Attitudinal copulas in Odia, an Indo-Aryan language

Foong Ha YAP¹ and Anindita SAHOO²

Hong Kong Polytechnic University ¹ & Amity University, Noida ²

Acknowledgment

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Objectives

- To examine the use of copulas as auxiliary verbs that encode not only tense but also person-agreement marking in Odia;
- To understand how these postverbal and clause-final auxiliary copulas are preposed to either clause-medial or clause-initial position to serve as focus particles, the latter type often interpretable as an attitudinal focus particle with negative valence.

Introduction



Odia is an eastern Indo-Aryan language spoken primarily in the Indian state of Odisha (or Orissa).

Indo-Aryan copulas as auxiliary verbs

- Following verbal predicates, Indo-Aryan copulas can be reanalyzed as auxiliary verbs that are dedicated as carriers of information related to tense and subject-verb agreement.
 - Tense-aspect-mood (TAM)
 - Agreement
- Agreement encodes information about person, honorificity level, number and/or gender.
 - Person
 - Honorificity level
 - Number
 - Gender (not in Odia)

Verbal morphology in Odia

• Odia is a nominative-accusative language with the unmarked nominative subject triggering person, number and honorificity level on the verb.

```
(1) a. mu meri-ku piT-i-l-i

1SG-NOM Mary-ACC hit-PERF-PST-1SG.NH

'I hit Mary.'
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- b. tu meri-ku piT-i-l-u

 2SG-NOM Mary-ACC hit-PERF-PST-2SG.NH

 'You hit Mary.'
- c. se meri-ku piT-i-l-aa

 3SG-NOM Mary-ACC hit-PERF-PST-3SG.NH
 'He/She hit Mary.'

TAM marking in Odia -- past perfect(ive) morphology

- Odia has a complex verbal morphology with the copula carrying TAM marking:
- (2) a. mu ruTi khaa-i-l-i

 1SG chapati eat-PERF-PST-1SG

 'I ate chapati.'

b. mu ruTi khaa-i de-l-i

1SG chapati eat-PERF give.-PST-1SG

'I ate up the chapati.'

with light verb de- 'give'



TAM marking in Odia with differences in honorificity level

- (3) a. *tu* ruTi khaa-i-l-u

 2SG.NH chapati eat-PERF-PST-2SG.NH

 'You ate chapati.'
 - b. *tume* ruTi khaa-i-l-a

 2SG.H chapati eat-PERF-PST-2SG.H

 'You ate chapati.'
 - c. *aapaNa* ruti khaa-i-l-e

 2SG.HH chapati eat-PERF-PST-2SG.HH

 'You (honorable one) ate chapati.'

TAM marking in Odia (with and without an auxiliary copula)

- (4) a. se ruTi khaa-i-l-aa

 3SG.NH chapati eat-PFV-PST-3SG.NH

 'He/She ate chapati.'
 - b. se ruTi khaa-i thi-l-aa

 3SG.NH chapati eat-PFV AUX.EMPH-PST-3SG.NH

 '(I'm sure) he/she ate chapati.'
- (5) a. se ruTi khaa-i-l-e

 3SG.H/HH chapati eat-PFV-PST-3SG.H/HH

 'He/She ate chapati.'
 - b. se ruTi khaa-i thi-l-e

 3SG.H/HH chapati eat-PFV AUX.EMPH-PST-3SG.H/HH

 '(I'm sure) he/she ate chapati.'

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TAM marking in Odia (with and without an auxiliary copula)

- (6) a. se ruTi khaa-u-chh-i
 3SG.NH chapati eat-IMPF-PRES-3SG.NH
 'He/She is eating chapati.'
 b. se ruTi khaa-u achh-i
 - b. se ruTi khaa-u achh-i

 3SG.NH chapati eat-IMPF AUX.EMPH-PRES-3SG.NH

 '(I'm sure) he/she is eating chapati.'
- (7) a. se ruTi khaa-u-chh-anti
 3SG.H/HH chapati eat-IMPF-PRES-3SG.H/HH
 'He/She is eating chapati.'
 - b. se ruTi khaa-u achh-anti
 3SG.H/HH chapati eat-IMPFV AUX.EMPH-PST-3SG.H/HH
 '(I'm sure) he/she is eating chapati.'

Functions of copulas in Odia

Copula as a main verb

- (8) a. *mili mora bhauNi aT-e* (with nominal predicate)
 Mili 1SG.GEN sister COP.PRES.3SG.NH
 'Mili is my sister.
 - b. *mili khusi achh-i* (with adjectival predicate)
 Mili happy COP-3SG.NH
 - 'Mili is happy.'
 - c. *mili* ghar-e achh-i (with locative predicate)
 Mili home-LOC COP.PRES.3SG.NH
 'Mili is at home.'

Copula as an auxiliary verb

(9) *mili ghara-ku jaa-u achh-i* (with verbal predicate)
Mili home-LOC go-IMPF AUX.COP.PRES-3SG.NH
'Mili is going home.'

Attitudinal copula constructions in Odia

Auxiliary copula as emphatic marker

(10) kaali raati-re se bhaata khaa-i
yesterday night-in 3SG.NH rice eat-PFV
thi-l-aa
AUX-PST-3SG.NH
'(I'm sure) he/she ate rice yesterday.'

Preposed copula as focus marker

(11) thi-l-aa se kaali ghar-e

FOC-PST-3SG.NH 3SG yesterday home-LOC

'(It was that) he/she was home yesterday.'

Versatile copulas in Odia

- Linking verb
- Auxiliary verb
- Focus particle

Examples of copulas as main verbs in Odia (past vs. present form)

- (12) Intolerance charchā hĩ propaganda thi-l-ā intolerance drive FOC propaganda COP-PST-3NH.SG 'The intolerance drive was a propaganda.'
- (13) tān-ka pāĩ āu goTe bada challenge achh-i
 3NH.SG-GEN for another one big challenge COP.PRS.3NH.SG
 'For him, it is another big challenge.'

Examples of auxiliary copulas in Odia

(14) se ghara-ku jā-u achh-i
3NH.SG home-LOC go-IMPF AUX.PRS-3NH.SG
'S/he is going home.'

Auxiliary copulas also have extended uses as auxiliary modals.

(15) modi-ku hi haTeibā-ra achh-i

Modi-ACC EMPH remove-to AUX.PRS-3NH.SG

'Modi has to be removed.'

Examples of auxiliary copulas with imperfective marker in Odia

- (16) core issue alaga jāgā-re rahi jā-u-chh-i core issue different place-LOC stay go-IMPF-AUX.PRS-3NH.SG 'The core issue remains at a different place.'
- The *jā-u-chh-i* imperfective auxiliary copula can be used with some stative verbs:

```
jaNaa jaa-u-chh-i
know go.IMPF-AUX.PRS-3NH.SG
'knows'

*prema jaa-u-chh-i
love go. IMPF-AUX.PRS-3NH.SG
'loves'

*baasa jaa-u-chh-i
live go.IMPF-AUX.PRS-3NH.SG
'lives'
```

Interim summary on (auxiliary) copulas in Odia

- Copulas are used as linking verbs that connect subject NPs and their identifying or specifying complement clauses.
- Copulas are used as dedicated tense and agreement carriers.
- As tense-carriers, copulas provide temporal information to ground or instantiate events; copulas are thus a linguistic means to identify independent finite structures.
- As agreement-carriers, copulas encode information about discourse participants (e.g. subject NPs); all Indo-Aryan languages reveal information about person and honorificity level, and some languages further include information about gender and number as well.
- Odia does not make gender distinctions.

Odia copulas as focus markers

(via preposing or 'raising')

- Indo-Aryan copulas can be preposed to serve as focus markers.
- In Odia, the focus copula is preposed to clause-medial position (between the subject and the verb), and it highlights the subject NP.

NP FOC.COP

VP

• Some focus copulas in Odia (e.g. *thilā* and *achhi*) can further occur at the left periphery.

FOC.COP

NP VP

• Both *thilā* and *achhi* (but not *aTe* nor *-chhi*) occur at the left periphery to highlight new information, and also mark the speaker's (often negative) attitude.

Examples of focus copulas in Odia (subject NP focus)

(17) Jau grand alliance thi-l-ā tā

REL grand alliance FOC.COP-PST-3NH.SG 3NH.SG.POSS

pākhare lalu prasad-ra pocket vote nitish-ra pocket vote for Lalu Prasad-GEN pocket vote Nitish-GEN pocket vote

'The Grand Alliance that he had, it had the pocket votes of Lalu Prasad and the pocket votes of Nitish.'

Examples of focus copulas in Odia

(subject NP focus)

(18) abhi achhi/*-chhi ebe ghar-e

Abhi FOC.COP.PRS-3NH.SG now home-LOC

'Abhi is at home now.'

Highlighting the subject NP and still retaining the tense and agreement markers

Examples of focus copulas in Odia

(argument focus and new information focus)

(19) se thil-ā baḍa badmaas
3NH.SG FOC.COP.PST-3NH.SG big naughty
'S/he was a naughty child.'
(Lit. 'S/he was a child who was naughty.')

Argument focus

(20) thil-ā se baḍa badmaas
FOC.COP.PST-3NH.SG 3NH.SG big naughty
'S/he was a naughty child.'
(Lit. 'S/he was a child who was naughty.')

New information focus

(20) is a close equivalent of the broad focus reading 'It was that s/he was *a naughty child*' in the sense that the focus here is on the new information, which is the naughtiness of the child. Whereas the English broad focus reading conveys a more objective speaker stance by virtue of the nominalized *that*-clause, the Odia construction in (20) can convey a more subjective speaker stance, in this case potentially with negative valence.



Examples of focus copulas in Odia

(argument focus and new information focus)

(21) abhi achhi/*-chhi ebe ghar-e

Abhi FOC.COP.PRS-3NH.SG now home-LOC

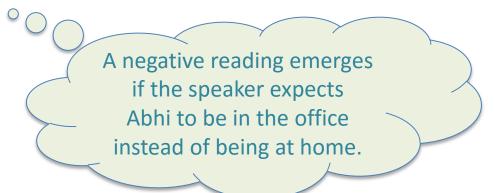
'Abhi is at home now.'

Argument focus

(22) **achhi/*-chhi** abhi ebe **ghar-e**FOC.COP.PRS-3NH.SG Abhi now home-LOC

New information focus

'Abhi is *at home* now.' (Lit. It's home where Abhi is now.)



Functions of copulas in Odia

(present tense forms)

Table 1. Functions of Odia copulas in present tense

Types of copulas	Functions of copulas						
	Identification	Specification	Attribution	Focus marking	Auxiliary verb		
Retroflex plosive copulas: aTe, aTu, aTa, aTanti	1	٧	٧	4			
Palatal affricative copulas: acchi, acchu, accha, achanti		V	٧	V	√		
Phonologically-reduced palatal affricative copulas: -chi, -chu, -cha, -chanti					V		

Odia copulas

Table 2: Copula forms in Odia based on tense and agreement markers

	Past		Pro	esent	Future		
	SG	PL	SG	PL	SG	PL	
1	thi-l-i	thi-l-u	aT-e ~ achh-i	aT-u ~ achh-u	thi-b-i ~ he-b-i	thi-b-u ~ he-b-u	
2NH	thi-l-u	thi-l-a	aT-u ~ achh-u aT-a ~ achh-a		thi-b-u ~ he-b-u	thi-b-a ~ he-b-a	
2н	thi-l-a		aT-a ~ achh-a		thi-b-a ~ he-b-a		
ЗNН	thi-l-ā	thi-l-e	aT-e ~ achh-i	a <i>T</i> -anti ~ achh-anti	thi-b-a ~ he-b-a	thi-b-e ~ he-b-e	
2нн	thi-l-e aT-anti ~ achh-anti				thi-b-e ~ he-b-e		
3н							

Note: The copulas are italicized, and the tense suffixes are in bold font. The final suffixes are the agreement markers that encode information about person, number, and honorificity level, but not gender. Plural forms are often also used for singular referents to express politeness, for example, when referring to honorific referents (e.g. 2H, 2HH, 3H) or even when addressing a non-honorific addressee (2NH).

Interim summary on focus copulas in Odia

- Copulas are also often preposed (or 'raised') to highlight certain constituents that the speaker intends to be interpreted as salient in the discourse.
- This preposing (or 'raising') phenomenon gives rise to focus effects.
- Focus copulas highlight the subject NP (ARGUMENT FOCUS and NARROW SCOPE) when they occur in clause-medial position.
- The focus copulas can also highlight new information in the proposition (NEW INFORMATION FOCUS and BROAD SCOPE) when they occur at the leftmost periphery.
- In Odia, in the present tense, copulas with different phonological realizations are sometimes used to distinguish between argument focus and new information focus readings.
- More specifically, *aT*-type copulas are used for argument focus in constructions with an identificational (i.e. identity mapping) function.
- For constructions involving new information (including specificational information about the argument), *achhi*-type copulas (or their past tense *thil*-type counterparts) are used instead.
- The phonologically reduced *-cchi*-type copulas cannot be used as main verbs nor as focus copulas; as auxiliary copulas, they are suffixes dedicated to carrying tensemood and agreement features.

Attitudinal uses of focus copula markers

• Situation:

A discussion on family dispute over property. Speaker A and her aunt are talking. Her aunt is unhappy with the decision of her in-laws over a house that her husband owns. She has been dragged into some trouble for some trivial issues. The whole discourse in which the aunt vents her frustration, with minimal interruption from the niece (Speaker A) is anger-driven.

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Attitudinal focus copulas in Odia Excerpt 1

```
Aunt:
      mu mo swaami-ku ghara khande maag-i-b-i-ni
      1SG.GEN my husband-ACC house CL beg-PFV-FUT-1SG-NEG
      'Will I not ask my husband for a house?'
      heichh-i mo swami kan nikammaa
      COP.3SG.NH my husband what useless
      je mote ghara khande de-i paariba-ni?
      COMP 1SG-DAT house CL give-PFV able.FUT-NEG
      'Is my husband that useless that he can't buy me a
      house?'
      bhaabi-chha kan tume?
      think-AUX.PRES.2PL.H what you
      'What do you think?'
```

Attitudinal focus copula constructions in Odia Excerpt 2

```
Aunt:
       Mo paisa kuade galaa?
       my money where go-PST-3SG.NH
       'Where has my (dowry) money gone?'
                             thi-l-e. Kahinki rakhi-la-ni?
       Mo baapaa de-i
       my father give-PERF AUX-PST-3SG.HH why keep-PST-2SG.H-NEG
       'My father gave it (to me). Why didn't you (= Mother-in-law) keep it?'
       Besi dekh-aa galaa
                                   tumaku?
       more see-PFV go-PST.3SG.NH you-ACC
       'Did it look too much to you (= Mother-in-law)?'
Ani:
       dei
                thi-l-e
                                besi paisaa ta sei paain!
       give-PFV AUX-PST-3SG.HH more money EMPH that for
        'Since (they saw he (= Aunt's Father) gave a lot of (dowry) money,
       (they spent it)!'
```

Issues of interest

- When is insubordination triggered?
 - When the main clause is elided?
 - When the verb phrase or aux is raised?
 - Not predicate-raising?
 - When emphasis marker is added?
 - All combined?

Copula forms of Odia

(no gender distinction)

	Past		P	resent	Future		
	SG	PL	SG PL		SG	PL	
1	<i>thi-</i> l -i	<i>thi-</i> l -u	<i>aT</i> -e ∼ <i>ach</i> -i	<i>aT</i> -u ∼ <i>ach</i> -u	<i>thi-</i> b -i ~ <i>he-</i> b -i	<i>thi-</i> b -u ~ <i>he-</i> b -u	
2NH	<i>thi-</i> l -u	thi- l -a	<i>aT</i> -u ∼ <i>ach</i> -u	aT -a ~ ach -a	<i>thi-</i> b -u ~ <i>he-</i> b -u	<i>thi-</i> b -a ~ <i>he-</i> b -a	
2н	thi- l -a		aT -a ~ ach -a		<i>thi-</i> b -a ~ <i>he-</i> b -a		
ЗNН	thi- l -ā	thi- l -e	<i>aT</i> -e ∼ <i>ach</i> -i	a <i>T</i> -anti ∼ <i>ach</i> -anti	<i>thi-</i> b -a ~ <i>he-</i> b -a	<i>thi-</i> b -e ~ <i>he-</i> b -e	
2нн	thi- l -e		aT -anti $\sim ach$ -anti		<i>thi-</i> b -e ~ <i>he</i> - b -e		
3н			ur-and o uch-	airci	יייי אוני-ט-פייי וופ-ט-פיייי		

Copula forms of Hindi

(with some gender distinction)

	Past Present					sent	Future			
	S	G	PL	S	G	PL	S	G	P	L
	М	F	M/F	М	F	M/F	M	F	М	F
1	<i>th</i> -ā	<i>th</i> -ī	<i>th</i> -e	h -i	ũ	h -aĩ	<i>ho</i> -uŋ- g -ā	<i>ho-</i> uŋ- g -ī	<i>ho</i> -(е)ŋ- g -е	
Зин				h-a	ai		ho- g -ā	ho- g -ī	<i>ho</i> -ŋ- g -е	
2 _{NH}	<i>th</i> -e			h -0	0		<i>ho-</i> g -e			
2н		th -ĩ		h-a	aĩ		<i>ho</i> -ŋ- g -е	<i>ho</i> -ŋ- g -ĩ	<i>ho</i> -ŋ- g -е	<i>ho</i> -ŋ- g -ĩ
3н										

Note: The copulas are italicized, and the tense suffixes are in bold font. The final suffixes are agreement markers that encode reference to person, number, gender, and honorificity level.

Forms of Copulas in Bajjika

Table 4: Forms of Bajjika 'be' verbs that function as copula/auxiliary

		1 2мн 2нн	2н	2NH	3NH	3н
NOM	PRS	<i>ha</i> -ti	<i>ha</i> -ta	<i>ha</i> -te	ha -i	<i>ha</i> -thin
	PST	<i>rah</i> -i	<i>rah-</i> a	<i>rah-</i> e	rah-e	<i>rah</i> -thin
	FUT	rah-a-m/b	<i>rah-</i> b- a	<i>rah-</i> b -e	rah-i	<i>rah</i> -i-han
NNOM	PRS	<i>ha-</i> e	h -aw	<i>h</i> -au	h -ai	<i>h</i> -ain
	PST	<i>rah-</i> e	<i>rah</i> -aw	<i>rah</i> -au	<i>rah</i> -ai	<i>rah</i> -ain
	FUT	rah-i	rah- t -aw	<i>rah-</i> t-au	<i>rah-</i> t -ai	rah- t -ain

Note: Copulas are shown by *italics*; **bold** font indicates tense; and regular fonts refer to person-agreement.

References

- Crunow, Timothy J. 1999. Towards a crosslinguistic typology of copula constructions. *Proceedings of 1999 Conference of Australian Linguistic Society*. Perth: University of Western Australia.
- Declerck, Renaat. 1988. *Studies on Copula Sentences, Clefts and Pseudo-clefts*, pp 39-50. Leuven: Leuven University Press and Foris.
- Dik, Simon C. 1983. *The Theory of Functional Grammar*. Dordrecht: Foris.
- Kashyap, Abhishek Kumar and Foong Ha Yap. (in press). Epistemicity, social identity and politeness marking: A pragmatic analysis of Bajjika verbal inflections. *Linguistics*.
- Pustet, Regina. 2003. Copulas: Universals in the Categorization of the Lexicon. Oxford: Oxford University Press.

Copula Constructions in Odia

- Copula as TAM-bearing auxiliary verb :
- (12a) *mili khusi achh-i*Mili happy COP-3SG.NH
 'Mili is happy.'
- (12b) sikhyaka khusi achh-anti teacher happy COP-3SG.HH 'The teacher is happy.'

Previous studies on copula

Pustet (2003)

Form

- Copulas linking subjects and nominal predicates
 - NP COP NP (English)NP NP COP (Indo-Aryan)
- Copulas linking subjects and adjectival predicates
 - NP COP AdjP (English)NP AdjP COP (Indo-Aryan)
- Copulas reanalyzed as auxiliary verbs
 - NP AUX.COP VP (English)NP VP AUX.COP (Indo-Aryan)

- Copulas reanalyzed as focus markers
 - NP FOC.AUX.COP VP (Indo-Aryan)
 - FOC.AUX.COP NP VP (Indo-Aryan)

Function

- Identity relationship
- Specifying relationship
- Specifying relationship
- Tense-carrier

Dedicated carriers

- Agreement-carrier
 - Person
 - Number
 - Gender
 - Honorificity level
- Focus marking

(via preposing or 'raising')

Hindi Copula Forms

Table 3: Forms of Hindi 'be' verbs that function as copula/auxiliary

	Past			Present		Future			
	SG		PL	SG	PL	SG		PL	
	M	F	M/F	M F	M/F	M	F	M	F
1	<i>th</i> -ā	<i>th-</i> ī	<i>th</i> -e	<i>h</i> -ũ	h -aĩ	<i>ho</i> -นŋ- g -ā	<i>ho-</i> սŋ- g -ī	<i>ho</i> -(e)ŋ- g -е	
3NH				<i>h</i>-ai		ho- g -ā	ho-g-ī	<i>ho</i> -ŋ- g -е	
2 _{NH}	<i>th</i> -e			h -o		ho- g -e			
2н		<i>th</i> -ĩ		h -aĩ		<i>ho</i> -ŋ- g -е	<i>ho-</i> ŋ- g -ĩ	<i>ho</i> -ŋ- g -е	<i>ho</i> -ŋ- g -ĩ
3н									

Note: The copulas are italicized, and the tense suffixes are in bold font. The final suffixes are agreement markers that encode nominal properties such as person, number, gender, and honorificity level related to the nominative NP (i.e. the subject).

Examples of copulas as main verbs in Hindi

```
(13) yah baṛ-ī acch-ī murlī h-ai.

DEM.SG much-F good-F flute

COP.PRS-3NH.SG

'This is a very good flute.'
```

(14) *ve-log vahã nahĩ th-e.*DEM-PL there NEG COP.PST-3H.PL 'They were not there.'



Examples of auxiliary copulas in Hindi

Tense-carrier

tum agle saptāh kyā kar rahe ho?

2NH.SG next week what do PROG AUX.2NH
'What are you doing next week?

Extended use as auxiliary modal

(16)thīk tum-ne Se ammā se māŋg-e mother 2NH.SG-ERG well ABL demand-PFV ABL nahĩ ho-ge. NEG AUX-FUT.OBI 'You may (=probably) not have asked mother well (for the money).' 39



Examples of existential copulas in Hindi

```
    (17) ek rājā th-ā.
    one king EXST.PST-3NH.SG.M
    'There was a king.'
    (18) ek din kī bāt h-ai.
    one day GEN talk EXST.PRS.3NH.SG
    'It's a matter of one day.'
```



Examples of focus copulas in Hindi

• **Argument focus** (clause-medial after subject)

```
sāiḍ iphekṭ hai is-kā bhī

side effect FOC.PRS.3NH.SG DEM.NH-DAT also 'It also has (its) side-effect.'
```

• Enhanced focus as orientation – THEME (as opposed to RHEME)

```
(20) are hai
vo jenţlmæn
hey FOC.PRS.3NH.SG 3NH.SG
gentleman
```

THEME

RHEME

GIVEN information

NEW

information

'Hey, he is a gentleman (= I'm not saying he is not).'

Interim summary on (auxiliary) copulas in Hindi

- Copulas in Hindi are also used as linking verbs between subject NPs and their identifying or specifying complement clauses.
- They are also used as dedicated tense and agreement carriers.
- As tense-carriers, copulas in Hindi also provide temporal grounding to instantiate events by realizing them through linguistic means as independent finite structures.
- As agreement-carriers, copulas in Hindi encode **more** information about privileged participants (e.g. subject NPs); in addition to information about person, honorificity level and number, Hindi copulas also encode information about **GENDER**.

Interim summary on focus copulas in Hindi

- Copulas in Hindi are also often preposed (or 'raised') to highlight certain constituents that the speaker intends to be interpreted as salient in the discourse.
- Similar to Odia, focus copulas in Hindi can highlight the subject NP (ARGUMENT FOCUS and NARROW SCOPE) when they occur in clause-medial position.
- The focus copulas in Hindi, similar to those in Odia, can also highlight new information in the proposition (NEW INFORMATION FOCUS and BROAD SCOPE) when they occur at the leftmost periphery.

Forms of Copulas in Bajjika

Table 4: Forms of Bajjika 'be' verbs that function as copula/auxiliary

		1 2мн 2нн	2н	2NH	3NH	3н
NOM	PRS	<i>ha</i> -ti	<i>ha</i> -ta	<i>ha</i> -te	ha -i	<i>ha</i> -thin
	PST	<i>rah</i> -i	<i>rah-</i> a	<i>rah-</i> e	<i>rah-</i> e	<i>rah</i> -thin
	FUT	rah-a-m/b	rah- b- a	<i>rah-</i> b -e	rah-i	<i>rah</i> -i-han
NNOM	PRS	<i>ha-</i> e	h -aw	<i>h</i> -au	h -ai	h -ain
	PST	<i>rah</i> -e	<i>rah</i> -aw	<i>rah</i> -au	<i>rah</i> -ai	<i>rah</i> -ain
	FUT	rah-i	rah- t -aw	<i>rah-</i> t -au	rah- t -ai	rah-t-ain

Note: Copulas are shown by *italics*; **bold** font indicates tense; and regular fonts refer to person-agreement.

Examples of copulas as main verbs in Bajjika

```
(21)
      murol ego lamhar
                                   gãw
                                                 ha-aw.
              Murol one
                                                 village
                            big
       COP.PRS-ALLOC:2H
              'Murol is a big village.'
              (The addressee is 2H.)
(22)
      mahrā kakkā ke
                                   nām
              Mahra uncle GEN
                                   name
              rah-ain
                                                 sinhesar
       mahrā
              COP.PST-3H.NNOM
                                          Sinhesar
       Mahra
              'Uncle Mahra's name was Sinhesar Mahra.'
```



Examples of auxiliary copulas in Bajjika

Extended use as auxiliary modal

```
(23)
       ham-rā ghar
                                      pacchim
                    se
                                                     rames
       sarmā
               1-DAT
                              house
                                      ABL
                                             west
       Ramesh Sharma
               ke
                              ghar
                                              ban-ait
       rah-e.
                                      make-PROG
               GEN
                       house
       AUX.PST-3NH
```

'To the west of my house, Ramesh Sharma's house was being constructed.'

Examples of auxiliary copulas in Bajjika

Extended use as auxiliary modal

```
e=ke

otherwise one hour more walk-INF

ho-t-aw.
AUX-FUT-ALLOC: 2H

'Or else it may be that you will have to travel one more hour (= one extra hour).'
```

(Kashyap & Yap, in press)



Examples of existential copulas in Bajjika

(25) ek=ber ego pari rah-e.

once one fairy EXST.PST-3NH
TIME EXISTENT PROCESS: Verb

'Once there was a fairy.'

Examples of focus copulas in Bajjika

• **Argument focus** (clause-medial after subject)

```
(26) sāiḍ ifekṭ ha-e
ekk-ar-o
side effect FOC.PRS-3NH.NNOM 3NH-GEN-also
'It also has (its) side-effect.'
```

• Enhanced focus as orientation – THEME (as opposed to RHEME)

```
(27) hat-in ta khuṭrākas
FOC.PRS-3H.F THEME devil (problem.creator)

dar-e kah-ile bhagbatti
fear-ABLsay-1.NOM goddess
```

'(She) is a devil (problem.creator), but (we) call her Goddess out of fear.'

Interim summary on (auxiliary) copulas in Bajjikka

- Copulas in Bajjika carry even more information than copulas in Hindi.
- In addition to information about person, honorificity level, number and gender that agree with the nominal features of the subject NP, copulas in Bajjika also encode agreement features that provide information about other referents or participants in the discourse.

Interim summary on focus copulas in Bajjikka

- Copulas in Bajjika are also often preposed (or 'raised') to highlight certain constituents that the speaker intends to be interpreted as salient in the discourse.
- Similar to Odia and Hindi, copulas in Bajjika can either highlight the subject NP (ARGUMENT FOCUS and NARROW SCOPE) when they occur in clause-medial position, or they can further highlight new information within the proposition (NEW INFORMATION FOCUS and BROAD SCOPE) when they occur at the leftmost periphery.

'Double agreement' marking in Bajjika

- Whereas Odia and Hindi deploy a 'single agreement' system, Bajjika deploys a more complex 'double agreement' system.
- For languages with a 'single agreement' system, the speaker needs to decide whether to express nominative agreement or non-nominative agreement, but not both simultaneously.
- Languages with a 'double agreement system' such as Bajjika, on the other hand, can express both nominative and non-nominative agreement simultaneously.

'Double agreement' marking in Bajjika

- The availability of 'double agreement' marking allows Bajjika to develop grammaticalized markers that allows the speaker to signal his social (hence also interpersonal) relationship with the addressee, which is important within a community that places great importance on how one attends to the 'face needs' of the others.
- Bajjika also often uses its future tense markers as epistemic markers with pragmatic hedging functions; this constitutes one of its politeness systems. The non-nominative agreement markers in Bajjika, with can signal the social status of the addressee, consitutes yet another politeness system. The interaction of both systems provide more nuanced calibrations of the speaker's expression of politeness to other interlocutors.

Table comparing copulas in Odia, Hindi and Bajjika

Table 2: Copula forms in Odia based on tense and agreement markers

- GENDER

	Past		Pro	esent	Future		
	SG	PL	SG	PL	SG	PL	
1	thi-l-i	thi-l-u	<i>aT</i> -e ~ <i>achh</i> -i	aT-u ∼ achh-u	thi- b -i ∼ he- b -i	thi- b -u ∼ he- b -u	
2 _{NH}	thi-l-u	thi-l-a	aT-u ∼ achh-u	aT-a ~ achh-a	thi- b -u ∼ he- b -u	thi- b -a ~ he- b -a	
2н	thi-l-a		aT-a ~ achh-a		<i>thi-</i> b- a ~ <i>he-</i> b- a		
3 _{NH}	thi-l-ā	thi-l-e	aT-e ∼ achh-i	aT-anti ∼ achh-anti	<i>thi-</i> b -a ∼ <i>he</i> - b -a	<i>thi-</i> b -e ∼ <i>he-</i> b -e	
2нн	thi-l-e		aT-anti ∼ achh-anti		<i>thi-</i> b -e ~ <i>he-</i> b -e		
3н							

Table 3: Forms of Hindi 'be' verbs that function as copula/auxiliary

+ GENDER

	Past			Present		Future			
	SG		PL	SG	PL	SG		PL	
	M	F	M/F	M F	M/F	M	F	M	F
1	<i>th-</i> ā	<i>th-</i> ī	<i>th-</i> e	<i>h</i> -ũ	h -aĩ	<i>ho</i> -uŋ- g -ā	<i>ho</i> -uŋ- g -ī	<i>ho</i> -(е)ŋ- g -е	
3 _{NH}				<i>h</i>-ai		ho- g -ā	<i>ho-</i> g -ī	<i>ho</i> -ŋ- g -е	
2 _{NH}	<i>th</i> -e			<i>h</i> -o		<i>ho-</i> g -e			
2н		<i>th-</i> ĩ		h -aĩ		<i>ho</i> -ŋ- g -е	<i>ho</i> -ŋ- g -ĩ	<i>ho</i> -ŋ- g -е	<i>ho</i> -ŋ- g -ĩ
3н									

Forms of Copulas in Bajjika

No number (SG/PL) distinction

Table 4: Forms of Bajjika 'be' verbs that function as copula/auxiliary

		1 2мн 2нн	2н	2NH	3NH	3н
NOM	PRS	<i>ha</i> -ti	<i>ha</i> -ta	<i>ha</i> -te	ha -i	<i>ha</i> -thin
	PST	<i>rah-</i> i	<i>rah-</i> a	<i>rah-</i> e	<i>rah-</i> e	<i>rah</i> -thin
	FUT	rah-a-m/b	<i>rah</i> -b-a	<i>rah</i> - b -e	rah-i	<i>rah</i> -i-han
NNOM	PRS	<i>ha</i> -e	h -aw	<i>h</i> -au	<i>h</i> -ai	<i>h</i> -ain
	PST	<i>rah-</i> e	<i>rah</i> -aw	<i>rah</i> -au	<i>rah</i> -ai	<i>rah</i> -ain
	FUT	rah-i	<i>rah-</i> t -aw	<i>rah-t</i> -au	<i>rah-</i> t-ai	rah- t -ain

Forms of Copulas in Bajjika

Table 4: Forms of Bajjika 'be' verbs that function as copula/auxiliary

		1 2мн 2нн	2н	2NH	3NH	3н
NOM	PRS	<i>ha</i> -ti	<i>ha</i> -ta	<i>ha</i> -te	<i>ha</i> -i	<i>ha</i> -thin
	PST	<i>rah-</i> i	<i>rah-</i> a	<i>rah-</i> e	<i>rah-</i> e	<i>rah</i> -thin
	FUT	rah-a-m/b	rah-b-a	<i>rah</i> -b-e	rah-i	<i>rah</i> -i-han
NNOM	PRS	<i>ha</i> -e	h -aw	<i>h</i> -au	h -ai	h -ain
	PST	<i>rah-</i> e	<i>rah</i> -aw	<i>rah</i> -au	<i>rah</i> -ai	<i>rah</i> -ain
	FUT	rah-i	<i>rah</i> - t -aw	<i>rah-t</i> -au	<i>rah-</i> t-ai	rah-t-ain

Odia copulas

Table 2: Copula forms in Odia based on tense and agreement markers

	Past		Pro	esent	Future		
	SG	PL	SG	PL	SG	PL	
1	thi-l-i	thi-l-u	aT-e ~ achh-i	aT-u ~ achh-u	thi-b-i ~ he-b-i	thi-b-u ~ he-b-u	
2NH	thi-l-u	thi-l-a	aT-u ~ achh-u	aT-a ~ achh-a	thi-b-u ~ he-b-u	thi-b-a ~ he-b-a	
2н	thi-l-a		aT-a ~ achh-a		thi-b-a ~ he-b-a		
Зин	thi-l-ā	thi-l-e	aT-e ~ achh-i	a <i>T</i> -anti ~ achh-anti	thi-b-a ~ he-b-a	thi-b-e ~ he-b-e	
2нн	thi-l-e		aT-anti ~ achh-anti		thi-b-e ~ he-b-e		
3н							

Note: The copulas are italicized, and the tense suffixes are in bold font. The final suffixes are the agreement markers that encode information about person, number, and honorificity level, but not gender. Plural forms are often also used for singular referents to express politeness, for example, when referring to honorific referents (e.g. 2H, 2HH, 3H) or even when addressing a non-honorific addressee (2NH).

Hindi Copula Forms

Table 3: Forms of Hindi 'be' verbs that function as copula/auxiliary

	Past			Pres	ent	Future			
	SG I		PL	SG	PL	SG		PL	
	M	F	M/F	M F	M/F	M	F	M	F
1	<i>th-</i> ā	<i>th</i> -ī	<i>th</i> -e	<i>h</i> -ũ	h -aĩ	<i>ho</i> -นŋ- g -ā	<i>ho-</i> սŋ- g -ī	<i>ho</i> -(e)ŋ- g -e	
3 _{NH}				<i>h</i>-ai		ho- g -ā	ho-g-ī	<i>ho</i> -ŋ- g -е	
2 _{NH}	<i>th-</i> e			h -o		ho- g -e			
2н		<i>th</i> -ĩ		h -aĩ		<i>ho</i> -ŋ- g -е	<i>ho-</i> ŋ- g -ĩ	<i>ho</i> -ŋ- g -е	ho-ŋ- g -ĩ
3н									

Note: The copulas are italicized, and the tense suffixes are in bold font. The final suffixes are agreement markers that encode nominal properties such as person, number, gender, and honorificity level related to the nominative NP (i.e. the subject).

Forms of Copulas in Bajjika

Table 4: Forms of Bajjika 'be' verbs that function as copula/auxiliary

		1 2мн 2нн	2н	2NH	3NH	3н
NOM	PRS	<i>ha-</i> ti	<i>ha</i> -ta	<i>ha</i> -te	<i>ha-</i> i	<i>ha</i> -thin
	PST	<i>rah</i> -i	<i>rah-</i> a	rah-e	<i>rah-</i> e	<i>rah</i> -thin
	FUT	rah-a-m/b	rah-b-a	<i>rah-</i> b-e	rah-i	<i>rah</i> -i-han
NNOM	PRS	<i>ha-</i> e	h -aw	h -au	h -ai	h -ain
	PST	<i>rah</i> -e	<i>rah</i> -aw	<i>rah-</i> au	<i>rah</i> -ai	<i>rah</i> -ain
	FUT	rah-i	rah- t -aw	<i>rah-</i> t -au	<i>rah-</i> t-ai	rah- t -ain

Note: Copulas are shown by *italics*; **bold** font indicates tense; and regular fonts refer to person-agreement.

Focus copulas in Odia

(8) thi-l-aa se ghar-e kaali / COP.PAST.3SG.NH he/she home-LOC yest

(9) achh-i / COP.PRES.3SG.NH erday/ He/she was home yesterday

(10)aaji / today

(11)He/She is home today

 \bigcirc

TAM marking on Odia copula constructions (present imperfective tense-aspect morphology)

(6) a.

- b. *mili ghara-ku jaa-u achh-i*Mili home-LOC go-IMPF AUX.COP.PRES-3SG.NH
 'Mili is going home.'
- (7) c. *mili ghara-ku jaa-u thi-l-aa*Mili home-LOC go-IMPF AUX.COP.PRES-3SG.NH

 'Mili is going home.'
- c. *mili ghara-ku jaa-u thi-l-aa*Mili home-LOC go-IMPF AUX.COP.PRES-3SG.NH

 'Mili is going home.'

TAM marking on Odia copula constructions (present imperfective tense-aspect morphology)

- (6) a. mili ghara-ku jaa-u achh-i

 Mili home-LOC go-IMPF—AUX.COP.PRES-3SG.NH

 'Mili is going home.'
 - b. *mili ghara-ku jaa-u achh-i*Mili home-LOC go-IMPF AUX.COP.PRES-3SG.NH
 'Mili is going home.'
- (7) a. sikhyaka ghara-ku jaa-u achha-nti teacher home-LOC go-IMPF—AUX.COP.PRES-3SG.HH 'The teacher is going home.'
 - b. *sikhyaka ghara-ku jaa-u achha-nti* teacher home-LOC go-IMPF AUX.COP.PRES-3SG.HH 'The teacher is going home.'

 \bigcirc

TAM marking on Odia copula constructions (present imperfective tense-aspect morphology)

• Copula as a main verb

- (6) a. *mili ghar-e achh-i*Mili home-LOC COP.PRES.3SG.NH
 'Mili is at home.'
 - b. *sikhyaka ghar-e achha-nti* teacher home-LOC COP.PRES.3SG.HH 'The teacher is at home.'

Copula as an auxiliary verb

- (7) a. *mili ghara-ku jaa-u achh-i*Mili home-LOC go-IMPF AUX.COP.PRES-3SG.NH
 'Mili is going home.'
 - b. sikhyaka ghara-ku jaa-u achha-nti teacher home-LOC go-IMPF AUX.COP.PRES-3SG.HH 'The teacher is going home.'

Examples of existential copulas in Odia

(17) law and order thāu na thāu
law and order EXST not EXST
'Whether law and order is there or not...'