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Title	The Interpretations and Structures of Universal Quantifier GUME 'all' in Sibe
Author(s)	Hsu, Pei-Ling
Citation	北方言語研究, 15, 71-95
Issue Date	2025-03-20
DOI	https://doi.org/10.14943/112972
Doc URL	https://hdl.handle.net/2115/94616
Type	departmental bulletin paper
File Information	05_Hsu.pdf



The Interpretations and Structures of Universal Quantifier

GUME ‘all’ in Sibe

Pei-Ling HSU
(Tamkang University)

Keywords: Sibe, syntax, universal quantification, *GUME* ‘all’, feature-checking

1. Introduction

In the Sibe language, universal quantifiers are represented in both adverbial and determiner forms. The adverbial quantifiers include *GUME* ‘all’ and *GELE* ‘also’, while determiner quantifiers include *yaya* NP ‘any NP’, *uxuri* NP ‘all NP’, among others. This study specifically focuses on *GUME* ‘all’ and explores its syntactic properties as well as the interpretations of the associates it quantifies.¹

GUME ‘all’ is a preverbal adverb that interacts with preceding constituents, such as pronouns, noun phrases (NPs), free choice items (FCIs), and clauses, to contribute the maximality or universal forces to those associates. The data are exemplified in (1)-(3).

- (1) a. *eneje afqa xalxuN bo gume qaqe-Xe=i.*
today sky hot 1PL.EXCL all thirsty-PFV=NIF
‘Today is hot, and we all are/each of us is thirsty.’ (vol.4#50)²
- b. *ere mejuN=we si gume ta-Xe=i.*
these silver=ACC 2SG all see-PFV=NIF
‘You saw all of these silvers.’ (vol.8#47)
- (2) Wh-indefinites
- a. [*we gene-me*] *gume o-mi.*
who go-CBV all AUX-IRR.NIF
‘Anyone can go.’ (lit.) Whoever goes, it is fine for me.’

¹ A language spoken in Xinjiang, China with approximately twenty thousand speakers.

² The numbers represent the source of the spoken data. (vol.4#50) indicates (No.50 in Volume 4) meaning that the sentence appears in the 50th line item of the dialogues in Volume 4 of “*Qing Yu Lao Qi Da*” (清語老乞大). “*Qing Yu Lao Qi Da*” was a Korean textbook for learning the Manchu language, the edition of which referred to herein is from 1765. It consists of eight volumes and is written in conversational form. The Sibe data based on Manju text are oral translations recorded by a Sibe native speaker Mrs. Zhao, Lianying (1925-2014).

- b. [*we gene-ci*] *gume* *o-mi*.
 who go-COND all AUX-IRR.NIF
 ‘Anyone can go.’ (lit.) It doesn’t matter who goes, anyone is acceptable.’
 (K/m89y/7N)³

- (3) *The -ciwe Concessive clause*
yaya eriN o-ciwe gume miN=we byase.
 any time AUX-CONC all 1SG=ACC find.IMP
 ‘Whenever it is, (you can) always come to find me.’ (vol.5#95)

In (1), the pronoun *bo* ‘1PL.EXCL’ and the noun *ere meŋuN* ‘these silver’ associated with *GUME* are interpreted as ‘we all’ and ‘all these silvers’ from a specific contextual domain, indicating maximality. This donates the maximum members of the set, meaning ‘all of us’, ‘all of these silvers’. In (2)-a, the *wh*-indefinite *we* ‘who’ is interpreted as a universal FCI, meaning ‘Whoever goes’, in contrast to the sentence without *GUME*, such as *we ji-Xe=i?* ‘Who came?’. (2)-b has a very similar meaning to (2)-a, in which the *wh*-indefinite *we* ‘who’ within a *-ci* conditional clause can also be licensed by *GUME*. The free choice item *yaya eriN* ‘any time’ in (3) within a *-ciwe* ‘although’ concessive clause can also be emphasized by *GUME*, meaning ‘whenever’.

GUME functions similarly to *DOU* ‘all’ in Mandarin Chinese, which has been analyzed as a universal quantifier (Lee 1986, Li 1995, Cheng & Huang 1996, Cheng 1995, 2009, 2017, Dong 2009, Yang 2000, Fen & Pan 2022), a distributor (Lee 1986, Lin 1998, Yang 2000), a maximality operator (Ginanakidou & Cheng 2006, Xiang 2008, Xiang 2020), or an existential modal (Tsai 2015). *DOU* is also typically associated with expressions to its left (Leftness Condition), and the types of expressions that interact with *DOU* include pronouns, noun phrases (NPs), *wh*-indefinites, and unconditional clause *wulun* ‘no. mater’. The examples are provided in (4).

- (4) a. *Tamen dou yiqi lai.*
 3PL DOU together come
 ‘All of them came together.’ (Cheng 2017 (3b))
 b. *Na san ge xuesheng dou lai-le.*
 that three CL student DOU come-PERF
 ‘Those three students all came.’ (Cheng 2017 (1b))
 c. *Ta shenme dou chi.*
 3SG what DOU eat
 ‘He eats everything.’ (Cheng 2017 (3a))

³ The data I presented in this paper are also mainly collected by interviewing with two native Sibe speakers: *Kogoro Guwang*, *Din-Yuan*/Male/Age 89/Speaker of dialect of 7th Niru village (simplified as K/m89y/7N), and *Mergentai*/ Male/Age 22/Speaker of the dialect of 3rd Niru village (simplified as M/m22y/3N).

- d. (Wulun) *shei lai, wo *(dou) huanying.*
no.matter who come 1SG DOU welcome
‘No matter who comes, I welcome (him).’ (Cheng 2017 (17a))

Despite these similarities, *GUME* differs from *DOU* because it does not always yield distributive reading. For example, in (5), when an indefinite object *yi-bu chezi* ‘one car’ is included, *DOU* functions as a distributive operator, leading to a distributive interpretation such as ‘each person bought a car’. However, in Sibe, *GUME* does not allow this reading while co-occurring with an indefinite object, as demonstrated in example (6). *bo yelaN nane* ‘we three people’ associated with *GUME* can only be interpreted as ‘all three of us ate a piece of Sibe bread’, not as ‘three of us each ate a piece of Sibe bread’.

- (5) *Tamen dou mai-le yi-bu chezi.*
3PL DOU buy-PERF one-CL car
‘All of them bought a car.’ (Cheng 2017 (5b))
- (6) *bo yelaN nane gume fale-Xe eweN=we eme farsi je-ke=i.*
1PL.EXCL three person all rise-PERF bread=ACC one piece eat-PFV=NIF
i * ‘Each three of us ate a piece of Sibe bread.’
ii. ‘We three people altogether ate a piece of Sibe bread.’ (K/m89y/7N)

Based on the observations above, *GUME* functions like a maximality operator or universal quantifier concerning the expressions that precede it, but it does not act as a distributivity marker. Furthermore, *GUME* quantification is subject to a leftness condition, and the nature of the leftness condition remains unclear. In this paper, I will provide further data to explore the properties of *GUME* from a syntactic perspective and will argue for its structural implications.

This paper is organized as follows. In section 2, I first present a Sibe transcript of recorded data based on “*Qing Yu Lao Qi Da*” that outlines the types of expressions that *GUME* quantifies. Then in section 3, I argue for the structural positions of *GUME* and its associates. In section 4, I offer a syntactic analysis to explain the empirical data regarding the leftness condition of *GUME* quantification and the interpretation of its associates. Section 5 concludes the paper.

2. Expressions Interacting with *GUME*

In this section, I first present a series of data drawn from Sibe language oral translation of passages of the “*Qing Yu Lao Qi Da*”, featuring *GUME* and the types of expressions that precede it to demonstrate how *GUME* is typically used in sentences.

As noted in the previous section, the types of expressions that *GUME* associates include pronouns, noun phrases, *wh*-indefinites, and clauses. These constituents can appear in argument positions serving as a subject or an object, as shown in (7)-(9),

and may also occupy non-argument positions, such as fronting and topic positions, as shown in (10) and (11).

- (7) The subject
mese gume *gene-ci ere naXeN=we ta-re nane aqu*
 1PL.INCL all go-COND this kang=ACC watch-IRR person NEG
o-mi.
 AUX-IRR.NIF
 ‘If we all left, there would be no one to watch this kang.’ (vol.2#58)
- (8) The object with accusative case =we
bo cikse’ sole-Xe eweN=we gume je-ke=i.
 1PL.EXCL yesterday bake-PFV bread=ACC all eat-PFV=NIF
 i. *’All/Each of us ate the baked bread yesterday.’
 ii. ‘We ate all of the baked bread yesterday.’ (M/m22y/3N)
- (9) The object with dative case =de
jeNkeN boixuN=de gume syaN o-ci suyaN aisiN
 truly family=DAT all good AUX-COND yellow gold
ai wesixuN ba bi o-Xe.
 what valuable place there AUX-PFV
 ‘If all the family/each member of the family is truly good, the value of gold is nothing.’ (vol.5#47)
- (10) Fronted elements
 a. **ere mejuN=we si gume ta-Xe=i.**
 these silver=ACC 2SG all see-PFV=NIF
 ‘You have seen all of these silvers.’ (vol.8#47)
 b. **bo uliN=we inu gume uNca-Xe=i.**
 1PL.EXCL goods=ACC also all sell-PFV=NIF
 ‘We sold all of the goods as well.’ (vol.8#56)
- (11) Topicalizaization
moN=i tewa=i qociN gume ewa=i qociN=i emduruN waqe,
 1PL=GEN there=GEN well all here=GEN well=GEN same NEG
ewa=i qociN gume fise=i (e) saXe-Xe=ne lawdu.
 here=GEN well all brick=INST stack-PFV=NMLZ many
 ‘All of our wells there are different from the wells here. As for the wells here, lots of them were all made up of stacked bricks.’ (vol.3#2)

Here, I differentiate between fronted elements and topicalization based on their distinct syntactic operations. The fronted elements, such as *ere mejuN=we*, *uliN=we* in (10), accompanied by case markers, are derived from A'-movement. In contrast, the topic element which lacks case markers, such as *ewa=i qociN* in (11), is base-

generated in a topic position. I will discuss this in sections 3.2 and 3.3.

GUME can also interact with an empty category (*e*), which refers to elements from a previous context or discourse. For example, in the sentence in (12)-b, a response to the question presented in (12)-a, *GUME* in (12)-b must be associated with an empty category (*e*) because the response stands alone as an independent sentence. In this case, the empty category (*e*) refers to *eiteN tyuwxe syogu* ‘every fruits and vegetables’, which is mentioned in the previous interrogative sentence (12)-a.

(12) Empty category

- a. *eiteN tyuwxe syogu=we gume belxe-me waje-Xe na?*
 every fruit vegetables=ACC all prepare-CVB finish-PFV Q
 ‘Did you prepare all the fruits and vegetables?’ (vol.7#16)
- b. (*e*) *gume belxe-Xe=i.*
 all prepare-PFV=NIF
 ‘I had prepared all.’ (vol.7#17)

Moreover, *wh*-indefinites *we* ‘who’, *ya* ‘which, where’ as well as the free choice item (FCI) *yaya* ‘any’ can be licensed by *GUME* as well, granting them universal quantificational force. In (13), *we* ‘who’ and *ya* ‘which, where’ can be both licensed by *GUME* and interpreted as ‘anyone and any side’. In (14), *yaya ba* ‘any place’ is interpreted as ‘every place’.

(13) *Wh*-indefinite *we* ‘who’ *ya* ‘which, where’

- we ya=de gume χarse-re ba aqu.*
 who which=DAT all slant-IRR place NEG
 ‘It is not slanted to favor anyone or any side.’ (vol.5#77)

(14) Indefinite determiner *yaya* ‘any’

- yaya ba=de gume gene-me dulu-Xe=ηe.*
 any place-DAT all go-CVB pass-PFV=OIF
 ‘I have gone to every place.’ (K/m89y/7N)

Additionally, *GUME* can be linked to the whole preceding constituents, such as temporal adverbial phrases/clauses introduced by *=de*, shown in (15), (16). *GUME* in (15) and (16) quantifies the entire preceding temporal adverbial phrase or clause, conveying interpretations such as ‘every/each time’, ‘whenever’, or ‘always’ in the sentences.

(15) *yaya* within *=de* temporal adverbial phrase

- yaya eme uNca-re uda-re=de gume eriN χuda bi.*
 any one sell-IRR buy-IRR=DAT all time price AUX
 ‘For each buying and selling, there is always a current price.’ (vol.5#77)

- (16) The =*de* temporal adverbial clause
amele baitele-me oju=qu o-Xe=de gume ere xuda
 after use-CVB can=IRR.NGE AUX-PFV=DAT all this price
toqtusi=we bya-mi.
 decision maker=ACC find-IRR.NIF
 ‘When it (the silver) is void, you can always come to find the person who
 decides the price’ (vol.5#94)

The examples shown in (17) indicate that the universal quantificational usage of *wh*-indefinites within a clause can be licensed by *GUME*.

- (17) *Wh*-indefinites
 a. [*si ai jaqe gya-me gume o-mi.*
 2SG what thing take-CVB all AUX-IRR.NIF
 ‘You can take anything.’ (lit.) Whatever you take, it is fine.’ (K/m89y/7N)
 b. [*si yawa=de gene-me gume o-mi.*
 2SG where=DAT go-CVB all AUX-IRR.NIF
 ‘You can go anywhere.’ (lit.) Wherever you go, it is fine.’ (K/m89y/7N)

This type of data resembles *DOU* quantification in Mandarin, as presented in (18). Cheng (2017) claims that *DOU* is not directly associated with the *wh*-phrase, but rather with the whole preceding proposition.

- (18) [*Lisi chi shenme dou gen wo wuguan.*
 Lisi eat what all to 1SG irrelevant
 ‘Whatever Lisi eats is irrelevant to me.’ (Cheng 2017 (23))

Although *GUME* and *DOU* share similarities, *GUME* does not interact with negative polarity items (NPI). As seen in examples (19) and (20). *DOU* is compatible with the indefinite *yi-ge ren* ‘one person’ and the *wh*-indefinite *shei* ‘who’ in negative statements (19), while *GUME* is not allowed in these contexts (20).⁴

⁴ *GUME* can be compatible with two *wh*-indefinites such as *we we* ‘who, who’ shown in (i), where *we we* must refer to specific people that listeners and speakers know. I suggest that this specific usage of *wh*-indefinites is discourse-linked and it is its plurality that *GEMU* quantifies.

- (i) *we we gume ji-Xaqu=i.*
 who who all come-PFV.NEG=NIF
 ‘Neither of them came comes.’ (K/m89y/7N)

- (19) a. *yi-ge ren dou mei lai.*
one-CL person all NEG come
‘No one came.’ (Author’s own example)
- b. *shei dou mei lai.*
who all NEG come.
‘No one came.’ (Author’s own example)
- (20) a. **eme nane gume ji-Xaqu=i.*
one person all come-PFV.NEG=NIF
‘No one came.’ (K/m89y/7N)
- b. **we gume ji-Xaqu=i.*
who all come-PFV.NEG=NIF
‘No one came.’ (K/m89y/7N)

Alternatively, the other universal quantificational adverb *GELE* ‘also’ can be used to co-occur with indefinite words and form a concord with negation, as exemplified in (21).

- (21) a. *eme nane gele ji-Xaqu=i.*
one person also come-PFV.NEG=NIF
‘No one came.’ (K/m89y/7N)
- b. *bo cikse’ sole-Xe eweN ni we gele je-kaqu=i.*
1PL.EXCL yesterday bake-PFV bread TOP who also eat-PFV.NEG=NIF
‘We, none of us ate baked bread yesterday.’ (M/m22y/3N)

The observation that *GELE*, along with the indefinite words it interacts with, is licensed by sentential negation indicates that these elements can be categorized as negative polarity items (NPIs). In contrast, *GUME* cannot be classified as an NPI, as it occurs in both affirmative and negative sentences. Given the need for a thorough investigation into the NPI properties of *GELE*, I will refrain from discussing it further at this time.

yaya NP ‘any NP’ that *GUEM* interacts with is also not an NPI since it interacts with *GUME* in both affirmative and negative sentences. As shown in (22)-a and (22)-b, respectively.

- (22) a. *bi yaya ba=de gume gene-Xequ=ye.*
1SG any place=DAT all go-PFV.NEG=OIF
‘I didn’t go any place.’ (K/m89y/7N)
- b. *bi yaya ba=de gume gene-me dulu-Xe=ye.*
1SG any place=DAT all go-CVB pass-PFV=OIF
‘I have been to all the places.’ (K/m89y/7N)

- c. *yaya nane moriN=deri aleje-me mutu=qu.*
 any person horse=ABL leave-CVB can=IRR.NEG
 ‘It is impossible for each one of them to leave from horses.’ (K/m89y/7N)

In (22)-c, *GUME* can be optional but with a different reading, as the universal interpretation is not an inherent reading of *yaya*. *Yaya nane* without *GUME* refers to ‘any ONE of individuals within a given set’, rather than to ‘every member in that set’, which is only allowed when *GUME* is included. As for the other type of universal determiner such as *uxuri*’ NP ‘all NP’, the universal reading remains available without the presence of *GUME*, which is different from *yaya* NP. As shown in (23), *uxuri*’ *asyta guruN* ‘all young people’ retains its universal interpretation regardless of whether *GUME* is present or not; it is because it possesses an inherent universal interpretation.

- (23) *te=i uxuri’ asyta guruN (gume) mo#tuo#che=we yale-me cixale-mi.*
 now=GEN all young people (all) motorcycle=ACC ride-CVB like-IRR.NIF
 ‘All the young people nowadays like to ride motorcycles.’ (K/m89y/7N)

The data presented above illustrates various expressions interacting with *GUME*. In this paper, I would like to set aside expressions with an inherent universal reading, like *uxuri*’ NP ‘all NP’ and *eiteN* NP ‘every NP,’ and only focus on the expressions that *GUME* associates with and quantifies for universal interpretation. The next section will discuss the associates, particularly nominal expressions, and the structural positions of *GUME*.

3. Structural Positions of *GUME* and its Associates

I take *GUME* to be a universal quantifier and a maximality operator that quantifies over a plural domain of alternatives and can interact with free choice items, a set of things, or propositions. *GUME* quantification subjects to leftness, including (sentential) subjects, objects (with accusative case =*we* and dative case =*de*), fronted objects, adjuncts (specifically temporal adverbial clause), and topic elements. This section will argue for the structural positions of *GUME* and its associates.

3.1 Subjects and Objects

GUME is a quantificational adverb that attaches to various verbal projections, including VP, *vP*, AspP, and TP. When *GUME* quantifies the subject, as shown in (24), it is assumed to be positioned between *vP* and TP, attaching to either *vP* or AspP. In (24)-a, *GUME* occupies a higher position than the locative adverb *ewa=de* ‘here=DAT’, which is adjoined to VP or *vP*. In (24)-b, *GUME* is lower than the temporal adverb *ere ucuri* ‘this recently’, which must be adjoined to AspP or TP.

- (24) a. *so gume ewa=de ali-me ila.*
 2PL all here=DAT wait-CVB stop.IMP
 ‘You all wait here.’ (vol.6#15)
- b. *moN=i dyaN nane ere ucuri’ gume tulesi’ tyuci-fi*
 1PL.INCL=GEN store person this recently all toward out-CVB
 ‘The staff of my store all went out recently,...’ (vol.4#76)

Further evidence that *GUME*, when quantifying the subject, must attach to *vP* or a higher position is based on the empirical fact that it only appears to the left of the object, as shown in (25)-a. In (25)-b,c, the subject *bo* ‘1PL.EXCL’ does not receive a universal interpretation when *GUME* appears to the right of the object. This indicates that the subject cannot be quantified by VP-adjoined *GUME*.

- (25) a. *cikse’ bo gume sole-Xe eweN=we je-ke=i.*
 yesterday 1PL.EXCL all bake-PFV bread=ACC eat-PFV=NIF
 i. ‘All/Each of us ate the baked bread yesterday.’
 ii. *‘We ate all of the baked bread yesterday.’ (M/m22y/3N)
- b. *cikse’ bo sole-Xe eweN=we gume je-ke=i.*
 yesterday 1PL.EXCL bake-PFV bread=ACC all eat-PFV=NIF
 i. *‘All/Each of us ate the baked bread yesterday.’
 ii. ‘We ate all of the baked bread yesterday.’ (M/m22y/3N)
- c. *bo cikse’ sole-Xe eweN=we gume je-ke=i.*
 1PL.EXCL yesterday bake-PFV bread=ACC all eat-PFV=NIF
 i. *‘All/Each of us ate the baked bread yesterday.’
 ii. ‘We ate all of the baked bread yesterday.’ (M/m22y/3N)

Therefore, the formation of *GUME* quantifying the subject can be illustrated in (26).

- (26) Quantification of Subjects
 [TP **Subj** (*gume*) [AspP (*gume*) [_{VP} [_{VP} obj=*we* (~~*gume*~~) VP]]]]

Regarding the position of *GUME* when quantifying the object, *GUME* always appears to the right of the object (either the objects marked by accusative case =*we* in (8) or dative case =*de* in (9)). Moreover, as shown in example (27), when the aspectual adverb *xamime* ‘almost’ is present, the object *uliN=we* ‘goods=ACC’ must be located below AspP, and *GUME* appearing to the right of the object must be positioned within VP. Therefore, it can be assumed that *GUME* is adjoined to VP or V.

- (27) *ani waje-me xamime uliN=we gume uNca-fi,...*
 year finis-CVB almost goods=ACC all sell-CVB
 ‘At the end of the year, I almost sold all of my goods,...’ (vol.1#83)

Therefore, the formation of *GUME* quantifying the objects can be illustrated in (28).

(28) Quantification of Objects

[_{TP} Subj [_{AspP} [_{vP} e [_{vP} **Obj=we** (*gume*) [e V]]]]]

3.2 Fronted Objects

The fronted objects, as well as the *in-situ* objects, can be quantified by a VP-adjoined *GUME*. In (29), the sentence contains a temporal adverb *cikse* ‘yesterday’ and a locative adverb *tere sibe puse=de* ‘that Sibe store=DAT’. The subject *we* ‘who’ appears to the right of the locative adverb and occupies a lower position inside the vP domain, where *GUME* is adjoined to VP. Although the vP-internal subject *we* ‘who’ comes before *GUME* in (29), the universal reading of *wh*-indefinite is not allowed. Conversely, the fronted object *fale-Xe eweN=we* ‘fermented bread/Sibe bread=ACC’ is positioned outside the vP domain (via A’-movement) and can be quantified by a VP-adjoined *GUME*, allowing for a universal interpretation.

- (29) *fale-Xe eweN=we ni cikse’ tere sibe puse=de we gume*
 ferment-PFV bread=ACC FOC yesterday that Sibe store=DAT who all
je-me waje- Xe=i?
 eat-CVB finish-PFV=NIF

i. “As for the Sibe bread, who ate all of them at the Sibe store yesterday?”

ii.* “As for the Sibe bread, everyone ate it at the Sibe store yesterday.

(K/m89y/7N)

In (30), *GUME* is positioned between the temporal adverb *cikse* ‘yesterday’ and the subject *bo* ‘1PL.EXCL’. If *bo* occupies in vP-internal subject position, the structure allows for *GUME* to be attached to either vP or AspP. Alternatively, if *bo* is in the specifier position of TP, *GUME* can be assumed to attach to TP. In both structures, the fronted object *sole-Xe eweN=we* ‘baked bread=ACC’ having a universal reading indicates that the fronted objects can be quantified by *GUME*, whether it is attached to vP, AspP, or TP.

- (30) *sole-Xe eweN=we cikse’ gume bo je-ke=i.*
 bake-PFV bread=ACC yesterday all 1PL.EXCL eat-PFV=NIF
 i. *‘All of us ate the baked bread yesterday.’

ii. ‘We ate all of the baked bread yesterday.’

(M/m22y/3N)

Both the fronted object and the subject can be quantified by vP adjoined *GUME*, leading to ambiguity in the sentence. This is illustrated in examples presented in (31) and (32), where the fronted object *sole-Xe eweN=we* ‘baked bread=ACC’ and the subject *bo* ‘1PL.EXCL’ appearing before *GUME* allow for universal interpretations.

- (31) a. *sole-Xe eweN=we cikse’ bo gume je-ke=i.*
 bake-PFV bread=ACC yesterday 1PL.EXCL all eat-PFV=NIF
 i. ‘All of us ate the baked bread yesterday.’
 ii. ‘We ate all of the baked bread yesterday.’ (M/m22y/3N)
- b. *sole-Xe eweN=we bo cikse’ gume je-ke=i.*
 bake-PFV bread=ACC 1PL.EXCL yesterday all eat-PFV=NIF
 i. ‘All of us ate the baked bread yesterday.’
 ii. ‘We ate all of the baked bread yesterday.’ (M/m22y/3N)
- (32) *bo sole-Xe eweN=we gume cikse’ je-ke=i.*
 1PL.EXCL bake-PFV bread=ACC all yesterday eat-PFV=NIF
 i. ‘All of us ate the baked bread yesterday.’
 ii. ‘We ate all of the baked bread yesterday.’ (M/m22y/3N)

In summary, a fronted object extracted from an argument position to any A’-positions outside of *vP* domain can be quantified by various positions of *GUME*. The structure, therefore, can be illustrated in (33).

- (33) Quantification of the Fronted Objects
 [_{CP} **Obj=we** [_{TP} Subj (*gume*) [_{AspP} (*gume*) [_{vP} (*gume*) [_{vP} *e* (*gume*)V]]]]

3.3 Topicalization

Topicalized elements can be quantified by *GUME* and interpreted universally. Based on the data from “*Qing Yu Lao Qi Da*,” as repeated below, the topic element *ewa=i qociN* ‘here=GEN well’ in (11) must be base-generated in the topic position since *ewa=i qociN* cannot be extracted from nominalized clause *fise=i saxe-Xe=ŋe* ‘ones that stacked with bricks’, unlike the fronted object discussed in 3.2. This non-movement account further captures the fact presented in (34), in which *ere joduN* ‘this textile’ is interpreted to be the theme of both predicates *jode-fi* ‘weave’ and *Gaje-Xe* ‘bring-PFV’.

- (11) Topicalization
moN=i tewa=i qociN gume ewa=i qociN=i emduruN waqe,
 1PL=GEN there=GEN well all here=GEN well=GEN same NEG
ewa=i qociN gume fise=i (e) saxe-Xe=ŋe lawdu.
 here=GEN well all brick=INST stack-PFV=NMLZ many
 ‘All of our wells there are different from the wells here. As for the wells
here, each of them was all made up of stacked bricks.’ (vol.3#2)

(34) Topicalization

ere joduN gume da ba=deri' (e) jode-fi (e) Gaje-Xe=ŋe.
this textile all original place=ABL weave-CVB bring-PFV=NMLZ
'All of these textiles are weaved and brought from the original place.'
(vol.8#34)

If *ere joduN* undergoes movement to the topic position, it would be problematic to determine which argument position *ere joduN* is base-generated. This also violates the theta criterion that assumes each argument can only bear one theta role, and the locality condition that the extraction from a nominal clause is not allowed. Alternatively, these empirical and theoretical problems can be solved by assuming non-movement analysis, which is that the topic element is base-generated in the left-periphery position. I also assume there are empty resumptive pronouns in the clause that are co-referential to the topic element, allowing it to relate to two or more predicates.

Therefore, the structure of topicalization can be illustrated in (35), where there exists an empty resumptive pronoun within the clause, relating to the topic element. As for *GUME*, I assume that it adjoins to TP to quantify the topic element, which is base-generated in the specifier of TopP (CP).

(35) Quantification of Topic Elements

[_{CP} **TOP** (*gume*) [_{TP} (*e-resumptive pronoun*)]]]

3.4 Empty Category-Hidden Topic

It is evident that the quantification of the empty category requires antecedents in the context. In (12)-b, what *GUME* quantifies is the object of *belxe-Xe* 'prepared', and semantically refers to *eiteN tyuwxe syogu* 'all kinds of fruits and vegetables' mentioned in the previous context shown in (12)-a.

(12) Empty category

- a. *eiteN tyuwxe syogu=we gume belxe-me waje-Xe na?*
every fruit vegetable=ACC all prepare-CVB finish-PFV Q
'Did you prepare all the fruits and vegetables?' (vol.7#16)
- b. *(e) gume belxe-Xe=i.*
all prepare-PFV=NIF
'I had prepared all (of the fruits and vegetables).'

A question arises as to whether the empty category (*e*) quantified by *GUME* is akin to a phonetically null pronoun that has an antecedent, or merely a copy of the antecedent without phonetic form. I argue that it is indeed a phonetically null pronoun with an antecedent. The claim is supported by the example shown in (36)-b, where the subject of *mele-me waje-Xe=i* 'all finished drinking' refers to *ere moriN* 'this horse' and *gwa*

‘others’ in the previous context presented in (36)-a. The semantic reference of *GUME* encompasses all those horses, indicating that the empty category (*e*) it quantifies is not just a copy of the antecedent, but rather a pronominal entity. I refer to it as an empty pronoun.

- (36) a. *si ere moriN_i=we kutele-me amesi Gaji gele gwa_i=we*
 2SG this horse=ACC lead-CVB later bring.IMP also other=ACC
kutele-me Gaji mele.
 lead-CVB bring.IMP drink.IMP
 ‘Lead this horse and bring it back later, then again lead others to come and let them drink water.’ (vol.3#6)
- b. (e) *gume mele-me waje-Xe=i.*
all drink-CVB finish-PFV=NIF
 ‘They all finished drinking water.’ (vol.3#7)

When quantifying an empty pronoun, the position of *GUME* is determined by whether the phonetically null pronoun functions as the subject or the object, as well as by the predicate. If the empty pronoun serves as the subject, *GUME* is assumed to be adjoined to the same position as in the structure that quantifies a phonetically realized subject. If the empty pronoun serves as the object, *GUME* is assumed to be adjoined to a position identical to that in the structure quantifying a phonetically realized object. Thus, the structure for quantifying empty pronouns can be illustrated in (37).

- (37) Quantification of Empty Categories
- i. [TP *empty pronoun*-Subj (*gume*) [AspP (*gume*) [vP [VP]]]]
 - ii. [TP [AspP [vP [VP *empty pronoun*-obj (*gume*) [e V]]]]]

Since the empty pronoun must have an antecedent in the preceding context or from the discourse, it is reasonable to assume that the empty pronoun refers to a covert, hidden topic that is co-indexed with its antecedent. In this scenario, the structure of quantification for the empty pronoun can be likened to the quantification of topic elements, albeit with a covert topic. The structure can be illustrated in (38).

- (38) Quantification of Topic Elements
 Antecedent_i [CP **Covert TOP_i** (*gume*) [TP (*e*-resumptive pronoun)]]

4. *GUME* Quantification

4.1 Conditions on *GUME* Quantification

Based on the discussions in the preceding section, the structure for quantifying noun phrases with *GUME* can be summarized and simplified in (39). In these constructions,

noun phrases that are quantified by *GUME* must be positioned to its left.

- (39) a. [TP **Subj**₁ [AspP (*gume*) [vP *e*₁ [VP obj₂=*we* [*e*₂ V]]]]]]
 b. [TP Subj₁ [AspP [vP *e*₁ [VP **Obj**₂=*we* (*gume*) [*e*₂ V]]]]]]
 c. [CP <**Obj**₂=*we*>[TP Subj₁ <**Obj**₂=*we*>[AspP (*gume*)[vP *e*₁ [VP *e*₂ (*gume*)[*e*₂ V]]]]]]]
 d. [CP (Covert) **TOP** (*gume*) [TP (e-resumptive *pro*)]]

Nonetheless, this generalization does not hold for the subject when *GUME* is positioned inside the VP. The data provided in (25) are repeated below, where the subject *bo* in (25)-b does not have a universal reading, in contrast to (25)-a. The structure for this can be illustrated in (40).

- (25) a. *cikse' bo gume sole-Xe eweN=we je-ke=i.*
 yesterday 1PL.EXCL all bake-PFV bread=ACC eat-PFV=NIF
 i. 'All of us ate the baked bread yesterday.'
 ii. *'We ate all of the baked bread yesterday.' (M/m22y/3N)
 b. *cikse' bo sole-Xe eweN=we gume je-ke=i.*
 yesterday 1PL.EXCL bake-PFV bread=ACC all eat-PFV=NIF
 i. *'All of us ate the baked bread yesterday.'
 ii. 'We ate all of the baked bread yesterday.' (M/m22y/3N)

- (40) *[TP **Subj**₁ [AspP [vP *e*₁ [VP Obj₂=*we* (*gume*) [*e*₂ V]]]]]

The inability of *GUME* to quantify the subject in (40) when attached to VP can be attributed to its failure to c-command the argument position of the subject. In other structures, *GUME* c-commands the argument positions of the expressions it associates with, making the quantification of *GUME* possible. Therefore, a condition regarding *GUME* quantification can be stated as follows.

- (41) Conditions on *GUME* quantification
 The associates XP quantified by *GUME* must c-command *GUME*, and *GUME* must c-command the argument position of the associates XP.

In cases where the topic element is base-generated in a topic position, it does not have an argument position within the clause. However, if we assume the presence of an empty resumptive pronoun within the clause that refers to the topic, as illustrated in (39), the quantification of the topic elements can be accounted for under the same condition.

4.2 Agreement

I argue that the requirements of the c-commanding relations presented in (41) can be

captured through an agreement approach, assuming feature checking via a spec-head configuration involving *GUME* and its associates. I propose that *GUME* carries an uninterpretable universal quantification feature [$u\forall$], which triggers its associates from its c-command domain to engage in an Agree relation. The associates do not possess an inherent quantificational meaning until being quantified by *GUME*. This analysis is inspired by the universal concord analysis of *mei...dou* ‘every-...all’ construction in Mandarin Chinese as proposed by Dong (2009), and the analysis of *-can*, a case of universal concord in Cantonese suggested by Yip (2022). The mechanisms proposed in these two studies involve a featural set-up and the Agree relation.

4.2.1 Dong (2009)

Dong (2009) introduces a universal concord analysis for *DOU*-quantification in Mandarin Chinese. The discussion begins with *mei...dou* ‘every...all’ construction, as exemplified in (42). In this construction, *DOU* is obligatory, and the phrase *mei-N* ‘every-N’ must precede *DOU*. This can also be exemplified in (43), where the object *meigeren* ‘everyone’ must move to the left of *DOU*.

- (42) **Meigeren dou xihuan chi pingguo.**
 Everyone all like eat apple
 ‘Everyone likes to eat apples.’ (Dong 2009:174(9))

- (43) **Meigeren Yuehan dou xihuan.**
 Everyone John all like
 ‘John likes everyone.’ (Dong 2009:176(16))

Dong (2009) suggests that the *mei*-phrase carries an uninterpretable universal feature (uF), which agrees with the interpretable universal feature [F] of *DOU*. In order to eliminate the uninterpretable feature on *mei*, the *mei*-phrase must move to the specifier of *DOU* via a spec-head configuration. The derivation is illustrated in (44).

- (44)a [dou_F [meigeren_{uF} likes to eat apples]]
 b. [meigeren_{uF} dou_F [t likes to eat apples]]
 c. [meigeren [t dou_F [t likes to eat apples]]] (Dong 2009:186(40)-(42))

In (44)-a, b, *meigeren* ‘everyone’ possesses an uninterpretable universal feature [uF] and is located within vP . *DOU*, which has an interpretable feature [F], adjoins to vP . *meigeren* ‘everyone’ then moves to a local configuration with *DOU* to check off the uninterpretable feature. Once the uninterpretable feature is eliminated, *meigeree* can further undergo A’ movement to a higher position, as shown in (44)-c.

Dong (2009) suggests that this universal concord analysis can also explain other

DOU-quantification data, as *DOU* can appear in sentences without *mei*-‘every’. When *DOU* co-occurs with a definite noun phrase such as *zhexie-ren* ‘these people’ or a *wh*-indefinite like *shei* ‘who’, its quantificational force comes from *DOU* via feature checking, resulting in derivations similar to (44).

4.2.2 Yip (2022)

Yip (2022) examines universal concord in Cantonese, focusing specifically on the verbal suffix *-can*. This suffix lacks quantification force, yet a universal reading is compulsory in sentences that use *-can*. According to Yip, the sentences with *-can* always have a universal quantifier, whether it is overt or covert. The example is shown in (45).

- (45) *Aaming jam-can naai, go tou zau tung.*
 Ming drink-CAN milk CL stomach then ache
 ‘Everytime/whenever Ming drinks milk, his tummy feels odd.
 (Yip 2022:221(2a))

Yip (2022) follows Beghelli & Stowell (1997), assuming there is a universality feature $[+Univ]$, and then proposes that *-can* bears an uninterpretable universal feature $[u\forall]$, and genuine universal quantifiers, such as *ziji* ‘only.if’, *mui-ci* ‘every time’, and *mui-go* ‘every’ bear an interpretable universal feature $[i\forall]$. The uninterpretable feature $[u\forall]$ on *-can* needs to be deleted before Transfer to the Logical Form (LF) for Full Interpretation, achieved through valuation by an interpretable counterpart via Agree.

4.3 Analysis

I also follow Beghelli & Stowell (1997) and assume that there is a universality feature $[+Univ]$. According to Beghelli & Stowell (1997), there are five major types of quantifier phrases: Interrogative QPs (WhQPs), Negative QPs (NQPs), Distributive-Universal QPs (DQPs), Counting QPs (CQPs) and Group-Denoting QPs (GQPs). QPs headed by *every* and *each* belongs to Distributive-Universal QPs (DQPs); *each* is attributed to an intrinsic distributive feature $[+Dist]$, while *every* is underspecified for $[+Dist]$ but specified for universality feature $[+Univ]$. Beghelli & Stowell (1997) also identify the relative LF positions where each type of QP is satisfied, with each position reflecting the scope hierarchy for different QPs. For Distributive-Universal QPs (DQPs), there is a Distributive-Universal category called DistP, and DQPs are assumed to move to the specifier position of DistP ($[Spec, DistP]$), to undergo Spec-head agreement with the head $[DistP^0]$, resulting in Distributive or Universal interpretations. This movement can be overt, as Szabolcsi (1996) notes that the surface order in Hungarian reflects scope hierarchies, where each type of QP moves to overt scope positions in functional projections.

Contrasting with *DOU*-quantification, where *DOU* is assumed to bear an

interpretable feature [F] (Dong 2009), I propose *GUME* has an uninterpretable universal feature [$u\forall$]. It is reasonable to assume that the expressions quantified by *GUME* can be specified with an interpretable universal feature [$\forall$]. The presence of the uninterpretable universal feature [$u\forall$] on *GUME* necessitates that feature checking occurs in Syntax instead of Logical Form (LF) to eliminate the uninterpretable feature via Agree. Consequently, the expressions that *GUME* associates move to the specifier position of *GUME*, forming a spec-head configuration. Once the uninterpretable feature is checked off, the associates can further undergo A- or A'- movement to a higher position. The requirements for the leftness condition for *DOU* in Mandarin Chinese and *GUME* in Sibe appear to result from the feature checking in overt syntax and scope interpretation of universally quantified phrases.

Lastly, Sibe, as a V-to-I language, allows a verb to move out of vP to $AspP/IP$. This enables *GUME* to adjoin various projections, including VP, vP , $AspP$, allowing for its occurrence in different projections within a syntactic structure. The derivation for *GUME* quantification can therefore be illustrated in (46).

- (46)
- $$\begin{aligned} & [\quad \quad \quad gume \text{ } [u\forall] \text{ } [AspP / vP / VP \quad XP \quad]] \\ \rightarrow & [\quad XP_{[\forall]} \quad gume \text{ } [\neq\forall] \text{ } [AspP / vP / VP \quad <XP> \quad]] \\ \rightarrow & [<XP_{[\forall]}> [\quad <XP_{[\forall]}> \quad gume \text{ } [\neq\forall] \text{ } [AspP / vP / VP \quad <XP> \quad]] \end{aligned}$$
- XP can be DP, NP, pronoun, free choice item, proposition

4.4 Locality

4.4.1 Clause-mates

The analysis of movement and feature-checking in the quantification of *GUME* can be supported by the clause-mate relationship between *GUME* and its associates. In (47)-a, *GUME* in the matrix clause can only quantify the expression *sole-Xe eweN* ‘baked bread’, as it is in the same clause as *GUME*. The embedded expression *bo* ‘we’ cannot be quantified because it is not in the same clause.

- (47) a. [*bo* *cikse'* *je-ke*] *sole-Xe* *eweN* *ni* *gume* *we* *ni*
 1PL.EXCL yesterday eat-PFV bake-PFV bread FOC all who FOC
are-Xe=i?
 make-PFV=NIF
 i. ‘Who made all the baked bread that we ate yesterday?’
 ii. ‘*Who made the baked bread that we all ate yesterday?’ (M/m22y/3N)
- b. [*bo* *cikse'* *gume je-ke*] *sole-Xe* *eweN-ni* *we* *ni*
 1PL.EXCL yesterday all eat-PFV bake-PFV bread FOC who FOC
are-Xe=i?
 make-PFV=NIF
 i. ‘*Who made all the baked bread that we ate yesterday?’
 ii. ‘Who made the baked bread that we all ate yesterday?’ (M/m22y/3N)

In (47)-b, the embedded *GUME* only quantifies the subject *bo* within the same clause, rather than the head noun *sole-Xe eweN* ‘baked bread’. However, when *GUME* appears in a relative clause, it does not necessarily imply that the head noun is unquantifiable. If we assume the presence of an operator co-indexed with the head noun in the relative clause, this empty category can indeed be quantified by *GUME*. As a result, the head noun can take on a universal interpretation. The example is illustrated in (48).

- (48) [*moN=i* *teni’ tewa=de* (*e*) *gume je-ke*] *sole-Xe eweN oriN jiχa*.
 1PL.EXCL=GEN just there=DAT all eat-PFV bake-PFV bread twenty cents
 ‘All the baked bread we just ate over there are twenty cents.’ (K/m89y/7N)

In (48), the locative *tewa=de* ‘there=DAT’ appears before *GUME* in the structure, suggesting that *GUME* is located within *vP*, likely in the VP-adjunct position. An empty category within a relative clause that co-indexes with the head noun can be associated with *GUME*. In this context, the head noun can be interpreted universally. This observation indicates that the lack of a universal reading for the head noun in (47)-b is not due to a locality issue; instead, it is because *GUME* is positioned higher than *vP*, which leads it to preferentially quantifies the subject of the relative clause.

The example presented in (49) also indicates that the *wh*-indefinite within a direct quotation, an embedded clause selected by the matrix predicate *sa=qu* ‘know=NEG’, cannot be licensed by *GUME*. In (49)-a *yawa=de* ‘where=DAT’ fails to achieve a universal reading. In contrast, in (49)-b, *yawa=de* ‘where=DAT’ within *vP* can be licensed by matrix *GUME*, allowing for universal reading. The lack of a universal reading in (49)-a can be explained by clause-mate constraint, while the presence of the universal reading in (49)-b requires a different explanation.

- (49)a. [_{CP} *si yawa=de gene-Xe bi-Xe=i*], *bi (*gume) sa=qu*.
 2SG where=DAT go-CVB AUX-PFV=NIF 1SG (*all) know=NEG
 ‘As for where you have been, I have no idea.’ (K/m89y/7N)
 b. [_{vP} *si yawa=de gene-me*] *gume o-mi*.
 2SG where=DAT go-CVB all AUX-IRR.NIF
 ‘(lit.) Wherever you go is fine for me.’ (K/m89y/7N)

4.4.2 Unconditional Clauses

Wh-indefinites and free choice items (FCIs) such as *yaya*-NP ‘any-NP’ within unconditional clauses can be licensed by *GUME*, as presented below, regardless of the clause-mate requirement discussed in the previous section. The examples in (17) are constituent unconditionals, while the *-ciwe* phrase in (3) and the *-ci* phrase in (50) are unconditional adjuncts. The examples in (51) are disjunctions (of propositions), based on Rawlins (2008). All these unconditionals introduce sets of alternatives into the sentences.

- (17) *Wh*-indefinites
- a. [si **ai** **jaqe** gya-me] **gume** o-mi.
 2SG what thing take-CBV all AUX-IRR.NIF
 'You can take anything.' (lit.) Whatever you take, it is fine for me.'
- b. [si **yawa=de** gene-me] **gume** o-mi.
 2SG where=DAT go-CVB all AUX-IRR.NIF
 'You can go anywhere.' (lit.) Wherever you go, it is fine for me.'
 (K/m89y/7N)
- (3) The indefinite determiner *yaya* within *-ciwe* concessive clause
yaya eriN o-ciwe gume miN=we byase.
 any time AUX-CONC all 1SG=ACC find.IMP
 'Whenever it is, (you can) always come to find me.'
 (vol.5#95)
- (50) *Wh*-indefinites within *-ci* conditional clauses
- a. [si **ai** **jaqe** gya-ci] **gume** o-mi.
 2SG what thing take-COND all AUX-IRR.NIF
 'You can take anything.' (lit.) Whatever you take, anything is acceptable.'
- b. [we gene-ci] **gume** o-mi.
 who go-COND all AUX-IRR.NIF
 'Anyone can go.' (lit.) It doesn't matter who goes, anyone is acceptable.'
 (K/m89y/7N)
- (51) Disjunctions
- a. **tere gene-mi na gene=qu na gume omi.**
 3SG go-IRR.NIF Q go=IRR.NEG Q all AUX-IRR.NIF
 'It is fine to me whether he is going or not.' (K/m55y/3N)
- b. **tere gene-mi na gene=qu na, bi (gume) sa=qu.**
 3SG go-IRR.NIF Q go=IRR.NEG Q 1SG all know-IRR.NEG
 'I don't know at all whether he is going or not.' (K/m55y/3N)

According to Rawlins (2008), free choice and unconditionals serve as sets of alternatives and must be understood as relating to the presupposition that all the alternatives are possible and only possible under a context set. Rawlins (2008) also assumes that the modal base is always intersected with the context set. For instance, in (52), the domain of the context set is wide enough to consider even the least likely possible individuals who might come to the party. In this case, *-ever* in constituent unconditionals plays a role in widening the intentional domain of interpretation.

- (52) Whoever comes to the party, it should be fun. (Rawlin 2008:209(631))

Based on Rawlins (2008), I propose that *GUME* in licensing unconditionals also adjoins modal auxiliaries, which express notions of possibility and necessity,

universally quantifies over the situations (the possible domain constrained by the context set). Furthermore, I suggest that the unconditionals presented above do not have an inherent universal operator. Instead, I align with Rawlins’ assertion that the default operator is the existential operator $[\exists]$. The universal reading, in this case, must be licensed by the presence of *GUME*. The derivation is like what is shown in (46), but instead, *GUME* in unconditional structures is adjoined to ModP. *GUME* triggers the movement of its associates (such as proposition, *-ciwe* clause or *-ci* clause) to its left and universally quantifies the clauses (a situation variable as assumed by Feng & Pan 2022). The *wh*-indefinites and free choice items (as individual variables) within the clause can be unselectively bound by $[\forall]$ introduced by *GUME*. This quantifier has an uninterpretable universal feature that is checked and activated, allowing the simultaneous evaluation of the variable. This hypothesis requires a comprehensive examination, and I will defer the specifics of this mechanism for future studies. This unselective binding strategy is also analyzed by Cheng (2017) and Feng & Pan (2022) in their studies on *DOU*-unconditionals.

In Mandarin Chinese, as illustrated in examples (4) and (53), Cheng (2017) argues that the expressions interacting with *DOU* must denote a set of alternatives. This can include either a nominal *wh*-phrase in (4) or a disjunctive sentence in (53), where *wulun* ‘no matter’ is optional. In (4), *DOU* is analyzed as not being directly linked to the *wh*-phrase, instead, it is associated with the entire preceding constituent (Cheng 2017:10).

- (4) (Wulun) *shei lai, wo *(dou) huanying.*
no.matter who come 1SG DOU welcome
‘No matter who comes, I welcome (him).’ (Cheng 2017 (17a))
- (53) (Wulun) *ni mai LGB haishi MP, Lisi *(dou) xihuan.*
no.matter you buy LGB or MP Lisi DOU like
‘No matter whether you buy LGB or MP, Lisi likes (it).’ (Cheng 2017 (17c))

Feng & Pan (2022:303) propose that two binding strategies are possible in Mandarin: E-type pronoun binding and unselective binding. In (54), Feng & Pan explain that *DOU* quantifies the set of possible situations in which people make calls, and these situations are relative to the actual circumstance. The semantic meaning is illustrated in (55), in which the top $\forall$ binds *s*’ (the set of situations that the speaker believes) and *x* (*na-ge-ren* ‘which person’).

- (54) [*Tongchang na-ge-ren da-diuanhua lai,*] *wo dou bu jie.*
usually which-CL-person telephone come I DOU NEG answer
‘Usually, I won’t answer the phone no matter which person calls.’
(Feng & Pan 2022:303 (56))

- (55) $\forall s', x$ [person (x, s') $\wedge$ call (x, s') $\rightarrow \exists s''$ [$s' < s'' \wedge$ say the speaker is not here (Hearer, s'')]] where $s' \in f(s)(\text{Speaker})$ and
 $f(s)(\text{Speaker}) = \{s' : \forall p[\text{believe}(p)(s)(\text{speaker}) \rightarrow p(s')]\}$
 for a situation of evaluation s and the speaker, $f(s)(\text{Speaker})$ is the set of situations where the speaker's beliefs about s holds. (Feng & Pan 2022:304 (58))

4.5 Scope Interactions with Negation

In the final section of this paper, I would like to mention the scope interactions with negation and suggest that the overt syntactic positions of *GUME* determine the scope relationships with negation. The expression quantified by *GUME* is typically interpreted in a higher position than negation. In (56), only total negation readings are permissible (i, iii), while the partial negation reading presented in (ii, iv) is not allowed.

- (56) *bo cikse' sole-Xe eweN=we gume je-kaqu=i.*
 we yesterday bake-PFV bread=ACC all eat-PFV.NEG=NIF
 i. ‘We, as for all of the bread, didn’t eat any yesterday.’ ($\forall > \neg$)
 ii. ‘*We didn’t eat all of the bread yesterday..’ ($*\neg > \forall$)
 iii. ‘All of us didn’t eat the baked bread yesterday.’ ($\forall > \neg$)
 iv. ‘*Not all of us ate the baked bread yesterday.’ ($*\neg > \forall$)
 (M/m22y/3N)

The negative morpheme *=qu* is assumed to be positioned above the aspectual marker *-Xe*, resulting in the form *-Xaqu*. The absence of partial negation reading can be explained by the overt structural positions between the universal quantified expression and the negation. *GUME* can be assumed to adjoin to the positions outside the νP , such as AspP or possibly NegP , allowing it to quantify the object and the subject. The object must undergo fronting to a higher position (A' -position) after being quantified by *GUME*, enabling it to take a wide scope over negation. However, the partial negation reading is possible when *GUME* adjoins to the νP with the adverb *embade* ‘together’, as exemplified in (57)-b, compared to (57)-a.

- (57) a. *ane yelaN nane gume ji-Xaqu=i.*
 why three person all come-PFV.NEG=NIF
 i. ‘Why is it that all of three people didn’t come?’ ($\forall > \neg$)
 ii. ‘*Why is it that the three people didn’t all come? (only two came)’ ($*\neg > \forall$)
 b. *ane yelaN nane gume embade ji-Xaqu=i.*
 why three person all together come-PFV.NEG=NIF
 i. ‘Why is it that three people didn’t come altogether?’ ($\forall > \neg$)
 ii. ‘Why is it that the three people didn’t come together? (only two came).’ ($\neg > \forall$)
 (M/m22y/3N)

(58) a. The structure of (57)-b(i): ($\forall > \neg$)
 [XP_[$\forall$] **gume** [_{# $\forall$]} [_{NegP} V-**Xaqu** [_{AspP} <-Xe> [_{vP} *embade* [_{vP/VP} <XP> <V>]]]]]
 b. The structure of (57)-b(ii): ($\neg > \forall$)
 [XP_[$\forall$] [_{NegP} V-**Xaqu** [_{AspP} <-Xe> [_{<XP_[$\forall$]>} **gume** [_{# $\forall$]} [_{vP} *embade* [_{vP/VP} <XP>
 <V>]]]]]]]

This paper delves into the syntactic properties and interpretations of the universal quantifier *GUME* ‘all’, exploring how it functions within various linguistic contexts. Through a detailed analysis, *GUME* contributes universality and maximality to the various preceding expressions, including noun phrases, pronouns, free-choice items (FCIs), adverbial temporal phrases, and unconditional clauses. I adopt a feature-checking strategy, positing that *GUME* has an uninterpretable universal feature [$u\forall$] that triggers the movement of its associates to the specifier position of *GUME*. The associates then move further to higher positions such as a subject position or any A’ positions. The feature-checking approach not only clarifies the leftness condition but also aids in determining the scope interpretations. Additionally, the discussions in this paper highlight both the similarities and differences between *GUME* quantification in Sibe and *DOU* quantification in Mandarin Chinese, emphasizing the role of universal quantifiers across languages.

(59) **we gume kuile-we=qu.**
 who all suffer a loss-CAUS=IRR.NEG
 ‘No one suffers a loss.’ (vol.5#87)

- (60) a. **we gume ji-Xaqu=i.*
 who all come-PFV.NEG=NIF
 ‘No one came.’ (K/m89y/7N)
- b. **we gume baile-maXe=i.*
 who all happy-IMPV=NIF
 ‘Everyone is happy.’ (K/m89y/7N)

Considering the potential for individual differences in grammaticality judgments, it is essential to conduct further research on the licensing of *wh*-indefinites in Sibe. This includes the discussions that *wh*-indefinites are licensed by *GELE* in negative statements, as well as the NPI properties of *GELE*. I will reserve these topics for future studies.

Abbreviations

-	Suffix Boundary	FOC	Focus
=	Clitic Boundary	GEN	Genitive
#	Word Boundary	IMP	Imperative
1	1 st person	IMPV	Imperfective
2	2 nd person	INCL	Inclusive
3	3 rd person	INF	Inference
ACC	Accusative	IRR	Irrealis
ALL	Allative	NEG	Negation
AUX	Auxiliary	NIF	New Information
CAUS	Causative	NMLZ	Nominalization
CL	Classifier	OIF	Old Information
COMP	Complementizer	PFV	Perfective
CONC	Concessive	PL	Plural
COND	Conditional	PN	Proper Noun
CVB	Co-verb	Q	Question
DAT	Dative	SG	Singular
EXCL	Exclusive		

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Summary

This paper discusses the syntactic properties and interpretations of the universal quantifier *GUME* ‘all’ in the Sibe language. *GUME* imparts universality and maximality to various preceding expressions, including noun phrases, pronouns, free-choice items, adverbial temporal phrases, and unconditional clauses. Employing a feature-checking approach, I propose that *GUME* possesses an uninterpretable universal feature $[u\forall]$, which triggers its associates to move to the specifier position of *GUME*. This feature-checking mechanism not only clarifies the leftness condition but also contributes to the determination of scope interpretations. Furthermore, the analysis highlights similarities as well as distinctions between *GUME* quantification in Sibe and *DOU* quantification in Mandarin Chinese, emphasizing the significance of universal quantifiers across languages.

(139030@o365.tku.edu.tw)