Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Doubling in Hong Kong Sign Language

Emily Koenders
The Chinese University of Hong Kong

The present paper provides a copy-movement analysis for doubling in Hong Kong Sign Language (HKSL). HKSL allows for the doubling of heads and phrases in an XYX pattern with the doubled element occurring clause-finally. I argue that doubled elements undergo A'-movement into Spec,FocP, attracted by a focus-feature on Foc°. The moved element then fuses with the abstract focus feature head of FocP and becomes morphologically distinct from the lower element. This research provides a uniform account of two related phenomena, namely doubling and right dislocation, by considering head-to-spec movement. Finally, doubling in HKSL has not been previously described, and therefore my account adds to the typological picture of doubling in sign and spoken languages. This is especially important because HKSL allows for the doubling of both heads and phrases, which sets it apart from earlier accounts on doubling in other sign languages.

Keywords: doubling, focus-prominence, head-to-spec movement, Hong Kong Sign Language, right dislocation

1. Introduction

It has been remarked by researchers that the economy principle of language should be violated if an utterance contains the same constituent twice and has both instances phonologically realised (e.g., Kimmelman 2012). Yet, in spite of this, it has been reported for several languages that such "doubling" of syntactic elements can occur, as is exemplified in examples (1) to (3) from Italian Sign Language (LIS), Sign Language of the Netherlands (NGT), and Nupe, respectively (doubled elements in bold face).

(1) **WHERE** PLACE ACCIDENT **WHERE**?
'Where did the accident take place?' [LIS; Branchini et al. 2013: 168]

(2) ONE **BRING** SCHOOL **BRING.**
'At 1 I brought her back to school.' [NGT; Kimmelman 2019: 188]

https://doi.org/10.1075/sll.23004.koe | Published online: 18 April 2024
Sign Language & Linguistics ISSN 1387-9316 | E-ISSN 1569-996X © 2024 John Benjamins Publishing Company

(3) Musa è **gi** bise **gi**.
Musa PRS eat hen eat
'Musa IS eating the hen.' [Nupe; Kandybowicz 2007: 120]

Though some researchers argue that doubled elements could be the result of base-generation (e.g., Petronio 1993; Petronio & Lillo-Martin 1997), the prevalent analyses are variations on the copy-movement theory (e.g., Nunes 2004; Kandybowicz 2007; Nunes & De Quadros 2008; Barbiers et al. 2010; Branchini et al. 2013; among others). Branchini et al. (2013), for instance, argue that doubled WH-words in LIS are identical full copies in a focused cleft question, where one element is located in Spec,CP and the other in Spec,FocP. They can both be realised because they are the heads of two distinct movement chains. A slightly different approach is the one taken by Nunes (2004), who originally came up with the idea that multiple copies of a movement chain may be phonologically realised if they are distinct and thus invisible to linearisation. This can be achieved through the fusion of a moved element with a head (Nunes & De Quadros 2008). There also exist accounts of doubling that do not include a syntactic analysis, but focus on the function of doubling. For example, Kimmelman (2012, 2019) argues that the function of doubling is the foregrounding of important information.

Doubling also occurs in Hong Kong Sign Language (HKSL), where free conversation data present us with 454 tokens of this phenomenon. Consider examples (4–6) below:

(4) **TAKE-THE-TRAIN** OVERNIGHT, **TAKE-THE-TRAIN.**
'We took the train overnight.'

(5) TIME ABOUT **SIX-O'CLOCK SEVEN-O'CLOCK** NIGHT, **SIX-O'CLOCK SEVEN-O'CLOCK.**
'It was about 6 or 7 o'clock at night.'

(6) IX_1 MOTHER **MANY** BITTER, **MANY.**
'My mother has been through a lot.'

Though it is indeed true that it seems superfluous for an utterance to contain the same element twice, this doubling can be attested frequently in naturalistic HKSL data. What makes the HKSL data especially interesting is that both heads and phrases of all sorts can be doubled. This makes HKSL unique in comparison to other sign and spoken languages.

In what follows, I provide an analysis of HKSL doubling that builds on and augments existing doubling analyses, specifically that of Nunes & De Quadros (2008). This analysis accounts for the syntactic structure and processes that underlie the phenomenon of doubling. In addition to the syntactic analysis, I also discuss the function doubling serves regarding information structure. Not only is

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

my paper the first analysis of doubling in HKSL, but, due to the augmentation of existing analyses, I am also able to propose a uniform account for doubling and a phenomenon very similar to it: right dislocation. Furthermore, my account of HKSL adds to the typological data on doubling in both sign and spoken languages.

Section 2 of this paper contains an overview of the data extracted from free conversations between native signers of HKSL. Section 3 presents the theoretical account, in which I argue that doubling is a form of focalisation, and that rightward long distance A'-movement moves doubled elements into Spec,FocP. In previous accounts of doubling, the function of doubling has been linked to information structure. I hypothesise that it is possible to make this connection between doubling, focalisation, and information structure more concrete and prominent. Therefore, in Section 4, I will introduce a novel avenue of investigation and propose that the prominence of doubling in the HKSL data might be evidence that HKSL is a focus-prominent language. Finally, Section 5 concludes this paper.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

2. Descriptive data analysis

The data used for this study come from free conversations between three native signers of HKSL: two men and one woman in their late 20s and early 30s. The signers interact with each other on a regular basis. For the purpose of this study, I collected utterances containing doubled elements from four of such conversations with a total duration of approximately 280 minutes. Each conversation involves an interaction between two native signers of HKSL. In total, I found 454 instances of doubled elements. The number of doubled tokens produced by the three signers were roughly similar: as shown in Table 1, signer A produced 136 tokens, signer B produced 169 tokens, and signer C produced 149 tokens.

These 454 tokens can be divided into several categories, as also shown in Table 1. In what follows, I will provide definitions of the different types of doubled elements and also discuss which of these will be the target constructions for formal analysis.

2.1 Clause-internal doubling

In the present paper, *clause-internal doubling* (CID) is defined as the phonological realisation of a constituent more than once within the same clause (i.e., CP). Clause boundaries were defined based on three criteria: (i) a brow raise and slight head tilt forward (a non-manual cue); (ii) a perceivable pause in signing (a prosodic cue); or (iii) change of interlocutor, i.e., turn-taking (a discourse cue).

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Table 1. Number of tokens per signer

Doubling type	Total tokens	Signer A	Signer B	Signer C
Clause-internal doubling	**307**	**88**	**114**	**105**
XYX	286	86	107	93
YXX	18	2	7	9
XXY	3			3
Clause doubling	**8**	**4**	**1**	**3**
XYX	7	3	1	3
XXY	1	1		
Index doubling	**53**	**19**	**26**	**8**
Clause repetition	**86**	**25**	**28**	**33**
XX	43	13	9	21
XX'	43	12	19	12
More than one type of doubling	45	14	21	10
Total	**454**	**136**	**169**	**149**

Furthermore, Sze (2004) also notes that HKSL signers tend to blink at sentence boundaries to indicate the completion of an independent information unit. These criteria were established by the native Deaf signers who work at our research centre,[1] and the coding of these clause boundaries in the HKSL doubling data was also verified by a Deaf researcher at our centre. The doubled constituents of CID must refer to the same referent or event/action/state and must be essentially the same lexical word, though either of the two copies may show morphological/phonetic modification. Doubling patterns may be XYX, YXX, XXY, or XX('). Note that the apostrophe in XX(') indicates that there is (optionally) a slight variation between the first and second element. Examples of CID from my data are:[2]

(7) UNTIL-NOW **STILL**$_{a}$ FIGHT, SEEM NOW~STILL, **STILL**$_{a}$.
'It seems like they're still fighting.'

(8) COMPUTER IX$_{1}$ **NOT-HAVE** IN-THE-PAST **NOT-HAVE.**
'I didn't use to have a computer in the past.'

1. The Centre for Sign Linguistics and Deaf Studies, Department of Linguistics and Modern Languages, The Chinese University of Hong Kong.

2. Following the transcription style used at the CSLDS, the use of the tilde (~) in my sign language transcription indicates that two signs were semi-contracted: i.e., produced very quickly and closely together.

The above examples show CID of the XYX pattern, meaning that the doubled element occurs once in the main clause and then again at the end of the clause. In (7), the adverb STILL is doubled and in (8) the modal (or negative existential) verb NOT-HAVE. As shown in Table 1, 307 out of 454 tokens (67.6%) are CID. In 286 of those 307 instances (93.2%) of CID, the sentence follows the XYX pattern. CID thus predominantly follows an XYX pattern. Below are some of the outlier data showing a YXX (9) and an XXY (10) structure.[3]

(9) TIME NIGHT **FEW CLOSE FEW CLOSE**.
'Since it was late at night, they were almost closing.'

(10) **IX$_{obj}$ STORY**, **IX$_{obj}$ STORY** WHAT?
'What is that story?'

In (9) the verb phrase FEW CLOSE is doubled in a YXX pattern, and in (10) the noun phrase IX$_{obj}$ STORY is doubled in a XXY pattern. Only 18 tokens (5.9%) of YXX CID were found in the data and only 3 tokens (<1%) of XXY CID.[4]

2.2 INDEX doubling

A particular type of doubled element that occurs within the clause are pronominal index signs. The doubling of index signs is a special type of CID that – though it also follows an XYX structure – is treated separately here. In the literature, a phenomenon that resembles this type of doubling is commonly referred to as *topic copying* or *subject pronoun copy*, and it has been attested in various sign languages (e.g., Liddell 1980; Padden 1988; Lillo-Martin 1990; Petronio 1991; Aarons et al. 1992; Torigoe 1994; Wilbur 1994; Bos 1995; Fischer 1996; Van Gijn 2004; Johnston & Schembri 2007; Crasborn et al. 2009; Kimmelman 2015). Note that in the current research, right-peripheral index signs are only considered doubling (or *copies*), if they are the exact same item from the numeration. This type of doubling occurs 53 times in the data (see Table 1). (11) and (12) below are examples found in the HKSL dataset.

3. HKSL WH-words occur in clause-final position, which is why (10) shows an XXY pattern of doubling. However, when WH-words are doubled, they remain in situ, and the doubled WH-word occurs in clause-final position.

4. An anonymous reviewer pointed out that there is a possibility that rare XXY and YXX patterns are more appropriately analysed as discourse repetitions than doubling. This would certainly explain, for example, why it appears that HKSL does not tolerate adjacent copies of modal verbs (see Section 3.3 and Footnote 9).

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

(11) **IX$_2$** $_2$DISTURB$_3$, **IX$_2$**?
'Did you disturb him?'

(12) **IX$_2$** IN-THE-PAST PLANE-FLY USA **IX$_2$**.
'You've flown to the USA before.'

As with other types of CID, the doubled element occurs twice within the same clause. Sze (2012) argues that these right-dislocated index signs in HKSL are "aboutness" topics, which, through their spatial indexing, serve the function of sustaining the discourse topic (cf. Crasborn et al. (2009) for NGT). According to Sze's data, the index signs in the right periphery refer back to the topic of the sentence (2012: 1954). In my data, I also found that the doubled index signs consistently referred to "known" or "old" information and referents.

One additional observation from the data is that index doubling can cooccur with the doubling of other constituents, i.e., a sentence can contain more than one type of doubling (45 attestations, 9.9%), and one of those always involves the doubling of an index sign. For example, in (13) below, both the modal verb NEED as well as the index sign IX$_2$ ('you') are doubled. In (14), the adjectival predicate FAVOURITE and the index sign IX$_3$ ('he') are doubled. And in (15), the clause exhibits both index doubling of IX$_3$ ('she') as well as doubling of the DP IX$_1$ ELDER-SISTER-IN-LAW ('my sister-in-law').

(13) *IX$_2$* **NEED** X-RAY **NEED** *IX$_2$*.
'You should get an X-ray done.'

(14) *IX$_3$* **FAVOURITE** AUTHOR **FAVOURITE** *IX$_3$*.
'He is my favourite author.'

(15) IN-THE-PAST **IX$_1$~ELDER-SISTER-IN-LAW** *IX$_3$* SAME **IX$_1$~ELDER-SISTER-IN-LAW** *IX$_3$*.
'My sister-in-law used to do that same thing.'

We know that IX$_3$ in (15) is not a determiner within the noun phrase because HKSL nominal determiners are usually prenominal (Tang & Sze 2002); in fact IX$_1$ is the nominal determiner and IX$_3$ the resumptive pronoun.

Index doubling can thus cooccur with CID. In contrast, doubling of other types of constituents may not cooccur; for instance, the doubling of a modal verb in combination with the doubling of any other constituent is never attested. What also stands out is that if a sentence contains both index doubling and doubling, the doubled index sign is always in clause-final position. In other words, the index sign always comes after any other doubled constituent. This distribution suggests that index doubling should be treated separately from other forms of doubling

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

and leads me to assume two different syntactic positions for these two doubled elements.

2.3 Clause doubling vs. clause repetition

In addition to CID, it is also possible for clauses to be doubled in their entirety in an XYX pattern. This will be referred to as *clause doubling*. Table 1 shows that only 8 instances of clause doubling were attested in the data. Consider examples (16) and (17):

(16) **SWIMMING GOOD.** SWIMMING CAN. **SWIMMING GOOD.**
'He swims well. He can swim. He swims well.'

(17) **NOW FAMILIAR.** CHAT GOOD. **NOW FAMILIAR.**
'Now we know each other well. We have pleasant conversations. Now we know each other well.'

Clause doubling is different from what I have referred to as *clause repetition* in Table 1. Clause repetition follows a XX(') pattern, and it occurs because the speaker/signer was interrupted or is asking for the addressee's attention. These conversational considerations were not found for clause doubling. Consider examples (18) and (19), which both exhibit the XX pattern:

(18) IX_2 DRINK CANNOT? **IX_2 DRINK CANNOT?**
'You can't drink? You can't drink?'

(19) $\text{IX}_{2\ 2}$TOGETHER$_1$? **$\text{IX}_{2\ 2}$TOGETHER$_1$?**
'You and me together? You and me together?'

In the present paper, only CID, index doubling, and clause doubling will be considered linguistically significant forms of doubling. However, the scope of this study is limited to providing a theoretical account for CID and index doubling, since clause doubling involves complete CPs. Whether the analysis proposed for CID and index doubling proposed in the present paper can also be adopted for clause doubling will be the subject of a follow-up study.

2.4 Doubled elements

The data show that several word classes can be doubled in HKSL. In fact, HKSL not only allows for the doubling of different kinds of heads, but also for the doubling of (parts of) phrases. Table 2 provides an overview of what types of heads and phrases have been found in the doubling data.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Table 2. Overview of doubled word classes and constituents

Doubled element	Clause-internal	Clause doubling	Index doubling	Clause repetition	Total	Percentage
V / VP / PredAdj	173				173	38.1
CP		8		86	94	20.7
INDEX			58		58	12.8
DP / N	46				46	10.1
Adv	38				38	8.4
Modal	24				24	5.3
Adj	8				8	1.8
Num	6				6	1.3
Wh	3				3	0.7
gesture	3				3	0.7
Prep	1				1	0.2
Total	**302**	**8**	**58**	**86**	**454**	**100**

What the table clearly shows is that predicative adjectives (20), verbs (21), and verb phrases are doubled most often as they make up 38.1% of the data.

(20) FEW **UNFAIR** CANNOT **UNFAIR.**
'If it's just a few that would be unfair.'

(21) PERFECT **UNDERSTAND IX$_2$** NORDIC STORY **UNDERSTAND IX$_2$**?
'Do you fully understand those Nordic stories?'

Nouns (22) and determiner phrases (23) are also frequently doubled. This kind of doubling makes up 10.1% of the data. Other types involve adverbs (24), which make up 8.4%, and index signs (i.e., index doubling), which make up 12.8% of the data. Further word classes that were found doubled are modal verbs, numerals, adjectives (non-predicative), WH-words[5] (25), gestures, and a preposition.

(22) GOOD BUT **WIND** HAVE~NOT-HAVE IX$_{loc}$ [=USA] **WIND**?
'Alright, but is there any wind over there?'

(23) **THREE MONTHS** SEEM **THREE MONTHS.**
'I think it was three months.'

5. See also Bross (2020) on doubled WH-signs in German Sign Language (DGS), which includes the doubling of the complex WH-phrase WITH WHO.

(24) IX$_2$ **DEFINITELY** DISLOCATION **DEFINITELY.**
'You definitely dislocated it.'

(25) PLASTIC IX$_{obj}$ (=plastic) **WHAT** CHEMISTRY **WHAT**?
'Then what is the chemical composition of plastic?'

Except for index signs and CPs, all word classes may be doubled clause-internally. The large number of doubled CPs is due to clause repetition, and therefore, these CPs will not be considered as doubling data.

Contrary to previous research on doubling in other sign languages (cf. Petronio 1993; Nunes & De Quadros 2008), HKSL thus allows for the doubling of both heads and phrases. Petronio (1993), for instance, argues that the doubled element is base-generated in the C-head, and therefore, the doubled element has to be a head. Indeed, in American Sign Language (ASL), this is the case. Similarly, Nunes & De Quadros argue for both ASL and Brazilian Sign Language (Libras), that only head elements can be doubled, and their analysis involves copy and movement of the doubled element. In the examples below, compare how HKSL allows VP-doubling, i.e., doubling of [$_{VP}$ IX$_1$ BUY BOOK][6] in (26),[7] while the same is not allowed in Libras (27).

(26) **IX$_1$ BUY BOOK** HAVE **IX$_1$~BUY BOOK.**
[[IX$_1$ BUY BOOK HAVE $_{TP}$] [IX$_1$ BUY BOOK $_{VP}$] $_{CP}$]
'I have bought the book.'

(27) * JOHN **BUY CAR** YESTERDAY **BUY CAR**
'Yesterday John bought a car.' [Libras; Nunes & De Quadros 2008: 4]

When discussing Cantonese dislocation copying, Cheung (2015: 229) notes that "more than one element can be dislocated simultaneously". Cantonese data thus more closely resemble what we find in HKSL – see, for example, (28) (SP = sentence particle).

(28) 佢 話 我 錯 喎, 佢 話。
keoi waa ngo co wo, keoi waa
he say I wrong SP he say
'He said I was wrong.' [Cantonese; Cheung 2015: 230]

6. See Section 3 of the present paper for a structural analysis.

7. The HKSL verb HAVE is an existential verb, and it conveys the meaning that IX$_1$ BUY BOOK has taken place. HAVE is not c-commanded by IX$_1$.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

2.5 Phonetic and morphological modifications

Kimmelman (2019) remarks that doubled constituents need not always be fully identical. In his own data from Russian Sign Language (RSL) and Sign Language of the Netherlands (NGT), identical doubling occurs more frequently than modified doubling: in RSL, 64% of doubling was identical, and in NGT, 72% of doubling was identical (Kimmelman 2019: 191). The modification of doubled elements can take several forms, which are best categorised as (a) phonetic modification and (b) morphological modification. As for phonetic modification, our HKSL data contain some examples of this type of modification. We observe that the doubled element could have fewer or more repetitions in the movement of the sign (29) below; movements could be larger, faster, or slower (30); and one-handed signs might be produced with two hands or vice versa (31).

(29) **CAN** SELL **CAN**$_{[\%\text{movement reduced}]}$.
'You could sell it.'

(30) SIXTY-THOUSAND **INSURANCE** CAN PAY **INSURANCE**$_{[\%\text{sign held longer}]}$.
'You can pay the $6000 insurance.'

(31) ONLINE SEE$_a$ IX$_{obj}$ [= site] **TABLE**$_{[\%\text{one-handed}]}$ IX$_{obj}$ [= table] **TABLE**.
'I saw the table online.'

Morphological modification of doubled elements is found with verbs or verb phrases. For example, verbal inflection such as agreement marking (32) or aspectual marking (33) may be added to or dropped from the doubled element; or certain parts of a constituent may surface only in the doubled structure (34).

(32) **SHOW** SIMPLE? **SHOW**$_{[\%\text{plural.object}]}$ SIMPLE?
'Is it that simple to show [people]?

(33) **LOOK** WINDOW IX PLANE **LOOK-ASP.CONT**.
'He looks out of the window of the plane.'
[RSL; Kimmelman 2019: 192 (bold face added)]

(34) DON'T-KNOW, NEWSPAPER FEW IX$_1$~**SEE NEWSPAPER FEW**.
'I don't know, I don't often read the newspaper.'
(*doubled VP*: (SEE) NEWSPAPER FEW)

Despite the fact that both phonetic and morphological modification of doubled elements is attested in the HKSL data, such modifications are very rare: they occurred only in a total of 32 tokens (7% of the data). Furthermore, the HKSL data was inconsistent regarding the "heaviness" – i.e., the morphological or phonetic complexity – of the two elements: for 18 tokens out of 32, the first element was

heavier, and for 14 out of 32 tokens, the doubled element was heavier. From this, it can be concluded that despite the fact that modified doubling exists in HKSL, it is not significant.[8]

2.6 Interim discussion

Our HKSL data show 307 instances of CID and 53 instances of index doubling. CID follows an XYX pattern, with the doubled element in clause-final position. Similarly, when index doubling occurs, the doubled index signs also occurs clause-finally. When a sentence contains both these types of doubling, the doubled index sign (i.e., index doubling) ends up to the right of the other doubled element. HKSL allows for the doubling of head elements as well as phrases, which sets it apart from other sign languages that have been studies and makes it pattern with languages such as Cantonese. The vast majority of doubled elements are verbs, predicative adjectives, and verb phrases, but HKSL also allows for the doubling of nouns, noun phrases, adverbs, modals, WH-words, numerals, and more. In the next section, I will provide a formal analysis that accounts for these data.

3. Formal analysis

In this section, I will analyse how the HKSL data discussed above is structured syntactically. Using a rightward copy-movement approach to focalisation, I will argue that doubling is invoked by a focus feature within FocP. Furthermore, I propose that in HKSL syntax, there are different landing sites for index signs involved in index doubling, modals that are doubled, and other doubled constituents.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

8. An interesting analysis of verb doubling constructions in ASL, where the second element is always aspectually modified, has been suggested by Matsuoka (1997). Matsuoka calls such structures a "verb sandwich" (cf. Fischer & Janis 1992); see (i) for an example (Matsuoka 1997: 129):

(i) STUDENT NAME S-A-L-L-Y TYPE HER TERM PAPER TYPE$_{[asp:cont]}$.
'A student whose name is Sally was typing and typing her term paper.'

Matsuoka proposes that verb sandwiches are the result of verb raising without deletion of the trace at PF. The aspectual marker is an inflectional head (i.e., an affix) that projects AspP. The copied verb moves to Asp^{0} and merges with the aspectual affix.
Unlike the HKSL data, ASL verb sandwiches thus always involve aspectual modification of the second verbal element. Another difference with the HKSL data is that Matsuoka's account only deals with verb doubling, whereas my HKSL account provides an analysis of the doubling of different types of elements.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

My account of HKSL doubling takes Nunes & De Quadros' (2008) study as point of departure although it departs from their analysis in various ways.[9] I argue that HKSL CID is caused by rightward movement of a copied element into Spec,FocP. FocP has an unvalued [focus]-feature that is valued by movement of a doubled element with a [+focus]-feature into Spec,FocP. Similar to Martins' (2007) views on verb doubling in European Portuguese, I view the two elements as "copies of the same item from the numeration" (2007:77), an analysis which is in line with the copy theory of movement (Chomsky 1995).

The moved element fuses with the abstract focus feature head in Spec,FocP and thus becomes morphologically distinct from the lower element, i.e., it undergoes *morphological reanalysis* (Halle & Marantz 1993). Since fusion takes place before linearisation (Nunes 2001, 2004), both elements can be realised at PF (following the analyses of Martins (2007) for European Portuguese and Nunes & De Quadros (2008) for ASL and Libras). Linearisation is the process by which syntactic structures receive word order based on the asymmetric c-command relations within the structure, e.g., the c-command structure (W … X … Y). Since fusion merges two sister heads of the same category node into a terminal node (Martins 2007), Focus°, it is no longer accessible to syntactic operations such as the Linear Correspondence Axiom (LCA, Kayne 1994). Therefore, the two elements from the linked chain can both be phonologically realised, as they do not interfere with linearisation: (X … Y … X) becomes (X+A … Y … X), in which A is the feature head. For example, in European Portuguese, a verb may be doubled, as illustrated in (35a):

(35) a. Ele comprou o carro, comprou.
he bought the car bought
'He did buy the car.' [European Portuguese; Martins 2007:87]

b. $[_{CP}\ [_{\Sigma P}$ ele comprou$_i$ o carro$]_k\ [_{C'}\ [_C$ comprou$_i]\ [_{\Sigma P}$ ~~ele~~$_j\ [_{\Sigma'}$ ~~comprou~~$_i\ [_{TP}\ [_{T'}$ ~~comprou~~$_i\ [_{VP}$ ~~ele$_j$ comprou$_i$ o carro~~$]\ ]\ ]\ ]\ ]_k\ ]\ ]$

According to Martins' analysis, shown in (35b), the doubled verb *comprou* moves through ΣP and is fused with C to form C°. Since the second copy of the verb undergoes morphological reanalysis, it becomes V+C, which is distinct from the lower copy V.

Since I assume that HKSL is right-branching (see De Quadros 1999; Cecchetto et al. 2009; among others), I suggest that the morphological reanalysis that results from the movement of a doubled element looks as follows:

9. Unlike Nunes & De Quadros' (2008) account, I do not argue for remnant movement of the TP into Spec,TopP, nor do I argue for emphatic focus in HKSL.

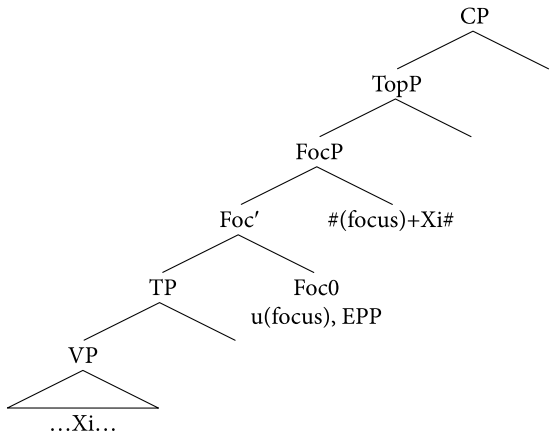


Figure 1. Fusion of doubled element within Spec,FocP

The focused element X is copied from VP and moves into Spec,FocP, where it fuses with the abstract focus feature head in Spec,FocP. Example (20) is repeated below as (36a) to show how this movement would look in HKSL (36b):

(36) a. FEW **UNFAIR** CANNOT **UNFAIR.**
'If it's just a few that would be unfair.'
b. [[[[[[$_{VP}$ FEW UNFAIR$_i$ CANNOT] $_{TP}$] [$_{Foc}$ U(focus), EPP] $_{Foc'}$] [UNFAIR$_i$] $_{FocP}$] $_{TopP}$] $_{CP}$]

Despite the fact that both copies of UNFAIR are coindexed, neither is deleted because the doubled element in Spec,FocP is morphologically distinct enough not to interfere with linearisation.

3.1 Island constraints

The grammaticality of doubling is sensitive to islands (see also Petronio 1993; Nunes & De Quadros 2008). Elements that are embedded in island clauses cannot be copied, extracted, and moved up to Spec,FocP. This is illustrated by the examples in (37) to (40). (37) is the grammatical (non-island) case. (38) and (39) involve doubling of an element from within a complex NP island and are thus ungrammatical, as is (40), in which an element from within an adjunct island is doubled.

(37) IX$_1$ $_1$**SAY**$_2$ **FINISH** CONTENT, $_1$**SAY**$_2$ **FINISH.**
'I've already told you the content.'

(38) * [**FATHER** IX$_3$ ISSUE SOLVE FINISH $_{NP}$] IX$_2$ HEAR, **FATHER**?
'You heard [the fact] that father solved the problem, father?'

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

(39) * [**FRENCH** GOOD-AT $IX_{3a\ NP}$] COMPANY IX_{3b} $_aHIRE_b$ FINISH, **FRENCH**.
'That company hired someone who is very good at French, French.'

(40) * [**FEMALE** IX_3 ARRIVE+CL:person] IX_1 ELDER-BROTHER HAPPY, IX_3 **FEMALE**.
'When the woman arrived, my brother was very happy, the woman.'

Note that examples (37–40) above were not part of the corpus data set. These example sentences were created by myself working together with a linguistically trained native signer of HKSL to represent what doubling of elements embedded in island clauses would look like. The native HKSL signer then asked three other native signers for their judgements and interpretations of these sentences.

The ungrammaticality of the examples above shows that doubled elements are not base-generated (cf. Petronio 1993) because, if they were, there should be no restrictions on what elements are allowed in FocP as well as on how these elements relate to the matrix clause. Additionally, the sensitivity to island boundaries of these doubled elements is predicted by Cheng & Vincente (2013: 26f) for such long-distance A'-head-movement.

3.2 Head-to-spec movement

In HKSL, both heads and phrases can be doubled. This means that in my analysis, movement into Spec,FocP is available to both minimal and maximal projections, i.e., both heads and phrases may undergo A'-movement into a specifier position.

It is beyond the scope of this paper to summarise the debate on head-to-spec movement. In short, head-to-spec movement has been argued to violate two syntactic constraints, namely the Chains Uniformity Condition (CUC; Chomsky 1995: 253) as well as the Head Movement Constraint (HMC; Travis 1984: 131). However, other researchers have long since called the legitimacy and necessity of both the CUC and the HMC into question (see Fukui & Takano 1998; Toyoshima 2001a, 2001b; Pesetsky & Torrego 2001; Matushansky 2006; Vicente 2009; Roberts 2011; Cheng & Vicente 2013; Lee 2017; among others, for the main arguments in defence of head-to-spec movement).

The HMC can be derived from c-selection, which means that a head selects its own complement. This c-selection can be achieved through feature checking (Svenonius 1994). Based on this notion, Matushansky (2006) argues that head movement and phrase movement are essentially the same, the only difference being that phrasal movement is triggered by Agree and head movement by c-selection. Head-to-head movement is thus the attraction of a head-element into a head-position because of the c-features of the head that attracts (Cheng & Vicente 2013: 27). Similarly, head-to-spec movement can be the result of c-selection, i.e., of features triggering head movement (as has also been suggested by Fukui &

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Takano (1998: 47)). According to Cheng & Vicente (2013), features that trigger this head movement could include [topic] and [focus] features. The assumption that movement of whatever element is for the purpose of checking features, is in line with the Feature Checking Theory of Movement (Chomsky 1992). This also implies that the landing site of such movement cannot be empty; yet, the category or features that are present can be phonologically invisible (Toyoshima 2001b: 117).

Matushansky (2006) argues that head-to-spec movement leads to morphological merger (cf. morphological reanalysis, Halle & Marantz 1993), resulting in the fusion of both heads, the moved head and the adjacent projecting head, into one constituent. In the case of HKSL doubling, the doubled element moving into Spec,FocP would thus merge with Foc°, as I have argued above. Since Foc° contains a [focus] feature, the doubled element can undergo long-distance movement into its specifier (Vicente 2009: 165). As Matushansky (2006: 71) mentions, this analysis does away with the "undesirability of having two types of movement in linguistic theory".

3.3 Mood phrase

It is necessary to discuss HKSL modal verbs separately from other types of doubled elements because in HKSL, modal verbs surface in clause-final position, as is shown in (41–43).

(41) IX$_1$ MOTHER SWIM CANNOT.
'My mother can't swim.'

(42) MONGKOK IX$_{loc}$ BUY CAN.
'You can buy it in Mongkok.'

(43) $_1$HELP$_2$ MUST?
'Should I help you?'

However, when the modal is doubled, one copy surfaces in front of the main verb and the other in the clause-final position, where one would usually find the modal in utterances without doubling, see (44) to (46).

(44) **WANT** GO-HOME, **WANT**.
'I want to go home.'

(45) IX$_3$ [= friend] BORROW BANK, *IX$_{obj}$* [= bank] **NEED** SEE WORK PROOF **NEED**, *IX$_{obj}$*.
'He [wanted to] borrow money from the bank. The bank needed to see his proof of employment.'

(46) CAN SELL, CAN.
'You could sell it.' (adapted from (29))

However, this should not be taken to imply that, in the case of doubled modals, as in (44–46), the clause-final occurrence of the modal would be the original one and the other one the copy, as that would mean that the doubling of modal verbs abides by different rules than the doubling of other elements. Instead, I would argue that there is a MoodP in HKSL, and that in HKSL sentences that do not involve doubling, the modal verb moves to MoodP leaving behind a trace, as is illustrated for example (41) in (47), where (47a) is the underlying and (47b) the derived structure.

(47) a. [IX_1 MOTHER CANNOT SWIM $_{\text{TP}}$]
b. [[[[[IX_1 MOTHER t^i SWIM $_{\text{TP}}$] [$_{\text{Mood}}$ CANNOT^i] $_{\text{MoodP}}$] $_{\text{FocP}}$] $_{\text{TopP}}$] $_{\text{CP}}$]

However, when the utterance contains doubling, the modal verb moves through MoodP and further into Spec,FocP. The trace left behind in MoodP disallows the movement of the lower copy of the modal verb into MoodP, and the lower copy can thus only be spelled out in situ.[10] In (45′), I provide a modified version of the sentence in (45) (neglecting the doubling of the index for reasons of clarity) as well as its derivation (45′b):

(45′) a. [IX_{obj} NEED SEE WORK PROOF NEED $_{\text{TP}}$]
b. [[[[[[IX_{obj} NEED^i SEE WORK PROOF $_{\text{TP}}$] [$_{\text{Mood}}$ t^i] $_{\text{MoodP}}$] [$_{\text{Foc}}$ U(FOCUS), EPP] $_{\text{Foc'}}$] [NEED^i] $_{\text{FocP}}$] $_{\text{TopP}}$] $_{\text{CP}}$]

This analysis is supported by two pieces of evidence. Firstly, if we assumed that modal verbs in doubling constructions remain in MoodP, we would expect to find instances in the data where two elements are doubled, one of which would be a modal in MoodP, while the other doubled element could be located in Spec,FocP. However, the data contain no instances of a sentence containing two doubled elements, where one would be a modal and the other anything but an index sign (i.e., index doubling, see Section 3.4 below). Secondly, the idea that modal verbs originate in front of the main verb and move into MoodP and thus end up clause-finally could explain the trend amongst younger HKSL users to sign modal verbs pre-verbally, cf. (48a) vs. (48b).

10. An anonymous reviewer put forward the interesting idea that in the case of doubling, the reason the intermediate copy of the modal gets deleted rather than the lowest copy (as I propose is the case in non-doubling sentences), could possibly result from the fact HKSL rules out adjacent copies. In other words, HKSL does not allow for both the modals in MoodP and FocP to be realised because they would be adjacent to each other. This analysis could help explain why the outlier XXY and YXX patterns are rare in the data.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

(48) a. TEACHER $_3$SAY$_1$ DO-HOMEWORK NEED.
b. TEACHER $_3$SAY$_1$ NEED DO-HOMEWORK.
'The teacher told me I need to do my homework.'

Native and older signers generally prefer the structure in (48a) with clause-final modal. However, younger generations, especially those signers who are less fluent in signing because they are born to hearing parents, tend to use the word order in (48b). It has been speculated that this is due to the influence of the spoken language in Hong Kong, Cantonese, which causes this word order preference in non-native Deaf signers. It could well be the case that the modal verb in fact originates pre-verbally, and that disfluency amongst non-native Deaf signers causes the modal to be realised in situ more often; that is, under the influence of Cantonese, HKSL might be losing the feature that attracts the modal verb into MoodP.

3.4 Index doubling

As I have argued above, doubled elements move to Spec,FocP. Since all doubled elements end up in Spec,FocP, an utterance cannot contain two doubled elements. However, as we have seen, doubling of the CID type may cooccur with index doubling. This is because doubled index signs end up in Spec,TopP, which is the syntactic projection involved in topicalisation. Consider the derivations of (49–51); in all three examples, we first provide the sentence (a), then the underlying structure (b), and then the derivation (c). Note that, in addition to index doubling, (50) also contains doubling of the CID type, and (51) contains the doubling of a modal.

(49) a. WAIT **IX$_2$** GO$_a$ FREE-TIME DISCUSS CAN~**IX$_2$**.
'When you have free time, we can go discuss it.'
b. [WAIT IX$_2$ GO$_a$ FREE-TIME DISCUSS CAN $_{TP}$]
c. [[[WAIT IX$_2^{\ i}$ GO$_a$ FREE-TIME DISCUSS CAN $_{TP}$] $_{FocP}$] [IX$_2^{\ i}$] $_{TopP}$]

(50) a. IN-THE-PAST IX$_1$~SISTER-IN-LAW **IX$_3$** SAME, IX$_1$~SISTER-IN-LAW, **IX$_3$**.
'My sister-in-law used to do the same.'
b. [IN-THE-PAST IX$_1$~SISTER-IN-LAW IX$_3$ SAME $_{TP}$]
c. [[IN-THE-PAST IX$_1$~SISTER-IN-LAW^i IX$_3$ SAME $_{TP}$] IX$_1$~SISTER-IN-LAW^i $_{FocP}$]
[[[[[IN-THE-PAST IX$_1$~SISTER-IN-LAW^i IX$_3^{\ j}$ SAME $_{TP}$] [$_{Foc}$ U(focus), EPP] $_{Foc'}$]
[IX$_1$~SISTER-IN-LAW^i] $_{FocP}$] [IX$_3^{\ j}$] $_{TopP}$] $_{CP}$]

(51) a. **IX$_2$** NEED X-RAY, NEED, **IX$_2$**.
'You should really get an X-ray done.'
b. [IX$_2$ NEED X-RAY $_{TP}$]

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

c. [[IX$_2$ NEED^i X-RAY $_{TP}$] NEED^i $_{MoodP}$]
[[[IX$_2$ NEED^i X-RAY $_{TP}$] T^i $_{MoodP}$] NEED^i $_{FocP}$]
[[[[[IX$_2^j$ NEED^i X-RAY $_{TP}$] t^i $_{MoodP}$] [$_{Foc}$ u(focus), EPP] $_{Foc'}$] [NEED^i] $_{FocP}$] [IX$_2^j$] $_{TopP}$] $_{CP}$]

According to the principle of Minimality (Rizzi 1990), an element moving to its target position cannot skip past any other intervening element of the relevant type. One might expect minimality effects to occur in the process of index doubling described above, because the topic has to move past many specifier positions on its way to Spec,TopP. Nevertheless, the proposed index doubling configuration does not induce such effects when a doubled head is already occupying Spec,FocP. In other words, the doubled topic IX moves to the closest available specifier position – past the occupied ones in between – which is Spec,TopP.

Kimmelman (2014) mentions that index doubling in NGT is also a manifestation of doubling. It serves the function of foregrounding of a topic that will remain relevant in the following discourse. The distinction between the landing site of doubled index signs versus that of other doubled elements shows that they serve a different function. The function of focalisation in HKSL will be elaborated upon below. Regarding topicalisation, I concur with the common assumption that it serves the purpose of marking what the proposition is about.

3.5 Interim discussion

I thus propose that the HKSL phrase structure is as follows: CP > TopP > FocP > MoodP > TP. The movement of doubled elements into higher projections is for the purpose of feature checking. Topics – that is, index signs that are either subject or object or a scene-setting topic that the proposition is "about" – move from their base position into Spec,TopP because they are attracted by u[topic]. After fusion with Top°, they become morphologically distinct from the lower copy and can thus both be realised at PF. Similarly, other doubled elements move to Spec,FocP to value u(focus). In the case of modal verbs, they first move through Spec,MoodP and then up to Spec,FocP. Elements that are attracted to Spec,FocP fuse with Foc° and are thus also invisible to linearisation, hence both copies can be realised at PF. Insofar as this proposal accounts for the HKSL data, this lends support for the usefulness of considering head-to-spec movement. As expected, elements that undergo long-distance A'-movement are sensitive to island constraints. HKSL, too, does not allow for movement out of islands, as has been shown in Section 3.1.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

3.6 A uniform account of doubling and right dislocation

So far, I have argued for a copy-movement analysis of HKSL doubling. Other accounts of similar phenomena exist (e.g., Branchini et al. 2013; Cheung 2015; among others), which have opted to adopt different types of analyses, such as a bi-clausal sluicing analysis or suggesting that doubled elements are merged in FocP, in order to circumvent the issues that might be raised when arguing for head-to-spec movement. However, it is pivotal for my analysis to argue in favour of a copy-movement analysis because I want to propose a uniform account for two related phenomena, namely right dislocation (RD) and dislocation copy (DC) (cf. Cheung's (2015) analysis of Cantonese). Note that what Cheung (2015) calls *dislocation copy* is the same phenomenon as what has been referred to as *doubling* in the present paper.

In Cantonese, both (52a) with RD and (52b) involving DC are grammatical and occur in spontaneous discourse.

(52) a. 去 音樂會 㗎, 佢 會。 [right dislocation]
heoi jamngokwui gaa, keoi wui
go concert SP he will]
b. 佢 會 去 音樂會 㗎, 佢 會。 [dislocation copy]
keoi wui heoi jamngokwui gaa, keoi wui
he will go concert SP he will
(dislocation copy, DC)
'He will go to the concert.' [Cantonese; Cheung 2015: 227f]

Similarly, in HKSL (53a) and (53b), as well as (54a) and (54b) are grammatical.

(53) a. IX$_2$ DISLOCATION, DEFINITELY. [right dislocation]
b. IX$_2$ DEFINITELY DISLOCATION, DEFINITELY. [dislocation copy]
'You definitely dislocated it.'

(54) a. IX$_3$ YESTERDAY BUSY ABSURD, WORK. [right dislocation]
b. IX$_3$ YESTERDAY WORK BUSY ABSURD, WORK. [dislocation copy]
'He had a really busy day at work.'

In (52b), (53b), and (54b), the dislocated element at the end of the clause is also found in its base position, and both copies are phonologically realised. In (52a), (53a), and (54a), on the other hand, there is no corresponding element to the dislocated element. Cheung (2015: 228) schematises the difference between RD and DC as follows (*X* indicating the dislocated element):

(55) RD: [... SP], X
DC: [... X ... SP], X

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

RD and doubling (or DC) are different, but related, phenomena, and just like Cantonese, HKSL allows for both. With my analysis of HKSL CID, I can provide a uniform account for both RD and doubling. I assume that the processes underlying both RD and doubling are the same, the only difference being the features that are hosted in FocP. In both (53a) and (53b), DEFINITELY has moved to Spec,FocP. However, in (53b), Foc° contains a u(focus) feature that is valued by the movement of the doubled element into its specifier. As described above, the doubled element in the specifier fuses with the head containing the focus-feature and thus become morphologically distinct from the lower copy. In (53a), the dislocated element also moves into Spec,FocP. However, in this case, Spec,FocP does not contain a focus-feature, and therefore morphological reanalysis does not occur. Since the higher copy is thus not distinct from the lower copy, the lower copy gets deleted under LCA, and only the higher copy is realised at PF. The difference between RD and doubling thus comes down to the presence or absence of a feature of FocP, but the movement is essentially the same.[11]

At this point, I have not yet answered the question why, in the case of RD, movement into Spec,FocP occurs, especially since I proposed that in this case, FocP does not contain a focus-feature. This issue will be addressed in Section 4. What the above account does address, however, is that it is not necessary to use different approaches for RD and doubling. In contrast, Cheung's (2015) analysis of DC (but not of RD) uses a bi-clausal sluicing approach. Though this account certainly is elegant in and of its own, it seems undesirable that two phenomena that resemble each other so much should be explained using such vastly different approaches. My copy-movement approach can account for both the doubling and RD data in a uniform way.

3.7 A comparison with Petronio & Lillo-Martin (1997)

There exists another analysis that uniformly accounts for a doubling phenomenon and a form of RD. Petronio & Lillo-Martin (1997) argue that ASL WH-words move into a clause-initial Spec,CP located in the left periphery. This position is scope-bearing, and in this position, the [+WH] feature on the WH-word agrees with the [+WH] feature in C°.

ASL does allow for WH-in-situ sentences, but WH-questions often contain a doubled WH-word, with one copy occurring clause-initially and the other in clause-final position (56).

---

11. As pointed out by an anonymous reviewer, a uniform account of doubling and RD can also be achieved by arguing that fusion of the element that moves into Spec,FocP with the abstract focus feature head is optional.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

(56) a. whq
WHO LIKE NANCY WHO
'Who likes Nancy?'

b. whq
WHAT NANCY BUY WHAT
'What did Nancy buy?' [ASL; Petronio & Lillo-Martin 1997: 26]

Petronio & Lillo-Martin argue that the rightmost WH-copy is a base-generated double in C°, a position where other focused constituents may also occur doubled (cf. Aarons et al. 1992),[12] as is shown for a negative modal in (57) below. These elements carry a [+F(ocus)] feature. The leftmost WH-copy in (56) has moved from within IP to Spec,CP in the left periphery. Movement of the WH-word to Spec,CP checks its [+WH] feature by agreement with that in C°. According to Petronio & Lillo-Martin, ASL WH-words thus carry both a [+WH] and a [+F] feature which are checked through movement. In (56), the non-manual 'whq' marker spreads over the entire clause because it is a realisation of the combination of the [+WH] and [+F] features, and the clause is its c-command domain. However, it is also possible for other elements to occur in such a doubled construction.

(57) neg
ANN CANNOT READ CANNOT
'Ann cannot read.' [ASL; Petronio & Lillo-Martin 1997: 31]

The clause final copy of CANNOT in (57) is base-generated in the head of a [+F] CP. However, the in situ copy is also marked as [+F]. This in situ copy "functions as a focus operator, and as an operator it undergoes LF raising to spec-CP" (Petronio & Lillo-Martin 1997: 32). The two copies enter into a spec-head relation with each other, and the in situ copy licenses the final double by checking the [+F] feature. In other words, Petronio & Lillo-Martin's analysis does not only account for WH-doubling, but for the doubling of other ASL elements as well.

Regarding RD, ASL also allows for WH-questions with only one WH-word in clause-final position, as shown in (58a). Petronio & Lillo-Martin (1997) argue that the underlying structure of (58a) is as shown in (58b).

(58) a. whq
BUY CAR WHO
'Who bought the car?'

12. The main aim of Petronio & Lillo-Martin's paper is to argue against the rightward WH-movement analysis as proposed by Aarons et al. (1992). According to Aarons et al.'s analysis, the leftmost WH-copy is a base-generated topic located above CP, whereas the rightmost WH-copy has moved from within IP to Spec,CP located in the right periphery.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

b. whq
e BUY CAR WHO
'Who bought the car?' [ASL; Petronio & Lillo-Martin 1997: 36]

Petronio & Lillo-Martin account for these structures as follows: the WH-element in the WH-phrase is null (e). This phonologically empty WH-phrase still moves to Spec,CP in the left periphery and takes scope over the clause. It is because of the WH-phrase being scope-bearing that the 'whq' non-manual marker still spreads across the entire clause.

In sum, Petronio & Lillo-Martin's analysis argues that ASL WH-movement is leftward. Spec,CP is in the left periphery and is the landing site of WH-movement. If there are two WH-words in a sentence, the clause-final copy is a base-generated double in C°. If a sentence only contains one WH-word, which is not in situ but clause-final, then there is a null WH-element that has moved to Spec,CP and takes scope. The overt WH-word is still the base-generated double in C°. This analysis is then extended to forms of doubling and RD in ASL.

The above summary of Petronio & Lillo-Martin's account shows that a uniform analysis for doubling and RD phenomena has already been proposed. However, my analysis differs from that proposed by Petronio & Lillo-Martin in one important respect. I do not assume that any of the doubled elements in the HKSL data are base-generated. Under this assumption, phrases would be excluded from being doubled (cf. Petronio 1993), which is not what we see in the HKSL data (cf. (26)). Though I argue for rightward movement, my analysis also differs from Aarons et al.'s because they also assume one of the doubled elements, namely the clause-initial WH-topic, to be base-generated. Petronio & Lillo-Martin show that there is some cross-linguistic evidence for the existence of rightward WH-movement. However, they argue that there is no evidence for rightward WH-movement for the purpose of *true* WH-movement; instead the attested cases are instances of scrambling or focus movement. My analysis of HKSL does not contradict their claim, as I argue that the movement of HKSL doubled elements, including WH-words, targets a focus position in the right periphery.

An interesting similarity between our two accounts is that the grammaticality judgements for many ASL WH-doubling sentences – especially those with null WH-words – vary greatly, and Petronio & Lillo-Martin (1997) stress the importance of context recoverability. In my analysis of HKSL, I, too, invoke information structure and the distinction between old and new information. The notion of context recoverability is related to given – or old – information. In other words, Petronio & Lillo-Martin's variation in grammaticality judgements depended on whether the given information was sufficient in order to interpret the intended referent of the WH-phrase.

4. HKSL as a focus-prominent language and other topics for future research

Based on the above account of HKSL doubling, I would like to propose that HKSL could be a focus-prominent language. According to prior research by Sze (2015), HKSL was found not to be a topic-prominent language. This conclusion is based on the fact that HKSL does not meet criteria laid out by Li & Thompson (1976, 1981) and É Kiss (2001). In her conclusion, Sze raises the question as to whether HKSL might instead be a focus-prominent language and finishes the conclusion with the statement: "In my own preliminary observation of HKSL, there appears to be no evidence yet for a fixed syntactic position for focused elements" (2015: 860). I propose that such a fixed syntactic position does in fact exist in HKSL, namely Spec,FocP, and that the doubling data suggest that HKSL is a focus-prominent language. In light of this analysis, there are some questions that need to be answered in future research.

4.1 EPP in FocP

Assuming that HKSL is a focus-prominent language, I argue that HKSL expresses syntactically relevant focus by moving elements into Spec,FocP. The HKSL FocP contains an EPP feature that requires movement in order to be checked. Despite criticism of the use of EPP features (e.g., Grohmann et al. 2000; Bošković 2002; among others), even within the Minimalist Program, there are researchers that continue to use EPP as the force behind movement. Pan (2022: 124), among others (e.g., Kandybowicz & Baker 2003; Richards 2003), argues that each peripheral projection in Mandarin Chinese "constitutes a phase and that each peripheral head has an EPP feature, which must be satisfied". Further research is necessary to determine whether FocP in HKSL is in fact a phase. Since Pan (2022: 125) states that "[i]f Spec,TopP is a locus for A'-movement, then it is natural that TopP is a phase", the same might be true for FocP in HKSL. I argue that Spec,FocP is a locus for A'-movement, that FocP holds an EPP feature, and that therefore, FocP wants its specifier projected.

4.2 The semantic and pragmatic differences between doubling and RD

My analysis predicts that doubling and RD should be semantically and/or pragmatically different. The judgements of native HKSL signers help in addressing this issue. As mentioned above, some of the consultants stated, regarding the data samples they were shown, that the utterances would have been ungrammatical without the doubling. The consultants were indecisive about whether or not sentences

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

involving doubling were more emphatic than sentences without doubling; however, I asked the consultants for a second time to compare utterances from the data set and give their intuitions about the differences between these utterances. An example of the utterances I showed the consultants is given in (59), which is a repetition of (24). It occurred in the data as (59a). If this utterance had been an example of RD it would look like (59b).

(59) a. IX$_2$ DEFINITELY DISLOCATION, DEFINITELY.
b. IX$_2$ DISLOCATION, DEFINITELY.
'You definitely dislocated it.'

According to my consultants, (59a) and (59b) have more or less the same meaning, though (59a) was judged as more emphatic – "stronger" – in comparison. However, the consultants also added that they would prefer to sign the utterance as in (59a) themselves, as it felt more natural to them. In other words, preference was given to (59a) over (59b), with (59a) being more emphatic in comparison to (59b). My analysis is in line with the intuitions of my consultants: (59a) is "stronger" than (59b) due to the focus-feature in Foc°.

4.3 HKSL doubling is neither identificational focus nor emphatic focus

Although there has to be a semantic and/or pragmatic difference between doubling and RD, the HKSL doubling data do not fit the two most obvious choices for the function of focus, namely identificational focus or emphatic focus. For identificational focus, focus is expressed by a particular structural relation (É Kiss 2001: 1449). In other words, identificational focus is not marked in situ, but needs to be marked using a dedicated syntactic structure. This seems to be true for HKSL: given our assumption that doubled elements in HKSL are marked as focused through syntactic structure, HKSL doubling could be a case of identificational focus. However, identificational focus is also exhaustive in meaning, and this appears not to be the case for HKSL doubling. Take, for example, (15) and (31), repeated here as (60) and (61), respectively.

(60) IN-THE-PAST **IX$_1$~ELDER-SISTER-IN-LAW** *IX$_3$* SAME **IX$_1$~ELDER-SISTER-IN-LAW** *IX$_3$*.
'My sister-in-law used to do that same thing.'

(61) ONLINE SEE$_a$ IX$_{obj}$ [= site] **TABLE**$_{[\%one\text{-}handed]}$ IX$_{obj}$ [= table] **TABLE**.
'I saw the table online.'

Neither (60) nor (61) can be interpreted as expressing exhaustive identification. Whatever the action was the sister-in-law in (60) used to do, there may well have

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

been other people who did the same thing. Similarly, this sister-in-law did not just perform this one action, she probably did many other things, too. In (61), the person might have seen things online other than just the table. Thus, HKSL doubling does not express identificational focus. As (62) shows, the same holds true for doubling in ASL:

(62) BABY CRY BABY.
'The BABY is crying.' [ASL; Lillo-Martin & De Quadros 2004: 168]

According to Stickles (2013: 213), (62) does not "exhaustively delineate all the potential criers", as, in addition to the baby, the toddler might be crying, too.

The second type of focus is emphatic focus, which indicates that "the proposition that is actually asserted is prima facie a particularly unlikely one with respect to the alternatives" (Krifka 1995: 227). In other words, what is expressed through emphatic focus is something that might be very unlikely, unexpected, or remarkable. It has been argued for other sign languages that doubled constructions constitute emphatic focus (e.g., Petronio 1993; Nunes & De Quadros 2006), and that there is prosodic stress on the doubled element. However, the doubled element in HKSL does not encode the meaning of being unlikely, surprising, or unbelievable according to native signers' intuitions; moreover, the doubled element does not carry any prosodic stress, i.e., it is not accompanied by non-manual markers or characterized by modified movements, as discussed above.

4.4 Is HKSL Spec,FocP always filled?

I have argued that the differences between doubling and RD come down to this: if Foc° contains a u(focus) feature, it is valued by the movement of the doubled element into its specifier. In the case of doubling, the doubled element in the specifier then fuses with the head containing the focus-feature and thus becomes morphologically distinct from the lower copy. However, if Foc° does not contain a focus-feature, morphological reanalysis does not occur. The dislocated element still moves into Spec,FocP, but since the higher copy is not distinct from the lower copy, the lower copy gets deleted under LCA, and only the higher copy is realised at PF. In this case, we are dealing with RD.

An important implication of my proposal that HKSL is focus-prominent and has an EPP feature in FocP is that my analysis predicts that HKSL Spec,FocP is always filled, if not through doubling, then through RD. However, there are a few examples of HKSL utterances that neither contain doubling nor do they appear to be examples of RD; see (63) to (67) for examples.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

(63) REDUCE+CL:HP-bar> FEW FINISH KILL.
'You have to reduce their HP until there is only a little left in order to kill them.'

(64) IX_1 FLY NO NEVER.
'I have never flown before.'

(65) TWO-OF-THEM SEEM TOGETHER STILL.
'I think the two of them are still together.'

(66) IX_3 (=colleague) $_aGO_b$ TAKE-PHOTO FINISH, IX_1~$_1SEE_a$.
'I saw that they had gone there and taken photos.'

(67) ACTUALLY FREE HOLIDAY ENOUGH.
'[You] actually have enough time off [for that].'

I propose that there are three possible approaches to this implication that would allow us to account for utterances without doubling or RD.

First of all, there is a possibility that for the utterances in (63–67), Spec,FocP is in fact empty. In other words, neither doubling nor RD has occurred. Secondly, in keeping with the implication that Spec,FocP should always be filled, I could argue that all utterances that do not contain doubling are therefore automatically instances of RD: that is, Spec,FocP is filled by the element that appears in clause-final position. For example, (66) could be analysed as follows, with movement of the phrase [IX_1~$_1SEE_a$] to Spec,FocP:

(66′) [[[[t^i IX_3 (=colleague) $_aGO_b$ TAKE-PHOTO FINISH $_{TP}$] [$_{Foc}$ U(focus), EPP] $_{Foc'}$] [IX_1~$_1SEE_a{}^i$] $_{FocP}$] $_{CP}$]

Finally, if it appears that no movement has taken place, and basic word order is maintained, it would still be possible that the entire TP has moved into Spec,FocP. For example, (67) could be analysed as follows:

(67′) [[[[t^i $_{TP}$] [$_{Foc}$ U(focus), EPP] $_{Foc'}$] [ACTUALLY FREE HOLIDAY ENOUGH^i] $_{FocP}$] $_{CP}$]

In order to confirm that one of the above three hypotheses is true for the HKSL utterances without doubling, further research on basic word order in HKSL is required. Currently, the most frequently attested word order in HKSL is SVO, in 65% of the data, and SOV in 16.5% of the data (Sze 2015). The SOV word order is mostly used in clauses including agreement verbs of classifier predicates.

Furthermore, during the data analysis, I found no non-manual markers that accompanied the doubled elements in a consistent pattern, which would allow for them to be identified as focus markers. I hope that, with a larger dataset of naturalistic HKSL data, I will be able to identify non-manual focus markers.

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

5. Conclusion

In the present paper, I have provided a copy-movement analysis for doubling in Hong Kong Sign Language (HKSL). Doubling occurs frequently in HKSL, and it generally follows an XYX pattern, with the doubled element occurring in the clause-final position. What justifies this account of doubling is the fact that HKSL allows for the doubling of heads, phrases or parts of phrases, which makes it unique in comparison to other sign and spoken languages. Doubled elements undergo A'-movement into Spec,FocP because they are attracted to that position by an unvalued focus-feature on Foc°. The moved element fuses with the abstract focus feature head of FocP and thus becomes morphologically distinct from the lower element. Since this morphological reanalysis occurs before linearisation, both elements can be realised at PF. I have shown that HKSL doubling is sensitive to island constraints, which further strengthens my argument that doubling is the result of a movement operation.

There is one type of doubling that differs slightly from the above-mentioned account, that is, the doubling of index signs (i.e., index doubling). Index doubling can cooccur with the doubling of other elements and when it does, the doubled index appears to the right of other doubled elements. The doubled index signs thus move from their base position to Spec,TopP. This means that the syntactic structure I propose is CP > TopP > FocP > MoodP > TP.

The function of doubling is focalisation. However, since HKSL is a focus-prominent language, focalisation does not equal emphasis, i.e., informational or emphatic focus. HKSL expresses focalisation by moving focalised elements into the relevant syntactic position. In addition to possibly providing the first piece of evidence that HKSL is focus-prominent, my research also argues in favour of head-to-spec movement and provides a uniform account of two related phenomena, namely doubling and RD, that differs from accounts that have previously been proposed (e.g., Petronio & Lillo-Martin 1997).

It should be recognised that this study – although claiming that HKSL possibly qualifies as a focus-prominent language – is first and foremost limited in its scope to providing an analysis of doubling. This means that other syntactic structures of interest that were discussed in this paper remain on the table for future research. This is important to note, not only because these other structures could provide further evidence for or disprove my preliminary claim that HKSL is focus-prominent, but also because much more can be said about, for example, the HKSL MoodP or topic constructions in which right-peripheral index signs relate to a full DP (i.e., cases in which the topic and the in situ element are not the same item from the numeration).

Acknowledgements

I would like to thank the Centre for Sign Linguistics and Deaf Studies (CSLDS) at the Chinese University of Hong Kong for the access to the HKSL free conversation data. In particular, I would like to thank Professor Gladys Tang for drawing my attention to the topic of doubling and for her feedback on earlier drafts of this paper. Furthermore, as always, I am indebted to my Deaf colleagues at the CSLDS for sharing their intuitions and for providing the valuable insights that guide my work. Finally, I want to thank the anonymous reviewers and Dr. Roland Pfau for their feedback and suggestions during the revision process of this paper.

Chinese University of Hong Kong (cuhkhk) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

References

Aarons, Debra, Ben Bahan, Judy Kegl & Carol Neidle. 1992. Clause structure and a tier for grammatical marking in American Sign Language. *Nordic Journal of Linguistics* 15(2). 103–142.

Barbiers, Sjef, Olaf Koeneman & Marika Lekakou. 2010. Syntactic doubling and the structure of wh-chains. *Linguistics* 46. 1–46.

Bos, Heleen. 1995. Pronoun copy in Sign Language of the Netherlands. In Heleen Bos & Trude Schermer (eds.), *Sign language research 1994: Proceedings of the Fourth European Congress on Sign Language Research*, 121–147. Hamburg: Signum.

Bošković, Željko. 2002. A-movement and the EPP. *Syntax* 5(3). 167–218.

Branchini, Chiara, Anna Cardinaletti, Carlo Cecchetto, Caterina Donati & Carlo Geraci. 2013. Wh-duplication in Italian Sign Language (LIS). *Sign Language & Linguistics* 16(2). 157–188.

Bross, Fabian. 2020. *The clausal syntax of German Sign Language: a cartographic approach* (Open Generative Syntax 5). Berlin: Language Science Press.

Cecchetto, Carlo, Carlo Geraci & Sandro Zucchi. 2009. Another way to mark syntactic dependencies: the case for right-peripheral specifiers in sign languages. *Language* 85(2). 278–320.

Cheng, Lisa Lai-Shen & Luis Vicente. 2013. Verb doubling in Mandarin Chinese. *Journal of East Asian Linguistics* 22. 1–37.

Cheung, Lawrence Yam-Leung. 2015. Bi-clausal sluicing approach to dislocation copying in Cantonese. *International Journal of Chinese Linguistics* 2(2). 227–272.

Chomsky, Noam. 1992. *A Minimalist Program for linguistic theory* (= *MIT Occasional Papers in Linguistics* 1). Cambridge, MA: MITWPL.

Chomsky, Noam. 1995. *The minimalist program*. Cambridge MA: The MIT Press.

Crasborn, Onno, Els van der Kooij, Johan Ros & Helen de Hoop. 2009. Topic agreement in NGT (Sign Language of the Netherlands). *Linguistic Review* 26. 355–370.

É Kiss, Katalin. 2001. Discourse configurationality. In Martin Haspelmath, Ekkehard König, Wulf Oesterreicher & Wolfgang Raibler (eds.), *Language typology and language universals: an international handbook, vol. 2*, 1442–1455. Berlin: Walter de Gruyter.

Fischer, Susan. 1996. The role of agreement and auxiliaries in sign language. *Lingua* 98. 103–119.

Fischer, Susan & Wynne Janis. 1992. *License to derive: resolving conflicts between syntax and morphology in ASL*. Unpublished manuscript.

Fukui, Naoki & Yuji Takano. 1998. Symmetry in syntax: merge and emerge. *Journal of East Asian Linguistics* 7. 27–86.

Grohmann, Kleanthes K., John Drury & Juan Carlos Castillo. 2000. No more EPP. In Roger Billerey & Brook Danielle Lillehaugen (eds.), *WCCFL 19 Proceedings*, 153–166. Somerville, MA: Cascadilla Press.

Halle, Morris & Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Kenneth Hale & Samuel Jay Keyser (eds.), *The view from building 20: Essays in honor of Sylvain Bromberger*, 111–176. Cambridge MA: The MIT Press.

Johnston, Trevor, & Adam Schembri. 2007. *Australian Sign Language: an introduction to sign language linguistics*. New York: Cambridge University Press.

Kandybowicz, Jason. 2007. On fusion and multiple copy spell-out: the case of verbal repetition. In Norbert Corver & Jairo Nunes (eds.), *Copy theory of movement*, 119–150. Amsterdam: John Benjamins.

Kandybowicz, Jason & Mark Baker. 2003. On directionality and the structure of the verb phrase: evidence from Nupe. *Syntax* 6(2). 115–155.

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Cambridge MA: The MIT Press.

Kimmelman, Vadim. 2012. Doubling in RSL and NGT: towards a unified explanation. In Evan Cohen (ed.), *Proceedings of IATL 2011* (*MIT Working Papers in Linguistics* 65), 57–81. Cambridge, MA: MITWPL.

Kimmelman, Vadim. 2014. *Information structure in Russian Sign Language and Sign Language of the Netherlands*. Amsterdam: University of Amsterdam PhD dissertation.

Kimmelman, Vadim. 2015. Topics and topic prominence in two sign languages. *Journal of Pragmatics* 87. 156–170.

Kimmelman, Vadim. 2019. *Information structure in sign languages: evidence from Russian Sign Language and Sign Language of the Netherlands*. Berlin: De Gruyter Mouton.

Krifka, Manfred. 1995. The semantics and pragmatics of polarity items. *Linguistic Analysis* 25. 209–257.

Lee, Tsz Ming. 2017. Defocalization in Cantonese right dislocation. *Gengo Kenkyu* 152. 59–87.

Li, Charles N. & Sandra A. Thompson. 1976. Subject and topic: a new typology of language. In Charles N. Li & Sandra A. Thompson (eds.), *Subject and topic*, 456–489. New York: Academic Press.

Li, Charles N. & Sandra A. Thompson. 1981. *Mandarin Chinese: a functional reference grammar*. Berkeley, CA: University of California Press.

Liddell, Scott. 1980. *American Sign Language syntax*. The Hague: Mouton.

Lillo-Martin, Diane. 1990. Parameters for questions: evidence from wh-movement in ASL. In Ceil Lucas (ed.), *Sign language research: theoretical issues*, 211–222. Washington, DC: Gallaudet University Press.

Lillo-Martin, Diane & Ronice Müller de Quadros. 2004. Focus constructions in American Sign Language and Lingua de Sinais Brasileira. In Josep Quer (ed.), *Signs of the time: selected papers from TISLR 2004*, 161–176. Seedorf: Signum.

Martins, Ana Maria. 2007. Double realisation of verbal copies in European Portuguese emphatic affirmation. In Norbert Corver & Jairo Nunes (eds.), *Copy theory of movement*, 78–118. Amsterdam: John Benjamins.

Matsuoka, Kazuki. 1997. Verb raising in American Sign Language. *Lingua* 103. 127–149.

Chinese University of Hong Kong (cuhk-log/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37. 69–109.

Nunes, Jairo. 2001. Sideward movement. *Linguistic Inquiry* 32. 303–344.

Nunes, Jairo. 2004. *Linearization of chains and sideward movement*. Cambridge MA: The MIT Press.

Nunes, Jairo & Ronice Müller de Quadros. 2006. Duplication of wh-elements in Brazilian Sign Language. In Leah Batemen & Cherlon Ussery (eds.), *Proceedings of the 35th Conference of the North East Linguistic Society*, 463–478. Amherst, MA: GLSA UMass Amherst.

Nunes, Jairo & Ronice Müller de Quadros. 2008. Phonetically realized traces in American Sign Language and Brazilian Sign Language. In Josep Quer (ed.), *Signs of the time: selected papers from TISLR 2004*, 177–190. Seedorf: Signum.

Padden, Carol. 1988. *Interaction of morphology and syntax in American Sign Language* (*Outstanding dissertations in Linguistics*). Garland: New York.

Pan, Victor Junnan. 2022. Deriving head-final order in the peripheral domain of Chinese. *Linguistic Inquiry* 53(1). 121–154.

Pesetsky, David & Esther Torrego. 2001. T-to-C movement: causes and consequences. In Michael J. Kenstowicz (ed.), *Ken Hale: a life in language*, 355–426. Cambridge, MA: MIT Press.

Petronio, Karen. 1991. A focus position in ASL. In Jonathan Bobaljik & T. Bures (eds.), *Papers from the 3rd Student Conference in Linguistics 1991* (*MIT Working Papers in Linguistics* 14), 211–225. Cambridge, MA: MITWPL.

Petronio, Karen. 1993. *Clause structure in American Sign Language*. Seattle, WA: University of Washington PhD dissertation.

Petronio, Karen & Diane Lillo-Martin. 1997. WH-movement and the position of Spec-CP: evidence from American Sign Language. *Language* 73(1). 18–57.

Quadros, Ronice Müller de. 1999. *Phrase structure of Brazilian Sign Language*. Rio Grande do Sul: Pontifícia Universidade Católica do Rio Grande do Sul PhD dissertation.

Richards, Norvin. 2003. Why there is an EPP. *Gengo Kenkyu* 123. 221–256.

Rizzi, Luizi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.

Roberts, Ian. 2011. Head movement and the minimalist program. In Cedric Boeckx (ed.), *The Oxford handbook of linguistic minimalism*, 195–219. New York: Oxford University Press.

Stickles, Elise. 2013. Focus constructions in ASL: evidence from pseudoclefting and doubling. *University of Pennsylvania Working Papers in Linguistics* 19(1), Article 24. 207–216.

Svenonius, Peter. 1994. C-selection as feature checking. *Studia Linguistica* 48. 133–155.

Sze, Felix. 2004. Blinks and intonational phrasing in Hong Kong Sign Language. In Josep Quer (ed.), *Signs of the time: selected papers from TISLR 2004*, 83–107. Seedorf: Signum.

Sze, Felix. 2012. Right dislocated pronominal in Hong Kong Sign Language. *Journal of Pragmatics* 44. 1949–1965.

Sze, Felix. 2015. Is Hong Kong Sign Language a topic-prominent language? *Linguistics* 53(4). 809–876.

Tang, Gladys & Felix Sze. 2002. Nominal expressions in Hong Kong Sign Language: does modality make a difference? In Richard P. Meier, Kearsy Cormier & David Quinto-Pozos (eds.), *Modality and structure in signed and spoken languages*, 296–320. Cambridge: Cambridge University Press.

Chinese University of Hong Kong (cuhkhkg/2) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50

Torigoe, Takashi. 1994. Resumptive X structure in Japanese Sign Language. In Inger Ahlgren, Brita Bergman & Mary Brennan (eds.), *Perspectives on sign language structure* (*Papers from the 5th International Symposium on Sign Language Research, Vol. 1*), 187–198. Durham: ISLA.

Toyoshima, Takashi. 2001a. *Head-to-spec movement and dynamic economy*. Cornell University PhD dissertation.

Toyoshima, Takashi. 2001b. Head-to-spec movement. In Galina M. Alexandrova & Olga Arnaudova (eds.), *Minimalist parameter: Selected papers from the open linguistics forum, Ottawa 21–23 March 1997*, 115–136. Amsterdam: John Benjamins.

Travis, Lisa deMena. 1984. *Parameters and effects of word order variation*. Cambridge, MA: MIT PhD dissertation.

Van Gijn, Ingeborg. 2004. *The quest for syntactic dependency: Sentential complementation in Sign Language of the Netherlands (NGT)*. Amsterdam: University of Amsterdam PhD dissertation (LOT Dissertation Series, No. 89).

Vicente, Luis. 2009. An alternative to remnant movement for partial predicate fronting. *Syntax* 12(2). 158–191.

Wilbur, Ronnie. 1994. Stress, focus and extrametricality in ASL. In *Papers presented at the Linguistic Society of America, Boston.*

Address for correspondence

Emily Koenders
The Chinese University of Hong Kong
Academic Building No. 2, room 203
Shatin, N.T.
Hong Kong
emilykoenders@gmail.com
https://orcid.org/0000-0002-5366-587X

Publication history

Date received: 29 March 2023
Date accepted: 2 April 2024
Published online: 18 April 2024

Chinese University of Hong Kong (cuhkhkg/1) IP: 137.189.85.75 On: Wed, 16 Oct 2024 06:20:50