Head-First: On the head-initiality of Vietnamese clauses

Nigel Duffield

Konan University

Abstract

This paper provides a detailed analysis of complementizer-like elements on the left and right periphery of Vietnamese clauses, comparing these with their counterparts in other East Asian varieties, as well as in more familiar Western European languages. The focus of the study is on the derivation of Yes-No questions in Vietnamese, which—in contrast to constituent questions—exhibit a number of theoretically significant co-occurrence constraints, including a ban on negative, topicalized and future tense questions. Re-interpretating a more traditional, descriptive treatment (Nguyen 1997), this paper explains these distributional constraints through a derivational analysis involving predicate-raising around sentence-medial functional heads (cf. Kayne 1995). Implications of this analysis for other apparent rightward heads in Vietnamese—as well as for Chinese—are also considered.

1. Introduction

This paper is concerned with the analysis of functional morphemes in Vietnamese that surface on the right edge of interrogative clauses, specifically, the negative morphemes *không ('not')* and *chưa ('not yet')* illustrated in (1a) and (1b), respectively.[i]

(1) a. Chị có mua cái nhà   *không*?

          PRN ASR buy   CLS house   NEG

          'Did you [elder sister] buy (the) house?'

    b. Con đã uống thuốc   *chưa*?[ii]

          PRN ANT drink medicine not.yet

          'Have you [child] taken your medicine yet?'

These elements, which have been treated previously in generative work (see for example, Duffield 1999, 2007; Trinh 2005), attract attention not only in virtue of their unexpected syntactic distribution—rightward heads in an otherwise rigidly head-initial language—but also because of how they interact with other functional categories, in ways that suggest a more complex derivational history. Among the surprising interactions that this paper considers are the impossibility of negative Yes-No questions, exemplified in (2a), and the incompatibility of final *không/chưa* with preverbal topic and (future) tense markers, illustrated in (3a) and (4a), respectively.

(2) a. *Anh ấy không đến   không?

        PRN DEM NEG   come   NEG

        'Isn't he coming?'

b. Anh ấy không đến.

PRN DEM NEG come

'He isn't coming.'

c. *Con *chưa* uống thuốc *chưa*?

PRN not.yet drink medicine not.yet

'Haven't you [child] taken your medicine yet?'

d. Con *chưa* uống thuốc.

PRN not.yet drink medicine

'You [child] haven't yet taken your medicine.'

(3) a. *Xã bên (thì) ruộng tốt không?

village side TM rice field good NEG

'(As for) the neighboring village, are its rice-fields are good (fertile)?'

b. Xã bên (thì) ruộng tốt.

village side TM rice field good

'(As for) the neighboring village, its rice-fields are good (fertile).'

(4) a. *Vợ anh sẽ (có) làm việc ở Paris không?

wife PRN FUT ASR work be.loc Paris NEG

'Will your wife work in Paris?'

b. Vợ anh sẽ làm việc ở Paris.

wife PRN FUT work be.loc Paris

'Your wife will (indeed) work in Paris.'

There are three points to observe immediately concerning these contrasts. The first is the rather obvious fact that the final interrogative morpheme *không* in the (a) examples is formally identical to the sentential negation morpheme found in declarative clauses—except for its distribution: clausal negation in Vietnamese is strictly pre-verbal, occurring in a fixed position between Tense and the main verb, such that final placement of *không*/*chưa* in declarative clauses to express negation is ungrammatical. This is shown by the contrasts in (5) and (6):

(5)   a.   Anh *không* khỏe.

          PRN NEG   well

          'You [older brother] are unwell.'

      b.   Chị *không* mua   cái nhà.

          PRN NEG   buy   CLS house

          'You [elder sister] did not buy (the) house.'

      c.   Con *chưa*   uống thuốc.

          PRN not.yet drink medicine

          'You [child] have not taken your medicine.'

(6)   a.   Anh khỏe *không*.

          PRN well   NEG

          cannot mean 'You [older brother] are unwell.'

      b.   Con uống thuốc   *chưa*.

          PRN drink medicine not.yet

          cannot mean 'You [child] have not taken your medicine.'

4

As shown in (7), *không/chưa* also occurs unambiguously as an emphatic negative in the corresponding responsive constructions:

(7) a.   Anh có khỏe không?   A: Không! (Tôi không khỏe lắm.)

PRN ASR well NEG   NEG   PRN NEG   well very

'Are you [older brother] well?   'No (I'm not very well.)'

b.   Chị có mua cái nhà   không? A: Không, (tôi không mua.)

PRN ASR buy CLS house NEG   NEG   I NEG   buy

'Did you [elder sister] buy (the) house?'   'No, I didn't (buy it.)'

c.   Con đã uống thuốc   chưa?   A: Chưa!

PRN ANT drink medicine not-yet   not.yet

'Have you [child] taken medicine yet?'   'Not yet!'

The second point of these examples is that Yes-No questions marked by simple *không* are generally restricted to unselected root clauses, unless—as discussed below—the complement clause is introduced by the leftward complementizer *liệu* (8a): as shown in (8b), for example, embedded Yes-No questions are normally signaled by a subtly different device, namely, *hay không* ('or not'), which—like the other forms of tag question discussed further below—exhibit a distinct set of co-occurrence restrictions.

(8) a.   Cô gái hỏi [*liệu* cô có thể   đi đến bữa tiệc được *không*].

PRN girl ask LIEU PRN ASR possibility go arrive party   can   NEG

'The girl asked if she could go to the party'.

b.   Cô giáo   hỏi các em sinh viên có tham gia chuyến đi hay *không*.

PRN teacher ask PL PRN student ASR intention trip   go or NEG

'The teacher asked whether the students were going on the trip.'

The third, less obvious, point concerns a contrast in co-occurrence restrictions between the future/irrealis morpheme *sẽ*—illustrated in (4) above, which is incompatible with final *không*—vs. the "anterior" morpheme *đã* exemplified in (1b), and (9) below, which is fully compatible with final *chưa*.[iii] Indeed, the standard structuralist assumption has been that Yes-No questions are formed by means of two "brace constructions" in which the pre-verbal morphemes and *có* and *đã* —the former glossed ASR (for assertion) in (1a), following Duffield (2007)—are paired with final *không* and *chưa*, respectively: according to this brace analysis, schematized in (9), simple Yes-No questions involving only final *không/chưa*—that is, with no medial element—are derived through the optional omission of the pre-verbal element, in a manner apparently very similar to the omission of preverbal *ne* in negative sentences in many varieties of spoken French, as in (10).

(9)   a.   [(có)…...VP…không]

    b.   *[(đã)…VP…chưa]*

(10)   Elle   (ne) voit pas son fils.

    PRN (NEG) see NEG her son

    'She does not see her son.'

The discrepancy between the two pre-verbal morphemes is unexpected—and largely inexplicable—if both *đã* and *sẽ* are exponents of tense, as has often been claimed in the descriptive literature (see, for example Nguyen 1997, Lo Cicero 2001, amongst others): there would seem to be no reason why one should be able to ask past

tense Yes-No questions using this construction, but not future tense ones. On the other hand, the contrast can be explained if one assumes that the two morphemes are initially projected in distinct structural positions, as will be argued presently: see also Duffield & Phan (2010).

The aim of the present study, therefore, is to offer a syntactic analysis of Yes-No questions that simultaneously derives these effects, and which reconciles the surface position of these sentence-final question markers with the strictly head-initial character of Vietnamese phrase-structure more generally. The empirical claim will be that Vietnamese is in fact head-initial throughout (up to and including the CP level), and that the surface distributions in (1) as well as the constraints illustrated in (2)-(8) reflect a series of complex derivational steps involving predicate-raising around leftward heads.[iv] Furthermore, it will be argued that the derivation of the surface word-order of Yes-No questions differs in crucial respects from that of constituent wh-questions; lastly, it will be shown how the syntactic and interpretive behaviour of the anterior morpheme *đã* provides additional support for the projection of aspectual morphemes in a position below negation but above the maximal *v*P, that is, the position labelled "Outer Aspect" in Travis (1991, 2010).

The functional phrase structure implied by this proposal is diagrammed in (11), which is essentially that of Travis (2010), the only modification being the addition of a Topic Phrase projection to accommodate the topic-prominent nature of Vietnamese syntax: Cao 1991, Duffield 1999): in this tree, Vietnamese morphemes are realized at the point of initial merger:

(11)
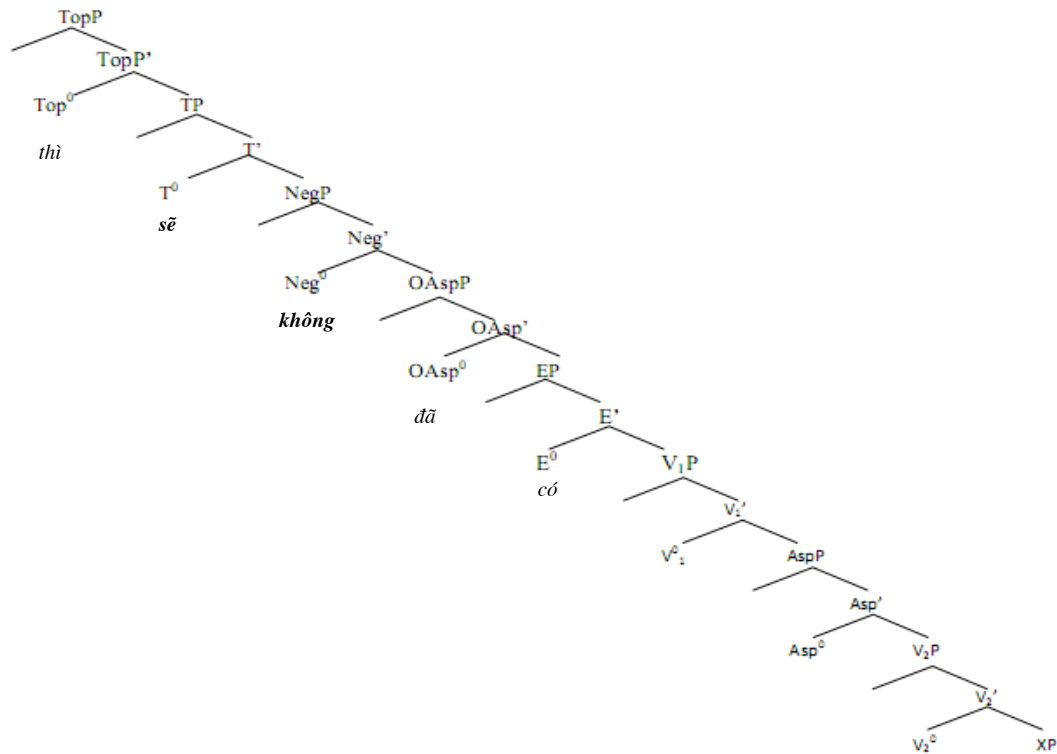
Our starting point, however, will be the null hypothesis about Vietnamese, namely, that it is fundamentally similar in structure to its areal and typological neighbour, Chinese. If this were the case, then Yes-No questions such as those in (1) should be treated on a par with the corresponding Yes-No (and wh-) questions in Mandarin exemplified in (12) (from Cheng 1997), which—superficially at least—display identical word-orders. Translating Cheng's (1997) analysis to Vietnamese, *không/chưa* would be thus treated as Q-markers in a rightward (head-final) Comp position, as schematized in (13):

(12) a.   Ni xihuan   zhe ben shu ma?

            you like   this book   Q

            'Do you like this book?'

b.   Qiaofeng mai-le shenme ne.

Qiaofeng buy-perf what Q_{WH}

'What did Qiaofeng buy.'

(13)

```
              CP
            /    \
          TP      Comp
         /‾‾\      |
              ma/không
```
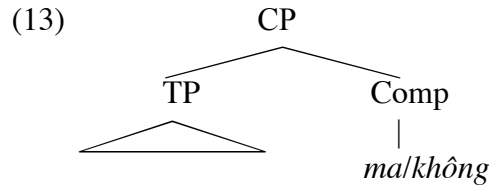
      The theoretical problems with such a translation, however convenient, should be obvious. In the first place, it offends against the otherwise rigidly head-initial character of Vietnamese phrase-structure; second, it offers no possibility of accounting for the contrasts just introduced. Most significantly perhaps, there is a considerable amount of empirical evidence that speaks against it.

      The argument to be developed runs as follows. First, it will be established that Vietnamese has leftward complementizers in other clausal contexts, including interrogative complementizers in indirect questions: such facts offer clear distributional evidence against the idea that these rightward elements are exponents of a head-final CP. Next, it will be demonstrated that these final elements are not tags, or other extra-sentential markers: Vietnamese does have productive tag questions, which are superficially very similar to Yes-No questions; however, these display none of the constraints illustrated above. These apparently contradictory findings—that Vietnamese has leftward complementizers, and that final Q-elements are nevertheless integrated functional heads—together support the Kaynian conclusion that head-final word-order in Vietnamese interrogatives should be derived through predicate-raising (Kayne 1995, and subsequent work): the analysis proposed in the final section analyzes the observed word order facts in this fashion, while directly accounting for

9

the interpretive and morphological constraints. This analysis is also shown to make the correct cut between the two pre-verbal morphemes, a distinction that is independently motivated by the semantic and interpretive properties of *đã*: see Trinh 2006, Duffield & Phan 2010). Finally, I consider the implications of this analysis for other apparent exceptions to head-initiality in Vietnamese—in particular, for the status of final modal *được* (Duffield 1999, 2001) and the demonstrative morphemes *này-ấy-kia* ('this-that-yon', cf. Nguyen 2009), as well as for broader parametric proposals, including Cheng's (1997) Clausal Typing Hypothesis.

2. Leftward complementizers

One of the most basic considerations against the idea that these sentence-final elements occupy a rightward Comp position is the fact that Vietnamese is otherwise a radically head-initial language. The examples in (14) and (15) below illustrate various ways in which Vietnamese is head-initial in its canonical word order, not simply with respect to head-complement order, but also with regard to most other head-modifier relations: the examples in (14) show that transitive verbs, prepositions, (complement-taking) nouns and adjectives, and most T-related elements precede their phrasal complements; those in (15) demonstrate the fact that attributive adjectives, (restrictive and non-restrictive) relative clauses, adjunct clauses, prepositional phrases, and even noun-modifiers in Noun-Noun compounds (15e), all invariably follow the head of the phrase they modify:

(14) a.   Tôi chỉ [$_{VP}$*mua* hai trái cam   thôi].

I   only buy   two CLS oranges at.all

'I only bought two oranges.'

b.   Bếp nằm ngay [_{PP} *sau* lều ngủ].

kitchen   directly behind tent sleep

'The kitchen is directly behind the sleeping tent.'

c.   [_{NP} *Giả thuyết* [trái đất   phẳng]] (thì) dễ   bác bỏ.

belief   earth   flat   TM easy disprove

'The belief that the earth is flat is easy to disprove.'

d.   Người đàn ông [_{AP} rất *tự   hào*   về   con gái mình]

person man   very self proud about CLS girl self

'A man very proud of his daughter.'

e.   Mẹ   tôi [_{TP} *đã* mua] và   chúng tôi trở về   nhà.

mother I   ANT buy   CONJ plural I   return   house

'My mother bought (it) and we returned home.'

(15) a.   Một người rất thông mình.

one person very   intelligent

'A very intelligent person.'

b.   Quyển sách [mà anh thích nhất] thì bán chạy.

CLS   book RM prn like   most   TM sell run

'The book that you like most is selling well.'

c.   Người phụ nữ hài lòng [vì   đã   quyết định sáng suốt].

person woman happy   because ANT decide   clearly

'The woman was happy because the right decision had been made.'

d. mẹ   của tôi

    mother POSS I

    'my mother'

e.i. *sân*   bay

    ground fly

    'airport'

ii. *sân*   bóng

    ground ball

    'football ground'

iii. *máy*   bay

    machine fly

    'plane'

iv. *máy*   in

    machine print

    'printing press'

Given this overwhelming head-initiality,[v] it would be rather surprising if regular clausal complements in Vietnamese were not also head-initial, even if Vietnamese were like Mandarin Chinese in possessing no overt complementizers.[vi] As it happens, though, it does.

2.1. Complementizers in declarative contexts

In embedded declarative clauses, the two most plausible candidates as complementizers are initial *rằng* and *là*, the former largely restricted to formal written registers, the latter more commonly found in colloquial registers, and homophonous with the identificational copula. The sentences in (16) illustrate typical examples of verbal sentential complements. In all of these cases, either *rằng* or *là* may introduce the embedded clause, depending on the register:[vii]

(16) a. Ông ta nói *rằng/là* công việc không thích hợp với ông ta.

    PRN say COMP   work   NEG   suitable   with   PRN

    'The man said that the job was unsuitable for him.'

  b. Chánh Án   Froeberg nói [*rằng* ông đưa ra hai bản án tối đa …][viii]

    Chief Justice Froeberg say   COMP PRN hand out two sentence max…

    'Chief Justice Froeberg said that he handed out the two maximum

     sentences…'

  c. Tôi mong-ước *là/rằng* mình có thể có   ngọn đèn như thế.

    I   wish   COMP self   can   possess lamp like so

    'I wish that I had a lamp like that.'

  d. Sau khi biết   *là* tôi biết chuyện, chị đã chủ động gọi điện cho tôi…

    after time know COMP I know story,   PRN ANT active   call phone give

     I

    'After (she) knew that I knew, she actively phoned me…'

13

e. Hôm qua anh ấy   nói *là* mai   anh ấy không   đến được.

yesterday PRN DEM say COMP tomorrow PRN DEM NEG come CAN

'He said yesterday that he would not be able to come tomorrow.'

The examples in (17) confirm that Vietnamese permits multiple-embedding with either element, such recursion being a further indication that these are complementizers of the familiar sort:

(17) a. Tôi nghỉ [*rằng* các bạn sẽ nói [*rằng* tôi dược hưởng   một nền giáo dục

tốt   đẹp   nhất   [*mà* tiền bạc có thể mua   được.]]]

I think   COMP PL. friend FUT say COMP I can inherit   one   education

good beautiful most RM   money   can   buy   can

'I guess that you could say that I had the best education that money can

buy.'

b. Tôi chắc *là*   chị ấy sẽ   cho *là*   chị ấy đã   không phạm sai lầm nào cả.

I sure   COMP PRN DEM FUT give COMP PRN DEM ANT NEG make error at all.

'I am sure that she will consider that she made no mistakes at all.'

2.2. Interrogative Complementizers

Turning now to interrogative complement clauses, the expectation is that Vietnamese should have leftward complementizers here too: if this is the case, then it would seem to strongly militate against the idea *không* and *chưa* are in C. Consider therefore the examples in (18) (partially repeated from 8):

(18) a. Cô giáo hỏi các em sinh viên có tham gia   chuyến đi hay

    không.

    PRN teacherask PL PRN student ASR intention trip   go or

    NEG

    'The teacher asked whether the students were going on the trip.'

    b. Người đàn ông tự hỏi [*liệu* cô bồ có   ở   lại với ông ấy (hay *không)*].
    person man self ask   LIEU PRN friend   ASR   be.loc stay with PRN DEM

        or NEG)

    'The man wondered whether (or not his girlfriend would stay with him.'

    c. Cô gái hỏi [*liệu* cô có thể   đi đến   bữa tiệc được *không*].
    PRN girl ask LIEU PRN ASR possibility go arrive party   can   NEG

    'The girl asked if she could go to the party.'

With the exception of (18a),[ix] the two other indirect questions in this set are introduced by the element *liệu*. According to Trang Phan (personal communication), these sentences are less natural whenever *liệu* is omitted. Given its distribution and functional role, the most obvious analysis of this element is as a (clausal typing) complementizer, similar to English *whether/if*.

The crosslinguistic parallel is not quite complete in that *liệu* is compatible with the complementizer *rằng*, as shown in (19):

(19)   Tôi đã sa thải họ. *Liệu* rằng tôi làm thế] có đúng không?

I ANT dismiss PRN.LIEU COMP I do   that ASR right NEG

'I have dismissed them. Did I do the right thing? (*lit*. whether I did that,

  was it right?)

However, this is hardly a serious objection to the claim that *liệu* is a [+wh] C-related element, since it has frequently been observed that the exclusion of *whether + *if*/*that*—previously handled in terms of the Doubly-Filled Comp Filter (DFCF; *cf*. also Bayer & Brandner 2008)—is a relatively recent constraint in the history of English: earlier grammars permitted this, and the collocation is attested in other languages, including Dutch, as in (20b-c):[x]

(20) a.   *men shal wel knowe who that I am*. (Middle English)

   b.   Hij vroeg *of dat* ik het wilde. (Colloquial Dutch)

     He asked if that I   it   wanted

     'He asked if I wanted it.'

   c.   Ik vraag hem of   hij zich verslapen   heeft *of dat* hij ziek is.
(Standard Dutch)

     I ask   him whether he   REFL overslept has   or that he ill is.

     'I asked him whether he overslept or whether he was ill.'

Therefore, it seems warranted to claim that *liệu* is a C-related element of some kind—though perhaps a specifier rather than a head, given its co-occurrence with *rằng*. If this is correct, it offers further evidence against the idea that final *không* occupies C in any context.[xi]

Notice finally that it is quite possible to embed a Yes-No question within a Yes-No question, yielding a double occurrence of final *không*, as exemplified in (21) below (though as noted earlier, it is preferable to signal the embedded question by means of a preceding *hay* 'or'):

(21) a.   Nó có hỏi mày có về   nhà   (hay) không không?

          PRN ASR ask PRN ASR return home (or) NEG   NEG

          'Did he ask whether you went home (or not)?

Summarizing this section, there seems to be robust distributional evidence to support the view that Vietnamese CP projections are head-initial in both declarative and interrogative complement clauses, in harmony with the head-initial character of the other constituent phrases that were illustrated in (14) and (15) above. In the light of this evidence, the strong implication must be that rightward *không* and *chưa* occupy some other phrase-structural position.

3.   Analyzing the right periphery

If the evidence of the previous section implies that *không* and *chưa* are not in C, the question arises as to their correct analysis. This section considers—and rejects—two straightforward analytic possibilities: first, that final *không* and *chưa* are extra-sentential elements; second—more plausibly perhaps—that they are sentential tags.

3.1.1. Final *không* as extra-sentential discourse marker

The notion that these elements might be extra-sentential (possibly extra-grammatical) morphemes, on a par with the final discourse particles exemplified in (22) below, is schematized in (23). Were this the case, their right-peripheral position

would present no challenge to the idea that Vietnamese phrase-structure is consistently head-initial; but neither would it be a theoretically interesting solution.

(22) a.   thế à?

            fact Q

            'Is that so?'

      b.   Anh đang làm gì   thế ạ?

            PRN PROG do   what Q   POL

            'What are you doing?'

      c.   Tôi đã   bảo là   tôi đi câu cơ mà! [xii]

            I   ANT say   COMP I   go fishing EXCL

            'I already told you that I'm going fishing!'

(23)   [CP ....] không?

        The idea that morphemes such as those in (22)—and their correlates in other languages—should be analyzed as extra-syntactic may be controversial (see note below), but it is by no means unprecedented in formal analysis.[xiii] Most relevant to the present paper is recent work by Teresa Biberauer and her colleagues (Biberauer, Holmberg, and Roberts 2007), (Biberauer, Holmberg, and Roberts 2008), whose Final-Over-Final Constraint (FOFC)[xiv] specifically requires final 'force particles' in head-initial languages to be treated as extra-metrical with respect to Kayne's LCA by virtue of not projecting categorial features. Interestingly, Biberauer, Holmberg and Roberts (2007) specifically cite Chinese as a key example of extra-metrical final particles in a head-initial language.

That said, such an analysis for Vietnamese *không* is unpromising. For one thing, it fails to explain why these elements should be homophonous with morphemes that *are* clearly syntactically integrated, and which have a clear context-free semantics of their own; by any reasonable understanding of the definition, *không* projects categorial features. Second, it predicts incorrectly that these elements should be restricted to the right edge of matrix clauses, and, possibly, that they should be separated from sentential material by some type of intonational break. The examples in (24), however, show that *không/chưa* are both integrated into some kind of subordinate clause such that they can appear within that constituent in fronting contexts.[xv] This mobility contrasts sharply with that of the elements in (22), which are all restricted to utterance-final positions. (Notice moreover that where *không* co-occurs with discourse particles, the latter always occur to its right).

(24)   a.   [Lan có gặp Thơ không]ⱼ,   Tân   biết tⱼ   (Bruening & Tran 2006a)

    Lan ASR meet Tho   NEG   Tan   know

    'Tan knows whether Lan met Tho.'

  b.   *[Lan có gặp Thơ]ⱼ,   Tân biết tⱼ   không.

    Lan ASR meet Tho   Tan know   NEG

    '*Tan knows whether Lan met Tho.'

  c.   Tân biết [Lan có gặp   Thơ   ?*(hay) không][xvi]

    Tan know Lan ASR meet Tho   or   NEG

    'Tan knows whether Lan met Tho.'

Finally, as noted at the outset, both *không* and *chưa* are syntactically bound to pre-verbal morphemes *có* and *đã*. The syntax of these two latter elements is discussed

in more detail in (Duffield 2007) and Duffield & Phan (2010), respectively. Here, the crucial point to observe is that it is these optionally realized pre-verbal elements, rather than *không* or *chưa,* that actually determine the force of the clause; the "clausal type", in Cheng (1997)'s sense. So, for instance, whereas sentence (25a) is ambiguous between a preferred direct and indirect reading, those in (25b-c) are unambiguous: where *có* precedes the embedded verb, as in (25b), only the indirect reading is possible; conversely, where *có* precedes the matrix verb (25c), only the direct reading is available. This contrast is indicated by the final bracketing to the left and right of *không*, respectively. In other words, it is *có* rather than *không*—correspondingly, *đã* rather than *chưa*—that functions as the scope marker in each case.

(25) a. Tân biết Lan gặp   Thơ không?

Tan know Lan meet Tho   NEG

'Does Tan know whether Lan met Tho?

marginally: 'Tan knows whether Lan met Tho.'

b. Tân biết [Lan *có*   gặp   Thơ hay không]?

Tan knows Lan ASR meet Tho   or   NEG

*'Does Tan know whether Lan met Tho?'

'Tan knows whether (or not) Lan met Tho.'

c. Tân *có* biết   [Lan gặp   Thơ]không?

Tan ASR knows Lan meet Tho   NEG

'Does Tan know whether Lan met Tho?'

*'Tan knows whether (or not) Lan met Tho.'

The main implications of these alternations are two-fold: first, that *không* cannot be treated as an extra-grammatical discourse marker, otherwise its dependence

on (interrogative) *có* would be inexplicable: second, as argued previously in Duffield (2007), [wh]-features in Vietnamese—and perhaps more generally—are not inherent properties of C-related heads, but are associated with a much lower functional category, which in Duffield (2007) is labelled AssertionP (= EP in the tree in 11 above). Other Vietnamese facts discussed in that paper provide additional support for this view, and which recalls earlier analyses of Noonan (1989), and especially Rizzi (1996). The following quote from Rizzi (1996) is germane:

…It is natural to assume that such a position (for +wh features) can be the main inflection (or one of the main inflectional heads, if some version of the Split Infl hypothesis is adopted, as in Pollock (1989)), the head that also contains the independent tense specification of the whole sentence. I would like to propose that among the other autonomously licensed specifications, *the main inflection can also be specified as [+wh]* [italics mine]...Rizzi (1996: nn).

The assumption that wh-features are located lower than C-related projections also immediately accounts for the distribution of another type of question marker in Mandarin Chinese, namely *ke*, discussed in Schaffar (n.d.) and exemplified in (26); also for the pre-verbal positioning of the Q-morpheme *puas* in Mong Leng, an areally- and typologically-related language, described by Bruhn (2007) and illustrated in (27):

(26) a.   Ni *ke* xihuan zhe ben shu?

         you Q like   this book

         'Do you like this book?'

(27) a.   Lauj tau   pum tug us.

         Lao   PERF see CLS duck

         'Lao has seen the duck.'

     b.   Lauj *puas* tau pum tug us.

         Lao Q   PERF see CLS duck

         'Has Lao seen the duck?'

     c.   Lauj nug kuv saib   Maab *puas*   nyam nwg.

         Lao ask 1SG whether Mang Q   like   3SG

         'Lao asked me whether Mang liked him.'

     d.   Lauj xaav trug saib   Maab   *puas* nyam nwg.

         Lao wonder   whether Mang Q   like   3SG

         'Lao wonders whether Mang likes him.'[xvii]

All of these distributional facts then tend towards the idea, originally articulated in (Aoun and Li 1993), that wh-features in East Asian languages quite generally are located lower than C-related projections.

3.1.2. Final *không* as tag question

Though the facts illustrated in (24) and (25) above clearly argue against a treatment of final *không* as a extra-grammatical element, they do not preclude a different possibility, namely, that final *không* should be analysed as a polarity tag-question. The most direct analogy would thus be to the English negative tags illustrated in (28), which also exhibit a close dependency with pre-verbal morphology, as signalled by person and number agreement, as well as by the 'inverse polarity' effect (-+, +-, *++, *--):

(28) a.   He should have done that, shouldn't he?

      b.   She has finally realised what she's doing, hasn't she?

      c.   *She has realized what she's doing, isn't she?

(Culicover 1998) analyzes English tag questions as involving a covert *pro*-IP, and one might wonder whether a similar analysis could be applied to Vietnamese final *không*. What makes this especially plausible is the fact that Vietnamese does have a very productive tag-question strategy, employing some of the same morphological elements, shown in (29):

(29) a.   Anh ấy không đến, (có) phải không?
            PRN DEM NEG   come ASR   right NEG
            'He isn't coming, is he?'

      b.   Bạn chưa   xem phim này, (có) phải không?
            friend not.yet see film DEM ASR   right NEG
            'You haven't seen the film yet, have you?'

     c.   Mày không có xu   nào, (có) phải không?

           PRN NEG   have money which ASR   right NEG

           'You haven't got any money, have you?'

However, simple Yes-No questions differ from these tag questions in several crucial respects that show that final *không* requires a separate treatment (whatever the correct analysis of tags may be). The most obvious difference between the two is that tag questions in both English and Vietnamese are strictly utterance-final phenomena: the interpretation of the examples in (30) show that *phải không* can only modify matrix predicates, while the contrast between the sentences in (30) versus those in (24) above demonstrate that *phải không*, unlike *không*, cannot appear within a fronted subordinate clause. Thus, the two constructions clearly diverge, both interpretively and distributionally.

(30) a.   Chị nói anh ấy không đến, phải không?

           PRN   say PRN DEM NEG   come right   NEG

           'She said he isn't coming, didn't she/*is he?'

     b.   Chị nói bạn   chưa xem phim này, phải không?

           PRN say friend not.yet see   film DEM right NEG

           'She said you haven't seen the film, didn't she/*have you?'

(31) a.   *[Lan có gặp Thơ phải không]ⱼ, Tân biết tⱼ.

            Lan ASR meet Tho   right NEG   Tan know

           '*Lan met Tho, didn't he, Tan knows.'

b. ?[Lan có gặp Thơ], Tân biết, (có) phải không?

   Lan ASR meet Tho Tan know ASR right NEG

   '*That Lan met Tho, Tan knows, didn't he?'

c. *Tân biết Lan có gặp Thơ hay phải không.

   Tan know Lan ASR meet Tho or right NEG

   'Tan knows whether Lan met Tho.' (cf. 24b)

The second significant difference between final *không* and *phải không* is that tags are not licensed in formal registers by preverbal *có:* indeed, as the examples in (32) demonstrate, *phải không* is strictly incompatible with preverbal interrogative *có*.[xviii]

(32) a. Tân *(*có)* biết Lan gặp Thơ, phải không?

   Tan ASR knows Lan meet Tho right NEG

   'Does Tan know whether Lan met Tho?'

b. Anh *(*có)* học tiếng Việt,   phải không?

   PRN ASR   study lang. Viet. right NEG

   'He studies Vietnamese, doesn't he?'

Finally, *phải không* shows none of the co-occurrence restrictions on final *không* flagged in the introduction, and which—as will be shown directly—offer the key evidence for a transformational analysis of the latter element: on the contrary, *phải không* is fully compatible with preceding topic markers and tense markers, as shown in (33) below, as well as with negative assertions (34):

(33) a.   Xã   bên (thì) ruộng   tốt, (có) phải không?[xix]

           village side TM rice field good ASR right NEG

           '(As for) the neighboring village, its rice-fields are good (fertile), aren't

               they?'

     b.   Vợ anh   sẽ làm việc ở Paris,   (có) phải không?

           wife PRN FUT do work be-LOC Paris ASR right NEG

           'Your wife will work in Paris, won't she?'

(34) a.   *Anh ấy   không đến (có) phải không?

            PRN DEM NEG   come ASR   right NEG

           'Isn't he coming?'

     b.   *Bạn chưa xem phim này (có) phải không?

            friend NOT.YET see film   DEM ASR right NEG

           'Haven't you seen the film yet?'

     c.   *Mày không có   xu   nào   (có) phải không?

            PRN NEG   have money which ASR right NEG

           'Haven't you got any money?'

    In short, the evidence against the idea that final *không* should be treated as a reduced tag is as varied and robust as that against the notion that final *không* is an extra-sentential discourse marker. Hence, it must be concluded that final *không* is an integrated functional head. Yet, as the first section showed, this is not a C-related head, since Vietnamese CPs are demonstrably head-initial, even in Yes-No questions. This apparent impasse calls for a more radical solution.

3.2. A derivational approach to Yes-No Questions

Interestingly, one possible way through—which might be termed a "radical ellipsis" analysis—is already offered by Nguyễn Đình Hoà (1997), who proposes that final *không* questions are derived from more complex bi-clausal representations, in which *không (chưa)* occupies the same underlying position in both clauses, as a pre-verbal marker of sentential negation. Nguyễn writes:

...Like *có... không?* the discontinuous expression *đã ... chưa* asks whether the action has taken place yet, and the question:

Con   đã uống thuốc   hay (là) chưa   uống   thuốc?

child ANT drink medicine or   COP not.yet drink medicine

'Have you taken your medicine (or not) yet?'

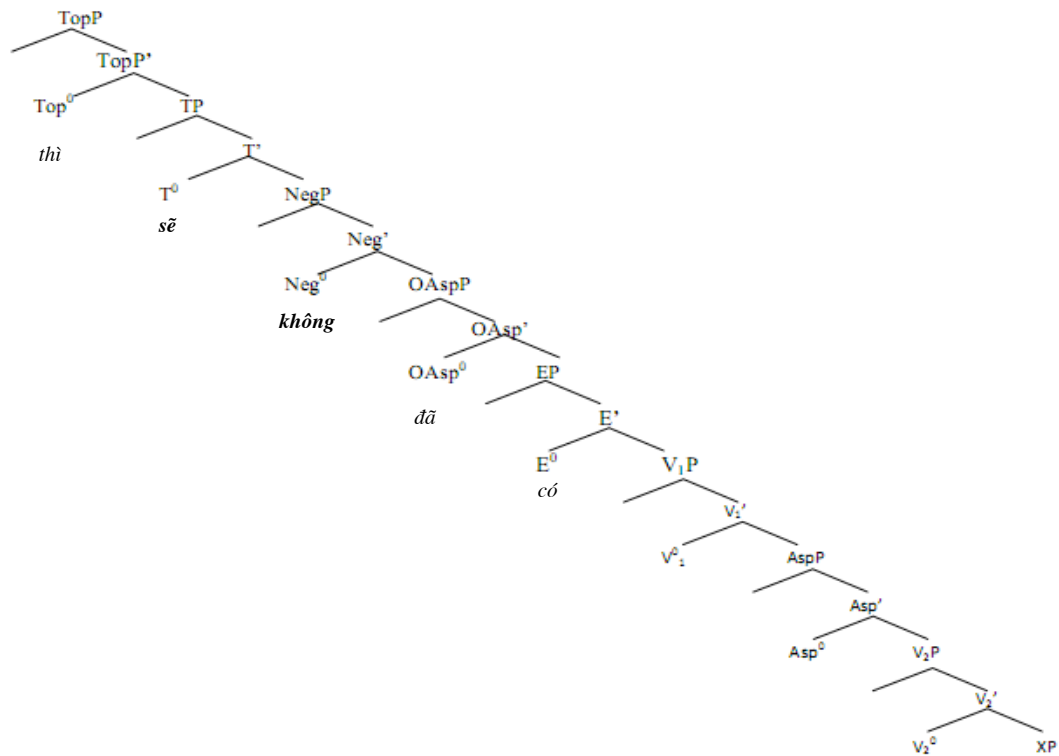undergoes successive deletions, until *đã* itself can be left out:

> Con đã uống thuốc hay là chưa?
> Con đã uống thuốc chưa?
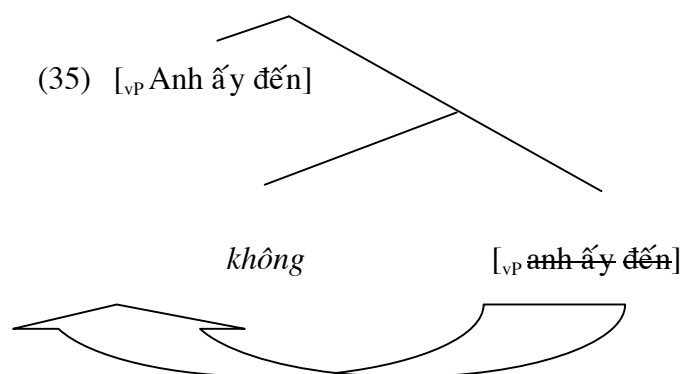> Con uống thuóc chưa?... (1997: 152ff):'

This is a very interesting proposal, and seems quite plausible both as a diachronic explanation of the origins of final *không/chưa*, and as a synchronic analysis of the *hay không* construction. However, given the contrasts obtaining between bare *không/chưa* and *phải không* just discussed, it is less credible as a synchronic analysis: it is certainly not a Minimal(ist) solution.[xx]

27

3.2.1.   Final *không* is not final (Kaynian manoeuvre)

Consider, therefore, how we might retain the intuition behind Nguyễn Đình Hoà's suggestion within a more economical derivational approach. Given the structure originally presented in (11) above, and repeated here for convenience, the proposed analysis of Yes-No questions is schematized in (35) below:

(11)

TopP
TopP'
Top⁰
thì
TP
T'
T⁰
sẽ
NegP
Neg'
Neg⁰
không
OAspP
OAsp'
OAsp⁰
đã
EP
E'
E⁰
có
V₁P
V₁'
V⁰₁
AspP
Asp'
Asp⁰
V₂P
V₂'
V₂⁰
XP

(35) [_{vP} Anh ấy đến]

không   [_{vP} ~~anh ấy đến~~]

On this treatment, features of *không,* projected as the head of NegP, force movement of the immediately subjacent constituent phrase to its specifier. At a stroke, this analysis explains not only the common form and semantics of pre-verbal sentential negation and final *không,* but also the impossibility of negative Yes-No questions mentioned earlier, and further illustrated in (36) (which should be compared directly with the tag question examples in (34) above.

(36) a.   *Anh ấy không đến   không?

         PRN DEM NEG   come   NEG

        'Isn't he coming?'

    b.   *Bạn   chưa   xem phim này không?

         friend NOT.YET see film   DEM NEG

        'Haven't you seen the film yet?'

    c.   *Mày không có   xu   nào   không?

         PRN   NEG   have money which NEG

        'Haven't you got any money?'

The reason that such sentences are excluded should be clear: a head is unable to trigger movement of a phrase containing itself around itself—see (37)—without

29

violating some fundamental constraint (e.g. Structure Preservation, Chain Uniformity, Extension Condition, *etc*.):

(37) *Không* [TP Anh ấy [NegP *không* [vP ~~Anh ấy~~ đến]]
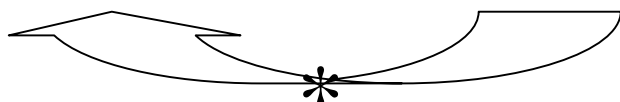
3.2.2. Immediate Consequences

In addition to excluding negative Yes-No questions, this analysis also derives the fact that, in contrast to normal declaratives and tag questions, Yes-No questions may only involve functional categories that are initially merged lower than the projection headed by *không*: specifically, it predicts correctly that Yes-No questions cannot contain the (future) tense marker *sẽ* or the topic marker *thì*. (I temporarily set aside the "past tense" marker *đã*). The contrasts discussed earlier—and recapitulated in (38) and (39) below—show that both of these predictions are borne out: in each case, tense and topic markers that are fully acceptable in tag questions—the (a) examples—are excluded from simple Yes-No questions, even though they are obviously interpretable.[xxi]

(38) a.   Vợ anh sẽ làm việc ở   Paris, (có) phải không?

            wife PRN FUT do   work be-LOC Paris   ASR right NEG

            'Your wife will work in Paris, won't she?'

      b.   *Vợ anh sẽ (có) làm việc ở   Paris không?

            wife PRN FUT ASR do   work be-loc Paris NEG

            'Will your wife work in Paris?'

c. Vợ anh có làm việc ở   Paris không?

wife PRN ASR do work be-loc Paris NEG

'Does/Will your wife work in Paris?' [Tense unspecified]

(39) a. Xã   bên (thì) ruộng tốt.

village side TM   ricefield good

'(As for) the neighboring village, its rice-fields are good (fertile)'

b. *Xã   bên   (thì) ruộng tốt không?

village side   TM   rice field good

'(As for) the neighboring village , are its rice-fields are good (fertile)?'

c. Xã   bên kia, ruộng   có tốt không?

village side DEMrice field ASR good NEG

'That neighboring village over these, are its rice-fields good (fertile)?'

Notice now that the analysis has immediate consequences for the treatment of two other grammatical morphemes that *can* appear in Yes-No questions: *viz*., the interrogative/emphatic marker *có* and the anterior marker *đã,* shown in (1) above, and elsewhere, repeated here for convenience: namely, that these elements must originate within the phrasal complement of *không*.

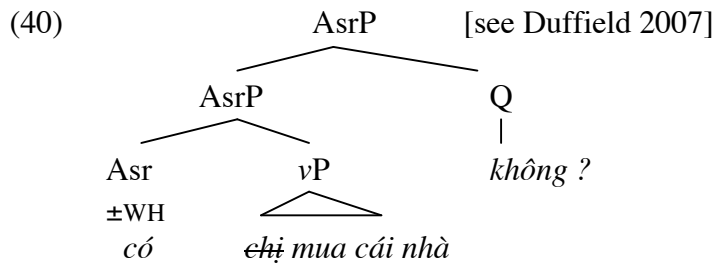(1) a. Chị có   muacái nhà   *không*?

PRN ASR buy CLS house NEG

'Did you [elder sister] buy (the) house?'
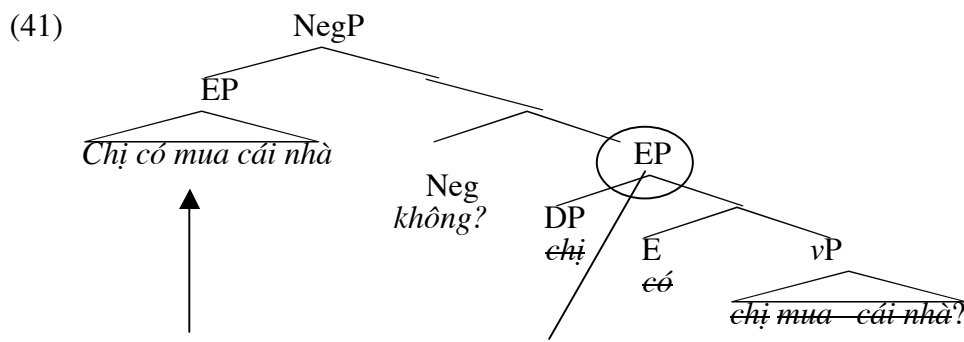
b.   Con đã uống thuốc   *chưa*?

PRN   ANT drink   medicine not.yet

'Have you [child] taken your medicine yet?'

Taking *có* first, it was claimed in Duffield (2007) that in Yes-No questions the negation morpheme *không* was adjoined to the same functional projection (AsrP) that was headed by *có*: this head was assumed to combine formal features associated with polarity (±Neg), clausal type (±wh), and emphasis (±Asr) under one node, as schematized in (40):

(40)   AsrP   [see Duffield 2007]

                 AsrP   Q

        Asr   *v*P |
        ±WH   *không ?*
         có   ~~chị~~ *mua cái nhà*

Whatever advantages this analysis may have, it is clearly incompatible with the present account. Instead, in order to derive questions such as those in (1a), *có* must be projected independently of—and below—the functional projection associated with *không*: moreover, the thematic subject must undergo raising out of the verb-phrase into the specifier of this projection prior to generalized raising of this derived complement to *không*. A possible derivation is of *có* questions is diagrammed in (41).

(41)   NegP

        EP
    Chị có mua cái nhà   EP

                          Neg   DP   E   *v*P
                         không?   *~~chị~~* *~~có~~*   ~~chị mua~~   ~~cái nhà~~?

32

Similar considerations apply to the derivation of Yes-No questions involving *đã*, such as that in (1b): if we assume that the negative morpheme *chưa* occupies the same syntactic position as (the default negative) *không*, it follows that *đã* too must be projected below the NegP projection: in other words, that anterior *đã*—in contrast to future *sẽ*—is not a tense marker underlyingly, but is instead associated with a lower aspectual projection. This is shown in (42):

(42)
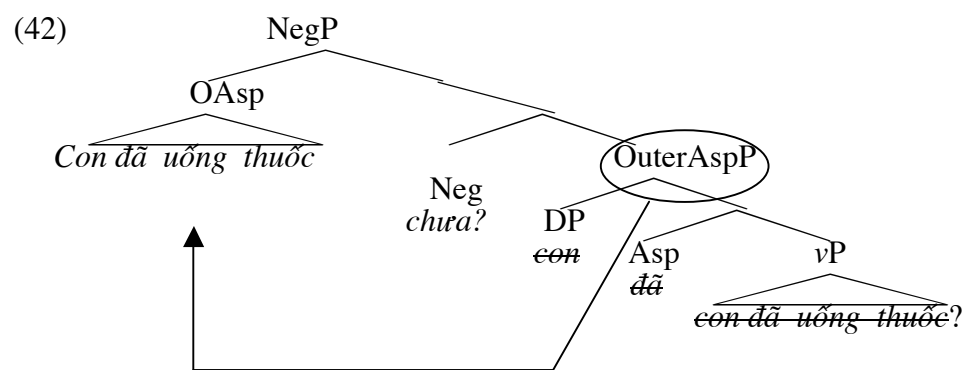
As it turns out, there independent evidence that these two pre-verbal markers—anterior *đã vs.* future *sẽ* —have a distinct syntax and semantics: see Duffield (2009), Duffield & Phan (2010), for details. Nor is this assumption novel: Trinh (2005) also proposes on independent grounds that *đã* undergoes head-raising to T (in contrast to future *sẽ*, which is taken to be base-generated in T). One piece of interpretive evidence that directly supports such an analysis concerns the interpretation of anterior *đã* in different sentential contexts: Trinh (2005) observes that whereas *đã* is generally ambiguous between a perfective and preterite interpretation (43a), only the latter reading is available in negative assertions (43b).

(43) a.   Nó đã đọc sách.   [examples from Trinh 2005]

PRN ANT read book

'He has read books.' (perfect reading) *or*

'He did read books.' (preterite reading)

b.   Nó   đã không đọc sách.

PRN PAST NEG   read book

'He did not read books'   (Only preterite reading allowed)

This interpretive constraint would follow directly from the assumption that generally *đã* is projected below NegP. Assume that—in the absence of sentential negation—*đã* is inserted under Asp and raises *via* head movement to T (accounting both for the ambiguity of *đã*, and for the incompatibility of aspectual *đã* with future *sẽ*.)[xxii] In Yes-No questions, *đã* continues to be inserted under Asp, and interpreted aspectually, but in negative declaratives, when Neg is projected, head movement to T is blocked, forcing *đã* to be merged late directly under T, and resulting in a purely temporal interpretation (*cf.* Pollock 1989's classic analysis of French-English differences in negative contexts).

Finally, this analysis of Yes-No questions correctly predicts the incompatibility of (aspectual) *đã* with (eventive) *có* in interrogative structures, even though these same elements are not mutually exclusive in declarative clauses: compare (44a) and (44b) below. On the present analysis, this contrast follows from the impossibility of combining the derivation in (41) with that in (42):

(44) a.   *Anh ấy đã có   trở về không?

PRN   DEM ANT ASR return   NEG

'Did he come back?'

b.   Anh ấy đã có trở về

PRN DEM ANT ASR return

'He did come back'

Summarizing, I have argued in this section that the various morphological, distributional and interpretive constraints on Yes-No questions that distinguish these sentences from tag questions on the one hand, and negative declarative sentences on the other, are best explained in terms of a Kaynian turn, by which *không/chưa* occupies a constant head-initial, sentence medial position underlyingly, its final position in interrogative structures derived through predicate raising of the immediately subjacent phrase to a higher specifier position.

    Before considering some further implications of this analysis, it is necessary to address the formal motivation for the predicate raising postulated here. A number of analytic options are available, but essentially these boil down to two: feature-driven movement on the one hand, and "scope evasion" on the other. As for the first, one might imagine that this obligatory predicate-raising satisfies the checking of [+wh] features of *không*, along the lines of Rizzi's *Wh*-criterion (Rizzi 1996), the difference being that such checking takes place in the original (medial) position where [+wh] features are initially inserted—see quote above—rather than in C. However, though this would provide an adequate formal account of the movement, it is as stipulative as any appeal to movement having no clear interpretive effects: it also seems anomalous

that Vietnamese should require overt movement for Yes-No questions, but not for constituent wh-questions.

An alternative explanation is suggested by the obligatory movement exhibited in Vietnamese by wh-words interpreted as universal quantifiers, discussed in Duffield (2007). As the examples in (45)-(47) show, object and adjunct phrases containing the underspecified 'wh-words' (*gì* 'what', *ai* 'who', *nào* 'which', etc.) are interpreted as universal quantifiers just in case they are displaced from their canonical postverbal position to a position to the left—outside of the scope of—the operator *cũng*. The alternations between the OSV orders in (45) and SOV orders in (46) demonstrate that the leftward landing site of such movement is irrelevant (suggesting that feature-checking is not the driving force); what is crucial is that the phrases are displaced to the left of *cũng*, as proven by the strict ungrammaticality of the "in situ" examples in (47).

(45)   a.   [Từ *nào*]$_i$ anh ấy   cũng nhớ   t$_i$.
            word which   PRN DEM   also   remember
            'He remembers every word.'

       b.   [*Ai*]$_I$ cô ấy   cũng quen t$_i$.
            ai   PRN DEM   also   know
            'She knows everybody.'

       c.   [Ngày *nào*]$_i$ tôi cũng tập thể thao   t$_i$.
            day   which   I   also   practise exercise
            'I do exercises every day.'

(46) a. Anh ấy [từ *nào*]ᵢ cũng nhớ tᵢ.

PRN DEM word which also remember

'He remembers every word.'

b. Cô ấy [*ai*]ᵢ cũng quen tᵢ .

PRN DEM ai also know

'She knows everybody.'

(47) a. *Anh ấy cũng nhớ từ nào. [*SVO order, with universal interpretation]

b. *Cô ấy cũng quen ai.

c. *Tôi cũng tập thể thao ngày nào.

The proposal is that parallel considerations apply to predicate-raising around *không*. Suppose that like *cũng* ('also'), *không* is also ambiguous with respect to the (interpretable) features that can be associated with it: in principle, it can bear either negative features or wh features, but not both simultaneously. The default interpretation of *không* is obviously as a negation morpheme, negating the constituent that appears overtly to its right (within its linear scope). Then, to evade this negative interpretation, and to signal the presence of [wh] features on *không*, the predicate is forced to raise outside of its scope, just as underspecified *wh*-constituents are forced to raise to avoid (default) wh-question interpretations. Thus, the best metaphor for raising here is not so much Greed (Chomsky 1989), or even Enlightened Self-Interest (Lasnik 1999), but a more functionalist notion: Survival (of interpretation).
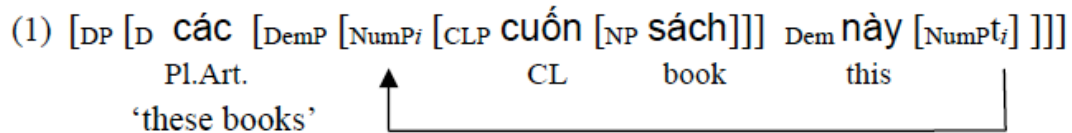
3.3. Extensions and Implications

It is worth pointing out that this type of roll-up analysis has already been applied to other apparently anomalous structures in Vietnamese, as well as in other

South East Asian varieties. Taking Vietnamese first, the only other two elements that appear to the right of the phrase that they modify are the abilitative modal *được* illustrated in (48c), and the demonstrative/deictic elements (*này, ấy, kia*), exemplified in (49). Both of these sets of elements (and—in the case of abilitative *được*—its cognates in other language varieties) have recently been analyzed and discussed by several authors, including Duffield (1998, 1999), Simpson (1997, 2001) for *được* *(dak)*, and Nguyen (2009) for an DP-internal raising analysis of final demonstratives.[xxiii]

(48) a.   Cô ấy   [kiếm **được** việc].   Achievement

PRN DEM seek   can   job

'She found a job.'

    b.   Cô ấy   **được** [kiếm việc].   Deontic modal

PRN DEM can   seek   job

'She is allowed to seek a job.'

    c.   [Cô ấy   kiếm việc] *được*.   Abilitative modal

PRN DEM seek job   can

'She is able to seek a job.'   [examples from Duffield 1999]

(49) a.   các   cuốn sách   *này*

CLS-PL. CLS   book   DEM1

'these books'

    b.   con   ngươi   *đó*

CLS   person   DEM2

'that person'

c.   cái   bình *kia*

     CLS   jar   DEM3

     'that jar over there'

(1) [DP [D **các** [DemP [NumP*i* [CLP **cuốn** [NP **sách**]]] Dem **này** [NumP*t_i*]]]]
     Pl.Art.   CL   book   this
     'these books'

[from Nguyen 2009]

Though the details of these various treatments vary, there is a general consensus that predicate-raising offers the most plausible and attractive analysis of these word-orders. Taken together with the analysis of Yes-No questions presented in this paper then, this general approach provides a general and principled solution to all of the anomalies in Vietnamese word-order, allowing us to conclude that the grammar is rigidly head-initial throughout.

Notice finally that this analysis of Yes-No questions has theoretical and analytic implications beyond Vietnamese, in particular, for Cheng's (1997) analysis of Mandarin Yes-No questions (introduced earlier) and for the CLAUSAL-TYPING HYPOTHESIS (CTH) that this analysis supports:[xxiv]

(50) Clausal Typing Hypothesis

Every clause needs to be typed. In the case of typing a wh-question, either a wh-particle in C is used or else fronting of a wh-word to the Spec of C is used, thereby typing a clause through C by Spec-Head Agreement (Cheng 1997:22).

The fundamental empirical contrast at the heart of the CTH is between English and (Mandarin) Chinese questions, illustrated in (12) above (repeated here for convenience) in which sentence-final particles in Mandarin questions are assumed to be exponents of a head-final CP:

(12) a.　　Ni　　xihuan　zhe ben shu　ma?[xxv]

　　　　　you　　like　　　this book　　Q

　　　　　'Do you like this book?'

　　　b.　　Qiaofeng　　mai- le　　shenme　ne.

　　　　　Qiaofeng　　buy　perf what　　Q_{WH}

　　　　　'What did Qiaofeng buy.'

The analysis of Yes-No questions presented in this paper offers several distinct challenges to this hypothesis. First—restricting attention to Vietnamese—the evidence that Vietnamese is consistently head-initial at all hierarchical levels up to CP shows that final "Q-markers" in Yes-No questions are not in C. If so, then Vietnamese stands as a counter-example to the CTH in having neither wh-particles in C, nor overt wh-movement. Second, the analysis of Vietnamese Yes-No questions presented here, as well as the related evidence from other East Asian varieties (e.g. Mandarin *ke* and Mong Leng *puas* mentioned above) provides both theoretical and empirical evidence for the idea that wh-features are inherent properties of a much lower, clause-medial, projection, which again argues against the idea that clausal typing is uniquely determined by elements originating in C.

Taking a broader view, it is not inconceivable that the core Chinese data that provided the initial motivation for the CTH might be reanalyzed in a similar way to that proposed for Vietnamese. On the face of it, the distribution and discourse

40

functions of elements on the right periphery in wh-questions are strikingly similar in both languages: if the existence of leftward complementizers licenses the inference that these final elements are not in C in Vietnamese, it raises the suspicion of an alternative analysis for Chinese as well: see Huang (2008) for one promising proposal.

4. Conclusion

In this paper, I have provided a detailed exposition and analysis of the left and right periphery of Vietnamese clauses. Various arguments have been presented in support of the claim that, despite initial appearances, Vietnamese is consistently head-initial up to CP. In place of a rightward C position, the appearance of the negative morphemes *không/chưa* is sentence-final position in Yes-No questions has been explained in terms of a Kaynian turn, in which the immediately subjacent complement of *không* is raised to a higher specifier position, leaving *không/chưa* on the right periphery. This analysis has been shown to explain a number of significant restrictions on Yes-No questions in Vietnamese, including the absence of negative yes-no questions, and the exclusion of tense and topic markers (all of which are freely available in superficially similar tag questions, and in wh-questions.

Finally, I have noted how this analysis fits with previous treatments of other anomalous elements in Vietnamese and areally-related languages, and considered the implications of this analysis the implications for Mandarin Chinese—and for the Clausal Typing Hypothesis more generally.

NOTES

[i] The conference talk on which this paper is based treated elements occurring in both Yes-No and *wh*-questions (*không/chưa* and *thế*, respectively). Here, I focus on the former set of elements: for a more detailed discussion of *wh*-questions in Vietnamese, see Bruening & Tran (2006a); *cf.* for a critique of that analysis, Duffield (2009, submitted.).

[ii] The main difference between the two morphemes *không* and *chưa* is that questions with final *không* simply ask about the truth of the proposition, whereas those with *chưa* ask whether the event or state of affairs denoted by the proposition has been realized.

[iii] See Duffield & Phan (2010) for discussion of the jutification of this label (i.e., anterior).

[iv] Notice that the argument developed here only goes through if it is assumed that there exist *intrinsically head-final languages*—Japanese being a canonical example—in which heads are initially merged to the right of their phrasal complements; in other words, that the type of "roll up movement" proposed here is not a generalized solution to the issue of head-finality, but rather a way of accounting for sporadic exceptions in head-initial languages. Hence, in this paper I adopt a Kaynian approach to predicate raising *without* adopting the more radical assumption that all languages are underlyingly head-initial.

[v] The main exceptions to this 'cross-category harmony' (Hawkins 1983) are two functional elements that unexpectedly appear on the right periphery of their phrasal complement, namely, the abilitative/epistemic modal *được* (on the right edge of the verb-phrase), and demonstrative modifiers, which appear on the right edge of the noun-phrase. See below: for detailed discussion of the peculiarities of *được*, arguably

the most recalcitrant element in Vietnamese grammar, see (Duffield 1999, 2001), Simpson 1999, 2001; see Nguyen (2009) for an analysis of demonstrative placement.

[vi] A reviewer observes that Mandarin Chinese and other varieties do have emerging complementizers (citing *shuo* in Mandarin as such as case).

[vii] In this paper, *là/rằng* are presented as stylistic variants of one another. This is not strictly accurate: as discussed in Duffield (in prep.), there are contexts from which one or other of these elements is excluded, as well as sentences such as those in (i) below, in which the two co-occur:

(i)   Phải   nói   *rằng   là*   thế hệ   trẻ   của   chúng ta rất   tài năng.

        modal say   COMP   COMP generation young of   plural prn very talented

        '(I) have to say that our young generation is very talented.'

        Space constraints preclude further elaboration of these contrasts, which are in any case tangential to the main argument.

[viii] (b) Người Việt Online: Friday, August 15, 2008], (d) [vietnamnet.vn/bandocviet/riengchung/2008/02/768004, accessed 24/02/09] (e) [EV: 201].

[ix] It is unclear what the correct analysis should be for the medial argument in (18a), whether *các em sinh viên (*'the students'*)* should be treated as matrix object or embedded subject.

[x] Example (19b) is cited in Ackema (2001); (26c) is from Stuurman (nd). It should be noted that these two authors make different assumptions about the proper analysis of this collocation.

[xi] A reviewer of an alternative draft of this paper did not consider this distributional evidence compelling, noting that … 'there's no reason that one category could not differ from the others, or even that some Cs and not others could be right-

headed…The point of the general pattern should be made, but I think it needs to be admitted to be a very weak argument…' While I agree with the first assertion, in as much as many languages that diverge from total cross categorical harmony—German being an often cited example—the second assertion appears much less valid: though it may be true that in principle some exponents of a given lexical or functional category could be initial in their phrase and others final, the empirical facts suggest that this is extremely rare crosslinguistically: one does not find languages in which, for example, past tense auxiliaries appear to the left of the verb, and present tense auxiliaries to the right, or where indicative complementizers are initial and subjunctive complementizers final. Even if one did, one might well argue that this would be sufficient motivation for a transformational analysis—to restore within category harmony: this would seem to be the impulse, for example, behind Huang (1994), to cite just one of numerous such analyses.

[xii] [http://hahien.wordpress.com/2009/05/08/th%E1%BA%BF-ma-toi-c%E1%BB%A9-t%C6%B0%E1%BB%9Fng-la-ong-di-cau/] accessed 1/07/09.

[xiii] A reviewer of a previous version of this paper expressed shocked incredulity ("[The] statement left me flabbergasted") at the claim that "many languages have lexical elements that are extra-metrical in this sense—present in utterances but not in sentences". Yet, I know of no formal analysis that treats elements such as final 'alright', 'ok', 'yeah', etc—as in (i) below—as structurally integrated into English clauses, even though these elements also are functionally clause-typing, signaling a (rhetorical) question:

(i)   a.   I'm coming, alright?!

         b.   She's my sister, yeah?!

c.   I know what I'm doing, ok?!

Nor are these the only elements that can be viewed as extra-grammatical, but nontheless linguistic objects: from affective noises ("Brrr!", "Whoosh," "Zoom-Zoom") to the ubiquitous, conversational "like", to paralinguistic gestures, including nods, head-shakes, turn-taking uh-huhs etc, natural language utterances are populated with morphemes—unique conventionalised pairings of sound and meaning—that show no signs of grammatical integration. Some of these elements are of course treated in theories of pragmatics or in cognitive theories of communication—see, for example, Kita & Ide (2007)—but not as syntactic objects.

[xiv] Originally due to (Holmberg 2000).

[xv] The reason for this circumspect phraseology is that I am not convinced, *pace* Bruening & Tran, that strings such as those in (23) involve either fronting or true complement clauses: if this were the case, then one would expect the unmoved, unfronted alternant (23c) to be grammatical without *hay*, contrary to the judgments of most speakers consulted.

[xvi] In this context, *hay* is obligatory for speakers consulted.

[xvii] [see Bruhn 2007, examples (4ab), (5bc)]. The examples in (25c) and (25d) clearly show that this Q-marker can occur in embedded clauses as well as matrix ones, and is separated from the complementizer *saib* by the intervening subject.

[xviii] Notice that *phải không is* compatible with pre-verbal *có* where it *có* functions as an emphatic marker (without interrogative function), or as a lexical main verb meaning have: see Duffield (2007), for further discussion.

[xix] Adapted from [Cao Xuân Hạo 1992:145], Haïo (1991)

xx This is not so say that one could not imagine a Minimalist implementation of this solution, perhaps in terms of Sideward Movement Nunes (2004)): see Bruening & Tran (2006b) for an analysis of bare conditional structures in Vietnamese and Chinese along these lines, as in (i):
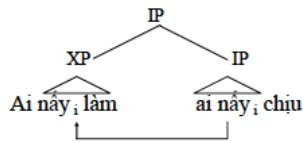
Whatever the merits of such an analysis for bare conditionals, however it seems less plausible that it should be applied in the present case: for one thing, it would not account for the absence of negative Yes-No questions, nor for the other constraints discussed immediately below.

xxi The contrast between (38b) and (38c) shows that topic information may still be left-adjoined—in apposition to the Yes-No question: it just cannot appear in the integrated topic position ({Spec, TopP} in (33) above).

xxii Note that this incompatiblility cannot be excluded on semantic grounds: as discussed in Duffield & Phan (2010), in non-interrogrative clause *đã* is perfectly compatible with "future perfect" contexts.

xxiii See Duffield (1995, 1996) for such an analysis of final demonstratives in Modern Irish (another head-initial language).

xxiv This is by no means the the first paper to address the CTH: aside from authors mentioned above, see Hoge (1998), Bruening (2007), Stevens (2008); also Ultan (1978), amongst others.

It should also be noted that the CTH includes substantive claims that go beyond the presence or absence of (overt) wh-movement: in particular, Cheng draws attention to a correlation between multiple wh-fronting and the possibility of forming

wh-words from the morphological base of indefinites: see again Hoge (1998), for discussion.

[xxv] Note also the possibility of a preverbal Q-morpheme *ke*: see below, also Schaffar (nd).

5. References

Ackema, Peter 2001 Colliding Complementizers in Dutch: another syntactic OCP effect. *Linguistic Inquiry* 32: 717-727.

Aoun, Joseph, and Yen-Hui Audrey Li 1993 WH-elements in situ: syntax or LF. *Linguistic Inquiry* 24: 199-238.

Bayer, Joseph, and Ellen Brandner 2008 On Wh-Head-Movement and the Doubly-Filled-Comp Filter. In C. B. Chang and H. J. Haynie (eds) *Proceedings of the 26th West Coast Conference on Formal Linguistics*, 87-95. Somerville, MA: Cascadilla Proceedings Project.

Biberauer, Theresa, Anders Holmberg, and Ian Roberts. 2007. Disharmonic word-order systems and the Final-over-Final-Constraint (FOFC). In A. Bisetto and F. Barbieri (eds.) *Proceedings of XXXIII Incontro di Grammatica Generativa*.

—. 2008. Structure and linearization in disharmonic word orders. In C. B. Chang and H. J. Haynie (eds.). In *Proceedings of the 26th West Coast Conference on Formal Linguistics* Somerville, Massachusetts: Cascadilla Proceedings Project.

Bruening, Benjamin 2007 Wh-in-situ does not correlate with wh -indefinites or question particles. *Linguistic Inquiry* 38: 139-166.

—and Thuan Tran 2006a. Wh-questions in Vietnamese. *Journal of East Asian Linguistics* 15: 319-341.

— 2006b. Wh-conditionals in Vietnamese and Chinese: against unselective binding, In (eds.) *Proceedings of Berkeley Linguistics Society (BLS) 32*.

Bruhn, Daniel 2007 LF Wh-movement in Mong Leng. Term Paper, UC Berkeley, Department of Linguistics.

Cao, Xuan Haïo 1991 Some preliminaries to the syntactic analysis of the Vietnamese sentence. *Mon-Khmer Studies* 20: 137-151.

Cheng, Lisa L.-S 1997 *On the typology of WH-Questions: Oustanding dissertations in Linguistics*. New York: Garland Publishing.

Chomsky, Noam 1989 Some Notes on Economy of Derivation and Representation. In Itziar Laka and Anoop Mahajan (eds.) MIT Working Papers in Linguistics #10,. Cambridge, MA: MIT.

Culicover, Peter 1992. English tag questions in Universal Grammar. *Lingua* 88: 21-54.

Duffield, Nigel 1995 *Particles and Projections in Irish Syntax*. Dordrecht: Kluwer.

—1996 On Structural Invariance and Lexical Diversity in VSO Languages: Arguments from Irish Noun-Phrases. In Robert Borsley & Ian Roberts (eds.), *The Syntax of the Celtic Languages*, 314-340. Cambridge: Cambridge University Press.

—1998 Auxiliary placement and interpretation in Vietnamese. In M. Catherine Gruber, Derrick Higgins, Kenneth E. Olson and Tamra Wysocki (eds.) *Proceedings of the 34th Regional Meeting of the Chicago Linguistic Society*, 95-109. Chicago: CLS.

—1999 Final modals, adverbs and antisymmetry in Vietnamese. *Revue québécoise de linguistique* 27: 92-129.

—2001 On certain head-final effects in Vietnamese. In Karen Megerdoomian and L. A. Bar-el (eds.), *Proceedings of WCCFL 20,* 101-114. Somerville, MA: Cascadilla Press.

—2007 Aspects of Vietnamese clause structure: separating tense from assertion. *Linguistics* 45: 765-814.

—2009 Head-first: on the head initiality of Vietnamese phrase structure. Paper presented at Linguistics of Vietnamese Workshop. University of Stuttgart, July 2009.

—in prep. Particles and Projections in Vietnamese Syntax. *Ms.*, University of Sheffield.

—and Trang Phan 2010 Aspect Exposed: On the Syntactic Representation of Tense and Aspect in Vietnamese. Paper presented at SEALS XX, Zurich, June 2010.

Hawkins, John A 1983 Word Order Universals. New York: Academic Press.

Hoge, Kerstin. 1998. Review of Cheng (1997). *Linguist List* http://www.linguistlist.org/issues/9/9-1725.html.

Holmberg, Anders 2000 Deriving OV order in Finnish. In Peter Svenonius (ed.). *The derivation of VO and OV*. Amsterdam: John Benjamins Publishing Company.

Huang, C.-T. James 1994 More on Chinese word order and parametric theory. In Barbara Lust, M. Suñer and John Whitman (eds.) *Syntactic Theory and First Language Acquisition: crosslinguistic perspectives*. (Volume 1 Heads,

Projections and Learnability). Hillsdale, New Jersey: Lawrence Erlbaum Associates.

Huang, X.-Y Kevin. 2008   Initialness of Sentence-final Particles in Mandarin Chinese: An Antisymmetry Movement Approach, ms.

Kayne, Richard   1994   The Antisymmetry of Syntax. Cambridge, Massachusetts: MIT Press.

Kita, Sotaro, and Ide, S   2007   Nodding, aizuchi, and final particles in Japanese conversation: How conversation reflects the ideology of communication and social relationships. *Journal of Pragmatics*, 39: 1242-1254.

Lasnik, Howard   1999   Minimalist Analysis. Oxford: Blackwell.

Lo-Cicero, Minh Ha   2001   L' expression du temps et de l'Aspect du verbe vietnamien. Review of Vietnamese Studies 1: 1-12.

Nguyen, Dinh Hoa   1997   *Vietnamese*. (Volume 9: London Oriental and African Language Library). Amsterdam/Philadelphia: John Benjamins Publishing Company.

Nguyen, Tuong Hung.   2009   The Structure of the Vietnamese Noun Phrase. Conference Presentation, Linguistics of Vietnamese, University of Stuttgart. [this volume?]

Noonan, Maire   1989   Operator Licensing and the Case of French Interrogatives. In E. Jane Fee and Kathryn Hunt (eds.) *Proceedings of the Eighth West Coast Conference of Formal Linguistics*. Stanford Linguistics Association, Stanford, CA.

Nunes, Jairo   2004   *Linearization of Chains and Sideward Movement*. Cambridge, MA: MIT Press.

Pollock, Jean-Yves   1989   Verb movement, Universal Grammar, and the structure of IP. *Linguistic Inquiry* 20: 365-424.

Rizzi, Luigi   1996   Residual verb-second and the Wh-Criterion, in Adriana Belletti and Luigi Rizzi (eds.), *Parameters and Functional Heads*, Oxford University Press, New York, Oxford.

Schaffar, Wolfram   nd   Typology of Yes-No questions in Chinese and Tai languages, ms., University of Tuebingen.

Simpson, Andrew   1996   VP-final modals and Pied Piping in S.E. Asian. In Proceedings of NELS 28.

—2001. Focus, Presupposition and Light Predicate Raising in East and South East Asia, *Journal of East Asian Linguistics* 10: 89-128.

Stevens, Jeff   2008   Grammar, Performance and the Wh-Question Typology. Ms. University of Washington.

Stuurman, Frits   nd   On items introducing finite relative and interrogative clauses in English and Dutch, ms.

Trinh, Tue   2005   Aspects of Clause Structure in Vietnamese, Masters thesis, Humboldt University.

Travis, Lisa   2010   *Inner Aspect*. *The Articulation of VP*. Berlin: Springer.

Ultan, R.   1978   Some general characteristics of interrogative systems, in Joseph H. Greenberg, Charles A. Ferguson and Edith A. Moravcsik (eds.) *Universals of Human Language*, vol. 4: Syntax, Stanford University Press, Stanford.