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Copula functions in a cross-Sinitic perspective

Dawei Jin daweijin@buffalo.edu

Abstract: This paper investigates the distinct functions associated with the copula morpheme and their distribution across Sinitic languages. Based on fieldwork on five Sinitic languages, an empirical generalization will be presented regarding the scope and variation of copular multifunctionality. Specifically, language-specific variation is witnessed in topic and conditional marking as well as verum marking. Conversely, it is found that Sinitic languages converge on employing the copula in constructions expressing phrasal and clausal level focus. The paper further explores whether these copular constructions should receive a uniform syntax, or should be conceived of as having a set of underlaid heterogeneous structures.

Keywords: copula, topic-comment structure, non-at-issue meaning, focus semantics, constraint-based syntax, syntactic typology, Sinitic language

1 Introduction

The copula morpheme in Sinitic languages is known to not only appear in copular clauses, but also in a variety of other constructions. For example, (1a) exemplifies a canonical copular clause in Mandarin Chinese, where the copula verb links a pre-copula subject with a post-copula complement. In (1b), the copula morpheme in Mandarin is juxtaposed with its negative counterpart, yielding a yes-no question that assigns a binary value to a proposition that serves as the argument of the reduplicated copular element.

(1) Mandarin Chinese

- a. $T\bar{a}$ shì jīngjù de yídài zōngshī. he COP Peking.Opera REL generation master 'He is a master of his generation in Peking Opera.'
- b. Shì bú shì jīntiān xiàwǔ yào kāi huì COP NEG COP today afternoon will hold meeting 'Is it that there will be a meeting this afternoon or not?'

Some languages belonging to the Sinitic language family (that is, daughter languages that commonly descend from Middle Chinese) employ the copula morpheme differently from Mandarin. Thus, (2a–c) additionally exemplify the employment of the Gan Chinese copula morpheme in the marking of a topic-comment structure, an *if*-conditional clause and an affirmative predicational clause, respectively.¹

(2) Fuzhou Gan

a. Lau^{45} $wo\eta^{213}$ εi ηo^{45} $tsau^{45}kan^{11}$ ts^hai^{24} $p^ho\eta^{41}tau^{11}$ $k\varepsilon^{45}$ old Wang COP_{TOP} I morning just meet him '(Speaking of) old Wang, I just saw him this morning.'

b. $K\varepsilon^{45}$ pu^2 $t^h o y^{24} j i^{212}$ εi $ko i^{32} - t \varepsilon^h j \varepsilon n^{41}$ $s i^{41}$ $t \varepsilon^h j u^{41}$ he NEG agree COP_{COND} DEM-CLF issue then pan^4 pu^2 tan^{41} $t \varepsilon^l$ achieve NEG RES PRT

'If he does not agree, we won't be able to get this issue done.'

c. εi^{22} $t\varepsilon j\varepsilon l^2 lai^{12}$ $t\varepsilon^l$ $tj\varepsilon n^{45}$ COP_{AFFIRM} unlucky PRF a.bit 'It [is]_{stressed} a bit unlucky.'

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¹ I have labeled the copula morpheme differently in my gloss, depending on the function of the morpheme in a given construction: COP_{TOP} = copula morpheme as a topic marker; COP_{COND} = copula morpheme as a conditional marker; COP_{AFFIRM} = copula morpheme as an affirmative marker. The unmarked COP stands for a copula verb proper. This labeling practice is for purely expositional reasons, serving to disambiguate the copula's different uses against different contexts. The labeling choice does not entail a theoretical position. For example, the topic marker and the conditional marker uses are labeled differently, even though in the following I will argue that the copula morpheme in these two uses receive a unified analysis. I thank an anonymous reviewer for suggesting me that all copulas be labeled differently.

The detailed analysis of the aforementioned functions constitutes the main concern of the current study. The goal of this paper is to broaden the database for copula distribution with the distinct functions performed by the copula morpheme by drawing upon fieldwork elicitations from a larger sample of Sinitic languages than before. Despite a number of early attempts at chronicling and analyzing copula functions of non-Mandarin Sinitic languages, at a general level cross-Sinitic comparison in terms of copula multifunctionality is currently at its inception, and hence relatively little is known about the extent of diversity across Sinitic languages. My primary interest is to avoid Mandarin-centrism and specifically to identify what copula features are typical (functions of the copula morpheme that find widespread distribution across Sinitic languages) and what are, by comparison, less typical copula features. Another question this paper seeks to address is to what extent apparently distinct constructions that commonly involve a copula morpheme are uniform, in the sense that they are shared by an identical structure. In other words, I strive to determine whether copula multifunctionality warrants positing distinct lexical entries.

In the current study, data come from five languages on which I have conducted fieldwork (Mandarin, Cantonese, Gan, Hui and Pinghua).² These languages, as well as the phonological representation of their respective copula morphemes, are listed in Table 1. As each Sinitic language is better understood as a group of language varieties with significant internal variation, the present investigation is restricted to one representative dialect spot per language (the place name given in the parenthesis stands for the dialect spot surveyed).

Table 1. A sampling of copula morphemes across five Sinitic languages

Language (dialect spot)	Copula form
Mandarin (Běijīng)	shì
Cantonese (Hong Kong)	hai^6
Gan (Fŭzhōu) ³	εi^{22}
Hui (Wùyuán)	εi^{31}
Pinghua (Bīnyáng)	$\epsilon \partial i^{42}$

Based on these findings, two claims are proposed. First, a number of copula functions exhibit inter-language variation. In a subset of surveyed Sinitic languages, the copula morpheme is employed as a topic marker and also appears in conditionals. Furthermore, certain Sinitic languages use the copula morpheme as a speaker-oriented marker confirming that (the speaker believes) the proposition it combines with is true. In contrast, the distribution of the remainder of copula functions exhibits no variation across the surveyed Sinitic varieties. These functions include, aside from the canonical copular clause, the copula marking of clefts and proposition-level assertions. Second, by adopting crosslinguistically applicable criteria, I propose that the copula morphemes in the topicmarking and the affirmative function project their distinct (albeit interrelated) lexical entries or form part of language-idiosyncratic construction types. The other functions of the copula

² My classification is based on the conservative view adopted in Ethnologue's Languages in China (18th edition), which assumes that the Sinitic group comprises the following ten members: Gan, Hakka, Hui, Jin, Mandarin, Min, Pinghua, Wu, Xiang and Yue (Cantonese).

³ Not to be confused with Fúzhōu dialect (tonal distinction indicated by the diacritical tonal marks), a Min variety spoken in the Fújiàn Province.

fall under an overarching lexical entry. I further propose to make sense of the range of copular functions as revolving around the predication-establishing role of the copula verb as advocated in a strand of previous research (e.g. Partee 1987). I show that all functions are structurally and semantically related to the copula's core function as a predication-establishing mediator. These relations are specified through a preliminary syntactic implementation under a constructionist framework.

Of course, it should be clear at the outset that this pilot study is by no means an exhaustive and thereby conclusive set of generalizations; rather, it represents a mere first approximation to a complicated and little understood empirical pattern. Revisions will have to be made once the scope of the survey is broadened. For example, claims regarding the typicality of a copula feature could be changed with more languages entering the sample. In addition, the claim that a given function exhibits no inter-language variation will be immediately discarded once a counterexample is identified from a new language. What's more, it has been reported that certain Sinitic varieties employ the copula morpheme to encode existence or location (see Pustet 2003 for the employment of the copula for locatives in Cantonese; Xie 2015 for similar uses in Xiangnan Xiang and Hakka; and Ma & Cai 2006; Wu 2000; Cao 2008 for the copula as existence verb in Wenzhou Wu and Yixian Hui), which are typologically robust patterns. For the five Sinitic varieties surveyed in this paper, these patterns have not been found. There is thus much to be desired regarding a broadened range of copula multifunctionality and new generalizations based on it, which awaits future research.

The rest of this paper is structured as follows. Section 2 examines the structure and semantics of the copular constructions that exhibit variation across languages. Section 3 examines constructions that exhibit no inter-language variation. Section 4 concludes the paper.

A practical transcription scheme is adopted throughout this paper. For Mandarin data, the standard pinyin scheme is used. The transcription of Cantonese is based on the Eitel Romanization scheme, which has official status in Hong Kong (tones are marked with a numbering system using the single digits 1–6). Broad phonemic transcriptions are employed for the other three languages, with a more iconic two-digit numbering system. A minimum of three native speakers are consulted for each Sinitic variety. All consultants report local residence without immigration history, see the appendix for the detailed consultant information.

Before proceeding, a clarification of the term 'copula' is in place here. Throughout the paper, the canonical use of the copula in a run-of-the-mill copular clause construction is referred to as 'the copula verb' or 'the copula verb proper'. The term 'the copula morpheme' is used to refer to the extended functions such as topic marking, in order to draw a distinction between these functions and the canonical function. Finally, I sketch some important typological characteristics of Sinitic syntax (cf. Chappell 2001, 2015). The most common word order in Sinitic languages is verb-medial for transitive sentences. In terms of phrase-internal constituents, the modifier tends to precede the modified (i.e. attributive < head, genitive < head, demonstrative < head, relative clause < head, negation word < verb, adposition < noun, numeral < noun, etc.; LaPolla 2015). Finally, despite being predominantly SVO, all Sinitic languages have been argued to exhibit topic-prominence (Xu 2000), with widespread object or oblique preposing.

⁴ I am indebted to an anonymous reviewer for raising this point.

2 Copula functions with cross-Sinitic variation

The Sinitic languages surveyed here differ in whether the copula morpheme plays a role in topic and conditional marking as well as whether it licenses an affirmative reading. On the other end of the continuum, these languages converge on the employment of the copula element in the canonical copular clause construction and a family of focalizing constructions, including clefts and broad assertions of proposition content. Table 2 summarizes the fieldwork findings of the distribution of copula functions across Sinitic languages.

Table 2. A taxonomy of the distribution of copula functions in Sinitic languages '+' indicates the presence of the copula in the given language with regard to the feature, and '-' indicates the absence of the copula w.r.t. the feature.

Functions	Mandarin	Cantonese	Gan	Hui	Pinghua
Topic marking	_	_	+	+	_
Conditional marking	_	_	+	+	_
Affirmative/verum	+	+	+	ı	_
Copular clause	+	+	+	+	+
Cleft	+	+	+	+	+
Propositional assertion	+	+	+	+	+

In what follows, I start with an overview of the copula verb's function within the garden-variety, canonical copular clauses, before going into detail about the syntactic and semantic properties of other extended copula functions. Canonical copular clauses have been argued to comprise a family of constructions (Mikkelsen 2005; 2011, cf. Higgins 1979 for the first taxonomy of different subtypes of copular clauses). Thus, (3a) exemplifies a predicational (or ascriptional/ascriptive) copular clause of the syntactic configuration [XP_{entity} COP YP_{pred}], in which the pre-copula subject XP is entity-denoting, and the post-copula complement YP denotes a property that is applied to that entity. (3b) illustrates a specificational copular clause of the configuration [XP_{pred} COP YP_{entity}], in which the subject XP is property-denoting, predicated of the entity-denoting complement YP.

(3) Hong Kong Cantonese

- a. Keoi⁵ hai⁶ ging¹kek⁶ ge³ jat¹doi⁶ zung¹si¹. he COP Peking.Opera POSS generation master 'He is a master in his generation's Peking Opera.'
- b. $Ngo^5 zung^1yi^3 ge^3 jan^4 hai^6 tong^4tong^{4-2}$. I love REL person COP Tongtong 'The person I am in love with is Tongtong.'

A plethora of syntactic proposals have argued that these two copular clauses are characterized by a uniform syntax-semantics alignment, which is further conditioned by information structure (Halliday 1967; Lyons 1977; Declerck 1988; Mikkelsen 2005; Zhan

and Sun 2013). Accordingly, Sinitic languages unanimously feature both clauses, because they fall under a single overarching copular clause construction type. In this construction, the copula serves as a functor (in the logico-semantic sense) that does not add semantic content to the construction it is contained in (Hengeveld 1992; Stassen 1997; Pustet 2003) but plays an essential role in the establishment of predication relationships (Partee 1987; Bowers 1993; Eide and Åfarli 1999; Adger and Ramchand 2003; Den Dikken 2006).⁵ In semantics, the copula indicates that the property denoted by the predicative argument holds for the referents of the other, entity-denoting argument (Williams 1983; Partee 1987; Geist 2007).⁶

The rest of Section 2 discusses those copula functions that vary across surveyed Sinitic languages (i.e. the topic marking, the conditional marking and the affirmative use according to Table 2). Section 3 investigates those copula functions commonly shared by surveyed Sinitic languages.⁷ Before proceeding, it is important to point out an assumption that has

(i) Hong Kong Cantonese

Uk¹daai⁶wai⁴ (zik^{I}) hai⁶ ou¹gu²si¹dou¹ $ou^1gu^2si^1dou^1$ (zik^{l}) hai⁶ uk¹daai⁶wai⁴ Octavius (exactly) COP Augustus Augustus (exactly) COP Octavius 'Octavius is Augustus, Augustus is Octavius.'

Several analyses have sought to unify the copula in the equative clause with the predicate-forming one in (3a–b). Accordingly, in (i), it is proposed that one of the two name arguments refers to *the property of* bearing a name and thus expresses a predicative element. For instance, *Octavius* could denote the property of bearing the name of Octavius (Geist 2007; Mikkelsen 2011). However, I am open to the possibility that there may exist a distinct contentful copula of identity (Benveniste 1966; Halliday 1967; see the recent revival of this idea in Mikkelsen 2005 and Pereltsvaig 2008). A polysemous approach to the copula thus brings potential complications to understanding the multifunctionality discussed in this paper that is centered on predication, although at present I opt not to dwell upon this issue.

⁷ Among types of predicate, the copula in Sinitic languages only connects nominal predicates, rather than verbal or adjectival predicates (Pustet 2003). Verbal predicates do not co-occur with any linking elements, and adjectival predicates are linked by a scalar morpheme (e.g. Mandarin *hen*), often analyzed as a generalized intensifier (Huang 2006; Gu 2008; Liu 2010; Grano 2012). As (i) illustrates, both verbal and adjectival predicates resist the insertion of a copula verb.

(i) Mandarin

- a. Zhāngsān (*shì) hěn cōngming Zhangsan (*COP) HEN smart 'Zhangsan is smart.'
- b. Zhāngsān (*shì) xǐhuān dúshū. Zhangsan (*COP) like reading 'Zhangsan likes reading.'

⁵ More specifically, previous proposals tend to argue that the copula, as a linking element in predication formation, mediates between a predicative element and a referential element in either direction. Thus, in a predicational clause, the copula links the predicative element in its complement position to the referential element in its subject position (as in [3a]). In a specificational clause, the copula links the referential element in its complement position to the predicative element in its subject position (3b).

⁶ Aside from the predicational and specificational readings mentioned above, there is also an equative (or equational/identificational) reading, instantiated in (i): The two NPs flanking the copula both refer to entities, and the construction functions to identify the two entities with one another, i.e. [XP_{entity} COP YP_{entity}]. In other words, the referent of *Octavius* is equated with the entity picked out by the expression *Augustus*, and vice versa.

been implicitly adopted to this point: This paper holds that the functions to be dealt with in Section 2 should be analyzed as related to the garden-variety copula verb, in the sense that their shared phonology reflects a recurring pattern that is replicated across languages and that is potentially characterizable by some underlying mechanisms of grammatical and semantic change. In other words, this paper considers it less plausible to treat these homophonous functions as arisen via accident. I will return to this issue in greater detail in subsections below whenever it is relevant.⁸

2.1 Copula as a topic marker

2.1.1 Topic-comment construction

This subsection motivates the claim that, in Gan and Hui, the copula morpheme may function as a topic marker, instantiating a topic-comment structure with the syntactic configuration of [[XP-COP_{TOP}] topic, YP_{comment}] (Here COP_{TOP} stands for the copula morpheme as a topic marker, see footnote 2 for the exposition of my labeling). In both languages, the copula follows a discourse topic (example 4a) as well as a contrastive topic (the B-answer in [4b]). Here discourse topics are understood in the sense of Reinhart (1982) and Portner and Yabushita (1998), as (re-)introducing a discourse referent for file update. Contrastive topics assume the existence of a prior overall question that is partitioned into contrasting subquestions (the A-question in [4b]), so that a contrastive topic introduces a (partial) answer addressing one of the subquestions (Hara 2006; Constant 2014; Büring 2016).

(4) Fuzhou Gan

a. Lau^{45} $wo\eta^{213}$ ϵi ηo^{45} $tsau^{45}kan^{11}$ ts^hai^{24} $p^ho\eta^{41}tau^{11}$ $k\epsilon^{45}$ old Wang COP_{TOP} I morning just meet him '(Speaking of) old Wang, I just saw him this morning.'

b. A:
$$K\varepsilon^{45}pin^{11}$$
 ts^hai^{32} tsu^{41} $s\varepsilon^{25}k\sigma^{1}$? they PROG do what 'What are they doing?'

B: Lau^{45} $wo\eta^{213}$ εi $k^h \varepsilon^{4l}$ $tsu^{4l}si^{2l3}$ li^l old Wang COP_{TOP} go work PRF Lau^{45} li^{2l3} εi , $ts^h ai^{32}$ u^2 xa^{22} . old Li COP_{TOP} LOC room in '[Old Wang]^{CT} has gone to work. [Old Li]^{CT} is in his room.'

Other phrasal categories such as PPs, which may occur as predicative complements in English, are also disallowed in Sinitic languages.

⁸ I thank an anonymous reviewer for showing me the importance of explicitly discussing this assumption.

⁹ Languages tend to employ the same marker for contrastive and discourse topics (as is the case with Japanese wa-marking, cf. Tomioka 2010). Nevertheless, this correlation finds exceptions. For instance, Mandarin -ne has been shown to mark contrastive topics alone (Constant 2014).

The topic-marker status of the copula morpheme is evidenced by several diagnostics. Specifically, I will argue that the topic-marking copula displays a distinctive prosodic integration pattern and a distinctive distributional pattern.

First, we find that the topic-marking copula is prosodically integrated to a topic host. In Gan, copula verbs carry a default lexical tone, which is characteristic of a free, stand-alone morpheme (Hu 2013). The copula morphemes in (4a-b), in contrast, are tone-less and nonstressed (sometimes referred to as 'neutral tone' in the Sinitic tonal literature). In Hui, tone sandhi patterns override inherent lexical tones of individual morphemes in connected speech (Wang 2011). The exact realization of Hui tone sandhi is sensitive to the number of syllables within a phonological unit. Thus, given a two-syllable unit, if the initial syllable bears an inherent falling tone, it is realized as a rising tone in connected speech. The second syllable of the unit retains its inherent lexical tone. Within a three-syllable unit, both the initial and the second syllable will be realized as a rising tone in connected speech if they bear an inherent falling tone. Crucially, we see in (5a) that, the initial and the second syllable preceding the copula -ci are both realized as a rising tone, whereas in isolation they both bear a falling tone (the superscript left of the arrow indicates the morpheme's inherent tone, and the notation right of the arrow indicates the actually realized tone in context). In other words, the tonal realization in question is characteristic of the tone sandhi pattern within a three-syllable unit. This pattern thus points to the copula -\varepsi being prosodically integrated into the preceding NP and participating in the latter's tone-sandhi-bearing unit. Such behavior is compatible with analyzing the copula morpheme in (5a) as an instance of a topic marker. In contrast, a full-fledged copula verb cannot be integrated into its preceding NP during tone sandhi. A case of illustration is (5b), where the second syllable li is realized as its inherent falling tone instead of a rising tone, which is expected of a two-syllable sandhi pattern and suggests that the copula morpheme does not participate in the preceding tonesandhi-bearing unit.¹⁰

(5) Wuyuan Hui a.
$$[lo^{31\rightarrow 24} li^{31\rightarrow 24} \epsiloni^{31}] tsu^{35} bu^{51}k \partial y^{15}$$
 old Li COP_{TOP} do carpenter.work '(Talking about) old Li, (he) makes a living as a carpenter.'

b.
$$[lo^{31\rightarrow 24} \quad li^{31}] \quad \epsilon i^{31} \quad i^{51}$$
- $ke^{35} \quad bu^{51}t\epsilon^h ia\eta^{51}$ old Li COP one-CLF carpenter 'Old Li is a carpenter.'

Secondly, distribution-wise, if the topic-marking copula and the copula verb are distinct, then nothing rules out their co-occurrence. We might expect a topic-comment structure with two consecutive copulas, in which the first copula attaches to the topic host as an (enclitic) bound morpheme to be followed by the second copula heading the comment as a lexical verb. This prediction is indeed borne out as evidenced by the co-occurrence pattern in (6).

(6) Fuzhou Gan
$$Lau^{45} w 2\eta^{213} \quad \varepsilon i \qquad \varepsilon i^{22} \quad \eta o^{45} \quad ko^1 \qquad tin^{24} sa^{41}$$

¹⁰ To my knowledge, Xu and Liu (2007) are among the first authors to have proposed using tone sandhi evidence for the topic marker status of morphemes in Sinitic languages.

old Wang COP_{TOP} COP I POSS neighbor '(Talking about) old Wang, he is my neighbor.'

Yet another prediction involves auxiliary placement. VP-level modifiers (such as negation words, modal auxiliaries and VP-level adverbials) precede verbs and follow topics/subjects in Sinitic languages (LaPolla 2015: 48–49). This means that when a topic-marking copula co-occurs with a copular verb, verbal modifiers should precede the verbal copula but *not* the topic-marking copula. (7) bears out this prediction: (7a) demonstrates that negation words and VP-level adverbials fail to precede the first of two copulas, while (7b) demonstrates that the same modifiers intervene between the two copulas.

(7) Fuzhou Gan

- a. Lau^{45} $wo\eta^{213}$ (* $pu2^2$ /* $te^hiu\eta^{24}te^hien^{24}$) ei ei^{22} lau^{45} li^{213} ko^1 $tin^{24}sa^{41}$ old Wang (NEG/previously) COP_{TOP} COP old Li POSS neighbor
- b. Lau^{45} won^{213} ϵi (* pun^{2} /* $te^hiun^{24}te^hien^{24}$) ϵi^{22} lau^{45} li^{213} ko^1 $tin^{24}sa^{41}$ old Wang COP_{TOP} (NEG/previously) COP old Li POSS neighbor '(Talking about) old Wang, he is not/previously old Li's neighbor.'

Fourthly, the copula morpheme interchanges with a pause in those environments where the pause disambiguates between a topical interpretation and a non-topical one, as seen in (8).

(8) Fuzhou Gan

- A: Lau^{45} $wo\eta^{213}$ $k^h \varepsilon^{41}$ $xoi^{24}ti^{11}$ $t\varepsilon^1$? old Wang go where PRT 'Where did Old Wang go?'
- B: (pause between $lau^{45}woy^{213}$ and $tsau^{45}kan^{11}$) $Lau^{45} woy^{213}, tsau^{45}kan^{11} ts^hai^{24} p^hoy^{41}tau^{11} k\epsilon^{45}.$ old Wang morning just meet him '(As for) old Wang, (I) just saw him this morning.'
- B₁: (without pause, non-congruent answer to A) $Lau^{45} \quad w \circ \eta^{213} \quad tsau^{45}kan^{11} \quad ts^hai^{24} \quad p^h \circ \eta^{41}tau^{11} \quad k \varepsilon^{45}.$ old Wang morning just meet him 'Old Wang just saw him (= somebody else) this morning.'

The presence of a pause in the B-answer induces the reading in which lau woy 'old Wang' is the discourse topic coherent with prior discourse, and the following comment updates new information about the topic referent. The resumptive object pronoun $k\varepsilon$ 'him' thus coindexes with lau woy 'old Wang'. In the B₁-answer, however, the absence of a pause forces the reading in which the object pronoun refers to some other individual than old Wang, such that the sentence cannot be construed as a relevant response to A's question. The lack of coindexation can be accounted for, if lau woy 'old Wang' in the B₁-answer is a subject, which fails to bind clause-mate pronouns. Contrast as such motivates the assumption that the

pause constitutes a phonological correlate to the syntactically defined topic marker position. Importantly, (9) is mutually paraphrasable with the B-answer in (8), as a congruent response to (8)'s A-question. This suggests that the copula morpheme patterns with the pause in terms of the topic-marking function.

(9) Fuzhou Gan

(without pause) Lau^{45} $wo\eta^{213}$ εi $tsau^{45}kan^{11}$ ts^hai^{24} $p^ho\eta^{41}tau^{11}$ $k\varepsilon^{45}$.

old Wang COP_{TOP} morning just meet him

'(As for) old Wang, (I) just saw him this morning.'

Finally, the copula morpheme, in its topic-marking function, fails to be attached to focus-sensitive phrases such as an *only*-NP, exemplified by the contrast between (10a) and (10b). This is welcome under a topic marker analysis of the copula morpheme since a direct consequence of such an analysis is that the copula in its topic marker function should not occur with a non-topical host. Independently, focus-sensitive phrases have been argued to constitute prototypical anti-topical items (ATIs, items that by nature resist a topical interpretation, cf. Tomioka 2007; 2009).

- (10) Fuzhou Gan
 - a. Lau^{45} won^{213} εi no^{45} ko^1 $tin^{24}sa^{41}$ old Wang COP_{TOP} I POSS neighbor '(Talking about) old Wang, he is my neighbor.'
 - b. $*Ja^{45}ju^{45}$ lau^{45} won^{213} ϵi ϵi^{22} ko^1 $tin^{24}sa^{41}$ only old Wang COP_{TOP} COP POSS neighbor 'Only old Wang is my neighbor.'

In sum, I have argued above that in Gan and Hui, the copula morpheme instantiates a topic marker category that is separate from the canonical copula verb, characterized by a set of idiosyncratic prosodic and distributional patterns.

2.1.2 The copula in a conditional clause

Example (11) shows that the copula morpheme also appears in *if*-conditionals. The distribution of the copula morpheme in the conditional use parallels the topic marking use (syntactic configuration: [[XP-COP_{COND}]_{if-antecedent}, YP_{consequent}]), attested in Gan and Hui but not in other Sinitic languages surveyed.¹²

reading is only obtained when additional prosodic salience (such as a pause) is present.

¹¹ The B-answer also involves an implicit subject distinct from the topic referent. I think that, all else being equal, a subject reading (with $lau^{45}wo\eta^{213}$ 'old Wang' as the subject) is preferred over a topic reading (where $lau^{45}wo\eta^{213}$ 'old Wang' is a topic, and there is a separate, implicit subject). Subjects in Sinitic languages are by default topics information-structurally. Hearers are therefore less likely to infer the sole pre-verbal NP constituent as a topic and to further posit a separate, implicit subject, hence the topic-plus-implicit-subject

¹² Xu and Liu (2007) have shown that the copula in Shanghai Wu also occurs with a topic and with an *if*-conditional, as (i) demonstrates:

(11) Fuzhou Gan

 $t^h o n^{24} i i^{212}$ koi^{32} - $te^h i \epsilon n^{41}$ $K\varepsilon^{45}$ pu^{2} $t\epsilon^h ju^{41}$ ьi a. he NEG then agree COP_{COND} DEM-CLF issue pan⁴¹ pu^{2} tan⁴¹ $t\varepsilon^{l}$ achieve NEG RES **PRT**

'If he does not agree, we won't be able to get this issue done.'

b. $Oi^{21}\eta o^{22} tau^{41} li^1$ ϵi $pi\eta^{32}\epsilon o\eta^{32} ti^{45} ju^{45} ma^{24}ts^hi^{11}$ hungry start PRF COP_{COND} fridge in have sticky.rice.cake 'If (you are) getting hungry, there are sticky rice cakes in the fridge.'

The parallelism between the topic-marking and the conditional use invites the question of whether the copula morpheme in (11) should be analyzed as a conditional connective in the sense of a clause-final adverbial subordinator or rather as a topic marker that is attached to the protasis (i.e. conditional antecedent). Prosodically and semantically speaking, the copula in the conditional use *is compatible with* a topic-marker analysis. First, as with the case of topic-marking environments, the copula in conditionals is non-tone-bearing in Gan. In Hui, it forms a tone-sandhi-bearing unit with the preceding material. Hence the copula as a topic marker and the copula as a conditional marker cannot be distinguished from one another prosodically whereas both are distinct from the copula verb. Second, several previous semantic proposals have characterized the protasis of *if*-conditionals as a (discourse) aboutness topic (Haiman 1978; Siegel 2006; Ebert et al. 2014) or a contrastive topic (Tomioka 2010; Constant 2014), which is subsequently predicated of by the consequent clause functioning as the comment. Under either characterization, subsuming the conditional copula under the topic marker can be maintained since the copulas in Gan and Hui mark both discourse and contrastive topics as Subsection 2.1.1 has shown.

Aside from the desirability of unifying conditional marking under the rubric of topic marking, distributional evidence lends further credence to a uniform analysis. To begin with, Gan and Hui feature a counterpart of the Mandarin clause-final conditional connective *dehua* (*kɔfa* in Gan and *kevo* in Hui, see Simpson and Wu 2002 and Hole 2011 for analyses of *dehua* as a conditional clause-typing subordinator). As (12) shows, the copula follows the connective anddoes not precede it.

(12) Fuzhou Gan

(i) Shanghai Wu

 $k^h \varepsilon$ ϵ i \mathfrak{I} zã $ts^h uuts \gamma$ sə?dw $k^h \partial n din$ k^huv ĥә a. zŋ little Zhang drive COP_{TOP} speed definitely fast PRT car '(Speaking of) little Zhang's driving, its speed is definitely fast.'

b. L_{2} ? hy z_{7} ziw $te^{h}yeiz$ bise fall rain COP_{TOP} then cancel match 'If it rains, then the match will be canceled.'

This accords with my proposal later in this subsection that the conditional copula is simply a case of topic marking. It is worth entertaining the possibility that my topic-marker analysis for Gan and Hui can be carried over to the Wu varieties, and quite likely also to other languages within the Sinitic group. However, this will have to be left to future research since it is an extension of the empirical scope of this paper.

a.
$$K\varepsilon^{45}$$
 $pu\rho^2$ $t^h v \eta^{24} j i^{212}$ $k v^{12} f a^{22}$ εi $ko i^{32} - t \varepsilon^h j \varepsilon n^{41}$ $s i^{41}$ $t \varepsilon^h j u^{41}$ he NEG agree COND COP_{COND} DEM-CLF issue then pan^{41} $pu\rho^2$ tan^{41} $t \varepsilon^1$ achieve NEG RES PRT 'If he does not agree (to that), we won't be able to get that issue done.'

b.
$$*K\varepsilon^{45}$$
 pu^2 $t^h v \eta^{24} j i^{212} \varepsilon i$ $k \sigma^{12} f a^{22}$ $k \sigma^{32} - s i^{41}$ $t \varepsilon^h j u^{41}$
he NEG agree COP_{COND} COND DEM-CLF issue then pan^{41} pu^2 tan^{41} $t \varepsilon^l$
achieve NEG RES PRT

If the copula is itself a clause-final conditional connective, the unacceptability in (12b) might be captured in terms of a constraint against the co-occurrence of two conditional connectives (the copula and $k \circ f a$). Yet in this case we would expect infelicity in both orderings, namely when the copula precedes and follows $k \circ f a$. In contrast, the asymmetry between (12a) and (12b) is accounted for if the copula is a topic marker that must be attached to the end of an entire if-clause and hence must follow the clause-final $k \circ f a$ -connective.

Secondly, *if*-conditionals in Sinitic languages may exhibit positional variance in the absence of copula marking: By default the *if*-protasis precedes its consequent clause (apodosis). Alternatively, the *if*-protasis may follow its apodosis, illustrated in (13a). As (13b) demonstrates, the option of a right-peripheral *if*-protasis is not available when the copula is present.

(13) Wuyuan Hui

a. η^{31} $i\sigma^{35}$ tsa^2 k^hua^{35} $i^{51}t\sigma^{15}\eta\tilde{\imath}^0$ tsi^0 , pu^{51} $s\tilde{\sigma}^{31}$ $\eta\tilde{e}^{35}$ you have to walk fast a little PRT NEG want to late $t\sigma^{51}$ $ke^0v\sigma^{51}$. arrive COND

'You need to walk a bit faster, if you don't want to be late.'

 $i\sigma^{35}$ $k^h u a^{35}$ $i^{51} t 2^{15} \eta i^0$ $t s i^0$, $p u^{51}$ $*n^{31}$ tsa^2 nẽ³⁵ b. a.little walk PRT NEG you have.to late want.to $t2^{51}$ сi. arrive COPCOND

While a right-peripheral *if*-protasis is common cross-linguistically (here I use the term 'right periphery' in a theory-neutral way and remain agnostic about the structure involved in the construction where an *if*-clause follows its apodosis), it has been observed that only a topic to the left of its comment allows for overt topic marking in Sinitic languages (Xu 2000), possibly due to the existence of a structurally defined, sentence-initial topic position.¹³

¹³ On a separate note, it is doubtful whether right-peripheral conditionals should be analyzed as a case of the topic-comment structure. In Sinitic languages, a left-peripheral *if*-protasis licenses a *then*-pronoun in the apodosis, whereas *then* fails to occur in the apodosis when the *if*-clause occurs to its right. According to Ebert et al. (2014), *then* is a resumptive pronoun anaphoric to a prior discourse referent introduced during topic

Therefore, the lack of positional variance in the presence of the copula follows independently from the ban against sentence-final topic markers, yet would be mysterious if the copula is a dedicated conditional connective.

Thirdly, if we assume that the copula appears in an *if*-protasis because a protasis is, generally speaking, a topic, then we would expect *any* topic markers to occur with a protasis. It should not matter whether the topic marker takes a copula form or not. This prediction is again borne out. Hui independently features a dedicated (discourse and contrastive) topic marker $-\eta i$ (Lu 2012). As (14) illustrates, $-\eta i$ is mutually paraphrasable with the copula $-\epsilon i$ in terms of conditional marking: (14a) shows that $-\eta i$ may co-occur with the conditional connective in a sentence-initial protasis, while (14b) demonstrates that $-\eta i$ fails to precede the connective; and (14c) illustrates that $-\eta i$ fails to occur in a right-peripheral protasis.

(14) Wuyuan Hui

 ke^0vo^{51} ηi , Pu^{51} s331 a. nẽ³⁵ tsa^2 TOP you have.to late arrive COND NEG want.to walk $k^h ua^{35}$ $i^{51}t2^{15}\eta i^{0}$ tsi^0 fast a.little PRT

'If you don't want to be late, you need to walk a bit faster.'

b. *
$$Pu^{51}$$
 $s\tilde{\sigma}^{31}$ $\eta\tilde{e}^{35}$ $t\sigma^{51}$ ηi $ke^0v\sigma^{51}$ η^{31} $i\sigma^{35}$ tsa^2

NEG want.to late arrive TOP COND you have.to walk k^hua^{35} $i^{51}t\sigma^{15}\eta\tilde{i}^0$ tsi^0
fast a.little PRT

c. *
$$\eta^{31}$$
 $i\sigma^{35}$ tsa^2 k^hua^{35} $i^{51}t\sigma^{15}\eta\tilde{\iota}^0$ tsi^0 , pu^{51} $s\tilde{\sigma}^{31}$ $\eta\tilde{e}^{35}$ you have to walk fast a little PRT NEG want to late $t\sigma^{51}$ $ke^0v\sigma^{51}$ ηi arrive COND TOP

In the above, I have proposed that in Gan and Hui, the copula morpheme instantiates a topic marker category that is distinct from the canonical copula verb category. In addition, I have argued that the copula morpheme attached to an *if*-clause is a topic marker rather than a clausal connective expressing hypothetical conditionality, based on behaviors from co-occurrence constraints, positional variance and mutual interchangeability with other topic markers.

Thus I have provided evidence that the copula morpheme as a topic marker is not to be conflated with the copula as a verb. Rather, it is more plausible to assume multiple, homophonous lexical entries, each having a different function. This does not mean that this homonymy should be seen as a pure accident. It is plausible to assume a robust, recurring association of the copula with the extended functions of topic- and conditional marking,

establishment. Thus, the failure of a right-peripheral *if*-clause to license a *then*-pronoun might suggest a mechanism different from the successive processes of topic establishment and subsequent anaphora. For example, it has been proposed that right-peripheral conditionals express an 'afterthought', in which the *if*-clause functions to resolve unclear prior referents or narrows down potential candidate referents already salient in prior discourse (Ebert et al. 2014: 388–389). Moreover, Ebert et al. have argued that a bigger problem for a topic analysis is that right-peripheral *if*-clauses may express focus, serving as an answer to a prior question containing a *wh*-pronoun.

which is potentially explainable by underlying semantic mechanisms and motivated principles of semantic change.

Crosslinguistically, the copula element is employed for topic marking in languages and language families that are genetically and geographically unrelated to Sinitic languages. Based on a non-exhaustive list that I have compiled (partly drawn from Shi and Han 2013), this pattern applies to Hebrew *hu* and Amharic –*ss* (both Semitic languages, Rappaport 1985; Leslau 1995), Rotuman *ne* (an Oceanic language spoken in Fiji, Den Dikken 2006), Chiapas Zoque *te* (a Mixe-Zoquen language spoken in Mexico, Faarlund and Gast 2006), Swahili *ndi* (a Bantu language spoken in eastern and southeastern Africa, Augustin 2007), Gur *le* (a Niger-Congo language spoken in West Africa, Schwarz 2009) and even to creoles (e.g. the Belizean Creole *a/da*, Escure 1993). The breadth of such a distributional pattern cannot be solely attributed to language contact; hence treating the topic-marking copula as having no association with the copula verb proper would miss out on an important crosslinguistic generalization.

Similarly, the copula element is robustly attested in conditionals, constituting a major source for conditional markers across languages (Traugott 1985). According to Traugott, these include genetically and geographically unrelated languages such as Biblical Hebrew, Swahili, Russian, Bengali and Chickasaw. More recent surveys have enriched Traugott's inventory by observing the widespread employment of the copula element for conditional marking in languages of the Caucasus (Maisak 2012) and Niger-Congo languages (Biloa and Fotso 2017; Nicolle 2017).

If we are to follow Haiman's (1978) proposal and subsequent treatments in analyzing conditional markers as a kind of topic marker, it may well be the case that the copular verb is adopted for topic marking because the establishment of a topic-comment structure is semantically related to copular clauses. According to some analyses, the comment is predicated of the topic as its logical (albeit not grammatical) subject, and hence the copula, as a linking element in establishing the predication relationship, optionally mediates the topic-comment relation (See Lee 2003 and Den Dikken 2006 for proposals along this line).

There is thus a need for diachronic investigations of the historical development of topic marking copulas in Sinitic languages. Specifically, it is likely that during a diachronic process, the copular verb grammaticalized into a topic marker, schematized as follows:

(15) Copular verb > topic marker

This process, in conjunction with the better understood process (e.g. Li and Thompson 1977) in which the copula verb originated from a demonstrative resumptive pronoun in historical Chinese, would instantiate Lohndal's (2009) copula cycle, *viz.* languages tend to develop successively from a demonstrative to a copula and then to a sublexical grammatical marker (cf. also Kuteva et al. 2019). However, extreme caution is needed, since much historical work is required before we can firmly establish the above pathway.¹⁴

Our argument that topic markers and conditional markers are uniform strongly supports a shared semantics for topics and conditionals in line with Haiman's (1978) conditionals-astopics theory. Haiman observes that conditionals and topic-comment structures share

¹⁴ The [copula verb > topic marker] pathway presumes that the topic marker use arose some time after Gan and Hui were split off from other Sinitic languages. At the present time, however, I am not aware of any available historical Gan/Hui corpora, hence the posited historical process remains speculative.

parallel discourse functions: topics represent entities, and conditionals represent states of affairs 'whose existence is agreed upon by the speaker and her audience' and which constitute 'the framework which has been selected for the following discourse' (1978: 587). A plethora of subsequent theories maintain a parallel treatment of conditionals and topic constructions, reducible to a difference in domain, i.e. plain topics range over individuals whereas conditionals range over possible worlds (von Fintel 1994, ch. 3; Bittner 2001; Ebert et al. 2014). For example, Reinhart (1982) draws a 'storage address' metaphor for topics, where information of the comment is 'stored' at the 'address' established by the topic (Reinhart 1982: 79-80). Ebert et al. (2014) further argue that the *if*-protasis and the *then*-apodosis in indicative *if*-conditionals correspond to the dual acts of topic establishment and property 'storage'/update. The reference of an *if*-conditional introduces a suitable group of possible worlds into the discourse as a novel discourse referent. The subsequent *then*-clause is understood as a property 'stored' to the discourse referent.

In the following, an overarching topic-comment super-construction will be posited under which the canonical topic-comment construction and the conditional clause construction are subsumed. This is achieved by assuming levels of generality in construction terms. Specifically, the family of construction types will be formulated in terms of cross-classifying generalizations, expressed through the interaction of a hierarchical classification of types. A given clausal construction is simultaneously classified in the two dimensions of clausality and headedness allowing grammatical generalizations specific to both dimensions to apply to various levels of subtypes (Pollard and Sag 1994). Thus, the type of clause (cl) has various subtypes, including simple-cl and complex-cl. The subtypes of complex-cl include coord(inate)-cl, subord(inate)-cl, and so forth. Among the immediate subtypes of headed-cx (headed construction), filler-head-cx is of relevance to our purpose: topic-comment-cx is subordinate to filler-head-cx, with two kinds of subtypes, canonical topic-comment-cx (cantopic-comment-cx) and the conditional clause construction (cond-cl-cx). Cond-cl-cx is simultaneously a subtype of the subordinate clause construction. This cross-classifying constructional hierarchy is illustrated in Figure 1.

¹⁵ A variety of constraint-based frameworks (such as Head-Driven Phrase Structure Grammar, Sign-Based Construction Grammar and multiple constructionist frameworks) have adopted a multiple inheritance hierarchy to express cross-classifying generalizations. Aside from a type system that captures superordinate and subordinate construction types, the variable grain of grammatical generalizations is modeled precisely in a type-based inheritance of grammatical constraints, where a construction imposes idiosyncratic constraints that define the properties of a 'maximal' type of construction (one that lacks subtypes), and constraints of full generality or of intermediate grain can be stated in terms of appropriate superordinate types or subtypes of constructions that the grammar recognizes. See Pollard and Sag (1994) and Sag (2010) for detailed discussion.

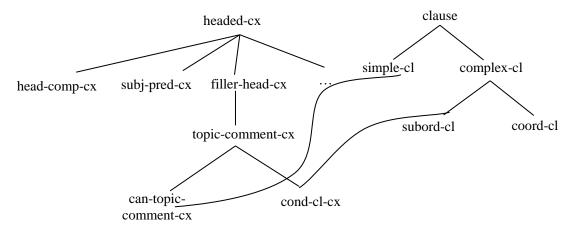


Figure 1. A cross-classifying construction type hierarchy encompassing the canonical topic comment construction and the conditional clause construction

2.2 The copula in the affirmative construction

This subsection turns to the affirmative use of the copula, first observed in Mandarin by Li and Thompson (1981: 151–154, labeled as 'the emphatic construction'). Based on our survey, the affirmative function is also attested in Cantonese and Gan but not in (Binyang) Pinghua and (Wuyuan) Hui. The affirmative construction features the frame [(XP_{topic}), [COP_{AFFIRM}-YP_{pred}]_{comment}] with the copula immediately preceding a predicate and optionally preceded by a topic. The predicate encodes information familiar from prior discourse or otherwise belonging to mutual knowledge, and the construction encodes the speaker's commitment to the truthfulness of said information. An illustration is provided in the B-answer below (data from Li and Thompson 1981):

(16) Mandarin

A: Wŏ xiǎng hěn qióng, suóyĭ bù kěn tā think willing.to I he HEN be.poor be.poor NEG shàng guănzi. go.to restaurants

B: Τā shì méi qián, kěshì уŏи zhìqi. fast a.little PRT principles money but have A: 'I thought he had no money, so he wouldn't dine out.' B: 'It's true that he has no money, but he is a proud person.'

The affirmative copula can be distinguished against the topic-marker copula based on syntactic distribution. An affirmative copula *optionally* takes a topical constituent. A topic-marker copula, on the contrary, *always* attaches to an overt topic host. In (17), B's response is construed as affirming the proposed costliness of the bike under discussion, yet the topic (i.e. the bike) is implicit and retrieved from prior discourse. Hence we can rule out a topic marker analysis and treat the copula here as an affirmative one.

(17) Wuyuan Hui A:
$$i^{11}$$
- $p^h u^{51}$ $t \epsilon i e^{51} t^h 2^{51} t \epsilon^h i e^{55}$ n^{31} $p u^{51}$ $\epsilon i 2^{35} t 2^{51}$ θ^{31} $i \epsilon m^{51}$ $t s i^{51}$

you use DEM-CLF bicycle know PRF NEG $m 2^{31}$ $t\epsilon i^{35}te^{55}$ ke^0 . ke^0 price how.many REL PRT buy tsi^0 B: ϵi^{31} *civ*⁵⁵pan³⁵ $i^{51}t2^{15}\eta i^{0}$. unworthy PRF a.bit COP_{AFFIRM}

A: 'This bike, you wouldn't guess how much I paid to get it!'

B: 'True (the bike) is a bit not worth the price.'

The affirmative copula is characterized by a number of distinctive features. Prosodically, it necessarily receives a stress accent, whereas elsewhere the copula is non-stressed.

Another characteristic of the affirmative use is that it is subject to a felicity condition over prior knowledge, formulated in (18):

(18) Non-ignorance constraint (The evidential bias constraint): The utterance of the affirmative copula sentence [accented-copula p] is felicitous only if the prejacent (proposition) p's content is biased over its negative counterpart $not \ p$ in the pre-utterance common ground.

The constraint states that the epistemic state prior to utterance is not neutral when it comes to the content of p. The way discourse is structured should evidentially favor p's content. This could be because the other interlocutor has previously proposed to update p to the common ground, pending acceptance by both interlocutors. The dialogue turns in (19a–b) below are both unacceptable due to violations of the constraint in (18). In (19a), the affirmative copular B-answer is incongruent with a reduplicative yes-no question (featuring two copies of the predicative element with a negation word inserted in between). This immediately follows from the non-ignorance constraint once we adopt the widely held assumption that reduplicative yes-no questions in Sinitic languages are committed to neutrality between the positive and the negative alternative (Li and Thompson 1981; Schaffar and Chen 2001). Likewise, in (19b), the infelicity of the B-answer is accounted for by the non-ignorance constraint, given that a wh-question cannot structure prior knowledge in any preferential way.

(19) Mandarin

- a. A: Kǎoshì nán-bù-nán? test.taking difficult-NEG-difficult 'Was the test hard or not?'
 - B: *Shì tǐng nán de.

 COP_{AFFIRM} quite difficult PRT
 Intended: 'True, it was quite tough.'
- b. A: Kǎoshì kǎo-de zěnmeyàng? test.taking perform-ADV how 'How did the test go?'
 - B: *Shì tǐng chà de.

COP_{AFFIRM} quite badly PRT Intended: 'True, I did badly in the test.'

The above definition of the copula morpheme as an accent-bearing expression affirming the truth of the proposition it combines with (i.e. the prejacent) is in line with the prevailing characterization of *verum focus* (Höhle 1992; Lohnstein 2016). Here I follow Höhle's (1992) original definition of verum focus as a phenomenon in which a salient prosodic pattern attaches typically to a semantically vacuous or light verb (copulas, *do*-support, modal auxiliaries, etc.) and indicates that the speaker affirms the truth of her utterance content. Verum focus and the prejacent it affirms can be viewed as contributing to a two-layered meaning (Höhle 1992; Gussenhoven 1984; Gutzmann and Castroviejo 2011; Lohnstein 2016): verum focus does not alter the meaning of its propositional argument at the at-issue level but moderates the semantic content at the conventional implicature (CI) level. The semantic contribution of the affirmative copula *qua* verum focus is captured informally as follows, in accordance with Potts' (2005) treatment of speaker-oriented adverbs and expressive:

(20) Wuyuan Hui

a. εi^{31} $\varepsilon i \varepsilon^{55} pan^{35}$ tsi^0 $i^{51} t \sigma^{15} \eta i^0$.

COP_{AFFIRM} unworthy PRF a.bit

'True it was a bit unworthy (of its price).'

b. Semantics

At-issue: It was a bit unworthy of its price.

CI: It is true/It is indeed the case (that it was a bit unworthy of its price).

There is evidence that the affirmative copula behaves in ways typical of non-at-issue materials, such as speaker-oriented adverbs (e.g. *frankly*) or expressives (e.g. *damn*). As per Potts (2005), the truth-conditional semantics of non-at-issue linguistic expressions targets a separate dimension of linguistic meaning rather than contributing to the asserted content. A distinctive characteristic of non-at-issueness is semantic unembeddability, in which a non-at-issue item fails to take scope under another scopal operator (Potts 2005; Bonami and Godard 2008). As (21) shows, the affirmative copula is semantically unembeddable: it fails to stay in the scope of an *if*-conditional, unlike other affirmative particles. This contrast can be explained if we assume that *zhēnde/diquè* 'indeed, truly' *asserts* affirmation, whereas *shì*'s affirmative semantics is *not* asserted.

(21) Mandarin

a. Rúguŏ xiǎo zhāng (**shì*) fàn-le zuì, tā bù if little Zhang (*COP_{AFFIRM}) commit-PRF crime NEG yīnggāi biăoxiàn-de zhème zhèndìng should behave-ADV unperturbed SO

¹⁶ Here we follow Potts' (2005) standard definition of CI meaning, briefly summarized as follows: CIs are compositionally independent from what is asserted (i.e. at-issue meaning) but, unlike implicature, they give rise to non-cancellable entailments. CIs are speaker-oriented: they are valid only for the utterer, at the time and place of utterance.

Intended: 'If little Zhang indeed committed the crime, he should not have behaved with such composure.'

Rúguŏ {díquè/zhēnde} bù xiǎo zhāng fàn-le zuì. tā {indeed/indeed} commit-PRF if little Zhang crime he NEG biǎoxiàn-de zhème zhèndìng yīnggāi should behave-ADV SO unperturbed 'If little Zhang indeed committed the crime, he should not have behaved with such composure.'

A similar contrast is established in (22). The copula cannot be interpreted within the scope of negation (the matrix predicate *bu xiangxin* 'not believe'), whereas *dique/zhende* freely embeds under negation. Once again, the copula's inability to take narrow scope is compatible with a non-at-issue characterization.¹⁷

(22) Mandarin

Xiǎo zhāng gàosù jĭngchá tā dāngshí zài wàimiàn gēn little Zhang police outside tell he then LOC with Xiǎo zhāng tóngshì zài yìqĭ, dànshì jĭngchá bù xiāngxìn colleague LOC together but police NEG believe little Zhang {(*shì)/zhēnde/díquè} z.ài wàimiàn. {(* COP_{AFFIRM})/truly/indeed} LOC outside

'Little Zhang told the police that at that time he was outside with a colleague, but the police did not believe that he was truly outside.'

Moreover, the treatment of the verum-marking copula as a non-at-issue item converges with recent semantic characterizations of verum expressions as being located at the non-at-issue level (e.g. Gutzmann 2015). That is, a sentence's asserted content is unaffected by the verum accent, and the verum accent puts conditions on the felicity of the utterance on another dimension. Henceforth the Sinitic affirmative use will be treated as a strategy of verum marking.

At present, I have nothing to say about the cross-linguistic variation in epistemic conditions on verum marking.

¹⁷ An alternative, simpler explanation is that the adverbs $diqu\dot{e}/zh\bar{e}nde$ encode irrealis semantics, i.e. situations that are contrary to what the interlocutors know about the real world, whereas the copula $sh\dot{i}$ in its affirmative use accentuates realis semantics. It then follows that the realis $sh\dot{i}$ cannot be embedded under the scope of an irrealis, hypothetical clause. For example, the hypothetical scenario encoded by the conditional in (21): 'if Xiao Zhang committed a crime'. I thank an anonymous reviewer for pointing out this analysis to me.

¹⁸ It is worth noting that the non-ignorance constraint is not operative in languages such as German and English. As (i) shows, verum marking appears in German and English without a requirement for an evidential bias (capitalization indicates an accent, data from Höhle 1992):

⁽i) (I am not sure whether Peter kicked the dog.)

a. Peter HAT den Hund getreten. (German)

b. Peter DID kick the dog. (English)

Finally, one would expect that natural languages tend to employ as a verum host semantically light materials with little or no meaning contribution. Hence, the semantically vacuous copula makes for a ready candidate for Sinitic languages. In other words, I will assume that Sinitic verum-marking is in line with typologically robust and independently motivated mechanisms crucially revolving around the placement of accenting. The employment of the copula for verum marking again comes through as no accident but receives an underlying semantic explanation. It is worth mentioning that in Long and Kuang's (2017) recent study, it is proposed that the affirmative *shì* participated in a distinct grammatical process from the copula *shì*; according to the authors, the affirmative *shì* developed from an adjective meaning 'true'. Meanwhile, the copula *shì* developed from a demonstrative pronoun. Long and Kuang suggest that the above distinct grammatical processes could point to the lack of a correlation between these two copula elements. ²⁰

Two arguments can be made regarding Long and Kuang's historical argument. First, they do not rule out a potential correlation between the above two processes: the [adjective > affirmative] pathway and the [demonstrative > copula verb] pathway might interweave into a multi-stage pathway, thereby explaining the shared phonetic form of the two *shì* 's (Long and Kuang 2017: 311). However, they consider such interweaving to be coincidental and hence idiosyncratic to historical Chinese. Crucially, they claim that across languages the copula form is *seldom* employed for affirmative uses (Long and Kuang 2017: 309–311).

In my opinion, Long and Kuang's above claim of crosslinguistic rarity needs further scrutiny. This claim runs counter to existing findings where distinct languages form verum focus by placing an accent on the copula (see Lohnstein 2016 for Germanic evidence and Kornfilt 1997, Johanson 1998 for Turkic evidence). Second, Long and Kuang discuss a few languages where a confirmative adverb does not share the form of the copula, yet in doing so they do not make a distinction between a verum focus marker and other classes of adverbs with confirmative senses. For example, they contrast the Tibetan confirmative adverb dngos gnas with the copula verb red 'be'. Unfortunately, dngos gnas is not a dedicated verum marker. Based on my own consultation, it is not accented as is expected of a true verum marker. Moreover, it encodes a broader array of senses than a true verum marker, for example the speech-act level meaning 'seriously, speaking in an earnest manner' (rather than proposition level affirmation). In other words, it is important to apply the definition of verum to the languages under investigation to make sure the morpheme under discussion truly belongs to a dedicated verum marker. Otherwise, arguments regarding crosslinguistic rarity or robustness might be unreliable, and thereby fail to bear on the issue of whether the phonetic affinity between the affirmative shì and the copula shì is idiosyncratic to Chinese or not.

¹⁹ In the current study, I do not seek to determine whether this verum accent is a focus accent (i.e. a stress accent that assigns to all focused constituents) or an idiosyncratic, lexicalized accent that only applies to the verum marking. Both analyses have been proposed in the literature (see Höhle 1992 and Büring 2016 for a focus-accent analysis, and see Gutzmann and Castroviejo 2011, Repp 2013 and Gutzmann et al. 2017 for treating the verum accent as a special intonational pattern). To make a choice would require an understanding of the prosody-information structure interface in Sinitic languages, but such an understanding is not available. More importantly, the issue is not directly relevant to my current purpose. What is important is that the verum accent needs a (phonologically realized) host.

²⁰ I am indebted to an anonymous reviewer for drawing my attention to Long and Kuang (2017) and for pointing out the connection between their grammaticalization argument and the current discussion.

Second, even if we leave aside the issue of the shi-copula, the connection between verum focus marking and the copula remains for *another* copula form in Sinitic languages. The Cantonese copula form hai^6 , surveyed in this paper, originated from the late Middle Chinese xi-copula. Another Sinitic language left out of the present paper, Hakka, also features a copula form xe^{33} that originated from the xi-copula. The xi-copula is independent of the development of the shi-copula. According to some analyses, xi developed from a lexical verb (Gao 1948; Tang 2009). Importantly, in both Cantonese and Hakka, the copula form serves as a verum focus marker when receiving a stress accent. The fact that two distinct and independently developed copula forms (shi) and xi) invariably became employed for the accented pattern of verum marking is hence compatible with the notion that the copula and verum marking shares a more than coincidental association.

Thus far, I have proposed a distinct lexical entry for the topic-marking copula and hypothesized that it emerged in Gan and Hui during a later development. Furthermore, I have accounted for the cross-Sinitic variation of the verum focus marking in terms of language-specific choices to employ the semantically vacuous copula as the host of verum accent. Distinct from the above-mentioned copula functions, Section 3 deals with another group of copula-related constructions that exhibit a robust pattern of distributional uniformity across Sinitic languages. The lack of language-specific idiosyncrasies thus favors a treatment in which a single overarching construction encompasses all these functions. In what follows, I will present descriptive generalizations of two related focus-marking construction types: clefts and propositional assertions, suggesting that these two focus-marking constructions lend support to the copular clause approach in the literature.

3 Copula functions without cross-Sinitic variation

The copula-marked cleft construction and propositional assertion construction are mutually related constructions employed for strategies of focus marking. Applying a set of diagnostics from the previous literature to the surveyed Sinitic varieties, it is argued in this section that *all* the five surveyed varieties exhibit identical structural behaviors that map to identical functions. Consequently, it is established that these varieties uniformly feature both construction types, characterized by the following mutually implicating distributional pattern in (23).

(23) copular clauses ⇔ clefts ⇔ propositional assertions
(⇔ indicates a mutually implicating pattern: Where the construction type left of the arrow is witnessed in a language, the construction type right of the arrow is also witnessed in that language, and vice versa)

It is further shown that the distributional uniformity of these constructions supports a uniform syntactic analysis (such as Li and Thompson 1981; Zhan and Sun 2013) in terms of a copular clause structure.

3.1 Clefts and propositional assertion

Based on the present survey, the cleft construction is attested in all surveyed Sinitic languages. In the current study, the Sinitic cleft construction will be referred to as a

copulative structure with the following configuration:²¹

(24) [(topic) copula [focus phrase] [open clause]]

The cleft structure thus defined is characterized by informational partition, syntactic adjacency, the optional presence of a topic and semantic exhaustivity (Hole 2011; Hole and Zimmermann 2013). While this set of characteristics has to this day been almost entirely motivated by the Mandarin data, the present study shows that they are shared by all the Sinitic languages surveyed. First, informational partition refers to the property in which the component to the right of the copula consists of a focus phrase (an NP, PP, or VP) encoding identificational focus (É. Kiss 1998: 245) as well as an open clause that carries discourse-old backgrounded content. The syntactic adjacency restriction further states that the focus phrase tends to be adjacent to the copula. In other words, a configuration in which discourse-old information is to the immediate right of the copula and hence more adjacent to the copula than the focus phrase would be degraded as the contrast between (25a) and (25b) from Cantonese illustrates:

(25) Hong Kong Cantonese

[Context: Who would return to work after dinner time?]

- a. $Hai^6 lou^5 zung^2 maan^5 caan^1 zi^1 hau^6 faan^1 gung^1$.

 COP chief dinner after return.to.work 'After dinner it would be [the boss] for that returns to work.'
- b. ??Hai⁶ maan⁵caan¹ zi¹hau⁶ lou⁵zung² faan¹gung¹.

 COP dinner after chief return.to.work

 Intended: 'After dinner it would be [the boss] for that returns to work.'

Furthermore, the optional pre-copula element in Sinitic clefts is a topic performing a frame-setting function. The topical status is evidenced by the fact that topic markers in Hui and Gan may attach to the pre-copula element (see also Hole 2011 for additional evidence):

(26) Wuyuan Hui $ni^{51}ke^{55}$ te^{35} $go^{51}t^ha^l$ $tsu^{35}ci^{51}$ - ei, ei $[lv^{51}-y^2]$ te^hie^{11} le^2 day.time LOC outside work-COP_{TOP} COP [fall-rain] he very pu $xun^{35}ei^{55}$.

NEG like 'Speaking of working outside during day time, it is [raining]^{foc} that he rather dislikes.'

Semantically, the focus phrase encodes identificational focus in the sense that it observes exhaustivity, which requires that the cleft focus exhausts all the possibilities in a given domain in that it, and only it, makes the backgrounded predicate come out true. An

²¹ As there are significant differences in the literature over the taxonomy and terminology of clefts and other copula-marked focus constructions, the rest of this section first presents the construction type of clefts as delineated by a set of distributional and interpretive properties in the spirit of a number of recent theories (Simpson and Wu 2002; Cheng 2008; Paul and Whitman 2008; Hole 2011).

illustration from Cantonese is given in (27). In (27a), the cleft sentence is not compatible with an additive *too*-sentence as continuation. As É. Kiss (1998) notes, the infelicity would be accounted for if the cleft sentence imposes exhaustivity. That is, in (27a), tomorrow is the *only* day of movie watching, in which case contradiction arises when the follow-up *too*-sentence adds another day of movie watching. Note that the incompatibility of the cleft sentence with an *too*-continuation in (27a) is crucially tied to the cleft construction. As (27b) demonstrates, a *too*-continuation is acceptable if the preceding sentence has a non-cleft structure (with the copula dropped), in which case it encodes information focus and imposes no exhaustivity requirement.

(27) Hong Kong Cantonese

- a. *Keoi⁵dei⁶ hai⁶ [ting¹jat⁶] heoi³ tai² din⁶jing², hau⁶jat⁶ they COP [tomorrow] go watch movie day.after.tomorrow keoi⁵dei⁶ jik⁶dou¹ heoi³ tai² din⁶jing². they also go watch movie *'It's [tomorrow]^{foc} that they will go watch a movie. On the day after tomorrow, too, they will go watch a movie.'
- b. $Keoi^5dei^6$ [$ting^1jat^6$] $heoi^3$ tai^2 din^6jing^2 , hau^6jat^6 they [tomorrow] go watch movie day.after.tomorrow $keoi^5dei^6$ jik^6dou^1 $heoi^3$ tai^2 din^6jing^2 . they also go watch movie 'They will go watch a movie [tomorrow]^{foc}. On the day after tomorrow, too, they will go watch a movie.'

In relation to clefts, it has been proposed that the copula additionally participates in the discourse function of asserting complex information. Following the term of Paul and Whitman (2008), I refer to this copulative structure as propositional assertion. Differing from the cleft, in propositional assertions, an entire post-copula, saturated clause is being asserted as focus (i.e. [copula [saturated clause]_{focus}]). Our study shows that all the surveyed Sinitic varieties share the above form-meaning alignment. The Hui examples in (28) instantiate the propositional assertion construction in Sinitic languages:

(28) a. Wuyuan Hui
$$t\varepsilon^h i e^{11} \quad p\tilde{z}^{11} \qquad x\tilde{a}^{55} \quad \theta^{31} \quad ka^2v\theta^5, \quad \theta^{31} \quad t\varepsilon i^{11}m\tilde{a}^{51} \quad \varepsilon i^{31} \quad [t\varepsilon^h i e^{11}]$$

²² Mandarin has two cleft constructions: A so-called [shi...de] sentence with a sentence-final particle de, which contrasts minimally with a so-called bare shi-clefts without the de-particle at the sentence-final position. The current paper does not make a distinction between the two constructions. For some authors, these two cleft constructions are variants of one another (Li and Thompson 1981; Huang 1988; Cheng 2008; Zhan and Sun 2013) whereas some other authors have claimed that only [shi...de] clefts give rise to an exhaustive focus reading, hence should be treated as the cleft proper (Simpson and Wu 2002; Paul and Whitman 2008; Hole 2011). This issue as it stands faces several complications. To name a few, the non-Mandarin Sinitic languages surveyed do not all feature a two-way distinction of clefts. Even in Cantonese, where both a [hai...ke] type and a bare-hai type of cleft coexist, an exhaustive reading is preferably expressed by bare-hai clefts. Moreover, this de-bare distinction does not extend to propositional assertions. Furthermore, recent acceptability-rating studies conducted by Liu and Yang (2016) and Chen (2019) fail to establish a significant difference in terms of an exhaustive reading between the [shi...de] and the bare-shi clefts among Mandarin speakers. For these reasons, I will leave the interaction of sentence-final particles and exhaustivity unresolved for the moment.

he NEG-PRF with me talk I hope COP [he $p\tilde{z}^{II}$ $\eta i \alpha n^{5I} t \sigma^0 t s^h y^{II}$ θ^{3I} le^{II}].

NEG-PRF recognize me out]

'He didn't talk to me, I hope it's that [he didn't recognize me].'

b. Binyang Pinghua

 mou^{33} - jou^{33} hat^5 - $l\phi k^{21}$ Na^{42} hak^6 tan^4kun^3 , kam⁴⁴ NEG-PRF eat-finish box talk then he $\epsilon \partial i^{42}$ $[na^{42} \quad mou^{33}]$ $tou^{42}\eta \phi^{42}$ kua^{44} . tsak⁵tak⁵ think NEG hungry] COP [he MOD.PRT 'He didn't finish that box of egg rolls, and so I think it might be that [he wasn't hungry].'

The assertion of propositional content can be established by testing what part of information is under negotiation. Consider the turn of dialogue in (29), in which speaker A's utterance is subsequently disputed.

(29) Mandarin

A: Xiǎo Zhāng méi dăzhāohù. Wŏ juéde shì gēn wŏ little Zhang NEG with greet I feel COP me $\int t\bar{a}$ méi rènchū wŏ lái]. [he NEG recognize me out] 'Little Zhang didn't greet me, I think it's that [he didn't recognize me].'

Zhāng B: Νĭ cuò-le. kànjian nĭ. Xiǎo méi wrong-PRF little Zhang NEG see you 'You are wrong. (Little Zhang didn't greet you, because) [little Zhang didn't see youl.'

Speaker B's continuation consists of a rebuttal followed by an assertion. In this case, B's rebuttal negates what is asserted in A's utterance (as opposed to what is presupposed or otherwise presumed as backgrounded by A), construed as what A proposes to be updated to the common ground in addressing the question under discussion (QUD). B's subsequent assertion amounts to a counterproposal to address the QUD (i.e. what B asserts, rather than what A asserts, ought to be updated to the common ground). The contrastive juxtaposition of A's proposal and B's counterproposal hence provides a means to diagnose the scope of A's asserted content. The fact that B's counterproposal updates a proposition (as an explanatory *because*-clause) indicates that what is asserted in A's utterance is likewise the entire propositional content.²³

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²³ I assume that the interlocutors in the scenario in (29) are trying to address the question under discussion (QUD) of the form '*Why didn't little Zhang greet speaker A*?'. Here the QUD is understood as the immediate guidance of the discourse, specifically the most recent issue that the interlocutors are trying to address. The discourse effect of (29A) can be modeled as an update of the context by contributing the asserted content to the common ground. The discourse effect of (29B) thus can be construed as an alternative proposal to update the common ground by replacing A's asserted content with another propositional content.

The propositional assertion construction also optionally carries a topic. In a topicalized assertion sentence, exemplified in (30), part of the proposition is expressed as a sentence-initial topic. The asserted content is thus expressed by an unsaturated open clause, with the missing argument coindexing with the pre-copula topic (i.e. $[topic_x copula [open clause (x)]_{focus}]$), unlike the run-of-the-mill propositional assertion where a saturated clause is being asserted.²⁴

(30) Fuzhou Gan

- a. ηo^{45} εi^{22} [$t^h i \eta^{21}$ $p^h j \varepsilon \gamma^5 \eta i n^{24} k a^{32}$ $f a^{22} s i^{22}$], ηo^{45} $t s i^{22} k a n^{45}$ I COP [follow others decide] I self $p u \gamma^2$ $\varepsilon j \varepsilon w^{45} t \varepsilon \gamma^l$ $l a \eta^{24}$ $p a n^{41}$.

 NEG know how act
 - 'For me, it's [listening to others giving orders]. I myself have no idea of what to do.'
- b. ηo^{45} $p \varepsilon n^{45} loi^{24}$ εi^{22} $[t \varepsilon^{21} m \sigma \eta^{22} liu^{24} x a^{22} loi^{24}]$ ko^{1} . I originally COP [hope.to stay] PRT 'Talking about me, in the beginning it's that [(I) hoped to stay].'

3.2 Sinitic distribution as evidence for a copular analysis

In the above I have reported that the five surveyed Sinitic languages converge on the occurrence of the copula in all the three constructions of copular clauses, clefts and propositional assertions (cf. [23] above). This cross-Sinitic uniformity of distribution favors an analysis according to which the copula in clefts is a special case of the copula verb.

Such a treatment, which I will call the copular clause approach to clefts, is readily available in the literature. Specifically, several proposals have treated the cleft as a special kind of the specificational pseudocleft (Jespersen 1927; Percus 1997; Patten 2010; Cheng and Vicente 2013; Den Dikken 2013), the latter being a sub-type of the specificational copular clause construction. (31a) features a garden-variety specificational pseudocleft, characterized by a pre-copula headless relative. A corresponding cleft is shown in (31b) (data from Mikkelsen 2011).

- (31) a. Who I met was Otto Preminger.
 - b. It was Otto Preminger who/that I met.

The pseudocleft sentence in (31a) is specificational in the sense that the headless relative *who I met* sets up a variable (the individual x whom the speaker met) and the post-copula complement specifies the value of such a variable (Williams 1983; Mikkelsen 2005, 2011). The cleft has been proposed to express the same specificational valuing, with additional mechanisms to relate the right-extraposed headless relative *who/that I met* to its pre-verbal

²⁴ The usual set of tests in diagnosing topichood also applies to the topicalized propositional assertion. As in clefts, the optional pre-copula element in the topicalized assertion allows for attachment of topic markers, disallows focus-sensitive constituents and resists being interpreted as focus.

counterpart in (31a).²⁵

Since Li and Thompson (1981), this pseudocleft analysis has been applied to Sinitic clefts (see also Cheng and Vicente 2013; Zhan and Sun 2013). The analyses that treat clefts as concealed specificational pseudoclefts have frequently drawn upon Partee's (1987) characterization, in which the copula heads a specificational copula clause connecting a referential argument encoding the specific value of a variable with a predicative argument encoding that variable (see more engaged discussions and modifications of Partee's proposal in Mikkelsen 2005 and Geist 2011). The copula in this way serves as a link between the variable and its specificational value, *qua* a mediating element that establishes a predication relation. In this sense, the copular analysis of clefts entails structural homogeneity, that is, an identical copula verb is at play for clefts, specificational pseudoclefts and canonical copular clauses alike.

The clausal argument in propositional assertions has also been treated as occupying the same structural correlate as the one hosting the specificational value in clefts (Moro 1997; Cheng 2008; Hole 2011). Propositional assertions and clefts have been argued to perform a uniform discourse strategy of bringing discourse salience to the immediately post-copular element, meanwhile the range of the new information under focus could vary (variable scope) (Moro 1997; Paul and Whitman 2008; Hole 2011). Thus, a propositional assertion updates an entire proposition to the common ground against a set of contrasting propositions (e.g. *that he didn't recognize me* versus *that he didn't see me* in the context of [28] above). A cleft, by comparison, only updates *part of* a proposition, against alternatives that are contrasted over that part of information (e.g. in *it's* [little Zhang] that didn't recognize me, it's [little Wang] that didn't recognize me, it's [little Li] that didn't recognize me, individuals little Zhang, little Wang and little Li are contrasted).

The relationship between clefts/propositional assertions and the copular clauses under the above structural homogeneity approach can be seen to be clearly using a sample constructionist formulation (similar to Figure 1 above; here I assume the hierarchical cross-classifying constructional schema as in Pollard and Sag 1994). Previous copular analyses have already proposed similar formulations within the constructionist framework. Figure 2 has been modified from Zhan and Sun (2013).

²⁵ The relative clause located at the right boundary of the cleft sentence has been treated as being connected with the subject position via some special clause linking devices/mechanisms (cf. Büring and Hartmann 1995; Hedberg 2000; Koster 2000; Reeve 2012; Den Dikken 2013). See Patten (2010) for a constructionist formulation of the right-extraposition analysis, in which clefts are situated within a family of specificational pseudocleft constructions. I will return to the family-of-construction formulation below.

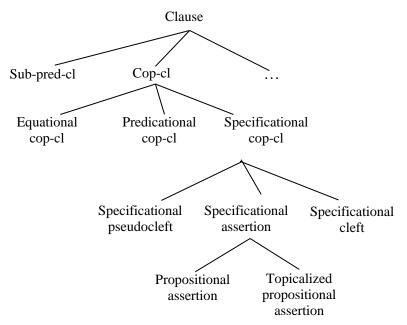


Figure 2. Incorporating clefts and propositional assertions into a taxonomy of copular clause constructions

Under the copular clause approach, the mutually implicating pattern among the three constructions is expected: for example, given that the clefts are underlaid by the same copula verb, it follows that every Sinitic language features the cleft construction to the extent that it features a copular clause, such that no language-specific variation regarding clefts arises across Sinitic languages, unlike the pattern of variation found in other cases of homophony within Sinitic syntax (e.g. the topic-marking copula, the conditional-marking copula and the verum-marking copula are attested in *some* Sinitic languages but not in all of them).

There are alternative approaches that do not treat clefts/propositional assertions as copular clauses. Rather, the copula morpheme in these constructions is analyzed as a separate lexical entry. There is a long tradition of analyzing the cleft copula as a focus adverb or a focus functional head (Teng 1979; Huang 1998; Zhu 1998, see Zhan and Sun 2013 for criticisms of the focus-based approach, but see also Lee 2005; Velleman et al. 2012; Hiraiwa and Ishihara 2012; Erlewine 2016 for recent revivals of the focus-based approach). If the cleft copula is distinct from the copula verb (e.g. *qua* a focus marker), then it is likely to vary across Sinitic varieties similar to what has been found here in the case of the topic-marking copula and the verum-marking copula. Against the above background, we can see that the uniformity finding established here is compatible with the copular approach, and hence the burden of proof lies with the advocates of the alternative approaches.

Furthermore, the copular approach finds additional support in diachronic studies. Recent work has shown that at different historical stages of the Chinese language, the emergence of the copula exhibits a converging pattern: the morpheme *wéi* in the earliest Chinese written records (thirteenth to eleventh century BC) is attested in copular clauses, propositional assertions and clefts (Schuessler 1987; Djamouri 2001; Meisterernst 2010). Secondly, the morpheme *shì* first became copularized in the first century AD (developed into a copula from a lexical source) and within two centuries became employed in propositional assertions and clefts (Shi and Xu 2001; Zhan and Traugott 2015). Thirdly, the morpheme *xì* (i.e. [*ci*])

similarly became copularized in Late Middle Chinese and subsequently entered propositional assertions and clefts in Early Mandarin (Sun 2018; Jin 2019). ²⁶ In other words, previous work has identified three independent and chronologically non-overlapping diachronic processes in which a copula verb developed the copular clause use and the two focus-marking uses in tandem.

Importantly, the subsequent processes of copula attrition are also coordinated. *Wéi* gradually gave way to the copula verb *shì* after the latter's emergence and in the process *wéi* simultaneously vanished from clefts and assertions (Chen 2017). Meanwhile, *xì* declined from all three functions in modern Mandarin, where *shì*'s all three functions have been productively retained and have completely replaced *xì*'s functions (Chen 2017; Jin 2019). In both cases, when a copula element ceases to be used, it disappeared from copular clauses, clefts and assertions alike.

This coordinated pattern of decline can be explained under the copular clause approach. Assuming that clefts and propositional assertions are subsumed under the copular clause construction supertype, after a lexical morpheme underwent reanalysis into a copula verb, the same morpheme is expected to undergo further extension to all constructional types that host the copula verb category. Importantly, it follows from the homogeneity of copular clauses and clefts/assertions that the loss of productivity of a given copula verb predicts that it will cease to be used in all these related constructions. The upshot, in a nutshell, is that the available evidence from both synchronic and diachronic perspectives across Sinitic languages is compatible with a uniform, copular-clause analysis.

3.3 Additional structural evidence

The purpose of the discussion so far has been to weigh in with a novel piece of typological evidence in favor of the copular approach. The rest of this section presents some additional structural evidence from Sinitic data that supplements the growing body of structural evidence in support of the copular approach. First, if the copula element in clefts is a copula verb, we would arrive at a straightforward explanation of the patterns of reduplicative yes-no questions in Sinitic languages. The copula verb in Sinitic copular clauses may undergo reduplication, yielding two identical copies that flank a negation word. The resulting construction gives rise to a yes-no reading, asking for whether a given proposition is true or false. Importantly, this reduplicative process targets not only copular clauses as in (32a) but also clefts as in (32b):

(32) a. Hong Kong Cantonese copular clause

Nei⁵ hai⁶-m⁶-hai⁶ keoi⁵ ge³ leon⁴geoi¹?

you COP-NEG-COP he POSS neighbor

'Are you his neighbor or not?'

b. Hong Kong Cantonese cleft

 Kam^4maan^5 di^1 din^6waa^{6-5} $hai^6-m^6-hai^6$ $[nei^5]$ daa^2 last.night those phone.call COP-NEG-COP [you] call

²⁶ In the Sinitic languages surveyed here, the Cantonese copula *hai* and the Pinghua copula $\varepsilon \partial i$ are modern reflexes of the historical Chinese xi-copula. The copulas in Mandarin and Gan are reflexes of the historical *shi*-copula.

bei2 ngo^5 gaa^3 ? to me PRT

'Those phone calls last night, is it [you]^F who made them to me or not?'

Elsewhere, the reduplicative process has been observed to target predicates exclusively (see Zhu 1981 and Huang 1988 for the predicate-only constraint in Mandarin; Matthews and Yip 1992 and Law 2001 for Cantonese; Lu 2012 for Hui). As (33) demonstrates, a non-copula predicate also undergoes reduplication to form a yes-no question whereas a non-predicative element, such as a focus-sensitive adverb, fails to undergo reduplication.

(33) Mandarin

- a. *Nǐ jiūjìng yuànyì-bú-yuànyì bāng wŏ?* you honestly be.willing-NEG-be.willing help me 'Is it the case that you are willing to help me out or not?'
- b. *Yìyuánmen zhǐ-bù-zhǐ tóngyì zhèi-ge fǎ'àn? congressmen only-NEG-only agree DEM-CLF bill 'Is it the case that the congressmen only agree to (passing) this bill or not?'

A copular clause approach to clefts allows us to maintain a predicate-only constraint in reduplication according to which the reduplicative process applies only to a predicate. Reduplication in clefts would follow since the reduplicative process is targeting a copula verb.

Other evidence can be brought forward that shows the copula in clefts to be parallel with the behavior of the copula verb. In Sinitic languages, copula verbs are optional in an unmodified, positive copular clause but are non-omissible in the presence of a quantificational adverb (e.g. negation), or an intensional predicate (e.g. *believe*). As the following Mandarin examples (34)–(35) illustrate, the copula morpheme in clefts is subject to the same constraint as in copular clauses. Note that in (34a) and (35a), a pause is preferably inserted between the subject and the predicate where a copula is omitted. Importantly, the insertion of a pause fails to rescue the sentences in (34b–c) or (35b–c).²⁷

(34) Mandarin copular clause

Dì shàng de nèi-ge wánjù dìdi de. a. wŏ **DEM-CLF** ground POSS my little.brother **POSS** 'The toy on the ground is my little brother's.'

b. Dì shàng de nèi-ge wánjù *(*shì*) bú wŏ ground on POSS **DEM-CLF** toy not *(COP) my dìdi de.little.brother **POSS**

'The toy on the ground is not my little brother's.'

Dì shàng de nèi-ge wánjù xiāngxìn *(*shì*) c. wŏmén ground POSS **DEM-CLF** toy we believe *(COP) on

²⁷ I am indebted to an anonymous reviewer for drawing my attention to the role played by the pause.

wŏ dìdi de.my little.brother POSS'The toy on the ground, we believe to be my little brother's.'

(35) Mandarin cleft

- dìdi Dì shàng de nèi-ge wánjù nòng a. wŏ little.brother ground dispose on POSS **DEM-CLF** toy my huài de. broken **PRT**
 - 'The toy on the ground, it was my little brother who broke it.'
- b. Dì deshàng nèi-ge wánjù bú *(*shì*) wŏ ground POSS **DEM-CLF** *(COP) on toy not my dìdi nòng huài de. little.brother dispose broken **PRT** 'The toy on the ground, it wasn't my little brother who broke it.'
- Diwánjù xiāngxìn *(*shì*) shàng de nèi-ge wŏmén *(COP) ground **DEM-CLF** believe on POSS toy we wŏ dìdi nòng huài de.little.brother dispose broken PRT 'The toy on the ground, we believe that it was my little brother who broke it.'

In Cantonese, copula drop is licensed in the presence of a speaker-oriented adverb (e.g. *gauging* 'on earth'). Once again, examples such as (36a) and (36b) reveal an identical pattern between copular clauses and clefts:

(36) Hong Kong Cantonese

- a. $Gin^6 si^6 gau^3ging^2$ (hai^6) $bin^1go^3 ge^3 zaak^3jam^4$ ne^1 ? CLF matter on earth (COP) who POSS responsibility Q.PRT 'This issue, whose responsibility is it, for God's sake?'
- b. Gau^3ging^2 (hai^6) bin^1go^3 $zeng^2$ $haam^3$ gu^2baak^3 ? on.earth (COP) who make cry Colbert 'Who the hell is it that caused Colbert to cry?'

In the above, it has been proposed that in all Sinitic languages surveyed, the copula in the cleft construction is non-distinct from the canonical copula verb category. It was further argued that the Sinitic cleft construction receives a copular clause analysis and can be subsumed under an overarching copular clause super-construction, based on the parallel syntactic behavior of the copula in clefts and in canonical copular clauses and in keeping with a plethora of previous syntactic treatments.

It has been shown above that Sinitic reduplicative yes-no questions only target predicates. A unified copular clause analysis of propositional assertions renders the prediction that the reduplicative process should also apply to the copula in proposition assertions. This prediction is borne out in the following:

(37)Fuzhou Gan topicalized propositional assertion ηo^{45} Ni^{45} ϵi^{22} -pu 2^2 - ϵi^{22} $pan^{41}tan^{41}$ koi^{32} - $te^h ien^{41}$ $[mon^{22}]$ pan^{21} COP-NEG-COP [hope.to help achieve you **DEM-CLF** si^{41} ko^{1} ? PRT matter] 'Talking about you, is it that [(you) are hoping to help me get this issue done] or not?

4 Conclusion

This paper has examined the range of copula functions in the Sinitic language family, a topic which has hitherto received little attention in the literature. Its aim was to understand what distinct functions are performed by the copula morpheme, how these functions are distributed across Sinitic languages as well as what contribution the copula makes in fulfilling a specific function within a particular construction. Based on a comparative study of a sampling of five Sinitic varieties, the investigation reveals the following empirical generalization: to the extent we know, the copula morphemes across languages vary in their ability to function as a topic marker. I have argued that in cases where the copula morpheme takes up this function, it is attached to a topic host. It was additionally argued that the copula morpheme may be attached to a conditional clause, assuming semantic identity between the topic-comment structure and the structure of conditionals. Furthermore, Sinitic languages also vary in the use of the copula element as an accent-bearing expression that commits the speaker to the truthfulness of the proposition it combines with. In this case, it is proposed that the copula element serves as a host to a verum marking intonational pattern (i.e. a verum accent) that pertains to the non-at-issue dimension of the sentence meaning.

On the other hand, Sinitic languages commonly share a number of copula functions. Based on their shared distribution, it is found that the copula is always involved in marking the cleft construction, in which the immediately post-copula term is associated with an exhaustive focus interpretation. The scope of the focus assignment may be further expanded to the entire post-copula clause, asserting a propositional content.

The empirical picture established here contributes Sinitic data to a general typology of the copula's role in natural language. Beyond the empirical goal, the paper also explored the theoretical implications of this cross-Sinitic comparison. For example, it seeks to understand whether it is possible to motivate a unified analysis for any two given copula functions when they are shared by every Sinitic language. Moreover, in cases where copula functions are found to be mutually distinct, we want to know what their connections are. In the paper, I have provided arguments that the distributional uniformity of all focus-related constructions supports the analysis (such as Zhan and Sun 2013) in terms of a copular clause structure, headed by a copula verb as a non-contentful element serving a predication-mediating function. The other copula functions might likewise be accounted for as further developments from this core function. For instance, the copula as a topic marker might have developed from the copula verb's structural mediating position within a predication structure. In short, it is my hope that the structured pattern presented in this study provides a starting point for making sense of the range of variation in copular multifunctionality.

Abbreviations

ADV = adverbial; CLF = classifier; COND = conditional marker; COP = copula; DE = nominalizing/adnominal particle; DECL = declarative; DEM = demonstrative; HEN = generalized intensifier; LOC = locative; MOD = modal; NEG = negation morpheme; POSS = possessive; PRF = perfective aspect marker; PRT = particle; PST = past tense; Q = question particle; REL = relativizer; RES = resultative; TOP = topic.

Appendix: Information on consultants

The following table provides information about the age, locality, occupation and gender of the consultants for each of the dialect spot surveyed.

Language	No. of	Age	Residence	Occupation	Gender
(dialect spot)	consultants				
Hong Kong	5	23–33	Shum ¹ Shui ²	Student	male (3)
Cantonese			Po ⁶ District		female (2)
Fŭzhōu Gan	3	23-24	Línchuān	Student	male (2)
			District		female (1)
Wùyuán Hui	3	33–66	Jiāngwān Town	Tea shop owner	male (1)
			_	and shop	female (2)
				assistant	
Bīnyáng	2	36–46	Dàqiáo Town	Hotelier	female (2)
Pinghua			_		

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