

GADDI

SYNTAX



Gaddi Syntax¹

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Introduction

This piece is a compilation of the work done on the morpho-syntax and syntax of Gaddi. It has four sections, which discuss case, agreement, questions and negation.

[Section 1](#) is dedicated to illustrating the case markers and the environments that license them. Gaddi has the following cases: the nominative, the accusative, the dative, the ergative, the oblique, the subject-oblique and the ablative. Apart from the nominative case, which has no morphological representation, the accusative, dative and ablative are morphologically marked on the noun phrase. The ergative and the subject-oblique manifest themselves on the suppletive stems of simple noun phrases. When the noun phrase is complex (i.e. when it is a conjoined noun phrase or has a relative clause modifying it), however, these cases manifest themselves in the form of clitics that attach to the entire phrase. All case markers block the verb from agreeing with the noun phrase they are associated with.

[Section 2](#) discusses the verbal and nominal agreement systems. Agreement in Gaddi is seen between adjectives and the noun phrases they modify, between verbs and subjects, between verbs and direct objects, between verbs and indirect objects, and between noun phrases with the genitive case and the noun phrase(s) they modify. In its verbal agreement system, the language also has the scope for default agreement, which applies when both subject-verb agreement and object-verb agreement are blocked. Blocking of agreement between a noun phrase and the verb happens when the noun phrase has morphological case.

¹ Parts of sections 1 and 4 have been published as “Gaddi Case” (Roy & Chakraborty, 2017) and “Negation Markers in Gaddi” (Sharma, 2017) respectively in issue 2 of Volume 1 of the *Jadavpur Journal of Languages and Linguistics* (the issue dedicated to publishing proceedings of SCONLI 11), while this compiled work was being edited.

² In alphabetical order of last name

Questions, of the *wh* type, and polar ones are discussed in [Section 3](#). Gaddi is a *wh* in-situ language, where the *wh* undergoes LF- or covert-movement. Yes/No questions are formed in two ways, one using a polar question particle, *kɛ*, and the other using a rising intonation with a declarative. Gaddi does not show much variation from the *wh*-syntax of Hindi, which is described in detail by Dayal (1996). A *wh*-phrase inside an embedded finite clause always has narrow scope. Gaddi is a scope marking language. Extraction of *whs* is not permitted.

Negation and Negative Polarity Items are discussed in [Section 4](#). Gaddi has four different negation markers: *na*, *ni*, *nathi*, and *mat^h*. *na/ni* is used to express sentential negation. *nathi* is the negative indicative mood marker, and *mat* is the negative imperative marker. *na* is the unmarked negation marker, while *ni* used in certain castes dialects. Sentences in all tenses, aspects and moods present in the language can be negated. The canonical word-order for sentential negation is when the negation marker is in the pre-verbal position. Negation can only have sentential scope. Constituent scope of negation is expressed by using paraphrasing using two negated sentences with contrastive constituents. In complex sentences, negation can raise to matrix clause. Strong and weak Negative Polarity Items exist in Gaddi. Many NPIs are formed with a focus particle *b^hi* ('even'), which plays a role in how NPIs are licensed.

1. Case in Gaddi

1.1 The nominative case

In the imperfective and progressive aspects, subjects of intransitive and transitive verbs get morphologically unmarked nominative case. Below are examples of subject noun phrases with unmarked nominative case in the imperfective and progressive aspects. In examples (1a) and (1b), the verb is intransitive and transitive respectively.

- (1) (a) **dəbbu** skul gənde hin
 3.NOM3 school.ACC/DAT go.IPFV IND
 (PL)⁴ (SGM) PL
 'Children go to school.'

³ Abbreviations in Glosses: 1-First person, 2-Second person, 3-Third person, ABL-Ablative, ABS-Absolute, ACC-Accusative, ADJ-Adjective, ADV-Adverb, AGR-Agreement, ASP-Aspect, AUX-Auxiliary, CAUS-Causative, COMP-Complementizer, COND-Conditional, COM-Comitative, DAT-Dative, DEM-Demonstrative, DET-Determiner, EM-Epistemic Mood, ERG-Ergative, F-Feminine, FE-Feminine-Gend, FUT-Future, GEN-Genitive, HAB-Habitual, IMP-Imperative, INCHO-Inchoative, IND-Indicative, INF-Infinitive, INS-Instrumental, IPFV-Imperfective, IRR-Irrealis, LOC-Locative, M-Masculine, MA-Masculine-Gend, MOD-Mood, Modality, Modal, NEG-Negation, NEUT-Neuter Gender, NOM-Nominative, OBJ-Object, OBL-Oblique, P-Person, PFV-Perfective, PL-Plural, PRF-Perfect, PRS-Present, PROG-Progressive, PST-Past, Q-Question word/particle, SBJV-Subjunctive, SG-Singular, TNS-Tense, VOC-Vocative

⁴ Sections 1 and 2 have dual-lined glosses. The first line has the semantic content and the function of the morpheme. The second line is exclusively dedicated to marking person, number and gender (PNG) agreement features. NG features within round braces, '()', refer to the number and gender features of nouns as they exist in the Gaddi lexicon. PNG features that are not with braces are the features that manifest as a result of agreement with the nominal features.

- (b) **bəndər** roti k^həu⁵ kərənda hə
 monkey.NOM roti eat PROG IND
 (SGM) (SGF) SGM SG
 ‘A/the monkey is eating a/the roti.’

In the perfect and the perfective aspects, only subjects of intransitive verbs get unmarked nominative case. This is illustrated in (2a) and (2b) respectively.

- (2) (a) **so** suturə hin
 3.NOM sleep.PRF IND
 (PL) PL PL
 ‘they have slept.’

- (b) **bəra** **hat^hi** nə məru
 big elephant.NOM NEG die.PFV
 SGM (SGM) SGM
 ‘The big elephant did not die.’

Subjects of unergative verbs, unaccusative verbs and predicative adjectives are also in the unmarked nominative. That the subject noun phrase has nominative case when the verb is an unergative, unaccusative or a predicative adjective is illustrated in (3a), (3b) and (3c) respectively:

- (3) (a) **radzib** tərū kərda
 Rajiv.NOM swim do.IPFV
 (SGM) SGM
 ‘Rajiv swims.’
- (b) **sisā** bədzi gu
 Glass NOM break go.PFV
 (SGM) SG
 ‘The glass broke.’
- (c) **so** k^hidzi gət^hurā t^hu
 3.NOM tire go.PRF PST
 (SGM) SG SGM
 ‘He was tired.’

1.2 The dative and the accusative

Masica (1991, p. 244) in its description of dative case markers in Indo Aryan, notes that –dzo is the dative case marker in West Pahari (Mandeali, Chameali, Bharmauri, Bhadarwahi-Bhalesi). In Gaddi too, the dative case marker is –dzo. All indirect objects

⁵ Mehta (2016) says that –u and –i do not represent a gender agreement feature, since consistent agreement with a noun phrase (subject or objects) is not noted. Rather, these morphemes are said to represent the feature "Gend", a feature that has two values, masculine (MA) and feminine (FE).

(which are beneficiaries or goals) are obligatorily marked by the dative. [see (5a)]. So are experiencer subjects [see (4b) and (4c)].

- (4) (a) *səmme* **rəm̩ma-d̩ʒo** *kita:b* *dituri* *ha*
 Shyam.ERG Ram.OBL-DAT book.ACC give.PRF IND
 (SGM) (SGM) (SGF) SGF SG
 ‘Shyam has given a book to Ram.’

- (b) **pəŋkəd̩ʒa-d̩ʒo** *b^hukə* *ləguri* *ha*
 Pankaj.OBL-DAT hunger feel.PRF IND
 (SGM) (SGF) SGF SG
 ‘Pankaj has been feeling hungry.’ (Lit: Hunger is coming to Pankaj)

- (c) *mind̩ʒo* *ε* *gəlla* *jad* *rəŋi* *ha*
 1.DAT this matter remember stay.INF IND
 (SG) (SGF) SGF SG SG
 I will remember this matter. (Lit: This matter will stay in my memory)

Masica (1991, p. 239) notes that north Indo-Aryan languages (except Sinhala) do not have an accusative case. This refers to the fact that in Indo-Aryan languages, direct objects can be marked by the same case marker marking indirect objects i.e. the dative case marker, and there is no independent accusative case marker (unlike, for example, in Dravidian languages). What happens in Gaddi, while largely within the Indo-Aryan paradigm, is not exactly the same. While direct objects are marked by -*d̩ʒo*, they may instead also be marked by another marker, -*o* [see (5)].

- (5) *rəvi-ε* *bottəl-o* *təbl-a* *puṭṭ^hi* *rəkk^hi* *ha*
 Ravi.ERG bottle-ACC table-OBL on.LOC keep.PFV IND
 (SGM)(SGM) (SGM) SGF SG
 ‘Ravi kept the bottle on the table.’

Interestingly, indirect objects can never be marked by -*o* [see (7)]

- (6) * *səmme* **rəm̩ma-o** *kita:b* *dituri* *ha*
 Shyam.ERG Ram.OBL-DAT book.ACC give.PRF IND
 (SGM) (SGM) (SGF) SGF SG
 ‘Shyam has given a book to Ram.’

Gaddi exhibits Differential Object Marking (Bossong, 1985). Differential Object Marking (DOM), as defined by Aissen (2002) following Bossong (1991) refers to the phenomenon in some languages wherein some objects (and not others) are overtly marked by a case marker. As Aissen (2002, p. 3) says, “The higher in prominence a direct object, the more likely it is to be overtly casemarked”. Prominence is assessed along the dimensions of animacy or/and definiteness. The animacy and definiteness scales are reproduced here from Aissen (2002, p. 3):

Animacy scale: Human > Animate > Inanimate

Definiteness scale: Personal pronoun > Proper name > Definite NP > Indefinite specific NP

> Non-specific NP

This means that if in a language a direct object of a particular rank can be case-marked, direct objects that rank higher than it can be case-marked but not those ranked lower than it.

Indo-Aryan languages typically show an interaction between both these scales. Aissen (2002) calls this two-dimensional DOM. For example, in Hindi, it says, both animate objects and inanimate objects can be case marked. But while only those inanimates that are definite can be case marked, amongst animates, both definite and indefinite humans (and some non-human animates) can be case marked. Also, for humans (and some non-human animates) case marking is obligatory while it is usually optional for inanimate.⁶

Both the animate and inanimate objects can be case marked in Gaddi. When the object is human it seems, it is obligatory to case mark it irrespective of it being definite or indefinite. This is illustrated in (7a) and (7b). In (7a), *dəbbu* is indefinite while in (7b) *dəbbu* is definite.

- (7) (a) *mei* *ek* ***dəbbu-o*** *dikk^hu*
 1.ERG one boy.ACC see.PFV
 (SGM/F) (SGM) SGM
 ‘I saw a boy.’
- (b) *mei* ***dəbbu-o*** *dikk^hu*
 1.ERG boy.ACC see.PFV
 (SGM/F) (SGM) SG.M
 ‘I saw the boy.’

However, definite human objects of verbs like ‘see’ in the perfective and perfect aspects are obligatorily unmarked, as shown in (8a) and (8b).

- (8) (a) *mindzo* ***sita*** *dikk^hi*
 1.DAT Sita see.PFV
 (SGM/F) (SGF) SGM
 ‘I saw Sita.’
- (b) **mindzo* ***sita-o*** *dikk^hi*

⁶ DOM in Hindi:

- (a) inanimate definite NP, optionally case-marked
bətʃtʃe-ne *kita:b-(ko)* *medʒ* *pər* *rək^h-a*
 child(M).OBL-ERG book (F)-ACC floor LOC keep-PFV.DEF
 ‘the child kept the book LOC the table’
- (b) inanimate indefinite NP, cannot be case marked
bətʃtʃe-ne *kita:be* *k^hərīdī*
 child.OBL-ERG book.PL(F) buy.PFV.PLF
 ‘the child bought books’
- (c) animate human NP, obligatorily case-marked
ma-ne *bətʃtʃe-ko* *zami:n* *pər* *bi^ha-(j)a*
 mother.ERG child-ACC floor LOC sit.CAUS-PFV.DEF
 ‘the mother made the child sit on the floor’

1.DAT	Sita-ACC	see.PFV
(SGM/F)	(SGF)	SG.F
‘I saw Sita.’		

When the object is non-human accusative case marking is optional. If the object not marked with the accusative case, its interpretation is ambiguous between an indefinite reading and a definite reading. This is illustrated in (9) below:

(9)	mēi	tasidzo	tfente	diture	hin
	1.ERG	3.DAT	cloth	give.PRF	IND
	SGM/F	SGM/F	(PL)	PL	PL
	‘I have given him/her clothes.’ <i>or</i>				
	‘I have given him/her the clothes.’				

However, when a non-human object is marked by the accusative case, the only interpretation available is that of the definite [see (10)]

(10)	mei	əlmari-o	dikk ^h u
	I.ERG	almirah.ACC	see.PFV
	SGM/F	(SGF)	SGF
	‘I saw the almirah.’		

The data collected for dative-accusative case was not done with special focus on DOM. DOM in Gaddi needs to be explored further and these initial claims verified with more data that is sensitive to DOM.

1.3 The ergative case

In the perfect and perfective aspects, subjects of transitive verbs get marked with the ergative case. The ergative is marked on a simple subject noun in the form of a suppletive stem of the noun. For example, ‘sjam’ with the ergative case is ‘səmmə’ [see (11)]. The following shows examples of sentences with ergative subject DPs.

(11)	səmmə	rəmma-dzo	kəta:b	dituri	ha
	shyam.ERG	ram.OBL-ACC/DAT	book	give.PRF	IND
	(SGM)	(SGM)	(SGF)	SGF	SG
	‘Shyam gave a/the book to Ram.’				

A complex subject, like one that is a conjoined noun phrase, is marked by the ergative case marker -ε. This is illustrated in (12):

(12)	sveta etε pinki	ε	mənprit-dzo	heru	ha
	Sweta and Pinki	ERG	Manpreet-ACC/DAT	see.PFV	IND
	(PL)		(SGF)	SGM	SG
	‘Sweta and Pinki saw Manpreet.’				

1.4 The subject-oblique case

1.4.1 The oblique form of noun phrases

Noun phrases that end in consonants appear in a suppletive oblique form (which ends in a vowel) when followed by a case marking suffix or postposition.

<i>Noun phrase ending in a consonant</i>	<i>Oblique form of the Noun Phrase</i>
bisal 'Vishal'	bisalla pur Vishal.OBL LOC 'on Vishal'
ram 'Ram'	rəm̩ma -dʒo Ram.OBL-DAT 'to Ram'
p ^h ul 'flower'	p^hulla sɔgi flowers.OBL INS 'with flowers'
kutr 'dog'	kutta t ^h au dog.OBL ABL 'from a/the dog'
seb 'apple'	sebba -rɛ apple.OBL-GEN 'apple's'

Table 1: Oblique forms of noun phrases ending in consonants

(13a), (13b) and (13c) instantiate proper nouns ending in consonants that appear in the oblique when followed by a case marker or postposition.

- (13) (a) sveta etɛ Pinki ɛ **d^hirdʒa**-dʒo heru ha
Sweta and Pinki ERG Dheeraj-ACC/DAT see.PFV IND
(PL) (SGF) SGM SG
'Sweta and Pinki saw Dheeraj.'
- (b) samme **rəm̩ma**-dʒo kitab deni ha
Shyam.SUB OBL Ram.OBL-DAT book give.PFV IND
(SGM) (SGM) (SGF) SGF SG
'Shyam will give a book to Ram.'
- (c) baɣ^hɛ **bisalla** pur həmla kəru
tiger.ERG Vishal.OBL on at^hack do.PFV
(SGM) (SGM) SGM
'A/The tiger attacked Vishal.'

The following are examples of common nouns (marked in bold) in the suppletive form when followed by a case marker or post position [(14a) to (14c)].

- (14) (a) kumare **kutte** t^hau gend lei
Kumar.ERG dog.OBL ABL ball take.PFV

- | | | | | | |
|-----|---|------------------|--------------|----------|---------|
| | (SGM) | (SGM) | (SGF) | SGF | |
| | 'Kumar took a/the ball from a/the dog.' | | | | |
| (b) | ləkʃmi | sebba -rɛ | tukrɛ | kʰaŋɛ | hin |
| | Lakshmi.SUB OBL | apple.OBL-GEN | piece | eat.INF | IND |
| | (SGF) | (SGM) | PL | PL | PL |
| | 'Lakshmi will eat the slices of a/the apple.' | | | | |
| (c) | pʰulla | səgi | murti | sədʒɑji | geji |
| | flower.OBL | with.INS | idol.ACC/DAT | decorate | go.PASS |
| | (PL) | (SGF) | SGF | SG | |
| | 'A/the idol was decorated with flowers.' | | | | |

1.4.2 The case for the subject of events unrealized in time

Gaddi has a special case that marks the subject of events unrealized in time. When an event is unrealized in time, the subject noun phrase is a suppletive stem. This suppletive stem has the same form as the oblique form of the noun stem that is required when a case marker or postposition follows it. The suppletive noun phrase that is the subject of an event unrealized in time is marked with the subject-oblique case. Henceforth, the oblique form of the noun phrase in subject position will be referred to as the noun phrase with the subject oblique (Sub-Obl for short) case. The Sub-Obl blocks subject-verb agreement, as seen in (15a) and (15b).

- | | | | | | | |
|------|-----|----------------------------------|-------------|-------|---------|-----|
| (15) | (a) | rəmma | dutʰɛ | am | kʰaŋa | ha |
| | | Ram.SUB OBL | tomorrow | mango | eat.INF | IND |
| | | (SGM) | | (SGM) | SGM | SG |
| | | 'Ram will eat mangoes tomorrow.' | | | | |
| | (b) | samma | ramma-dʒo | kitab | deŋi | ha |
| | | Shyam.SUB OBL | Ram.OBL-DAT | book | give | IND |
| | | (SGM) | (SGM) | (SGF) | SGF | SG |
| | | 'Shyam will give a book to Ram.' | | | | |

The subject noun phrase ending in a vowel is identical to its non-suppletive form, as (16) shows. It is also marked with Sub-Obl, and subject-verb agreement is blocked.

- | | | | | | |
|------|-------------------------------|----------|------|----------|-----|
| (16) | pudʒa | dutʰɛ | tei | tʃəlna | ha |
| | Puja.SUB OBL | tomorrow | till | walk.INF | IND |
| | (SGF) | | | SGM | SG |
| | 'Puja will leave by tomorrow' | | | | |

1.5 The ablative case

The ablative case, which is used in languages to indicate movement away from something (a location, person or inanimate object), is also found in Gaddi. It is also used to compare two noun phrases. There are four ablative case marking post positions, *tʰaũ*, *hɔ* and *haũ*, all of which are found to be used interchangeably.

In Gaddi, the ablative is used to indicate movement (not necessarily literally) from one spatial location to another [see (17a), (17b) and (17c)].

- (17) (a) bədzar eʃi tʰaũ du:r ha
 baazar here from. ABL far IND
 (SGM) SG
 ‘The market is far from here.’
- (b) so skulla tʰaũ iŋa ləgura
 3.NOM school ABL come.INF do.PRF
 (SGM) SGM SGM
 ‘He has come from school.’
- (c) ɖala tʰaũ seb peji
 branch.OBL ABL apple fall.PFV
 (SGM) (SGM) SGF
 ‘An/the apple fell from the tree.’

The ablative is also used to express movement (literal and discourse) from one temporal location to another. This is exemplified by (18).

- (18) e tʃenelle sombara tʰaũ tuara tək dəsi gənde hin
 these channels Monday ABL Sunday till show.PASS go.IPFV IND
 (PL) PL PL
 ‘These channels air from Monday to Sunday.’

1.6 The instrumental case

The instrumental case is used in languages to mark noun phrases used in the execution of an event. Gaddi has three instrumental case marking postpositions, each of which can be used for the others: *-te*, *-hoggi* and *-səgi*. (19a), (19b) and (19c) illustrate this case marker.

- (19) (a) təsidzɛ pʰəl tʰuri **səgi** bəɖɖu
 3.ERG fruit knife with.INS cut.PFV
 SGM/F (SGM) SGF SGM
 ‘She/ He cut the fruit with the knife’
- (b) pʰulla **səgi** murti sədzəji geji
 flower.OBL with.INS idol.ACC/DAT decorate go.PASS
 (PL) (SGF) SGF SG
 ‘A/the idol was decorated with flowers.’

- (c) dzendra tʃabi **səgi** k^hulda ha
 lock key with.INS open IND
 (SGM) (SGF) SGM SG
 ‘Locks open with keys’

1.7 The locative case

The locative case is used to mark the noun phrase that is the location of the event/state of being. Like the ablative and the instrumental, locative case markers are post positions; like *pur* [illustrated in (20a), (20b) and (20c)] and *məndz* [illustrated in (20d)].

- (20) (a) buʃta: **pur** ʌk ciʃi ha
 tree.OBL LOC one bird IND
 (SGM) (SGM) SG
 ‘There is a bird on a/the tree’
- (b) pa:da **pur** ijū ha
 mountain.OBL LOC ice IND
 (SGM) (SGM) SG
 ‘There is snow on the mountain’
- (c) əmba **pur** mək^hri djuri ha
 mango.OBL LOC fly sit.PRF IND
 (SGM) (SGF) SGF SG
 ‘The fly has sat on a/the mango’
- (d) səʃka **məndz** kutr k^hərura ha
 road.OBL LOC dog stand.PRF IND
 (SGM) (SGM) SGM SG
 ‘A/the dog is standing beside the road’

2 Agreement in Gaddi

2.1 Adjective-noun phrase agreement

2.1.1 Agreement with vowel ending adjectives

Adjectives, when ending in a vowel, agree in number and gender (in case of a singular subject) or just in number (in case of a plural subject) with the noun phrase they modify. This is true of both attributive and predicative adjectives.

The word final vowel of these adjectives is underspecified. Its specification is determined by the number and gender features of the noun phrase. For example, the adjectives *ləmmV*, *kəʃV*, *hukkV* (V= vowel), etc will be realised as *ləmma*, *kəʃa* and *hukka* when agreeing with a singular masculine noun phrase. This is illustrated in (21) where *kala* is

a predicative adjective agreeing with the masculine singular noun phrase *səndukə*.

- (21) *mera* *səndukə* ***ka:la*** *ha*
 1.GEN box black IND
 SGM SG(M) SGM SG
 ‘My box is black.’

When agreeing with a singular feminine noun phrase they will be realised as *ləmmi*, *kaʎi* and *hukki*. This is exemplified in (22), where the predicative adjective *ləmmi* agrees with the singular feminine noun *nəkə*.

- (22) *seri* *nəkə* ***ləmmi*** *ha*
 3.GEN nose long IND
 SGF (SGF) SGF SG
 ‘He/She has a long nose.’

They manifest as *ləmme*, *kaʎe* and *hukke* when modifying a plural noun phrase. This is instantiated in (23).

- (23) *udɖəɾnə* ***hukke*** *hin*
 Cloth dry IND
 (PL) PL PL
 ‘The clothes are dry.’

Attributive adjectives too agree with the noun phrase they modify [see (24a) and (24b)].

- (24) (a) *o* ***lutʃʃa*** *nikka* *ha*
 3.NOM rascal boy IND
 SG SGM SG(M) SG
 ‘He is a rascal’

- (b) *mei* *təsɪdʒo* *bəɾe* ***b^hare*** *kitaba* *dit^hure* *hin*
 1.ERG you.DAT very heavy book.ACC/DAT give.PRF IND
 SG SG PL PL (PL) PL PL
 ‘I have given him heavy books’

When more than one adjective (predicative or attributive) ending in a vowel modifies a DP, all the adjective agree in either number and gender or just number with the noun phrase. This is illustrated with attributive adjectives in (25a) and (25b).

- (25) (a) *so* *ək* ***bəɖa*** ***t^hula*** ***gubru*** *ha*
 3.NOM one big fat boy IND
 SG SGM SGM (SGM) SG
 ‘He is a very fat boy’

- (b) *so* *ək* ***ləmmi*** ***tʃəɖi*** ***moʃi*** ***kuʎi*** *ha*
 3.NOM one tall broad fat girl IND
 SG SGF SGF SGF (SGF) SG
 ‘She is a fat girl’

manifests on the verb, and only the plural agreement exponent is seen. If the noun phrase encodes honorificity, neither gender, nor number are manifested on the verb, and only honorificity is. The honorific feature has the same exponential value as that of the plural in Gaddi.

Verbs/mood markers may only agree with those noun phrases that do not have an overt morphological case marker attached to them. This implies that dative subjects, which manifest with experiencer predicates, and ergative subjects, which manifest in the perfect tense and the perfective aspect, block the verb/mood marker from agreeing with them.

2.3.1 Agreement in the indicative mood

In the imperfective aspect, if the subject is in the nominative case, the verb, irrespective of transitivity, agrees with the subject in gender, number and honorificity. The indicative mood marker⁸, agrees only in number and honorificity with the subject. This is exemplified in (28a), (28b) and (28c), where the subjects are singular masculine, singular feminine and plural respectively.

- (28) (a) rədzib k^haŋa **k^hənda** **ha**
 Rajib.NOM food.ACC/DAT eat.IPFV IND
 SG(M) SGM SGM SG
 ‘Rajiv eats food.’
- (b) səkʃi sku:l **gəndi** **ha**
 Sakshi.NOM school go.IPFV IND
 (SGF) SGF SG
 ‘Sakshi goes to school.’
- (c) dəbbu sku:l **gəndɛ** **hin**
 boy.NOM school go.IPFV IND
 (PL) PL PL
 ‘Boys go to school.’

In the progressive aspect, if the subject is in the nominative case, there is free variation between the Gend feature values MA (manifested as *-u*) and FE (manifested as *-i*) on the main verb⁹. The light verb, kərənd-a/i/ɛ, encoding the progressive aspect, agrees in number, gender and honorificity with the subject. The indicative mood marker agrees with the subject only in number and honorificity. This is exemplified in examples (29a), (29b) and (29c).

- (29) (a) bandər roti k^həu **kərənda** **ha**
 monkey.NOM roti eat.MA do.PROG IND

⁸ pronounced optionally

⁹ In the progressive aspect, the transitivity of the verb has no bearing on agreement.

	(SGM)	(SGF)		SGM		SG	
	‘the monkey is eating rotis’						
(b)	sita	pəkkure	amma	k ^h əu	kərəndi	ha	
	Sita	ripened	mango.OBL	eat.MA	do.PROG	IND	
	(SGF)		(SGF)		SGF	SG	
(c)	sita	ətɛ	ram	amma	k ^h əu	kərənde	hin
	Sita	and	Ram	mango	eat.MA	do.PROG	IND
		(PL)	(SGM)		PL	PL	

In the inchoative aspect, if the subject is in the nominative, the main verb in the infinitive form agrees in gender, number and honorificity with the subject. The verb *læg-*, is found in the same form that it appears in in the perfect (*læguri/a/ɛ*), and, like the main verb, agrees in gender, number and honorificity with the subject. The indicative mood marker, as with the above two Aspects, agrees only in number and honorificity.

(30)	(a)	vo	g ^h ar-o	gaŋa	lægura	ha		
		she.NOM	home-ACC/DAT.	go.INF	INCHO	IND		
		(SGF)	(SGM)	SG	SGM	SG		
		‘She is going home’						
	(b)	muŋti	bɛŋ	hɛlke	b ^h ai.dzo	sulaŋa	lægure	hin
		big	sister	small.OBL	brother.ACC	cause sleep.INF	INCHO	IND
		SGF	(SGF.HON)		(SGM)		HON	HON
		‘The older sister is putting the little brother to sleep’						
	(c)	ai	pətr	lik ^h na	lægure			
		1.NOM	letter	write.INF	PROG			
		(PL)	(SGM)		PL			
		‘We are writing a letter’						

In the perfective aspect, when the verb is intransitive it has the Gend feature MA or FE in free variation (when the subject is singular) or shows plural agreement (when the subject is plural). The indicative mood marker agrees in number and honorificity with the subject. This is illustrated in (31a), (31b) and (31c).

(31)	(a)	bəŋa	hat ^h i	na	məru	
		big	elephant	NEG	die.MA.PFV	
		SGM	(SGM)		SG	
		‘The big elephant did not die’				
	(b)	mək ^h ri	na	məri		
		fly	NEG	die.FE.PFV		
		(SGF)		SG		
		‘The fly did not die’				
	(c)	serɛ	pɛr	b ^h ədzi	gɛ	hin

3.GEN	leg	break	go.PFV	IND
PL	(PL)		PL	PL

‘His/her leg has broken’

When the verb is transitive, subject marking by ergative case leads to subject-verb agreement being blocked. Transitive verbs (including the light verb) in the perfective aspect have the Gend feature MA or FE in free variation (when the object is singular or plural), or may agree in number with the object when the object is plural. The indicative case marker agrees in number and honorificity with the subject. See examples (32a), (32b) and (32c) for an exemplification.

(32) (a)

tɛi	pətr	lik ^h u	ha
2.ERG	letter	write.MA.PFV	IND
SGM/F	(SGM)	SG	SG

‘You wrote a letter’

(b)

ridʒvanɛ	əpɲi	uŋgli	bəɟi	lei
Rizwan.ERG	REFL	finger	cut.MA	take.PFV
SGM	SGF	(SGF)	SG	SGF

‘Rizwan cut his finger’

(c)

sitɛ	kut ^h ɛ	here
sita.ERG	dog.OBL	see.PFV
(SGF)	(PL)	PL

‘Sita saw dogs’

When the verb is transitive and the object receives morphological accusative case, the verb shows no agreement, and receives the Gend feature value MA or FE in free variation. The indicative mood marker gets default agreement, which is masculine. This is shown in (33a) and (33b).

(33) (a)

Sitɛ	əlmari-o	dikk ^h u	ha
Sita.ERG	almirah-ACC/DAT	see.MA.PRF	IND
(SGF)	(SGF)		SG

‘Sita saw the almirah.’

(b)

minakʃiɛ	kumar	etɛ sakʃi-dʒo	heru	ha
Meenakshi.ERG	Kumar and Sakshi-ACC/DAT	see.MA.PFV	IND	
(SGF)	(PL)			SG

‘Meenakshi saw Kumar and Sakshi’

In events unrealised in time (events possible in the future, wishes, conditional statements etc), the subject is marked by the subject-oblique case. The verb when intransitive shows default (singular masculine) agreement in the infinitive form. The indicative mood marker too has default singular agreement. This is shown in (34).

(34)

mənprɪtɛ	dut ^h ɛ	tʃəlɪna	ha
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Manpreet-SUB OBL tomorrow walk.INF IND
 (SGF) SGM SG
 ‘Manpreet will leave tomorrow’

When the verb is transitive, and the direct object is not marked by any morphological case, the verb agrees with it. The verb in the infinitive agrees in gender, number and honorificity with the object. The indicative mood marker agrees with the direct object in number and honorificity [as shown in (35)].

(35) samme ramma-dzo kitab deni ha
 Shyam-SUB OBL Ram-DAT book give.INF IND
 (SGM) (SGM) (SGF) SGF SG
 ‘Shyam will give a book to Ram’

2.3.2 Agreement in the epistemic mood

The epistemic mood in Gaddi is expressed by attaching *-ll* to the *be* verb, followed by the gender, number and honorificity agreement features. The following are example sentences from Mehta (2016) exemplifying the agreement features on the verb [see examples (36a) and (36b)].

(36) (a) b^hai kε karda hol^{ll}a part of example
 brother what.Q do.IPFV be.EM (1.28), p. 21
 (SGM) SGM SGM
 ‘What would brother be doing?’
 (b) əgər bərk^ha b^hu^{ll}i part of example
 if rain be.EM (1.29), p. 22
 (SGF) (SGF)
 ta su g^həre hi reṇa
 then we house.LOC only stay.INF
 (PL) SGM
 ‘If it rains tomorrow, we will be at home’

2.3.3 Agreement in the imperative mood

In the imperative mood, the verb is in a form distinct from that of all other moods. While it shows no gender agreement feature, it might inflect for number/honorificity agreement, although data specific to this was not elicited. (37) exemplifies the agreement on the verb when the subject is second person singular.

(37) andər-ou gətʃ^h
 inside-LOC go.IMP
 SG
 ‘Go inside!’

2.3.4 Agreement in the past tense

The Gaddi past tense marker is *t^h-u/ t^h-i/ t^h-ije*. This marker agrees in gender, number and

	(SGM)	(SGM)		SGM	SGM
	'He was going home'				
(b)	urmila	k ^h aŋa	k ^h aŋa	ləguri	t^hi
	3.NOM	food	eat.INF	PROG	PST
	(SGF)	(SGM)		SGF	SGF
	'Urmila was eating (/the) food'				
(c)	[kəʃiʃ etɛ ləlɪt]	k ^h aŋa	k ^h aŋa	ləgure	t^hije
	3.NOM	food	eat.INF	PROG	PST
	(PL)	(SGM)		PL	PL
	'Kashish and Lalit was eating (/the) food'				

2.2.6 Agreement in the perfect tense

In the perfect of the present, when the verb is intransitive, the subject receives nominative case. The verb agrees with the subject in gender, number and honorificity. The indicative mood marker agrees with the subject in number and honorificity. This is seen in (41a), (41b) and (41c), where the verbs are intransitive and the subjects are singular masculine, singular feminine and plural respectively. (41a) has a light verb *gəc^hura*, and it is this that agrees in singular number and masculine gender with *mera pər*.

(41)	(a)	mera	pər	badzi	gəc^hura	ha
		1.GEN	leg	break	go.PRF	IND
		SGM	(SGM)		SGM	SG
		'My leg is broken'				
	(b)	meri	uŋli	badzi	gəc ^h uri	
		1.GEN	finger	break	go.PRF	
		SGF	(SGF)		SGF	
		'My finger is broken'				
	(c)	so		suture		hin
		3.NOM		sleep.PRF		IND
		(PL)		PL		PL
		'they have slept'				

When the verb is transitive, the subject noun phrase receives ergative case and thus the verb does not agree with the subject. The verb agrees in gender, number and honorificity with the object noun phrase, provided the object does not receive morphological accusative case. The indicative mood marker too agrees with the object, but only in number. For example, in (42a) below, *lik^hura* agrees with the object *pətr*, not with the subject *tei*. Similarly, in (42b) and (42c), *pə^huri* and *diture* agree with the objects *kitab* and *c^hentɛ* respectively.

- (42) (a) *tei pətr lik^hura ha*
 2.ERG letter write.PRF IND
 (SGM) SGM SG
 ‘you have written a/the letter’
- (b) *mẽ kitab pəɽuri ha*
 1.ERG book read.PRF IND
 SG (SGF) SGF SG
 ‘I have read a/the book’
- (c) *mëi təsidzo c^hente diturɛ hin*
 1.ERG 3.DAT clothes give.PRF IND
 SGM/F SGM/F (PL) PL PL
 ‘I have given him/her clothes’

When the verb is transitive and the object has accusative morphological case, agreement with the object is blocked. The verb, in this case has default masculine singular agreement. The indicative mood marker gets default singular agreement. This means that the number and gender features of neither the subject nor the object are of any consequence to the agreement features of the verb and the mood marker. This is exemplified in (43) where both the subject and the object are feminine, but the verb has masculine agreement.

- (43) *sveta etɛ pinki ɛ mənprɪt-dzo herura ha* (Roy &
 Sweta and Pinki ERG Manpreet-ACC/DAT see.PRF IND Chakraborty, 2017)
 (PL) (SGF) SGM SG
 ‘Sweta and Pinki saw Manpreet’

In the perfect of the past, intransitive verbs and the past tense marker agree with the subject in gender, number and honorificity [see (44a), (44b) and (44c)].

- (44) (a) *so k^hidzi gət^hura t^hu*
 3.NOM tire go.PRF PST
 (SGM) SGM SGM
 ‘He had become tired’
- (b) *so k^hidzi gət^huri t^hi*
 3.NOM tire go.PRF PST
 (SGF) SGF SGF
 ‘She had become tired’
- (c) *so k^hidzi gət^hurɛ t^hije*
 3.NOM tire go.PRF PST
 (PL) PL PL
 ‘They had become tired’

Like in the present, there is object agreement when the verb is transitive. Here, both the verb and the past tense marker agree in gender, number and honorificity with the object, as in (45a)-(45c).

- (45) (a) *sit^hε* *ək^hbar* **pəɾura** **t^hu**
 1.ERG newspaper read.PRF PST
 (SGF) (M) SGF SGF
 ‘Sita had read the newspaper’
- (b) *rammε* *kitab* **pəɾuri** **t^hi**
 1.ERG book read.PRF PST
 (SG.M) (F) SGF SGF
 ‘Ram had read the book’
- (c) *mēi* *tasidzo* *tʃentε* **diturε** **t^hije**
 1.ERG 3.DAT cloth give.PRF PST
 SGM/F SGM/F (PL) PL PL
 ‘I had given him/her clothes’

If the verb is transitive and both the subject and the object receive morphological case (i.e. the subject receives ergative case and the object accusative.), the verb and the past tense marker get default singular masculine agreement, as illustrated in (46).

- (46) *sitε* *so* *kuɾi-o* **herura** **t^hu**
 Sita.ERG that girl-ACC/DAT see.PRF PST
 (SGF) (SGF) SGM SGM
 ‘Sita had seen that girl’

3. Questions in Gaddi

3.1 Polar (Yes/No) questions in Gaddi

Polar questions in Gaddi are formed either with just a rising intonation on the declarative [as in (87)] or with the polar question particle *kε* [see (47b)].

- (47) (a) *tusε* *k^hanɑ* *k^hai* *liju*
 You.NOM.2SGM food.SGF eat.SGF take.M.PFV
 ‘Have you eaten?’
- (b) **kε** *tusε* *ədʒ* *ək^hbar* *pəɾi*
 PQ you.NOM.SGF today newspaper.SGF read.PFV.SGF
 ‘Did you read the newspaper today?’

3.2. Wh-questions in Gaddi

3.2.1 Gaddi in the typology of ‘wh-’ languages

The following are the *wh*-words in Gaddi:

- Argument *wh*:- *kuŋ* ‘who’, *kε* ‘what’, *kəs* ‘which’
- Adjunct *wh*:- *kijē* ‘how’, *kəɟi* ‘where’, *kəjo* ‘why’, *kəŋe* ‘when’

The syntax of interrogatives classifies languages into two types, as follows. There are

languages like English, in which the question particle occurs clause-initially, as shown in (48a). There is overt movement of the *wh*-phrase from the position it originates to the front of clause (see 48b).

- (48) (a) *English* (Dayal, 1996)
 What did Lisi buy?
 (b) [_{CP} what_i [_{IP} Lisi buy t_i]]

Now, among the languages with overt *wh*-movement there is a further distinction between languages that have both LF and S-structure movement (like English) and languages that only have only S-structure movement (Like Romanian). The following is an example from Romanian and English, reproduced from Dayal (1996).

- (49) (a) who_i t_i has seen what? (English)
 (b) *who_i what_j t_i has seen t_j? (English)
 (c) Cine_i ce_j t_i a vazut t_j? (Romanian)
 who what has seen
 (d) [_{CP} what_j who_i [t_i has seen t_j]] (LF of English and Romanian)

In English, in a question with multiple *wh*s, only one *wh* moves to the spec CP position at S-structure, while both of them move to the spec CP at LF for interpretation. A sentence like (49c) would be incorrect in English where both the *wh* moves to the clause initial position at the S-structure. However, Romanian is one such language where both the *wh*s have to move to the spec CP positions at S-structure. This suggests that Romanian only has S-structure movement or the overt movement of *wh*-phrase in all its *wh* constructions.

There are other kinds of languages like Hindi [see example (50)] and Chinese [Example (51)] in which the *wh*-phrase remains in-situ and does not move to the clause initial position at the S-structure. In these languages, movement happens only covertly at LF, thus providing the semantic content but not the form.

- (50) (a) ram.ne seb kʰəri:da
 Ram.ERG apple bought
 ‘Ram bought apples’
 (b) ram.ne kja kʰəri:da?
 Ram.ERG what bought
 ‘What did Ram buy?’
 (c) [_{CP} what_i [_{IP} Ram buy t_i]] (the LF structure)
- (51) (a) Lisi mai-le sheme
 Lisi bought what
 ‘What did Lisi buy?’

Now we attempt to see where Gaddi fits in the typology of *wh*-languages.

- (52) (a) rəmme bədʒdʒi kʰəriddu.
 Ram.M.ERG sweet(F) buy.M.PFV

- ‘Ram bought sweets’
- (b) rəmme kɛ kʰərɪddu
 Ram.M.ERG what buy.M.PFV
 ‘What did Ram buy?’
- (c) [_{CP} what_i [_{IP} Ram buy t_i]] (the LF structure)

As is evident from example (52), Gaddi also has covert *wh*-movement and thus falls under the same category as Hindi and Chinese, i.e., Gaddi is a *wh*-in-situ language.

There is a further distinction among the *wh*-in-situ languages like Hindi and Chinese. Hindi [example (53a)] allows fronting of the *wh*-phrase, whereas Chinese [example (53b)] does not allow fronting of *wh*:

- (53) (a) kja rəm-ne kʰəri:da
 What Ram.M.ERG buy.PFV
 ‘What has Ram bought?’
- (b) *sheme Lisi mai-le
 what Lisi bought
 ‘What did Lisi buy?’

Gaddi, like Hindi, seems to permit the fronting of the *wh*-phrase, as shown in (54).

- (54) kɛ rəmm-e kʰərɪddu
 what Ram.M-ERG buy.PFV
 ‘What has Ram bought?’

3.2.2 *Wh*-phrases in the nominative, ergative, accusative and dative

The following is a description of *wh*-phrases in the various cases.

- (55) *wh*- with nominative case
- (a) kʌŋ kriket kʰe|u kərda ha
 who.M/F cricket.M play.M.PFV do.M.IMPFV IND
 ‘Who is playing cricket?’
- (b) kʌŋ a:
 who.M/F.NOM come.M/F.PFV
 ‘Who came?’
- (c) kʌŋ a: tʰu
 who come.M/F PAST
 ‘Who had come?’
- (d) kʌŋ i:ŋa
 who.M/F come.M/F.INF
 ‘Who will come?’
- (56) *wh*- with ergative case
- (a) kʌŋi əmb kʰəu
 who.M.ERG/F mango.M eat.M.PFV
 ‘Who ate the mango?’

- (57) *wh* with accusative case
- (a) *rəmme* **kε** k^həu
 Ram.M.ERG what eat.M.PFV
 ‘What did Ram eat?’
- (b) *rəmme* **kuŋ** eɟu
 Ram.M.ERG who.M/F.ACC/DAT see.M.PFV
 ‘Whom did Ram see?’
- (58) *wh* with dative case
- (a) *rəmme* **kəssijo** p^hul dit^hta
 Ram.M.ERG who.DAT.M/F flower.F give.M.PFV
 ‘Whom did Ram give the flower to?’

The following [(59a) and (59b)] are examples of *wh*-adjunct phrases.

- (59) (a) *ərdzunne* kəŋja hək^h-ri **kijē** maru
 Arjun.M.ERG Karana.GEN.Meye(M)-GEN.M how hit.M.PFV
 ‘How did Arjun hit Karan’s eye?’
- (b) *ərdzunne* kəŋa.dʒo **kəjo** maru
 Arjun.M.ERG Karan.M.ACC/DAT why hit.M.PFV
 ‘Why did Arjun hit Karan?’

3.2.3 *Scope of wh-*

Gaddi is a scope marking language, which means that we cannot obtain a direct question reading out of a finite complement clause without using a scope-marking *wh-*. Without this-marker, a *wh*-phrase in an embedded finite clause will always have narrow scope.

- (60) *ram* **dʒaŋda** ha [dʒe siɛ **kε** k^həu]
 Ram.M.NOM know.IMM.PFV IND that Sita.ERG.F what eat.PFV
 ‘Ram knows what Sita ate.’

The only possible reading that we can get from sentence (60) is an indirect question reading i.e. ‘Ram knows what Sita ate.’ These are not questions (i.e. they do not generate alternatives that can be potential values for the *wh*-phrase). Thus, in order to get a direct question reading from a finite complement clause, there are two known ways, extraction and scope marking.

Extraction is the strategy of extracting the *wh*-phrase out of the finite complement clause and placing it in the clause initial position in order to get a direct question reading. For example, the extraction out of (103) would result in the example in (61).

- (61) *kε_i *ram* **dʒaŋda** ha [dʒe siɛ t_i k^həu]
 What Ram.M.NOM know.IMM.PFV IND COMP Sita.ERG.F eat.PFV
 ‘What does Ram know that Sita ate?’

Gaddi speakers did not provide a structure with this kind of extraction for a direct

question reading. Instead, they used a scope marker to give wide scope to an embedded *wh*- inside a finite complement clause, as the one in (62).

- (62) ram kɛ **dʒaŋda** ha [dʒe si:tʰa **kɛ** kʰaŋa]
 Ram.M.NOM what know.IMM.PFV IND COMP Sita.NOM.F what eat.INF
 Intended: ‘What does Ram know? What will Sita eat?’

In the above sentence, the *wh*-phrase in the matrix clause is what gives a direct question reading out of a finite complement clause. This matrix *wh*-phrase is known as a scope marker which does not have semantic content but it is there to give a wide scope reading to the embedded *wh*-

A few more examples serve to illustrate the point. In these, we first check the scope of *wh*-phrases inside an embedded clause first without the scope marker and then with the scope marker. These questions will be followed by their answers because answers can best illustrate the scope of the *wh*-phrase.

In what follows, we consider *wh*-phrases embedded with verbs that can take both interrogative and declarative complements.

- (63) *dʒaŋ*- ‘know’
- (a) ram **dʒaŋda** ha dʒe kuŋi
 Ram.M.NOM know.IMM.PFV IND COMP who.M.ERG/F
 badʒdʒi kʰai
 sweet.F eat.PFV.F
 ‘Ram knows who ate the sweet.’
- (b) ram **kɛ** **dʒaŋda** ha dʒe
 Ram.M.NOM what know.IMM.PFV IND COMP
 kuŋ-i badʒdʒi kʰai
 who.M.ERG/F sweet.F eat.PFV.F
 Intended: ‘What does Ram know? who ate the sweet?’
- Ans.- ram **dʒaŋda** ha je si:ttʰe
 Ram.M.NOM know.IMM.PFV IND COMP Sita.ERG.F
 badʒdʒi kʰai
 sweet eat.PFV.F
 ‘Ram knows that Sita ate the sweet.’

Wh-phrases in clauses with verbs that can take only declarative complement clauses.

- (64) *soʦtʃi*- ‘think’
- (a) ram **soʦtʃi** kərda ha dʒe ərdʒun
 Ram.NOM think.PFV do.IMPFV IND that Arjun.NOM
 kərŋa.dʒo kəɟi marŋa
 Karan.ACC/DAT when hit.INF
 Intended: ‘Ram thinks about when will Arjun hit Karan.’

- (b) ram kɛ soʃtʃi kərda ha dze
 Ram.NOM what think.PFV do.IMPFV IND that
 ərdʒun kərŋɑ-dʒo kəɟi mɑŋɑ
 Arjun.NOM Karan-ACC/DAT when hit.INF
 Intended: ‘What does Ram think? when will Arjun hit Karan?’
- Ans.- ram soʃtʃi kərda ha dze ərdʒun
 Ram.NOM think.PFV do.IMPFV IND that Arjun.NOM
 kərŋɑ.dʒo dduʰtɛ mɑŋɑ?
 Karan.ACC/DAT tomorrow hit.INF
 ‘Ram thinks that Arjun will hit Karan tomorrow.’

Wh-phrases in clauses with verbs that only take interrogative complement clauses.

(65) *putʃtʰi*-‘ask’

- (a) si:ta putʃtʰi kərɗi ha dze kɛ bʰua
 Sita.NOM.F ask.PFV.F do.IMPFV.F IND COMP what happen.PFV
 ‘Sita is asking what happened.’
- (b) si:ta kɛ putʃtʰi kərɗɗi ha dze kɛ
 Sita.NOM.F what ask.PFV.F do.IMPFV.F IND COMP what
 bʰua
 happen.PFV
 Intended: ‘What is Sita asking? what happened?’
- Ans.- si:ta putʃtʰi kərɗɗi ha dze aksident
 Sita.NOM.F ask.PFV.F do.IMPFV.F IND that accident
 bʰua
 happen.PFV
 ‘Sita is asking if an accident happened.’

So far, we have seen that Gaddi uses scope marker for embedded question clauses, but we have only tested our data with one embedded *wh*-phrase. In Gaddi, as in Hindi, with multiple *wh*-phrases in the embedded clause, only one scope marker is employed..

- (66) (a) ram kɛ dʒɑŋɑ ha dze kuŋ kɛ
 Ram.M.NOM what know.IMM.PFV IND that who.M/F.NOM what
 kʰɑŋɑ
 eat.M.INF
 Intended ‘What does Ram know? who will eat what?’
- (b) ram dʒɑŋɑ ha dze əkk dəbbu ice cream tɛ
 Ram.M.NOM know.IMPFV IND that one boy ice cream and
 ekk dəbbu chocolate kʰɑŋɑ
 one boy chocolate eat.M.INF
 ‘Ram knows that one boy will eat ice-cream and one boy will eat
 chocolate.’

Therefore, we see that we only need one matrix scope marker, which has to be ‘what’ and

it can have as many numbers of embedded *wh*-phrases in the complement clauses of any type. So far, we have noticed the similarities between Hindi and Gaddi both of which are a *wh*-in-situ and scope marking language, but now we will look at the difference between Gaddi and Hindi scope marking.

In a language like Hindi, when the matrix *wh*-phrase is used clause initially, the matrix *wh*-phrase has wide scope and the result is a polar question (meaning that the *wh*-phrase in this case is not actually a *wh*-phrase but rather a polar question particle) which can only be the value of the matrix *wh*- and not the embedded *wh*-phrase. But when similar constructions were made in Gaddi and were verified with speakers, wide scope of the matrix *wh*- was rejected and, rather, it was the embedded *wh*-phrase that has wide scope. Following are the examples supporting this claim:

- (67) **kɛ** ram dʒaŋda ha dʒe kuŋ-i
 what Ram.M.NOM know.IMM.PFV IND COMP who.M.ERG/F
 badʒdʒi kʰəi
 sweet.F eat.PFV.F
 Intended: ‘What does Ram know? who ate the sweet?’
- Ans.- ram dʒaŋda ha je si:ttʰe badʒdʒi
 Ram.M.NOM know.IMM.PFV IND COMP Sita.ERG.F sweet.F
 kʰəi
 eat.PFV.F
 ‘Ram knows that Sita ate the sweet.’

3.3 Scrambling of *wh*-phrases

As mentioned before, fronting of a *wh*-phrase is not movement but simply scrambling. It will be shown here that *wh*-phrase scrambling is allowed in Gaddi, and scrambling the *wh*-phrase in the matrix clause does not change the interpretation of the sentence.

- (68) (a) **kuŋ** paləmpur go
 Who.M/F.NOM Palampur go.M/F.PFV
 ‘Who went to Palampur?’
- Ans- ram paləmpur go
 Ram.M.NOM Palampur go.M.PFV
 ‘Ram went to Palampur’
- (b) paləmpur **kuŋ** go
 Palampur who.M.NOM go.M/F.PFV
 ‘Who went to Palampur?’
- Ans- ram paləmpur go
 Ram.M.NOM Palampur go.M.PFV
 ‘Ram went to Palampur’
- (c) paləmpur go **kuŋ**
 Palampur go.M/F.PFV who.M/F.NOM
 ‘Who went to Palampur?’

- Ans- ram paləmpur go
 Ram.M.NOM Palampur go.M.PFV
 ‘Ram went to Palampur’
- (69) (a) ram kɛ kʰaŋa
 Ram.M.NOM what eat.M.INF
 ‘What will Ram eat?’
- Ans- ram bʰa:tʰ kʰaŋa.
 Ram.M.NOM rice.M eat.M.INF
 ‘Ram will eat rice.’
- (b) kɛ ram kʰaŋa
 what Ram.M.NOM eat.M.INF
 ‘What will Ram eat?’
- Ans- ram bʰa:tʰ kʰaŋa
 Ram.NOM rice eat.INF
 ‘Ram will eat rice.’
- hã: ram kʰaŋa
 yes Ram.NOM eat.INF
 ‘Yes, Ram will eat’

In the data above, we see that in (69b), when the *wh*-phrase is in the clause initial position, the clause is ambiguous between a *wh*-question and a polar question, as shown by the answers to these questions. This suggests that there are two Gaddi *kɛ*s. One, is the *wh kɛ* and the other the polar *kɛ*. With *kɛ* in the clause initial position, intonation disambiguates the clause as either a polar question or a *wh*-question. This is similar to Hindi (Bhatt & Dayal, 2014).

Let us now look at scrambling two *wh*s.

- (70) (a) **kuŋ** **kɛŋe** gaŋa
 who.M/F.NOM when go.M/F.INF
 ‘who went when?’
- (b) **kɛŋe** **kuŋ** gaŋa
 when who.M/F.NOM go.M/F.INF
 ‘who went when?’

From the above examples, it is clear that when there are two *wh*-phrases in the matrix clause, the order of the *wh*-phrases does not interfere with the interpretation of the sentence.

3.4 Interaction between *wh*-scope and quantifier scope

Let us look at the scope of matrix universal quantifiers like ‘all’ and ‘every’, and *wh*-phrases inside the finite complement clause.

- (71) A student read every book

This sentence (71) has two meanings here:

- (i) There is one student who has read all the books.
(ii) All the books have been read by a student, who may not be the same but different student.

Therefore, this sentence is ambiguous and has two logical forms: *There is a student x, such that for every book y, x read y* and *for every book y, there is a student x such that x read y*. The two meanings depend on which quantifier takes wide scope at LF.

- (72) (a) səbb^hi dəbbue kəssi.dʒo eɖu
Every boy.M.ERG who.M/F.ACC/DAT see.M.PFV
‘Whom did every boy see?’
Ans- səbb^hi dəbbue kuɖi.dʒo eɖu
Every boy.M.ERG girl.F.ACC/DAT see.M.PFV
‘Every boy saw some girl.’ (For some girl x, every boy saw x)
(b) səbb^hi dəbbue kəss-kəss.dʒo eɖu
Every boy.M.ERG who-who.M/F.ACC/DAT see.PFV
‘Whom did every boy see?’
Ans- səbb^hi dəbbue rəmma tɛ ʃjəmma.dʒo
Every boy.M.ERG Ram.M.ACC/DAT and Shyam.M.ACC/DAT
eɖu
see.M.PFV
‘some boy saw Ram and some boy saw Shyam (every boy saw someone or the other)’

The LF of (72a) will be: *There is a girl y, such that for every boy x, x saw y*. And the LF of (72b) will be: *For every boy x, there is some person y, such that x saw y*.

(72b) above, needs some explanation as Gaddi uses a process, that is also used by many South Asian languages, called reduplication. This means that in order for the quantifier to have wide scope, there has to be reduplication of the *wh*-phrase. Otherwise, in a sentence with a single *wh*-phrase, the quantifier has narrow scope. This phenomenon is different from English, since in English the same syntactic structure is ambiguous between two logical forms. In Gaddi, however, the narrow and wide scope readings of the quantifier depend on two different syntactic structures. This explanation becomes quite clear with the answer given to these two questions. The same results hold for sentences with quantifier in the matrix clause and embedded *wh*-phrase in a finite complement clause and with quantifier in the embedded complement clause.

4. Negation and Negative Polarity Items (NPIs) in Gaddi

According to Zeijlstra (2013), every instance of sentential negation must be expressed by some negatively marked, overt element, with variation lying only in the type, position and number of such markers. We call such structures as negation markers.

4.1 Negation markers in Gaddi

Gaddi has four different negation markers: /na/, /ni/, /nət^hi/, and /mət/, as exemplified in the sentences from (73a) to (73e).

- (73) (a) rām pālāmpur-o **na** iṅa
 Ram.NOM pālāmpur-ACC/DAT NEG come.INF
 ‘Ram will not come to pālāmpur’
- (b) rām k^hāra gubru: **ni** ha
 Ram.NOM good.SGM boy NEG IND
 ‘Ram is not a good boy’
- (c) rām k^hāra gubru: **nət^hi**
 Ram.NOM good.SGM boy NEG.IND
 ‘Ram is not a good boy’
- (d) rām k^hāra gubru: **nət^hi**
 Ram.NOM good.SGM boy NEG.IND
 ‘Ram is not a good boy’
- (e) a:nḍər-əu **mət^h** gətʃ^h
 in-LOC NEG.PHB go.IMP
 ‘don’t go inside!’

4.2 Negation and word order

The preverbal position is the most natural word order position for the negation marker:

- (74) (a) rām pālāmpur-o **na** iṅa
 Ram.ERG Palampur-ACC/DAT NEG come.INF
 ‘Ram will not come to Palampur’
- (b) **na** iṅa rām pālāmpur-o
 NEG come.INF Ram.ERG Palampur-ACC/DAT
 ‘Ram will not come to Palampur’
- (c) * rām pālāmpur-o iṅa **na/ni**
 Ram.ERG Palampur-ACC/DAT come.INF NEG
 ‘Ram will not come to Palampur’
- (d) rām **na** pālāmpur-o iṅa
 Ram.ERG NEG Palampur-ACC/DAT come.INF
 ‘Ram will not come to Palampur’
- (e) **na/ni** rām pālāmpur-o iṅa
 NEG Ram Palampur-ACC/DAT come.INF
 ‘Ram will not come to Palampur’
- (f) rəm̩ma pālāmpur-o iṅa
 Ram.OBL Palampur-ACC/DAT/DAT come.FUT
 ‘Will Ram come to Palampur?’
- Ans- rām pālāmpur-o **na** iṅa
 Ram.OBL Palampur-ACC/DAT/DAT NEG come.FUT
 ‘Ram will not come to Palampur.’

(74a) is the most natural word order for native speakers. Example (74c) proves that NegP in Gaddi is above VP.

4.3 Negation in the clause

In a sentence in present, the negation marker precedes the mood marker.

- (75) (a) ram kʰərə gubru ha
 Ram.NOM good.(SGM) boy IND
 ‘Ram is a good boy.’
- (b) ram kʰərə gubru na ha
 Ram.NOM good boy.(SGM) NEG IND
 ‘Ram is not a good boy’

In (75) above, the negation marker precedes the indicative mood marker *ha*. In place of *na ha* in all the above sentences, the use of the indicative inflected form *nətʰi* is also an option, as is evident from example (76).

- (76) ram kʰərə gubru nətʰi
 Ram.NOM good.SGM boy(SGM) NEG.IND
 ‘Ram is not a good boy’

The negative marker precedes the past tense auxiliary verb [see (77b)]:

- (77) (a) ram kʰərə gubru tʰu
 Ram.NOM good.SGM boy(SGM) PST.SGM
 ‘Ram was a good boy’
- (b) ram kʰərə gubru na tʰu
 Ram good.SGM boy NEG PST.SGM
 ‘Ram was not a good boy’

Negation in the context of future tense is similar to its context in the present and past tenses in terms of its position in the sentence.

- (78) (a) rahula kʰana kʰaŋa
 rahul.OBL food eat.INF
 ‘Rahul will eat the food’
- (b) rahula kʰana na kʰaŋa
 rahul.OBL food NEG eat.INF
 ‘Rahul will not eat the food’

In the perfect in Gaddi, the negative marker precedes either the main verb, or is between the main verb and past tense auxiliary.

- (79) (a) ram ʃimla-dʒo na gəcʰura (ha)
 Ram.NOM Shimla-ACC/DAT. NEG go.M.PRF (IND)
 ‘Ram has not gone to Shimla’
- (b) ram ʃimla-dʒo na gəcʰura tʰu
 Ram.NOM Shimla-ACC/DAT. NEG go.M.PRF PST.SGM
 ‘Ram had not gone to Shimla’
- (c) ram ʃimla-dʒo gəcʰura na tʰu

	Ram.NOM	Shimla-ACC/DAT	go.M.PRF	NEG	PST
	'Ram had not gone to Shimla'				
(d)	ram	ʃimla-dʒo	na	gəc ^h ura	b ^h uŋa
	Ram.NOM	Shimla-ACC/DAT	NEG	go.PRF	PRESUM
	'Ram will not have gone to Shimla'				

4.4. Negation and aspect

In the imperfective aspect, the negation marker precedes the main verb. The indicative marker *ha* is optional in the indefinite aspect in present tense. But when negation is introduced, *ha* is barred, as is evident from example (80b). In the indefinite past, however, *t^hu* and negation can co-exist [see example (80d)].

(80)	(a)	ram	ʃimla-dʒo	gənda	(ha)	
		Ram.NOM	Shimla ACC/DAT	go.IPFV	(IND)	
		'Ram goes to Shimla'				
	(b)	ram	ʃimla-dʒo	na	gənda	(*ha)
		Ram.NOM	Shimla-ACC/DAT	NEG	go.IPFV	(IND)
		'Ram does not go to Shimla'				
	(c)	ram	ʃimla	dʒo	gənda	t ^h u
		Ram.NOM	Shimla	ACC/DAT	go.IPFV	PST.SGM
		'Ram use to go to Shimla'				
	(d)	ram	ʃimla-dʒo	na	gənda	t ^h u
		Ram.NOM	Shimla-ACC/DAT	NEG	go.IPFV	PST.SGM
		'Ram used to not go to Shimla'				
	(e)	ram	ʃimla-dʒo	gənda	b ^h uŋa	
		Ram.NOM	Shimla-ACC/DAT	go.IPFV	PRESUM	
		'Ram may usually go to Shimla'				
	(f)	ram	ʃimla-dʒo	na	gənda	b ^h uŋa
		Ram.NOM	Shimla-ACC/DAT	NEG	go.IPFV	PRESUM
		'Ram may not usually go to Shimla'				

As far as the interaction of the progressive aspect and negation is concerned, the negation marker may either precede the main verb, or it may directly precede the auxiliary verb that marks the progressive aspect [see (81a) to (81d)].

(81)	(a)	ram	ʃimla-dʒo	na	tʃəlu	kərda	
		Ram.NOM	Shimla-ACC/DAT	NEG	walk	do.PROG	
		'Ram is not going to Shimla'					
	(b)	ram	ʃimla-dʒo	tʃəlu	na	kərda	
		Ram.NOM	Shimla-ACC/DAT	walk	NEG	do.PROG	
		'Ram is not going to Shimla'					
	(c)	ram	ʃimla-dʒo	na	tʃəlu	kərda	t ^h u
		Ram.NOM	Shimla-ACC/DAT	NEG	walk	do.PROG	PST.SGM

- (d) 'Ram was not going to Shimla'
 ram ʃimla-dʒo **na** gəc^{hi} kərda b^huŋa
 Ram.NOM Shimla-ACC/DAT NEG go do.PROG PRESUM
 'Ram will not be going to Shimla'

4.5. Negation and mood in Gaddi

When an imperative sentence is negated, it is said to be a prohibitive sentence. In Gaddi a prohibitive can be represented by the negation marker *mət^h* [as shown in (82b)].

- (82) (a) a:ndər-ou gətʃc^h
 inside-LOC go.IMP
 'go inside!'
 (b) a:nddər-ou **mət^h** gətʃc^h
 inside-LOC NEG.PHB go.IMP
 'don't go inside!'

The indicative marker in Gaddi is *ha*. It is present in all present tense copula sentences. It is optional in the imperfective aspect in the present tense. But when negation is introduced, this optional *ha* disappears. There is also the inflected indicative form of negation, *nət^hhi*.

- (83) ram k^hərə gubru **nət^hi**
 ram good boy NEG.IND
 'Ram is not a good boy.'

In the subjunctive mood, negation immediately precedes the subjunctive form of the verb in the clause.

- (84) sit^ha tʃandi ha ki ram ʃimla-dʒo **na** gəc^ha
 Sita need IND COMP ram.NOM Shimla-ACC/DAT NEG go.SUBJ
 Hindi: sit^ha tʃaht^hi hɛ ki ram ʃimla na a:ɛ (definitely subjunctive in Hindi)
 'Sita wishes that Ram may not go to Shimla.'

Gaddi has presumptive mood, where we are certain that the action will take place, although it has not taken place yet. The marker for presumptive mood is *b^huŋa*, which also expresses future tense in many cases. The negation marker precedes the main verb [see (85a), (85b) and (85c)]. But the negation marker never occurs between the main verb and *b^huŋa* (i.e. immediately preceding *b^huŋa*), as exemplified in (85d). This is similar to how negation interacts with the indicative mood marker, *ha*.

- (85) (a) ram ʃimla-dʒo **na** gənda b^huŋa
 ram.NOM Shimla-ACC/DAT NEG go.IPFV PRESUM
 'Ram might not go to Shimla.'
 (b) ram ʃimla-dʒo **na** gəc^{hi} b^huŋa
 ram.NOM Shimla-ACC/DAT NEG go PRESUM
 'Ram might not be going to Shimla.'

- (c) ram ʃimla-dʒo **na** gəc^hura b^huŋa
 ram.NOM Shimla-ACC/DAT NEG go.M.PRF PRESUM
 ‘Ram might not have gone to Shimla.’
- (d) *ram ʃimla-dʒo gənda **na** b^huŋa
 ram.NOM Shimla-ACC/DAT go.IPFV NEG PRESUM
 Intended: ‘Ram might not go to Shimla.’

Examples showing positioning for negation marker in conditional and counterfactual sentences are given below. In examples (86d) and (86e), as with *b^huŋa*, the negation marker cannot come between the main verb and mood marker *b^holla*.

- (86) (a) rəmma ʃimlɛ-dʒo **na** gaŋa ta tɛs
 ram.OBL Shimla.OBL-ACC NEG go.INF then 3SG.ERG
 bədzara-dʒo gaŋa
 market.OBL-ACC/DAT go.INF
 ‘(if) ram does not go to Shimla, then he will go to the market.’
- (b) əgər ram ʃimlɛ-dʒo **na** gənda t^hu,
 if ram.NOM Shimla.OBL-ACC NEG go.IPFV PST.SGM
 ta so bədzara-dʒo gənda t^hu
 then 3SG.NOM market.OBL-ACC go.IPFV PST.SGM
 ‘if ram did not go to Shimla, then he went to the market.’
- (c) əgər ram ʃimlɛ-dʒo **na** go
 if ram.nom Shimla.OBL-LOC NEG go.PFV
 ta tɛs bədzara-dʒo gaŋa
 then 3SG.ERG market.OBL-LOC go.INF
 ‘if ram has not gone to Shimla, he will go to the market’
- (d) əgər ram ʃimlɛ-dʒo **na** tʃəlura **b^holla**,
 if ram.NOM Shimla.OBL-LOC NEG walk.PRF CF
 ta so bədzara-dʒo tʃəlura b^huŋa
 then 3SG.ERG market.OBL-LOC walk.PRF PRESUM
 ‘if ram were not be going to Shimla, then he might have gone to the market’
- (e) əgər ram ʃimlɛ-dʒo **na** gəc^hura **b^holla**,
 if ram.NOM Shimla.OBL-LOC NEG go.PRF CF
 ta so bədzara-dʒo gəc^hura b^huŋa
 then 3SG.ERG market.OBL-LOC go.PRF PRESUM
 ‘if ram were gone to Shimla, then he might have gone to the market’

As illustrated in the examples below, negation markers in Gaddi can precede as well as follow the main verb in the presence of the modal verbs *səkŋa* ‘can’ and *peŋa* ‘must’.

səkŋa ‘can’

- (87) (a) ram ʃimlɛ-dʒo na gəç^{hi} səkda
 Ram.NOM Shimla.OBL-LOC NEG go can.IPFV
 ‘Ram cannot go to Shimla.’
- (b) ram ʃimlɛ-dʒo gəç^{hi} **na** **səkda**
 Ram.NOM Shimla.OBL-LOC go NEG can.IPFV
 ‘Ram cannot go to Shimla.’

pɛŋa ‘must’

- (88) (a) ram ʃimlɛ-dʒo na gaŋa pjeo
 Ram.NOM Shimla.OBL-LOC NEG go.INF must
 ‘Ram did not have to go to Shimla/it was not must for ram to have gone to Shimla.’
- (b) ram ʃimlɛ-dʒo gaŋa **na** **pjeo**
 Ram.NOM Shimla.OBL-LOC go.INF NEG must
 ‘Ram did not have to go to Shimla/it was not must for ram to have gone to Shimla.’
- (c) rəmma ʃimlɛ-dʒo **na** gaŋa **pɛŋa**
 ram.OBL Shimla.OBL-LOC NEG go.INF must.INF
 ‘it is not must for Ram to go to Shimla.’
- (d) rəmma ʃimlɛ-dʒo gaŋa **na** **pɛŋa**
 ram.OBL Shimla.OBL-LOC go.INF NEG must.INF
 ‘it is not must for Ram to go to Shimla.’

tʃahŋa ‘need’

While with the modal verbs above, the negation marker could be placed between the main verb and the inflected modal, rendering the same scopal relation as having it precede the main verb [see (87a) and (87b)], this is not possible with *tʃahŋa* ‘need’

- (89) (a) premma-dʒo p^həl **na** k^haŋa **tʃahinda**
 prem.OBL-DAT fruit NEG eat.INF need.SGM
 ‘Prem does not want to eat fruit.’
- (b) *premma-dʒo mət^hai k^haŋa **na** **tʃahinda**
 prem.obl-DAT sweet eat.INF NEG need.SGM
 ‘Prem does not want to eat fruit.’

In complex predicates, the negation marker can precede either the main verb or the light verb [see (90b) and (90c)], just as it could with the modal verbs *səkŋa* ‘can’ and *pɛŋa* ‘must’.

- (90) (a) rəmme g^hər **ç^həddi** **dit^hura**
 Ram.ERG house leave give.SGM.PRF
 ‘Ram left the house.’
- (b) rəmme g^hər **na** **ç^həddi** **dit^hura**
 Ram.ERG home NEG leave give.SGM.PRF

- ‘Ram did not leave the house’
 (c) rəmmɛ ɡʰər ʈʰəɖɖi na ditʰura
 Ram.ERG home leave NEG give.SGM.PRF
 ‘Ram did not leave the house’

4.6 Other aspects

A DP cannot be negated in Gaddi and therefore a neither X nor Y type of sentence cannot be constructed. What we get instead is a sentence with sentential negation.

- (91) (a) ram ətʰɛ sitʰa doe hi əmm na kʰandde
 ram.NOM and sita both also mango NEG eat.IPFV
 ‘Neither Ram nor Sita eat mangoes’

In negated sentences, negation cannot take scope over the adverb:

- (92) (a) prem utʰijo na ɡənda
 Prem.NOM there NEG go.SGM.IPFV
 ‘Prem does not go there’
 (b) *premi na utʰijo ɡənda
 Prem.NOM NEG there go.SGM.IPFV
 Intended: ‘Prem does not go there’
- (93) (a) prem ɡəũe- ɡəũe na tʃəlura tʰu
 Prem.NOM slowly-slowly NEG walk.PRF.SGM PST
 ‘Prem does not go there’
 (b) *premi na ɡəũe-ɡəũe tʃəlura tʰu
 Prem.NOM NEG slowly-slowly walk.PRF.SGM PST
 Intended: ‘Prem does not go there’
- (94) (a) premma dutte ʃimlɛ dʒo na ɡaŋa
 Prem.SUB-OBL tomorrow Shimla.OBL DAT NEG go.INF
 ‘Prem will not go to Shimla tomorrow.’
 (b) premma ʃimlɛ dʒo dutʰe na ɡaŋa
 Prem.SUB-OBL Shimla.OBL DAT tomorrow NEG go.INF
 ‘Prem will not go to Shimla tomorrow.’
- (95) prem bəɖe tʰɔre- tʰɔre kəm na kərda
 Prem.NOM very fast-fast work NEG do.IPFV
 ‘Prem doesn’t work very fast’

For negation to scope over just the adverb, and not the entire clause, the speaker requires to give a contrastive context along with the sentence to imply this [see (96b)].

- (96) (a) prem dʒət-pət kəm na kərda (NEG always has sentential scope)
 Prem fast work NEG do.PROG
 ‘Prem does not work swiftly’
 (b) prem dʒət-pət kəm na kərda, (negation > adverb)

Prem fast work NEG do.PROG,
 pər kəski o:ri kəri diŋa
 but someone other do give.FUT
 ‘Prem does not do work swiftly, but someone else does’

If we look closely, (96b) are two sentences joined using the conjunction *pər*. So, it is still an instantiation of sentential negation. Constituent negation as shown in the following example is not possible.

(97) (a) * prem na dʒət-pət kəm kərda
 Prem. NEG fast work do.PROG
 Intended: ‘It is not Prem who does the work swiftly’

To express the intended meaning, informants paraphrase as shown below:

(b) premma ra kəm kəski o:ri
 Prem.OBL GEN.SGM work(SGM) someone other
 kəri deŋa
 do give.INF
 ‘Prem’s work will be done by someone else’

Hence, negation can only have sentential scope in Gaddi.

In sentences with VP ellipsis, the negation does not get elided along with the VP, suggesting that the NegP scopes over the VP.

(98) ram əm na kʰənda ətʰɛ sitʰa bʰi na
 ram.NOM mango NEG eat.IPFV and sita even neg
 ‘Ram doesn’t eat mangoes and neither does Sita’

4.7 NPIs in Gaddi

The following are the NPIs in Gaddi. As is evident from the examples below, most of them are compounds with *bʰi* ‘even’.

dʒəra bʰi ‘even little’

(99) sitʰa-dʒo krikeɽ kʰeɽna dʒəra bʰi kʰəra na lægda
 Sita ACC/DAT cricket play.INF little even good NEG
 feel.SGM.IPFV
 ‘Sita does not like to play cricket at all.’

kəsi sitʰɛ bʰi ‘with anyone’

(100) tɛs kəsi sitʰɛ bʰi na muɽna
 3SG any with even NEG meet.INF
 ‘She/he will not meet anyone’

koi bʰi ‘anyone’

- (101) *premma* *sitʰɛ* **koi** **bʰi** *dʒʰu:ʈʰ* **na** *bəlli* *səkdda*
 prem.OBL with any even lie NEG speak.CF can.SGM.IPFV
 * ‘Anybody cannot lie to Prem’

kəddi bʰi ‘never’

- (102) * *ram* *ʃimlə* *dʒo* **kəddi** **bʰi** **na** *gəçʰura*
 ram Shimla.OBL LOC sometime even NEG go.SGM.PRF
 ‘Ram did not go to Shimla sometime’

əkkə bʰi ‘even one’

- (103) *bəgʀi* *məndʒ* **əkkə bʰi** *mənu* **na** *kʰəʀura*
 field LOC one even man NEG stand.SGM.PRF
 ‘not even one man stands in the field’

həlli təkər ‘until now’

- (104) *premmɛ* **həlli təkər** *ʃimlə* *dʒo* **na** *gəçʰura*
 prem.ERG now until Shimla.OBL LOC NEG go.SGM.PRF
 ‘Prem has not gone to Shimla until now’

4.8.1 Negation raising (NEG raising) in complex sentences

A strong NPI can only be licensed by a negation marker same clause (Zeijlstra (2004, 2008)). To check for NEG raising, we can check if a strong NPI in the embedded clause is licensed by the negation marker in the matrix clause. If the negation in the matrix clause can license an NPI in the embedded clause, just as a negation in the embedded clause can, it means that the negation has the ability to raise from the embedded to the matrix clause.

The NPI *əkkə bʰi* (even one) in Gaddi is a strong NPI and requires negation to be in the clause that it is in. We can see that the negation in the matrix clause can license the NPI in the embedded clause.

- (105) (a) *miŋdʒo* *ləgdda* *ki* **əkkə bʰi** *mənu*
 1S.GEN feel.IPFV COMP one even man

 na *iŋa*
 NEG come.INF
 ‘I think that not even one man will come’
 (b) *miŋdʒo* **na** *ləgdda* *ki* **əkkə bʰi** *mənu* *iŋa*
 1S.GEN NEG feel.IPFV COMP one even man come.INF
 ‘I don’t think that even one man will come’

But,

- (c) * miŋdʒo ləgdda ki əkkə bʰi mənu iŋɑ
 1S.GEN.m/f feel.IPFV COMP one even man come.INF
 Intended: 'I feel that even one man will come'

Therefore, NEG raising is evident in Gaddi.

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