun. For examples, *paka katha* ‘mature talk’, *paka paka katha* ‘mature talks’.

Sen (1975) detailed a historical analysis of the Bangla word class adjective. Sanskrit adjectives in Old Indo-Aryan (OIA) have morphological characteristics such as the case, number, and gender of the nouns to which they are connected. Until the Middle Indo-Aryan (MIA), this persisted. Although they were occasionally discovered as examples of antiquity or for prosody’s sake, adjectives at the end of MIA were found to be devoid of any inflection markers. Adjectives were hardly ever inflected in old Bangla. Gender markers are used with adjectives in the $\text{ṣad}^{\text{h}}\text{u}$ style, which originated in Sanskrit. Two inflectional suffixes, $-\text{ṣro}$ and $-\text{ṣmo}$ or $-\text{ijṣ}$ and $-\text{if}^{\text{h}}\text{o}$ (in contrast to English -er and -est), were employed to compare adjectives. However, the use of colit^{h} , or colloquial style, is dwindling. Instead, the employment of postpositions becomes a crucial element. It’s interesting to note that occasionally, simply the possessive form—without postpositions—is employed, as in $\text{p}^{\text{h}}\text{ler fera am}$, which means ‘mango is the greatest among fruits’.

Klaiman (1987) states that morphology in modern Bengali is non-existent for adjectives, minimal for nouns and very productive for verbs. Loss or reduction of the earlier Indo-Aryan adjective declensional parameters (gender, case, number) is fairly typical of the modern Indo-Aryan languages; hence the absence of adjectival morphology in modern Bengali is not surprising. He notes that an adjective is always placed before the noun it modifies. By contrast, in earlier Indo-Aryan, adjectives showed inflectional concord with their modified nouns and consequently were freer in their positioning.

Chaki (1996) divided words into five different classes: nam/biṣeṣṣo , which means "noun," biṣeṣṣon , which means "adjective," ṣarbonam , which means "pronoun," ṣbboj , which means "indeclinable," and krija , which means "verb." He uses the same definition of adjectives as Chatterjee (1939). He divided adjectives into two categories: $\text{bid}^{\text{h}}\text{eo biṣeṣṣon}$, or "predicative adjective," and biṣeṣṣer biṣeṣṣon ‘adjectives of adjectives’. It is important to note

that the syntactic placements in sentences determine the usage of these two categories of adjectives. *bijeffer bifeʃon* is further divided into several groups: *porimnabacok bifeʃon* ‘quantitative’ (*onek lok* ‘many men’), *səŋk^habacok bifeʃon* ‘numeral adjective’ (*tin konna* ‘three daughters’), *purənbacok bifeʃon* ‘ordinal adjective’ (*ʃəʃt^ho ʃreni* ‘sixth standard’), *guniŋto ʃəŋk^habacok bifeʃon* ‘multiplied numeral adjective’ (*digun bəl* ‘double force’), *b^həgnəŋʃo səŋk^habacok bifeʃon* ‘fractional numeral adjective’ (*aek tritⁱəŋʃo lok* ‘one-third people’) and *d^hənnəttok bifeʃon* ‘onomatopoeic adjective’ (*kənkəne t^handa* ‘biting cold’). He distinguished three categories of adjectives based on their morphological structure: *moulik bifeʃon*, which means "simple adjective," *ʃad^hito bifeʃon*, which means "complex adjective," and *bijuk^to bohupədməj / bakkoməj bifeʃon*, which means "phrasal/sentential adjective". Additionally, he introduced the terms "adjective of pronoun" (*ʃərbonamer bifeʃon*), "pronominal adjective" (*ʃərbonam bifeʃon*), "adjective from pronoun" (*ʃərbonam^ɟəttə bifeʃon*), and "adjective of adjective" (*bifeʃonər bifeʃon*) under the general phrase "adjective of adjective".

Islam (1998) mentions the creation of adjectivals by adding genitive (possessive) markers to nouns. E.g., *sonar dant* ‘golden tooth’, *mamar bari* ‘maternal house’. Non-finite verbs and other verb forms are used as adjectives. e.g., *gaelo bachor* ‘last year’, *asche kaal* ‘next season’. Thus, he indirectly indicates the derivation process of adjectives for productivity.

Sikdar (2002) classifies words and word classes into six main groups. They are nouns, adjectives, pronouns, indeclinables, verbs and others. Interestingly, he identifies numerals separately from adjectives. He defines adjectives as qualifying or specifying nouns, verbs, and pronouns.

Dasgupta (Cardona and Jain, eds., 2003) notes that vowel harmony (phonological process) can make variants of two diglossic forms with High and Low varieties in case of adjectives that are derived from nouns. For examples, /deʃi/ [H] and /diʃi/ [L] ‘indigenous’ from /deʃ/ ‘country, nation’, /iŋreji/iŋrāji/ and /iŋriji/ ‘English (the language)’ from /iŋrej/ ‘English(wo)man’ and /bileti [[bilāti even more formal, etc.]], biliti/ ‘English (cooking, law etc.)’ from /bilet/ [bilet, bilāt] ‘England’. By adding /-i/ suffixes adjectives are formed from place names to indicate inhabitant or language names. E.g., /pānjāb_N, pānjābi_A/ ‘Panjab, Panjabi’. Again, this process is also applied to create nouns from adjectives. E.g., /cālāk, cālāki/ ‘clever, cleverness’. Another suffix /-hin/ is mentioned to produce adjectives like

/grihohin, šongihin/ ‘homeless, companionless’. From a grammatical standpoint, adjectives do not agree with the head noun. He raises an open question to identify adjectives and states that comparison can be a parameter applicable exclusively to adjectives. Adverbs are produced from adjectives. The Human classifier /jon/ is welcomed by some adjectives, particularly ordinals, to produce individual aggregate definites: /prothomjon jāe nāi, ditiyojon gaeche/ [[prothomjon jāe nāi, ditiyojon giyāche]] "The second one has gone, the first one did not." This is puzzling since nouns in Bangla do not take /jon/ to make individual aggregate definites (*/oddhāpokjon/, meaning "professor-Jon," would imply "the professor," if it were even marginally admissible; in Assamese, such forms are common).

Morshed (2007) categorizes words into eight classes in Bangla. He defines the adjective class as the word class that modifies nouns or proper nouns or any other types of nouns. He classifies adjectives and adverbs separately. They are nouns, verbs, adjectives, adverbs, pronouns, postpositions, conjunct and exclamatory words. He gives an example from English with the word ‘round’ to prove that the place and the environment where it sits determines its word class. The following examples show that the word English *round* can be used as different word classes based on the place and the environment where it appears: *round*_{ADJECTIVE} table, *they sat round*_{PREPOSITION} the table, *the first round*_{NOUN}, *his eyes rounded*_{VERB} with horror. Then, he exhibits that an adjective in Bangla sits between a classifier and a noun. E.g., *ekjon ... meye chole gelo* ‘a ... girl went’. Even when the classifier is absent, it sits before the noun. E.g., *je ... lok se kakhono ... kaj kore na* ‘a ... person does not do a ... deed’. Some qualitative words are used before adjectives in Bangla. E.g., *sabhay anek bhalo lok esechilo* ‘many good people came in the meeting’ and *kichu kharap lok sab jaygatei ache* ‘few bad people are everywhere’. The adjectives which modify nouns are placed before the nouns. When adjectives are used in the predicative position, they are placed after nouns. He also discusses inflection to make a comparison. It is noteworthy that any suffix or bound morpheme is not used in colloquial Bangla. The usage of *-taro/-tamo* suffix or bound morpheme indicates a comparison. He mentions that adjectives are also created from adjectives by the process of derivation. E.g., *lalche/lalima* ‘reddish’ from *lal* ‘red’. He differentiates between adjectives and adverbs. To create the demarkation finely, he exhibits inflectional morphology and syntax of adverbs of Bangla which function distinctly from adjectives.

Thompson (2010) states “Adjectives come in all shapes and sizes and don’t necessarily have any distinctive features.” The question is: is it so? Isn't there any distinctive feature specified for the adjective class? She defines adjectives as descriptive or modifying words. They are non-declinable as they do not take case endings. She classifies adjective types into six types: 1. qualifying/descriptive adjectives (physical attributes, non-physical characteristics, and opinions and comments), 2. quantifying, numeral, ordinal, 3. possessive, 4. distributive, 5. interrogative, 6. deictic/demonstrative. Also, she shows that all the types of adjectives can be used attributively. Regarding possessive and deictic, she mentions that these are essentially pronouns. The question is: Are they not indicating an overlapping situation for adjectives and pronouns? Then, she classifies adjectives into two types based on their occurrence in a sentence. They are attributive (occurs directly before the noun) and predicative (appears as a complement). She exhibits the ordering of possessive, deictic, quantifying and qualifying adjectives before the nouns as attributive ones. She notes "All but descriptive, qualifying adjectives are rather restricted in their use as predicates". Thus, she describes the syntactic distribution of adjectives in Bangla. Predicative adjectives can be equational (copulative) and active. She talks about verbal adjectives like *bheja banabhumi*, *pahar-ghera*. Though some suffixes are mentioned to be adjectival, there is no supporting evidence. Sanskritic forms with *-taro* and *-tamo* suffixes are used only in the case of specific adjectives. Some superlative forms of adjectives are only used as independent adjectives. E.g., *ghonishtho* 'close'. They often lose their superlative semanticity and are used normally without any superlative connotation. To make a comparison, *aro* 'more' is used before the adjective. E.g., *se aro sundor* 'she is more beautiful'. Besides, some postpositions are used to mark comparisons in Bangla. They are *cheye*, *theke*, *hote*, *chaite*, *tulonay*. In restricted situations, no postposition is used at all. Negated comparison (*eta anker cheye jotil na*) is illustrated. To indicate superlative, *sabcheye* and *moddhye* (*cheleder moddhe madhu sabcheye lamba*) is used. *moto* 'like' and relative co-relative construction (*se jemon lamba amio temon lamba*), are used to express equality.

Islam and Sarkar (2011) classified Bangla words into 2 categories. They are content words and functional words. Content words are divided into 2 types. They are lexical words and exclamatory words. The lexical words are categorized into 7 categories: noun, pronoun, verb, adjective, adverb. On the other hand, the functional words in Bangla are conjunct and

postposition. Loan words of Sanskrit words do not change gender. They classify adjectives based on three criteria: selectional, morphological and syntactic. Based on selectional criteria, adjectives are classified into 2 types. They are nam bishesan and bhab bisheshan. Nam bisheshana is classified into 2 types: bishesyer bisheshana and sarbonamer bisheshana. Nam bishesahana is divided into 9 types. They express colour, quality, state, numerative, ordinal, cardinal and fractional, material-based, interrogative and deictic. Bhab bisheshana modifies nam bisheshana and adverbs. It is also named as an intensifier. Morphologically adjectives are of 2 types. They are simple and derivational. The derivational adjectives are of different types. They are verbal adjectives, adjectives derived from nouns and pronouns, onomatopoeic adjectives, compound adjectives, and prefixed adjectives. Syntactically adjectives are of 2 types: attributive and predicative. Here the numerative adjectives are classified further. Well, the discussion on this is not required here. They classified adverbs separately based on usage and characteristics.

According to David (2015), the majority of Bangla adjectives cannot be formally distinguished from nouns; however, a few closed classes of historically derived adjectives, such as *okhankar* (from the adverb "there"), *kejo* (from the adjective "efficient"), *doinik* (from the noun "daily"), and *ghumanta* (from the verb "sleeping"), can be identified by their unique endings (-kar, -o, -ik, -anta). Except in predicative contexts, adjectives usually come before the nouns they modify. Although they do not exhibit agreement, nouns can be derived from them by adding plural ends (-gulo, -guli) and specific classifiers (-ta, -khana) (*katogulo*, 'how many', *pancta*, 'the five'). Adjectives engage in partial and reduplication, just like nouns (*dagor dagor kalo noyon* 'great big black eyes'). However, no example of the aforementioned partial reduplication of adjectives was observed. In Bangla, comparison frequently occurs periphrastically, but it can occasionally be constituted morphologically. Comparative expressions typically use an adjective as the parameter of comparison, a genitive nominal+postposition ('than') construction as the standard of comparison, or, in the absence of an explicit standard of comparison, an adverb meaning 'more'. These comparisons need not involve a copula; instead, they are equational sentences.

Dash (2015) gives structural (morphological) view of adjectives and discusses the word formation processes such as inflection (*gʰor* 'house'+ *-erPOSS* = *gʰorer* 'of house'), derivation (*ḍin* 'day' + *-ik* = *ḍoinik* 'daily'), sandhi (*ḍono* + *-eko* = *ḍonoiko* 'someone'),

prefixation ($\text{ɔ-} + \text{bas̩tob} = \text{ɔbas̩tob}$ ‘unreal’), suffixation ($\text{cɔlon} + \text{-fil} = \text{cɔlonfil}$ ‘mobile’), and prefixation-suffixation ($\text{ɔ-} + \text{bɔhon} + \text{-fil} = \text{ɔbɔhonfil}$ ‘non-carriagable’) are quite frequent in Bangla.

Bhattacharya (2016) shows adjectives as modifiers of nouns. He also mentions that nouns and verbs also possess the nature of the modification. Then, he raises the question of how to differentiate adjectives from nouns and verbs. He rightly mentions how classifiers can be attached to both nouns and adjectives, and comparison does not solely happen to adjectives but also nouns. He mentions that adverbs (intensifiers) like *khub*, *atyanta* ‘very’ are only used with adjectives, not nouns. He notes word formation process derivation for the adjective class where it is seen that adjectives are created from adjectives themselves and nouns.

Lahiri (Tiwari, ed., 2017) grouped adjectives and adverbs under a single category based on the feature modification. further he classified *nam-bisheshana* into 6 types: *gunabacaka*, *abasthabacaka*, *akarbacaka*, *sthanabacaka*, *barnabacaka*, *kalabacaka*. This classification is not clear due to the lack of uniformity in numbering. Whether *sarbanamika bisheshana* and *sankhyabacaka* are classified under *nambisheshana* or direct categories of *bishesahnas* is not evident. He notes special usages of adjectives produced through compounding and from/with indeclinables. *Bisheshanas* are used even before indeclinables. He mentions the comparison of adjectives in two ways. The first is adding *-taro* and *-tamo* suffixes with adjectives (*tatsama* words) as found in Hindi. The second way is to add the postposition *ceye* ‘than’. The question is whether he denoted *naam bisheshana* (adjective proper) or *kriyabisheshana* (adverb).

2.3.3. Adjectives in Maithili

Jha (1968) briefly mentioned a comparative study of adjectives in old Maithili and modern Maithili relating to gender and number markings. He rejected the idea of adverbs as a separate word class in Maithili based on the shared features between adjectives and adverbs. He discussed how pronouns and adjectives become overlapped.

Jha (1970) states that Maithili adjectives change their forms with the features of gender, politeness and formality. *Tatsama* numbers are more in number in Maithili. In place of

animate nouns, adjectives are used which is explained as a trace of antiquity of the language. He distinguished adjective class separately from nouns. There is no definition, no semantic or syntactic classification of adjectives. There is no mention of the word formation process to produce adjectives here. There is no mention of comparison in the case of adjectives. There is no mention of adjectives sharing any features with verbs. He did not discuss features of adjective class distinctly.

Jha (1974) presented a historical study on adjectives relating to the case, gender and number ranging from old Indo-Aryan language to modern Maithili through *abapramsha* and different phases of Maithili. He talked about adjectival forms to indicate the presence of an attribute partially not completely. He discussed the comparison of adjectives in Maithili in comparison to the old Indo-Aryan language. He also pointed out how *-taro* and *-tamo* suffixes are used in literary usage contrary to colloquial usage where *adhika/besi* ‘more’ is used before adjectives. Like Jha 1979, he also talked about *prabhedsuchak visheshana* (e.g. Lalka). He classified the number system into 9 types; cardinals, ordinals, fractionals, *gunabacakaa/abrittibacakaa*, *anupatabacakaa*, *samuhabacakaa*, *byashtibacakaa*, numbers related to games and finally adjectives derived from numbers. He classified the number system extensively which is rarely covered by other authors.

Jha (1976) classified words into 5 types: noun, pronoun, adjective, verb and indeclinable. By ‘bisheshana’ he means the adjective proper which modifies nouns. Words that modify nouns or specify nouns are called adjectives. E.g., *lal g^hoṛa* ‘red horse’. He mentioned that some adjectives belong to nouns having similar features to nouns. He categorised adjectives into three types. These are *gunabacaka*, *porimanbacaka* and *sangkyabacaka*. This categorisation is based on semanticity. *Sangkyabacaka bisheshanas* are divided into 2 types: *nishchit* and *anishchit sankhyabacaka*. *Nishchit sankhyabacaka bisheshans* are further categorized into 4 types: *samucchayabodhaka* (*dunu* ‘two’), *abrittikabodhaka* (*dowar* ‘twice’), *kramabodhaka* (*dosar* ‘second’), *angshabodhoka* (*adh* ‘half’). Maithili has gender distinctions in the case of adjectives. For example, *sunnar* ‘handsome’ and *sunnari* ‘beautiful’. He showed word formation processes where nouns are changed into adjectives. E.g., *kripa_N* ‘grace’ > *kripalu_A* ‘graceful’, *daya_N* ‘kindness’ > *dayalu_A* ‘kind’, *hansav_V* > *hansor_A*, *khelaeb_V* > *khalauriya_A/khalari_A*. Though he mentioned that adjectives share features with nouns, but there is no mention of the features that adjectives and nouns

share in Maithili. He still categorizes adjectives as a distinct word class in Maithili. He categorizes adjectives semantically but it is not exhaustive. He mentioned a single word formation process, that is, derivation. There are other word formation processes for the creative of adjectives found in other languages. The change is shown as *ghanishtha_N* ‘close’ to *ghanishthata_A* ‘closeness’, which is wrongly presented (p. 106). *ghanishtha* ‘close’ is actually an adjective, and *ghanishthata* is a noun. There is no mention of comparison in the case of adjectives. There is no discussion on the syntactic occurrence of adjectives. There is no mention of whether adjectives share any features with verbs, and the book does not discuss the features of the adjective class distinctly.

Jha (1979) stated that based on meaning, *nama* is of 3 types: *sañja*, *visheshana* and *sarvanama*. He classified adverbs under *nipata*. He compares his categorization of words with the eight-way categorization of words as proposed in the western tradition. He mentioned that *visheshana* is of two types: adjectives of nouns and adjectives of verbs and there is very less distinction between adjectives and adverbs. He designated adjective class which modifies or specifies the noun class. This is can be possible in three different ways and accordingly adjectives are classified into three types: *uparanjaka*, *vyavartaka*, *vinirdharaka*. Adjectives are not inflected for any suffix or case marker as just used to happen in Sanskrit. Besides, he had classified the adjective class into various types that are not purely based on semanticity; rather there is some overlap with other word classes like nouns and pronouns. But later he showed that some adjectives take gender inflections and pronominal adjectives take *-k* and *-r* genitive case markers. He called these adjectives *vikari visheshana*. He discussed the comparison of adjectives in Maithili in comparison to Sanskrit and English. Interestingly, he mentioned about *prabhedbacaka vishesana* which specifies a variety of referents. He has not categorized them separately and kept it under the noun class. He did not discussed how adjectives are created. There are various ways of categorization of adjectives that are not exhaustive. There is no discussion on the syntactic occurrence of adjectives.

Singh (1979) noted that the OIA gender system is nearly extinct in Maithili, with only a few remaining traces of it. One example of this can be seen in the non-definitive adjectives that agree with nouns of masculine and feminine genders. Similar to nouns, the gender distinction in adjectives is only maintained when referring to animate objects. However,

this system is gradually deteriorating, and in some dialects, the gender distinction is completely lost. In the standard colloquial form, feminine forms are used with feminine nouns and with the names of the disjunctive forms of adjectives. Unlike OIA, modern Maithili adjectives do not change their form based on the number and case of nouns. The comparative degree is indicated by the ablative postposition *-ac*. He discussed complementation with reference to adjectives. He mentioned that Maithili with its other sister languages permits adjectives to be placed before nouns only.

Yadav (1996) began the discussion of adjectives concerning grammatical features like case, number and gender. He stated that there is no case or number distinctions for adjectives though gender distinctions are visible barely. He classified adjectives based on definiteness: definite adjectives (which are marked by definite masculine and feminine suffixes) and indefinite adjectives (which consist of adjectival stems and show gender distinctions sometimes). He presented diminutive forms of adjectives. He exhibited syntactic types of adjectives with examples. He finely pointed out that adjectives in comparison are expressed by syntactic devices but not by morphological formations. He discussed genitives and determiners under the chapter on adjectives which indicate that he treated them (genitives and determiners) as adjectives. He mentioned numerals as adjectives and classified them into 5 types: cardinals, ordinals, fractionals, multiplicatives and aggregatives.

Yadav (Cardona and Jain, eds. 2003) noted that in Maithili, adjectives occur before nouns and do not distinguish based on case or number like Yadav (1996). There is some indication of gender differences, but not much. Definite adjectives modifying nouns that are animate in relation exhibit masculine and feminine variants. Adjectives that are non-definite are gender-neutral. Attributive adjectives and genitive modifiers come before head nouns in a noun phrase. He did not mention the definition, categorization based on semanticity, or morphology of adjectives, but mentioned attributive adjectives. He did not see adjectives as separate word class. Rather adjectives are discussed under *nominals*. He had not discussed any overlapping between adjective and adverb.

Jha (2022) defined adjectives as modifiers of nouns and pronouns. He classified adjectives into 6 types: *gunabacaka*, *sankhyabacaka*, *parimanabacaka*, *nischayabacaka*, *anischyabacaka*, and *sarbanamika*. He gave definitions with examples for the above. He discussed the syntactic positions of adjectives as before or after nouns. The adjectives that

occur before the nouns are called *bisheshya-bisheshana* and the adjectives that are placed after nouns are called *vidheya-bisheshana*. Also, he mentioned the comparison of adjectives. Moreover, how adjectives are produced from nouns, pronouns, adjectives, verbs, and indeclinables are illustrated with examples.

Das (n.d.) did not categorized the adjective class separately. In his view, it comes under the noun class. Further, his categorization of adjectives is similar to the one by Jha (1976, 3rd ed.). Well, he classified adverbs separately under indeclinable and adjectives semantically but it is not exhaustive. He classified adjectives under noun class, but there is no mention of the features that adjectives and nouns share in Maithili. He had not mentioned any word formation process for producing adjectives. There is no mention of comparison in the case of adjectives. There is no discussion on the syntactic occurrence of adjectives. There is no mention of adjectives share any features with verbs. It does not discuss features of adjective class distinctly.

2.3.4. Adjectives in Odia

Dash (1982) states that syntactically nouns and adjectives can be distinguished but morphologically they belong to only one category and cannot be separated. Nouns can take substantive inflections like number markings (e.g., *puo* ‘boy’, *puomane* ‘boys’) but adjectives (e.g., *ucco* ‘high’, *uccoꣳro* ‘higher’) rarely (comparatively) take substantive inflections.

Mahapatra (1995) describes the word formation processes prefixation and suffixation which help to produce new words; various sources of prefixes and other types of affixes; how a single suffix can be used to denote different meanings and create new words in Odia, e.g. *birata* (opposite meaning), *binamra*, *bibhinna* (special meaning). He does not mention word formation processes for the adjective class separately but states *-taro*, *-tamo*, *-anta* and others that create adjectives. He has not presented other word formation processes except affixation here.

Sahoo (1996) discusses adjectives based on their syntactic positions. She mentions both attributive and predicative adjectives are found in Odia. In the pre-nominal position, more than one attributive adjective can be placed. They do not need to agree with nouns in gender and number. Furthermore, she discusses the position of adjectives inside the DP in Odia.

Ray (Cardona and Jain, eds., 2003) shows that feminine adjectives (*dusṭa* ‘wicked’, *sundṛi* ‘beautiful’, *muliaṇi* ‘labourer’, *barikaṇi* ‘barber’, *bhikharuṇi* ‘beggar’) are formed by adding suffixes (/ -a/, / -i/, / -ṇi/, / -aṇi/, / -uṇi/) to masculine adjectives (*dusṭo* ‘wicked’, *sundṛo* ‘handsome’, *mulia* ‘labourer’, *bariko* ‘barber’, *bhikhari* ‘beggar’). Therefore, it is seen that the masculine forms are used as base forms. There is no separate feminine form for all adjectives like *bhṛo* ‘good’, *khṛap* ‘bad’ and others.

Neukom and Patnaik (2003) comprehensively examine adjectives in Odia, highlighting their functions and forms. Adjectives are categorized into two main types: qualitative and quantitative. Qualitative adjectives describe qualities, such as *sundara* ‘handsome’ and *bada* ‘big’, while quantitative adjectives indicate quantity, like *dui* ‘two’ and *kai* ‘many’. They illustrate how adjectives in Odia agree with the nouns they modify in terms of gender, number, and case. For instance, *sundara* ‘handsome’ is a masculine singular form, while *sundari* ‘beautiful’ is a feminine singular form. They note this gender agreement as essential for clarity and coherence in sentences. Furthermore, they discuss the syntactic positioning of adjectives, noting that they typically precede the nouns they modify, as in *sundar chabi* ‘beautiful picture’. However, in some contexts, adjectives can follow the noun for emphasis or poetic effect, demonstrating flexibility in structure. They also delve into compound adjectives, which combine two or more adjectives for nuanced meaning, such as *sundara-bada* ‘beautiful and big’. They highlight the role of adjectives in enhancing descriptive richness and aiding in effective communication. Finally, they mention how adjectives contribute to the language's expressive capabilities.

Mahapatra (2007a & b) starts the discussion on adjective class by defining adjectives as 'attributes to nouns' which can be used attributively and predicatively. In both the usages, adjectives are unmarked. In a predicative position. They appear in a copula less construction. He mentions that historically there are adjectives that end with -a but now there are adjectives with other endings phonologically. Attributive adjectives do not agree with nouns but there are also some exceptions (e.g., *budha daktar* ‘old male doctor’ and

budhi daktarṇi ‘old female doctor’). Well, he has also noticed that modern usages of both speaking and writing are discarding such gender agreements. He classified adjectives structurally or morphologically into 2 types: simple and complex. Then, he presented their definitions, examples, formations and other usages. Complex adjectives are formed by adding formatives with bases. As a result, nouns (*bṛḥ* ‘strength’ > *bṛḥua* ‘strong’) and adjectives (*pita* ‘yellow’ > *pitulia* ‘yellowish’) by the process of suffixation can make adjectives. He listed examples of verbal adjectives which are formed by adding 5 suffixes (-a, -ba, -la, -nta and -ṇa) with verb roots. He classified adjectives into two types: qualitative and quantitative but has not mentioned the foundation of this classification. Among quantitative adjectives (either numeral or numeral classifier), he found cardinal and ordinal numerals. Further, he discussed numeral classifiers. According to him, ‘numeral classifiers form a finite sub-class of Oriya adjectives’ and it leads him to the classification of nouns into count and uncount nouns (p. 219). Well, this point is out of the scope of discussion for the present research. He mentions adjectives of adjectives at the end. He treats all numeral classifiers and quantifiers as adjectives of adjectives.

Mahapatra (2010) classifies adjectives into two types: descriptive and determinative. He states about the syntactic usages (attributive and predicative) of descriptive adjectives; how they are formed by suffixation (by adding adjectival suffixes with nominal and verbal stems); and gender concord with the referent noun. He talks about adjectival equivalents. On the other hand, by determinatives he indicates adjectives that are obtained from pronominals, pronominal derivatives, fractionals, and numerals. Interestingly, he classifies numerals into two types: cardinals and ordinals but keeps fractionals separately not under numerals.

Sharma (2017) defines adjectives as words that specify or delimit nouns. He has presented examples from Odia literature extensively. He classified adjective class into 8 types. He showed the historical changes from Sanskrit through Prakrit to Odia for numbers. Further, adjectives are classified into three types: *prakrita visheshan* (adjectives of nouns), adjectives of adjectives (*visheshaniya visheshan*) and adjectives of verbs (*kriyavisheshan*). Adjectives appear before nouns. He discusses gender and number agreement between nouns and adjectives through different stages of languages from Sanskrit and Prakrit. He also discussed predicative adjectives.

Nayak (n.d.) discusses adjective phrases. He notes the ordering of adjectives while more than one adjective is present inside the NP.

The following chapter will discuss the Research Methodology.

Chapter 3

Research Methodology

3.1. Introduction

As indicated in the title, this chapter includes the research methodology of the thesis. In more detail, in this part, the author outlines the research questions in section 3.1.i, the research strategy in section 3.1.ii, the research method in section 3.4, the research approach in section 3.5, the methods of data collection in section 3.6, the selection of the sample in section 3.7, the research process in section 3.8, the type of data analysis in section 3.9, the ethical considerations in section 3.10 and the research limitations of the present research in section 3.11.

3.2. Research Questions

The research questions which are going to be investigated in this thesis are presented below.

- i. How can adjectives in the selected Eastern Indo-Aryan Languages Axomiya, Bangla, Maithili and Odia be identified?
- ii. How large is the adjective class in the mentioned languages?
- iii. How open is the adjective class in the given languages?
- iv. What is the semantic ordering of adjectives in Poly-adjectival Noun Phrases (PNPs) in the above-stated languages?
- v. What is the nature or grammatical properties of the adjective class in the languages mentioned above?
- vi. What are the cross-linguistic generalizations and variations found in these languages?

3.3. Research Strategy

Primarily existing research, regarding the semanticity and word formation processes of adjectives; the semantic ordering of adjectives in PNPs; and the nature of adjective class in

Axomiya, Bangla, Maithili and Odia, has been delineated. Following the review of the existing body of research, data has been collected from L1 speakers.

3.4. Research Method

In order to satisfy the objectives of the thesis, a mixed method is employed where both qualitative research and quantitative research within the framework of descriptive typology were held. The present research deals with the four Eastern Indo-Aryan languages Axomiya, Bangla, Maithili and Odia. It is based on the comparison of the typological study of the POS adjective, used in modern times and can be found in many academic books, theses and articles that the researcher has consulted. These books and articles mostly include information about the profile of adjectives in world languages including the focus languages covering morphology, syntactic appearance, semanticity and others, written by previous scholars. After going through all the details related to the study, the researcher then summarized all the data she had found and gathered from books and articles.

3.5. Research Approach

The research approach that was followed for the purposes of this research was a mix of deductive and inductive research. First, following deductive research, a hypothesis is formed, data was collected and analysed, the hypothesis was tested, then I reached a conclusion. Again, following the inductive research, observations are made on morpho-syntactic patterns. A general conclusion is made to modify/develop the existing theory and findings are stated.

3.6. Data Collection Method and Tools

Two structured questionnaires are prepared based on the typological framework. One is for qualitative research and another is for quantitative research.

The first questionnaire is based on qualitative research which deals with the recognition of adjective class, its largeness, openness, semanticity and word formation process in four focus languages. The materials and information that are necessary for developing this

questionnaire are gathered from both primary and secondary sources. Secondary resources on languages and linguistics, especially on morphology and syntax of Axomiya, Bangla, Maithili and Odia from the libraries of various universities and institutions were examined: Jadavpur University (School of Languages and Linguistics Departmental library, Bangla Departmental Library and Central Library), Sahitya Academy (Kolkata and New Delhi), Indian Statistical Institute Kolkata, The Sanskrit College and University, The Asiatic Society, Viswabharati Viswavidyala in West Bengal; Central Institute of Indian Languages in Karnataka; Gauhati University in Assam; Eastern Regional Language Centre, Ravenshaw University and Sambalpur University in the state of Odisha; and Jahangirnagar University (Central Library) situated in the neighbouring country Bangladesh. However, this first questionnaire is initially made in English. Then, following it, Bangla data is self-generated and checked by the supervisor. For Axomiya, Maithili and Odia, a few English inputs of the questionnaire were converted into Bangla as necessary. Some secondary data is also collected as needed. Once Bangla data was prepared to test the hypothesis, the data collection for the other three languages was performed. Axomiya, Maithili and Odia data was recorded in the voice recorder. Transcription is done using International Phonetic Alphabet symbols. The data collected for this qualitative research in the case of Axomiya, Maithili and Odia was verified by two linguists and/or language teachers per language. During qualitative data analysis, several discussions were made via phone calls, emails, personal chats, and online meetings. Discussions were made on phonology and morpho-syntactic features of Axomiya, Maithili and Odia as necessary.

Another questionnaire for the quantitative study explores the semantic ordering of adjectives in poly-adjectival noun phrases (PNPs) in the given languages and is based on the English questionnaire following Flanagan (2014). The preparation for the second questionnaire involves several steps. First, the adjectives in PNPs are categorized based on the semantic types as proposed by Dixon (2004). Then, it is simplified in lucid English. After that, the Bangla questionnaire is designed. Following this, three other questionnaires are developed for Axomiya, Maithili and Odia speakers in their mother tongues and respective scripts. Google forms are circulated with the target to get responses from 20 informants for each language to collect the quantitative data.

However, to conduct the entire research, the linguistic fieldwork methodology was adopted. In collecting data for this thesis; the researcher visited various places of the four states where the focus languages are spoken. The interview method which is considered to be the most common and widely used for Field Linguistics has been used for collecting data from informants. In fields, interviews are based on the above-mentioned two structured questionnaires.

3.7. Sample Selection

The method of purposive sampling was used to develop the sample of the research under discussion. According to this method, which belongs to the category of non-probability sampling techniques, sample members are selected on the basis of their knowledge, relationships and expertise regarding a research subject (Freedman et al., 2007). In the current study, the sample members who were selected had sufficient and relevant work experience in the field of respective language and linguistics and active involvement in this field, as well as proven research background and understanding of raw data concerning linguistic data. The informants of Axomiya, Maithili and Odia languages are both male and female speakers within the age group of 30-35 years. They speak a standard variety of each language. Axomiya speakers reside in the Sibsagar area of the state of Assam where the standard language variety of Axomiya is spoken. Maithili informants are targeted from the Darbhanga district of Bihar. Besides, Odia speakers reside in the capital city of Odisha, Bhubaneswar. They are trilingual with a knowledge of English and Hindi. They are highly educated qualifying minimum masters.

3.8. Research Process

Fieldworks were performed in Gauhati University campus for Axomiya, in Drabhangha for Maithili data and in Bhubaneswar for Odia data. Before data collection, the acceptances of participation in research were received from the informants. In 2019, Axomiya data was collected, during 2019-2020 Odia data was collected and in 2022 Maithili data was collected from speakers of standard language variety for each. In the field, the researcher came in touch with and asked them to participate in the research after explaining the nature and the scope of the study. The data collection process lasted for 2 hours breaking the period

into 2 slots for each language. Discussions were made simultaneously during and after the Questionnaire-based interview method. Then, important and relevant notes were taken in order to help the researcher to analyze the gathered data. During the conduction of the interview, respondents were free to express their views even in topics which were not included in the discussed areas. Finally, it should be noted that the conversations flowed smoothly and pleasantly.

3.9. Data Analysis

The data collection is analyzed in two ways. The first part of the data based on the first questionnaire involves content analysis. Here, the researcher attempts to use documentary and qualitative analysis. It will make learners easier to see the type of adjective class in Axomiya, Bangla, Maithili and Odia in terms of semanticity, largeness (size), openness (productivity) and its nature with respect to other POSs noun, verb and also adverb. In this case, the researcher analyzed the data based on the semanticity and the count of adjectives, their word formation processes, and the types and functions of morpho-syntactic structures. On the other hand, the second part of the data based on the second questionnaire manifests both quantitative data and qualitative data. This helps to understand the preferred semantic ordering of adjectives in PNPs chosen by the native speakers of the respective languages. Data analysis is done keeping in mind the typological framework in both cases. There are some steps that the researcher follows when the researcher tries to do the analyses. Firstly, the researcher reads several grammar and linguistic books about morpho-syntactic structures of the mentioned languages. Then, the researcher makes a comparison indicating the similarities and differences in the data and attempts to establish the typology of adjective class in the selected Indo-Aryan languages Axomiya, Bangla, Maithili and Odia. Finally, the researcher draws some conclusions after finishing the analysis.

3.10. Ethical Considerations

Participants were fully informed regarding the objectives of the study. They were reassured that their answers were treated as confidential and used only for academic purposes and only for the purposes of the particular research. Except for the above, participants were not

harmed or abused, both physically and psychologically, during the conduction of the research. In contrast, the researcher attempted to create and maintain a climate of comfort.

3.11. Research Limitations

Like any research, this thesis has its limitations. It was conducted during one of the world's most challenging times: the complete lockdown brought about by the COVID-19 pandemic. This situation led to the closure of universities, abrupt suspension of discussions with the supervisor, library shutdowns, halted fieldwork, indefinite delays in library visits and prolonged pauses in funding. These challenges significantly impacted the timely acquisition of books, journals and other secondary resources, hindered discussions of linguistic data with the supervisor, informants, linguists and language teachers, and created obstacles in data analysis within the set timeframe. Additionally, it posed considerable difficulties in maintaining the researcher's motivation throughout the study.

Chapter 4

Characteristics of Adjectives

4.1. Introduction

This chapter examines the criteria for the establishment of adjective class; the typology of the adjective class in the selected Eastern Indo-Aryan languages Axomiya, Bangla, Maithili and Odia based on the semanticity-cum-largeness and openness-cum-productivity and also the typology of the adjective class based on the nature or the grammatical properties of the adjective class in the languages as mentioned above. The latter typological examination will specify the position of the adjective class in the noun-verb continuum in the given languages.

4.2. Criteria for the Recognition of the Adjective Class

Dixon (2010, v. 2, pp. 70–72 and Dixon and Aikhenvald (eds.), 2004, pp. 10-12)) mentions a total of four characteristics for the establishment of the adjective class. There are two major semantic tasks: “(A) state a property, (B) further specify the referent of a noun”. Along with these two, there are two additional functions that adjectives perform in some languages, (C) parameter of comparative construction and (D) modifier of verbs. Now in the following section, data from selected four EIA languages will be examined to find out whether adjectives exhibit these functions aligning with Dixon (2010 & 2004).

This section endeavours to determine the criteria for establishing the adjective class in Axomiya, Bangla, Maithili and Odia. It will present the characteristics of the adjective class in them as well as establish the areal features of the adjective class in the smaller geographical area within the region of the Eastern Indo-Aryan region. Dixon (2010, v. 2, p. 70) proposes four characteristics as already mentioned. This section will analyse whether all four characteristics are applicable in case of the adjective class of Axomiya, Bangla, Maithili and Odia; and whether there is any other characteristic that can be considered to recognize an adjective class in the given languages.

4.2.1. CHARACTERISTIC A: STATE A PROPERTY

The first characteristic (A) exhibits that adjectives can state a property. It is represented by means of two ways; either as a verbless copula complement (A-i-VCC) or a copula complement (A-i-CC).

A-i: Adjectives as copula complement

The examples from (1) to (4) show that adjectives *ok^h*, *lamba*, *namhar*, *ḍeᅅga* ‘tall’ in Axomiya, Bangla, Maithili and Odia can be used as a verbless copula complement. This signifies that adjectives resemble to verbs.

A-i-VCC

Axomiya

- 1) loraᅇo ok^h
 boy-CLA tall
 ‘The boy is tall.’

Bangla

- 2) c^heleta lamba
 boy-CLA tall
 ‘The boy is tall.’

Maithili

- 3) c^hoᅇᅇa nēmhar əic^h
 boy-CLA tall be-PRS.3P.NH
 ‘The boy is tall.’

Odia

- 4) puoᅇi ḍeᅅga
 boy-CLA tall
 ‘The boy is tall.’

A-i-CC

The examples from (5) to (8) manifest that the adjectives *ob^hoᅇro* ‘rude’, *āᅇ^har* ‘dark’, *kəᅇ^hor* ‘cruel’ and *kəᅇ^hor* ‘rude’ in Axomiya, Bangla, Maithili and Odia gradually can occur in a predicative position with a copula complement.

Axomiya

- 5) apuni ob^hoᅇro hoi pəre
 you-HON.SG rude be-INF fall-IND.PRS
 ‘You become rude.’

Bangla

- 6) āᅇ^har holo maᅇᅇar-gac^her ᅇᅇla (Chakroborty, 1936, p.
 258)
 dark be-IND.PST.3P coral tree-GEN underneath

- 13) am poki goise
 mango ripen-NF go- PRF.PRS.3P
 ‘The mango has ripened.’

Bangla

- 14) amta peke gec^{he}
 mango-CLA ripen-NF go-PRF.PRS.3P
 ‘The mango has ripened.’

Maithili

- 15) am pəik gəil c^{hə}ik
 mango ripen-NF go-PRF be-PRS.3P
 ‘The mango has ripened.’

Odia

- 16) amboṭi paci jaic^{hi}
 mango-CLA ripen-NF go-PRF.PRS.3P
 ‘The mango has ripened.’

A-iii: Adjective function as Transitive predicate
A-iii-T-FV

The examples from (17) to (20) strikingly expand the idea of adjectives being intransitive predicates. Here they imply that adjectives can also be used as a transitive verb. The following examples are shown as finite verbs.

Axomiya

- 17) ṭṭeoloke karbaid ḍi kəl pəkaj
 they carbide give-POSTP banana ripen-
 CAUS.IND.PRS
 ‘They ripen the bananas with carbide.’

Bangla

- 18) tomrai c^{he}letake pakiec^{ho}
 you-PLU-EMP boy-CLA-ACC ripen-CAUS.PRF.PRS.3P
 ‘It is you people who have made the boy mature.’

Maithili

- 19) i kerasəb^{hə}ik karbəidsə
 he.3P.H.PROX banana-all-ACC carbaide-INST
 pək^{bə}iṭ c^{hə}iṭ^h
 ripen-CAUS.IMPRF be.PRS.3P.H
 ‘He has ripened all the bananas with carbide.’

Odia

- 20) semane karbaid ḍeiki kəḍḍ^oliku pəcanṭi
 they carbide give-POSTP bananas-ACC ripen-
 CAUS.IND.PRS
 ‘They ripen the bananas with carbide.’

A-iii-T-INFV

The examples from (21) to (24) demonstrate that adjectives of Axomiya, Bangla, Maithili and Odia also possess transitive infinite verbs.

Axomiya

21) loraṭowe kaporbɔr ʃukuwabɔloi dibo
boy-CLA-ERG cloth-PLU dry-INF give-IND.PRS.3P
'The boy will let the clothes dry.'

Bangla

22) c^heleta ʃamakapɔr ʃukoṭe ɖebe
boy-CLA clothes dry-INF give-IND.PRS.3P
'The boy will let the clothes dry.'

Maithili

23) chōra kəpɾa suk^habəij ɖeɪt
boy clothes dry-INF give-FUT
'The boy will let the clothes dry.'

Odia

24) pilaṭi kəpɾaguɾikə suk^heibə
boy-CLA cloth-PLU.ACC dry-FUT
'The boy will let the clothes dry.'

4.2.2. CHARACTERISTIC B: SPECIFY A HEAD NOUN

Another important characteristic of adjectives is specifying the referent of a head noun. Having different sources of words in Axomiya, Bangla, Maithili and Odia, adjectives in these languages may or may not take inflections of the head nouns. They are reflected via B-i and B-ii as follows:

B-i: Non-Agreement

The examples from (25) to (28) manifest that the adjective 'red' in Axomiya, Bangla, Maithili and Odia specifies its referent 'book' which is the nominal head below and does not take nominal inflections.

Axomiya

25) rəŋa kitapək^hən
red book-CLA
'the red book'

Bangla

26) lal boita

red book-CLA
'the red book'

Maithili

27) lalka poṅḥi
red book
'the red book'

Odia

28) lali bohiṭi
red book-CLA
'the red book'

B-ii: Agreement

As nouns are marked with gender and number inflections, adjectives are also found to be marked in the same way. The examples from (29) to (36) show gender agreement and (37) to (40) except (39) exhibit number marking.

Gender-marked

It is examined that adjectives belonging to the source of Sanskrit take gender inflections (female) *-i* of their nominal heads as found in (29), (31), (33) and (35) in Axomiya, Bangla, Maithili and Odia respectively.

Axomiya

29) hundṛi ob^hineṭri
beautiful actress
'beautiful actress'

30) hundṛ lora
handsome boy
'handsome boy'

Bangla

31) fundṛi najika
beautiful actress
'beautiful actress'

32) fundṛ balok
handsome boy
'handsome boy'

Maithili

33) sundṛi əb^hineṭri
beautiful actress
'beautiful actress'

34) sundṛ c^hōṛa

handsome boy
'handsome boy'

Odia

35) sunḍri ob^hineṭri
beautiful actress
'beautiful actress'

36) sunḍorə baḷokə
handsome boy
'handsome boy'

Number-marked

The examples in (37), (38) and (40) exhibit that adjectives in Axomiya, Bangla and Odia take number inflections. On the other hand, Maithili uses reduplication instead of taking nominal inflections on the given adjective.

Axomiya

37) mok rəṅabor lage
my red-PLU need.IND.PRS
'I want the red ones.'

Bangla

38) amar lalgulo cai
my red-PLU want.IND.PRS.1P
'I want the red ones.'

Maithili

39) həmrə nik nik cəhi
my good good want.IND.PRS
'I want the red one.'

Odia

40) mū naliguṭikə cahūc^hi
I red-PLU want.IND.PRS.1P
'I want the red ones.'

B-iii: Specificity

Like nouns, adjectives may take classifiers in the EIA languages. The examples from (41) to (44) except (43) manifest that adjectives in Axomiya, Bangla and Odia can carry classifiers like nouns to specify the referent.

Axomiya

41) mok rəŋazoni lage
 my red-CLA need.IND.PRS
 ‘I want the red one.’

Bangla

42) amar lalta cai
 my red-CLA want.IND.PRS.1P
 ‘I want the red one.’

Maithili

43) həmrə nik cəhi
 my good want.IND.PRS
 ‘I want the good one.’

Odia

44) mū naliṭi cahūc̣hi
 I red-CLA want.IND.PRS.1P
 ‘I want the red one.’

B-iv: Case Inflected

The examples from (45) to (48) demonstrate that adjectives *b^hal*, *b^halo*, *nik* and *b^holo* ‘good’ in the Axomiya, Bangla, Maithili and Odia are also attached to case inflections respectively.

Axomiya

45) b^halok b^hal buli kua
 good-ACC good COMPL tell.2P.IMP
 ‘Call a spade a spade.’

Bangla

46) b^haloke b^halo b^olo
 good-ACC good tell.2P.IMP
 ‘Call a spade a spade.’

Maithili

47) nikke nik baṃo
 good-ACC good tell.2P.IMP
 ‘Call a spade a spade.’

Odia

48) b^holo ku b^holo boli kuḥo
 good-ACC good COMP tell.2P.IMP
 ‘Call a spade a spade.’

4.2.3. CHARACTERISTIC C: ADJECTIVES IN COMPARISON CONSTRUCTIONS

C-i: equative construction

Axomiya, Bangla, Maithili and Odia adjectives can appear in an equative construction to indicate that the referents possess similar kind of qualities as found in (49) - (52). For examples,

Axomiya

- 49) pəlləbi cinməjer hōman ok^h
Pallabi Chinmay- GEN equal tall
'Pallabi is as tall as Chinmay.'

Bangla

- 50) pəlləbi cinməjer fōman lōmba
Pallabi Chinmay-GEN equal tall
'Pallabi is as tall as Chinmay.'

Maithili

- 51) pəlləbi cinməy jətek nəim əic^h
Pallabi Chinmay as-POSTP tall be-PRS.3P.NH
'Pallabi is as tall as Chinmay.'

Odia

- 52) pəlləbi cinməjə sōmo dɛŋga
Pallabi Chinmaya equal tall
'Pallabi is as tall as Chinmay.'

C-ii: comparative construction

The examples from (53) to (56) exhibit that the adjectives in Axomiya, Bangla, Maithili and Odia are used in comparative constructions.

Axomiya

- 53) pəlləbi cinməjətəkoi ok^h
Pallabi Chinmay-than.POSTP tall
'Pallabi is taller than Chinmay.'

Bangla

- 54) pəlləbi cinməjer t̪heke lōmba
Pallabi Chinmay-GEN than-POSTP tall
'Pallabi is taller than Chinmay.'

Maithili

- 55) pəlləbi cinməysə nəim əic^h
Pallabi Chinmay-from-INFL tall be-PRS.3P.NH
'Pallabi is taller than Chinmay.'

Odia

56) pəlləbi cinməj tʰaru oḍʰikə ɖeŋga
 Pallabi Chinmay than.POSTP more tall
 ‘Pallabi is taller than Chinmay.’

C-iii: superlative construction

Besides, adjectives of Axomiya, Bangla, Maithili and Odia can appear in superlative constructions as shown in (57), (58), (59) and (60) respectively.

Axomiya

57) pəlləbi həkəlotəkoi okʰ
 Pallabi all.POSS.than.POSTP tall
 ‘Pallabi is the tallest among all.’

Bangla

58) pəlləbi ʃəbər tʰeke beʃi ləmba
 Pallabi all-GEN from-POSTP more tall
 ‘Pallabi is the tallest among all.’

Maithili

59) pəlləbi ehi səbʰsə nəmgər əicʰ
 Pallabi these all-from-INFL tall.COMP be-PRS
 ‘Pallabi is the tallest among all of these.’

Odia

60) səməstəŋkə məddʰijəru pəlləbi səbuʰaru oḍʰikə ɖeŋga
 all-POSS among Pallabi all than.POSTP more tall
 ‘Pallabi is the tallest among all.’

4.2.4. CHARACTERISTIC D: ADJECTIVES MODIFY VERBS

Reduplicated adjectives can function as adverbs in these languages, consider examples form (61) to (64).

D-i: reduplication

Axomiya

61) pəlləbi lahe lahe kətʰa kəj
 Pallabi slowly- slowly talk speak-IND.PRS.3P
 ‘Pallabi speaks slowly.’

Bangla

62) pəlləbi ḍʰire ḍʰire kətʰa bəle
 Pallabi slowly- slowly talk speak-IND.PRS.3P
 ‘Pallabi speaks slowly.’

Maithili

63) pəlləbi ḍʰire bəjəit əicʰ
 Pallabi slowly speak-IMPRF be-PRS.3P.NH
 ‘Pallabi speaks slowly.’

Odia

- 64) pəlləbi d^hire d^hire kəṭ^hɑ kuhe
Pallabi slowly- slowly talk speak-IND.PRS.3P
'Pallabi speaks slowly.'

D-ii: manner modification

Interestingly, Axomiya, Maithili and Odia Adjectives exhibit manner with inflection whereas Bangla uses a separate auxiliary verb.

Axomiya

- 65) b^hal-kəi k^hɛla
good-INFL play-IND.PRS.2P
'You play well.'

Bangla

- 66) b^halo kore k^hælo
good do-NF play-IND.PRS.2P
'Play well.'

Maithili

- 67) niksā k^heləh
good-INFL play-FUT.M
'Play well.'

Odia

- 68) b^həlo-re k^helə
good-INFL play-IND.PRS.2P
'Play well.'

4.2.5. CHARACTERISTIC E: ADJECTIVES FUNCTION AS INTENSIFIERS

Consider examples from (69) to (72) in which the adjectives *bər* 'big', *bəro* 'big', *bəddə* 'big', *bəhutə* 'many' increase the degree of the modifying adjectives like English.

Axomiya

- 69) pəlləbi **bər** b^hal sowali
Pallabi big good girl.
'Pallabi is a very good girl.'

Bangla

- 70) pəlləbi **bəro** b^halo meje
Pallabi big good girl
'Pallabi is a very good girl.'

Maithili

- 71) pəlləbi **bəddə** nik c^həuṛi əic^h
Pallabi big good girl be-PRS.3P.NH
'Pallabi is a very good girl.'

Odia

72) pəlləbi goʈije bəhuta bʰəlo ʃʰio
 Pallabi one-CLA very good girl
 ‘Pallabi is a very good girl.’

Thus, it is investigated that adjective class in the selected four EIA languages Axomiya, Bangla, Maithili and Odia can be recognized by all four characteristics as proposed by Dixon (2004 and 2010): (A) state a property, (B) specify a head noun, (C) parameter of comparison and (D) function as a modifier of verbs. These languages also exhibit characteristic E, i.e., intensification apart from the four characteristics.

4.3. Nature or Grammatical Properties of the Adjective Class

This section focuses on the nature of the adjective class, i.e., the grammatical properties of adjectives in Axomiya, Bangla, Maithili and Odia. Cross-linguistically four types of adjective classes are found in world languages. They are (A) *verb-like adjective class*, (B) *noun-like adjective class*, (C) *verb-like and noun-like adjective class*, and (D) *distinct adjective class* based on grammatical properties either similar to nouns, verbs, or both, or neither (Dixon 2010, v. 1, pp. 112-113 and Dixon 2010, v. 2, pp. 62-64). This section strives to place the position of adjective class in the noun-adjective-verb continuum in the case of the languages as mentioned earlier. Thus, it exhibits the typological classification of the adjective class based on grammatical properties in these languages. Also, it tries to establish areal features based on grammatical features of the adjective class in a smaller geographical region in the Eastern Indo-Aryan region. Following the criteria as mentioned in the theoretical background (Chapter 2), the grammatical properties of the adjectives of Axomiya, Bangla, Maithili and Odia will be discussed here.

Interestingly, the previous section 0 on the criteria for the recognition of adjective class in the selected EIA languages complementarily covers the grammatical properties of adjectives in Axomiya, Bangla, Maithili and Odia. It is seen that adjectives of these languages possess similar grammatical properties to those of both verbs and nouns. Adjectives in Axomiya, Bangla, Maithili and Odia can occur as copula complement (A-i), intransitive predicate (A-ii) and transitive predicate (A-iii). The copula complement is represented in two ways: verbless copula complement (A-i-VCC) as exhibited in (1) – (4) and copula complement (A-i-CC) as manifested in (5) – (8). The intransitive predicate is

expressed in two ways: finite construction (A-ii-INT-FV) in (9) – (12) and non-finite verb construction (A-ii-INT-NFV) in (13) – (16). The transitive predicate is manifested in two ways: finite verb construction (A-iii-T-FV) in (17) – (20) and infinitive verb (A-iii-T-INFV) in (21) – (24). Besides, adjectives in these languages specify head nouns as found in (25) – (36). It is fascinating to note here that adjectives in these languages carry nominal inflections like feminine gender marker *-i* as observed in the examples (29), (31), (33) and (35) in Axomiya, Bangla, Maithili and Odia singly. Number markers are found to be attached to adjectives in Axomiya, Bangla and Odia as presented in (37), (38) and (40) gradually. It is also found that classifiers can be attached to adjectives resulting in them becoming nouns as found in (41) – (44) except (43). Additionally, adjectives are also inflected by case markers like nouns as seen in (45) – (48). Therefore, it can be stated that Axomiya, Bangla, Maithili and Odia possess grammatical features of both nouns and verbs. That is why, it is claimed here that these languages are both *noun-like and verb-like adjective class languages*.

4.4. Largeness of Adjective Class

This section deals with the largeness of the adjective class in Axomiya, Bangla, Maithili and Odia. The largeness of the adjective class depends on the parameter *size* as proposed by Dixon (2010, v. 2, p. 62). The *size* denotes the range of availability of the thirteen semantic types which are in turn divided into three SETs and the volume of the adjective class or the number of adjectives in a particular language. This section examines whether the selected languages possess three SETs i.e. SET A, SET B and SET C of semantic types and which semantic types are available in each SET. Thus, this section on the one hand will attempt to establish the largeness of the adjective class in selected languages and on the other hand will try to establish areal features based on the largeness of the adjective class in a smaller geographical region in Eastern Indo-Aryan region. Now, let's examine the largeness of adjective class in Axomiya, Bangla, Maithili and Odia.

SET A:

According to Dixon (Dixon and Aikhenvald (eds.), 2004, pp. 3-4) and Dixon (2010, v. 2, p. 73), SET A includes four core semantic types which are available in three types of adjective class languages: *large adjective class languages*, *medium adjective class*

languages and small adjective class languages. They are DIMENSION, AGE, VALUE and COLOUR. Let us examine the semantic types of adjectives in four selected Eastern Indo-Aryan languages Axomiya, Bangla, Maithili and Odia.

DIMENSION: DIMENSION is a semantic type that indicates length, breadth and height of an animate or inanimate object.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
daŋɔr	bɔɾo	pəiḡ ^h	bɔɾɔ	‘big’
xɔru	c ^h oto	c ^h ot	c ^h oto	‘small’
diḡ ^h al	lɔmba	nəmhər	lɔmba	‘long’
bɔhol	cɔɾa	cəuɾḡər	osarija, couɾa	‘wide’
ḡɔb ^h ir	ḡɔb ^h ir	ḡəhra	ḡɔb ^h iro	‘deep’

Table 1

AGE: By AGE, a semantic type is indicated which helps to understand the time a man or other animate entity spends in his lifetime before expiry or an inanimate object exists until it has its utility.

<i>Axomiya</i>	<i>Bangla</i>	<i>Odia</i>	<i>Maithili</i>	<i>Gloss</i>
natun	noṭun	nua	nəb ^h ka	‘new’
deka	jojan	ṭɔruŋɔ	juvan	‘young’
burha	bridd ^h o	buɾ ^h a	buɾ ^h	‘old (man)’
purni	purono	puruna	puran	‘old’ (non-animate)

Table 2

VALUE: The semantic type VALUE implies goodness, importance, worth, beauty and others that are subjected to social standards.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
b ^h al	b ^h alo	nik	b ^h ɔlɔ	‘good’
bɛa	k ^h arap	k ^h ɔran	k ^h ɔrab	‘bad’
d ^h unia	ṣund ^o ori	sunner	sund ^o ri	‘beautiful’
oḍb ^h uṭ	oḍb ^h uṭ	wicit ^o rə	oḍb ^h uṭɔ	‘starnge’
nīk ^h uṭ	nīk ^h uṭ	srest ^h ə	nīk ^h uṭ	‘perfect’

Table 3

COLOUR: The concept COLOUR is established by the perception of community members. It is a visual understanding of the entities around them.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
rɔŋa	lal	lal	nali	‘red’
nila	nil	nil	ni ɔ	‘blue’
halod ^h iija	holud	pijər	hə ɔd̪iija, pitto	‘yellow’
kɔla	kalo	kari	kə a	‘black’
boga	ʃad̪a	uɽla	d̪ ^h ə a	‘white’

Table 4

Hence, it is clear that Axomiya, Bangla, Maithili and Odia possess all four core semantic types (DIMENSION, AGE, VALUE and COLOUR) of adjectives.

SET B:

SET B consists of three peripheral semantic types. It has three semantic types PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED for the adjective class. They are found in *large adjective class languages* and *medium adjective class languages* (Dixon, 2010, v. 2, p. 73). The following table presents data from three semantic types belonging to peripheral semantic types of adjective class in selected EIA languages.

PHYSICAL PROPERTY: The semantic type PHYSICAL PROPERTY indicates words related to temperature, corporeal properties, and the like.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
pəriskar	poriskar	sap ^h	səp ^h a	‘clean’
gərɔm	gərɔm	gərɔm	gərɔmɔ	‘hot’
t ^h anda	t ^h anda	t ^h ənd	t ^h əŋd̪a	‘cold’
sukan	ʃukno	suk ^h əl	ʃuk ^h ila	‘dry’
komol	nɔrom	lɔrɔm	komə ɔ	‘soft’

Table 5

HUMAN PROPENSITY: HUMAN PROPENSITY is a semantic type that manifests mental and emotional states of human beings.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
xuk ^h i	ʃuk ^h i	k ^h us	sub ^h o/ suk ^h i	‘happy’
dəjalu	dəjalu	d̪əjalu	d̪əja u	‘kind’
sətur / tɛŋɔr	coɽur	calak	coɽurɔ	‘clever’
nist ^h ur	niʃt ^h ur	krur	nist ^h urɔ	‘cruel’
udar	uɽar	uɽar	bəɽannijɔ	‘generous’

Table 6

SPEED: The semantic type SPEED signifies the rate of motion of an entity.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
xunkale	ḍruṭo	res	ḍruṭo	‘fast’
ḍ ^h ir / mont ^h or	ḍ ^h ir / mont ^h or	rəse-səre	ḍ ^h irə / mōnt ^h orə	‘slow’

Table 7

So, it is investigated that Axomiya, Bangla, Maithili and Odia own members from all three peripheral semantic types (PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED).

SET C:

The following data will show whether six semantic types of SET C are available in the given languages. These six semantic types are DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION and NUMBER.

DIFFICULTY: DIFFICULTY, a semantic type usually available in the adjective class, signifies the effort a human needs.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
xəhoz	ʃohoj	əkəs	səhəj	‘easy’
kot ^h in	kot ^h in	mofkil	kət ^h in	‘difficult’
xorol	ʃorol	səḍ ^h ərən	sərəl	‘simple’

Table 8

SIMILARITY: By SIMILARITY, it means the similarity or dissimilarity of two or more objects or human beings with others in comparison.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
xadriʃo / ɛkɛ	ʃəḍriʃo/ækɛ	audne	səḍḍrusə	‘similar’
ob ^h inno	əb ^h inno	əb ^h innə	əb ^h innə	‘identical’
bələg	alada	əlgə	ələda	‘different’
onjo	ənnə	aro	ənnijə	‘other’

Table 9

QUALIFICATION: QUALIFICATION signifies the quality of the referent in a given situation.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
nirdisto	nirḍisto	nisciṭ	nisciṭ	‘definite’
xotjio / xosa / xud ^h o	ʃotṭo	səc	səṭ	‘true’
misa / oxud ^h o / oxotjo	mitt ^h a	juṭṭ ^h a	mitt ^h ijja	‘false’
xomb ^h abona	ʃomb ^h abbo	səmb ^h əb	səmb ^h abbijə	‘possible’
svavabik	ʃab ^h abik	səmanjə	swab ^h aik	‘normal’

Table 10

QUANTIFICATION: By QUANTIFICATION, we mean the unspecified quantity of the entities present.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
xokolu	ʃɔb/ʃɔkol	səb	səmostə	‘all’
xomogro / gətəi	ʃɔmogro /gota	anek	səməgrə	‘whole’
Bahut	ɔnek	ek	ɔnek	‘many’
olop	ɔlpo	ad ^h	ɔlpɔ	‘few’
kəol	kebol	matre	kebo ɔ	‘only’

Table 11

POSITION: The semantic type POSITION indicates the spatial orientation as perceived by members of a language community.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
usso / ɔk ^h ɔ	ũcu	ũc	uccə	‘high’
nimnə	nicu	nic	nimnə	‘low’
həp ^h al / həhat	dan	dəhina	dəhanɳ	‘right’
uttərio	uttire	uttari	uttərijə	‘northern’
duroborti	dūrobort̪i	dūrəs	dūrəbort̪i	‘distant’

Table 12

NUMBER: In opposition to QUANTIFICATION which implies an abstract concept, NUMBER has a physical realization.

CARDINAL: CARDINAL NUMBERS represent the counting system available to a community.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
ɛk	æk	æk	eko	‘one’
dui	d̪ui	d̪u	d̪ui	‘two’
tini	t̪in	t̪in	t̪ini	‘three’
d̪ɔʃ	d̪ɔʃ	d̪əs	d̪ɔʃɔ	‘ten’
bɪʃ	kuʀi	bis	koʀie	‘twenty’

Table 13

ORDINAL: ORDINAL NUMBERS mean the ordering of animate or inanimate entities.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
prɔt ^h om	prɔt ^h om	pəhil	prɔt ^h om	‘first’
d̪it̪in	d̪it̪ijo	d̪osər	d̪wit̪ijo	‘second’

tṛit̪io	tṛit̪ijo	tesər	tṛut̪ijɔ	‘third’
ḍəfom	ḍəfom	ḍəsma	ḍəfomɔ	‘tenth’

Table 14

FRACTIONAL: It is a part of the number system of a language that is represented in fractions.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
ɔrd̪ʰo / aḍ̪ʰa	ɔrd̪ʰo / aḍ̪ʰa	aḍ̪ʰa	ɔrd̪ʰo / ɔḍ̪ʰa	‘half’
ḍer	ḍer	ḍerʰ	ḍerʰ	‘one and half’
ɑ̪oi	ɑ̪ai	əḍ̪ʰai	ɔ̪ʰai	‘two and half’

Table 15

MULTIPLICATIVE: Multiplicatives are formed by the process of multiplication of the cardinal numbers.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
dubar/dugun	ḍigun	ḍuguna/ḍunna	ḍuit̪ʰɔɔ	‘twice’
tinibar/tinigun	ṭingun	ṭinguna	ṭiniṭ̪ʰɔɔ	‘thrice’
caribar	cargun	cariguna/cəuguna	carit̪ʰɔɔ	‘four times’

Table 16

AGGREGATIVE: By *aggregative*, a mass numeral is indicated.

<i>Axomiya</i>	<i>Bangla</i>	<i>Maithili</i>	<i>Odia</i>	<i>Gloss</i>
dujo/ubʰɔj	ubʰɔj	ḍunu	ubʰɔjɔ	both

Table 17

Finally, the last one, SET C consists of six semantic types DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION and NUMBER (CARDINAL and ORDINAL). Each of them owns a good number of members in Axomiya, Bangla, Maithili and Odia. Interestingly, it is found that the semantic type NUMBER encompasses FRACTIONALS (Table 15), MULTIPLICATIVES (Table 16) and AGGREGATIVES (Table 17) along with CARDINAL and ORDINAL NUMBERS in Axomiya, Bangla, Maithili and Odia. The given data from Table 8 to Table 17 support the claim. Hence, it can be claimed that the selected EIA languages Axomiya, Bangla, Maithili and Odia are typologically *large adjective class languages*.

4.5. Openness of Adjective Class

This section deals with the openness of the adjective class in Axomiya, Bangla, Maithili and Odia. The openness of the adjective class depends on the parameter *productivity* as proposed by Dixon (2010, v. 2, p. 62). *Productivity* indicates adding new words to the

lexicon through various word-formation processes. This section will explore the word-formation processes which involve the formation of adjectives in the given languages. Thus, it tries to establish areal features based on the openness of the adjective class in a smaller geographical region in the Eastern Indo-Aryan spectrum. This section attempts to exhibit whether Axomiya, Bangla, Maithili and Odia adjectives belong to open class. The more morphological processes available in a language, the more productive adjective class a language owns. The word formation processes found in the given languages are manifested below.

A. Inflection: Inflectional morphemes are morphemes that add grammatical information to a word. When a word is inflected, it still retains its core meaning, and its category stays the same. In case of adjectives of Axomiya, Bangla, Maithili and Odia, inflected forms are made with gender inflections and comparative and superlative affixes.

a. with Gender inflections

Axomiya

- 73) bōga
white-SUF_M
'white (M)'
74) bogi
white-SUF_F
'white (F)'

Bangla

- 75) paḡla
mad-SUF_M
'mad (M)'
76) paḡli
mad-SUF_F
'mad (F)'

Maithili

- 77) bəṅgali (Jha, 2022, p. 820)
Bengal-i_{SUF(M)}
78) bəṅgalini
Bengal-ini_{SUF(F)}

Odia

- 79) buɾ^ha
aged-SUF_M
'old (man)'
80) buɾ^hi
aged-SUF_F
'old (woman)'.

b. with comparative and superlative affixes

Axomiya

- 81) ussoɬɔ̃ro
high-SUF_{COMP}
'higher'
82) ussoɬɔ̃mo
high-SUF_{SUP}
'highest'

Bangla

- 83) uccoɬɔ̃ro
high-SUF_{COMP}
'higher'
84) uccoɬɔ̃mo
high-SUF_{SUP}
'highest'

Maithili

- 85) nəmgər
tall-COMP
'tall'

Odia

- 86) uccoɬɔ̃ro
high-SUF_{COMP}
'higher'
87) uccoɬɔ̃mo
high-SUF_{SUP}
'highest'

B. Assimilation: By means of changing the height of a vowel within a word, a new word can be made retaining the earlier meaning. This word formation process is called *Vowel Height Assimilation*.

Axomiya

- 88) d̥ehi > d̥ihi ‘native’
89) bilaṭi > biliṭi ‘English’

Bangla

- 90) d̥eṭi > d̥iṭi ‘native’
91) bileṭi > biliṭi ‘English’

Maithili

- 92) nil > lil ‘blue’
93) mukṭə > mukṭə ‘free’

Odia

- 94) d̥eṭi > d̥iṭi ‘native’
95) bileṭi > biliṭi ‘English’

C. Derivation: Derivation is a word formation process in which involves a change in the part of speech or the creation of a new lexeme.

a. Noun-based

Axomiya

- 96) hunor
gold + -of_{ADJ.SUF}
‘golden’
97) rupor
silver -of_{POSS}
‘of silver’

Bangla

- 98) me^ho
fish-O_{ADJ.SUF}
‘one who loves fish’
99) me^ho
mat^h-O_{ADJ.SUF}
‘made of mud’

Maithili

- 100) sonak ãut^hi
gold-POSS ring
‘golden ring’

Odia

- 101) maṭia (Neukom & Pattnaik 2003)
ground-a_{ADJ.SUF}
'brown'
- 102) paḥaṭia „
'hill'-ia_{ADJ.SUF}
'mountainous'

b. Verb-based

Axomiya

- 103) colṭi
col-ṭi_{ADJ.SUF}
'moving'

Bangla

- 104) poṭṭi
fall-ṭi_{ADJ.SUF}
'falling'

Maithili

- 105) cələiṭ kar
moving car
'moving car'

Odia

- 106) ḍek^ha (Neukom & Pattnaik 2003)
see-a
'seen'

c. Adjective-based

Axomiya

- 107) hoṅkiriṇomōna
narrow-minded
'narrow-minded'

Bangla

- 108) ḥoṅkiriṇomōna
narrow-minded
'narrow-minded'

Maithili

- 109) ləlka (Asad, 2015, p. 46)
red-ka_{ADJ} _{SUF}
'reddish'

Odia

- 110) ləlɕia (Neukom & Patnaik, 2003, p. 69)
red-cia_{ADJ} _{SUF}
'reddish'

D. Compounding: It is a word formation process where two or more free morphemes are combined.

- a. **Subordinate:** When there is a complement relation between two constituents, a subordinate compound is made.

Axomiya

- 111) mongɔra
mind.built
'imaginative'

Bangal

- 112) mongɔɾa
mind.built
'imaginative'

Maithili

- 113) məngəɾhəntɕ
mind.built
'imaginative'

Odia

- 114) mənogɔra
mind.built
'imaginative'

- b. **Attributive:** Attributive adjectives are formed by a head and a non-head where non-heads belong to noun/adjective/ verb.

Axomiya

- 115) nilkənt^ho

Bangla
116) blue throat
'Lord Shiva'
nilkənt^h
blue throat
'Lord Shiva'

Maithili
117) nilkənt^h
blue throat
'Lord Shiva'

Odia
118) ni|əkənt^h
blue throat
'Lord Shiva'

- c. **Coordinate:** Usually coordinate compounds are made with 'and' between two constituents in English. But examples from (119) to (122) show that in the selected EIA languages adjectives are compounded side by side without the insertion of a conjunct.

Axomiya
119) əmloməḡ^hr
sour.sweet
'sour and sweet'

Bangla
120) əmloməḡ^hur
sour.sweet
'sour and sweet'

Maithili
121) k^hətmit^h
sour.sweet
'sour and sweet'

Odia
122) əm|oməḡ^hur
sour.sweet
'sour and sweet'

E. Reduplication: When a root or its part or attached affixes get repeated completely or partially, it is called reduplication. Reduplicative compounds are compounds in which the first constituent is a (partial) copy of the second. Examples can be presented here in English: *klop-klop*, *knock-knock* and *tik-tak tick-tock*. They may express a form of repetition of sounds or actions. Reduplicated adjectives in Axomiya, Bangla, Maithili and Odia are presented below.

a. Noun-based

Axomiya

- 123) ʃʰuʃi-ʃʰuʃi hobʃi
 basket-RED vegetables
 ‘vegetables full of baskets’
- 124) hahi-hahi muk^h
 smile-RED face
 ‘smiling face’

Bangla

- 125) ʃʰuʃi-ʃʰuʃi ʃobʃi
 basket-RED vegetables
 ‘vegetables full of baskets’
- 126) haʃi-haʃi muk^h
 smile-RED face
 ‘smiling face’

Maithili

- 127) tokri tokri ʃʌrkri
 basket basket vegetables
 ‘vegetables full of baskets’

Odia

- 128) raᅇᅇgo-raᅇᅇg-ia (Neukom & Patnaik 2003)
 colour-RED-AF_{ADJ}
 ‘coloured’

b. Verb-based

Axomiya

- 129) mᅇromᅇro ᅇbosᅇᅇa
 die-AF-die-AF_{RED} condition
 ‘dying condition’

Bangla

- 130) mərəmərə ɔbostʰa
die-AF-die-AF_{RED} condition
'dying condition'

Odia

- 131) mərəmərə ɔbostʰa
die-AF-die-AF_{RED} condition
'dying condition'

c. Adjective-based

Axomiya

- 132) daɲɔr daɲɔr cɔkʰu
big-RED eye
'big eyes'
- 133) tʰanda tʰanda bʰab
cold-RED feeling
'cold-like feeling'

Bangla

- 134) bəɽɔ bəɽɔ gʰɔr
big big house
'big houses'
- 135) ʃiɽ ʃiɽ bʰab
cold-RED feeling
'cold-like feeling'

Maithili

- 136) paigʰ paigʰ aikʰ
big big eye
'big eyes'
- 137) pijər pijər (Asad, 2015, p. 46)
yellow yellow
'very yellow'

Odia

- 138) bəɽɔ bəɽɔ akʰi
big-RED eye
'big eyes'
- 139) siɽɔ siɽɔ bʰabo
cold-RED feeling

‘cold-like feeling’

F. Affixation: While affixes (prefix, suffix and/or both) are attached to a word to create a new word, the process is called affixation.

a. Prefixation

Axomiya

- 140) ni-k^huṭ
NEG_{AF}-flaw
‘flawless’

Bangla

with Bangla prefix:

- 141) nik^huṭ
NEG_{AF}-flaw
‘flawless’

with Foreign prefix:

- 142) bəḍṛagi
bad-temper-i_{ADJ.SUF}
‘ill-tempered’

Maithili

- 143) ənsəh̃ṭə
NEG_{AF}-decent
‘indecent’

Odia

- 144) əjogijə
NEG_{AF}-eligible
‘ineligible’

b. Suffixation

Axomiya

- 145) nami
name-i_{SUF}
‘famous’

Bangla

- 146) nami (Bhattacharya, 2012, p. 284 - 285)
 name-i_{SUF}
 ‘famous’

Maithili

- 147) nami
 name-i_{ADJ.SUF}
 ‘famous’

Odia

- 148) kōca (Neukom & Patnaik 2003)
 wash-α_{SUF}
 ‘washed’
- 149) ḡek^hα ”
 see-α_{SUF}
 ‘seen’

a. Prefixation-suffixation

Axomiya

- 150) benami
 NEG_{PRE}-name-i_{SUF}
 ‘anonymous’

Bangla

- 151) benami
 NEG_{PRE}-name-i_{SUF}
 ‘anonymous’

Maithili

- 152) bind^hoal
 bin-wash-al
 ‘unwashed’

Odia

- 153) ṅkōca (Neukom & Patnaik 2003)
 ṅNEG.AF-wash-α_{ADJ.SUF}
 ‘unwashed’
- 154) ṅḡek^hα ”
 ṅNEG.AF-see-α_{ADJ.SUF}
 ‘unseen’

G. Causation: Causation is one of the morphological processes to create new words. A causative is a linguistic expression referring to a situation consisting of a certain event and a force responsible for the realization of it, as seen in the following examples, where the addressee is understood as the cause of the laughing of the addresser. For example, in English, *You make me laugh*.

Axomiya

155) luko.ḡek^huia kam
 people.show-INF work
 ‘works which are done to show others’

Bangla

156) lokḡæk^hano kaḡ
 people.show-INF work
 ‘works which are done to show others’

Maithili

157) lokodek^hua kaḡ
 people.show-INF work
 ‘works which are done to show others’

Odia

158) lokodek^hanija kamo
 people.show-INF work
 ‘works which are done to show others’

It can be noted that there are word formation processes such as inflection, assimilation, derivation, compounding, reduplication, affixation and causation which are applied to produce adjectives in Axomiya, Bangla, Maithili and Odia. It implies that these selected four languages possess open adjective class.

4.6. Summary

4.6.1. Characteristics of Adjectives in the EIA Languages

From the above data analysed in section 0, there are five characteristics to be recognized for the adjective class in the selected four EIA languages. A: state a property, B: specify a head noun, C: parameter of comparison, D: modify a verb, E: function as intensifiers.

Features	Techniques			
(A) State a property	A-i	Complement clause	verbless copula complement	
			copula complement	
	A-ii	Intransitive predicate	Intransitive finite verb	Grammatical agreement: Take inflections of verbs in case of Intransitive and Transitive predicates both. (aspect, tense, person)
			Intransitive non-finite verb	
	A-iii	Transitive predicate	Transitive finite verb with causation	
			Transitive non-finite verb	
(B) Specify a head noun	Modification		Modifies a head noun	
	Without Grammatical agreement		Do not take inflections of nouns	
	With Grammatical agreement		Take inflections of nouns (gender, number, case)	
	Specificity		Classifiers are attached	
(C) Comparison Constructions	C-i		Equative construction	
	C-ii		Comparative construction	
	C-iii		Superlative construction	
(D) Modify verbs	D-i		Reduplication	
	D-ii		Manner modification	
(E) Function as Intensifiers				

Table 18: Criteria for the Recognition of the Adjective Class

in the Selected EIA Languages Axomiya, Bangla, Maithili and Odia

4.6.2. Cross-linguistic Variations

While analysing data from the point of typology based on largeness, openness and nature of adjective class in the given languages, it is examined that all these languages are *large adjective class languages*, *open adjective class languages* and finally *both noun-like and verb-like adjective class languages*. Therefore, it can be stated that from the point of semanticity, productivity and grammatical properties adjectives carry or possess in the selected EIA languages, the adjective class functions similarly in these four languages.

Adjectives in Axomiya, Bangla, and Odia take number inflections, as seen by the instances in (37), (38) and (40). However, Maithili indicates plurality by reduplication rather than by using nominal inflections on the provided adjective as found in (39).

The examples in (41), (42) and (44), demonstrate that adjectives in Axomiya, Bangla, and Odia take classifier. However, as can be seen in (43), the provided Maithili adjective is employed without any classifier.

In case of equative construction of adjectives, Axomiya and Bangla behave similarly. The possessive marker is attached to the *comparee* (with which the comparison is made) in Axomiya and Bangla as found in (49) and (52) respectively. In case of Maithili and Odia, examples (51) and (52) does not take any possessive marker.

In case of comparative construction, there are some distinctions. the ablative marker is attached to the the comparee except any postposition in Axomiya (53). In Bangla (54), a possessive marker is added to the comparee with a postposition. In Maithili (51), there is no postposition but an inflection is attached to the comparee. On the other hand, postposition is used without any possessive marker/ablative case marker/inflection to the comparee in Odia (56).

The Bangla adjective utilizes an auxiliary verb (example 66)), although Axomiya, Maithili, and Odia adjectives show manner with inflection while modifying verbs as found in (65), (67) and (68) respectively.

4.6.3. Cross-linguistic Generalisations

From the point of linguistic typology, there are some commonalities between the selected four languages in case of the adjective class. Firstly, examining the parameter *size*, it is noted that the four selected Eastern Indo-Aryan languages Axomiya, Bangla, Maithili and Odia are endowed with three sets (SET A, SET B and SET C) of semantic types for the adjective class. Axomiya, Bangla, Maithili and Odia possess four core semantic types DIMENSION, AGE, VALUE and COLOUR adjectives from SET A. They own adjectives from the semantic types PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED of SET B. Each of these languages also owns the rest six semantic types, i.e., DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION and NUMBER (CARDINAL and ORDINAL). It is striking to note here that Dixon shows (2004 and 2010, v. 2) that there are two sub-types of NUMBER semantic type. But examples presented in the Table 15 to Table 17 exhibit that there are also other three sub-semantic types in the case of Axomiya, Bangla, Maithili and Odia which is FRACTIONALS, MULLTIPLICATIVES and AGGREGATIVES besides CARDINAL and ORDINAL NUMBERS. Therefore, it is evident that the three sets of semantic types are available in Axomiya, Bangla, Maithili and Odia. They can be considered as *large adjective-class languages*. Secondly, while talking about the openness of the adjective class in the mentioned languages, it is seen that various word-formation processes like inflection, assimilation, derivation, compounding, reduplication, affixation and causation are found to be employed. It indicates that the adjective class in these languages belongs to the open class which implies the productive nature of adjectives in the given languages. Hence, they are called *open adjective class languages*. Thirdly, Axomiya, Bangla, Maithili and Odia possess both nominal and verbal features. These grammatical properties are presented below in Table 18. Consequently, it can be claimed that these languages are designated as *both noun-like and verb-like adjective class languages*.

Fourthly, it can be said that the criteria to recognize an adjective class is fulfilled in the case of Axomiya, Bangla, Maithili and Odia based on the proposition made by Dixon (2010, v. 2). Apart from the Characteristics A (state a property), B (specify a noun), C (make comparison constructions) and D (modify verbs), there is a unique feature Characteristic E: function as intensifiers available to Axomiya, Bangla, Maithili and Odia. Including the earlier studies, this chapter supports the view that Axomiya, Bangla, Maithili and Odia

adjectives behave like nouns. They share grammatical features like gender and number sometimes and get attached to case markers in all four selected languages. They are attached to classifiers to indicate specificity in Axomiya, Bangla and Odia (see Characteristic B). Along with this, they can also behave like verbs based on parameters like transitivity, finiteness and infiniteness. They are marked for grammatical features like tense, aspect and person as shown in the examples under the construction type A-ii and A-iii. Therefore, it can be said that Axomiya, Bangla, Maithili and Odia adjectives combine the grammatical properties of both verbs and nouns.

Chapter 5

Semantic Ordering of Adjectives

5.1. Introduction

This chapter presents quantitative and qualitative data on the semantic ordering of adjectives in the selected eastern Indo-Aryan languages Axomiya, Bangla, Maithili, and Odia. The quantitative and qualitative data both is focused in the section 0. The section 0 delineates language-specific study. At the end, the cross-linguistic generalisations and variations for the semantic orderings of adjectives are given in the section 0.

5.2. Ordering of Adjectives

This section mainly presents the semantic ordering of adjectives with twenty-one instances in the selected EIA languages.

5.2.1. qualification vs. colour

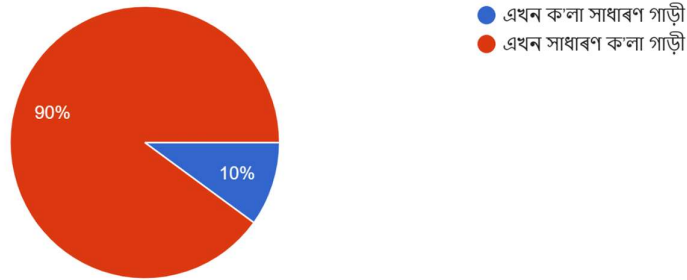
The adjectives *kola* / *kalo* / *kəria* / *kəla* ‘black’ and *xadharən* / *faḍḍharon* / *səḍḍharəṇ* / *faḍḍharəṇə* ‘ordinary’ belong to the semantic types COLOUR (SET A) and QUALIFICATION (SET C) in Axomiya, Bangla, Maithili and Odia. The table in 1 indicates that 18 Axomiya informants out of 20 responded to the *ekḥən xadḍharən kola gari* ‘an ordinary black car’. This implies that the preferred semantic order of adjectives is QUALIFICATION > COLOUR. In Bangla, 17 informants responded to the order *ækta faḍḍharon kalo gari* ‘an ordinary black car’ whereas only 3 informants responded to the other order. It indicates that the preferable semantic order of adjectives is QUALIFICATION > COLOUR, i.e., if adjectives from COLOUR and QUALIFICATION appear in a poly-adjectival NP, then the COLOUR semantic type places after the QUALIFICATION semantic type.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
এখন ক'লা সাধাৰণ গাড়ী ekʰɔn kola xad̪ʰaron gari a black ordinary car 'a black ordinary car'	2	একটা কালো সাধাৰণ গাড়ি ækta kalo ʃad̪ʰaron gaɽi one-CLA black ordinary car 'a black ordinary car'	3
এখন সাধাৰণ ক'লা গাড়ী ekʰɔn xad̪ʰaron kola gari an ordinary black car 'an ordinary black car'	18	একটা সাধাৰণ কালো গাড়ি ækta ʃad̪ʰaron kalo gaɽi one-CLA ordinary black car 'an ordinary black car'	17

Table 1

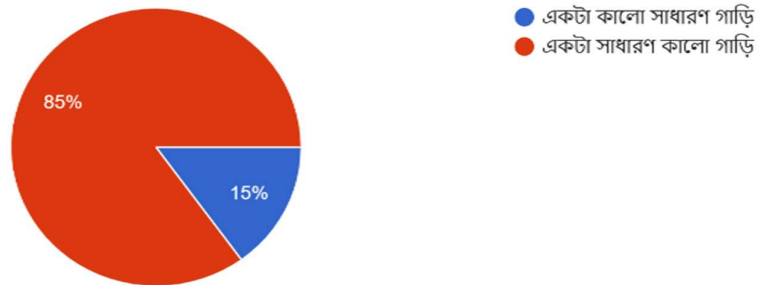
1. Which one is preferable to you?

20 responses



1. Which one is preferable to you?

20 responses



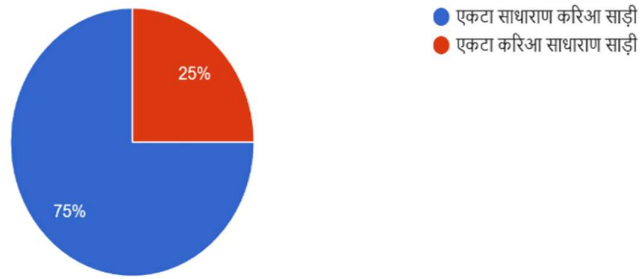
Like Axomiya, it is examined that most Maithili informants replied to the order QUALIFICATION > COLOUR. Like Axomiya and Maithili and unlike Bangla, 19 out of 20 Odia informants favoured the semantic order QUALIFICATION > COLOUR.

<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
एकटा साधारण करिआ साड़ी ekta sādḥarəṇ kəria saṛi one-CLA ordinary black saree ‘an ordinary black saree’	15	ଗୋଟିଏ କଳା ସାଧାରଣ କାର gotije kəla sādḥarəṇə kar one black ordinary car ‘a black ordinary car’	1
एकटा करिआ साधारण साड़ी ekta kəria sādḥarəṇ saṛi one-CLA black ordinary saree ‘an black ordinary saree’	5	ଗୋଟିଏ ସାଧାରଣ କଳା କାର gotije sādḥarəṇə kəla kar one ordinary black car ‘an ordinary black car’	19

Table 2

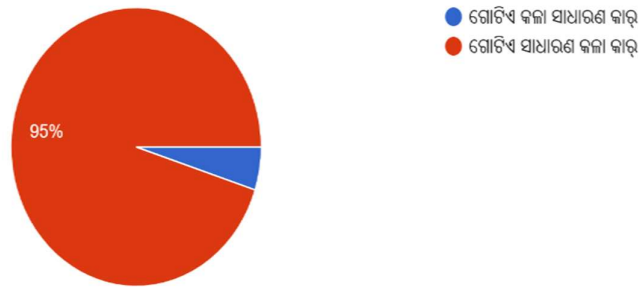
1. Which one is preferable to you?

20 responses



1. Which one is preferable to you?

20 responses



5.2.2. value vs. age

The following tables 3 and 4 possess adjectives *xund̥or* / *fund̥or* / *sund̥ar* / *sund̥oro* ‘beautiful’ and *noṭun* / *noṭun* / *nəv* / *nua* ‘new’ in Axomiya, Bangla, Maithili and Odia singly. They come under the semantic types VALUE (SET A) and AGE (SET A) respectively. 13 out of 30 Axomiya informants selected the semantic order VALUE > AGE. Besides, it is seen that 14 Bangla informants out of 20 selected the order VALUE > AGE, not vice-versa.

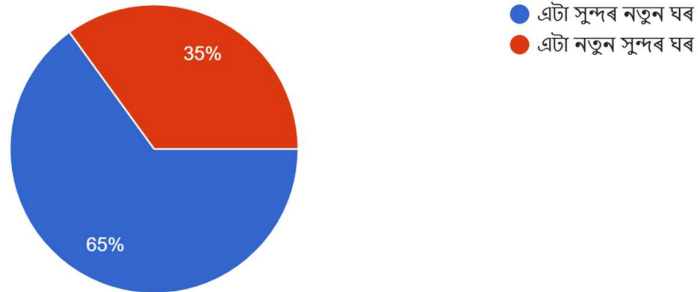
<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
ଏଟା ସୁନ୍ଦର ନତୁନ ଘର eta xund̥or noṭun g ^h or a beautiful new house ‘a beautiful new house’	13	একটা সুন্দর নতুন বাড়ি ækta fund̥or noṭun baṛi one-CLA beautiful new house ‘a beautiful new house’	14

এটা নতুন সুন্দৰ ঘৰ eta noṭun xundor ghar a new beautiful house 'a new beautiful house'	7	একটা নতুন সুন্দৰ বাড়ি ækta noṭun sundor bari one-CLA new beautiful house 'a new beautiful house'	6
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Table 3

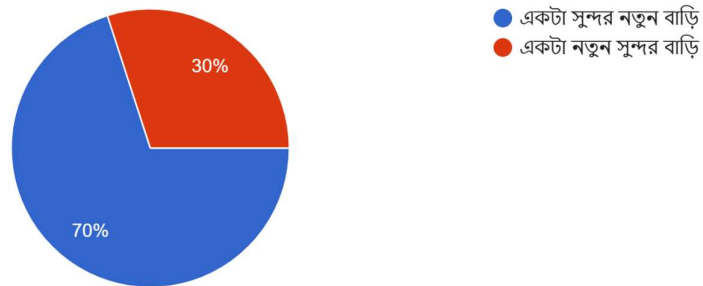
2. Which one is preferable to you?

20 responses



2. Which one is preferable to you?

20 responses



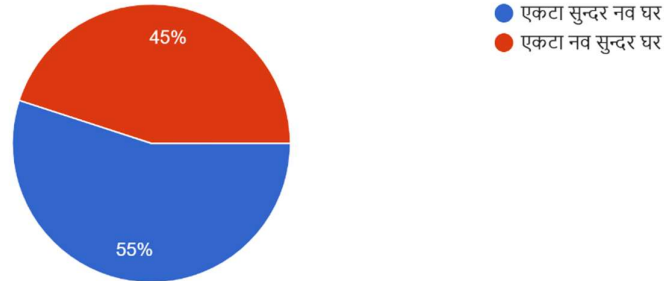
Out of 20 Maithili informants, 11 chose the order VALUE > AGE rather than the other way around. Of the 20 Odia informants, 20 chose the order VALUE >AGE rather than AGE >VALUE.

<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
एकटा सुन्दर नव घर ekta sundar nāv g ^h ar one-CLA beautiful new house 'a beautiful new house'	11	ଗୋଟିଏ ସୁନ୍ଦର ନୂଆ ଘର gotije sundara nua g ^h aro one beautiful new house 'a beautiful new house'	20
एकटा नव सुन्दर घर ekta nāv sundar g ^h ar one-CLA new beautiful house 'a new beautiful house'	9	ଗୋଟିଏ ନୂଆ ସୁନ୍ଦର ଘର gotije nua sundara g ^h aro one new beautiful house 'a new beautiful house'	0

Table 4

2. Which one is preferable to you?

20 responses



2. Which one is preferable to you?

20 responses



5.2.3. physical property vs. qualification

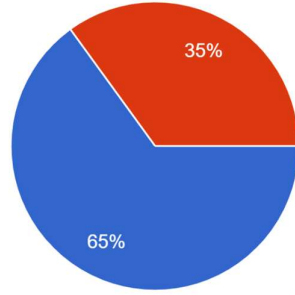
Adjectives *enimeted* / *ænimeted* / *jibənt̪* / *ænimeted* ‘animated’ and *baŋla* / *baŋla* / *bəŋla* / *bəŋla* ‘Bengali’ are placed in two orders in Axomiya, Bangla, Maithili and Odia. These pertain to the semantic types PHYSICAL PROPERTY (SET B) and QUALIFICATION (SET C). Most of the informants for each selected language answer to the semantic order PHYSICAL PROPERTY > QUALIFICATION. Out of 20 informants, 13 responded to the order PHYSICAL PROPERTY > QUALIFICATION. 12 Bangla informants out of 20 responded to the order PHYSICAL PROPERTY > QUALIFICATION.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence		Occurrence
ଏନିମେଟେଡ଼ ବାଙ୍ଗା ଲୋକକଥା <i>enimeted baŋla lokokəṭʰa</i> animated Bengali folktale ‘animated Bengali folktale’	13	ଅ୍ୟାନିମେଟେଡ଼ ବାଙ୍ଗା ଲୋକକାହିନୀ <i>ænimeted baŋla lokokahini</i> animated Bangla folktale ‘animated Bengali folktale’	12
ବାଙ୍ଗା ଏନିମେଟେଡ଼ ଲୋକକଥା <i>baŋla enimeted lokokəṭʰa</i> Bengali animated folktale ‘Bengali animated folklore’	7	ବାଙ୍ଗା ଅ୍ୟାନିମେଟେଡ଼ ଲୋକକାହିନୀ <i>baŋla ænimeted lokokahini</i> Bangla animated folktale ‘Bengali animated folktale’	8

Table 5

3. Which one is preferable to you?

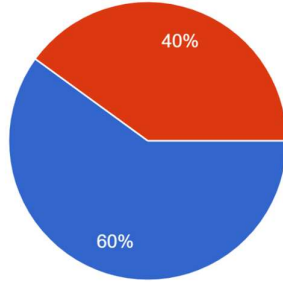
20 responses



- এনিমেটেড বাংলা লোককথা
- বাংলা এনিমেটেড লোককথা

3. Which one is preferable to you?

20 responses



- অ্যানিমেটেড বাংলা লোককাহিনী
- বাংলা অ্যানিমেটেড লোককাহিনী

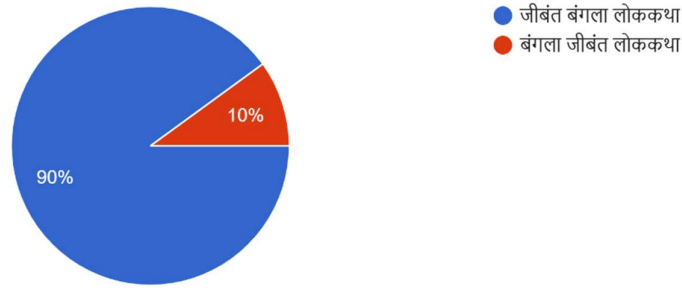
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
जीबंत बंगला लोककथा jībənt̪ bəŋgla lɔkkək̪ʰa animated Bengali folktale ‘animated Bengali folktale’	18	ଆନିମେଟେଡ଼ ବଙ୍ଗଳା ଲୋକକଥା ænimeted bəŋgla lokok̪ʰa animated Bengali folktale ‘animated Bengali folktale’	11
बंगला जीबंत लोककथा bəŋgla jībənt̪ lɔkkək̪ʰa Bengali animated folktale	2	ବଙ୍ଗଳା ଆନିମେଟେଡ଼ ଲୋକକଥା bəŋgla ænimeted lokok̪ʰa Bengali animated folktale	9

‘Bengali animated folktale’		‘Bengali animated folktale’	
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Table 6

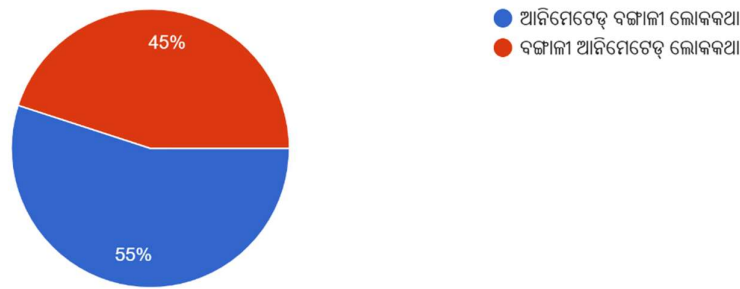
3. Which one is preferable to you?

20 responses



3. Which one is preferable to you?

20 responses



5.2.4. qualification (nationality) vs. qualification (genre)

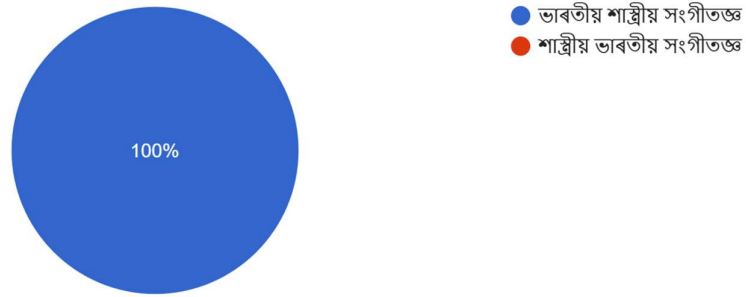
Tables 7 and 8 exhibit that there are two adjectives *bharoṭṭijo* / *b^haroṭṭijo* / *bhəṭṭija* / *bharoṭṭijo* ‘Indian’ and *xaxṭrijo* / *ṣaxṭrijo* / *saxṭrija* / *saxṭrijo* ‘classical’ in Axomiya, Bangla, Maithili and Odia. Both of them are members of the semantic type QUALIFICATION (SET C). Here, the given two adjectives can be further grouped into two sub-semantic types: NATIONALITY

and GENRE. All the Axomiya informants responded to the semantic order NATIONALITY (QUALIFICATION) > GENRE (QUALIFICATION). Similarly, 19 Bangla informants out of 20 prefer the adjective *b^harotijjo* ‘Indian’ to be in the first position. Therefore, the most chosen order in Bangla is NATIONALITY > GENRE.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
ভাৰতীয় শাস্ত্ৰীয় সংগীতজ্ঞ <i>b^harotijjo xaxtrijjo xongitogggijõ</i> Indian classical musician ‘Indian classical musician’	20	ভাৰতীয় শাস্ত্ৰীয় সঙ্গীতশিল্পী <i>b^harotijjo fashtrijjo fongitõilpi</i> Indian classical musician ‘Indian classical musician’	19
শাস্ত্ৰীয় ভাৰতীয় সংগীতজ্ঞ <i>xaxtrijjo b^harotijjo xongitogggijõ</i> classical Indian musician ‘classical Indian musician’	0	শাস্ত্ৰীয় ভাৰতীয় সঙ্গীতশিল্পী <i>fashtrijjo b^harotijjo fongitõilpi</i> classical Indian musician ‘classical Indian musician’	1

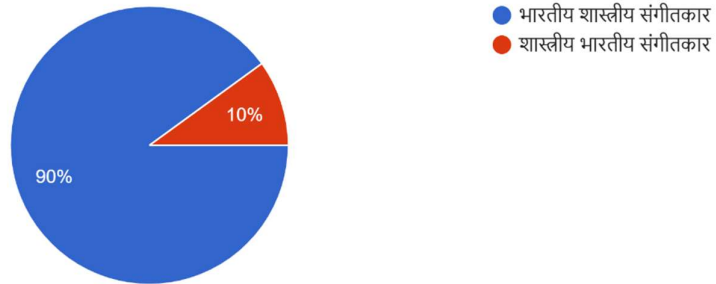
Table 7

4. Which one is preferable to you?
20 responses



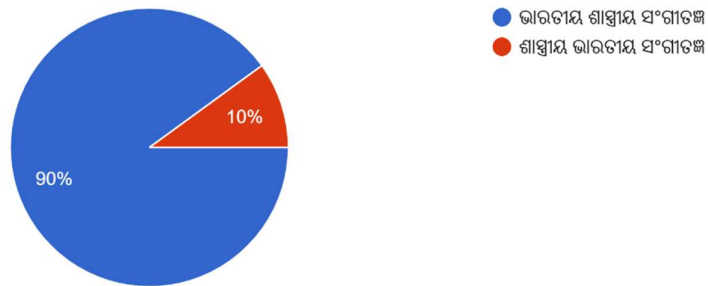
4. Which one is preferable to you?

20 responses



4. Which one is preferable to you?

20 responses



5.2.5. colour vs. dimension vs. physical property

Adjectives *gul / gol / gol / golakar* ‘round’, *kothin / jōkṭo / thos / taṇṇ* ‘hard’ and *ṛṅga / lal / lal / nali* ‘red’ in Axomiya, Bangla, Maithili, and Odia are affiliated to the semantic types DIMENSION (SET A), PHYSICAL PROPERTY (SET B) and COLOUR (SET A). The semantic order COLOUR > DIMENSION > PHYSICAL PROPERTY is picked up as a favoured one over other orders in the case of Axomiya. The semantic order DIMENSION > PHYSICAL PROPERTY > COLOUR is the most chosen one in Bangla differing from the Axomiya one.

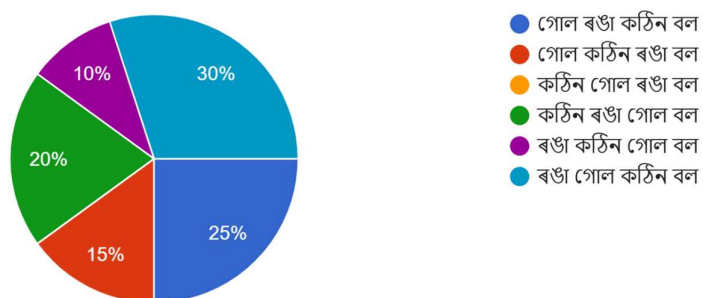
<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence

গোল বঙা কঠিন বল gul rɔŋga kotʰin bɔl round red hard ball 'round red hard ball'	5	গোল লাল শক্ত বল gol lal ʃɔktɔ bɔl round red hard ball 'a round red hard ball'	1
গোল কঠিন বঙা বল gul kotʰin rɔŋga bɔl round hard red ball 'round hard red ball'	3	লাল শক্ত গোল বল lal ʃɔktɔ gol bɔl red hard round ball 'a red hard round ball'	4
কঠিন গোল বঙা বল kotʰin gul rɔŋga bɔl hard round red ball 'hard round red ball'	0	লাল গোল শক্ত বল lal gol ʃɔktɔ bɔl red round hard ball 'a red round hard ball'	1
কঠিন বঙা গোল বল kotʰin rɔŋga gul bɔl hard red round ball 'hard red round ball'	4	শক্ত লাল গোল বল ʃɔktɔ lal gol bɔl hard red round ball 'a hard red round ball'	3
বঙা কঠিন গোল বল rɔŋga kotʰin gul bɔl red hard round ball 'red hard round ball'	2	শক্ত গোল লাল বল ʃɔktɔ gol lal bɔl hard round red ball 'a hard round red ball'	5
বঙা গোল কঠিন বল rɔŋga gul kotʰin bɔl red round hard ball 'red round hard ball'	6	গোল শক্ত লাল বল gol ʃɔktɔ lal bɔl round hard red ball 'a round hard red ball'	6

Table 9

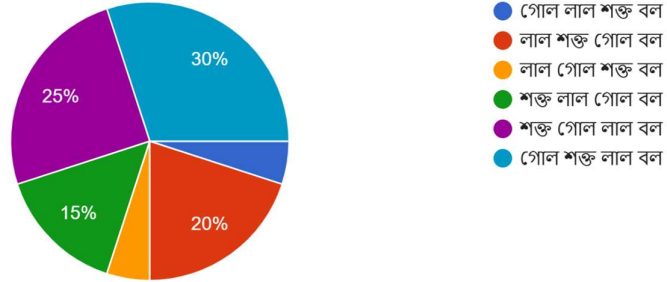
5. Which one is preferable to you?

20 responses



5. Which one is preferable to you?

20 responses



11 Maithili informants out of 20 picked up the semantic order DIMENSION > COLOUR > PHYSICAL PROPERTY. In the same way as Maithili, the most selected semantic order in Odia is DIMENSION > COLOUR > PHYSICAL PROPERTY.

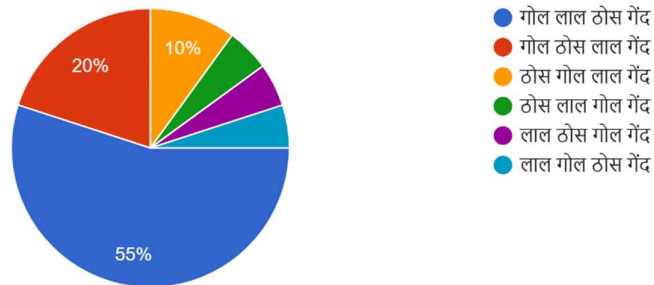
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
ଗୋଲ ଲାଲ ଠୋସ ଗେଁଦ gol lal t ^h os gēṅḍ round red hard ball 'round red hard ball'	11	ଗୋଲାକାର ନାଲି ଟାଣ ବଲ୍ golakar nali taṅḍ bōl round red hard ball 'round red hard ball'	6
ଗୋଲ ଠୋସ ଲାଲ ଗେଁଦ gol t ^h os lal gēṅḍ round hard red ball 'round hard red ball'	4	ଗୋଲାକାର ଟାଣ ନାଲି ବଲ୍ golakar taṅḍ nali bōl round hard red ball 'round hard red ball'	5
ଠୋସ ଗୋଲ ଲାଲ ଗେଁଦ t ^h os gol lal gēṅḍ hard round red ball 'hard round red ball'	2	ଟାଣ ଗୋଲାକାର ନାଲି ବଲ୍ taṅḍ golakar nali bōl hard round red ball 'hard round red ball'	2
ଠୋସ ଲାଲ ଗୋଲ ଗେଁଦ t ^h os lal gol gēṅḍ hard red round ball 'hard red round ball'	1	ଟାଣ ନାଲି ଗୋଲାକାର ବଲ୍ taṅḍ nali golakar bōl hard red round ball 'hard red round ball'	1
ଲାଲ ଠୋସ ଗୋଲ ଗେଁଦ	1	ନାଲି ଟାଣ ଗୋଲାକାର ବଲ୍	2

lal t ^h os gol gēnd red hard round ball 'red hard round ball'		nali taṇḍ golakar bəl red hard round ball 'red hard round ball'	
लाल गोल ठोस गेंद lal gol t ^h os gēnd red round hard ball 'red round hard ball'	1	ନାଲି ଗୋଲାକାର ଟାଣ ବଲ୍ nali golakar taṇḍ bəl red round hard ball 'red round hard ball'	4

Table 10

5. Which one is preferable to you?

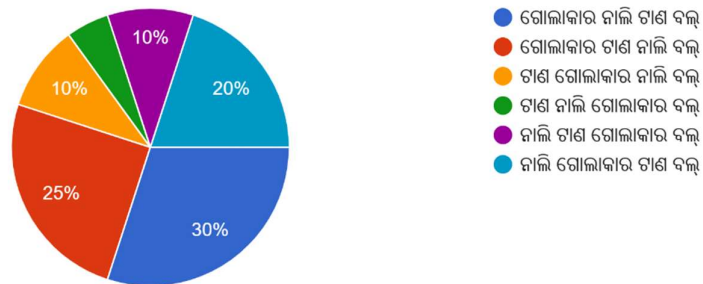
20 responses



- गोल लाल ठोस गेंद
- गोल ठोस लाल गेंद
- ठोस गोल लाल गेंद
- ठोस लाल गोल गेंद
- लाल ठोस गोल गेंद
- लाल गोल ठोस गेंद

5. Which one is preferable to you?

20 responses



- ଗୋଲାକାର ନାଲି ଟାଣ ବଲ୍
- ଗୋଲାକାର ଟାଣ ନାଲି ବଲ୍
- ଟାଣ ଗୋଲାକାର ନାଲି ବଲ୍
- ଟାଣ ନାଲି ଗୋଲାକାର ବଲ୍
- ନାଲି ଟାଣ ଗୋଲାକାର ବଲ୍
- ନାଲି ଗୋଲାକାର ଟାଣ ବଲ୍

5.2.6. ordinal number vs. cardinal number vs. age

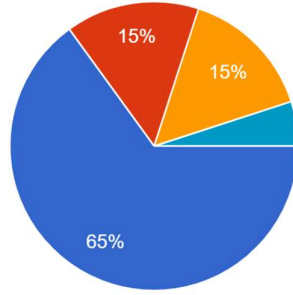
Tables 11 and 12 show that adjectives *prɔ̃hɔm* / *prõhɔm* / *pəhil* / *prõhɔmɔ* ‘first’, *păc* / *păc* / *păncɔ* ‘five’ and *prak̃ɔn* / *prak̃ɔn* / *purv* / *purbõɔnɔ* ‘former’ in Axomiya, Bangla, Maithili, and Odia are allied to the semantic types ORDINAL NUMBER (SET C), CARDINAL NUMBER (SET C) and AGE (SET A). It is fascinating that the preferred semantic order for all four selected languages is the same. It is ORDINAL NUMBER > CARDINAL NUMBER > AGE.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
প্রথম পাঁচজন প্রাক্তন রাষ্ট্রপতি <i>prõhɔm păczon prak̃ɔn raxtrɔpõti</i> first five-CLA former president ‘first five former presidents’	13	প্রথম পাঁচজন প্রাক্তন রাষ্ট্রপতি <i>prõhɔm păczon prak̃ɔn raxtrɔpõti</i> first five-CLA former president ‘first five former presidents’	10
প্রথম প্রাক্তন পাঁচজন রাষ্ট্রপতি <i>prõhɔm prak̃ɔn păczon raxtrɔpõti</i> first former five-CLA president ‘first former five presidents’	3	প্রথম প্রাক্তন পাঁচজন রাষ্ট্রপতি <i>prõhɔm prak̃ɔn păczon raxtrɔpõti</i> first former five-CLA president ‘first former five presidents’	0
প্রাক্তন প্রথম পাঁচজন রাষ্ট্রপতি <i>prak̃ɔn prõhɔm păczon raxtrɔpõti</i> former first five-CLA president ‘former first five presidents’	3	পাঁচজন প্রথম প্রাক্তন রাষ্ট্রপতি <i>păczon prõhɔm prak̃ɔn raxtrɔpõti</i> five-CLA first former president ‘five first former presidents’	6
প্রাক্তন পাঁচজন প্রথম রাষ্ট্রপতি <i>prak̃ɔn păczon prõhɔm raxtrɔpõti</i> former five-CLA first president ‘former five first presidents’	0	প্রাক্তন প্রথম পাঁচজন রাষ্ট্রপতি <i>prak̃ɔn prõhɔm păczon raxtrɔpõti</i> former first five-CLA president ‘former first five presidents’	3
পাঁচজন প্রাক্তন প্রথম রাষ্ট্রপতি <i>păczon prak̃ɔn prõhɔm raxtrɔpõti</i> five-CLA former first president ‘five former first presidents’	0	পাঁচজন প্রাক্তন প্রথম রাষ্ট্রপতি <i>păczon prak̃ɔn prõhɔm raxtrɔpõti</i> five-CLA former first president ‘five former first presidents’	1
পাঁচজন প্রথম প্রাক্তন রাষ্ট্রপতি <i>păczon prõhɔm prak̃ɔn raxtrɔpõti</i> five-CLA first former president ‘five first former presidents’	1	প্রাক্তন পাঁচজন প্রথম রাষ্ট্রপতি <i>prak̃ɔn păczon prõhɔm raxtrɔpõti</i> former five-CLA first president ‘former five first presidents’	0

Table 11

6. Which one is preferable to you?

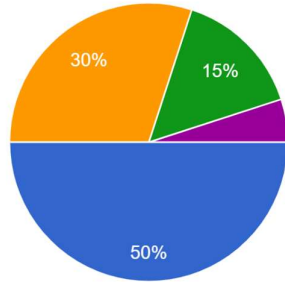
20 responses



- प्रथम पाँचजन प्राञ्जन बाङ्गपति
- प्रथम प्राञ्जन पाँचजन बाङ्गपति
- प्राञ्जन प्रथम पाँचजन बाङ्गपति
- प्राञ्जन पाँचजन प्रथम बाङ्गपति
- पाँचजन प्राञ्जन प्रथम बाङ्गपति
- पाँचजन प्रथम प्राञ्जन बाङ्गपति

6. Which one is preferable to you?

20 responses



- प्रथम पाँचजन प्राञ्जन राङ्गपति
- प्रथम प्राञ्जन पाँचजन राङ्गपति
- पाँचजन प्रथम प्राञ्जन राङ्गपति
- प्राञ्जन प्रथम पाँचजन राङ्गपति
- पाँचजन प्राञ्जन प्रथम राङ्गपति
- प्राञ्जन पाँचजन प्रथम राङ्गपति

Maithili	
Orders	Occurrence
पहिल पांच पूर्व राष्ट्रपति pəhil pāc purv rāstrəpəti first five former president 'first five former presidents'	10
पहिल पूर्व पांच राष्ट्रपति pəhil purv pāc rāstrəpəti	4

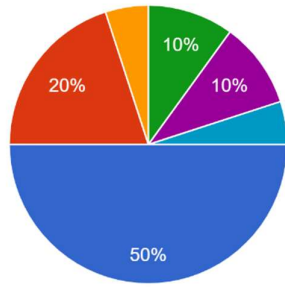
first former five president 'first former five presidents'	
पूर्व पहिल पांच राष्ट्रपति purv pəhil pāc rāstrəpəti former first five president 'former first five presidents'	1
पूर्व पांच पहिल राष्ट्रपति purv pāc pəhil rāstrəpəti former five first president 'former five first presidents'	2
पांच पूर्व पहिल राष्ट्रपति pāc purv pəhil rāstrəpəti first former five president 'first former five presidents'	2
पांच पहिल पूर्व राष्ट्रपति pāc pəhil purv rāstrəpəti five first former president 'five first former presidents'	1
Odia	
Orders	Occurrence
ପ୍ରଥମ ପାଞ୍ଚଜଣ ପୂର୍ବତନ ରାଷ୍ଟ୍ରପତି prathama pāncōjāṇa purbatāna rāstrapati first five-CLA former president 'first five former presidents'	11
ପ୍ରଥମ ପୂର୍ବତନ ପାଞ୍ଚଜଣ ରାଷ୍ଟ୍ରପତି prathama purbatāna pāncōjāṇa rāstrapati first former five-CLA president 'first former five presidents'	1
ପୂର୍ବତନ ପ୍ରଥମ ପାଞ୍ଚଜଣ ରାଷ୍ଟ୍ରପତି purbatāna prathama pāncōjāṇa rāstrapati former first five-CLA president 'former first five presidents'	1
ପୂର୍ବତନ ପାଞ୍ଚଜଣ ପ୍ରଥମ ରାଷ୍ଟ୍ରପତି purbatāna pāncōjāṇa prathama rāstrapati former five-CLA first president 'former five first presidents'	3
ପାଞ୍ଚଜଣ ପୂର୍ବତନ ପ୍ରଥମ ରାଷ୍ଟ୍ରପତି pāncōjāṇa purbatāna prathama rāstrapati five-CLA former first president 'five former first presidents'	2

ପାଞ୍ଚଜଣ ପ୍ରଥମ ପୂର୍ବତନ ରାଷ୍ଟ୍ରପତି pāñcoḅaṅa praṭ ^h oma purbatāṅa rastropati five-CLA first former president 'five first former presidents'	2
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Table 12

6. Which one is preferable to you?

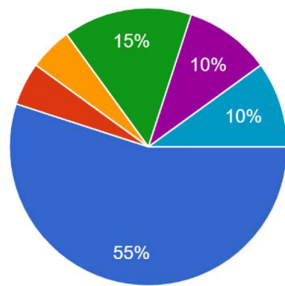
20 responses



- पहिल पांच पूर्व राष्ट्रपति
- पहिल पूर्व पांच राष्ट्रपति
- पूर्व पहिल पांच राष्ट्रपति
- पूर्व पांच पहिल राष्ट्रपति
- पांच पूर्व पहिल राष्ट्रपति
- पांच पहिल पूर्व राष्ट्रपति

6. Which one is preferable to you?

20 responses



- ପ୍ରଥମ ପାଞ୍ଚଜଣ ପୂର୍ବତନ ରାଷ୍ଟ୍ରପତି
- ପ୍ରଥମ ପୂର୍ବତନ ପାଞ୍ଚଜଣ ରାଷ୍ଟ୍ରପତି
- ପୂର୍ବତନ ପ୍ରଥମ ପାଞ୍ଚଜଣ ରାଷ୍ଟ୍ରପତି
- ପୂର୍ବତନ ପାଞ୍ଚଜଣ ପ୍ରଥମ ରାଷ୍ଟ୍ରପତି
- ପାଞ୍ଚଜଣ ପୂର୍ବତନ ପ୍ରଥମ ରାଷ୍ଟ୍ରପତି
- ପାଞ୍ଚଜଣ ପ୍ରଥମ ପୂର୍ବତନ ରାଷ୍ଟ୍ରପତି

5.2.7. age vs. cardinal number vs. physical property

There are adjectives *pərovət̪i* / *pərobət̪i* / *əgila* / *pərobət̪i* ‘next’, *ṭ̪ini* / *ṭ̪in* / *ṭ̪in* / *ṭ̪ini* ‘three’ and *t̪anda* / *ʃ̪iṭ̪er* / *t̪anda* / *siṭ̪od̪inət̪* ‘cold’ in Axomiya, Bangla, Maithili and Odia

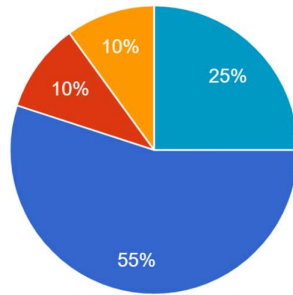
which are associated with the semantic types AGE (SET A), CARDINAL NUMBER (SET C) and PHYSICAL PROPERTY (SET B) gradually. The favoured semantic order in Axomiya, Bangla and Odia is found to be the same. This is AGE > CARDINAL NUMBER > PHYSICAL PROPERTY.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
পৰৱৰ্তী তিনিটা ঠাণ্ডা ৰাতিপুৱা pərobort̪i t̪in̪ita t̪handa rat̪ipua next three-CLA winter morning 'next three winter mornings'	11	পৰৱৰ্তী তিনটে শীতৰ সকাল pərobort̪i t̪inte ʃit̪er ʃokal next three-CLA cold morning 'next three cold mornings'	8
পৰৱৰ্তী ঠাণ্ডা তিনিটা ৰাতিপুৱা pərobort̪i t̪handa t̪in̪ita rat̪ipua next winter three-CLA morning 'next winter three mornings'	2	পৰৱৰ্তী শীতৰ তিনটে সকাল pərobort̪i ʃit̪er t̪inte ʃokal next cold three-CLA morning 'next cold three mornings'	1
ঠাণ্ডা পৰৱৰ্তী তিনিটা ৰাতিপুৱা t̪handa pərobort̪i t̪in̪ita rat̪ipua winter next three-CLA morning 'winter next three mornings'	2	শীতৰ পৰৱৰ্তী তিনটে সকাল ʃit̪er pərobort̪i t̪inte ʃokal cold next three-CLA morning 'cold next three mornings'	7
ঠাণ্ডা তিনিটা পৰৱৰ্তী ৰাতিপুৱা t̪handa t̪in̪ita pərobort̪i rat̪ipua winter three-CLA next morning 'winter three next mornings'	0	শীতৰ তিনটে পৰৱৰ্তী সকাল ʃit̪er t̪inte pərobort̪i ʃokal cold three-CLA next morning 'cold three next mornings'	3
তিনিটা ঠাণ্ডা পৰৱৰ্তী ৰাতিপুৱা t̪in̪ita t̪handa pərobort̪i rat̪ipua three-CLA winter next morning 'three winter next mornings'	0	তিনটে শীতৰ পৰৱৰ্তী সকাল t̪inte ʃit̪er pərobort̪i ʃokal three-CLA cold next morning 'three cold next mornings'	0
তিনিটা পৰৱৰ্তী ঠাণ্ডা ৰাতিপুৱা t̪in̪ita pərobort̪i t̪handa rat̪ipua three-CLA next winter morning 'three next winter mornings'	5	তিনটে পৰৱৰ্তী শীতৰ সকাল t̪inte pərobort̪i ʃit̪er ʃokal three-CLA next cold morning 'three next cold mornings'	1

Table 13

7. Which one is preferable to you?

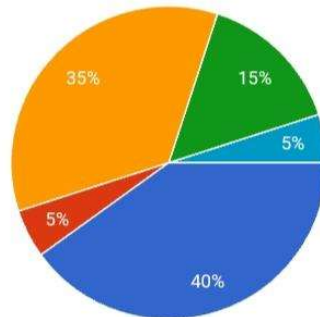
20 responses



- ପରବର୍ତ୍ତୀ ତିନିଟା ଠାଙ୍ଗା ବାତିପୁରା
- ପରବର୍ତ୍ତୀ ଠାଙ୍ଗା ତିନିଟା ବାତିପୁରା
- ଠାଙ୍ଗା ପରବର୍ତ୍ତୀ ତିନିଟା ବାତିପୁରା
- ଠାଙ୍ଗା ତିନିଟା ପରବର୍ତ୍ତୀ ବାତିପୁରା
- ତିନିଟା ଠାଙ୍ଗା ପରବର୍ତ୍ତୀ ବାତିପୁରା
- ତିନିଟା ପରବର୍ତ୍ତୀ ଠାଙ୍ଗା ବାତିପୁରା

7. Which one is preferable to you?

20 responses



- ପରବର୍ତ୍ତୀ ତିନିଟେ ଶୀତେର ସକାଳ
- ପରବର୍ତ୍ତୀ ଶୀତେର ତିନିଟେ ସକାଳ
- ଶୀତେର ପରବର୍ତ୍ତୀ ତିନିଟେ ସକାଳ
- ଶୀତେର ତିନିଟେ ପରବର୍ତ୍ତୀ ସକାଳ
- ତିନିଟେ ଶୀତେର ପରବର୍ତ୍ତୀ ସକାଳ
- ତିନିଟେ ପରବର୍ତ୍ତୀ ଶୀତେର ସକାଳ

But in case of Odia, the most chosen semantic order PHYSICAL PROPERTY > AGE > CARDINAL NUMBER is different from the rest languages.

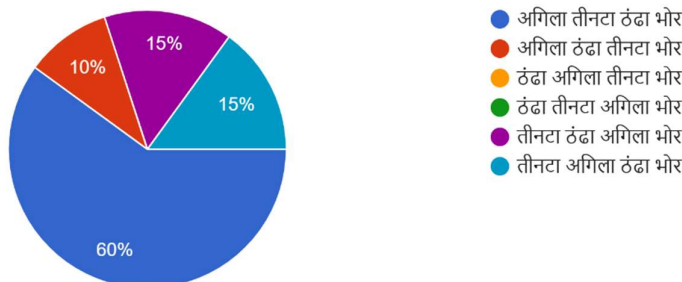
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
ଅଗିଲା ତିନଟା ଠଣ୍ଡା ଭୌର	12	ପରବର୍ତ୍ତୀ ତିନିଟା ଠାଙ୍ଗା ବାତିପୁରା	4

əgila t̪inta tʰənda bʰor next three-CLA cold morning ‘next three cold mornings’		pərobərt̪i t̪inoti siṭoḍḍinəro ʃəkəɭo next three-CLA cold morning ‘next three cold mornings’	
अगिला ठंढा तीनटा भोर əgila tʰənda t̪inta bʰor next cold three-CLA morning ‘next cold three mornings’	2	ପରବର୍ତ୍ତୀ ଶୀତଦିନର ତିନୋଟି ସକାଳ pərobərt̪i siṭoḍḍinəro t̪inoti ʃəkəɭo next cold three-CLA morning ‘next cold three mornings’	2
ठंढा अगिला तीनटा भोर tʰənda əgila t̪inta bʰor cold next three-CLA morning ‘cold next three mornings’	0	ଶୀତଦିନର ପରବର୍ତ୍ତୀ ତିନୋଟି ସକାଳ siṭoḍḍinəro pərobərt̪i t̪inoti ʃəkəɭo cold next three-CLA morning ‘cold next three mornings’	8
ठंढा तीनटा अगिला भोर tʰənda t̪inta əgila bʰor cold three-CLA next morning ‘cold three next mornings’	0	ଶୀତଦିନର ତିନୋଟି ପରବର୍ତ୍ତୀ ସକାଳ siṭoḍḍinəro t̪inoti pərobərt̪i ʃəkəɭo cold three-CLA next morning ‘cold three next mornings’	4
तीनटा ठंढा अगिला भोर t̪inta tʰənda əgila bʰor three-CLA cold next morning ‘cold three next mornings’	3	ତିନୋଟି ଶୀତଦିନର ପରବର୍ତ୍ତୀ ସକାଳ t̪inoti siṭoḍḍinəro pərobərt̪i ʃəkəɭo three-CLA cold next morning ‘three cold next mornings’	0
तीनटा अगिला ठंढा भोर t̪inta əgila tʰənda bʰor three-CLA next cold morning ‘three next cold mornings’	3	ତିନୋଟି ପରବର୍ତ୍ତୀ ଶୀତଦିନର ସକାଳ t̪inoti pərobərt̪i siṭoḍḍinəro ʃəkəɭo three-CLA next cold morning ‘three next cold mornings’	2

Table 14

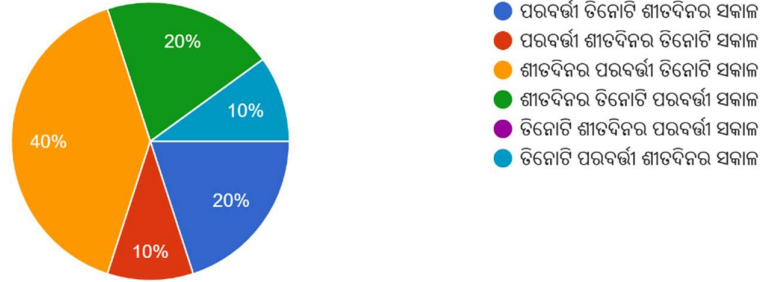
7. Which one is preferable to you?

20 responses



7. Which one is preferable to you?

20 responses



5.2.8. cardinal number vs. value vs. age

Three adjectives *ḍui* / *ḍui* / *ḍu* / *ḍui* ‘two’, *ḍhunija* / *ḍunḍor* / *ḍunḍar* / *ḍunḍora* ‘handsome’ and *deka* / *ḍlpobḍjofi* / *chot* / *choto* ‘young’ belonging to the semantic types CARDINAL NUMBER (SET C), VALUE (SET A) and AGE (SET A) respectively. The most selected order in Axomiya, Maithili and Odia is CARDINAL NUMBER > VALUE > AGE. Though it is seen that Axomiya, Maithili and Odia informants preferred the semantic order of adjectives as CARDINAL NUMBER > VALUE > AGE, the most received response in Bangla is dissimilar from them: VALUE > CARDINAL NUMBER > AGE.

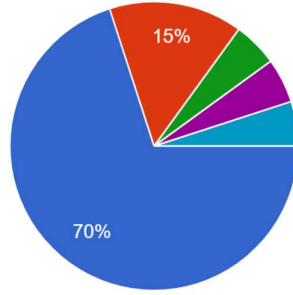
<i>Axomiya</i>	
Orders	Occurrence
ଦୁଜନ (ସର୍ବାଧିକ ଧୁନିଆ) ଡେକା ଲ'ବା ḍuzḍn (xḍrbaḍḍhik ḍḍhunija) deka lḍra two-CLA (all.more-POSTP handsome) young boy ‘two (most handsome) young boys’	14
ଦୁଜନ ଡେକା (ସର୍ବାଧିକ ଧୁନିଆ) ଲ'ବା ḍuzḍn deka (xḍrbaḍḍhik ḍḍhunija) lḍra two-CLA young (all.more-POSTP handsome) boy ‘two young (most handsome) boys’	3
ଡେକା ଦୁଜନ (ସର୍ବାଧିକ ଧୁନିଆ) ଲ'ବା deka ḍuzḍn (xḍrbaḍḍhik ḍḍhunija) lḍra young two-CLA (all.more-POSTP handsome) boy	0

‘young two (most handsome) boys’	
ডেকা (সর্বাধিক ধুনীয়া) দুজন ল’ৰা deka (xɔɾbaɖ ^h ik ɖ ^h unija) ɖuzɔn lɔɾa young (all.more-POSTP handsome) two-CLA boy ‘young (most handsome) two boys’	1
(সর্বাধিক ধুনীয়া) ডেকা দুজন ল’ৰা (xɔɾbaɖ ^h ik ɖ ^h unija) deka ɖuzɔn lɔɾa (all.more-POSTP handsome) young two-CLA boy ‘(most handsome) young two boys’	1
(সর্বাধিক ধুনীয়া) দুজন ডেকা ল’ৰা (xɔɾbaɖ ^h ik ɖ ^h unija) ɖuzɔn deka lɔɾa (all.more-POSTP handsome) two-CLA young boy ‘(most handsome) two young boys’	1
Bangla	
Orders	Occurrence
দুটো (সবচেয়ে সুন্দর) অল্পবয়সী ছেলে ɖuto (ʃɔbceje ʃuɖɔɾ) ɔlpɔbɔjɔʃi c ^h ele two-CLA (all.than-POSTP handsome) young boy ‘two (most handsome) young boys’	4
(সবচেয়ে সুন্দর) দুটো অল্পবয়সী ছেলে (ʃɔbceje ʃuɖɔɾ) ɖuto ɔlpɔbɔjɔʃi chele (all.than-POSTP handsome) two-CLA young boy ‘(most handsome) two young boys’	6
দুটো অল্পবয়সী (সবচেয়ে সুন্দর) ছেলে ɖuto ɔlpɔbɔjɔʃi (ʃɔbceje ʃuɖɔɾ) c ^h ele two-CLA young (all.than-POSTP handsome) boy ‘two young (most handsome) boys’	3
(সবচেয়ে সুন্দর) অল্পবয়সী দুটো ছেলে (ʃɔbceje ʃuɖɔɾ) ɔlpɔbɔjɔʃi ɖuto c ^h ele (all.than-POSTP handsome) young two-CLA boy ‘(most handsome) young two boys’	3
অল্পবয়সী (সবচেয়ে সুন্দর) দুটো ছেলে ɔlpɔbɔjɔʃi (ʃɔbceje ʃuɖɔɾ) ɖuto c ^h ele young (all.than-POSTP handsome) two-CLA boy ‘young (most handsome) two boys’	4
অল্পবয়সী দুটো (সবচেয়ে সুন্দর) ছেলে ɔlpɔbɔjɔʃi ɖuto (ʃɔbceje ʃuɖɔɾ) c ^h ele young two-CLA (all.than-POSTP handsome) boy ‘young two (most handsome) boys’	0

Table 15

8. Which one is preferable to you? (Treat words in brackets as a single unit.)

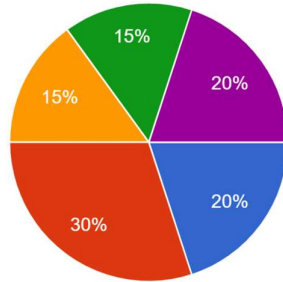
20 responses



- दुजन (सर्वाधिक धुनीया) डेका ल'बा
- दुजन डेका (सर्वाधिक धुनीया) ल'बा
- डेका दुजन (सर्वाधिक धुनीया) ल'बा
- डेका (सर्वाधिक धुनीया) दुजन ल'बा
- (सर्वाधिक धुनीया) डेका दुजन ल'बा
- (सर्वाधिक धुनीया) दुजन डेका ल'बा

8. Which one is preferable to you? (Treat words in brackets as a single unit.)

20 responses



- दुटो (सबचेये सुन्दर) अल्लवयसी छेले
- (सबचेये सुन्दर) दुटो अल्लवयसी छेले
- दुटो अल्लवयसी (सबचेये सुन्दर) छेले
- (सबचेये सुन्दर) अल्लवयसी दुटो छेले
- अल्लवयसी (सबचेये सुन्दर) दुटो छेले
- अल्लवयसी दुटो (सबचेये सुन्दर) छेले

<i>Maithili</i>	
Orders	Occurrence
दूटा (सबसँ सुन्दर) छोट लड़का ḍūta (səbsə̃ suṅḍə̃r) cʰot ləɽka two-CLA (most.than-POSTP handsome) young boy 'two (most handsome) young boys'	11
दूटा छोट (सबसँ सुन्दर) लड़का ḍūta cʰot (səbsə̃ suṅḍə̃r) ləɽka	3

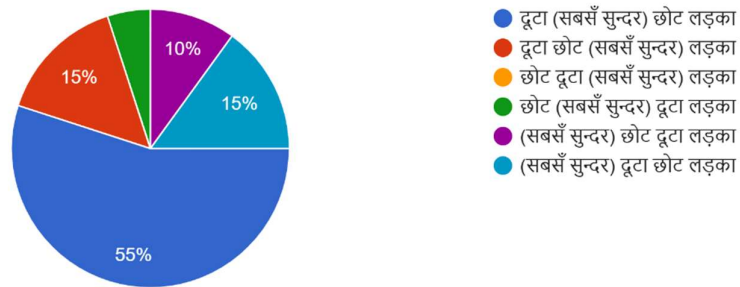
two-CLA young (most.than-POSTP handsome) boy 'two young (most handsome) boys'	
छोट दूटा (सबसँ सुन्दर) लड़का c ^h ot dūta (səbsə̃ sundə̃r) ləɽka young two-CLA (most.than-POSTP handsome) boy 'young two (most handsome) boys'	0
छोट (सबसँ सुन्दर) दूटा लड़का c ^h ot (səbsə̃ sundə̃r) dūta ləɽka young (most.than-POSTP handsome) two-CLA boy 'young (most handsome) two boys'	1
(सबसँ सुन्दर) छोट दूटा लड़का (səbsə̃ sundə̃r) c ^h ot dūta ləɽka (most.than-POSTP handsome) young two-CLA boy '(most handsome) young two boys'	2
(सबसँ सुन्दर) दूटा छोट लड़का (səbsə̃ sundə̃r) dūta c ^h ot ləɽka (most.than-POSTP handsome) two-CLA young boy '(most handsome) two young boys'	3
<i>Odia</i>	
Orders	Occurrence
दुइति (सबसँ सुन्दर) लड़का dūiti (səbut ^h aru sundə̃rə) c ^h oto puo two-CLA (all.than-POSTP handsome) young boy 'two (most handsome) young boys'	8
दुइति लड़का (सबसँ सुन्दर) लड़का dūiti c ^h oto (səbut ^h aru sundə̃rə) puo two-CLA young (all.than-POSTP handsome) boy 'two young (most handsome) boys'	4
लड़का दुइति (सबसँ सुन्दर) लड़का c ^h oto dūiti (səbut ^h aru sundə̃rə) puo young two-CLA (all.than-POSTP handsome) boy 'young two (most handsome) boys'	1
लड़का (सबसँ सुन्दर) लड़का दुइति लड़का c ^h oto (səbut ^h aru sundə̃rə) dūiti puo young (all.than-POSTP handsome) two-CLA boy 'young (most handsome) two boys'	0
(सबसँ सुन्दर) लड़का लड़का दुइति लड़का (səbut ^h aru sundə̃rə) c ^h oto dūiti puo (all.than-POSTP handsome) young two-CLA boy	1

‘(most handsome) young two boys’	
(ସବୁଠାରୁ ସୁନ୍ଦର) ଦୁଇଟି ଛୋଟ ପୁଅ (sɔbutʰaru sunḍara) ɖuiti cʰoto puo (all.than-POSTP handsome) two-CLA young boy ‘(most handsome) two young boys’	6

Table 16

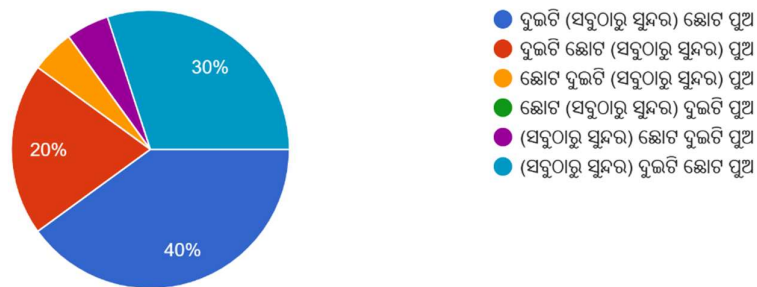
8. Which one is preferable to you? (Treat words in brackets as a single unit.)

20 responses



8. Which one is preferable to you? (Treat words in brackets as a single unit.)

20 responses



5.2.9. physical property vs. physical property

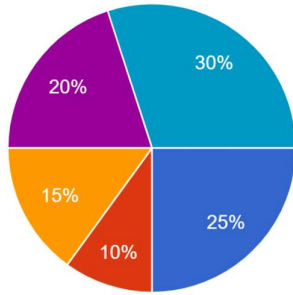
All the adjectives *uzzal* / *uyjal* / *uyjar* / *uyjal* ‘bright’, *siksikija* / *cakcake* / *cuh-cuh* / *cikiciki* ‘shiny’, *gar* / *gar^ho* / *dapdap* / *garho* ‘deep’ in the Tables 17 and 18 belong to the semantic type PHYSICAL PROPERTY (SET B) in Axomiya, Bangla, Maithili and Odia. The order of adjectives for Axomiya is mostly picked as *shiny* > *bright* > *deep*. The most chosen order is bright > shiny > deep in case of Bangla which is different from Axomiya.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
উজ্জ্বল চিকচিকিয়া গাঢ় ৰঙা uzzal siksikija gar rɔŋga bright shiny deep red ‘bright shiny deep red’	5	উজ্জ্বল চকচকে গাঢ় লাল uyjal cakcake gar ^h o lal bright shiny deep red ‘bright shiny deep red’	8
উজ্জ্বল গাঢ় চিকচিকিয়া ৰঙা uzzal gar siksikija rɔŋga bright deep shiny red ‘bright deep shiny red’	2	গাঢ় উজ্জ্বল চকচকে লাল gar ^h o uyjal cakcake lal deep bright shiny red ‘deep bright shiny red’	5
গাঢ় উজ্জ্বল চিকচিকিয়া ৰঙা gar uzzal siksikija rɔŋga deep bright shiny red ‘deep bright shiny red’	3	উজ্জ্বল গাঢ় চকচকে লাল uyjal gar ^h o cakcake lal bright deep shiny red ‘bright deep shiny red’	3
গাঢ় চিকচিকিয়া উজ্জ্বল ৰঙা gar siksikija uzzal rɔŋga deep shiny bright red ‘deep shiny bright red’	0	গাঢ় চকচকে উজ্জ্বল লাল gar ^h o cakcake uyjal lal deep shiny bright red ‘deep shiny bright red’	1
চিকচিকিয়া গাঢ় উজ্জ্বল ৰঙা siksikija gar uzzal rɔŋga shiny deep bright red ‘shiny deep bright red’	4	চকচকে গাঢ় উজ্জ্বল লাল cakcake gar ^h o uyjal lal shiny deep bright red ‘shiny deep bright red’	2
চিকচিকিয়া উজ্জ্বল গাঢ় ৰঙা siksikija uzzal gar rɔŋga shiny bright deep red ‘shiny bright deep red’	6	চকচকে উজ্জ্বল গাঢ় লাল cakcake uyjal gar ^h o lal shiny bright deep red ‘shiny bright deep red’	1

Table 17

9. Which one is preferable to you?

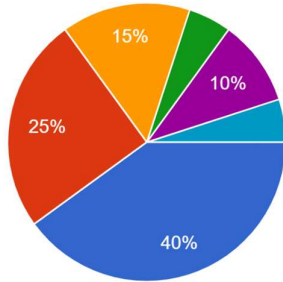
20 responses



- উজ্জ্বল চিকচিকিয়া গাঢ় বঙা
- উজ্জ্বল গাঢ় চিকচিকিয়া বঙা
- গাঢ় উজ্জ্বল চিকচিকিয়া বঙা
- গাঢ় চিকচিকিয়া উজ্জ্বল বঙা
- চিকচিকিয়া গাঢ় উজ্জ্বল বঙা
- চিকচিকিয়া উজ্জ্বল গাঢ় বঙা

9. Which one is preferable to you?

20 responses



- উজ্জ্বল চকচকে গাঢ় লাল
- গাঢ় উজ্জ্বল চকচকে লাল
- উজ্জ্বল গাঢ় চকচকে লাল
- গাঢ় চকচকে উজ্জ্বল লাল
- চকচকে গাঢ় উজ্জ্বল লাল
- চকচকে উজ্জ্বল গাঢ় লাল

Like Axomiya and unlike Bangla, the favoured order of adjectives is *shiny* > *bright* > *deep* in Maithili. Like Bangla, Odia informants mostly chose the order: *bright* > *shiny* > *deep*.

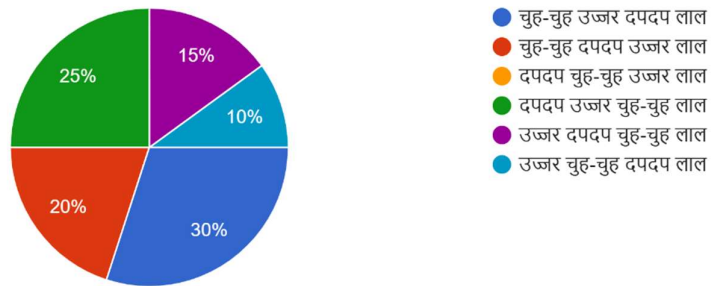
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
चुह-चुह उज्जर दपदप लाल cuh-cuh ujjar d̥əp̥d̥əp lal shiny bright deep red	6	ଉଜ୍ଜ୍ୱଳ ଚିକିଚିକି ଗାଢ଼ ନାଲି uj̥ʝɔɭ cikiciki gaɽ ^h o nali bright shiny deep red	8

‘shiny bright deep red’		‘bright shiny deep red’	
ଚୁହ-ଚୁହ ଦପଦପ ଉଜ୍ଜର ଲାଲ cuh-cuh ḍəpḍəp ujjəɾ lal shiny deep bright red ‘shiny deep bright red’	4	ଉଜ୍ଜର ଗାଢ଼ ଚିକିଚିକି ନାଲି ujjəɾə gɑːʰo cikiciki nali bright deep shiny red ‘bright deep shiny red’	2
ଦପଦପ ଚୁହ-ଚୁହ ଉଜ୍ଜର ଲାଲ ḍəpḍəp cuh-cuh ujjəɾ lal deep shiny bright red ‘deep shiny bright red’	0	ଚିକିଚିକି ଉଜ୍ଜର ଗାଢ଼ ନାଲି cikiciki ujjəɾə gɑːʰo nali shiny bright deep red ‘shiny bright deep red’	7
ଦପଦପ ଉଜ୍ଜର ଚୁହ-ଚୁହ ଲାଲ ḍəpḍəp ujjəɾ cuh-cuh lal deep bright shiny red ‘deep bright shiny red’	5	ଚିକିଚିକି ଗାଢ଼ ଉଜ୍ଜର ନାଲି cikiciki gɑːʰo ujjəɾə nali shiny deep bright red ‘shiny deep bright red’	0
ଉଜ୍ଜର ଦପଦପ ଚୁହ-ଚୁହ ଲାଲ ujjəɾ ḍəpḍəp cuh-cuh lal bright deep shiny red ‘bright deep shiny red’	3	ଗାଢ଼ ଚିକିଚିକି ଉଜ୍ଜର ନାଲି gɑːʰo cikiciki ujjəɾə nali deep shiny bright red ‘deep shiny bright red’	1
ଉଜ୍ଜର ଚୁହ-ଚୁହ ଦପଦପ ଲାଲ ujjəɾ cuh-cuh ḍəpḍəp lal bright shiny deep red ‘bright shiny deep red’	2	ଗାଢ଼ ଉଜ୍ଜର ଚିକିଚିକି ନାଲି gɑːʰo ujjəɾə cikiciki nali deep bright shiny red ‘deep bright shiny red’	2

Table 18

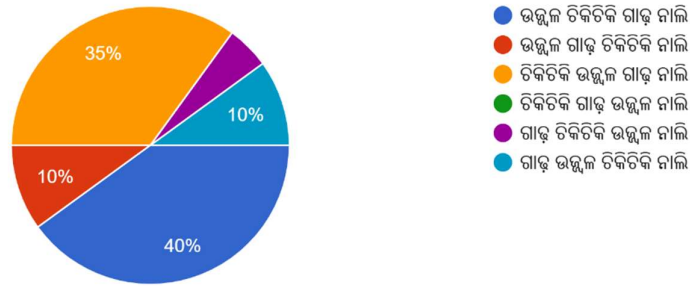
9. Which one is preferable to you?

20 responses



9. Which one is preferable to you?

20 responses



5.2.10. value vs. value

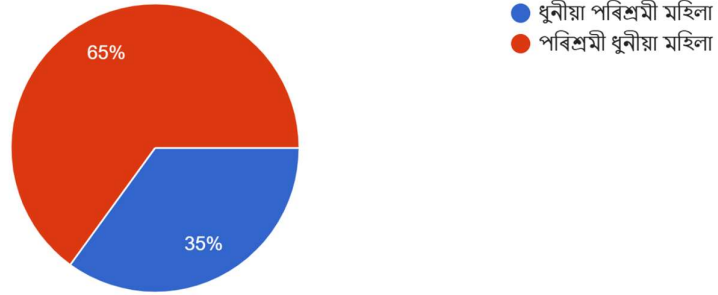
Both the adjectives *ḍhunija / funḍori / sunḍri / sunḍora* ‘beautiful’ and *porisrāmi / porisromi / pārisrāmi / porisromi* ‘hard-working’ pertain to the semantic type VALUE (SET A). The preferred order of adjectives is *hard-working* > *beautiful* in all four selected languages.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
<p>ଧୁନୀୟା ପରିଶ୍ରମୀ ମହିଳା ḍ^hunija porisrāmi mohila beautiful hard-working lady ‘beautiful hard-working lady’</p>	7	<p>ସୁନ୍ଦରୀ ପରିଶ୍ରମୀ ମହିଳା funḍori porisromi mohila beautiful hard-working lady ‘beautiful hard-working lady’</p>	7
<p>ପରିଶ୍ରମୀ ଧୁନୀୟା ମହିଳା porisrāmi ḍ^hunija mohila hard-working beautiful lady ‘hard-working beautiful lady’</p>	13	<p>ପରିଶ୍ରମୀ ସୁନ୍ଦରୀ ମହିଳା porisromi funḍori mohila hard-working beautiful lady ‘hard-working beautiful lady’</p>	13

Table 19

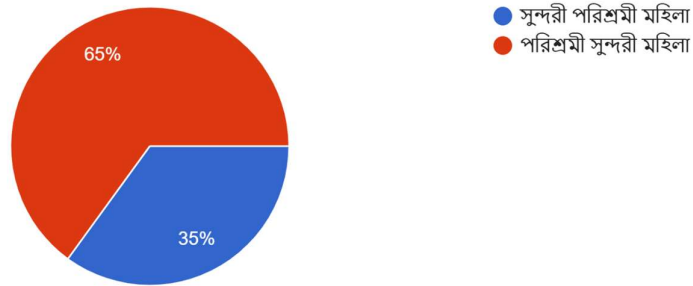
10. Which one is preferable to you?

20 responses



10. Which one is preferable to you?

20 responses



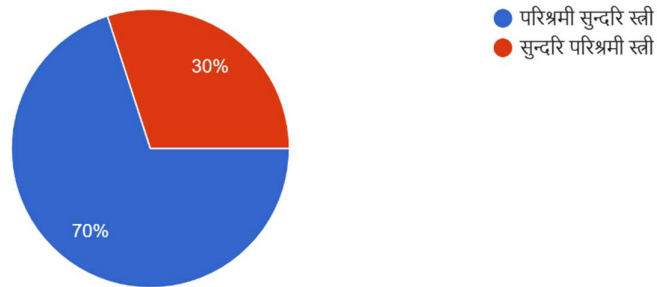
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
पबिश्रमी सुन्दरि स्त्री pərisrəmi sundri st̪ri hard-working beautiful lady 'hard-working beautiful lady'	14	ସୁନ୍ଦର ପରିश୍ରମୀ ମହିଳା sund̪ərə porisromi mohi ɑ beautiful hard-working lady 'beautiful hard-working lady'	9

सुन्दरि परिश्रमी स्त्री sundri p̄ris̄r̄mi st̄ri beautiful hard-working lady 'beautiful hard-working lady'	6	ପରିଶ୍ରମୀ ସୁନ୍ଦର ମହିଳା porisromi sund̄ara mohil̄a hard-working beautiful lady 'hard-working beautiful lady'	11
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Table 20

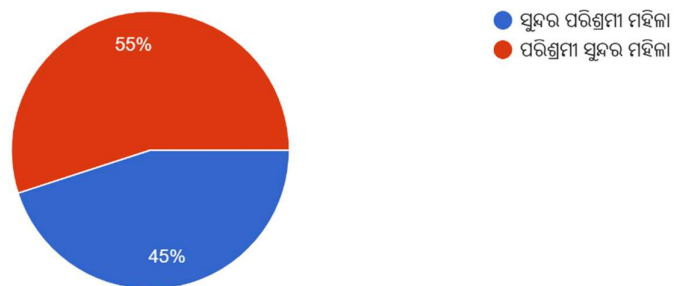
10. Which one is preferable to you?

20 responses



10. Which one is preferable to you?

20 responses



5.2.11. value vs. age vs. physical property

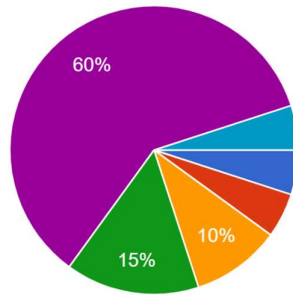
Tables 21 and 22 possess three adjectives *ɔxar / ɔkejo / bekar / ɔekar /* ‘useless’, *puroni / purono / puran / puruᅇa* ‘old’ and *khali / k^hali / khali / k^hali* ‘empty’ in Axomiya, Bangla, Maithili and Odia. They come under the semantic types VALUE (SET A), AGE (SET A) and PHYSICAL PROPERTY (SET B) respectively. While they are placed in six different orders, it is examined that most informants opted for the order AGE > VALUE > PHYSICAL PROPERTY over others in case of Axomiya, Bangla and Odia.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
অসাব পুৰণি খালী বাকচ <i>ɔxar puroni k^hali bakɔs</i> useless old empty box ‘useless old empty box’	1	অকেজো পুরনো খালি বাক্স <i>ɔkejo purono k^hali bakʃo</i> useless old empty box ‘useless old empty box’	5
অসাব খালী পুৰণি বাকচ <i>ɔxar k^hali puroni bakɔs</i> useless empty old box ‘useless empty old box’	1	অকেজো খালি পুরনো বাক্স <i>ɔkejo k^hali purono bakʃo</i> useless empty old box ‘useless empty old box’	3
খালী অসাব পুৰণি বাকচ <i>khali ɔxar puroni bakɔs</i> empty useless old box ‘empty useless old box’	2	পুরনো অকেজো খালি বাক্স <i>purono ɔkejo k^hali bakʃo</i> old useless empty box ‘old useless empty box’	6
খালী পুৰণি অসাব বাকচ <i>k^hali puroni ɔxar bakɔs</i> empty old useless box ‘empty old useless box’	3	খালি পুরনো অকেজো বাক্স <i>k^hali purono ɔkejo bakʃo</i> empty old useless box ‘empty old useless box’	2
পুৰণি অসাব খালী বাকচ <i>puroni ɔxar k^hali bakɔs</i> old useless empty box ‘old useless empty box’	12	খালি অকেজো পুরনো বাক্স <i>k^hali ɔkejo purono bakʃo</i> empty useless old box ‘empty useless old box’	1
পুৰণি খালী অসাব বাকচ <i>puroni khali ɔxar bakɔs</i> old empty useless box ‘old empty useless box’	1	পুরনো খালি অকেজো বাক্স <i>purono k^hali ɔkejo bakʃo</i> old empty useless box ‘old empty useless box’	3

Table 21

11. Which one is preferable to you?

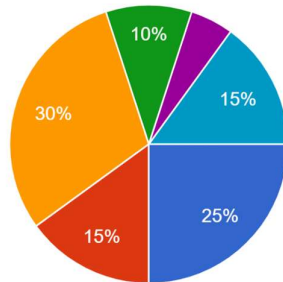
20 responses



- অসার পুৰণি খালী বাকচ
- অসার খালী পুৰণি বাকচ
- খালী অসার পুৰণি বাকচ
- খালী পুৰণি অসার বাকচ
- পুৰণি অসার খালী বাকচ
- পুৰণি খালী অসার বাকচ

11. Which one is preferable to you?

20 responses



- অকেজো পুরনো খালি বাক্স
- অকেজো খালি পুরনো বাক্স
- পুরনো অকেজো খালি বাক্স
- খালি পুরনো অকেজো বাক্স
- খালি অকেজো পুরনো বাক্স
- পুরনো খালি অকেজো বাক্স

Maithili response for the same is quite different. The most opted ordering is VALUE > AGE > PHYSICAL PROPERTY. Strikingly, Odia possesses two favoured orders for the given adjectives. One order (AGE > VALUE > PHYSICAL PROPERTY) matches with Axomiya and Bangla. Another preferred order is similar to the Maithili one (VALUE > AGE > PHYSICAL PROPERTY).

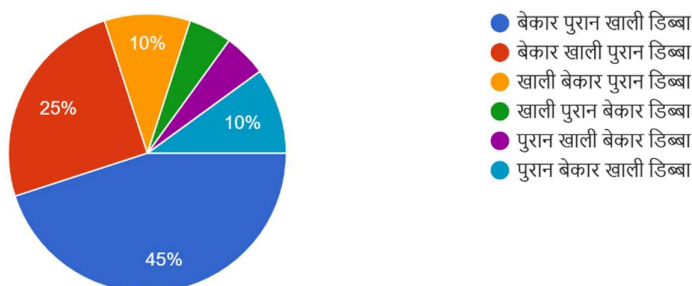
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence

ବେକାର ପୁରାନ ଖାଲୀ ଡିବ୍ବା bekar puran k ^h ali dibba useless old empty box 'useless old empty box'	9	ଅଦରକାରୀ ପୁରୁଣା ଖାଲି ବାକ୍ସ adarkari puruṇa k ^h ali bakso useless old empty box 'useless old empty box'	7
ବେକାର ଖାଲୀ ପୁରାନ ଡିବ୍ବା bekar k ^h ali puran dibba useless empty old box 'useless empty old box'	5	ଅଦରକାରୀ ଖାଲି ପୁରୁଣା ବାକ୍ସ adarkari k ^h ali puruṇa bakso useless empty old box 'useless empty old box'	2
ଖାଲୀ ବେକାର ପୁରାନ ଡିବ୍ବା k ^h ali bekar puran dibba empty useless old box 'empty useless old box'	2	ଖାଲି ଅଦରକାରୀ ପୁରୁଣା ବାକ୍ସ k ^h ali adarkari puruṇa bakso empty useless old box 'empty useless old box'	3
ଖାଲୀ ପୁରାନ ବେକାର ଡିବ୍ବା k ^h ali puran bekar dibba empty old useless box 'empty old useless box'	1	ଖାଲି ପୁରୁଣା ଅଦରକାରୀ ବାକ୍ସ k ^h ali puruṇa adarkari bakso empty old useless box 'empty old useless box'	1
ପୁରାନ ଖାଲୀ ବେକାର ଡିବ୍ବା puran k ^h ali bekar dibba old empty useless box 'old empty useless box'	1	ପୁରୁଣା ଖାଲି ଅଦରକାରୀ ବାକ୍ସ puruṇa k ^h ali adarkari bakso old empty useless box 'old empty useless box'	0
ପୁରାନ ବେକାର ଖାଲୀ ଡିବ୍ବା puran bekar k ^h ali dibba old useless empty box 'old useless empty box'	2	ପୁରୁଣା ଅଦରକାରୀ ଖାଲି ବାକ୍ସ puruṇa adarkari k ^h ali bakso old useless empty box 'old useless empty box'	7

Table 22

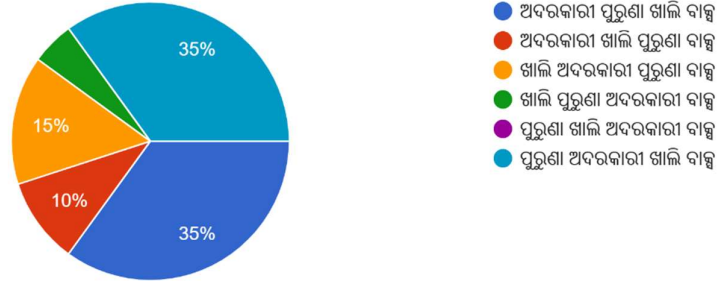
11. Which one is preferable to you?

20 responses



- ବେକାର ପୁରାନ ଖାଲୀ ଡିବ୍ବା
- ବେକାର ଖାଲୀ ପୁରାନ ଡିବ୍ବା
- ଖାଲୀ ବେକାର ପୁରାନ ଡିବ୍ବା
- ଖାଲୀ ପୁରାନ ବେକାର ଡିବ୍ବା
- ପୁରାନ ଖାଲୀ ବେକାର ଡିବ୍ବା
- ପୁରାନ ବେକାର ଖାଲୀ ଡିବ୍ବା

11. Which one is preferable to you?
20 responses



5.2.12. value vs. physical property

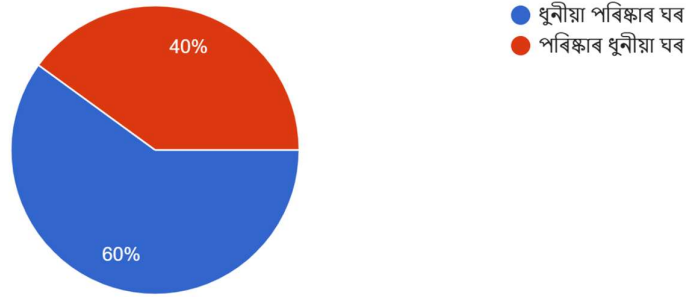
Adjectives *ḍhuniya* / *ḥundḍor* / *nik* / *sundḍoro* ‘beautiful’ and *poriskar* / *poriḥkar* / *saph-suṭhra* / *sḍp^ha* ‘clean’ are placed in two orders in Bangla. These are related to the semantic types VALUE (SET A) and PHYSICAL PROPERTY (SET B) singly. Of 20 Axomiya informants, 12 responded to the semantic order VALUE > PHYSICAL PROPERTY. In opposition to Axomiya, 13 Bangla informants out of 20 responded to the order PHYSICAL PROPERTY > VALUE, not vice versa.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
ଧୁନୀୟା ପରିଷ୍କାର ଘର <i>ḍhuniya poriskar ghḍr</i> beautiful clean room ‘beautiful clean room’	12	ସୁନ୍ଦର ପରିଷ୍କାର ଘର <i>ḥundḍor poriḥkar ghḍr</i> beautiful clean room ‘beautiful clean room’	7
ପରିଷ୍କାର ଧୁନୀୟା ଘର <i>poriskar ḍhuniya ghḍr</i> clean beautiful room ‘clean beautiful room’	8	ପରିଷ୍କାର ସୁନ୍ଦର ଘର <i>poriḥkar ḥundḍor ghḍr</i> clean beautiful room ‘clean beautiful room’	13

Table 23

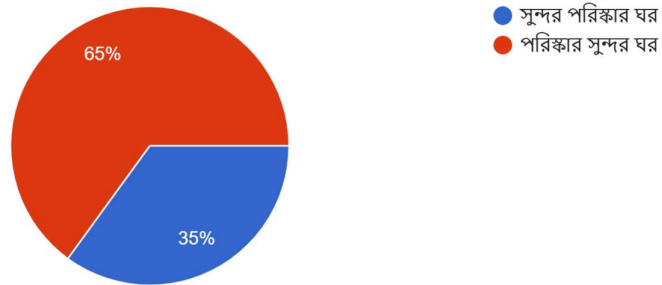
12. Which one is preferable to you?

20 responses



12. Which one is preferable to you?

20 responses



Like Bangla, the most picked semantic order in Maithili is PHYSICAL PROPERTY > VALUE. Again, Odia owns two preferred semantic orders. One is similar to Axomiya and another matches with Bangla and Maithili.

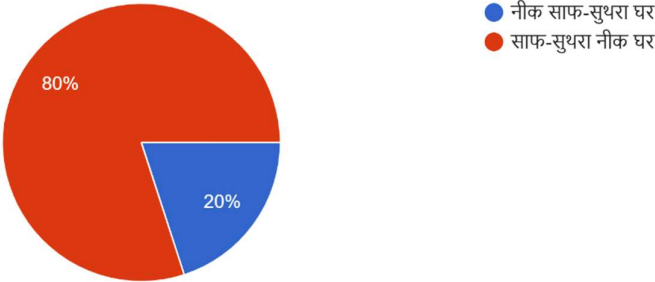
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
ନୀକ୍ ସାଫ-ସୁଥରା ଘର nik sap ^h -su ^h ra g ^h ar beautiful neat-clean house 'beautiful clean house'	4	ସୁନ୍ଦର ସଫା ଘର sundaro sap ^h a g ^h aro beautiful clean room 'beautiful clean room'	10
ସାଫ-ସୁଥରା ନୀକ୍ ଘର	16	ସଫା ସୁନ୍ଦର ଘର	10

sap ^h -su ^h ra nik g ^h ar neat-clean beautiful house 'clean beautiful house'		sap ^h a sund ^o ro g ^h oro clean beautiful room 'clean beautiful room'	
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Table 24

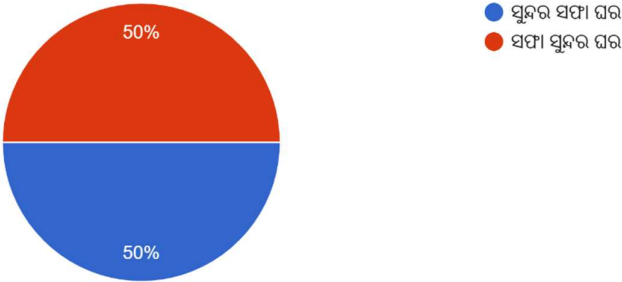
12. Which one is preferable to you?

20 responses



12. Which one is preferable to you?

20 responses



5.2.13. dimension vs. value vs. qualification

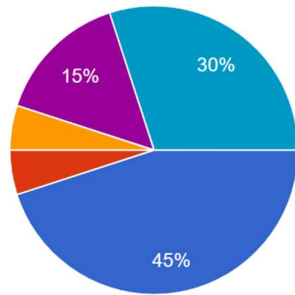
Tables 25 and 26 exhibit that there are three adjectives *okho* / *lamba* / *nəmgər* / *lamba* ‘tall’, *ḍhunija* / *ḍunḍori* / *sundri* / *sundro* ‘beautiful’ and *baṅali* / *baṅali* / *bəṅgali* / *bəṅgali* ‘Bengali’ in Axomiya, Bangla, Maithili and Odia. They are members of the semantic types DIMENSION (SET A), VALUE (SET A) and QUALIFICATION (SET C) serially. Axomiya selects the semantic order DIMENSION > VALUE > QUALIFICATION most. The most favoured order is VALUE > DIMENSION > QUALIFICATION in Bangla differing from Axomiya.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
ওখ ধুনীয়া বাঙালী ছোৱালী ok ^h o ḍhunija baṅali suwali tall beautiful Bengali girl ‘tall beautiful Bengali girl’	9	লম্বা সুন্দরী বাঙালি মেয়ে lamba ḍunḍori baṅali meje tall beautiful Bengali girl ‘tall beautiful Bengali girl’	7
ওখ বাঙালী ধুনীয়া ছোৱালী okho baṅali ḍhunija suwali tall Bengali beautiful girl ‘tall Bengali beautiful girl’	1	সুন্দরী লম্বা বাঙালি মেয়ে ḍunḍori lamba baṅali meje beautiful tall Bengali girl ‘beautiful tall Bengali girl’	11
বাঙালী ওখ ধুনীয়া ছোৱালী baṅali ok ^h o ḍhunija suwali Bengali tall beautiful girl ‘Bengali tall beautiful girl’	1	লম্বা বাঙালি সুন্দরী মেয়ে lamba baṅali ḍunḍori meje tall Bengali beautiful girl ‘tall Bengali beautiful girl’	1
বাঙালী ধুনীয়া ওখ ছোৱালী baṅali ḍhunija ok ^h o suwali Bengali beautiful tall girl ‘Bengali beautiful tall girl’	0	সুন্দরী বাঙালি লম্বা মেয়ে ḍunḍori baṅali lamba meje beautiful Bengali tall girl ‘beautiful Bengali tall girl’	1
ধুনীয়া বাঙালী ওখ ছোৱালী ḍhunija baṅali ok ^h o suwali beautiful Bengali tall girl ‘beautiful Bengali tall girl’	3	বাঙালি লম্বা সুন্দরী মেয়ে baṅali lamba ḍunḍori meje Bengali tall beautiful girl ‘Bengali tall beautiful girl’	0
ধুনীয়া ওখ বাঙালী ছোৱালী ḍhunija ok ^h o baṅali suwali beautiful tall Bengali girl ‘beautiful tall Bengali girl’	6	বাঙালি সুন্দরী লম্বা মেয়ে baṅali ḍunḍori lamba meje Bengali beautiful tall girl ‘Bengali beautiful tall girl’	0

Table 25

13. Which one is preferable to you?

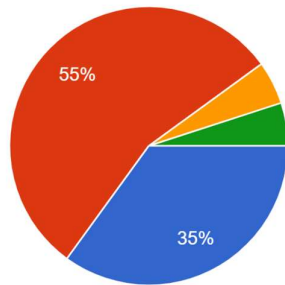
20 responses



- ওখ ধনীয়া বাঙালী ছোৱালী
- ওখ বাঙালী ধনীয়া ছোৱালী
- বাঙালী ওখ ধনীয়া ছোৱালী
- বাঙালী ধনীয়া ওখ ছোৱালী
- ধনীয়া বাঙালী ওখ ছোৱালী
- ধনীয়া ওখ বাঙালী ছোৱালী

13. Which one is preferable to you?

20 responses



- লম্বা সুন্দরী বাঙালি মেয়ে
- সুন্দরী লম্বা বাঙালি মেয়ে
- লম্বা বাঙালি সুন্দরী মেয়ে
- সুন্দরী বাঙালি লম্বা মেয়ে
- বাঙালি লম্বা সুন্দরী মেয়ে
- বাঙালি সুন্দরী লম্বা মেয়ে

Fascinatingly, Maithili data shows that there are four favoured semantic orders. The first one (DIMENSION > VALUE > QUALIFICATION) matches with Axomiya and Odia. The second one (VALUE > DIMENSION > QUALIFICATION) has a similarity with the Bangla one. The rest are QUALIFICATION > VALUE > DIMENSION and QUALIFICATION > DIMENSION > VALUE. Like Axomiya and Maithili, Odia also possesses the most opted order DIMENSION > VALUE > QUALIFICATION.

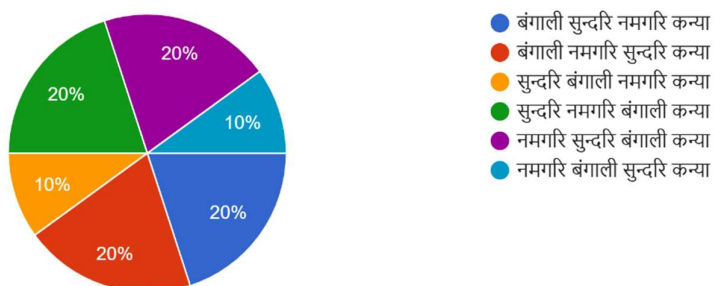
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence

ବଙ୍ଗାଳୀ ସୁନ୍ଦରୀ ନମଗରୀ କନ୍ୟା bəŋgali sundri nəmgəri kənnija Bengali beautiful tall girl ‘Bengali beautiful tall girl’	4	ଲମ୍ବା ସୁନ୍ଦରୀ ବଙ୍ଗାଳୀ ଝିଅ lamba sundaro bəŋgali jʰijo tall beautiful Bengali girl ‘tall beautiful Bengali girl’	12
ବଙ୍ଗାଳୀ ନମଗରୀ ସୁନ୍ଦରୀ କନ୍ୟା bəŋgali nəmgəri sundri kənnija Bengali tall beautiful girl ‘Bengali tall beautiful girl’	4	ଲମ୍ବା ବଙ୍ଗାଳୀ ସୁନ୍ଦରୀ ଝିଅ lamba bəŋgali sundaro jʰijo tall Bengali beautiful girl ‘tall Bengali beautiful girl’	0
ସୁନ୍ଦରୀ ବଙ୍ଗାଳୀ ନମଗରୀ କନ୍ୟା sundri bəŋgali nəmgəri kənnija beautiful Bengali tall girl ‘beautiful Bengali tall girl’	2	ବଙ୍ଗାଳୀ ଲମ୍ବା ସୁନ୍ଦରୀ ଝିଅ bəŋgali lamba sundaro jʰijo Bengali tall beautiful girl ‘Bengali tall beautiful girl’	0
ସୁନ୍ଦରୀ ନମଗରୀ ବଙ୍ଗାଳୀ କନ୍ୟା sundri nəmgəri bəŋgali kənnija beautiful tall Bengali girl ‘beautiful tall Bengali girl’	4	ବଙ୍ଗାଳୀ ସୁନ୍ଦରୀ ଲମ୍ବା ଝିଅ bəŋgali sundaro lamba jʰijo Bengali beautiful tall girl ‘Bengali beautiful tall girl’	0
ନମଗରୀ ସୁନ୍ଦରୀ ବଙ୍ଗାଳୀ କନ୍ୟା nəmgəri sundri bəŋgali kənnija tall beautiful Bengali girl ‘tall beautiful Bengali girl’	4	ସୁନ୍ଦରୀ ବଙ୍ଗାଳୀ ଲମ୍ବା ଝିଅ sundaro bəŋgali lamba jʰijo beautiful Bengali tall girl ‘beautiful Bengali tall girl’	3
ନମଗରୀ ବଙ୍ଗାଳୀ ସୁନ୍ଦରୀ କନ୍ୟା nəmgəri bəŋgali sundri kənnija tall Bengali beautiful girl ‘tall Bengali beautiful girl’	2	ସୁନ୍ଦରୀ ଲମ୍ବା ବଙ୍ଗାଳୀ ଝିଅ sundaro lamba bəŋgali jʰijo beautiful tall Bengali girl ‘beautiful tall Bengali girl’	5

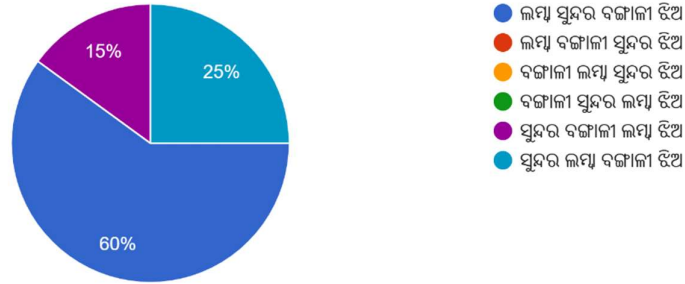
Table 26

13. Which one is preferable to you?

20 responses



13. Which one is preferable to you?
20 responses



5.2.14. human propensity vs. human propensity vs. age

There are adjectives *ḍusto / ḍustu / ukathi / ḍusto* ‘naughty’, *biroḱṭikar / biroḱṭikar / tunukah / biroḱṭikaro* ‘annoying’ and *c^hotto / xaru / c^hot / c^hoto* ‘little’ in Axomiya, Bangla, Maithili and Odia. The first two adjectives are affiliated to the semantic type HUMAN PROPENSITY (SET B) and the last one is incorporated in the semantic type AGE (SET A). Notably, it is found that there are two favoured orders of adjectives in Axomiya. These are HUMAN PROPENSITY (annoying) > HUMAN PROPENSITY (naughty) > AGE and HUMAN PROPENSITY (naughty) > HUMAN PROPENSITY (annoying) > AGE. Interestingly, the two adjectives *naughty* and *annoying* belonging to the semantic type HUMAN PROPENSITY appear before the semantic type AGE in both the semantic orders. Most Bangla informants responded to the ordering AGE > HUMAN PROPENSITY (naughty) > HUMAN PROPENSITY (annoying) deviating from the semantic orders of Axomiya.

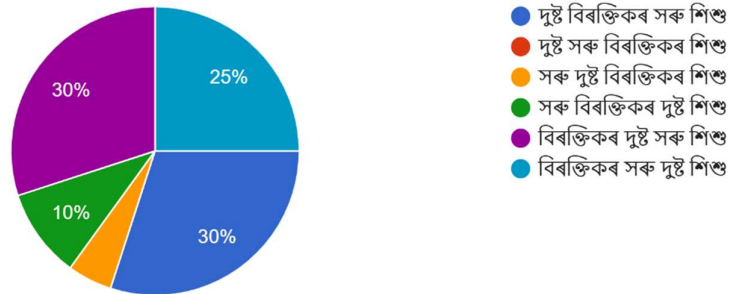
<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
ଦୁଷ୍ଟ ବିରକ୍ତିକର ସରୁ ଶିଶୁ ḍusto biroḱṭikar xaru xixu naughty annoying little child ‘naughty annoying little child’	6	ଦୁଷ୍ଟ ବିରକ୍ତିକର ଛୋଟ ବାଚ୍ଛା ḍustu biroḱṭikar c ^h otto bacca naughty annoying little child ‘naughty annoying little child’	4
ଦୁଷ୍ଟ ସରୁ ବିରକ୍ତିକର ଶିଶୁ	0	ଦୁଷ୍ଟ ଛୋଟ ବିରକ୍ତିକର ବାଚ୍ଛା	0

ɖusto xɔru birokɖikɔr xixu naughty little annoying child ‘naughty little annoying child’		ɖustu c ^h otto birokɖikɔr bacca naughty little annoying child ‘naughty little annoying child’	
সৰু দুষ্ট বিৰক্তিকৰ শিশু xɔru ɖusto birokɖikɔr xixu little naughty annoying child ‘little naughty annoying child’	1	বিৰক্তিকৰ দুষ্ট ছোট্ট বাচ্চা birokɖikɔr ɖustu c ^h otto bacca annoying naughty little child ‘annoying naughty little child’	4
সৰু বিৰক্তিকৰ দুষ্ট শিশু xɔru birokɖikɔr ɖusto xixu little annoying naughty child ‘little annoying naughty child’	2	ছোট্ট দুষ্ট বিৰক্তিকৰ বাচ্চা c ^h otto ɖustu birokɖikɔr bacca little naughty annoying child ‘little naughty annoying child’	6
বিৰক্তিকৰ দুষ্ট সৰু শিশু birokɖikɔr ɖusto xɔru xixu annoying naughty little child ‘annoying naughty little child’	6	ছোট্ট বিৰক্তিকৰ দুষ্ট বাচ্চা c ^h otto birokɖikɔr ɖustu bacca little annoying naughty child ‘little annoying naughty child’	2
বিৰক্তিকৰ সৰু দুষ্ট শিশু birokɖikɔr xɔru ɖusto xixu annoying little naughty child ‘annoying little naughty child’	5	বিৰক্তিকৰ ছোট্ট দুষ্ট বাচ্চা birokɖikɔr c ^h otto ɖustu bacca annoying little naughty child ‘annoying little naughty child’	4

Table 27

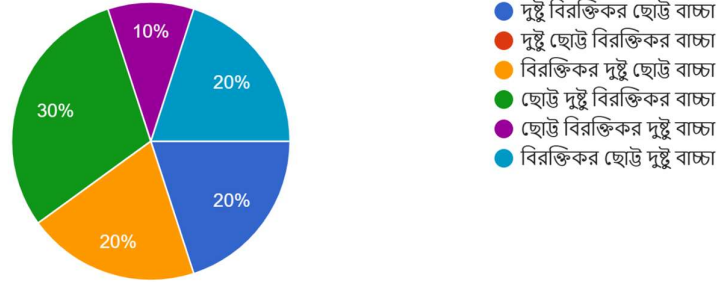
14. Which one is preferable to you?

20 responses



14. Which one is preferable to you?

20 responses



In the same manner as Bangla, the preferred semantic order of Maithili is AGE > HUMAN PROPENSITY (naughty) > HUMAN PROPENSITY (annoying). Like one of the preferred semantic orders of Axomiya, Odia owns the most selected semantic order as HUMAN PROPENSITY (annoying) > HUMAN PROPENSITY (naughty) > AGE.

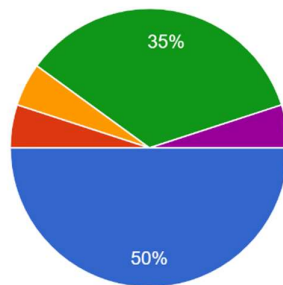
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
छोट उकाठी तुनुकाह नेना c ^h ot ukat ^h i t̪unukah nəina little naughty annoying child 'little naughty annoying child'	10	ଦୁଷ୍ଟ ବିରକ୍ତିକର ଛୋଟ ପିଲା ḍuṣṭo birakṭikaro c ^h oto pila naughty annoying little child 'naughty annoying little child'	4
छोट तुनुकाह उकाठी नेना c ^h ot t̪unukah ukat ^h i nəina little annoying naughty child 'little annoying naughty child'	1	ଦୁଷ୍ଟ ଛୋଟ ବିରକ୍ତିକର ପିଲା ḍuṣṭo c ^h oto birakṭikar pila naughty little annoying child 'naughty little annoying child'	1
तुनुकाह छोट उकाठी नेना t̪unukah c ^h ot ukat ^h i nəina annoying little naughty child 'annoying little naughty child'	1	ଛୋଟ ଦୁଷ୍ଟ ବିରକ୍ତିକର ପିଲା c ^h oto ḍuṣṭo birakṭikar pila little naughty annoying child 'little naughty annoying child'	2
तुनुकाह उकाठी छोट नेना t̪unukah ukat ^h i c ^h ot nəina annoying naughty little child 'annoying naughty little child'	7	ଛୋଟ ବିରକ୍ତିକର ଦୁଷ୍ଟ ପିଲା c ^h oto birakṭikar ḍuṣṭo pila little annoying naughty child 'little annoying naughty child'	3
उकाठी छोट तुनुकाह नेना ukat ^h i c ^h ot t̪unukah nəina naughty little annoying child	1	ବିରକ୍ତିକର ଛୋଟ ଦୁଷ୍ଟ ପିଲା birakṭikar c ^h oto ḍuṣṭo pila annoying little naughty child	4

‘naughty little annoying child’		‘annoying little naughty child’	
उकाठी तुनुकाह छोट नेना ukat ^h i tunukah c ^h ot naina naughty annoying little child ‘naughty annoying little child’	0	ବିରକ୍ତିକର ଦୁଷ୍ଟ ଛୋଟ ପିଲା biraktikar dusto c ^h oto pila annoying naughty little child ‘annoying naughty little child’	6

Table 28

14. Which one is preferable to you?

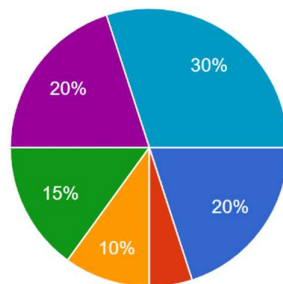
20 responses



- छोट उकाठी तुनुकाह नेना
- छोट तुनुकाह उकाठी नेना
- तुनुकाह छोट उकाठी नेना
- तुनुकाह उकाठी छोट नेना
- उकाठी छोट तुनुकाह नेना
- उकाठी तुनुकाह छोट नेना

14. Which one is preferable to you?

20 responses



- ଦୁଷ୍ଟ ବିରକ୍ତିକର ଛୋଟ ପିଲା
- ଦୁଷ୍ଟ ଛୋଟ ବିରକ୍ତିକର ପିଲା
- ଛୋଟ ଦୁଷ୍ଟ ବିରକ୍ତିକର ପିଲା
- ଛୋଟ ବିରକ୍ତିକର ଦୁଷ୍ଟ ପିଲା
- ବିରକ୍ତିକର ଛୋଟ ଦୁଷ୍ଟ ପିଲା
- ବିରକ୍ତିକର ଦୁଷ୍ଟ ଛୋଟ ପିଲା

5.2.15. human propensity vs. age

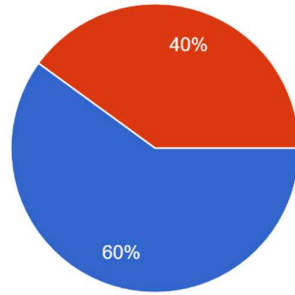
The following tables (29 and 30) display that adjectives *buddhiman* / *budd^himan* / *bud^hiar* / *buddhiman* ‘intelligent’ and *prakṭon* / *prakṭon* / *purv* / *purbotṭon* ‘former’ in the selected languages are allied to the semantic types HUMAN PROPENSITY (SET B) and AGE (SET A). Most informants of Axomiya, Bangla and Maithili responded to the ordering HUMAN PROPENSITY > AGE.

<i>Axomiya</i>	
Orders	Occurrence
(সর্বাধিক বুদ্ধিমান) প্রাক্তন বিজ্ঞানী (xorbādḥik buddhiman) prakṭon biggijāni (most intelligent) former scientist	12
প্রাক্তন (সর্বাধিক বুদ্ধিমান) বিজ্ঞানী prakṭon (xorbādḥik buddhiman) biggijāni (most intelligent) former scientist	8
<i>Bangla</i>	
Orders	Occurrence
(সবচেয়ে বুদ্ধিমান) প্রাক্তন বিজ্ঞানী (ṣobceje budd ^h iman) prakṭon biggæni (all.than-POSTP intelligent) former scientist ‘(most intelligent) former scientist’	13
প্রাক্তন (সবচেয়ে বুদ্ধিমান) বিজ্ঞানী prakṭon (ṣobceje budd ^h iman) biggæni former (all.than-POSTP intelligent) scientist ‘former (most intelligent) scientist’	7

Table 29

15. Which one is preferable to you? (Treat words in brackets as a single unit.)

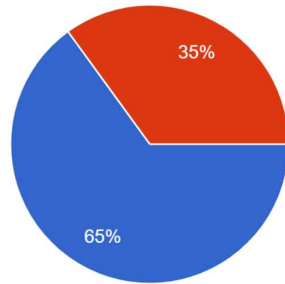
20 responses



- (सर्वाधिक बुद्धिमान) प्राज्ञन विज्ञानी
- प्राज्ञन (सर्वाधिक बुद्धिमान) विज्ञानी

15. Which one is preferable to you? (Treat words in brackets as a single unit.)

20 responses



- (सबचेये बुद्धिमान) प्राज्ञन विज्ञानी
- प्राज्ञन (सबचेये बुद्धिमान) विज्ञानी

Only the Odia data differs in this case in which the semantic order is opposite to the HUMAN PROPENSITY > AGE : AGE > HUMAN PROPENSITY.

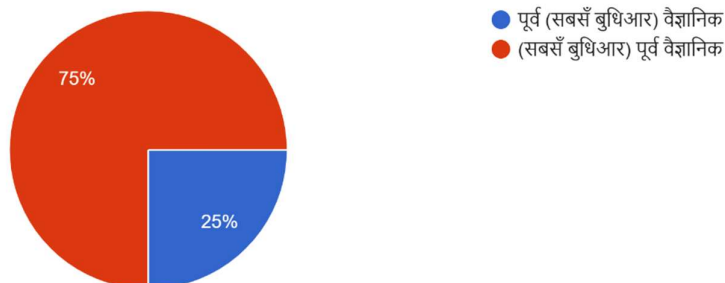
<i>Maithili</i>	
Orders	Occurrence
<p>पूर्व (सबसँ बुधिआर) वैज्ञानिक purv (səbsə̃ buḍʰiar) vɛ̃g̃gijənik former (most.than-POSTP intelligent) scientist</p>	5

‘former (most intelligent) scientist (सबसँ बुधिआर) पूर्व वैज्ञानिक (səbsə̃ bʊd̪hiar) purv və̃ig̪g̪jə̃nik (most.than-POSTP intelligent) former scientist ‘(most intelligent) former scientist’	15
Odia	
Orders	Occurrence
(ସର୍ବାଧିକ ବୁଦ୍ଧିମାନ) ପୂର୍ବତନ ବୈଜ୍ଞାନିକ (sarbad̪hiko bʊd̪himan) purbot̪nə̃ boig̪g̪ā̃niko (all.more intelligent) former scientist ‘(most intelligent) former scientist’	9
ପୂର୍ବତନ (ସର୍ବାଧିକ ବୁଦ୍ଧିମାନ) ବୈଜ୍ଞାନିକ purbot̪nə̃ (sarbad̪hiko bʊd̪himan) boig̪g̪ā̃niko former (all.more intelligent) scientist ‘former (most intelligent) scientist’	11

Table 30

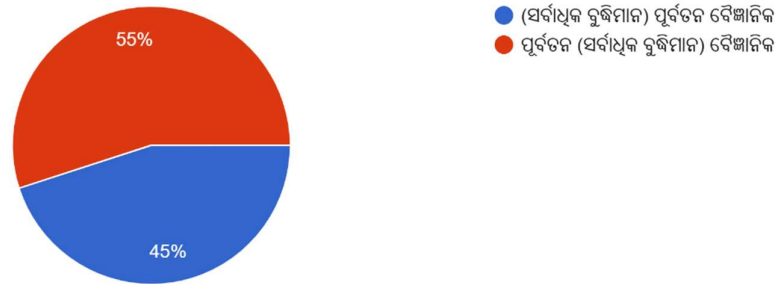
15. Which one is preferable to you? (Treat words in brackets as a single unit.)

20 responses



15. Which one is preferable to you?

20 responses



5.2.16. age vs. value vs. qualification

There are adjectives *prakṭon / prakṭon / purv / purbaṭṭon* ‘former’, *guruṭwopurno / guruṭṭopurno / mahāṭṭvapurṇ / guruṭṭwṇapurṇ* ‘important’ and *bharoṭṭijo / b^haroṭṭijo / bhāṭṭija / bhāroṭṭijo* ‘Indian’ which are linked with the semantic types AGE (SET A), VALUE (SET A) and QUALIFICATION (SET C) in succession. Here two semantic orders are found in case of Axomiya. These are AGE > VALUE > QUALIFICATION and QUALIFICATION > VALUE > AGE. It is quite interesting that the given orders are mirror opposite to each other. The most chosen semantic ordering in Bangla is AGE > VALUE > QUALIFICATION which is similar to one of the orders found in case of Axomiya.

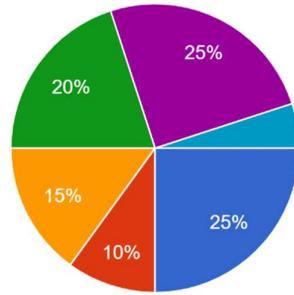
<i>Axomiya</i>	
Orders	Occurrence
প্রাক্তন গুরুত্বপূর্ণ ভারতীয় অফিছর <i>prakṭon guruṭwopurno bharoṭṭijo ophisar</i> former important Indian official ‘former important Indian official’	5
প্রাক্তন ভারতীয় গুরুত্বপূর্ণ অফিছর <i>prakṭon bharoṭṭijo guruṭwopurno ophisar</i> former Indian important official ‘former Indian important official’	2
গুরুত্বপূর্ণ প্রাক্তন ভারতীয় অফিছর <i>guruṭwopurno prakṭon bharoṭṭijo ophisar</i> important former Indian official ‘important former Indian official’	3

গুরুত্বপূর্ণ ভারতীয় প্রাক্তন অফিছৰ gurutwopurno bharotjjo prakton ophisar important Indian former official 'important Indian former official'	4
ভারতীয় গুরুত্বপূর্ণ প্রাক্তন অফিছৰ bharotjjo gurutwopurno prakton ophisar Indian important former official 'Indian important former official'	5
ভারতীয় প্রাক্তন গুরুত্বপূর্ণ অফিছৰ bharotjjo prakton gurutwopurno ophisar Indian former important official 'Indian former important official'	1
Bangla	
Orders	Occurrence
প্রাক্তন গুরুত্বপূর্ণ ভারতীয় আধিকারিক prakton guruttopurno bharotjjo adhikarik former important Indian official 'former important Indian official'	5
প্রাক্তন ভারতীয় গুরুত্বপূর্ণ আধিকারিক prakton bharotjjo guruttopurno adhikarik former Indian important official 'former Indian important official'	3
গুরুত্বপূর্ণ প্রাক্তন ভারতীয় আধিকারিক guruttopurno prakton bharotjjo adhikarik important former Indian official 'important former Indian official'	4
গুরুত্বপূর্ণ ভারতীয় প্রাক্তন আধিকারিক guruttopurno bharotjjo prakton adhikarik important Indian former official 'important Indian former official'	1
ভারতীয় গুরুত্বপূর্ণ প্রাক্তন আধিকারিক bharotjjo guruttopurno prakton adhikarik Indian important former official 'Indian important former official'	3
ভারতীয় প্রাক্তন গুরুত্বপূর্ণ আধিকারিক bharotjjo prakton guruttopurno adhikarik Indian former important official 'Indian former important official'	4

Table 31

16. Which one is preferable to you?

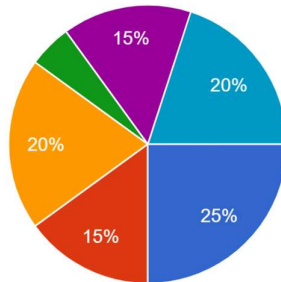
20 responses



- প্রাক্তন গুরুত্বপূর্ণ ভাৰতীয় অফিছৰ
- প্রাক্তন ভাৰতীয় গুরুত্বপূৰ্ণ অফিছৰ
- গুরুত্বপূৰ্ণ প্রাক্তন ভাৰতীয় অফিছৰ
- গুরুত্বপূৰ্ণ ভাৰতীয় প্রাক্তন অফিছৰ
- ভাৰতীয় গুরুত্বপূৰ্ণ প্রাক্তন অফিছৰ
- ভাৰতীয় প্রাক্তন গুরুত্বপূৰ্ণ অফিছৰ

16. Which one is preferable to you?

20 responses



- প্রাক্তন গুরুত্বপূৰ্ণ ভাৰতীয় আধিকাৰিক
- প্রাক্তন ভাৰতীয় গুরুত্বপূৰ্ণ আধিকাৰিক
- গুরুত্বপূৰ্ণ প্রাক্তন ভাৰতীয় আধিকাৰিক
- গুরুত্বপূৰ্ণ ভাৰতীয় প্রাক্তন আধিকাৰিক
- ভাৰতীয় গুরুত্বপূৰ্ণ প্রাক্তন আধিকাৰিক
- ভাৰতীয় প্রাক্তন গুরুত্বপূৰ্ণ আধিকাৰিক

Like Bangla, AGE > VALUE > QUALIFICATION is the most selected order in Maithili. Distinguishing from the semantic orders examined in Axomiya, Bangla and Maithili, Odia owns a distinct semantic order, i. e., QUALIFICATION > AGE > VALUE.

Orders	Occurrence
<p>पूर्व महत्त्वपूर्ण भारतीय अधिकारी</p> <p>purv mahattvapurn b^hartijə əd^hikari</p> <p>former important Indian official</p>	6

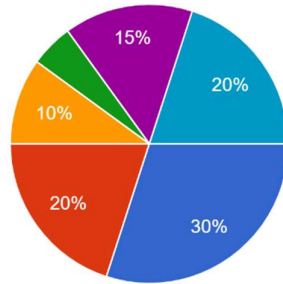
‘former important Indian official’	
पूर्व भारतीय महत्त्वपूर्ण अधिकारी purv b ^h ar ^h ij ^o m ^a h ^a tt ^o apurn ^o ad ^h ikari former Indian important official ‘former Indian important official’	4
भारतीय पूर्व महत्त्वपूर्ण अधिकारी b ^h ar ^h ij ^o purv m ^a h ^a tt ^o apurn ^o ad ^h ikari Indian former important official ‘Indian former important official’	2
भारतीय महत्त्वपूर्ण पूर्व अधिकारी b ^h ar ^h ij ^o m ^a h ^a tt ^o apurn ^o purv ad ^h ikari Indian important former official ‘Indian important former official’	1
महत्त्वपूर्ण भारतीय पूर्व अधिकारी m ^a h ^a tt ^o apurn ^o b ^h ar ^h ij ^o purv ad ^h ikari important Indian former official ‘important Indian former official’	3
महत्त्वपूर्ण पूर्व भारतीय अधिकारी m ^a h ^a tt ^o apurn ^o purv b ^h ar ^h ij ^o ad ^h ikari important former Indian official ‘important former Indian official’	4
<i>Odia</i>	
Orders	Occurrence
पूर्वतन गुरुत्वपूर्ण ଭାରତୀୟ ଅଧିକାରୀ purbot ^o no gurutt ^o apurn ^o b ^h ar ^h ij ^o ad ^h ikari former important Indian official ‘former important Indian official’	4
पूर्वतन ଭାରତୀୟ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଅଧିକାରୀ purbot ^o no b ^h ar ^h ij ^o gurutt ^o apurn ^o ad ^h ikari former Indian important official ‘former Indian important official’	3
ଭାରତୀୟ ପୂର୍ବତନ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଅଧିକାରୀ b ^h ar ^h ij ^o purbot ^o no gurutt ^o apurn ^o ad ^h ikari Indian former important official ‘Indian former important official’	7
ଭାରତୀୟ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ପୂର୍ବତନ ଅଧିକାରୀ b ^h ar ^h ij ^o gurutt ^o apurn ^o purbot ^o no ad ^h ikari Indian important former official ‘Indian important former official’	3

ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଭାରତୀୟ ପୂର୍ବତନ ଅଧିକାରୀ guruttwāpurnḥa bʰarotījjo purbotāno dḥīkari important Indian former official ‘important Indian former official’	1
ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ପୂର୍ବତନ ଭାରତୀୟ ଅଧିକାରୀ guruttwāpurnḥa purbotāno bʰarotījjo dḥīkari important former Indian official ‘important former Indian official’	2

Table 32

16. Which one is preferable to you?

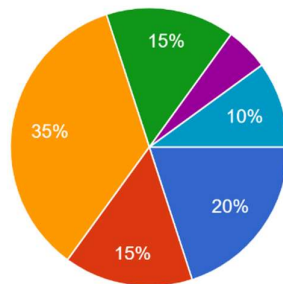
20 responses



- ପୂର୍ବ ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ଭାରତୀୟ ଅଧିକାରୀ
- ପୂର୍ବ ଭାରତୀୟ ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ଅଧିକାରୀ
- ଭାରତୀୟ ପୂର୍ବ ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ଅଧିକାରୀ
- ଭାରତୀୟ ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ପୂର୍ବ ଅଧିକାରୀ
- ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ଭାରତୀୟ ପୂର୍ବ ଅଧିକାରୀ
- ମହତ୍ତ୍ୱପୂର୍ଣ୍ଣ ପୂର୍ବ ଭାରତୀୟ ଅଧିକାରୀ

16. Which one is preferable to you?

20 responses



- ପୂର୍ବତନ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଭାରତୀୟ ଅଧିକାରୀ
- ପୂର୍ବତନ ଭାରତୀୟ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଅଧିକାରୀ
- ଭାରତୀୟ ପୂର୍ବତନ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଅଧିକାରୀ
- ଭାରତୀୟ ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ପୂର୍ବତନ ଅଧିକାରୀ
- ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ଭାରତୀୟ ପୂର୍ବତନ ଅଧିକାରୀ
- ଗୁରୁତ୍ୱପୂର୍ଣ୍ଣ ପୂର୍ବତନ ଭାରତୀୟ ଅଧିକାରୀ

5.2.17. human propensity vs. human propensity

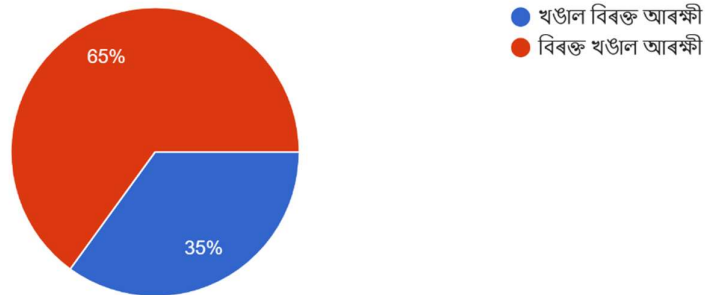
Two adjectives *kʰɔŋgal / rɑgi / kʰisɨajel / kroḍʰiṭo* ‘angry’ and *birɔkto / kʰitkʰite / cəɾbɔiṭ / birɔkto* ‘irritated’ are there in Tables 33 and 34. They both belong to the same semantic type HUMAN PROPENSITY (SET B). It is proved here that two adjectives from the same semantic type can appear within a poly-adjectival NP. The most selected order in all the four languages is *irritated > angry*.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
খঙাল বিৰক্ত আৰক্ষী <i>kʰɔŋgal birɔkto arokkʰi</i> angry irritated police ‘angry irritated police’	7	রাগী খিটখিটে পুলি <i>raɡi kʰitkʰite puli</i> angry irritated police ‘angry irritated police’	8
বিৰক্ত খঙাল আৰক্ষী <i>birɔkto kʰɔŋgal arokkʰi</i> irritated angry police ‘irritated angry police’	13	খিটখিটে রাগী পুলি <i>raɡi kʰitkʰite puli</i> irritated angry police ‘irritated angry police’	12

Table 33

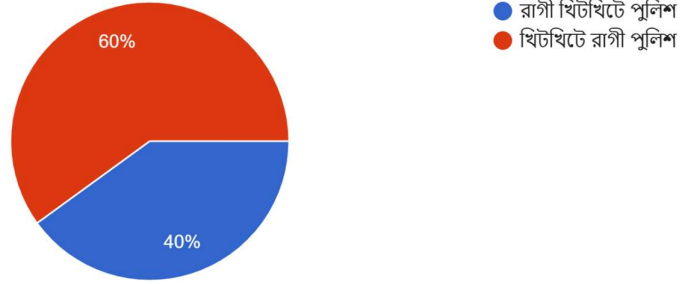
17. Which one is preferable to you?

20 responses



17. Which one is preferable to you?

20 responses

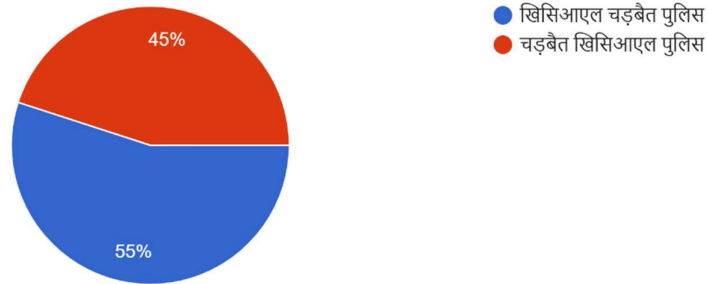


<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
खिसिआएल चड़बैत पुलिस k ^h isiajel cəɽbəiɽ pulis angry irritated police 'angry irritated police'	9	କ୍ରୋଧିତ ବିରକ୍ତ ପୋଲିସ krod ^h itō biraktā polis angry irritated police 'angry irritated police'	4
चड़बैत खिसिआएल पुलिस cəɽbəiɽ k ^h isiajel pulis irritated angry police 'irritated angry police'	11	ବିରକ୍ତ କ୍ରୋଧିତ ପୋଲିସ biraktā krod ^h it pulis irritated angry police 'irritated angry police'	16

Table 34

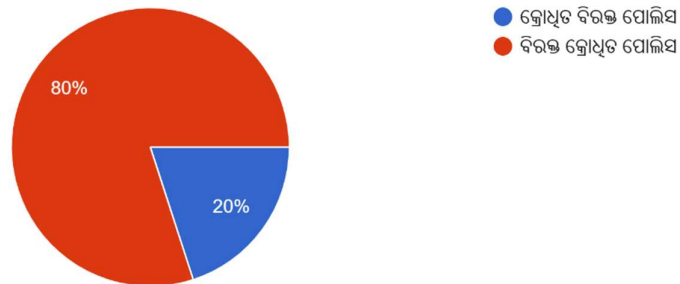
17. Which one is preferable to you?

20 responses



17. Which one is preferable to you?

20 responses



5.2.18. ordinal number vs. value vs. qualification

The adjectives *prathom* / *prothom* / *pratham* / *protham* ‘first’, *zonoprija* / *jonoprija* / *lokprija* / *lokoprija* ‘famous’ and *bharotija* / *bharotijo* / *bhartija* / *bharotijo* ‘Indian’ in Axomiya, Bangla, Miathili and Odia belong to the semantic types ORDINAL NUMBER (SET

C), VALUE (SET A) and QUALIFICATION (SET C) respectively. 8 out of 20 Axomiya informants responded to the semantic order ORDINAL NUMBER > VALUE > QUALIFICATION as the most preferred order. Intriguingly, it is found that two orders are favoured by Bangla informants. The orders are ORDINAL NUMBER > VALUE > QUALIFICATION and ORDINAL NUMBER > QUALIFICATION > VALUE. Among these, the first order is similar to the preferred order of Axomiya.

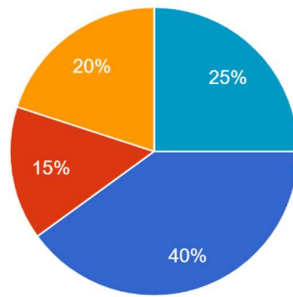
<i>Axomiya</i>	
Orders	Occurrence
প্রথম জনপ্রিয় ভারতীয় (চন্দ্র অরতরণ) prathom zanoprija bharotijja (candro-awaroron) first famous Indian (Moon-landing) 'first famous Indian (Moon-landing)'	8
প্রথম ভারতীয় জনপ্রিয় (চন্দ্র অরতরণ) prathom bharotijja zanoprija (candro-awaroron) first Indian famous (Moon-landing) 'first Indian famous (Moon-landing)'	3
জনপ্রিয় প্রথম ভারতীয় (চন্দ্র অরতরণ) zanoprija prathom bharotijja (candro-awaroron) famous first Indian (Moon-landing) 'famous first Indian (Moon-landing)'	4
জনপ্রিয় ভারতীয় প্রথম (চন্দ্র অরতরণ) zanoprija bharotijja prathom (candro-awaroron) famous Indian first (Moon-landing) 'famous Indian first (Moon-landing)'	0
ভারতীয় জনপ্রিয় প্রথম (চন্দ্র অরতরণ) bharotijja zanoprija prathom (candro-awaroron) Indian famous first (Moon-landing) 'Indian famous first (Moon-landing)'	0
ভারতীয় প্রথম জনপ্রিয় (চন্দ্র অরতরণ) bharotijja prathom zanoprija (candro-awaroron) Indian first famous (Moon-landing) 'Indian first famous (Moon-landing)'	5
<i>Bangla</i>	
Orders	Occurrence
প্রথম জনপ্রিয় ভারতীয় (চন্দ্র-অবতরণ) prathom zanoprija bharotijja (candro abaroron) first famous Indian (Moon-landing) 'first famous Indian (Moon-landing)'	7

প্রথম ভারতীয় জনপ্রিয় (চন্দ্র-অবতরণ) pro ^h om b ^h aro ^t ijo jono ^p rijo (candro abot ^o ron) first Indian famous (Moon-landing) ‘first Indian famous (Moon-landing)’	7
জনপ্রিয় প্রথম ভারতীয় (চন্দ্র-অবতরণ) jono ^p rijo pro ^h om b ^h aro ^t ijo (candro abot ^o ron) ‘famous first Indian (Moon-landing)’ ‘famous first Indian (Moon-landing)’	2
জনপ্রিয় ভারতীয় প্রথম (চন্দ্র-অবতরণ) pro ^h om jono ^p rijo b ^h aro ^t ijo (candro abot ^o ron) famous Indian first (Moon-landing) ‘famous Indian first (Moon-landing)’	0
ভারতীয় জনপ্রিয় প্রথম (চন্দ্র-অবতরণ) b ^h aro ^t ijo jono ^p rijo pro ^h om (candro abot ^o ron) Indian famous first (Moon-landing) ‘Indian famous first (Moon-landing)’	0
ভারতীয় প্রথম জনপ্রিয় (চন্দ্র-অবতরণ) b ^h aro ^t ijo pro ^h om jono ^p rijo (candro abot ^o ron) Indian first famous (Moon-landing) ‘Indian first famous (Moon-landing)’	4

Table 35

18. Which one is preferable to you? (Treat words in brackets as a single unit.)

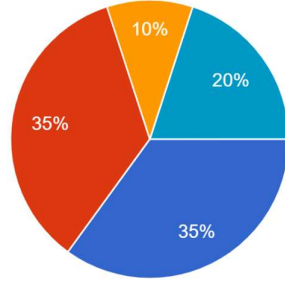
20 responses



- প্রথম জনপ্রিয় ভারতীয় (চন্দ্র অবতরণ)
- প্রথম ভারতীয় জনপ্রিয় (চন্দ্র অবতরণ)
- জনপ্রিয় প্রথম ভারতীয় (চন্দ্র অবতরণ)
- জনপ্রিয় ভারতীয় প্রথম (চন্দ্র অবতরণ)
- ভারতীয় জনপ্রিয় প্রথম (চন্দ্র অবতরণ)
- ভারতীয় প্রথম জনপ্রিয় (চন্দ্র অবতরণ)

18. Which one is preferable to you?

20 responses



- प्रथम जनप्रिय भारतीय (चन्द्र-अवतरण)
- प्रथम भारतीय जनप्रिय (चन्द्र-अवतरण)
- जनप्रिय प्रथम भारतीय (चन्द्र-अवतरण)
- जनप्रिय भारतीय प्रथम (चन्द्र-अवतरण)
- भारतीय जनप्रिय प्रथम (चन्द्र-अवतरण)
- भारतीय प्रथम जनप्रिय (चन्द्र-अवतरण)

The most chosen semantic order in Maithili is quite distinct from the orders found in other languages. It is QUALIFICATION > ORDINAL NUMBER > VALUE. Like Bangla, Odia also possesses two preferred semantic orders. Though one is common which is ORDINAL NUMBER > QUALIFICATION > VALUE. The other one is different. It is ORDINAL NUMBER > VALUE > QUALIFICATION.

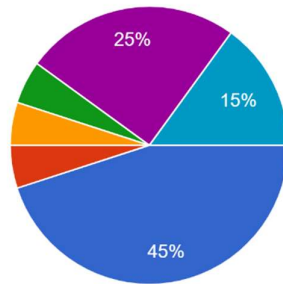
<i>Maithili</i>	
Orders	Occurrence
भारतीय प्रथम लोकप्रिय (चंद्र-अवरोह) b ^h ərɕijə prəṭ ^h əm lokprijə (cəndrə-əvrəh) Indian first famous (Moon-landing) 'Indian first famous (Moon-landing)'	9
भारतीय लोकप्रिय प्रथम (चंद्र-अवरोह) b ^h ərɕijə lokprijə prəṭ ^h əm (cəndrə-əvrəh) Indian famous first (Moon-landing) 'Indian famous first (Moon-landing)'	1
लोकप्रिय भारतीय प्रथम (चंद्र-अवरोह) lokprijə b ^h ərɕijə prəṭ ^h əm (cəndrə-əvrəh) famous Indian first (Moon-landing) 'famous Indian first (Moon-landing)'	1
लोकप्रिय प्रथम भारतीय (चंद्र-अवरोह) lokprijə prəṭ ^h əm b ^h ərɕijə (cəndrə-əvrəh) famous first Indian (Moon-landing) 'famous first Indian (Moon-landing)'	1

प्रथम लोकप्रिय भारतीय (चंद्र-अवरोह) pra ^h am lokprija b ^h ar ^t ija (ca ⁿ dra-avroha) first famous Indian (Moon-landing) ‘first famous Indian (Moon-landing)’	5
प्रथम भारतीय लोकप्रिय (चंद्र-अवरोह) pra ^h am b ^h ar ^t ija lokprija (ca ⁿ dra-avroha) first Indian famous (Moon-landing) ‘first Indian famous (Moon-landing)’	3
Odia	
Orders	Occurrence
ପ୍ରଥମ ଲୋକପ୍ରିୟ ଭାରତୀୟ (ଚନ୍ଦ୍ର ଅବତରଣ) pra ^h ama lokoprija b ^h ara ^t ija (ca ⁿ dra abata ^r ana) first famous Indian (Moon-landing) ‘first famous Indian (Moon-landing)’	6
ପ୍ରଥମ ଭାରତୀୟ ଲୋକପ୍ରିୟ (ଚନ୍ଦ୍ର ଅବତରଣ) pra ^h ama b ^h ara ^t ija lokoprija (ca ⁿ dra abata ^r ana) first Indian famous (Moon-landing) ‘first Indian famous (Moon-landing)’	4
ଭାରତୀୟ ପ୍ରଥମ ଲୋକପ୍ରିୟ (ଚନ୍ଦ୍ର ଅବତରଣ) b ^h ara ^t ija pra ^h ama lokoprija (ca ⁿ dra abata ^r ana) Indian first famous (Moon-landing) ‘Indian first famous (Moon-landing)’	7
ଭାରତୀୟ ଲୋକପ୍ରିୟ ପ୍ରଥମ (ଚନ୍ଦ୍ର ଅବତରଣ) b ^h ara ^t ija lokoprija pra ^h ama (ca ⁿ dra abata ^r ana) Indian famous first (Moon-landing) ‘Indian famous first (Moon-landing)’	0
ଲୋକପ୍ରିୟ ଭାରତୀୟ ପ୍ରଥମ (ଚନ୍ଦ୍ର ଅବତରଣ) lokoprija b ^h ara ^t ija pra ^h ama (ca ⁿ dra abata ^r ana) famous Indian first (Moon-landing) ‘famous Indian first (Moon-landing)’	1
ଲୋକପ୍ରିୟ ପ୍ରଥମ ଭାରତୀୟ (ଚନ୍ଦ୍ର ଅବତରଣ) lokoprija pra ^h ama b ^h ara ^t ija (ca ⁿ dra abata ^r ana) famous first Indian (Moon-landing) ‘famous first Indian (Moon-landing)’	2

Table 36

18. Which one is preferable to you? (Treat words in brackets as a single unit.)

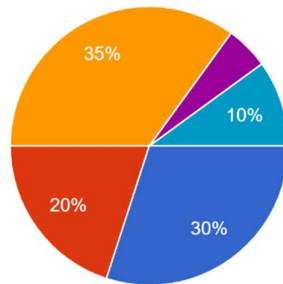
20 responses



- भारतीय प्रथम लोकप्रिय (चंद्र-अवरोह)
- भारतीय लोकप्रिय प्रथम (चंद्र-अवरोह)
- लोकप्रिय भारतीय प्रथम (चंद्र-अवरोह)
- लोकप्रिय प्रथम भारतीय (चंद्र-अवरोह)
- प्रथम लोकप्रिय भारतीय (चंद्र-अवरोह)
- प्रथम भारतीय लोकप्रिय (चंद्र-अवरोह)

18. Which one is preferable to you?

20 responses



- ପ୍ରଥମ ଲୋକପ୍ରିୟ ଭାରତୀୟ (ଚନ୍ଦ୍ର ଅବଚରଣ)
- ପ୍ରଥମ ଭାରତୀୟ ଲୋକପ୍ରିୟ (ଚନ୍ଦ୍ର ଅବଚରଣ)
- ଭାରତୀୟ ପ୍ରଥମ ଲୋକପ୍ରିୟ (ଚନ୍ଦ୍ର ଅବଚରଣ)
- ଭାରତୀୟ ଲୋକପ୍ରିୟ ପ୍ରଥମ (ଚନ୍ଦ୍ର ଅବଚରଣ)
- ଲୋକପ୍ରିୟ ଭାରତୀୟ ପ୍ରଥମ (ଚନ୍ଦ୍ର ଅବଚରଣ)
- ଲୋକପ୍ରିୟ ପ୍ରଥମ ଭାରତୀୟ (ଚନ୍ଦ୍ର ଅବଚରଣ)

5.2.19. qualification vs. qualification vs. cardinal number

The succeeding tables 37 and 38 own three adjectives *xadharon* / *gɔʃanugoʃik* / *samanniə* / *sadʰarəŋə* ‘usual’, *ɖui* / *ɖui* / *ɖu* / *ɖui* ‘two’ and *sina* / *cainiz* / *ciniã* / *cainij* ‘Chinese’. Among them, the first and last adjectives are affiliated to the semantic type QUALIFICATION (SET C) and the rest pertains to the semantic type CARDINAL NUMBER (SET C). Strikingly, it is observed that the sub-type NATIONALITY of the semantic type QUALIFICATION comes later than the other sub-type of the same semantic type in Axomiya, Bangla and Odia. 16 Axomiya informants out of 20 selected the semantic order CARDINAL NUMBER >

QUALIFICATION > QUALIFICATION (NATIONALITY) which is invariably the most chosen order. 11 out of 20 Bangla informants chose the ordering QUALIFICATION > CARDINAL NUMBER > QUALIFICATION (NATIONALITY).

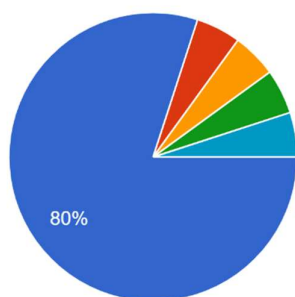
<i>Axomiya</i>	
Orders	Occurrence
দুটা সাধাৰণ চীনা খাদ্য ḡuta xad̪harɔn sina khaid̪ḡo two-CLA usual Chinese dish 'two usual Chinese dishes'	16
দুটা চীনা সাধাৰণ খাদ্য ḡuta sina xad̪harɔn khaid̪ḡo two-CLA Chinese usual dish 'two Chinese usual dishes'	1
সাধাৰণ দুটা চীনা খাদ্য xad̪harɔn ḡuta sina khaid̪ḡo usual two-CLA Chinese dish 'usual two Chinese dishes'	1
সাধাৰণ চীনা দুটা খাদ্য xad̪harɔn sina ḡuta khaid̪ḡo usual Chinese two-CLA dish 'usual Chinese two dishes'	1
চীনা সাধাৰণ দুটা খাদ্য sina xad̪harɔn ḡuta khaid̪ḡo Chinese usual two-CLA dish 'Chinese usual two dishes'	0
চীনা দুটা সাধাৰণ খাদ্য sina ḡuta xad̪harɔn khaid̪ḡo Chinese two-CLA usual dish 'Chinese two usual dishes'	1
<i>Bangla</i>	
Orders	Occurrence
গতানুগতিক দুটো চাইনিজ খাবাৰ gɔṭanugot̪ik ḡuto cainiz k ^h abar usual two-CLA Chinese dish 'usual two Chinese dishes'	11
গতানুগতিক চাইনিজ দুটো খাবাৰ gɔṭanugot̪ik cainiz ḡuto k ^h abar	1

usual Chinese two-CLA dish 'usual Chinese two dishes'	
চাইনিজ গতানুগতিক দুটো খাবার cainiz gɔʈʌnugotʃik ɖuto kʰabar Chinese usual two-CLA dish 'Chinese usual two dishes'	3
চাইনিজ দুটো গতানুগতিক খাবার cainiz ɖuto gɔʈʌnugotʃik kʰabar Chinese two-CLA usual dish 'Chinese two usual dishes'	0
দুটো চাইনিজ গতানুগতিক খাবার ɖuto cainiz gɔʈʌnugotʃik kʰabar two-CLA Chinese usual dish 'two Chinese usual dishes'	1
দুটো গতানুগতিক চাইনিজ খাবার ɖuto gɔʈʌnugotʃik cainiz kʰabar two-CLA usual Chinese dish 'two usual Chinese dishes'	4

Table 37

19. Which one is preferable to you?

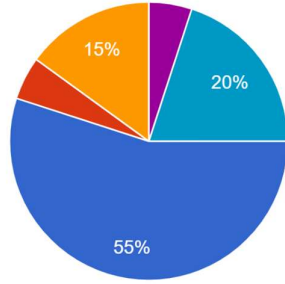
20 responses



- দুটা সাধারণ চীনা খাদ্য
- দুটা চীনা সাধারণ খাদ্য
- সাধারণ দুটা চীনা খাদ্য
- সাধারণ চীনা দুটা খাদ্য
- চীনা সাধারণ দুটা খাদ্য
- চীনা দুটা সাধারণ খাদ্য

19. Which one is preferable to you?

20 responses



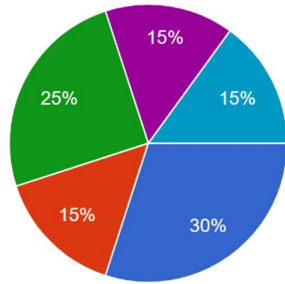
- গতানুগতিক দুটো চাইনিজ খাবার
- গতানুগতিক চাইনিজ দুটো খাবার
- চাইনিজ গতানুগতিক দুটো খাবার
- চাইনিজ দুটো গতানুগতিক খাবার
- দুটো চাইনিজ গতানুগতিক খাবার
- দুটো গতানুগতিক চাইনিজ খাবার

Surprisingly, the NATIONALITY sub-semantic type comes earlier in case of Maithili as found in the most selected semantic order QUALIFICATION (NATIONALITY) > CARDINAL NUMBER > QUALIFICATION. Like Axomiya, the preferable semantic order in Odia is CARDINAL NUMBER > QUALIFICATION > QUALIFICATION (NATIONALITY).

<i>Maithili</i>	
Orders	Occurrence
चिनिजा दूटा सामान्य व्यंजन ciniã dūta samanniã vijənjən Chinese two-CLA usual dish 'Chinese two usual dishes'	6
चिनिजा सामान्य दूटा व्यंजन ciniã samanniã dūta vijənjən Chinese usual two-CLA dish 'Chinese usual two dishes'	3
सामान्य चिनिजा दूटा व्यंजन samanniã ciniã dūta vijənjən usual Chinese two-CLA dish 'usual Chinese two dishes'	0
सामान्य दूटा चिनिजा व्यंजन samanniã dūta ciniã vijənjən usual two-CLA Chinese dish 'usual two Chinese dishes'	5
दूटा सामान्य चिनिजा व्यंजन dūta samanniã ciniã vijənjən two-CLA usual Chinese dish	3

19. Which one is preferable to you?

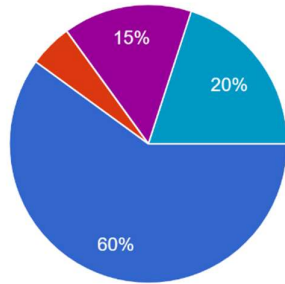
20 responses



- चिनिजा दूटा सामान्य व्यंजन
- चिनिजा सामान्य दूटा व्यंजन
- सामान्य चिनिजा दूटा व्यंजन
- सामान्य दूटा चिनिजा व्यंजन
- दूटा सामान्य चिनिजा व्यंजन
- दूटा चिनिजा सामान्य व्यंजन

19. Which one is preferable to you?

20 responses



- ଦୁଇଟି ସାଧାରଣ ଚାଲନ୍ତି ଖାଦ୍ୟ
- ଦୁଇଟି ଚାଲନ୍ତି ସାଧାରଣ ଖାଦ୍ୟ
- ଚାଲନ୍ତି ଦୁଇଟି ସାଧାରଣ ଖାଦ୍ୟ
- ଚାଲନ୍ତି ସାଧାରଣ ଦୁଇଟି ଖାଦ୍ୟ
- ସାଧାରଣ ଚାଲନ୍ତି ଦୁଇଟି ଖାଦ୍ୟ
- ସାଧାରଣ ଦୁଇଟି ଚାଲନ୍ତି ଖାଦ୍ୟ

5.2.20. position vs. cardinal number vs. physical property

The subsequent tables 39 and 40 possess three adjectives *xexor* / *ʃef* / *pəchila* / *seso* ‘last’, *ḍui* / *ḍui* / *ḍu* / *ḍui* ‘two’ and *klanṭo* / *klanṭo* / *ṭhakəl* / *kḷanṭo* ‘tired’. They come under the semantic types POSITION (SET C), CARDINAL NUMBER (SET C) and PHYSICAL PROPERTY (SET B) correspondingly. While they are placed in six different orders, it is investigated that most informants opted for the order POSITION > CARDINAL NUMBER > PHYSICAL PROPERTY over others in case of Axomiya, Bangla and Maithili.

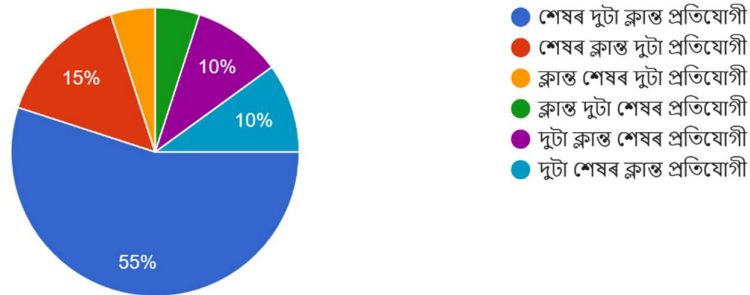
<i>Axomiya</i>	<i>Bangla</i>
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Orders	Occurrence	Orders	Occurrence
শেষৰ দুটা ক্লান্ত প্রতিযোগী xexor d̥uta klan̥to prot̥j̥jogi final two-CLA tired competitor 'final two tired competitors'	11	শেষ দুজন ক্লান্ত প্রতিযোগী ʃeʃ d̥ujon klan̥to prot̥j̥jogi last two-CLA tired participant 'last two tired participants'	9
শেষৰ ক্লান্ত দুটা প্রতিযোগী xexor klan̥to d̥uta prot̥j̥jogi final tired two-CLA competitor 'final tired two competitors'	3	ক্লান্ত শেষ দুজন প্রতিযোগী klan̥to ʃeʃ d̥ujon prot̥j̥jogi tired last two-CLA participant 'tired last two participants'	2
ক্লান্ত শেষৰ দুটা প্রতিযোগী klan̥to xexor d̥uta prot̥j̥jogi tired final two-CLA competitor 'tired final two competitors'	1	দুজন ক্লান্ত শেষ প্রতিযোগী d̥ujon klan̥to ʃeʃ prot̥j̥jogi two-CLA tired last participant 'two tired last participants'	3
ক্লান্ত দুটা শেষৰ প্রতিযোগী klan̥to d̥uta xexor prot̥j̥jogi tired two-CLA final competitor 'tired two final competitors'	1	দুজন শেষ ক্লান্ত প্রতিযোগী d̥ujon ʃeʃ klan̥to prot̥j̥jogi two-CLA last tired participant 'two last tired participants'	2
দুটা ক্লান্ত শেষৰ প্রতিযোগী d̥uta klan̥to xexor prot̥j̥jogi two-CLA tired final competitor 'two tired final competitors'	2	ক্লান্ত দুজন শেষ প্রতিযোগী klan̥to d̥ujon ʃeʃ prot̥j̥jogi tired two-CLA last participant 'tired two last participants'	2
দুটা শেষৰ ক্লান্ত প্রতিযোগী d̥uta xexor klan̥to prot̥j̥jogi two-CLA final tired competitor 'two final tired competitors'	2	শেষ ক্লান্ত দুজন প্রতিযোগী ʃeʃ klan̥to d̥ujon prot̥j̥jogi last tired two-CLA participant 'last tired two participants'	2

Table 39

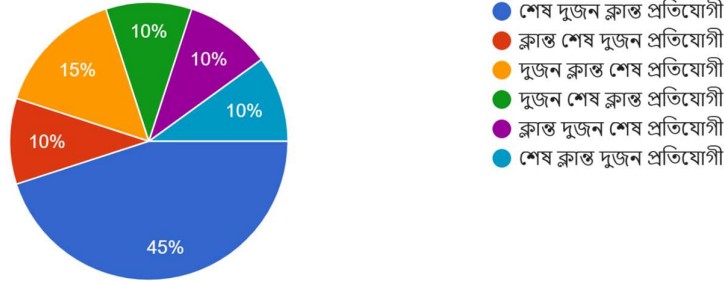
20. Which one is preferable to you?

20 responses



20. Which one is preferable to you?

20 responses



Unanticipatedly, Odia is found to own CARDINAL NUMBER > PHYSICAL PROPERTY > POSITION as the most preferred semantic order.

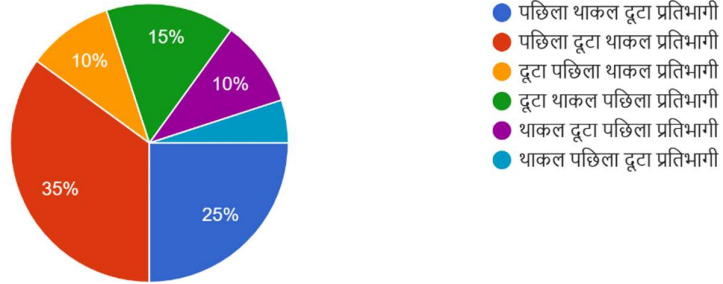
<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
पछिला थाकल दूटा प्रतिभागी pəc ^h ila t ^h akəl dūta prət̪ib ^h agi last tired two-CLA competitor 'last tired two competitors'	5	ଶେଷ ଦୁଇଟି କ୍ଳାନ୍ତ ପ୍ରତିଯୋଗୀ seso dūiti k[an̪to prət̪jogi last two-CLA tired participant 'last two tired participants'	6
पछिला दूटा थाकल प्रतिभागी pəc ^h ila dūta t ^h akəl prət̪ib ^h agi last two-CLA tired competitor 'last two tired competitors'	7	ଶେଷ କ୍ଳାନ୍ତ ଦୁଇଟି ପ୍ରତିଯୋଗୀ seso k[an̪to dūiti prət̪jogi last tired two-CLA participant 'last tired two participants'	2
दूटा पछिला थाकल प्रतिभागी dūta pəc ^h ila t ^h akəl prət̪ib ^h agi two-CLA last tired competitor 'two last tired competitors'	2	କ୍ଳାନ୍ତ ଶେଷ ଦୁଇଟି ପ୍ରତିଯୋଗୀ k[an̪to seso dūiti prət̪jogi tired last two-CLA participant 'tired last two participants'	0
दूटा थाकल पछिला प्रतिभागी dūta t ^h akəl pəc ^h ila prət̪ib ^h agi two-CLA tired last competitor 'two tired last competitors'	3	କ୍ଳାନ୍ତ ଦୁଇଟି ଶେଷ ପ୍ରତିଯୋଗୀ k[an̪to dūiti seso prət̪jogi tired two-CLA last participant 'tired two last participants'	1
थाकल दूटा पछिला प्रतिभागी t ^h akəl dūta pəc ^h ila prət̪ib ^h agi tired two-CLA last competitor 'tired two last competitors'	2	ଦୁଇଟି କ୍ଳାନ୍ତ ଶେଷ ପ୍ରତିଯୋଗୀ dūiti k[an̪to seso prət̪jogi two-CLA tired last participant 'two tired last participants'	7
थाकल पछिला दूटा प्रतिभागी t ^h akəl pəc ^h ila dūta prət̪ib ^h agi	1	ଦୁଇଟି ଶେଷ କ୍ଳାନ୍ତ ପ୍ରତିଯୋଗୀ dūiti seso k[an̪to prət̪jogi	4

tired last two-CLA competitor 'tired last two competitors'		two-CLA last tired participant 'two last tired participants'	
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Table 40

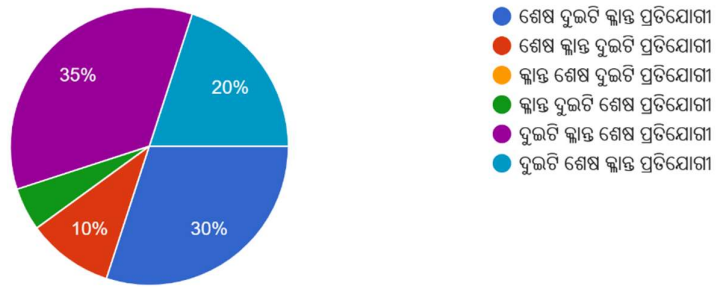
20. Which one is preferable to you?

20 responses



20. Which one is preferable to you?

20 responses



5.2.21. ordinal number vs. cardinal number vs. human propensity

There are adjectives *proḡhom* / *proḡ^hom* / *pəhil* / *proḡhəmo* 'first', *ḡini* / *ḡin* / *ḡin* / *ḡini* 'three' and *xukḡor* / *fuk^hi* / *anəḡməj* / *k^husi* 'happy' in Axomiya, Bangla, Maithili and Odia which are linked with the semantic types ORDINAL NUMBER (SET C), CARDINAL NUMBER (SET C)

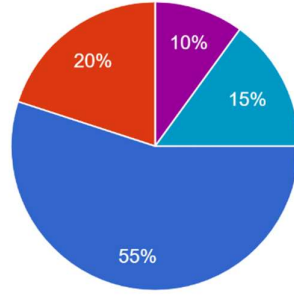
and HUMAN PROPENSITY (SET B) singly. The most chosen semantic ordering is ORDINAL NUMBER > CARDINAL NUMBER > HUMAN PROPENSITY in Axomiya, Bangla and Odia.

<i>Axomiya</i>		<i>Bangla</i>	
Orders	Occurrence	Orders	Occurrence
ପ୍ରଥମ ତିନିଟା ସୁଖର ବଛ pro ^h om t̪ɪnɪtə xuk ^h ɔr bɔsɔr first three-CLA happy year ‘first three happy years’	11	ପ୍ରଥମ ତିନିଟେ ସୁଖି ବଛ pro ^h om t̪ɪntɛ suk ^h i bɔc ^h ɔr first three-CLA happy year ‘first three happy years’	13
ପ୍ରଥମ ସୁଖର ତିନିଟା ବଛ pro ^h om xuk ^h ɔr t̪ɪnɪtə bɔsɔr first happy three-CLA year ‘first happy three years’	4	ସୁଖି ପ୍ରଥମ ତିନିଟେ ବଛ suk ^h i pro ^h om t̪ɪntɛ bɔc ^h ɔr happy first three-CLA year ‘happy first three years’	3
ତିନିଟା ପ୍ରଥମ ସୁଖର ବଛ t̪ɪnɪtə pro ^h om xuk ^h ɔr bɔsɔr three-CLA first happy year ‘three first happy years’	0	ତିନିଟେ ସୁଖି ପ୍ରଥମ ବଛ t̪ɪntɛ suk ^h i pro ^h om bɔc ^h ɔr three-CLA happy first year ‘three happy first years’	1
ତିନିଟା ସୁଖର ପ୍ରଥମ ବଛ t̪ɪnɪtə xuk ^h ɔr pro ^h om bɔsɔr three-CLA happy first year ‘three happy first years’	0	ପ୍ରଥମ ସୁଖି ତିନିଟେ ବଛ pro ^h om suk ^h i t̪ɪntɛ bɔc ^h ɔr first happy three-CLA year ‘first happy three years’	1
ସୁଖର ତିନିଟା ପ୍ରଥମ ବଛ xuk ^h ɔr t̪ɪnɪtə pro ^h om bɔsɔr happy three-CLA first year ‘happy three first years’	2	ସୁଖି ତିନିଟେ ପ୍ରଥମ ବଛ suk ^h i t̪ɪntɛ pro ^h om bɔc ^h ɔr happy three-CLA first year ‘happy three first years’	0
ସୁଖର ପ୍ରଥମ ତିନିଟା ବଛ xuk ^h ɔr pro ^h om t̪ɪnɪtə bɔsɔr happy first three-CLA year ‘happy first three years’	3	ତିନିଟେ ପ୍ରଥମ ସୁଖି ବଛ t̪ɪntɛ pro ^h om suk ^h i bɔc ^h ɔr three-CLA first happy year ‘three first happy years’	2

Table 41

21. Which one is preferable to you?

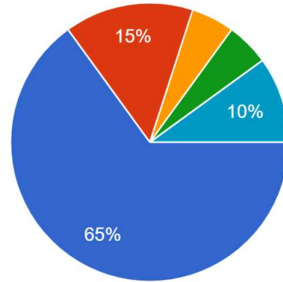
20 responses



- प्रथम तिनिटा सुखर बछर
- प्रथम सुखर तिनिटा बछर
- तिनिटा प्रथम सुखर बछर
- तिनिटा सुखर प्रथम बछर
- सुखर तिनिटा प्रथम बछर
- सुखर प्रथम तिनिटा बछर

21. Which one is preferable to you?

20 responses



- प्रथम तिनटे सुधी बछर
- सुधी प्रथम तिनटे बछर
- तिनटे सुधी प्रथम बछर
- प्रथम सुधी तिनटे बछर
- सुधी तिनटे प्रथम बछर
- तिनटे प्रथम सुधी बछर

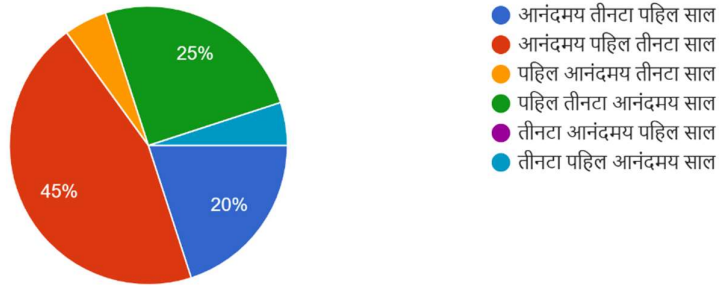
The most selected semantic order of adjectives in Maithili is HUMAN PROPENSITY > ORDINAL NUMBER > CARDINAL NUMBER.

<i>Maithili</i>		<i>Odia</i>	
Orders	Occurrence	Orders	Occurrence
आनंदमय तीनटा पहिल साल anəndməj t̪inta pəhil sal happy three-CLA first year	4	ପ୍ରଥମ ତିନୋଟି ଖୁସି ବର୍ଷ proth̪əmo t̪inoti k ^h usi b̪orso first three-CLA happy year	12

‘happy three first years’		‘first three happy years’	
आनंदमय पहिल तीनटा साल anəᅇᅇməj pəhil t̪inta sal happy first three-CLA year ‘happy first three years’	9	ପ୍ରଥମ ଖୁସି ତିନୋଟି ବର୍ଷ proᅇᅇəmo kʰusi t̪inoti bərsə first happy three-CLA year ‘first happy three years’	2
पहिल आनंदमय तीनटा साल pəhil anəᅇᅇməj t̪inta sal first happy three-CLA year ‘first happy three years’	1	ତିନୋଟି ପ୍ରଥମ ଖୁସି ବର୍ଷ t̪inoti proᅇᅇəmo kʰusi bərsə three-CLA first happy year ‘three first happy years’	3
पहिल तीनटा आनंदमय साल pəhil t̪inta anəᅇᅇməj sal first three-CLA happy year ‘first three happy years’	5	ତିନୋଟି ଖୁସି ପ୍ରଥମ ବର୍ଷ t̪inoti kʰusi proᅇᅇəmo bərsə three-CLA happy first year ‘three happy first years’	0
तीनटा आनंदमय पहिल साल t̪inta anəᅇᅇməj pəhil sal three-CLA happy first year ‘three happy first years’	0	ଖୁସି ତିନୋଟି ପ୍ରଥମ ବର୍ଷ kʰusi t̪inoti proᅇᅇəmo bərsə happy three-CLA first year ‘happy three first years’	2
तीनटा पहिल आनंदमय साल t̪inta pəhil anəᅇᅇməj sal three-CLA first happy year ‘three first happy years’	1	ଖୁସି ପ୍ରଥମ ତିନୋଟି ବର୍ଷ kʰusi proᅇᅇəmo t̪inoti bərsə happy first three-CLA year ‘happy first three years’	1

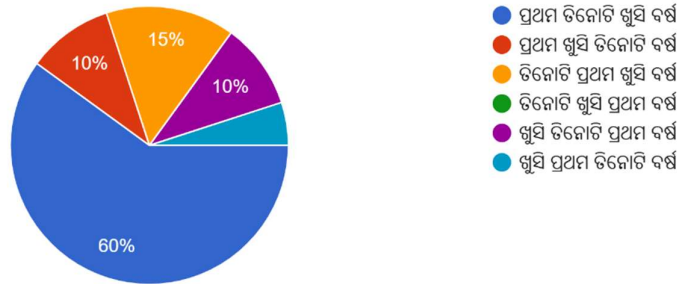
Table 42

21. Which one is preferable to you?
20 responses



21. Which one is preferable to you?

20 responses



5.3. Language-Specific Study of Semantic Ordering of Adjectives

5.3.1. Semantic Ordering of Adjectives in Axomiya

In Axomiya, we found that adjectives of QUALIFICATION semantic type precede COLOUR adjectives (Table 1), adjectives denoting VALUE precede AGE (Table 3), PHYSICAL PROPERTY semantic type comes before QUALIFICATION (Table 5), GENRE follows NATIONALITY (Table 7), VALUE comes before PHYSICAL PROPERTY (Table 23), AGE goes after HUMAN PROPENSITY (Table 29). The orderings of three adjectives with the distinct semantic types manifested in the data are as follows:

COLOUR > DIMENSION > PHYSICAL PROPERTY	Table 9
ORDINAL NUMBER > CARDINAL NUMBER > AGE	Table 11
AGE > CARDINAL NUMBER > PHYSICAL PROPERTY	Table 13
CARDINAL NUMBER > VALUE > AGE	Table 15
AGE > VALUE > PHYSICAL PROPERTY	Table 21
DIMENSION > VALUE > QUALIFICATION	Table 25
HUMAN PROPENSITY > HUMAN PROPENSITY > AGE	Table 27
AGE > VALUE > QUALIFICATION	Table 31

QUALIFICATION > VALUE > AGE	
ORDINAL NUMBER > VALUE > QUALIFICATION	Table 35
CARDINAL NUMBER > QUALIFICATION > QUALIFICATION (NATIONALITY)	Table 37
POSITION > CARDINAL NUMBER > PHYSICAL PROPERTY	Table 39
ORDINAL NUMBER > CARDINAL NUMBER > HUMAN PROPENSITY	Table 41

5.3.2. Semantic Ordering of Adjectives in Bangla

Bangla data demonstrates that adjectives of QUALIFICATION semantic type come before COLOUR adjectives (Table 1), adjectives indicating VALUE precede AGE (Table 3), PHYSICAL PROPERTY semantic type goes before QUALIFICATION (Table 5), GENRE comes behind NATIONALITY (Table 7), PHYSICAL PROPERTY goes before VALUE (Table 23), AGE comes after HUMAN PROPENSITY (Table 29). The following are the orderings of three adjectives that appear in the Bangla data and belong to the different semantic types:

DIMENSION > PHYSICAL PROPERTY > COLOUR	Table 9
ORDINAL NUMBER > CARDINAL NUMBER > AGE	Table 11
AGE > CARDINAL NUMBER > PHYSICAL PROPERTY	Table 13
VALUE > CARDINAL NUMBER > AGE	Table 15
AGE > VALUE > PHYSICAL PROPERTY	Table 21
VALUE > DIMENSION > QUALIFICATION	Table 25
AGE > HUMAN PROPENSITY > HUMAN PROPENSITY	Table 27
AGE > VALUE > QUALIFICATION	Table 31
ORDINAL NUMBER > VALUE > QUALIFICATION	Table 35
ORDINAL NUMBER > QUALIFICATION > VALUE	
QUALIFICATION > CARDINAL NUMBER > QUALIFICATION (NATIONALITY)	Table 37
POSITION > CARDINAL NUMBER > PHYSICAL PROPERTY	Table 39

5.3.3. Semantic Ordering of Adjectives in Maithili

According to Maithili data, adjectives of the QUALIFICATION semantic type appear before those of the COLOUR semantic type (Table 2), adjectives that designate VALUE ahead of AGE (Table 4), PHYSICAL PROPERTY semantic type comes before QUALIFICATION (Table 6), GENRE follows NATIONALITY (Table 8), PHYSICAL PROPERTY comes before VALUE (Table 24), and AGE follows HUMAN PROPENSITY (Table 30). The following lists three adjectives with the divergent semantic types that are found in the Maithili data:

DIMENSION > COLOUR > PHYSICAL PROPERTY	Table 10
ORDINAL NUMBER > CARDINAL NUMBER > AGE	Table 12
AGE > CARDINAL NUMBER > PHYSICAL PROPERTY	Table 14
CARDINAL NUMBER > VALUE > AGE	Table 16
VALUE > AGE > PHYSICAL PROPERTY	Table 22
QUALIFICATION > VALUE > DIMENSION, QUALIFICATION > DIMENSION > VALUE, VALUE > DIMENSION > QUALIFICATION &	Table 26
DIMENSION > VALUE > QUALIFICATION	
AGE > HUMAN PROPENSITY > HUMAN PROPENSITY	Table 28
AGE > VALUE > QUALIFICATION	Table 32
QUALIFICATION > ORDINAL NUMBER > VALUE	Table 36
QUALIFICATION (NATIONALITY) > CARDINAL NUMBER > QUALIFICATION	Table 38
POSITION > CARDINAL NUMBER > PHYSICAL PROPERTY	Table 40
HUMAN PROPENSITY > ORDINAL NUMBER > CARDINAL NUMBER	Table 42

5.3.4. Semantic Ordering of Adjectives in Odia

Odia data show that adjectives of the QUALIFICATION semantic type appear before those of the COLOUR semantic type (Table 2), that adjectives designating VALUE come before those designating AGE (Table 4), that adjectives of the PHYSICAL PROPERTY semantic type go before those denoting QUALIFICATION (Table 6), that GENRE comes after NATIONALITY (Table 8), PHYSICAL PROPERTY both precedes and follows VALUE (Table 24), and HUMAN PROPENSITY follows AGE (Table 30). Three adjectives from the Odia data are listed below, each having a different semantic type:

DIMENSION > COLOUR > PHYSICAL PROPERTY	Table 10
ORDINAL NUMBER > CARDINAL NUMBER > AGE	Table 12
PHYSICAL PROPERTY > AGE > CARDINAL NUMBER	Table 14
CARDINAL NUMBER > VALUE > AGE	Table 16
VALUE > AGE > PHYSICAL PROPERTY	Table 22
AGE > VALUE > PHYSICAL PROPERTY	
DIMENSION > VALUE > QUALIFICATION	Table 26
HUMAN PROPENSITY > HUMAN PROPENSITY > AGE	Table 28
QUALIFICATION > AGE > VALUE	Table 32
ORDINAL NUMBER > VALUE > QUALIFICATION	Table 36
ORDINAL NUMBER > QUALIFICATION > VALUE	
CARDINAL NUMBER > QUALIFICATION > QUALIFICATION (NATIONALITY)	Table 38
CARDINAL NUMBER > PHYSICAL PROPERTY > POSITION	Table 40
ORDINAL NUMBER > CARDINAL NUMBER > HUMAN PROPENSITY	Table 42

5.4. Cross-linguistic Generalisations and Variations

From the above study, it is obvious that there are similarities and dissimilarities in case of semantic ordering of adjectives in the selected Eastern Indo-Aryan languages Axomiya, Bangla, Maithili and Odia as presented in the following Table 43. QUALIFICATION precedes COLOUR, VALUE comes before AGE, PHYSICAL PROPERTY goes before QUALIFICATION, GENRE follows NATIONALITY, ORDINAL NUMBER precedes CARDINAL NUMBER and AGE, *beautiful* goes behind *hard-working*, *irritated* appears before *angry* in these four languages.

Apart from the above commonalities, there are some deviations in the results of orderings among the chosen languages. In Axomiya, Bangla and Maithili, AGE precedes CARDINAL NUMBER and PHYSICAL PROPERTY whereas PHYSICAL PROPERTY follows AGE and CARDINAL NUMBER in Odia (Tables 13 and 14). CARDINAL NUMBER comes before VALUE and AGE in Axomiya, Maithili and Odia though Bangla shows a different ordering where VALUE goes before CARDINAL NUMBER and AGE (Tables 15 and 16). On the one hand, Axomiya and Maithili have the ordering *shiny* > *bright* > *deep* and on the other hand, Bangla and Odia informants choose the ordering *bright* > *shiny* > *deep* (Tables 17 and 18). AGE comes earlier than VALUE and PHYSICAL PROPERTY in Axomiya, Bangla and Odia. Maithili exhibits the ordering where VALUE goes before AGE and PHYSICAL PROPERTY which is also common to Odia (Tables 21 and 22). VALUE comes earlier than PHYSICAL PROPERTY in Axomiya and Odia while PHYSICAL PROPERTY precedes VALUE in Bangla and Maithili which is also exhibited in Odia (Tables 23 and 24). AGE goes earlier than two adjectives denoting HUMAN PROPENSITY in Axomiya and Odia but Bangla and Maithili manifest the opposite ordering where AGE comes later (Tables 27 and 28). In Axomiya, Bangla and Maithili, HUMAN PROPENSITY goes before AGE while Odia owns the inverse ordering (Tables 29 and 30). The semantic type POSITION precedes CARDINAL NUMBER and PHYSICAL PROPERTY in Axomiya, Bangla and Maithili whereas Odia possesses the mirror opposite of this ordering where position follows CARDINAL NUMBER and PHYSICAL PROPERTY (Tables 39 and 40). ORDINAL NUMBER comes before CARDINAL NUMBER and HUMAN PROPENSITY in Axomiya, Bangla and Odia but HUMAN PROPENSITY follows ORDINAL NUMBER and CARDINAL NUMBER in Maithili (Tables 41 and 42).

Additionally, there are some instances where more variations are found in the semantic orderings of adjectives in the given languages. Though DIMENSION precedes COLOUR and PHYSICAL PROPERTY in Maithili and Odia, Axomiya shows the ordering COLOUR > DIMENSION > PHYSICAL PROPERTY and Bangla DIMENSION > PHYSICAL PROPERTY > COLOUR (Tables 9 and 10). Axomiya, Maithili and Odia possess the ordering DIMENSION > VALUE > QUALIFICATION. Bangla shares the ordering VALUE > DIMENSION > QUALIFICATION again with Maithili. Interestingly, Maithili owns two other orderings. These are QUALIFICATION > VALUE > DIMENSION > and QUALIFICATION > DIMENSION > VALUE (Tables 25 and 26). In Axomiya, Bangla and Maithili, AGE comes before VALUE and QUALIFICATION whereas Odia shows a different ordering QUALIFICATION > AGE > VALUE. Here Axomiya adds another ordering QUALIFICATION > VALUE > AGE which slightly differs from the Odia one (Tables 31 and 32). The semantic orderings ORDINAL NUMBER > VALUE > QUALIFICATION and ORDINAL NUMBER > QUALIFICATION > VALUE are both found in Bangla and Odia. Among these, the first order is common to Axomiya. Maithili displays a somewhat divergent response with the semantic ordering QUALIFICATION > ORDINAL NUMBER > VALUE (Tables 35 and 36). Finally, Axomiya and Odia share the same semantic ordering: CARDINAL NUMBER > QUALIFICATION > QUALIFICATION (NATIONALITY). Bangla and Maithili possess dissimilar orderings. These are QUALIFICATION > CARDINAL NUMBER > QUALIFICATION (NATIONALITY) and QUALIFICATION (NATIONALITY) > CARDINAL NUMBER > QUALIFICATION respectively (Tables 37 and 38).

Chapter 6

Conclusion

6.1. Introduction

This thesis focuses on the adjective class from the perspective of language typology. It first aims to establish how to recognize adjective class in the selected Eastern Indo-Aryan languages Axomiya, Bangla, Maithili and Odia. Secondly, it explores the semanticity-cum-largeness, openness-cum-productivity and the grammatical properties of the adjectives in these languages. Thirdly, it presents the semantic ordering of adjectives in poly-adjectival noun phrases. This helps us to understand the syntactic positions of adjectives within a PNP based on their taxonomy. Finally, the present thesis aids in understanding the areal features of adjectives in the eastern Indo-Aryan region.

6.2. Major Findings

Firstly, the adjective class in the selected EIA languages is recognized through five characteristics: (A) state a property, (B) Specify a head noun, (C) constructions in comparison, (D) modify verbs and (E) function as intensifiers. The table below summarizes the characteristics of adjective class in the selected EIA languages.

Secondly, the adjective class in the selected EIA languages showed *large adjective class languages* demonstrating all three sets of a total of thirteen semantic types as proposed by Dixon (2004 & 2010). They were SET A (DIMENSION, AGE, VALUE and COLOUR), SET B (PHYSICAL PROPERTY, HUMAN PROPENSITY and SPEED) and SET C (DIFFICULTY, SIMILARITY, QUALIFICATION, QUANTIFICATION, POSITION, NUMBER). Significantly, three sub-semantic types FRCATIONAL, MULTIPLICATIVE and AGGREGATIVE were included in the last semantic type NUMBER (SET C) along with the previous two sub-semantic types (CARDINAL NUMBER and ORDINAL NUMBER) as proposed by Dixon (2010 and 2004). In addition, I argued that the adjective class in the chosen EIA languages are *open adjective class languages*

employing various word-formation processes such as inflection, assimilation, derivation, compounding, reduplication, affixation and causation to add new members to the above semantic types of adjectives. Moreover, I found that adjectives carry both nominal features (gender agreement, number agreement and specified with classifier) and verbal features (inflected with tense, aspect, person markers) in these languages. Therefore, they need to be categorised as *both noun-like and verb-like adjective class languages*.

While addressing similarities and differences in the semantic ordering of adjectives in Axomiya, Bangla, Maithili, and Odia, we noted QUALIFICATION occurs before COLOUR, VALUE before AGE, and GENRE after NATIONALITY, QUALIFICATION after PHYSICAL PROPERTY, ORDINAL NUMBER before CARDINAL NUMBER and AGE. In addition to the similitude, We found several dissimilarities in the ordering of adjectives among the selected languages. In Axomiya, Bangla, and Maithili, AGE preceded CARDINAL NUMBER and PHYSICAL PROPERTY, while in Odia, PHYSICAL PROPERTY followed AGE and CARDINAL NUMBER. CARDINAL NUMBER occurred before VALUE and AGE in Axomiya, Maithili, and Odia, while in Bangla, VALUE preceded both CARDINAL NUMBER and AGE. AGE preceded VALUE and PHYSICAL PROPERTY in Axomiya, Bangla, and Odia, while Maithili placed VALUE before AGE and PHYSICAL PROPERTY, a pattern also attested in Odia. VALUE came before PHYSICAL PROPERTY in Axomiya and Odia, but PHYSICAL PROPERTY preceded VALUE in Bangla and Maithili. Other distinct orderings included variations in HUMAN PROPENSITY, POSITION, and the relationships between ORDINAL and CARDINAL NUMBERS in these languages. There were additional variations in the semantic ordering of adjectives across the languages. While DIMENSION preceded COLOUR and PHYSICAL PROPERTY in Maithili and Odia, Axomiya ordered them as COLOUR > DIMENSION > PHYSICAL PROPERTY. Bangla preferred DIMENSION > PHYSICAL PROPERTY > COLOUR. Axomiya, Maithili, and Odia followed DIMENSION > VALUE > QUALIFICATION, but Bangla placed VALUE before DIMENSION and QUALIFICATION, a pattern shared with Maithili. Maithili demonstrated two other orderings: QUALIFICATION > VALUE > DIMENSION and QUALIFICATION > DIMENSION > VALUE. In terms of AGE, Axomiya, Bangla, and Maithili placed it before VALUE and QUALIFICATION, while Odia preferred QUALIFICATION > AGE > VALUE, with Axomiya showing QUALIFICATION > VALUE > AGE, which slightly differs from Odia. The orderings ORDINAL NUMBER > VALUE > QUALIFICATION and ORDINAL NUMBER > QUALIFICATION > VALUE appear in both Bangla and Odia, while Maithili opted for QUALIFICATION > ORDINAL

NUMBER > VALUE. Finally, Axomiya and Odia shared the ordering CARDINAL NUMBER > QUALIFICATION > QUALIFICATION (NATIONALITY), unlike Bangla and Maithili, which have different variations.

6.3. Limitations

As this research focuses on specific languages of the EIA region, it restricts the findings to those languages. It does not account for the full typological diversity of the region. Besides, this study focuses primarily on synchronic (current) data. It fails to address the diachronic (historical) development of adjective formation processes adequately. Understanding how adjective formation has evolved is essential to fully grasp the openness and productivity of the adjective class in Eastern Indo-Aryan languages. In addition, it concentrates on standardized forms of the selected EIA languages, neglecting the dialectal variation that exists within the language family. This lack of cross-dialectal analysis limits the generalizability of findings and overlooks how noun-like and verb-like features might vary across different dialects or regions. A diachronic perspective would provide a clearer understanding of how adjective forms have evolved and how their noun-like and verb-like properties have developed or changed. This study concentrates on syntax and semantics in isolation, without considering how pragmatic factors or contextual usage influence adjective ordering. In natural speech, the ordering of adjectives can be affected by emphasis, speaker intention, or topicality. Ignoring these pragmatic factors limits our understanding of how flexible or fixed the adjective order is in real-world language use. While some studies focus on specific Eastern Indo-Aryan languages, there is often a lack of cross-linguistic comparison with other Indian language families. Understanding adjective ordering in relation to languages from different families would enrich typological insights and shed light on potential universals or language-specific features in adjective ordering across the world's languages.

6.4. Future Research

A better understanding of adjectives in the selected Eastern Indo-Aryan languages could improve language teaching materials and enhance natural language processing (NLP) tools, especially for applications involving machine translation and syntactic analysis in these

languages. Incorporating historical perspectives could offer deeper insights into the evolution of adjectives, enriching the understanding of grammatical change and cross-generational differences in adjective usage within the Eastern Indo-Aryan family. Future research on the largeness of the adjective class in Eastern Indo-Aryan languages can illuminate the extent to which the adjective class is expanding over time. This could help identify new trends in word formation and the integration of new adjectives, shedding light on the dynamic nature of the language. Understanding the largeness of the adjective class will enable comparisons with other language families, offering insights into how different languages expand their adjective classes. These comparisons can contribute to typological studies, highlighting similarities and differences in adjective categorization across languages. The research may provide valuable information for lexical acquisition, helping language learners understand the scale and flexibility of adjectives in Eastern Indo-Aryan languages, thus improving learning strategies and educational resources. A deeper understanding of the largeness of the adjective class could improve computational linguistics tools, especially in areas like machine translation, corpus linguistics, and AI-based language processing, aiding in the accurate recognition and use of adjectives. Research on the openness and word-formation processes of adjectives in Eastern Indo-Aryan languages can expand current theories of word formation. Understanding adjective formation processes has significant implications for computational linguistics, especially in developing tools for morphological analysis and machine translation. It will help improve the processing of complex adjective forms in the selected EIA languages. The findings could lead to more effective language teaching materials, allowing learners to better understand adjective formation rules and enhance their grasp of morphological patterns in Eastern Indo-Aryan languages. Research on noun- and verb-like adjectives in Eastern Indo-Aryan languages will refine the classification of word classes. This could lead to a more nuanced understanding of how these word classes interact and evolve over time. It may improve the analysis of morphosyntactic patterns. A better grasp of noun- and verb-like adjectives will aid in NLP tools, improving the accuracy of syntactic parsing and machine translation, especially when dealing with languages exhibiting complex word class features. The findings can improve language teaching materials, particularly in helping learners understand the flexible nature of adjectives in the selected EIA languages, enhancing both language acquisition and pedagogical approaches. Research on the semantic ordering of adjectives in poly-adjectival noun phrases will deepen our

understanding of the interaction between syntax and semantics. It will offer insights into how meaning is structured in noun phrases and how different adjective types contribute to the overall meaning in these languages. Future studies can facilitate cross-linguistic comparisons, allowing linguists to understand universal patterns and language-specific features in adjective ordering. This can contribute to the broader field of typological research in adjective syntax across different Indian language families. Understanding the semantic hierarchy in poly-adjectival noun phrases will improve NLP, particularly in tasks like machine translation and automatic syntactic parsing, ensuring that adjective order is correctly captured. This research will benefit language teaching, offering clearer guidelines for learners on the ordering of adjectives in Eastern Indo-Aryan languages, improving both comprehension and production of complex noun phrases.

To conclude, this study shows the diversity and complexity of adjectives in Indo-Aryan languages in terms of semanticity, word-formation processes, grammatical features and semantic ordering in poly-adjectival noun phrases. It highlights the need for more research on under-explored languages, spoken data and context to improve typological understanding.

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