

Focus, Presupposition and Light

Predicate Raising in East and S.E.Asia

Cinque (1997) presents strong arguments in favour of the Universal Base Hypothesis (UBH) and the assumption that an elaborate functional structure exists in all languages hierarchically ordered in a unique way. This paper examines a patterning found with certain modal verbs in a series of languages of East and S.E.Asia. which poses a strong empirical challenge to the UBH. In a group of genetically unrelated and otherwise fully regular head-initial SVO languages a particular modal verb is consistently found to occur in predicate-final position. Arguing that a single 'irregular' structure has been borrowed extensively into a variety of neighbouring languages, a detailed investigation of contemporary Thai then suggests that the surface forms are actually derived from fully regular underlying structures via a process of focus-driven light predicate raising, an analysis which is shown to be supported by diachronic evidence from Early and Middle Chinese. Variation in the paradigm across Vietnamese and Cantonese then indicates that the structures in these languages are in various stages of historical development and re-analysis away from the original structure. In Cantonese, in particular, it is argued that the trigger for raising has now become fully fossilized and can no longer be given its earlier motivation. The syntactic evidence in favour of this movement still being strong however, it is concluded that certain movement operations in general may in fact occur without any clearly understandable synchronic trigger. The paper suggests that Chomsky's notion of 'strong categorial features' corresponds precisely to this

type of movement whose original motivation has weakened and become hidden during the course of language change. Finally, certain clear parallels between the structures in S.E.Asian and patterns in Scandinavian are pointed out and it is suggested that Scandinavian object-shift phenomena may potentially be analyzed as having an underlying syntactic derivation parallel to the S.E.Asian construction.

0. Introduction

This paper sets out to provide an account of a rather odd distributional patterning found with certain modal verbs in a number of SVO languages of S.E.Asia, the occurrence of a particular alethic modal in predicate-final position. The actual paradigm and how it is arguably the result of borrowing and transfer amongst the various languages is initially described below. Its relevance for Cinque's defence of the Universal Base Hypothesis is then indicated in section 2 and this is followed by a close examination of the modal's patterning in contemporary Thai. An analysis is ultimately arrived at which makes critical reference to aspects of the informational structure of the modal construction, and the close connection with focus is examined in section 3. Section 4 introduces diachronic data in support of the light predicate raising hypothesis from Middle and Early Chinese. Section 5 then charts the development of the construction in Vietnamese and Cantonese away from its hypothesized original form and discusses how the syntax of present-day Cantonese forms may really only be clearly understood with

reference to the wider cross-linguistic and diachronic forms. It is argued that the construction in Cantonese is essentially still powered by a trigger whose semantic force has now been fully lost and which remains on as a pure fossil of an earlier stage in the language's history. Section 6 then concludes the paper with a brief consideration of object-shift phenomena in Scandinavian and how the S.E.Asian paradigm may be useful in providing an alternate view of this much-discussed patterning.

1. Predicate-final modals in languages of S.E.Asia - the Paradigm

Standard (Central) Thai is a fully regular head-initial SVO language of the Tai language family, spoken in Bangkok and the greater part of central Thailand. In Standard Thai it is found that all modal verbs regularly occur in standard positions preceding the VP with the curious exception of a modal element meaning to be able/can which occurs *after* the verb. The regular pre-VP pattern is illustrated in (1) below, and the post-verbal variant in (2):

- (1) Daeng **aat-ca/doong/khong** maa *Thai*
Daeng may/must/is-sure-to come
'Daeng may/must/is sure to come.'

- (2) khaw khian **dai** *Thai*
he write can
'He can write.'

This odd positional property of dai 'can' in Thai is also characteristic of Cambodian, Vietnamese and Hmong, all SVO Mon-Khmer languages. In Cambodian modals occur before the VP with the exception of the potential modal pronounced baan meaning to-be-able/can which occurs *after* the verb, as illustrated in (3) and (4):

- (3) k'nyom **dtrou** jaak-jeun *Cambodian*
I must leave
'I must leave.'

- (4) goa'at roo-ut **baan** *Cambodian*
he run can
'He can run.'

In Vietnamese modal verbs are similarly all positioned in front of the VP with the exception of a single modal meaning can/be able to which is pronounced đn̄χk and which occurs in a post-verbal position, as in (5) and (6)

(5) toi **phai** di mua cam *Vietnamese*
 I must go buy orange
 ‘I must go and buy oranges.’

(6) anh-ta den **duoc** *Vietnamese*
 he come can
 ‘He can come.’

The same distribution is also repeated in SVO Cantonese, here the relevant post-verbal modal meaning be able to is pronounced d̄ k:

(7) kui **yiuhoh-yi** tung ngoh hui *Cantonese*
 he must/may with me go
 ‘He must/may go with me.’

(8) kui lai **dak** *Cantonese*
 he come can
 ‘He can come.’

Assuming then that some pattern of borrowing is responsible for the spread of this structure and that it did not just spontaneously evolve in this way in so many geographically close languages, I would like to suggest that the most likely source for the hypothetical modal is actually Middle Chinese. Although forms like Cantonese (8) do not occur in Modern Mandarin, they are commonly found up until the 13thC in Middle Chinese, as in (13):

13)	yi	ren	ji	de	<i>Middle Chinese</i>
	one	person	play	can	
	one person can play (it)				

If one does take Middle Chinese to be the original source of the modal throughout the various languages mentioned, this allows one to suggest a highly plausible route of transfer out of Middle Chinese and into the other languages which simultaneously allows for an explanation of the differences in pronunciation. First of all, it is commonly argued that the Tai people originally inhabited parts of S.E.China and later emigrated out to modern Thailand, Laos and parts of Vietnam around the 11th/12thC as a result of increased Mongol pressure from the north; consequently they were located in the Chinese speaking area precisely at the time when this modal structure existed in Middle Chinese and migrated away just

before its decline, a highly suggestive fact.¹ It is also believed that the Chinese modal was pronounced as dei at this earlier time (see in particular Sun 1996), a pronunciation maintained in the modern Mandarin deontic modal written with the same character, so the sound change to dai would have been relatively minor.² Turning to Cambodian, there would *not* seem to be any phonetic similarity between Cambodian baan and Middle Chinese dei; however, the Cambodian pronunciation can be explained by the fact that Thai developed a second post-verbal modal with the same properties and meaning as dai but pronounced pɔn, so this is arguably the form which got borrowed into neighbouring Cambodian during the many years of Thai-Cambodian cultural exchange. Finally the Vietnamese form ɗɲɣk with its syllable-final voiceless stop is clearly closer to Cantonese d k and may be taken to reflect borrowing from Chinese at an earlier period when it is known that syllable-final stops were indeed still common in the dominant form of Chinese. The long contact between China and Vietnam also provides an obvious route of transfer from one language into the other.

There is consequently not unreasonable motivation for assuming that a process of borrowing and transfer has indeed resulted in the creation of a regional typological feature of some significance - the occurrence of a *post-verbal* modal in a set of otherwise fully regular head-initial V-O languages, and it will henceforth

be assumed that the modals in all these languages do indeed constitute or at least derive from a single basic paradigm.³

2. Cinque (1997) and the Universal Base Hypothesis

The patterning of the modal documented above is not only inconsistent with the regular positioning of other modals in the languages considered, but also presents a serious empirical challenge to the Universal Base Hypothesis argued for at length in Cinque (1997), i.e. the very general idea that clausal architecture is in a large way predetermined to follow some *universal* blue-print. In Cinque (1997) it is suggested that the ordering of tense, modality and aspectual projections is universally fixed across languages and that all such elements will always occur hierarchically arranged in such a way in a functional super-structure in the clause external to the lexical descriptive core, i.e. the VP, very approximately as in (16):

16) epistemic modals>tense>deontic modals>alethic modals>aspectuals>VP

The modal paradigm noted here for Thai, Vietnamese and the other languages in the group strongly seems to go against such predictions - whereas modals are expected to occur dominating the VP and hence to its left in all these V-O

languages, the potential modal is consistently found to occur in a *post*-verbal position and so might even appear to be *within* the VP. In what follows, the structure of these modal sentences is closely examined in order to determine what underlying factors might give rise to their apparent ‘deviance’ and whether they do indeed constitute genuine counter-examples to the universalist hypothesis.

2.1 Syntactic properties of the potential: an examination of Thai

One possible way of avoiding the conclusion that the patterning of this modal series appears to be in violation of the Universal Base Hypothesis might be to suggest that the modal element in Cantonese, Thai and the other languages is actually a *suffix* attached to the verb, and that as inflectional suffixes these elements simply raise up with the verb at LF to be checked and licensed by some higher functional head which would indeed dominate the VP. This is quite possibly the case in a language like Japanese, where one available expression of modal potentiality is indeed by means of a verbal suffix, as in (17):

- 17) hanas - e - ru
speak - Potential - Tense
‘can speak’.

However, a brief inspection of other data indicates that this is not a possible analysis in general, as many elements may actually intervene between the verb and the modal, as in the Thai example (18) where both a prepositional phrase and an adverb occur separating the lexical verb from the modal:

- 18) khun pai kap khaw phrung-nii **dai**
you go with him tomorrow can
'You can go with him tomorrow.'

One must therefore conclude that Thai dai here is in fact an independent modal verb. The post-verbal position it occurs in may then seem to constitute a genuine problem for the universalist hypothesis, which is otherwise very well supported. Considering the patterning further however, and staying with Thai as a representative of the paradigm, there are a number of vital clues which indicate that the surface position of the modal is *not* in fact within the VP but somehow higher. The first of these relates to *question-forms*. Yes-no questions in Thai (and all of the languages under consideration) are answered in the affirmative by repetition of the highest verbal element present in the string; this is the verb-form which can be taken to be associated with the finite specification of the clause.⁴ Illustration of this is given in (19):

19) phom doong pai mai

I must go Q

‘Must I go?’

A: doong

must

‘Yes.’

In dai-sentences we find that an answer-form consists in the repetition of the modal dai rather than the linearly first lexical verb, indicating that it is dai which is in fact the hierarchically higher verbal element associated with the finiteness of the clause rather than the lexical verb, despite the surface ordering; this is shown in (20) below:

20) khaw phuut phasaa thai **dai** mai

he speak language thai can Q

‘Can he speak Thai?’

A1: **dai**

can

‘Yes’

A2: *phuut

 speak

The position of *sentential negation* in dai-sentences also offers a vital clue as to the structure of the clause; sentential negation occurs *immediately before dai*, and *following* the lexical verb and its object/adverbs, as in example (21):

21) khaw phuut phasaa thai **mai** dai

 he speak language thai NEG can

 ‘He cannot speak Thai.’

If one makes the fairly standard assumption that sentential negation occurs external to and higher than the VP, then it is not possible to suggest that there is a VP constituent in (21) containing both the lexical verb and dai as this would then simultaneously also contain the sentential negation. Consequently dai would again *not* seem to be inside the VP. It is also quite important to note that normally verbs may *not* in fact precede sentential negation, i.e. there is no overt V-to-I in Thai or any of these languages, as seen in the ungrammaticality of (22):

- 22) *khaw pay mai
he go not

The patterning of *constituent negation* in Thai provides further information concerning the internal structure of *dai*-sentences. In (23) the constituent negation *only* has scope over the underlined string and critically *not* over the modal dai:

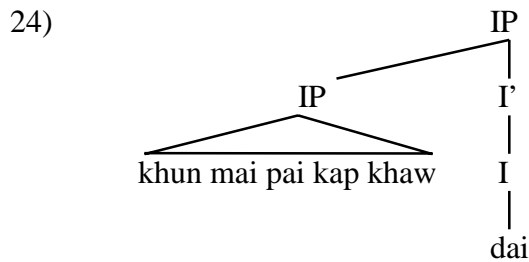
- 23) khun **mai** pai kap khaw dai
you NEG go with him can

You can (choose) not (to) go with him.

In order to account for this, one must assume that negation in (23) does not c-command dai, and hence that the underlined string in (23) is a constituent which excludes dai.⁵

Putting this information together, that the modal dai is not simply lower down in the VP headed by the lexical verb and actually is the element interpreted as finite and so relating to the tense specification of the clause, one might suggest that these structures in fact contain *sentential subjects*, i.e. that all of the material preceding dai in (23) is predicated of dai as its subject. In such a sentential

subject structure dai would be the ‘finite’ higher verbal element relating to Tense and constituent negation would indeed not c-command dai, accounting for the interpretation of (23). (24) is a hypothetical representation of (23) as a sentential subject structure, the whole of the string preceding the modal being predicated of dai as its subject similar to other cases of sentential subjects common in the language:



However, despite a certain initial plausibility, there are reasons to believe that a sentential subject analysis is not in fact appropriate here. The first of these has to do with selectional restrictions. Root modals (as opposed to epistemics) clearly impose selectional restrictions on their subjects and may be taken to assign some kind of theta role to them. (25) below is odd in both Thai and English as the modal dai/can/be able requires a +animate subject to assign its theta role to:

- 25) ??fon dok dai
 rain fall can
 ??'The rain is able to/can fall.'

Considering (24), if the pronominal khun ‘you’ is analyzed as being inside a sentential subject it should not be possible for dai to assign its theta role to this position, as there is in general no possible theta/predicational relation between a predicate and an element which occurs inside the subject of that predicate. So, for example, ‘be good’ may not be predicated of ‘John’ in the sentential subject (26) and (26) does therefore not entail (27):

26) [That John is coming tomorrow] *is good*.

27) John is good.

Consequently, in order to allow a theta relation between khun ‘you’ and dai in (23) (and elsewhere), some other type of structure must be assumed for dai-sentences.

Further evidence arguing against a sentential subject analysis relates to *extraction asymmetries* which can be noted when comparing dai-sentences with other clear sentential subject structures. Relativization and topicalization from the latter is fully unacceptable, as shown in (28) and (29) - in (28) relativization of the object of the verb in the sentential subject is completely unacceptable, and parallel topicalization from within a sentential subject in (29) is also ungrammatical, just as in English:

28) *phuu-chaai O_i thii [loon khop t_i] mai dii ko khuu..
 man Rel she associate-with Neg good be-namely..

‘The man who that she associates with is bad is..(e.g. John)’

29) *sing-law-nan-na_i [khaw phuut t_i] may dii
 things-group-that-Top he speak not good

‘*Those things_i, [that she says t_i] is bad.’

If dai-sentences were sentential subject structures, one would expect that extraction of an element preceding dai should result in a violation equivalent to that in (28/29). However, parallel relativization or topicalization with dai-sentences is perfectly acceptable, indicating that they are *not* structurally equivalent to sentential subject structures, this being illustrated with relativization in (30) and topicalization in (31):⁶

30) phuu-chaai O_i thii [loon khop t_i] mai dai ko khuu..
 man Rel she see Neg can is

‘The man who she may not date/see is ... (John)’

31) sing-law-nan-na_i, [chan phuut t_i] mai dai, (khoothoot khrap)
 thing-type-that-Top I speak Neg can (sorry Pol)

Those things I just can’t reveal/say, (I’m sorry).

Relative scope facts in sentences containing multiple occurrences of modal elements also argue against a sentential subject analysis. In (32) the modal doong ‘must’ obligatorily takes scope over dai, and in (33) naa-ca ‘should’ must also scope over dai:

32) khun doong phoo phuut phasaa thai dai nit-nooi
 you must suffice speak language thai can a little
 ‘You must be able to speak a little Thai.’

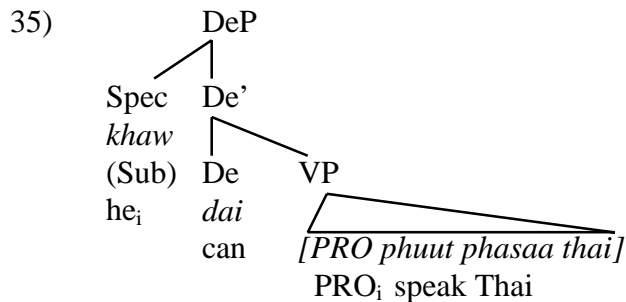
33) khaw naa-ca pen pheuan kan dai
 they should be friend together can
 They should be able to be friends together.

Were all the material preceding dai in (32) or (33) to be analyzed as a sentential subject, then doong and naa-ca would not be in a position in which they would c-command dai and hence would not be expected to be able to take scope over dai. Once again then this strongly suggests that dai-sentences have a structure quite different from that of sentential subjects.

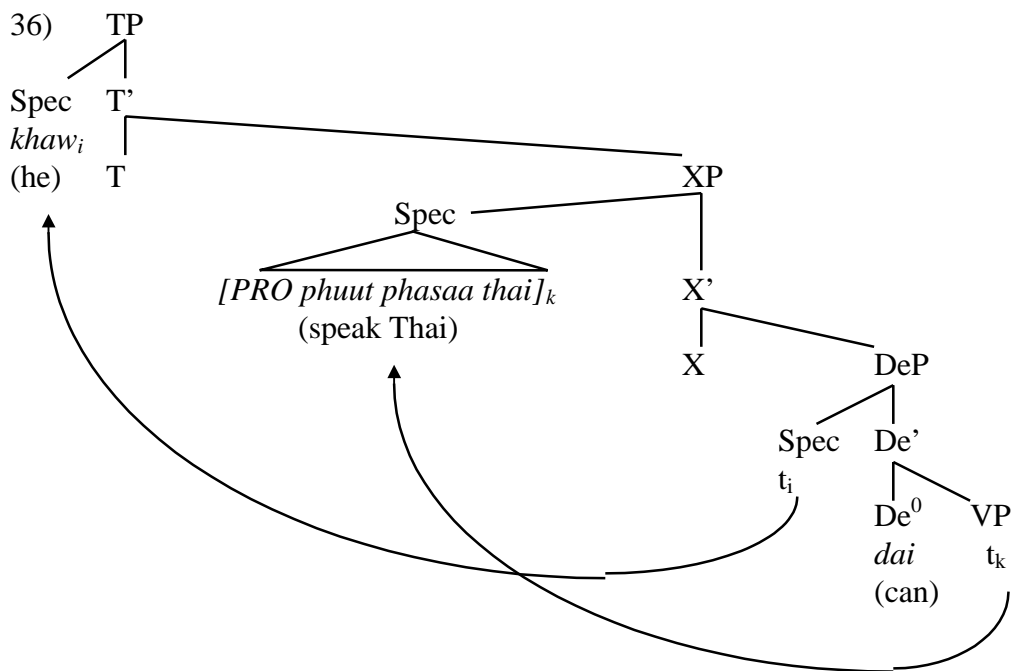
2.2 dai-sentences as light predicate raising structures

The structure I would actually like to suggest is appropriate for dai-sentences is one in which dai heads a modal projection which selects a predicate VP as its complement and projects a Specifier filled here by the lexical subject NP. I label the modal phrase as ‘DeP’ as it is intended not just to be Thai-specific but to occur in all the languages under consideration here and represent a regular low alethic modal projection. The choice of ‘de’ as the label is meant to reflect the modal’s suggested origins in Chinese. (35) is a representation of how the various parts of (34) are suggested to be base-generated, with a null pronominal PRO assumed present in SpecVP, controlled by the DP in SpecDeP:⁷

- 34) khaw phuut phasaa thai dai
 he speak language thai can
 ‘He can speak Thai.’



A surface form such as (34) will then be derived from (35) via two applications of movement. The subject DP in SpecDeP will raise to SpecTP to satisfy the EPP and the predicate VP will raise to a position between T^0 and DeP as illustrated in (36). The landing-site of this latter movement is not made explicit; assuming the existence of a variety of higher modal projections as in Cinque, the VP may be taken to raise to the specifier of one of these projections (or alternatively adjoin to such a specifier position), and I simply label this projection as XP.



Such an analysis would seem to be able to capture all of the key properties of dai-sentences noted in section 2.1, specifically:

a) dai theta marks and constrains the choice of the lexical subject; here the subject is base-generated in SpecDeP where it receives its theta role from dai.

b) dai is suggested to be base-generated in a head position higher than that of the lexical verb in the VP; consequently it is dai which is the verbal element associated with Tense and which appears in answer-forms (and possibly dai or its features raise to T^0 at LF).

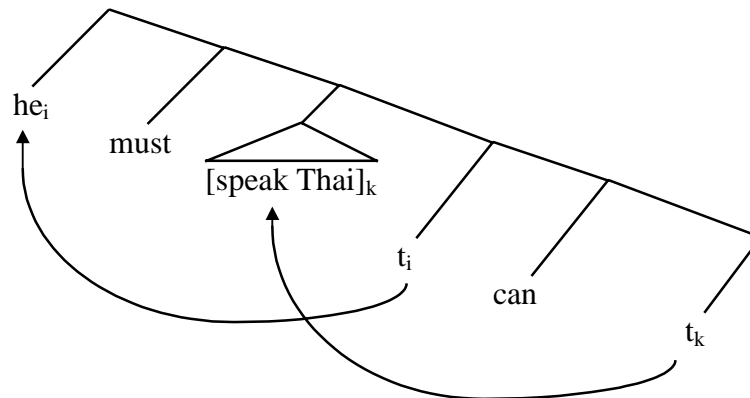
c) There is no sentential subject structure; object relativization-extraction may take place out of the VP in its complement position, hence not causing any CED violation

d) The structure suggested allows a simple account of the negation facts; sentential negation is base-generated between the XP and DeP, hence higher than the VP. The fact that the lexical verb and its object appear higher than sentential negation is simply due to the movement of the VP. That it is a VP maximal projection rather than a head which moves also accounts for why there would seem to be no Head Movement Constraint violation when the lexical verb is found to precede Negation (it has also already been noted that lexical verbs may otherwise *not* normally precede Negation). ‘Constituent negation’ will be base-generated between De^0 and the VP and raise together with the latter.

Consequently it will not c-command dai, accounting for the lack of scope over dai.

e) Sentences such as (32) and (33) with a second modal verb obligatorily taking scope over dai may be assigned a structure in which doong/must heads a higher modal phrase occurring between TP and the XP, so that the resulting c-command relations between the two modals in such a structure straightforwardly accounts for their relative scopes, schematically as in (37) (using English words for the Thai in (32)):

37)



2.3 NPI-licensing and Ellipsis phenomena

The analysis above in section 2.2 also allows for an explanation of two other sets of facts. The first of these relates to the licensing of Negative Polarity Items

(NPIs). NPIs in Thai are essentially like those in Chinese (see e.g. Li 1992) and may be interpreted as *wh*-question words, NPIs or sometimes as existentials, this being illustrated in (38):

- 38) a. khaw book aray?
he say what
'What did he say?'
- b. khaw mai book aray
he NEG say anything
'He didn't say anything.'
- c. khaw book aray, chai mai?
he say something correct Q
'He said something, right?'

Now, in the clear *sentential subject structure* (39) the element aray can only be interpreted as a *wh*-phrase meaning 'what' and not as an NPI 'anything', so (39) must mean 'What is it good that he doesn't say?' and cannot mean: 'That he says nothing is good.'. However parallel elements in what appear to be similar positions in dai-sentences such as (40) are indeed perfectly acceptable with an NPI interpretation. If one assumes that NPIs must be c-commanded by their licenser at

least at some point in the syntactic derivation, then assuming the VP predicate to be base-generated lower down in the structure will mean that it will indeed be c-commanded by Negation prior to the VP-movement, this supporting the movement analysis in (36):

39) [khaw phuut aray] mai dii
 he say what Neg good

not: ‘That he says nothing is good.’

only: ‘What is it good that he doesn’t say?’

40) khaw [phuut aray]_i mai dai t_i
 he say what Neg can

‘He can’t say anything.’

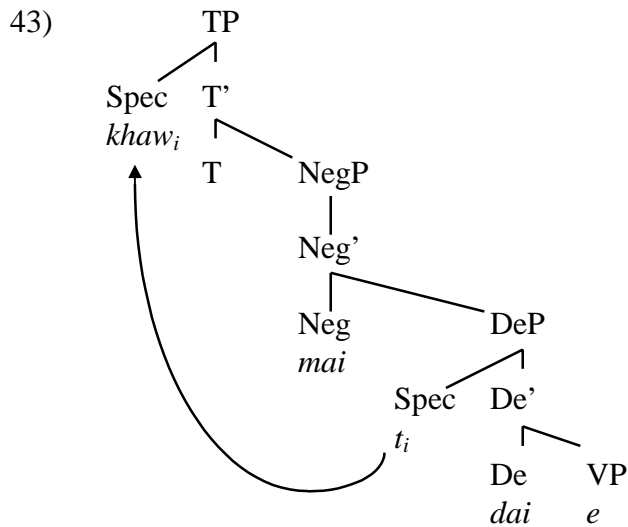
Secondly, the patterning of *ellipsis* can be given a natural and easy account in this kind of analysis - examples such as (41) can be treated as straightforward cases of VP-ellipsis:

41) Lek phuut phasaa jiin dai, dae Dam-na, khaw mai dai
 Lek speak Chinese can but Dam-Top she Neg can
 ‘Daeng can speak Chinese, but Dam can’t.’

In (40) the string phuut phasaa ciin ‘speak Chinese’ has been elided from the lower conjunct. This kind of ellipsis is rather difficult to explain for an account which would assume either that the modal is a lower constituent in the VP or that what precedes the modal is a sentential subject. If the modal were base-generated lower down in the VP, one would have to posit ellipsis of a non-constituent - the upper portion of the VP only, excluding the modal. A sentential subject analysis on the other hand would need to assume ellipsis of only *part* of the sentential subject, leaving behind khaw ‘he’ in (41) (noting that khaw cannot be in topic position as this is occupied by Dam). It would also suggest that ellipsis in Thai should be able to delete all of the material in an IP (the hypothetical sentential subject here) except for the subject; however, this is generally not possible in Thai, as (42) and (43) show:

- 42) *Mary pai Parii laew John
 Mary go Paris and John
 intended: ‘Mary went to Paris *and* John.’⁸

In the present suggested analysis however, the underlined sequence in (41) essentially just corresponds to a VP base-generated to the right of the modal, as in (43) and so (41) would really be just a very common instance of VP-ellipsis:



Finally and importantly, in a structure such as (35/36) dai no longer is an exceptional modal occurring merged in a highly irregular VP-internal position and one is indeed able to successfully maintain Cinque's universal base hypothesis. What is exceptional about dai and in need of explanation however is not its base-generated position but rather the movement of its complement VP, and this I will turn to presently.

2.4 Aspectual yuu

Before considering what might motivate movement of the VP with dai, I would first like to note that if one does assume such a productive process of predicate raising to be possible in Thai, this may allow for a similar account of a second rather odd property found in the language, the occurrence of VP-final *aspectual* verbs such as yuu encoding progressive aspect. This aspectual verb is derived from the homophonous lexical verb yuu meaning ‘to be at’, shown in (44):

- 44) khaw **yuu** thii-nii
he be here
He is here.

Aspectual yuu is found to occur *after* the verb as in (45) and in this sense it may seem like the post-verbal progressive aspect-marker -zhe in Chinese in (46):

- 45) khaw wing **yuu**
he run Asp
He is running.

- 46) men kai-zhe
 door open-Asp
 The door is open.

In fact the Thai aspectual element yu is very probably related to the classical Chinese element yu. Yu both appears as a progressive aspectual marker with stative verbs in Classical Chinese, as in (47), and still occurs in modern Chinese with the locative meaning ‘be at’ in formal written forms such as in (48):

- 47) mang-yu ji-yu
 be busy-Asp worry-Asp
 be busy be worrying
- 48) ta sheng-yu Beijing
 he be born at Beijing
 He was born in Beijing.

However, whereas Chinese -zhe and -yu seem to be verbal suffixes, Thai yu is *not*, and may be separated from the verb by the verb’s object and adverbs as shown in (49):

49) khaw fang phleeng phloen yuu

he listen song happilyAsp

He is happily/dreamily listening to songs.

Essentially then one encounters the same type of problem as with the potential modal dai - aspectual projections are expected to be found dominating the VP and hence to its left in head-initial languages yet here there is an aspect-marker in an odd VP-final type position; as (47) shows it is not possible to analyze the aspect-marker as a suffix which could then be carried up by the verb to be checked or licensed against a higher Aspect head, so again there appears to be a problem for the Universal Base Hypothesis.

It is in fact quite common cross-linguistically for lexical verbs with the meaning 'to be at' to become used as progressive markers, this occurring in Burmese, Welsh, Cambodian and a variety of other languages. Modern Mandarin also has such an element - a free-standing non-affixal progressive aspect verb homophonous with a verb meaning 'to be at' pronounced zai, but importantly this aspectual verb comes *before* the VP, precisely as would be expected for a regular head-initial language:

- 50) ta **zai** gen wo shuo-hua
 he Asp with me talk
 He is talking with me.

The problem presented by the VP-final positioning of the aspectual verb in Thai may be explained away if it is assumed that the structure underlying (51) is actually (52) with yu selecting for a VP-complement, this VP then undergoing raising parallel to the VP-complement of dai, as in (53):

- 51) khaw phuut phasaa thai yuu
 he speak language thai Asp
 He is speaking Thai.

- 52) khaw **yu** [_{VP} phuut phasaa thai] *underlying structure*
 he Asp speak language thai

- 53) khaw [_{VP} phuut phasaa thai]_i **yu** t_i

In this way one is also able to explain the relative ordering of yu and dai when they co-occur in sentences such as (54):

- 54) khray ja mii ka-jay moong-duu thiang **yuu** dai
 who would have heart look-look candle Asp can
 Lit: ‘Who has the heart to be able to be looking at the candle?’
 ‘Who would dare look at the candle?’

Here we find the linear order: *progressive aspect - root modal*, i.e. yuu before dai. Cross-linguistic evidence would however lead one to expect the opposite order. If Modality is situated higher in the functional structure than Aspect as suggested by Cinque and others on the basis of considerable empirical evidence, one would expect this to result in the linear order Modal verb preceding Aspectual verb in a head-initial language. The odd relative ordering in (54) can be simply explained by a double application of predicate raising - first the complement to the aspectual verb yuu will raise over the aspectual verb, perhaps to its Spec, so from the base structure in (55) giving rise to the intermediate representation (56), and then the complement of dai will raise further over dai resulting in the attested surface order (57):

- 55) ..[_{DeP} dai [_{Asp} **yuu** [_{VP} moong-duu thiang]]]
 can be look candle

56) ..[_{DeP} dai [_{AspP} [_{VP} moong-duu thiang]_i [_{Asp} **yuu** t_i]]]
 can look candle be

57) .. [_{AspP} [_{VP} moong-duu thiang]_i [_{Asp} **yuu** t_i]]]_k [_{DeP} dai t_k]
 look candle be can

Such an analysis if correct also indicates that the constituent which undergoes raising in dai sentences may be larger than a VP and correspond to an AspP of some type, as was suggested in endnote 7.

3. A motivation for raising - focus and pre-supposition

If there are indeed good syntactic reasons to argue for the raising structure proposed, the question clearly arises as to *why* this movement should take place, what might be its motivation? Many large scale pied piping operations are proposed in the literature, supported by a variety of evidence (or simply invoked in order to capture the observed word order) but it is not always at all clear what triggers the movement. This possibly does not mean that there is or *was* no understandable motivation, just that perhaps it is now no longer so easy to detect. Here however it would seem possible to offer some kind of explanation for the

movement hypothesized, by relating this movement to the particular informational structure of dai-sentences

A significant fact so far left un-mentioned is that under certain circumstances it is actually possible for the object of the lexical verb to occur clause-finally *after dai*, as in (58) and (59), rather than immediately after the lexical verb as in all previous examples:

58) ..kwaaj ja thaai **dai** sak-phaap-nung..
..before Irr. take can even picture one
..before I could take *even a single picture*,..

59) khaw phuut **dai** laai phasaa
he speak can many languages
He can speak *many languages*.

This may only happen however if the object is strongly *focused*. Furthermore if the object is so focused, it *must* occur in this position and is highly unnatural/unacceptable preceding dai. In addition to this, one can also note that if no focused object follows dai, i.e. if dai is final in the clause, then dai itself automatically carries a focal stress as e.g. in (60-62):

- 60) khaw phuut phasaa thai may dai
 he speak language thai Neg can
 ‘He *can*’t speak Thai.’
- 61) khun pay duu nang dai
 you go see film can
 ‘You *can* go to the movies.’
- 62) than dai laew!
 eat can now
 ‘We can eat now!’

What can be concluded from this is that dai-sentences would always seem to be associated with some kind of focus. I would therefore now like to suggest that these focus-effects are indeed critically responsible for the ‘exceptional’ behaviour observed in dai-sentences and that the motivation and function of the proposed VP-raising is principally to *de-focus* the predicate by moving it away from the final focus position, allowing for either dai itself or alternatively an object following dai to receive the focus intonation and interpretation.⁹

The force of dai-sentences is then to emphasize the possibility, ability or permission of carrying out a certain action (with stress on dai itself) or to emphasize a particular element relating to this possible action (with stress on a

final object as in (58) and (59)). The VP predicate in a sense then represents *presupposed* old information, while the new/focused information is clearly the affirmation of the positive (or negative) possibility of the content of the predicate (or some element related to the predicate).¹⁰

Such a view of dai-sentences would arguably seem to be supported by the fact that they occur with a high degree of frequency in negative sentences, questions and acts of granting permission, all instances where it may be argued that the content of the predicate is quite likely to be information presupposed in the discourse. This presuppositional nature of the predicate in dai-sentences is well captured and best translated by adding a stress to the modal in English equivalents, e.g:

- 63) He *CAN'T* speak Thai. (negative sentence)
- 64) *CAN* I invite him along? (question)
- 65) You *MAY* indeed go to the movies. (act of granting permission)

Once the modal is stressed (as it is in Thai), one can only interpret the predicate in sentences such as these as being presupposed, in the sense that its content is already under discussion in the conversation prior to the utterance of any of (63-

- 69) kui ja dak ho faai *Cantonese*
 he drive DAK very fast
 He drove very fast.

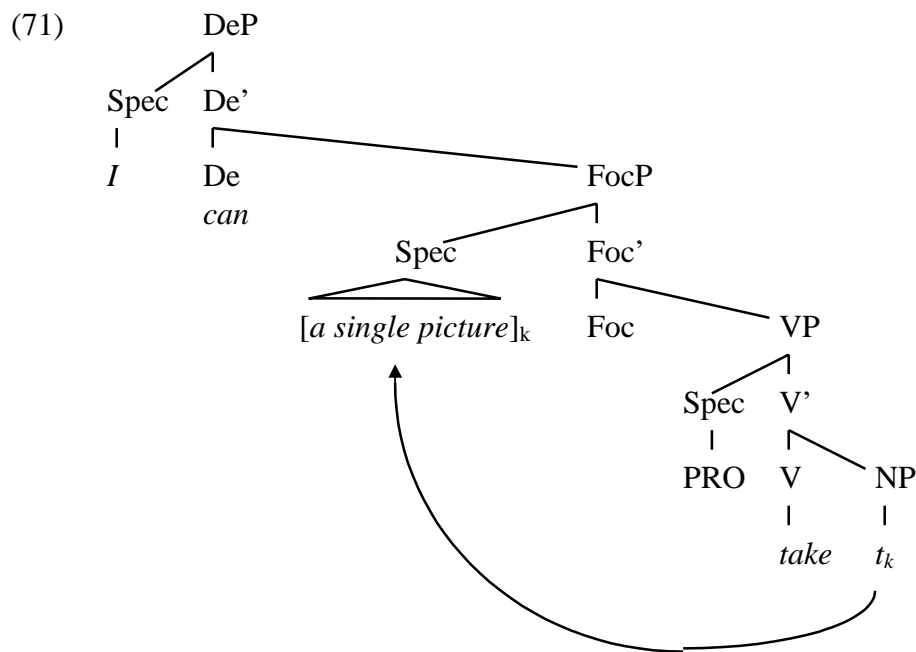
Parallel to the Thai cases considered just now, here it is evident that in this second strategy where some element *follows* the dai/de/dak modal element this element constitutes the focussed new information, and what precedes the modal is presupposed and old. A consequence of this is that an answer to a question of the type in (70) ‘*What did he do?*’ can only be the first form (68) and not (69) because a new value for the *entire* VP is requested in (70) but in the modal-based adverbial structure (69) the verb or the VP preceding the modal is necessarily presupposed and old, hence inappropriate as an answer-form:

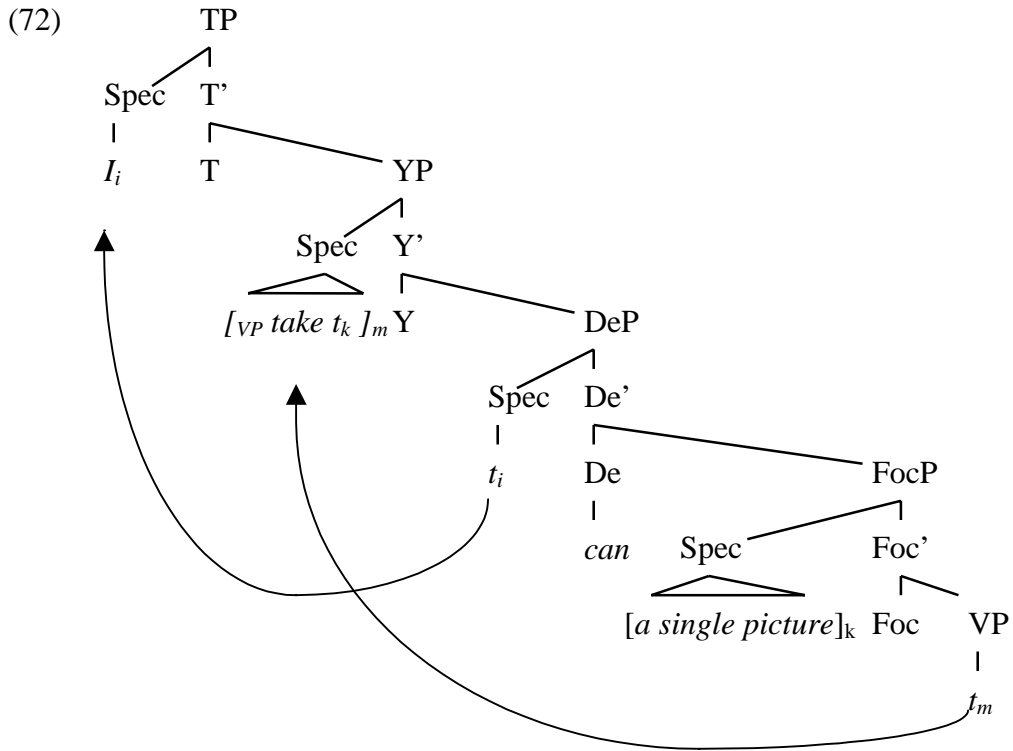
- 70) kui jo matye a? *Cantonese*
 he do what Q
 What did he do?

3.1 A Focus Projection and Remnant Movement

So, if raising of the VP then occurs as proposed in order to de-focus the predicate, it still needs to be explained how it is possible for a focused object to occur after

dai - i.e. if the entire VP raises past the modal, how is it that the object can remain in final position (as in (58) and (59))? Here I would like to suggest that what is ultimately exceptional about the modal dai is that it actually selects for a focus projection as its complement, and that when a focused object follows dai it has in fact raised out of the VP to the Specifier of this FocusPhrase. This focus-movement is then followed by VP-raising to the position preceding dai, as indicated in the sequence (71) and (72) (again using English glosses for the relevant Thai words in (58)), deriving the sequence: ‘..(before) I take can a single picture..’ from: ‘..(before) I can take a single picture.’:

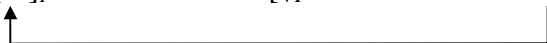





Such a derivation is then suggested to be a case of Remnant Movement as discussed for German in den Besten and Webelhuth (1987, 1990) and others, used to explain how VPs in German may topicalize without all VP-internal material necessarily raising. For example, (73) is argued to be derived in a two-step process; first the object es ‘it’ raises out of the VP as in (74) and then the VP-Remnant is raised higher to the SpecCP position (75), essentially just as proposed for the Thai cases above:

73) [VP Ein Aussenseiter gewonnen] hat es hier noch nie
 an outsider won has it here still never
 ‘An outsider has never won it before.’

74) (hat) [es]_i hier noch nie [VP Ein Aussenseiter t_i gewonnen]



75) [VP Ein Aussenseiter t_i gewonnen]_k hat [es]_i hier noch nie t_k



4. Middle Chinese and Old Chinese

A fairly detailed investigation of contemporary Thai has led to an analysis of dai-sentences which might seem to offer a principled and coherent account of the otherwise puzzling post-verbal position of this modal, one which importantly also turns out to be quite in line with the Universal Base Hypothesis as developed in Cinque (1997). In introducing the paradigm earlier it was suggested that these structures in Thai in all likelihood have been borrowed from Middle Chinese. Consequently their syntactic properties might naturally be expected to be those of Middle Chinese de-constructions. Now turning back to earlier forms of Chinese there would indeed seem to be evidence of two basic types which both indicate

that the syntax of Thai dai-constructions is indeed that of Middle Chinese de, adding strong support to the proposed analysis of focus-related VP-raising.

First of all, if one considers the patterning of the object of the lexical verb in Middle Chinese de-constructions, it would indeed appear to mirror the distribution found in Thai and therefore arguably be dictated by the same presupposition/focus distinctions. As occurs frequently in Thai dai-structures, one often finds that the object is deleted/a *pro*, as in example (76). Because a *pro* may normally only be used where its content is already assumed and identifiable in the discourse, the regular occurrence of an object *pro* here *may* be argued to reflect the fact that possibly the content of the whole VP including the object is presupposed in these structures.

- 76) yi ren ji de
 one person play can
 One person can play (it).

Where an object is overt but indefinite/unstressed it is found to occur ‘raised’ in the VP (i.e. sandwiched between the lexical verb and the modal de); examples such as (77) strongly resembling those found in Thai:

- 77) shi qie [yao shou] bu de
 cause wife wave hand Neg can
 ‘It caused the wife not to be able to wave her hand.’

Finally one finds that strongly focused objects occur *after* de, exactly as in Thai:

- 78) cheng de ge shenme-bian shi?
 succeed can Cl what matter
 ‘What can one accomplish?’

A second set of data which support the proposals for Thai comes from de-structures found earlier still in Old Chinese. In the preceding sections it has been shown that a variety of arguments all converge on the same conclusion, namely that the surface strings found in dai-sentences are actually derived from structures in which the modal underlyingly selects a VP complement to its right, this VP subsequently undergoing raising for reasons relating to focus. Turning to de-constructions in Old Chinese one significantly finds that at this period in its history de in fact *preceded* the VP, showing precisely what has been argued to be the base-generated form of de and dai-sentences in Middle Chinese and Thai, and

indicating that the VP/predicate clearly was a (rightward) complement to de in its origins:¹¹

- 79) Zikuai bu de [VP yu ren yan]
Zikuai Neg permit give other Yan
'Zikuai is not allowed to give others the state of Yan.'
- 80) ni **de** [VP ru men ye]
you can enter door Prt
You can enter.

Returning once again to Middle Chinese, Sun (1996) reveals that such de-initial (de-VP) structures actually remained present for some time alongside other post-verbal de-constructions, so there was consequently a period in Middle Chinese when both types of de-VP and VP-de structures simultaneously occurred. One can therefore suggest that the later de-final (VP-de) type found only in Middle Chinese developed from the earlier de-initial (de-VP) forms quite plausibly as a stylistic variant triggered by the informational-discourse reasons already outlined - the rightward VP complement became raised whenever there was a need to de-focus it. This raising was clearly optional in early Middle Chinese (when it may be assumed that not all de-sentences necessarily had

predicates whose content was presupposed), but later became obligatory, at least in Thai, as part of the meaning of such constructions.

Consequently then diachronic data from Old and Middle Chinese strongly seem to bear out and support the analysis developed on the basis of Thai and can be suggested to indicate that a period where there existed competing stylistic forms ultimately led to the establishment of one of these as the sole and exclusive option, conceivably as a classic result of ‘over-use’ of this particular variant.

5. Vietnamese

I would now like to turn briefly to Vietnamese and from there on to Cantonese. Earlier on it was mentioned in a footnote that there are certain interesting differences in the *contemporary* patterning of the modal construction among the various languages which contain it. One of these relates to the position that the object of the lexical verb occurs in. Considering at least the northern dialects of Vietnamese and the position of the object, one seems to find the familiar pattern which occurs in Thai and Middle Chinese. There seems to be a heavy preference for indefinite non-focussed objects to precede the potential modal and for focussed DPs to follow it, as in (81) and (82):¹²

- 81) a. toi lai **xe** duoc
 I drive car can
 ‘I can drive (cars).’
- b. ??toi lai duoc **xe**
 I drive can car
- 82) a. ong-ai noi duoc **moi-tieng**
 he speak can every language
 ‘He can speak every language.’
- b. ??ong-ai noi **moi-tieng** duoc
 he speak every language can

However, it transpires that *definite* but non-focussed DPs can also readily occur *either* before the modal *or* after it, as in (83):

- 83) a. ong-ai noi **tieng anh** duoc
 he speak English can
 ‘He can speak English.’
- b. ong-ai noi duoc **tieng anh**
 he speak can English
 ‘He can speak English.’

This is somewhat unexpected and different to what is found in Thai. As noted earlier, in Thai it would not be possible to have a definite but *non-focussed* object in the post-modal position. If the modal construction in Vietnamese stems from the same basic source that Thai does in Middle Chinese as seems to be more than likely, this difference may be taken as indication that the focussed interpretation of an object occurring after the modal has over time undergone substantial weakening so that ultimately this position has become a fully regular position for definite DP objects with no necessary focus association. One could then imagine that possibly after further time the definiteness restriction on post-duoc objects might also disappear and indefinite objects would also occur in this position. What may have originally been clearly focus-driven movement may gradually become re-analyzed over time as simply movement for the licensing of *all* types of objects, possibly overt movement to the specifier of a low Agreement or Aspect Phrase where objective case may be checked. Such a further development is arguably what has indeed occurred in *Cantonese*, which shows additional differences to Thai and Viet with regard to object positioning.

6. Cantonese

In Cantonese it is found that *all* object types do indeed occur after the modal, even those which may be non-referential parts of verb-object idiom sequences, hence NPs which are not available for focussing at all, as in (84); example (85) shows that the object *cannot* in fact precede the modal:

84) kui m yau dak sui
 he not travel can water
 He can't swim.

85) *kui m yau sui dak
 he not travel water can

This actually makes the modal look quite like a suffix in Cantonese. There is however a variety of evidence that dak still is an independent modal in Cantonese and that the syntax of dak constructions essentially parallels the derivation suggested for Thai and Middle Chinese, though now for somewhat different re-analyzed motivations.

First of all, it is found that dak need *not* always occur attached to a verb - in simple answers to dak-questions a short answer-form comprising dak alone is

perfectly acceptable, as seen in (86), indicating that dak *cannot* be taken to be a verbal suffix or clitic:

86) ngoh tai dak nei-bo-sue ma?

I read can your-Cl-book Q

‘Can I read your book?’

A: dak

can

‘Yes.’

The behaviour of dak here contrasts with that of other aspectual elements which attach to the right of verbs and do seem to be suffix-like as they may not occur separated from the verb in short answer-forms. For example, (87) shows that the completive aspect marker yuen may not occur as an independent answer-form:

87) nei tai yuen goh-bo sue ma?

you read Asp that-cl-book Q

‘Did you finish reading that book?’

A1: *yuen

Asp

A2: tai-yuen

look-Asp

‘Yes.’

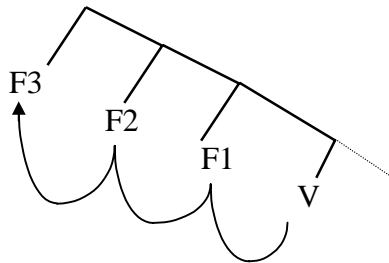
Examples such as (88) in which the aspectual marker yuen appears together with the modal dak provide a second reason for rejecting the dak-as-suffix possibility. If the aspectual marker yuen in (88) is a suffix analyzed as attaching to the verb ‘read’ tai, then dak would also have to be analyzed as being a suffix. However, this ordering of suffixes attaching to the verb would seem to violate either the Mirror Principle (Baker 1988) or Cinque’s universal template of clausal structure. In (88) the order of elements is seen to be:

main verb - Modal(dak) - Aspect(yuen)

- 88) ngoh m tai **dak** yuen bo-sue
 I Neg read can Asp Cl-book
 ‘I can’t finish reading the book.’

Now, cross-linguistic evidence has consistently been taken to indicate that those inflectional affixes which occur closest to the verb stem correspond to functional heads which are lower in the clausal structure. So in the schema below showing a verb with three suffixes, Affix-1 closest to the verb will be checked against the lowest functional head F1, Aff-2 against F2 and so on. If dak and yuen are suffixes in (88), the fact that dak occurs closer to the verb than yuen should then indicate that root modality in Cantonese is lower than completive aspect. However, Cinque presents much evidence that root and all other modality is universally ordered higher than the various types of aspect, so either the ordering of the suffixes here would have to be admitted as a singular exception to this ordering, or one would have to assume that the Mirror Principle is incorrect, neither an attractive possibility.

V - Aff₁ - Aff₂ - Aff₃



A third clear reason to reject the dak-as-suffix possibility is that examples with constituent and sentential negation occurring in a single string indicate that dak need not be immediately adjacent to the verb and hence cannot be a verbal suffix. In (89) dak is separated from the verb by sentential negation.

89) nei [m lai] m dak

you Neg come Neg can

You can't not come = You must come.

It can therefore be assumed that dak is an independent modal occurring in a low root modality head and that the order of *lexical verb-dak* is the result of movement of the verb to its position preceding dak. Again consideration of various aspects of this raising may lead one to conclude that this is in fact movement of a VP remnant and not just of a verbal head - if just the verb moved to this position over the modal head, this should result in a violation of the Head Movement Constraint (HMC) or the Minimal Link Condition(MLC)/Shortest Move, yet all these forms are perfectly acceptable. Furthermore, where we introduce constituent negation as well as sentential negation in (89) we find that the verb actually occurs in a position higher than sentential negation - again head-movement of just the verb over this (sentential) negation might be expected to

violate the HMC, noting also that verbs may normally *not* be raised over negation in Cantonese as (90) shows:

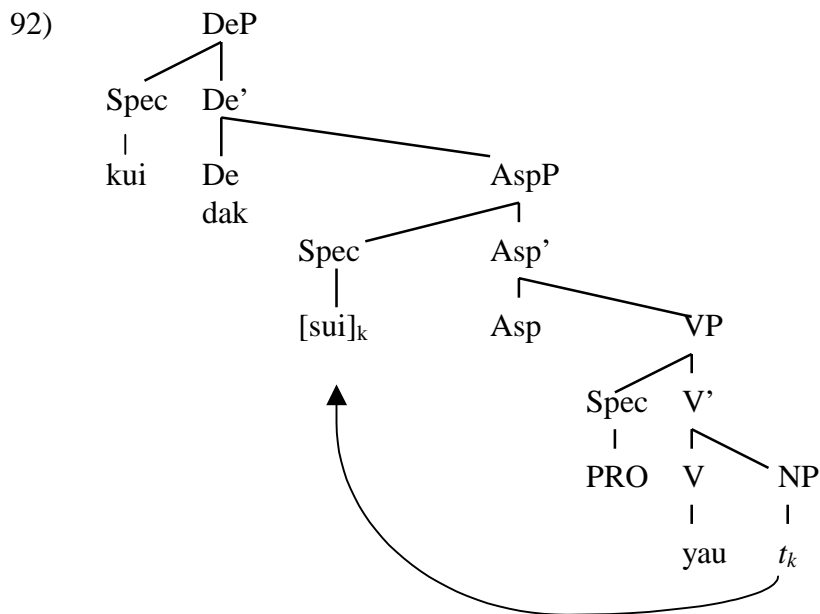
- 90) *ngoh hui m Heung-Gong
I go Neg Hong Kong
intended: 'I'm not going to Hong Kong.'

Lastly, the fact that the constituent negation appears raised up with the lexical verb in (89) also strongly suggests that what has been raised is a unit which is larger than a head, and hence arguably a lower NegP + a VP remnant.

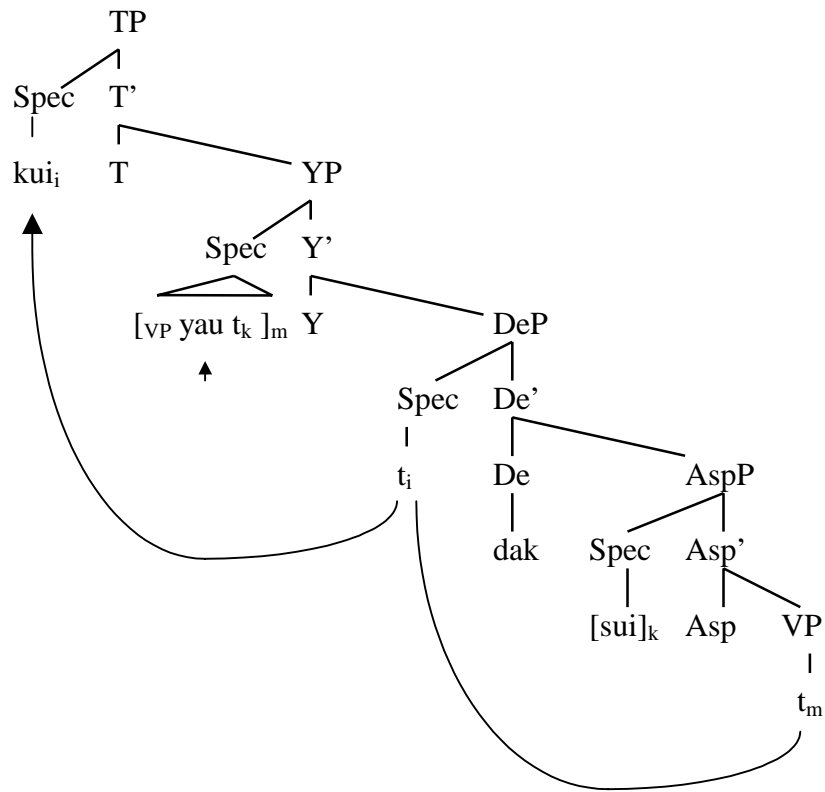
There is then sufficiently good reason to believe that the derivation in Cantonese follows the same steps as in Thai and Middle Chinese. The crucial difference between Thai and Cantonese is that the object in Cantonese is always forced to raise out of the VP to some position lower than the modal before the VP-remnant raises higher, while in Thai this only ever occurs when the object is focused. As noted a little earlier an object DP in Cantonese need not be focused to appear after the modal and *all* objects occur in this position. I would therefore like to suggest that the process of development away from a purely focus-oriented construction seen underway in Vietnamese has indeed proceeded a further significant step in Cantonese and perhaps the over-use of semi-stylistic object

focus-movement has over time been fully re-interpreted as regularized object-shift to a position which is involved in licensing *all* object types, possibly the Specifier of an Aspectual Phrase lower than the modal. The derivation of a simple dak structure such as (91) would then follow the steps in (92-93). From an underlying structure in which the VP predicate occurs to the right of the modal the object raises up to the Specifier of a low AspectPhrase (92); this is then followed by VP-remnant movement to a position preceding the modal dak:

- 91) kui yau dak sui
 he travel can water
 ‘He can swim.’



93)



The end result of such a derivation is a surface form where the modal really looks as if it could be a verbal suffix as only the verb is present in the VP-remnant which undergoes raising and nothing breaks up the linear verb-modal sequence; one can in fact easily imagine that given further time such sequences might indeed get reanalyzed as verb + suffix and that this is a rather different means by which suffixes may develop. All that it would essentially take for this reanalysis process of dak as a genuine suffix to be complete would be that the evidence in favour of dak being an independent modal would disappear; hence one might imagine

increased use of answer-forms where the lexical verb and dak appear together rather than just dak on its own, a loss of sequences where dak is followed by a dependent aspectual element such as in (88) and the discontinuation or freezing of forms with constituent and sentential negation co-occurring as in (89). For the present though, one may argue that dak constructions do still follow the syntax of the original modal construction in Middle Chinese and its counterpart in contemporary Thai.

Before leaving Cantonese though, some further remarks are in order. A fairly ‘imaginative’ analysis of Cantonese dak has been arrived at here, in the sense that what might look quite like a ‘regular’ base-generated sequence of lexical verb + modal suffix + object is actually argued to result from a complex sequence of object-raising and VP-remnant movement. Certain synchronic facts in Cantonese combined with contemporary theory suggest that this is indeed the right analysis, but essentially such an account was only really arrived at by means of looking at other languages and the analysis of Cantonese is to a large extent justified by what we are able to show with these other languages together with diachronic evidence from Early and Middle (Northern/Central) Chinese. One obvious point is that this clearly stresses the usefulness of careful comparative and diachronic research. The case of Cantonese however also allows one to suggest certain other more general conclusions regarding similar rather abstract analyses

and the commonly argued for need to clearly motivate any suggestions of movement in a syntactic analysis. Supposing, momentarily, one were to consider just the Cantonese paradigm and isolate it from the rest of cross-linguistic data presented here. There is indeed the possibility that one could in fact arrive at the analysis here; theoretical interaction of the Universal Base Hypothesis and the HMC with the patterning dak is observed to display with constituent negation, with other aspect markers and in questions all might legitimately lead one to suggest an account of VP-remnant movement along the lines proposed above. However, such an analysis in isolation would most probably be faced with the natural criticism that there is no understanding of *why* the sequence of movements would be taking place. While it has been suggested that raising of the object may be argued to be for case reasons (a reanalysis of the focus-movement), and this could also be suggested in an ‘isolated’ Cantonese account, the hypothetical VP-raising operation is difficult to account for. In contemporary Cantonese there no longer is any association with focus in the dak construction and it can hence no longer be suggested that movement of the VP takes place for (the earlier posited) reasons of defocussing. No other synchronic explanation in semantic or discourse-oriented terms suggesting itself, one is forced to assume movement without any means to properly motivate this. As an isolated account would not have the information that there may in fact have been a clear earlier trigger for the

movement, and as there is a natural desire to know why any suggested movement takes place, such an isolated account would be likely to remain theoretically plausible but ultimately less than fully convincing. If, however, one is privileged to an awareness of the wider cross-linguistic and diachronic paradigm, the VP-raising analysis of Cantonese can be clearly better understood. Initially one may still be left without the identification of a *synchronic* trigger for the VP-movement, but the possibility that there might indeed be such movement does become considerably easier to accept. Understanding the roots of the construction and then considering possible changes over time, one can argue that Cantonese VP-movement may now essentially be considered to be something like an ‘automatic fossilized reflex’ of an earlier stage of the language mirrored in contemporary Thai. Due to developments within the language, the semantic force of the modal construction has been lost in Cantonese itself, but has arguably left behind this legacy of the two discrete movements, one becoming reinterpreted as raising for case, the other however being left without any clear motivation. The consequence of such a view based on argumentation relating to the cross-linguistic modal paradigm is then that there *are* indeed movements (such as the Cantonese VP-raising) which may not have any clear synchronic trigger in obviously identifiable semantic or morphological terms. Such movements may have become embedded in a language as a result of diachronic change but then

ultimately appear to occur for no clearly understandable reason. Current Minimalist theory does however provide a technical mechanism to allow for such movement, namely Chomsky's (1995) idea of a (strong) categorial feature set. Although ostensibly referring to a morphological specification (i.e. the syntactic type of an element), the notion of a categorial feature may be used to motivate movement (in a weak sense) without there being any morphological features checked on an element *beyond* its pure categorial type. For example, if the EPP is satisfied when a category of type D appears in a checking relation with T in a language, this is all that is required to license that relation, and any number/person features present on the element of type D *need* not be checked along with the categorial specification - a categorial feature may be checked in isolation. I would like to suggest that this notion of a categorial feature being able to trigger movement may be precisely what is involved in at least certain instances of language change and reanalysis. It is clear that all syntactic elements must indeed be of some categorial specification and hence in principle be attractable to a head which bears a (strong) categorial feature of a corresponding category type. When a clear semantic (or possibly morphological) trigger for movement disappears over time, as in the case of the Cantonese modal construction, it is possible, at least in some instances, that the grammar reanalyzes a particular movement as being driven instead by pure categorial features, and that the theoretical possibility

of categorial features triggering movement is a formal means by which grammars allow themselves the continual legitimization of dependencies whose original characteristics have undergone change and loss. In the case of Cantonese, it can simply be suggested that a set of strong *v*-features on a high clausal head may cause raising of the VP.¹³ A broader question is why a particular movement is not simply discontinued when its original motivation becomes lost? Why might language allow for the suggested reanalysis process in terms of categorial features rather than simply ceasing to make the movement (specifically in Cantonese, why does the VP continue to raise after loss of the focus effects in the construction when it could just remain in situ?). In the history of English, for example, it has been suggested that loss of agreement morphology on lexical verb-forms resulted in a simple loss of verb-movement. Here there might not seem to be any obvious answer; however, I believe one should take into account the gradual and slow nature of actual language change. It is often not easy to be sure when the semantic motivation for a movement is replaced by a purely formal trigger, and it may be the case that it is easier for a speaker who does not understand the semantic trigger of a construction he hears to (subconsciously) mimic the construction with the use of a categorial feature analysis rather than to attempt a radical replacement, i.e. stop the movement entirely. Furthermore, it is not in fact clear that there are indeed cases where the loss of a semantic/morphological trigger actually leads to a

full loss of movement; in the case of English verbal agreement just noted, it is not fully correct to say that there was a simple discontinuation of verb-raising to Infl when the verbal agreement deteriorated. A more accurate characterization would be to say that some other element became used to fill the Infl position - the dummy auxiliary do. In this way the filling of the Infl position remained constant and there was no simple retreat to a stage when the Infl position stayed vacant. Possibly languages might not tolerate such a purely backward step and it may be that there are internal pressures to *compensate* for loss and favour reanalysis rather than to opt for pure and simple regression.

On a procedural level, the conclusion resulting from Cantonese that movement may indeed sometimes take place without any clear semantic or morphological trigger suggests the need for greater potential tolerance towards other accounts faced with difficulties in motivating movement. In recent years there has been criticism of a number of analyses where a particular theory leads to the conclusion that an element undergoes some movement without being able to find any obvious trigger or motivation for the movement. What the comparison of Cantonese and other languages here might illustrate is that the lack of any clear motivation for a movement which other theoretical reasons leads one to posit is *not* necessarily a strong enough reason to reject such a movement as implausible. There may well be movements whose original motivations get lost over time due

to developments in the language as in Cantonese here which has almost entirely covered its tracks in the modal construction considered, and sometimes the extra information which would allow us to understand and make sense of a movement we are led to posit may possibly no longer be available in the language, or it is available somewhere but we are somehow not able to recognize it. Here in the paradigm investigated we are in fact rather fortunate and find a single construction type in various stages of development in different languages along with a useful supply of good diachronic records, legitimizing to a large extent the somewhat abstract account suggested for Cantonese. What arguably seems to be right for Cantonese on purely theoretical grounds is justified considerably by cross-linguistic and diachronic evidence. In other cases in other languages one might perhaps not be so fortunate to find such supporting evidence and yet the analysis a theory forces one to might indeed be equally correct. Quite generally then one arguably should accept that there may well be many parallel fossilized applications of movement without any clear synchronic motivation, and that if there are otherwise good theoretical reasons for positing a movement operation, a lack of understandable motivation as a trigger for such a movement should not necessarily deter one from assuming that it actually does take place.

7. Scandinavian Object-Shift

In this last section, I would like to speculate a little about a phenomenon and a puzzle in Scandinavian which I believe may be usefully compared to the patterning found in Thai and Chinese etc. This is the well-discussed issue of *object-shift*, where a verb's object is commonly described as occurring optionally raised in the Specifier of a VP-external Object-Agreement Phrase. This process would also seem to be subject to certain restrictions - in Holmberg (1986) it is noted that objects in Scandinavian may appear raised before Negation and other adverbs but only if the lexical verb is also raised and furthermore only if the object is a pronoun in mainland Scandinavian; example (94) shows the pronoun tey-‘them’ shifting leftwards over negation in Faroese, this being accompanied by raising of the verb veit ‘-’to know’, both from base positions in the VP to the right of Negation as indicated by the traces. (95) shows that if an auxiliary is present - here havthu-‘had’ then the object cannot raise out of the VP because there will have been no raising of the lexical verb in this instance. Example (96) illustrates the claim that object-shift is restricted to pronouns in mainland Scandinavian languages such as Danish - the non-pronominal DP object in (96) would not seem to be able to raise over negation:

- 94) Eg veit_i tey_k ikki t_i t_k *Faroese*
 I know them not
 I don't know them.
- 95) *Bornini hovthu tey_k ikki saeth t_k *Faroese*
 children-the had them not seen
- 96) *Peter laeste artiklen_i ikke t_i *Danish*
 Peter read article-the not

The apparent dependence of object shift on verb movement was initially assumed to be universal and was consequently built into the general syntactic mechanics of Chomsky's (1993) Minimalist Paper. However, languages such as Dutch and Japanese have since been argued to show that object DPs may indeed raise without there being any necessary verb-movement. Chomsky (1995) consequently rejects the earlier analysis where object-raising was taken to be directly dependent on verb-movement due to this verb-movement being domain-extending, and other authors such as Holmberg (1997) have provided additional arguments against the domain extension account of verb-movement and object-shift. If UG does then generally allow for object-shift without verb-movement, the pattern illustrated above in Scandinavian is puzzling and remains without explanation, i.e. why is it

that pronominal object-shift over Negation should only be possible when the verb also appears to be moved?

The object-shift patterning in Scandinavian can be argued to bear an intriguing similarity to the modal paradigm discussed in Thai and Viet. Essentially one finds that in both Scandinavian and Thai/Viet the positioning of the object of a lexical verb appears to be dependent on the position of the verb itself. For example, in Scandinavian it is possible to position the object of a verb in front of adverbs and negation, but this is only possible if the verb also precedes the adverbs/negation. In Thai and Viet it is found that it is possible for the object of a verb to exceptionally precede the potential modal dai/dnyk, but only when the lexical verb also precedes the modal. The analysis accounting for this patterning which seemed forced in the case of Thai was that the entire VP undergoes raising to a position higher than the modal, and it would *not* seem possible to analyze the S.E.Asian patterning in terms of verb-movement accompanied by object-shift for the simple reason that the verb-movement part of such a derivation should not be possible. First of all raising of a verb over the modal would violate the HMC/MLC; secondly lexical verbs are only ever seen preceding *sentential negation* when they also occur preceding the potential modal indicating that negation is also a barrier for verb-movement; thirdly it is found that adverbs and adjunct PPs also may occur shifted in positions preceding the modal

but only when the verb precedes the modal. All of this falls straightforwardly out of a VP-raising analysis but would seem to be difficult to account for if the verb moves independently from the object and adverbs etc. So, if the S.E.Asian pattern is indeed basically similar to that in Scandinavian and if the S.E.Asian facts may not be explained in terms of independent verb and object-raising as assumed in Scandinavian, it is tempting to try and explain the Scandinavian pattern with the S.E.Asian model and suggest that objects in Scandinavian will only occur shifted over Negation when the *whole VP* is in fact raised. Such a possibility would necessarily and fairly simply account for the apparent necessity of ‘verb-movement’ in Scandinavian - in fact there would be no independent verb-movement as such, and the verb would move together with its object as a single unit. The only possibility for an object to precede negation would then be when the verb also occurs raised with the object both inside the same VP.

Two further facts make the parallel with S.E.Asian even more suggestive. The core cases of object-shift reported in Scandinavian involve the raising of *pronominal* objects. Now, the analysis for S.E.Asian was that the VP undergoes raising to remove it from a final focus position and the contents of the VP essentially constitutes *presupposed* information. Pronouns are by definition presupposed in their reference and so if Scandinavian object-shift is akin to the S.E.Asian construction one would expect that pronominal objects would be the

type of object to undergo this raising. Concerning the possibility of shifting non-pronominal objects, the ‘facts’ are actually somewhat unclear - originally it was suggested that only Icelandic allowed for object-shift of full DPs, but there are increasing reports that object-shift of full DPs in mainland Scandinavian is often not so unacceptable. Essentially if what undergoes raising should be referentially presupposed, one would indeed expect a heavy preference for pronouns over full DPs; however one could also imagine that certain speakers might be willing to accept the shift of full DPs if they could take these as presupposed and old. Finally, one may note the fact reported in Diesing (1996) that *unshifted* object DPs following Negation in Scandinavian receive a contrastive *focused* interpretation, precisely as post-modal objects do in Thai, as for example would be the case in (97):

- 97) Jon keypti ekki bokina *Icelandic*
 Jon bought not book-the
 Jon didn't buy *the book* (he bought the magazine instead).

One might therefore attempt to argue for a similar derivation to that outlined for Thai - either the *entire* VP is shifted over Negation for de-focusing, *or* the object is raised out of the VP to a low focus projection following Negation and the VP-

remnant is raised higher still. Such an analysis certainly leaves unanswered a number of questions, and I will not attempt to develop the possibility of a VP-raising account of Scandinavian further here, the focus of the paper being squarely set on the S.E.Asian paradigm. However, the noted surface parallels between the different sets of languages does make it interesting to at least entertain the possibility of a unitary type of analysis.¹⁴

8. Concluding remarks

This paper began with the suggestion that rather unusual large-scale lexico-syntactic borrowing has resulted in the creation of a distinctive modal paradigm connecting various genetically-unrelated languages in S.E.Asia. It was then indicated that the patterning observed in this modal series clearly seems to present a strong empirical challenge to the Universal Base Hypothesis as strongly defended in Cinque (1997); the UBH suggests that tense, modal and aspectual verbs should all occur in a strictly rigid hierarchical order dominating the VP, yet in the languages considered a single alethic modal was found to appear in an unexpected predicate-final position. A close investigation of the syntactic properties of the modal in contemporary Thai however then showed that a variety of evidence all converges on an analysis in which the predicate occurs in its

surface position as a result of being raised there from a base structure which significantly does correspond to Cinque's predictions and the UBH. Careful consideration of apparent strong counter-examples to the UBH is then ultimately shown to provide powerful support for the view that clausal architecture may indeed be universal in design. The motivation for the raising of the predicate was subsequently suggested to be a need to *de-focus* the VP as pre-supposed information in what was shown to be a focus-oriented construction; in section 4 such an analysis was also argued to receive good diachronic support from Middle and Early Chinese. In section 5 the paper then suggested that the original construction has developed and undergone re-analysis to different degrees in Viet and Cantonese, giving rise to certain critical cross-linguistic variation in the position of the object in these structures and the impression that the modal is actually a suffix in Cantonese. Synchronic evidence indicated however that the modal construction in Cantonese nevertheless does still follow the basic VP-raising pattern suggested for Thai and Middle Chinese. As all earlier association with focus has now disappeared from contemporary Cantonese and there seemed to be no way to motivate the VP-raising in other semantic/functional terms it was argued that this movement has now become simply fossilized in Cantonese and continues to be made *without* any clearly understandable synchronic motivation long after the time that its original trigger weakened and got lost. A general

conclusion to result from this then was that there are indeed (possibly many) instances of movement which do not have any obvious purely synchronic semantic explanation and that the process of language change may often result in once clearly understandable motivations for movement simply becoming lost over time. It was suggested that Chomsky's (1993) notion of strong categorial features is then a necessary mechanism made available by language to legitimize the continued existence of movement dependencies which have lost their original motivation, permitting the reinterpretation of a semantic trigger in terms of a purely formal requirement. Finally in section 7 the paper noted that aspects of the S.E.Asian modal paradigm seem quite reminiscent of object-shift phenomena in Scandinavian, and suggested that it might be appropriate to attempt to analyze at least certain instances of object-shift as focus-related VP-shift.

Endnotes

1. It can be noted here that although Thailand saw a lot of Chinese immigration in the 19th and 20th centuries, the group which immigrated in is the Chiu-Jau/Dae-Jiu group and this dialect does *not* have this particular modal construction. The construction might therefore seem to be an old export from China rather than a recent import.

2. The Middle Chinese potential modal pronunciation dei is suggested to have turned into the modern Mandarin pronunciation de due to a process of grammaticalization and being sandwiched in the middle of the two-verb structures V-de-V forms illustrated below:

- | | | | | |
|-----|----|------------------|----|-----------------------------------|
| (i) | a. | kan-de-jian | b. | ting-de-dong |
| | | look-can-meet | | listen-can-understand |
| | | ‘is able to see’ | | ‘can understand (when listening)’ |

3. There are in fact certain interesting differences in the contemporary patterns found amongst Thai, Viet, Cantonese and Cambodian, relating primarily to the positions of negation and objects. Later on it will be argued that these differences are the result of ongoing historical change.

4. None of these languages exhibits any overt tense/agreement morphology.

5. In a structure such as (23), it is possible for the constituent negation to apply its force to the object following the lexical verb, i.e. the negation in (i) can apply to Daeng rather than the verb. This indicates that such negation must be able to c-command more than just the verb. The lack of scope over dai can therefore not be suggested to be due to the negation here being simply adjoined to the V⁰:

- | | | | | | | |
|-----|--|-----|-----|------|-------|-----|
| (i) | khun | mai | pai | kap | Daeng | dai |
| | you | NEG | go | with | Daeng | can |
| | ‘You can not go with <i>Daeng</i> (if you really don’t like her).’ | | | | | |

6. The bracketing in these examples would be correct if dai-sentences were sentential subject structures and is intended to highlight the fact that relativization and topicalization is made from a position which *would be* within the sentential subject (if dai-sentences contained sentential subjects), fully parallel to the ungrammatical (28) and (29).

7. (35) actually simplifies things somewhat. With Cinque I assume that below modal projections there are first aspectual phrases of various types and then the VP (even if there are no overt aspect-heads). Consequently what is labelled as VP in (35) may in fact be an AspectPhrase of some type. Essentially all results here are the same whether the constituent is labelled as VP or as AspP with an empty Asp head, and so I take the former option for simplicity.

8. With the correct intonation, the English in (42) is certainly acceptable in many British dialects.

9. Cinque (1997) argues for similar effects in Italian. In (ii) below, suggested to be derived from the neutral order in (i), raising of the indirect object over the direct object is argued to put the latter into focus:

- (i) Hanno dato[uno schiaffo][al figlio di Maria]
(they)-have given a slap to-the son of Maria
'They slapped Maria's son.'

- (ii) Hanno dato [al figlio di Maria]_i [uno schiaffo] t_i
 (they)-have given to-the son of Maria a slap
 ‘They *slapped* Maria’s son.’

Raising of the indirect object then has for effect that the indirect object is no longer a possible focus candidate.

Another de-focussing device well-discussed in the literature is the *ba*-construction in Chinese. When an object is preposed before the verb and marked with *ba*, the object is clearly being placed out of focus (see among others Sybesma 1992, Li & Thompson 1981, Chiu 1993):

- (iii) ta ba haizi da-le yi dun
 he BA child hit-Asp one go
 ‘He *hit* the child.’

10. Cinque (1997) also makes the point that material defocussed via raising is commonly interpreted as presupposed, as for example the indirect object in example (ii) of endnote 9.

11. In fact, Sun (1996) notes that de-VP forms can in fact still be found in modern legal prose:

- (i) ku-fang zhong-di bu de [v_P ru nei]
 warehouse premises NEG can enter inside
 ‘Trespassing is not allowed on the warehouse premises.’

12. Certain speakers of the southern Saigon dialect have indicated that the indefinite object may in fact occur after the modal in (76) in contrast to the judgements here elicited from speakers of the central Hue and northern Hanoi dialects.

13. Such an account would also need to block attraction of the modal dak instead of the VP, on the assumption that modals are verb-like elements. An additional feature [+lexical] might be able to effect this finer discrimination.

14. For interesting work on V2 in German and Hungarian verb-movement phenomena viewed in a similar light, see Hallman (1997) and Koopman & Szabolsci (1998).

References

Baker, M. 1988. *Incorporation: A Theory of Grammatical Function-Changing*.

Chicago University Press.

Chao, Yuen-Ren. 1968. *A Grammar of Spoken Chinese*. University of California

Press.

Chiu, Bonnie. 1993. The inflectional structure of Mandarin Chinese. PhD Diss.

UCLA

Chomsky, N. 1993. A Minimalist Program for Linguistic Theory. MIT,

Occasional Papers in Linguistics No.1.

- Cinque, G. 1997. "Adverbs and the Universal Hierarchy of Functional Projections." Ms Venice
- Diesing, M. 1996. Semantic Variables and Object Shift, in H. Thrainsson, S. Epstein, and S. Peter, eds., *Studies in Comparative Germanic Syntax II*, Dordrecht, Kluwer
- Hallmann, Peter. 1997. The position of the verb in German is invariant. ms. UCLA
- Holmberg, A. 1986. Word Order and Syntactic Features in Scandinavian Languages and English. PhD Dissertation, University of Stockholm
- Holmberg, A. 1997. The true nature of Holmberg's Generalization. ms. Tromsø
- Huang, C.-T. James. 1982. *Logical Relations in Chinese and the Theory of Grammar*. PhD Diss, MIT
- Huffman, F.E. 1973. Thai and Cambodian - A Case of Syntactic Borrowing? *Journal of the American Oriental Society*. 93:488-509
- Johnson, Kyle. 1991. Object Positions. *Natural Language and Linguistic Inquiry* 9:577-636
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. MIT Press
- Koopman, Hilda & Anna Szabolsci. 1997. The Hungarian verbal complex. ms. UCLA

- Li, Charles & Sandra Thompson. 1981. *Mandarin Chinese. A functional reference grammar*. Berkeley: University of California Press.
- Li, Yen-hui Audrey. 1990. *Order and Constituency in Mandarin Chinese*. Kluwer.
- Li, Yen-hui Audrey. 1992. Indefinite *Wh* in Mandarin Chinese. *Journal of East Asian Linguistics* 1:125-155
- Sun, Chaofen. 1996. *Word Order Change and Grammaticalization in the history of Chinese*. Stanford.
- Sybesma, Rint. 1992. *Causatives and Accomplishments: the case of Chinese ba*. HIL Press.
- Webelhuth, Gerd & Hans den Besten. 1987. Remnant topicalization and the constituent structure of VP in the Germanic SOV languages. *GLOW Newsletter* 18:15-16
- Webelhuth, Gerd & Hans den Besten. 1990. Stranding. in: *Scrambling and Barriers*. 77-92 eds: G. Grewendorf & W. Sternefeld. John Benjamins, Amsterdam.