

CHAPTER SIX

DUAL INTERPRETATIONS OF OBJECT NEG-*WH*- QUANTIFIERS (NEG-WHQ) IN CANTONESE: A FEATURE-BASED APPROACH

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1. Introduction

In Cantonese, the combination of a negative morpheme and a *wh*-phrase can be used as a strong indefinite. This chapter is concerned with the features involved in these negative *wh*-quantifiers (neg-whQs). Much like *wh*-words in Mandarin Chinese, *wh*-words in Cantonese also give rise to existential interpretations, in the same way as indefinites (*some-* or *any-* or *every-*) in non-interrogative contexts besides interrogative interpretations.¹ The literature (Cheng 1991, 1994; Huang 1982; Li 1992; Lin 1998) reports that Chinese *wh*-words need to be interpreted as indefinites under a licensing relationship with licensors. In order to obtain the existential interpretations, *wh*-words are required to appear in negative polarity contexts², non-factive contexts and contexts of tentativeness, inference (Cheng 1994) and the *dou*-quantification (Cheng 1995) context. In addition, some short forms of *wh*-expressions (e.g., *bin*) are used as negative propositions rather than interrogatives. Cheng (1995) reports a few languages (e.g., Cantonese, Spanish, Korean, English, German, Japanese and Hebrew) in which *wh*-expressions are used as negative

¹ With *dou*-quantification, the *wh*-phrase *matje* ‘what’ is licensed as a universal quantifier in Cantonese.

(i) Ngo *matje* dou zongji sik gaa.
I what also like eat SP
‘I like to eat everything.’

² Like *wh*-phrases in Mandarin Chinese, *wh*-phrases in Cantonese are also licensed as Negative Polarity Items (NPI) in a negated context.

(ii) Ngo mou zongji *bingo*.
I not like who
‘I don’t like anybody.’

propositions rather than interrogatives, like *since when* in English, *eti/ettehkhey* ‘where/how’ in Korean, *de dónde* ‘of where’ in Spanish and *bindou* ‘where’ in Cantonese. Even though Mandarin Chinese and Cantonese share a lot of syntactic similarities, an object neg-whQ is an exception that does not appear in Mandarin Chinese. As a negative quantifier, an object neg-whQ undergoes overt raising and gives rise to both negative and existential presupposition interpretations. This chapter aims to report the overt raising phenomenon which results in a unique SOV word order in Cantonese and also dual interpretations, in a feature-based approach. In section 2, I propose an interpretable and strong [Quant] feature and a [uNeg] feature to account for the possible dual readings of object neg-whQs in Cantonese. I attempt to explain how the overt raising phenomenon is accounted for and each available interpretation is licensed in a feature-based approach. Section 3 supports my proposal by presenting data where Cantonese *wh*-expressions are used as negative presuppositions and briefly discusses Cantonese *wh*-words in a feature-based approach. Section 4 provides additional data where *wh*-words give rise to special existential interpretations in negative sentences. Section 5 summaries the proposed account.

2. The Proposal

This study proposes an interpretable and strong [Quant] feature and an uninterpretable feature [uNeg], which would account for the possible dual readings of object negative *wh*-quantifiers (neg-whQs) in Cantonese. Unlike other ordinary negative quantifiers (e.g., *mouje* ‘nothing,’ *moujan* ‘nobody’) that give rise to only a non-existential reading, neg-whQs give rise to either negative or existential readings, depending on the different licensers involved in the contexts. Morphologically, Cantonese neg-whQs consist of a negative morpheme *mou* with any *wh*-phrases, for example *mou-bingo* (no-who), *mou-matje* (no-what) and *mou-bindou* (no-where).

(1)

Neg-whQ
e.g., *mou-bingo*, *mou-bindou*, *mou-matje*
[Quant: strong]
[uNeg]

Empirical studies (Kratzer 1995; Potts 2000; Penka and von Stechow 2001) suggest that negative phrases are decomposed into negation and an existential/indefinite element. Neg-whQs are most likely equivalent to

English negative quantifiers such as *nobody*, *nothing* and *nowhere* in semantic terms of the negative interpretation. Given that the canonical word order in Cantonese is SVO, objects follow the verb, as in (2), and so does a numeric NP, as in (3). On a par with ordinary negative quantifiers (negQs), neg-*wh*Qs are also a kind of strong quantifiers and observe a unique SOV word order, apart from their equivalent negative reading. A construction with an object negQ *mou-je* ‘nothing’ renders grammaticality in the SOV word order, as in (4).

- (2) Ngo zungji fa.
I like flower
‘I like flowers.’
- (3) Ngo sik-zo saam go pingguo.
I eat-PFV³ three CL⁴ apple
‘I ate three apples.’
- (4) Ngo *mou-je* sik-guo.
I no-thing eat-ASP⁵
‘I ate nothing.’

An object neg-*wh*Q construction also displays such a unique SOV word order. In addition, it not only gives rise to a non-existential or sentential negation interpretation, but also to an existential presupposition interpretation. In certain contexts, such as (5) below, there can be ambiguity due to the difference between a non-existential interpretation, as in (5a), and an existential presupposition interpretation, as in (5b). This neg-*wh*Q is unique in Cantonese, and not found in Mandarin Chinese, despite the syntactic similarities between the two languages. The same combination of a negative morpheme and a *wh*-phrase in Mandarin Chinese neither appears as an object in canonical SVO nor in the unique SOV structure in (6). On the contrary, such a combination, appearing as the subject in a sentence, leads to grammaticality in Mandarin Chinese, as in (7). We, thus, focus on object neg-*wh*Qs in Cantonese.

- (5) Ngo *mou-bindou* soeng heoi.
I no-where want go
a. ‘I want to go to nowhere.’ (Lit. ‘I don’t want to go to anywhere.’)

³ PFV, perfective aspect.

⁴ CL, classifier.

⁵ ASP, aspect marker.

b. 'I want to go to a few places.'

- (6) *Wo *meiyou-shei* xihuan.
 I no-who like
 *Wo xihuan *meiyou-shei*.
 I like no-who
 'I like nobody.'
- (7) *Meiyou-shei* xihuan ni.
 no-who like you
 'Nobody likes you.'

On the one hand, the existential reading is facilitated with the help of sentence final particles (SP) or a rising tone in contexts where exaggeration or emphasis is made. The literature on Cantonese sentence particles (Law 2002; Tang 1998) suggests that *zaa*, for example, is an indication of a restrictive focus "only."

- (8) Ngo *mou-bindou* soeng heoi zaa.
 I no-where want go SP
 'I want to go to only a few places.'

Similarly, negative quantifiers can imply an existential reading in English double negated contexts when stress applies.

- (9) I don't love NOBODY.
 (In other words, 'I love SOMEBODY.')

On the other hand, a negative reading is embedded in neg-whQs in cases where an existential reading is maintained in double negated contexts.

- (10) Ngo *mou-matje* m zungji.
 I no-what not like
 'I don't like nothing.' (In other words, 'I like something.')

Neg-whQs, as indefinites, require an external licenser to allow for the full interpretations in the same way as *wh*-words do in Cantonese (or Mandarin Chinese). Lewis (1975) and Heim (1982) suggest that there is no inherent quantificational force within indefinites and, therefore, indefinites require a trigger to be licensed. For instance, Mandarin Chinese *wh*-words remain in-situ and require an external force to be licensed as interrogative. Aoun and Li (1993) suggest that question particles in Chinese are an overt Qu-marker belonging to an X^0 category and they undergo optional raising,

depending on the presence of a Qu-operator in LF. When a question particle is overt, it appears in the Spec of CP and creates such a licensing effect for the *wh*-word in-situ. When it is absent, however, the *wh*-word in-situ can also be licensed as interrogative by raising the question operator in LF. Unlike *wh*-phrases in English, the morphological realization of the [+/-Q] feature of Cantonese *wh*-words does not rely on the *wh*-word itself but depends on elements in other parts of the sentence. In other words, an unvalued (uninterpretable) [Q] feature is involved in *wh*-words in Mandarin. Empirical studies (Aoun and Li 1993; Cheng 1991, 1994; Huang 1982; Lin 1998, 2004; Tsai 1994a, 1994b) suggest that *wh*-words in Mandarin can be interpreted as indefinites and, since *wh*-words in Cantonese function in a similar syntactic way, *wh*-words in Cantonese are proposed to have an unvalued [Quant] feature as well. The difference between the mechanisms of negative quantifiers in English and neg-*wh*Qs in Cantonese is parallel to those of *wh*-phrases in these two languages. While English negative quantifiers are internally negative with a [+Neg] feature, neg-*wh*Qs as indefinites require an external valuation for the [uNeg] feature inherited from the lexical ambiguity of *mou* in Cantonese.

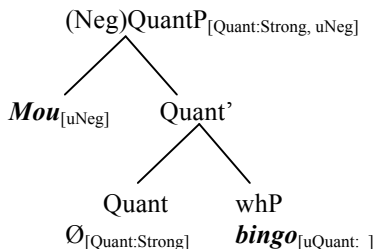
Table 1. Comparison of Cantonese neg-*wh*Qs, Cantonese ordinary negative quantifiers and English negative quantifiers in the object position.

| | Cantonese | | English |
|--------------------|---|--|--|
| Quantifiers | Neg-quantifiers e.g., <i>moujie</i> (‘nothing’) | Neg- <i>wh</i> Qs e.g., <i>mou-matjie</i> (‘no-who’) | Neg-quantifiers e.g., nobody, no one |
| Syntactic features | [Quant: strong] [+Neg] | [Quant: strong] [uNeg] | [Quant: weak] [+Neg] |
| Word Order | SOV | SOV | SVO |
| Interpretation | Sentential negation | Sentential negation/ existential presupposition | Sentential negation |

My proposal here follows the structure of NegQP (Lee 2011) in that a neg-*wh*Q appears as one constituent in terms of possible movements or extractions. Modifications are made to the NegQP in order to account for dual interpretations. I hereby propose a (Neg)QuantP which has an internal unpronounced quantifier operator \emptyset that carries a [Quant:Strong] feature as its head, and a negator *mou* in the Spec position that specifies the phrase with a [uNeg] feature and takes a *wh*-phrase as its complement (any DP for other non-existential quantifiers). Such a QuantP accounts for the

internal structure of neg-whQs and captures the features involved, triggering the overt quantifier raising and the dual interpretations. The [Quant:Strong] feature in the invisible quantifier operator \emptyset marks the neg-whQ as a strong quantifier and forces it to undergo overt movement. Overt raising of neg-whQs is driven by the [uQuant] in Spec,vP under *Agree*. The underspecified [uNeg] feature triggers vague variation between negative and existential presuppositions. Hence, neg-whQs, as strong quantifiers and colloquial terms, have both non-existential and existential presupposition interpretations in Cantonese. This is shown in the following structure.

(12)



The QuantP with *mou* serves as a classifier. The internal quantifier operator has a quantifying force, after *Merge* ($\{mou\{\emptyset, bingo\}\}$), which accounts for the structure of neg-whQs and endows such strong quantifiers with properties of ambiguity. This ambiguity is possibly an outcome of combining the negative morpheme *mou* with *wh*-words in Cantonese, given that there is some sort of [+Neg] feature within *wh*-words. The short form of *wh*-words in Cantonese can imply negative presuppositions. This will be discussed in the next section, using data from Cantonese. The NegP is projected, with a covert negative operator Op_{\neg} as its head, after *Merge* of an object neg-whQ in the derivation. I take Beghelli and Stowell's (1997) location in the functional structure of the clause of the five QP-types into account, where neg-whQs “checks [+Neg] in Spec of NegP, under agreement with the Neg-operator in Neg⁰.” This covert negative operator carries an [iNeg] feature and creates a licensing relationship with a neg-whQ in the base-generated object position of an SVO structure. The full interpretation of the neg-whQ construction is accounted for under the following assumptions for the two scenarios:

- (13) The two scenarios for the pre-Spell-out mechanisms of neg-whQs:
- a. Obligatory quantifier raising (QR) takes place before Spell-Out and decomposition for internally complex QPs must follow.

- b. Decomposition for internally complex QPs takes place before Spell Out and overt movement must follow.

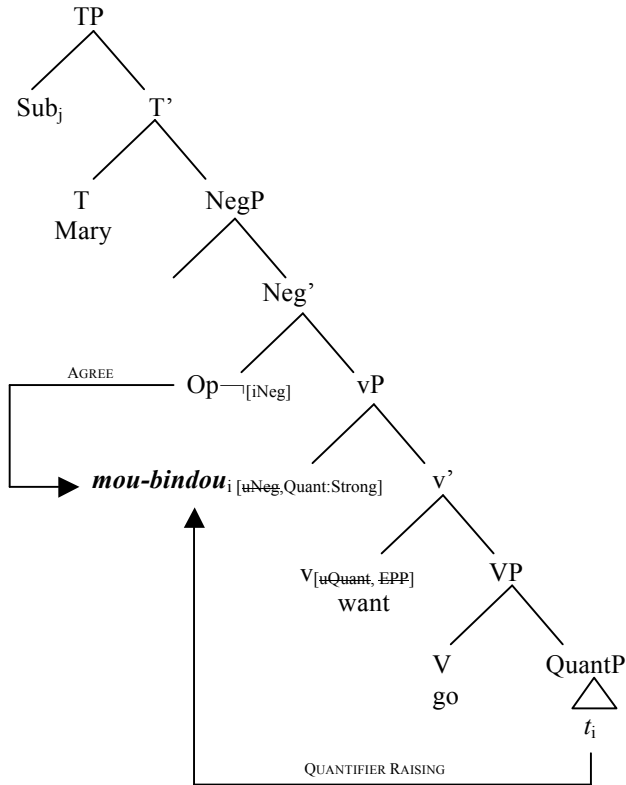
This chapter focuses mainly on the first scenario to capture the dual interpretations of object neg-*wh*Qs in an SOV structure. Neg-*wh*Qs, as strong quantifiers, undergo obligatory quantifier raising (QR) as one constituent. I follow Diesing (1992) and É. Kiss (1995) in that all “strong quantifiers” in Cantonese, such as ordinary negative (non-existential) quantifiers like *moujan* ‘nobody,’ universal quantifiers like *sojaujan* and *muigojan* ‘everyone’ with *dou*-quantification (Cheng 1995), existential quantifiers like *jaujan* ‘someone’ and neg-*wh*Qs like *mou-bingo* ‘nobody’ are required to undergo QR. In contrast, only quantifiers with *dou*-quantification in Mandarin Chinese that appear in the SOV structure. Negative phrases like *ekkert* (Rögnvaldsson 1987) in Icelandic undergo overt quantifier raising. The principle of Full Interpretation (FI) “... requires that every element of PF and LF, taken to be the interface of syntax (in the broad sense) with systems of language use, must receive an appropriate interpretation-licensed in the sense indicated” (Chomsky 1986, 98). In order to receive the full quantificational interpretations, either non-existential or existential, neg-*wh*Qs have to undergo overt QR to the preverbal position to be licensed as strong quantifiers, obtaining both possible presuppositions.

In Chomsky’s Minimalist Program (MP) (Chomsky 1995a), Agree and EPP features yield obligatory movements of neg-*wh*Qs into the specifier position of a structurally higher position. Attract F and Minimal Link Condition (Chomsky 1995b) are defined as follows, which constrains any possible syntactic movement involved for a probe in offering a position for any movement of a valid goal.

- (14) Attract F:
K attracts F if F is the closest feature that can enter into a checking relation with a sublabel of K.
- (15) Minimal Link Condition:
K attracts α only if there is no β , β closer to K than α , such that K attracts β .

Based on the first scenario in (13a), overt quantifier raising is triggered by the uninterpretable features, as described below with the representation in (16).

(16)



The object neg-whQ *mou-bindou* undergoes overt QR to satisfy unvalued features such as [uQuant] and [uNeg]. The EPP feature on *v*, as Last Resort, triggers movement of the neg-whQ into Spec,vP and possible further successive movements. The *v* probes its c-command domain and attracts *mou-bindou* for feature matching and valuation (and deletion). *Mou-bindou* first lands in Spec,vP, where [uQuant] is valued and deleted. In addition, the EPP feature on *v* is also checked. Such constructions, with the object neg-whQ carrying an [uNeg], require the projection of NegP in the derivation and allow a sentential negation. The covert negative operator Op_¬, as an active probe in the Neg⁰, carries an [iNeg] feature and, therefore, Agrees with *mou-bindou*, and checks and deletes the [uNeg] feature on *mou-bindou*. All features are checked for the probes and they become inactive and drive no further syntactic operation. Hence,

object neg-whQs move to Spec,vP and nowhere else obligatorily in overt syntax in Cantonese, resulting in the unique SOV structure. Such overt movement licenses the negative reading of neg-whQs, and, therefore, gives rise to the sentential negation interpretation.

The recent work on the syntax of LF suggests that QR is required for antecedent-contained deletion (ACD) (Kennedy 1997; May 1985) construction as a condition for grammaticality. Kennedy (1997) suggests that the principles forcing LF movement of any lexical material should be the same as those forcing overt (PF) movement. The data with ACD in Cantonese in example (17) supports the claim of the existence of the overt QR in Cantonese. VP-deletion in Cantonese is marked by modal verbs like *jau* ‘have,’ *hoji* ‘can’ and in infinitival constructions after *hui* ‘to.’ This patterns with ACD constructions involving a relative clause in Mandarin Chinese, where modal verbs such as *neng* ‘can’ or *gan* ‘dare to’ (Soh 2005) are required. The neg-whQ *mou-matje* in the following example survives in an ACD construction. Although Cantonese is subject to scrambling, such raising of neg-whQs is not simply an object shift (Chomsky 2001) because the unique SOV structure is restricted to object neg-whQs.

- (17) Ngo *mou-matje*; maai-zo t_i (ji) nei dou jau ge.
 I no-what buy-PVF (that) you also have GE
 a. ‘I bought nothing that you did.’
 b. ‘I bought only a few things that you did.’

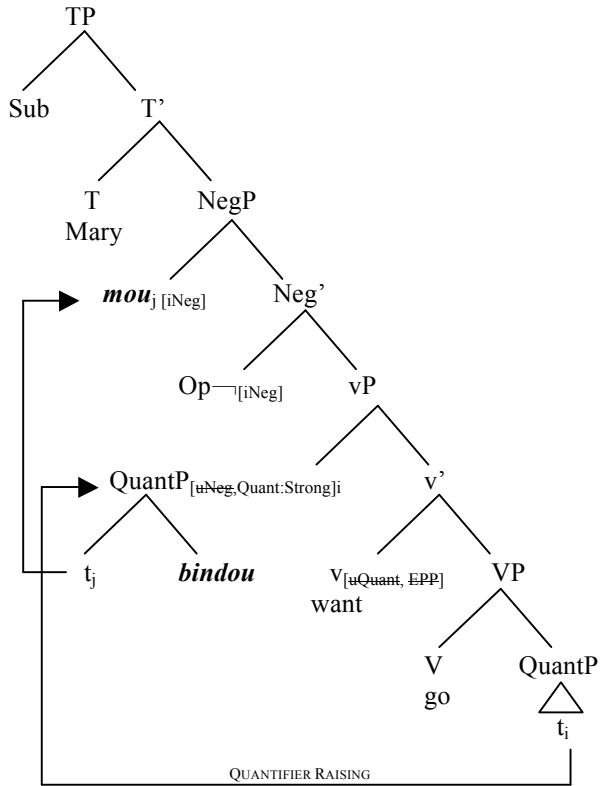
Under the assumption in (13), the decomposition for a neg-whQ follows after the obligatory and overt QR because it is internally complex in morphology. The existential reading is triggered where the split reading is made available due to the decomposition of the neg-whQ into negation and indefinites. This is in accord with Kayne (1998), who proposes that Norwegian neg-phrases are a combination of a negation ‘not’ plus an existential/indefinite.

- (18) The NEG-criterion:
 a. A NEG-operator must be in Spec-head agreement relation with an X^0 [NEG].
 b. An X^0 [NEG] must be in Spec-head agreement relation with a NEG operator.

I follow Haegeman and Zanuttini’s (1991) Neg-criterion, which forces the negative morpheme *mou* to move to the specifier of NegP after decomposition in order to be in a Spec-head agreement relation with the

Op_{\neg} at X^0 [NEG]. Neg-raising is forced by the lexical ambiguity of *mou*, being either interpretable or uninterpretable, and *mou* cannot stay under Op_{\neg} . This neg-raising takes place after the obligatory overt movement to the preverbal position and still preserves the syntactic structure of an object neg-whQ construction prior to Spell-out. The existential reading is made available under the double negated context as an outcome.

(19)



(20) Semantic representation of the existential reading:

 $\neg \dots \neg \exists(x)$ [place (x) I want to go to x]

'It is not the case, such that there is not a place x that I want to go.'

(Lit. 'There is at least somewhere I want to go.')

Given that constructions with object neg-whQs have dual interpretations, the choice of interpretation in these constructions is always context dependent in Cantonese (given that neg-whQs are typical colloquial terms). On the one hand, the “only a few” reading is facilitated when there is an overt sentence particle (SP) such as *zaa* (“only”), *ze/zek* (“emphatic”), *zima* (“only”) or a rhetorical rising tone. According to Tong and James (1994), some sentence particles “express moods and achieve certain rhetorical functions” (Tong and James 1994, 17). On the other hand, the definite negative reading is forced in affirmed contexts, for example, with an overt sentence particle (e.g., *ge* “assertion or emphasis”) and a lowering tone. Taking SP *laa* as an example, with a lowering tone it has the function of “giving affirmation” (Tong and James 1994, 17).

- (21) (Houcoi) ngo *mou-matje* jiu zou *zaa*.
 (luckily) I no-what need do SP
 a. * ‘(Luckily), I have to do nothing.’
 b. ‘(Luckily), I have to do only a few things.’

The sentence particle *zaa* (“only”) above indicates a restrictive focus “only” (Law 2002; Tang 1998). With the presence of an SP *zaa* “only,” the existential interpretation of the object neg-whQ *mou-matje* is forced in (21b), and the non-existential interpretation in (21a) is no longer available. In accordance with the literature (A. Law 2002; S. Law 1990), *zaa* occurs in CP and it is high enough to license the existential interpretation of *mou-matje* in (21). It is argued that the sentence particle *zaa* is quantificational in nature and occupies SFP₂ head, where a topic is located, which is higher than the Neg head in the clausal structure. It follows that it blocks any LF (covert) movements of object neg-whQs to take wider scope, as Relativised Minimality (Rizzi 1990) excludes further movements across C^{0,6}.

- (22) Ngo *mou-matje* maai-zo ze/zek.
 I no-what buy-PFV SP
 a. ? ‘I bought nothing.’
 b. ‘I bought only a few things.’
- (23) Ngo *mou-matje* maai-zo (gaa)wo.
 I no-what buy-PFV SP
 a. ‘I bought nothing.’

⁴ However, sentence particles are beyond the scope of this paper and are not discussed in detail.

b. ? ‘I bought only a few things.’

- (24) Keoi *mou-bingo* zungji ze/zek.
 he no-who like SP
 a. ? ‘He likes nobody.’
 b. ‘He likes only a few people.’

- (25) Keoi *mou-bingo* zungji (gaa)wo.
 he no-who like SP
 a. ‘He likes nobody.’
 b. ? ‘He likes only a few people.’

An existential reading seems to be preferable to a non-existential one in neg-whQ constructions in (22) and (24), which end with *ze/zek*, and a non-existential reading is preferred to an existential one in (23) and (25), which end with *(gaa)wo*. This is expected under our assumption since *(gaa)wo* (“reminder”) tends to have a lowering tone whereas *ze/zek* (“emphatic”) tends to have a rising tone.

To summarize, the neg-whQ inherits both the [uNeg] and [Quant:Strong] features from the internal negative morpheme *mou* and unpronounced quantifier operator \emptyset . As a strong quantifier, it is forced to undergo overt quantifier raising. In order to obtain a full interpretation, it is attracted to Spec,vP, then to Spec,NegP, checking and deleting uninterpretable features under Agree. Therefore, it gives rise to the sentential negation interpretation. The additional existential presupposition is triggered by the following decomposition mechanism that takes place. The choice between the dual interpretations is context-dependent. Rhetorical contexts and contexts with sentence final particles with a rising tone such as *zaa* (“only”), *ze/zek* (“emphatic”) and *zimaa* (“only”) indicate presuppositions of existence. They tend to give rise to existential presupposition interpretations, whereas sentence particles with a lowering tone like *(gaa)wo* tend to infer negative readings.

3. Cantonese *wh*-words in a feature-based account

In this section, I support my proposal by presenting data where Cantonese *wh*-expressions are used as negative presuppositions, and briefly discuss Cantonese *wh*-words in a feature-based approach. Cheung (2006, 2009) suggested that Negative *Wh*-words (NWHs) in Cantonese could also be used to give a negative reading and be paraphrased closely as “no way... .” NWHs are restricted mainly to the short forms of Cantonese *wh*-words, such as *bin(dou)* ‘where,’ *dim* ‘how’ and *me* ‘what’ (but not the

long forms of ‘how’ *dimjoeng* and ‘what’ *matjie*). The negative interpretation of these words can only be maintained in a pre-modal position. The distribution of NWHs is as follows ((26) and (27) are based on Cheung 2006):

- (26) Keoi *bin* jau luksap seoi aa?!
 he where have sixty year-old SP
 a. ‘No way is he 60 years old.’
 b. * ‘Where will he be 60 years old?’
- (27) Keoi *dim* wui maai go bun syu aa?!
 he how will buy the CL book SP
 a. ‘No way will he buy the book.’
 b. * ‘How will he buy the book?’

On a par with *shenme* ‘what’ in Mandarin Chinese, *matje* ‘what’ can also be used to give a strong negative implication when it appears after auxiliaries. The following illustrate the use of *shenme* in Mandarin Chinese (28) (Hsieh 2001) and its counterpart *matje* in Cantonese (29), which give rise to a strong negative implication.

- (28) Zhe you *shenme* hao?
 this have what good
 ‘What good is this?’
- (29) Gam jau *matje* hou?
 this have what good
 ‘What good is this?’

Wh-elements occurring either in pre- or post-auxiliary positions, as shown by (28) and (29), have negative interpretations but not interrogative interpretations. I have further analyzed Cheung’s NWHs in Cantonese as a variation from other *wh*-words in their inherent features. On the one hand, NWHs appear to bear an internal (uninterpretable) [uNeg] to be licensed in the pre-auxiliary position and a [-Q] feature, and, therefore, a negative rather than an interrogative reading is easily obtained. On the other hand, ordinary *wh*-words bear the [+/-Q] feature. *Wh*-arguments such as *matje* (‘what’), *bingo* (‘who’) and *bindou* (‘where’) even bear a [uQuant] feature, which allows them to be interpreted as either interrogative or indefinite depending on the contexts they appear in.

- (30)

| | |
|---|--|
| NWHs | WH |
| e.g., <i>bin(dou), dim, me,</i> <i>mat(je)</i> | e.g., <i>matje, bingo, bindou,</i> <i>dingaai, dimjoeng</i> |
| [uNEG] | [+/-Q] |
| [-Q] | |

Since NWHs are normally short forms of ordinary *wh*-words, perhaps such [uNeg] elements are embedded in every *wh*-word and the negative reading is retrieved in different ways, for example, where NWHs appear in the pre- or post-auxiliary position. In some cases, even the long form of *wh*-words give rise to negative meanings, in particular contexts like (31).

- (31) *Bingo* wui zoek ji gin saam gaa, gam watak.
 who will wear this piece clothes SP so ugly
 ‘Who will ever wear this top? This is so ugly.’
 (Lit. ‘Nobody will wear this top, so ugly (it is).’)

The reason why *bingo* in (31) gets a negative interpretation is beyond the scope of this study. However, the data suggest some sort-of [uNeg] feature embedded within *wh*-words and the negative reading is waiting to be triggered in some way. Therefore, dual interpretations can somehow be hinted at from the complexity of a neg-whQ. Ambiguity arises from the interaction of the lexical ambiguity of the negative morpheme *mou* itself and some sort of [uNeg] features within *wh*-words in Cantonese. This study needs to be further extended to provide a unified account for neg-whQs and *wh*-words in Cantonese.

4. Existential interpretations of Cantonese *wh*-words

This section examines Yip and Matthews’ (2000) data in Cantonese where *wh*-words give rise to special existential interpretations in negative sentences. The data supports our proposal that an existential interpretation is possible in negative (neg-whQ) constructions.

- (32) *Mou bingo* wui gam chun ge.
 No who will so stupid SP
 ‘Hardly anyone would be so stupid.’

The interaction of a negative word and a *wh*-word gives rise to the meaning “hardly at all” rather than “not at all,” according to Yip and Matthews (2000). *Mou bingo* in (32), as a subject, is also a neg-whQ,

however, in my proposal, a subject neg-*wh*Q has no optional existential interpretation and only gives rise to a sentential negation interpretation. The same “hardly”-interpretation remains even if *mou bingo* is replaced by the ordinary negative quantifier *mou-jan* ‘nobody’ in (32). Therefore, it is questionable whether the ambiguous *mou* and the sentence particle *ge* have an effect on giving rise to existential interpretations here, rather than *mou* and *wh*-word combined as one constituent in such a case. Neg-*wh*Qs in the subject position are outside the scope of this study. To better explain the “hardly at all” interpretation in these kinds of constructions, I focus on constructions with an object neg-*wh*Q where the interpretation changes if it is replaced by an ordinary negative quantifier. In the following examples cited from Yip and Matthews’ (2000) data, the so-called “hardly at all” interpretation is only available with object neg-*wh*Qs or a negation and *wh*-word as a combination in the preverbal position.

- (33) *Nei gamjat mou matje zou.*
 you today no what do
 ‘You don’t have anything much to do today.’
- (34) *Ngodei mou bindou heoi.*
 we no where go
 ‘We don’t have anywhere much to go.’
- (35) *Ngo mou dim(jeong) lam-guo.*
 I no how think-PFV
 ‘I hardly gave it any thought.’
- (36) *Nei gamjat mou matje zou, zinghaai jiu daa*
 you today no what do just need type
fon sun zek.
 CL letter SP
 ‘You don’t have anything much to do today, just type up a letter.’

The above examples support the claim that an existential interpretation is available even in the absence of sentence particles. However, in replacing all neg-*wh*Qs by ordinary negative quantifiers, the “hardly at all” interpretations immediately disappear. These support the proposal made in this chapter that there are dual interpretations in constructions with object neg-*wh*Qs.

5. Conclusion

To conclude, this study has looked at neg-whQs in Cantonese in a feature-based approach. The possible dual readings of an object neg-whQ, which is morphologically composed of a negative morpheme *mou* and a *wh*-phrase, are made clear by the proposed interpretable [Quant:Strong] feature and the [uNeg] feature. Both non-existential (negative) and existential interpretations are available in neg-whQs, which makes neg-whQs distinct from any other ordinary negative quantifiers. The alternation of the two possible readings is context-dependent in the absence or presence of sentence particles (e.g., “only” particle *zaa*) implying existential presuppositions, or the change of tone of sentences. The study has also attempted to unify the features of *wh*-phrases in Cantonese in which [uNeg] could be involved, by suggesting NWHs are a subset of WH. The additional existential reading is supported by data with a “hardly at all” reading in Cantonese. The scope of this study is limited to object neg-whQs and further investigation is needed for a unified account for *wh*-phrases in Cantonese.

REFERENCES

- Aoun, Joseph, and Audrey Li. 1993. *Syntax of scope*. Cambridge, MA: MIT Press.
- Beghelli, Fillippo, and Tim Stowell. 1997. "Distributivity and Negation: the Syntax of each and every." In *Ways of Scope Taking*, edited by Anna Szabolcsi, 71-197. Dordrecht: Kluwer.
- Cheng, Lai-Shen Lisa. 1991. "On the typology of wh-questions." PhD diss., MIT.
- Cheng, Lai-Shen Lisa. 1994. "Wh-words as Polarity Items." *Chinese Languages and Linguistics* 2:615-40.
- Cheng, Lai-Shen Lisa. 1995. "On Dou-quantification." *Journal of East Asian Linguistics* 4:197-234.
- Cheung, Yam-Leung Lawrence. 2006. "Negative Wh-Words in Cantonese." In *Proceedings of the 18th North America Conference on Chinese Linguistics (NACCL-18)*, edited by Janet Xing.
- Cheung, Yam-Leung Lawrence. 2009. "Negative wh-construction and its semantic properties." *J East Asian Linguist* 18:297-321. doi:10.1007/s10831-009-9051-2.
- Chomsky, Noam. 1986. *Barriers*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1995a. "Bare phrase structure." In *Government and Binding Theory and the Minimalist Program*, edited by Gert Webelhuth, 383-440. Oxford: Blackwell.
- Chomsky, Noam. 1995b. *The minimalist program*. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. "Derivation by Phrase." In *Ken Hale. A Life in Language*, edited by Michael Kenstowicz, 1-52. Cambridge, MA: MIT Press.
- Diesing, Molly. 1992. *Indefinites*. Cambridge, MA: MIT Press.
- É. Kiss, Katalin. 1995. "NP Movement, Operator Movement, and Scrambling in Hungarian." In *Discourse Configurational Languages*, edited by Katalin É. Kiss, 207-43. Oxford: OUP.
- Haegeman, Liliane, and Raffaella Zanuttini. 1991. "Negative Heads and the Neg-criterion." In *The Linguistic Review* 8:233-51.
- Heim, Irene Roswitha. 1982. "The semantics of definite and indefinite noun phrases." PhD diss., University of Massachusetts, Amherst, MA.
- Hsieh, Miao-Ling. 2001. "Form and meaning: Negation and question in Chinese." PhD diss., University of Southern California.

- Huang, Cheng-Teh James. 1982. "Logical relations in Chinese and the theory of grammar." PhD diss., MIT.
- Kayne, Richard. 1998. "Overt VS. Covert Movement." *Syntax* 1:2:128-91.
- Kennedy, Christopher. 1997. "Antecedent-Contained Deletion and the Syntax of Quantification." *Linguistic Inquiry* 28(4):662-88.
- Kratzer, Angelika. 1995. "Stage-level and individual-level predicates." In *The Generic Book*, edited by Gregory N. Carlson and Francis Jeffry Pelletier, 125-75. Chicago: University of Chicago Press.
- Law, Sam-Po. 1990. "The syntax and phonology of Cantonese sentence-final particles." PhD diss., Boston University.
- Law, Ann. 2002. "Cantonese sentence-final particles and the CP domain." *UCL Working Papers in Linguistics* 14:375-98.
- Lee, Man-Ki Theodora. 2011. "Overt quantifier raising of Negative-wh-quantifiers in Cantonese." In *Proceedings of the Sixth Cambridge Postgraduate Conference in Language Research*, edited by Chris Cummins, Chi-Hé Elder, Thomas Godard, Morgan Macleod, Elaine Schmidt, and George Walkden, 92-107. Cambridge: Cambridge Institute of Language Research.
- Lewis, David. 1975. "Adverbs of quantification." In *Formal Semantics of Natural Language*, edited by Edward L. Keenan, 3-15. Cambridge: CUP.
- Li, Yen-Hui Audrey. 1992. "Indefinite wh in Mandarin Chinese." *Journal of East Asian Linguistics* 1:125-55.
- Lin, Jo-Wang. 1998. "On existential polarity wh-phrases in Chinese." *Journal of East Asian Linguistics* 7: 219-55.
- Lin, Jo-Wang. 2004. "Choice functions and scope of existential polarity WH-phrases." *Linguistics and Philosophy* 27:451-91.
- May, Robert. 1985. *Logical Form: Its Structure and Derivation*. Cambridge, MA: MIT Press.
- Penka, Doris, and Arnim von Stechow. 2001. "Negative Indefinita unter Modalverben" in *Modalität und Modalverben im Deutschen*, edited by Reimar Müller and Marga Reis, 263-86. Hamburg: Buske Verlag.
- Potts, Christopher. 2000. "When even no's neg is splitsville." *Jorge Hankamer's Web Fest*, edited by Sandy Chung, Jim McCloskey, and Nathan Sanders. Available at <http://ling.ucsc.edu/Jorge/potts.html>.
- Progovac, Ljiljana. 1988. "A Binding Approach to Polarity Sensitivity." PhD diss., UCLA.
- Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.
- Rögnvaldsson, Eiríkur. 1987. "OV Word Order in Icelandic." In *Proceedings of the Seventh Biennial Conference of Teachers of Scandinavian Studies in Great Britain and Northern Ireland*, edited by

- Robin M.A. Allan and Michael P. Barnes, 33-49. London: University College.
- Soh, Hooi-Ling. 2005. "Wh-in-situ in Mandarin Chinese." *Linguistic Inquiry* 36:143-155.
- Tang, Sze-Wing. 1998. "Parametrization of features in syntax." PhD diss., University of California, Irvine.
- Tong, S.-T. Keith, and Gregory James. 1994. *Colloquial Cantonese – A complete Language Course*. London/New York: Routledge.
- Tsai Wei-Tien, Dylan. 1994a. "On nominal islands and LF extractions in Chinese." *Natural Language and Linguistic Theory* 12:121–75.
- Tsai Wei-Tien, Dylan. 1994b. "On economizing the theory of A-bar dependencies." Unpublished PhD diss., MIT.
- Yip, Virginia, and Stephen Matthews. 2000. *Intermediate Cantonese: a Grammar and Workbook*. London: Routledge.