On what projects: Anti-projection and multifunctionality in Vietnamese

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One of the few points of agreement between most current generativists and non-generativists is the idea that grammar originates in the lexicon. This idea is slightly more formally expressed in Huang's (1997) assertion that:

> 'Syntax is a projection of the lexicon. The structure of sentences is a reflection of the lexical properties of the individual lexical items they contain (Huang (1997) 45).'

As is well known, the basis for Huang's assertion was established at least 16 years previously by Chomsky's introduction of the projection principle, in *Lectures on Government and Binding* (LGB); Chomsky (1981).[1] I'll return to this directly. It will be recognized immediately that there is substantial *dis*agreement within and without generativist ranks concerning the nature (atomicity, granularity) of the lexical representations that give rise to grammatically well-formed sentences: at one extreme are found the uninterpretable formal features of current Minimalism; at the other, the storage of fully-specified, contextually-specific multi-word strings, complete with intonation contours and pragmatic implicatures, as proposed in varieties of Construction Grammar, and usage-based approaches; e.g. Goldberg (2006, 1995), Bates and Goodman (1997), Bybee and Thompson (1997). Yet underlying this highly fragmented scene is a shared canvas on which—one way or another—syntax is taken to be underwritten by lexical information.

[1] I follow Chomsky's 1981 (anti-) convention of not capitalizing, or otherwise distinguishing, the term projection principle, in contrast to other principles, such as the Theta Criterion, the Empty Category Principle, etc.

No words, no grammar.

Given the overwhelming, and rare, consensus on this point, it might seem foolish and anachronistic to propose an alternative construal of the lexicon-syntax relationship, in which grammatical meaning inheres in the syntax—what Chomsky (1981) refers to as the CATEGORIAL COMPONENT—and where lexical items are in significant respects mere ornaments on a pre-formed syntactic structure. As leaves on a tree.

Foolish or not, that is just what I will propose in this paper.

The construal is anachronistic inasmuch as it appears to hark back to the base-rules, lexical insertion rules, and lexical redundancy rules of the Standard Theory—mainstream generative grammar prior to LGB. Alternatively, it could also be viewed as a candid description of many current cartographic approaches, even if it is one to which most cartographers seem reluctant to admit; *cf*. Rizzi (2002). Either way, it incorporates the claim that syntactic projection is largely autonomous of lexical properties, which in turn allows for a much sparer, minimalist lexicon: in the limit, a lexicon that consists exclusively of pronounceable vocabulary items.

Words without grammar; Grammar without Words.

The idea that the lexicon might be radically underspecified is not only aesthetically and theoretically attractive from a certain perspective, I will suggest, it is also empirically justified. Specifically, I will claim that only this antithetical approach allows for an adequate explanation of multifunctional elements in Vietnamese, which is the main

empirical focus of this paper (as it has been of much of my work over the last 15 years or so; see, Duffield (2014, 2013b, 2013a, 2011, 2007, 2001, 1999)).

Before presenting the Vietnamese data, it is useful to reconsider the theoretical justification for the projection principle—reproduced in (1), for the record— to examine its status within contemporaneous generative theory (GB), and to discuss some of the (perhaps unintended) consequences of its adoption for subsequent theory development.

1. Representations at each syntactic level (i.e., LF, and D-structure and S-structure) are projected from the lexicon, in that they observe the subcategorization properties of lexical items.[2]

As discussed at the outset to *LGB*, the principal motivation for the projection principle—something that, as Chomsky himself observes 'is by no means obviously correct (Chomsky 1981: 32)'—is: 'to eliminate 'an unwanted redundancy between the rules of the categorial component and the lexicon in a grammar of the sort outlined in Chomsky (1965).' Quite why generativists are so rabidly opposed to some forms of redundancy—

[2] In the immediately following discussion (Chomsky 1981: 5 ff), the projection principle is revised/recast in terms of theta-marking, in such a way as to broaden its scope (to subject arguments), with the notion of 'selection' being substituted for subcategorization. It should be clear, though, that neither the original formulation (1), nor the revised version, makes any *exhaustive* claim: even if it is the case that every lexical property/element/feature must be syntactically represented, it doesn't follow that syntactic representations/derivations only consist of lexically- represented elements. In other words, contrary to what Chomsky claims, the projection principle does not by itself eliminate redundancy, in the absence of additional stipulations, such as the INCLUSIVENESS CONDITION (Chomsky (2001)); even with this, there remains the possibility that the syntax may contain 'frame information' for instances of 'non-lexical projection'; see below.

but not to others—is an interesting question in itself, though one that largely beyond the scope of this paper. Chomsky continues (*ibid.*):

> 'The information about the class of subcategorization frames that is thus dually represented cannot be eliminated from lexical entries. Therefore, we should seek to eliminate it from the categorial component. The projection principle in fact accomplishes this, in quite a sweeping way.'

As has occurred frequently in the history of generative grammar, a questionable assumption, adopted without close scrutiny, comes to be accepted as axiomatic for the subsequent development of theoretical mechanisms. So it is here: in the case of Government-Binding Theory, almost all of other major constructs of the theory—including the Theta Criterion, Trace Theory, Case Theory and Government Theory—depend to some extent on the correctness of the projection principle.

Yet the justification given for this principle is tenuous at best. Even granting for the sake of discussion that redundancy in the marking of subcategorization information is 'unwanted', it is not clear that subcategorization frames cannot be eliminated from lexical entries. Indeed, there is a substantial body of research, originating with Grimshaw (1979), that aimed to reduce much of subcategorization to semantic selection.

As for the residue—reflected, for example, in the selectional contrasts between English *say* and *tell* in (2)-(3), or between English *vs*. Dutch *vs*. Bulgarian complements of WANT (want, willen, искам) in (4-6), it might seem obvious that this information must be lexically stored:

2. a. She said ([to me]) [that she was waiting for the right opportunity].
   b. She said that she was waiting for the right opportunity (*[to me]).
   c. *She said ([her friends]) the story.
3. a. She told [me] [that she was waiting for the right opportunity].
   b. *She told [that she was waiting for the right opportunity].
   c. She told her friends the story/the truth/?the facts/*the events.
   d. She told the story/?the truth/??the plot/??the facts/*the events to her friends.
4. a. I want *to leave* you (here).
   b. I want you *to leave* me (here).
   c. *I want that you *leave* me (here).
   d. *I want that I leave you (here).
5. a. Ik wil je *loslaten*.
      I want you leave-INF
      'I want to leave you.'
   b. *Ik wil je me *loslaten*.
      I want you me leave-INF
      'I want you to leave me.'
   c. Ik wil dat je me *loslaat*.
      I want you me leave-INF
      'I want you to leave me.' Lit. *I want that you leave me.
   d. *Ik wil dat ik je *loslaat*
      I want that I you leave-FIN
      'I want you to leave me.' Lit. *I want that I leave you.
6. a. *искам (аз/ме) те остав тук.
      iskam az/me te octav tuk
      want-1sg (I/me) you leave-INF here
      'I want to leave you here.'
   b. *искам ти ме остав тук.
      iskam tu me octav tuk
      want-1SG you me leave-INF here
      'I want you to leave me here.'
   c. искам да ме оставиш тук.
      iskam da me octavish tuk
      want-1sg that me leave-2SG here
      'I want you to leave me here.' Lit. *I want that you leave me here.
   d. искам да те оставя тук
      iskam da te ostavya tuk
      want-1sg that you leave-1SG here
      'I want to leave you here' Lit. *I want that I leave you here.

However, the fact that *some* selectional information must be lexically stored does not entail *ipso facto* that this kind of information can be eliminated *outright* from the categorial component—however desirable this might be to those with an obsession for theoretical tidiness. The obvious objection to such a move is that there are numerous

instances where syntax projects grammatically acceptable strings that have no clear lexical source, where both categorial and subcategorial information appear to be derived and determined by syntactic configurations, rather than the other way around.

At this point, I will consider three classes of what might be termed 'non-lexical syntax': (i) poetic license, where lexical category information is subverted or cancelled; (ii) neologisms, where lexical category information is non-existent, by definition; (iii) lexical polysemy, where redundancy arguments run in the opposite direction. In each case, it is the syntax rather than the lexicon that guarantees well-formedness.

(i) Consider first **poetic license**. When a Japanese second language learner of English writes, *"The animal is awaring"* treating an adjectival predicate as a verb, it is normally treated as an error. On the other hand, when Shakespeare writes in *Romeo and Juliet* "Thank me no thankings, nor proud me no prouds" (see below), the verb 'to proud' is considered acceptable, and enters the English literary canon.

How, how, how, how? Chopped logic! What is this?
"Proud," and "I thank you," and "I thank you not,"
And yet "not proud"? Mistress minion you,
Thank me no thankings, nor proud me no prouds,
But fettle your fine joints 'gainst Thursday next
To go with Paris to Saint Peter's Church,
Or I will drag thee on a hurdle thither.

William Shakespeare, Romeo & Juliet (Act III, Scene 4).

Similarly, were another ESL student to produce "she brang book to Mary", we would reject this sentence as ungrammatical, on the grounds of determiner omission, and of the failure to recognize that the past tense of bring is not normally *brang* but brought. In Minimalist analyses of noun-phrase structure, the appearance of determiners is generally

taken to be licensed through '(upward) selection,' while *brang* is neither generable by rule, nor stored as a lexical exception (brought). *Brang* simply shouldn't occur, in standard varieties of English. Yet when Neil Diamond tells us, in the song *Play me* (below), "Song she sang to me/Song she brang to me," the same 'errors', plus an obvious violation of basic word-order—OSV in place of SVO—are now deemed perfectly acceptable, in the context.

Song she sang to me
Song she *brang* to me
Words that rang in me
Rhyme that sprang from me
Warmed the night
And what was right
…Became me.

From Neil Diamond, *Play Me.*

'In the context' is, of course, the key expression here: the examples above highlight the fact that grammatical acceptability, even of the most basic kind, is relative to highly specific contextual factors.[3] It is unlikely that *proud* has ever been used elsewhere in conjugated form (*she prouds, they prouded*) either by Shakespeare, or any other Early Modern English writer, or even that *proud* could be used as an inflected verb, except in conjunction with its cognate object (*proud* used as a plural noun). Similarly, *brang* in Neil Diamond's verse is only acceptable because of its rhyming association with *sang*, *rang* and *sprang*, in adjacent lines.

[3] 'Context' also includes authorship, something that is regularly accepted in sociolinguistic research, and just as often dismissed in work on theoretical syntax: utterances that are rated as deviant, or analyzed in terms of crosslinguistic influence where they are understood to originate from a non-native speaker are often regarded as quite acceptable where the speaker or writer is believed to be an educated native-speaker.

Two further examples reinforce the point. The first comes towards the end of the 1970s Monty Python sketch about Continental philosophy—*Mrs. Premise and Mrs. Conclusion visit J-P. Sartre*—in which Mrs. Sartre [sic] complains about her husband's passion for producing revolutionary leaflets:

Mrs. Sartre:	Oh, I say, you're not a Marxist are you, Mrs. Conclusion?
Mrs. Conclusion:	No, I'm a Revisionist!!
Mrs. Sartre:	Oh, good…I mean, look at this place…I'm at my wits end...revolutionary leaflets everywhere…one of these days, I'll *revolutionary-leaflets* him…If it wasn't for the goat, you couldn't get any other propaganda!

Monty Python, *Mrs. Premise & Mrs. Conclusion visit Jean-Paul Sartre*.

In this extract, the italicized compound *revolutionary leaflets* is unambiguously analyzed as a non-finite verb,[4] in spite of retaining overt plural nominal inflection. In other contexts, this output form would be treated as a clear violation of level-ordering (Siegel (1974), Kiparsky (1982)): zero-conversion of *leaflet* from noun to verb is obviously possible—*The Free Dictionary*, for example, lists *to leaflet a* neighborhood as a transitive usage[5]—but it must precede—and therefore preclude—the attachment of nominal inflection. Moreover, if *revolutionary leaflets* is treated as a true nominal compound, its use as a verb violates the Lexicalist Hypothesis ((Chomsky 1970)).

Lexical integrity is further challenged by the following lines from Elvis Costello's *Alison.* Here, *body* in *somebody* is simultaneously treated as a bound morpheme within a

[4] The approximate meaning of the string is "I will attack him with/on account of (his) revolutionary leaflets". Its precise meaning is unclear; what is relevant here is that the string is treated as grammatically fully acceptable.

[5] http://www.thefreedictionary.com/leaflet accessed 2/19/15.

quantificational expression, and as a lexical antecedent of *mine*, in the following line. Replace *somebody* with *someone*, and it is not only the rhyme that is lost:

I don't know if you're loving some*body /*
I only know it isn't *mine*…

Elvis Costello, *Alison.*

Examples like these can be multiplied at will. Almost every piece of non-clichéd text shows authors violating the letter of the projection principle in grammatically acceptable ways. Contextual appropriateness, fluency, and confidence are sufficient to override the default judgments of all but the most pedantic or prescriptive of readers/listeners. But if grammatical acceptability is not licensed by lexical properties in such cases—as it patently isn't—it must have its source elsewhere, most plausibly in the syntax itself.

(ii) **Neologisms**: *Jabberwocky* and *Jabberwocky' (prime).* Every undergraduate introduction to English grammar contains a section on determining parts of speech (POS). Lexical meaning, students are told, is an unreliable diagnostic of the category to which a given lexeme belongs—even though it offers an important cue in first language acquisition, where it is considerably more reliable (in statistical terms at least) than in the adult lexicon. Instead, [we teach that] categorization should be based on inflectional or morphological cues and—*where these fail, because of the absence or ambiguity of affixes*—the assignment of words to lexical categories should be determined by external syntactic distribution. There is general consensus that the position of a word-form relative to others in a string is the most reliable way of determining a word's lexical category, a

view that is shared even by probabilistic-learning theorists, such as Onnis and Christiansen (2008), who have little regard for autonomous syntax.

The determining power of syntax is typically pressed home by a rehearsal of the initial verses of Lewis Carroll's poem *Jabberwocky*. Here, we may keep to the first stanza, and, for the sake of discussion, that of its cousin *Jabberwocky' (prime):*

7. a. T'was brillig, and the *slithy toves* / did gyre and *gimble* in the *wabe*,
All *mimsy* were the *borogroves* / And the *mome raths outgrabe*.
b. T'is brillig, and the krindish slithe / toves with gimble in the wabe,
All *mimsies slem* in *borrid grive* / And the *mome raths outgrabe.*

In the original *Jabberwocky* (7a), it is clear that *slithy and mimsy* are adjectives, *toves* and *borogroves*—also *wabe*—nouns, and *gyre* and *gimble* are verbs. As for …*the mome raths outgrabe...*, the string is ambiguous between two possible analyses: A-N_{pl}-V_{pl} or N_{sg}-V_{sg}-Adv (*cf.* '(the) dog remains outside'), the latter being less likely only because the first line is interpreted as involving past tense reference. By contrast, in *Jabberwocky'* all of the shared lexemes are analyzed as belonging to different lexical categories: in (7b), *slithe* is (despite its shape) a noun, as are *mimsy* and *gimble,* while '*toves'* toves (verbally, that is). And in this case, the second analysis of the string *mome raths outgrabe* (N_{sg}-V_{sg}-Adv) is now the one that is preferred.

The analytic contrasts between the two stanzas in (7) beg the question of where our judgments of syntactic category assignment originate. Intuitively, it seems that these judgments must come from the syntax, since logically, they can't come from the lexicon. The latter assertion is true by definition: even if some educated readers may have stored representations of the original lexemes in (7a), it is implausible to suppose that anyone has previously encountered the lexemes in (7b), let alone pre-categorized them with

respect to their formal grammatical features: *slem,* for instance, is just not in anyone's lexicon. This observation notwithstanding, there is no obvious sense in which (7a) is any easier to parse than (7b), or—crucially—*any more difficult* to parse than equivalent stanzas containing real words, such as those in (8):

8. a. T'was gloomy, and the shiny voles / did glide and glisten in the wave,
All clingy were the swallow-holes / And the loam rats out-saved.
b. T'is gloomy, and the childish ivy / flies with thimbles in the waves,
All onesies sleep in horrid gravy / And the bone eats its chives.[6]

In other words, judgments of grammatical acceptability—which entail category assignment—are largely insensitive to lexicality (that is to say, to whether or not the strings under analysis involve real lexical items or nonsense words). This is a curious and unexpected result, if grammatical well-formedness is exclusively determined by lexically represented elements, as the projection principle implies.

(iii) **Homonymous and polysemous items**: *Shake Can Well*..what? Consider finally homophonous and/or polysemous items—real words whose existence in the mental lexicon (in some form) is undisputed, but whose categorial interpretation can only be resolved by reference to particular structural contexts. Virtually any string of uninflected English words would serve as well, but to make the point, I'll take three that face me every morning these days, thanks to *Schick Shaveguard*^{TM}: Shake Can Well.

[6] Example (8b) is, perhaps, best read in Australian English.

Figure 1. Shake Can Well (Schick Shaveguard)

The slightly modified quotes in (9), adapted from a set of *Google* string searches, clearly demonstrate that the V-N-ADV analysis—proper to (9a)—is not the only way to parse these three words, even if it might be the most popular in terms of token frequency. As the examples in (9b)-(9e) illustrate, *shake* can be variously analyzed as a verb or noun, *can* as a noun, verb, or modal (epistemic, deontic, abilitative); *well,* as an adverb, noun, verb ('to well up'), or parenthetical expression. And so on. The categorial options are not limitless, but they are numerous enough that they should cause parsing problems.

9. a. *Shake can well* before use.
   b. A good *shake can well* boost our energy and cheer the day!
   c. For many people, having cheese, a glass of milk, or a milk *shake can, well, shake* things up.
   d. Seven pounds of berry-cleaning later, I was getting ready to *can. Well,* truth be told, I was trying to talk myself out of canning…all the wholesome summer evening fun you *can shake* a stick at.
   e. *Well shake can* also be caused by a bent wheel which wheel balancing will not fix…
   f. So today I get to torture you with more […] than you *can, well, shake* a fist at.

Except that they don't [cause any problems], whatsoever: in context, none of these strings is globally, or even locally, ambiguous. Arguably, the absence of any 'garden-path'

effects—as well as the intelligibility and coherence of *Jabberwocky* (above)—can be explained on the assumption that grammatical acceptability is as much a matter of transitional probability—call this LINEAR GRAMMATICALITY or surface parsing—as it is about underlying features or rules; *cf*. Ferreira and Patson (2007); Ferreira et al. (2002); alsoFrank et al. (2012),Sanford and Sturt (2012).

Whether or not this explanation is correct, it is not the normal conclusion drawn in introductory linguistics classes. Instead, having once used phrase-structure to divine the 'lexical' category, our regular practice is annotate the lexeme under examination with a distinct category-label—i.e. [shake $_{V}$], [shake $_{N}$]; [well $_{ADV}$], [well $_{N}$], [well $_{V}$], etc.—in order to ensure that it ends up in the right place, so to speak, whenever it is (next) projected into syntax.

For nearly thirty years, the circularity of this procedure failed to dawn on me—or, if it did, provoked only mild puzzlement, until recently. If we can only determine the syntactic category of an item *after* it is inserted into syntax, why bother to label it in the lexicon prior to lexical insertion? Why not simply let it be filtered out if it crops up in the 'wrong place'? Or permit it, if uttered with sufficient authority: 'proud me no prouds'?

In the case of *lexical* lexical categories—the answer goes back, *via Conditions on Transformations*, to semantic arbitrariness: the syntax alone cannot give us the difference in meaning between, for instance, the nominal and verbal forms of *can* and *well*, or tell us that in its nominal form, *shake* either refers to the action of shaking (anything), or, in a more specific usage, to some kind of milk-based beverage.

In fact, such a response is only necessary if one maintains an additional fundamental assumption of generative approach, namely, that constructions are not part of our grammatical knowledge. Otherwise we could say, for instance, that *can* is obligatorily interpreted as a noun when it appears in construction with a determiner or immediately-preceding attributive adjective, as a lexical verb when it is immediately preceded by *to*, and so forth.

But even if one adopts the standard Lexicalist Hypothesis for open class categories, what about the exponents of functional categories (*this, that, it, of, for, to, -s, -ed, -ing, as, so, (expletive) there,* etc)? Couldn't we let the syntax decide in these cases? It turns out that for these purely grammatical categories, lexical annotation is only required by the projection principle.

The importance of the projection principle cannot be overstated, since it largely predetermines the answers given to most of the significant 'big questions' that generativists have asked themselves over the last few decades. These include questions surrounding: (i) the existence or otherwise of labelled trees, (ii) the existence of a universal base (UBH), (iii) the possibility of syntactic parameters; (iv) the choice between derivational and representational models, (v) the relevance of affixal morphology to narrow syntax, and (vi) questions about the physical extent of syntactic analysis (the 'right-edge problem'). See Figure 2.

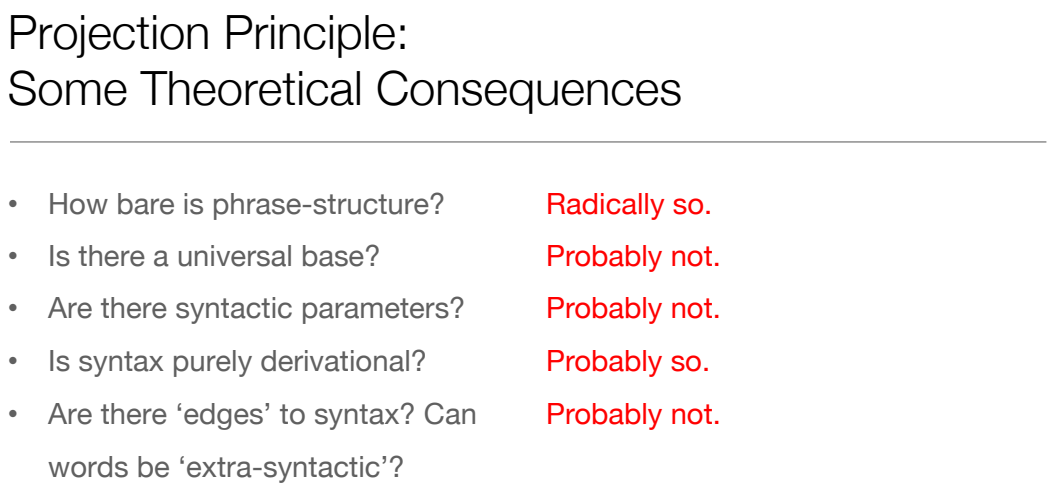


Figure 2. Some consequences of the projection principle.

If, aside from the effects of scope and constituency, all grammatical meaning inheres in and projects from the lexicon, then narrow syntax can be construed as the radically spare (i), un-parameterized (iii), thoroughly derivational procedure (ii, iv) that informs current generative models—at least those proposed on the ideological right wing of the party, epitomized by Boeckx (2008, 2011). Moreover, if syntax is construed as exclusively the projection of lexical properties, it follows that *everything* that projects from the lexicon—all uttered material, up to and including discourse particles—necessarily enters into the syntactic computation. In a strictly derivational model, there are no edges beyond which lexemes can be deemed to be extra-syntactic; most importantly, there is no *right* edge (vi).

But what if it ain't so? What if we have fundamentally misconstrued the syntax-lexicon relationship? Here, I'd like to propose an antithetical functionalist alternative: the idea that the lexicon—or at least, a theoretically interesting subpart of it—is better viewed as a projection of syntactic meaning. Anti-Projection. Words as filters, exponents of syntactic configurations, acquiring their functional meaning in virtue of their syntactic position. This is minimalism, to be sure, but it is *lexical*, rather than syntactic, minimalism.

I will argue in what follows that this reversal offers more than a novel perspective on the syntax of familiar inflectional languages: it is the only empirically adequate way to treat multi-functional morphemes in isolating languages like Vietnamese, which do not differentiate subtle grammatical contrasts in the lexicon, but instead dispose of a set of radically-underspecified 'multifunctional' items, whose semantics are determined in part—and in some instances exhaustively—by their position in phrase-structure.

In order to articulate this argument, I'll assume the functional cartography illustrated in Fig. 3, together with the definition of multifunctionality given in (10), from Bobaljik, Travis & Lefevbre (1998):

10. 'A multifunctional functional category (MFC) is one that is 'inherently underspecified with the unspecified properties of the host head...[where]... syntax can provide additional information not available in the lexical entry of the item. The lexical entry encode[s] the intersection of the uses of the item...[d]ifferent senses [of a multifunctional item] follow from the different head positions in which it occurs (Bobaljik, Travis & Lefevbre 1998).'

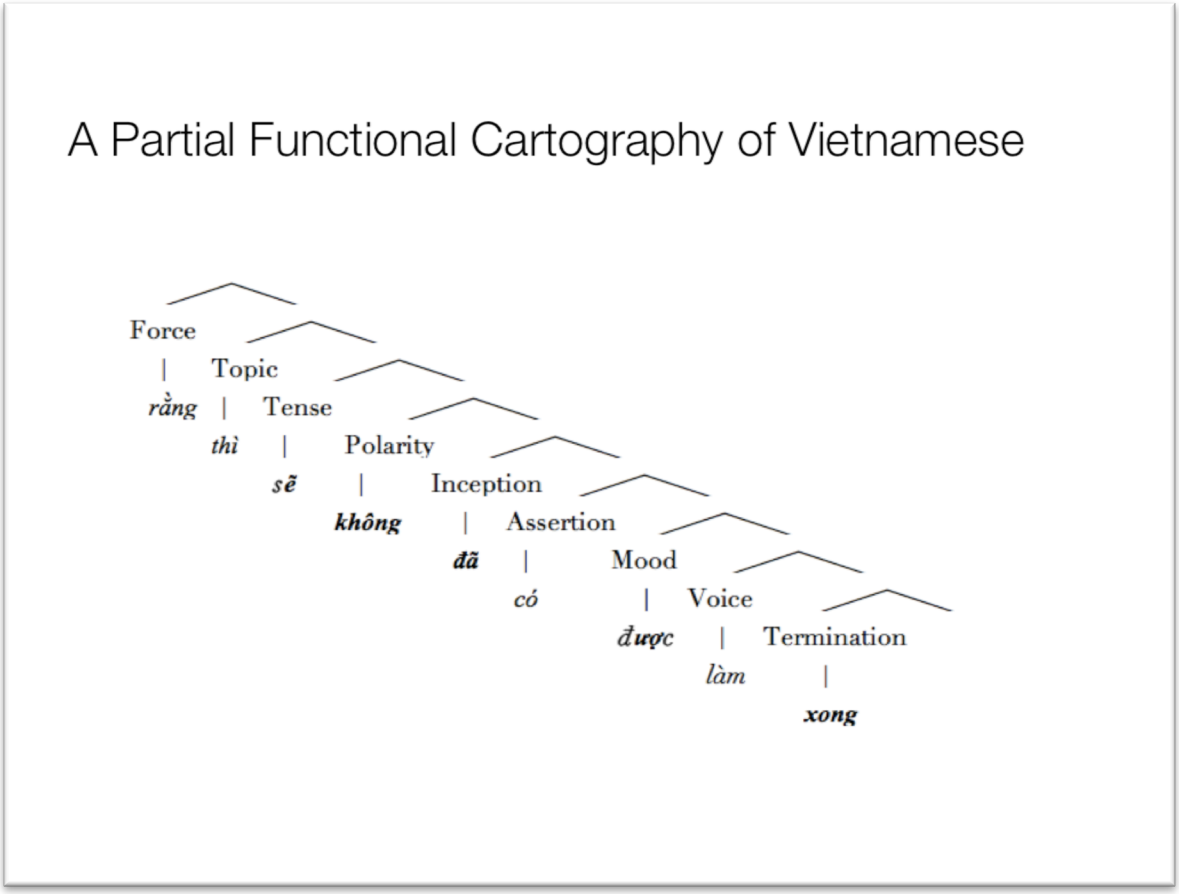


Figure 3. Adorning the Tree: Syntactic Projection in Vietnamese

In the remainder of the paper, I'll discuss several examples of functional lexemes whose meaning cannot be dissociated from their syntactic positions, without significant loss of generalization: characterizing the contrasts below in lexical terms blatantly misses the point.

We may begin with modals—*shake 'can' well*. A paradigm instance of multifunctionality is offered by the modal auxiliary *được* (also *phải*, *nên*), which is variously interpreted as a deontic, epistemic or abilitative modal—even as a non-modal (*realis*), aspectual, particle—depending on its structural position. This is clearly illustrated by the alternations in (11), from Duffield (1998, 1999): in (11a), pre-verbal *được* is interpreted

deontically; (11b) immediately post-verbal *được* is interpreted as a non-modal aspectual, indicating accomplishment or completion; finally, in (11c), phrase-final *được* only has an abilitative reading: see Duffield (1999):

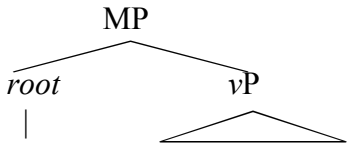
11. a. Ông Quang *được* mua cái nhà. [pre-verbal = root]
PRN Q. CAN buy CL house
'Quang was allowed to buy a house.'

b. Ông Quang mua *được* cái nhà. [immediately post-verbal = aspectual]
PRN Q. buy CAN CL house
'Quang has bought (was able to buy) a house.'

c. Ông Quang mua cái nhà *được*. [post-vp = abilitative/epistemic]
PRN Q. buy CL house CAN
'Quang is able to buy a house/
Quang may possibly buy a house.'

Similar alternations involving post-verbal CAN are readily observable in other languages of the South East Asian Linguistic area. Analogous constructions in Thai are discussed, for example, by Simpson (1998); Simpson and Wu (2000), Enfield (2001) offers a functionalist typological survey, focussing on Lao, while Cheng and Sybesma (2004) present a analysis of medial *dak* in Cantonese. However, in these other language varieties these distributional effects do not extend across the entire set of modal auxiliaries, to the best of my knowledge. In Vietnamese, on the other hand, all of the other modal auxiliaries also display these alternations, their meaning precisely co-varying with their syntactic position: this is illustrated in the corresponding examples in (13) and (14) below:

12.



13. a. Họ *nên* làm việc lớn.
PRN should do job big
'They should do great things.'
b. Cô ấy *được* kiếm việc.
PRN DEM can seek job
'She is/was allowed to look for a job.'
c. Cô ấy *phải* kiếm việc.
PRN DEM must seek job
'She must look for a job.'

Naturally, on a standard lexicalist approach, one could assign different lexical features to the homophones of each modal element to ensure that they end up in just these positions. It should be clear, however, that this is missing a crucial generalization about the complete class of modal auxiliaries, namely, that specific modal meanings are completely predictable from the structural context in which they appear. It could be argued that this is exactly the kind of predictable information that the lexicon should be free of.

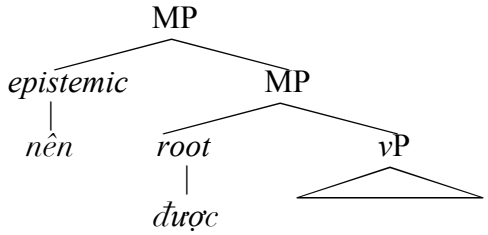
14. a. Họ làm *nên* việc lớn.
PRN do ASP job big
'They did (made) great things.'
b. Cô ấy kiếm *được* việc.
PRN DEM seek ASP job
'She found a job.'
c. Cô ấy kiếm *phải* việc.
PRN DEM seek must job
'She found a job.'

Moreover, the examples in (14) show that Vietnamese is largely indifferent to which modal is inserted into the post-verbal position—they are all interpreted identically as *realis*/aspectual markers. Before considering the nature of this position in more detail, let's stick to the pre-verbal modals for a moment. The examples in (15) demonstrate that

it is in fact possible to have more than one pre-verbal auxiliary, though—as shown by the unacceptability of (15b)—their order is fixed, consistent with the cartography in (16):

15. a. Cô ấy *nên* *được* kiếm việc.
PRN DEM should obtain find job
'She should be allowed to find a job.'
b. *Cô ấy *được* *nên* kiếm việc.
PRN DEM obtain should look-for job
'*She is allowed should find a job.'
c. She *may* have to look for a job (now that she has a work permit) [= only epistemic reading]
d. She *should/ought to* be able to find a job (now that she has a work permit) [= epistemic reading strongly preferred]
e. She *may/should/ought to* look for a job (now that she has a work permit) [= ambiguous root/epistemic.]

16.



Notice that where *nên* precedes *được* (in (15a)), the modal loses its deontic reading and is interpreted purely epistemically. The same appears to hold of English: the examples in (15c-d) show that the leftmost modal in a sequence must be interpreted epistemically, even where it is otherwise ambiguous when it occurs in isolation. This fact gives the lie to the idea that there is only one pre-verbal (polysemous) modal element, and suggests a common cartography for the two languages.

Let us now examine the immediately post-verbal position more closely. Why should this position be associated with accomplishment/completion? An answer is immediately available to anyone familiar with syntactic treatments of what is sometimes termed 'lexical aspect' (which is only lexical in languages with morphologically complex verb

forms). A glance at the data in (17) and (20) below shows that accomplishment readings are not tied to the predicate itself—in this case the verb *đọc* ('read')—or to the pre-verbal anterior morpheme *đã* (of which more anon). Instead telicity is determined by the presence or absence of the post-verbal aspectual auxiliary *xong*, which is usually translated as finish when it occurs as a main verb, and by the position of the object DP relative to *xong*.

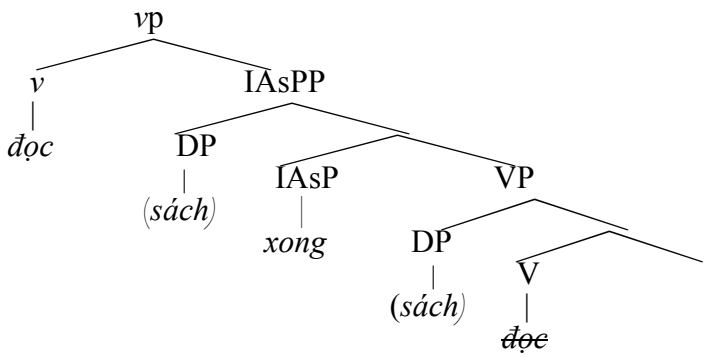
17. a. Nó đã đọc *xong* sách rồi.
PRN ANT read PTC book already
'He has finished reading (the) books.' [= definite/indefinite reading]
b. Nó đã đọc sách *xong* rồi.
PRN ANT read book PTC already
'He has finished reading the books.' [= only definite reading]

The alternation in (17) reveals that direct objects in Vietnamese may precede or follow the terminative morpheme *xong*. Notice that where the direct object is interpreted as definite (even in the absence of a classifier or numeral quantifier), it must precede *xong*. This parallels the restriction found in Dutch and other Germanic particle constructions (18), something that is commonly analyzed in terms of obligatory object-shift. It seems reasonable to assume the same for Vietnamese, as diagrammed in (19), except that this object raising to the [Spec, AspP] stays within the VP: hence, the label—"Inner Aspect", due to Travis (2010)—is the most appropriate:

18. a. *Het meisje eet koekjes op.[7]
the girl eats biscuits PTC
'The girl eats up bread.'
b. *Het meisje eet brood op.
the girl eats bread PTC
'?The girl eats bread up.'
c. Het meisje eet het brood op.
the girl eats the bread PTC
'The girl eats the bread up.'

[7] The examples in (18) are from Thrift (2003).

19.



20. a. Nó đã viết bài, nhưng vẫn chưa xong.
PRN ANT write paper (but still NEG finish)
'He wrote (= has started writing) the paper (but he hasn't finished it yet).'
b. Nó đã viết *xong* bài (*nhưng vẫn chưa xong).
PRN ANT write PTC paper (but still NEG finish)
'He wrote (up) the paper (*but he hasn't finished it).'
c. Nó đã viết hai bài, (*nhưng vẫn chưa xong).
PRN ANT write two paper (but still NEG finish)
'He wrote two papers (*but he hasn't finished them yet).'

The alternations in (20), from Phan (2013) reinforce the point that the termination of an event is rarely entailed by the verb itself, but requires either a terminative morpheme such as *xong*, or a quantified object. Crucially, the pre-verbal morpheme *đã*—which is sometimes glossed as a past tense marker—does not serve to delimit the event, even though it is clearly aspectual, as we shall see directly.

Before leaving the modal auxilaries, consider the use of *nên* in (21):

21. a. [Nhưng tại tôi mới ăn món gà xong] *nên* [chắc mấy tuần sau mới nấu lại].
yet because I just eat cl. chicken PTC should sure some week later just cook again.
'Yet since I have just had chicken means that (lit. 'should') I'll probably cook it again in few weeks.'
b. Bởi vì có biết bao người ở bên em như thế, nên có lẽ anh nghĩ, anh có thể đẩy em đi.
because exist know how many people on your side like that, should perhaps prn think, he can push prn go
'Because there are so many people in your position, (so) maybe he thinks he can (just) push you away.'

Whatever else it means in this context—Trang Phan translates it as 'means that' in (16a)—*nên* is not functioning as a root modal. Rather, as its position dictates, it serves as a pure conjunction, something like English *so*.[8] In this position—and only here—it is interchangeable with other multifunctional clause-linkers, including the 'topic marker' *thì*, the 'relative marker' *mà*, and the copula *là*, all of which are neutralized in this position.

Let us turn now to *đã*, especially as featured in the examples immediately below. The situation of *đã* is slightly more complex than that of the modal auxiliaries, which have mutually exclusive interpretations depending on where they are inserted, becasue *đã* usually expresses two kinds of grammatical meaning simltaneously, something that is arguably a signature of head-movement.[9]

Consider first the examples in (22) and (23), which show that *đã* has the syntactic distribution of a tense marker, rather than that of a typical aspectual morpheme: the examples in (22) show that it competes for the same position as the future tense marker

[8] Another MFC, if ever there was one.

[9] Chomsky (2010) explicitly equates bearing two grammatical meanings with displacement:

''So..take the sentence, say, 'Can eagles swim?' … How do we understand it?... Well, we're asking…the word can is actually serving two functions in the sentence—it's what's called 'displaced', meaning two functions…On the one hand, it's indicating that there's a—it's a—yes or no question; on the other hand, it's connected with swim—you're asking about the capacity to swim—and in fact if you look at it more closely, so, it, semantically it appears over here [between eagles and swim] it's related to 'eagles can swim' and it's saying 'Is it true that eagles can swim?' and that's the question…' (Chomsky 2010: 00:34~).

If one assumes that this statement is intended as a biconditional, the fact that *đã* carries two meanings forces a movement analysis.

sẽ, appearing to the left of manner adverbials such as *cẩn thận* ('carefully') (22), as well as of the sentential negation marker *không* (another MFC to which we'll return directly); the examples in (23) demonstrate that whereas the imperfective marker *đang* may appear on either side of negation, *đã* is always the highest functional category:

22. a. Tôi (sẽ) cẩn thận (*sẽ) viết lá thư này.
I FUT carefully FUT write letter DEM
'I will write this letter carefully.'
b. Anh ấy (đã) cẩn thận (*đã) đọc quyển sách này.
PRN.DEM ANT carefully ANT read CL book DEM
'He read the book carefully.'

23. a. Tôi (đang) không (đang) ăn cơm.
PRN ASP NEG ASP eat rice
'I am not having a meal.'
b. Tôi (đã) không (*đã) làm việc đó.
PRN ASP NEG ASP do job DEM[2]
'I didn't do that.'
c. Tôi (sẽ) không (*sẽ) làm việc đó.
PRN FUT NEG FUT do job DEM[2]
'I will not do that.'

At the same time—as Trang Phan clearly demonstrates in her dissertation, and as we have jointly discussed elsewhere, Duffield & Phan (2010)—*đã* is fundamentally an aspectual morpheme, denoting inception or anteriority (that is, a perfect, as opposed to perfective, marker). The present- and future-perfect examples in (24)-(265) show that *đã* need not express any past tense meaning, while those in (26) show that *đã*—in contrast to the English preterite—does not entail event completion.

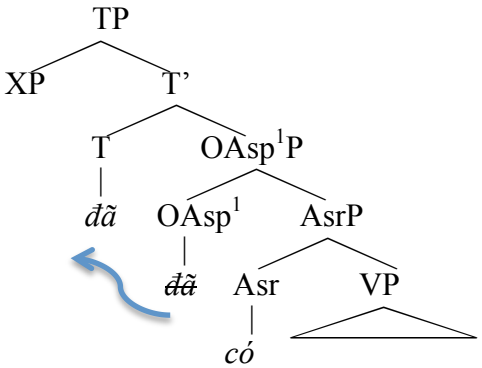
24. a. Ông ấy *đã* già rồi.
PRN DEM ANT old already
'He is old (already).'
b. Harry Potter *đã* chết!
Harry Potter ANT die
'Harry Potter is dead!'

25. a. Bằng giờ này năm sau, chị *đã* là giáo viên rồi.
by time this year next, she ANT COP teacher already
'By next year, she'll *already b*e working as a teacher instead.'
b. Đến cuối năm nay, tôi *đã* ra.trường.
arrive end year DEM[1] PRN ANT go.out.school
'I *shall have* graduated by the end of the year.'
c. (Nếu) ông nói với tôi sớm hơn thì tôi đã săn sóc đến việc ông.
(if) PRN say with me earlier TOP I ANT take.care work PRN
'If you had told me about it earlier, I *would have* taken care of that business of yours.'

26. a.i Tàu đã chạy rồi mà giờ nó lại dừng.
train ANT run already but now PRN again stop
'The train has already run [= set off], but it has now stopped again.'
a.ii Tàu *đã* chạy rồi và giờ nó vẫn chưa dừng.
train ANT run already and now PRN still not.yet stop
'The train has already run [= set off], and hasn't stopped yet.'

In spite of the apparent cancellability of any past-tense reading, as first discussed in Trinh (2005), *đã* often simultaneously expresses features of tense and aspect. This can be captured syntactically if we assume with Trinh that aspectual *đã* is initially inserted lower in phrase-structure and undergoes raising to T, shown as in (23). This derivation also neatly accounts for the complementary distribution between future sẽ and *đã*, exemplified in (28).

27.



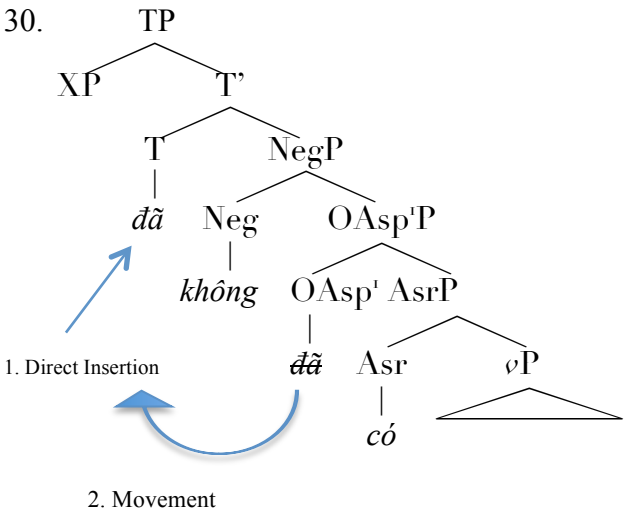
28. Đến cuối năm nay, tôi (*sẽ) đã ra.trường.
arrive end year DEM[1] PRN FUT ANT go.out.school
'I *shall have* graduated by the end of the year.'

But here's the rub. As Trinh and others note, in *negative* contexts—before *không*—*đã* only has a (tense-related) preterite interpretation, as the contrast between (29a) and (29b) clearly illustrates.

29. a. Nó *đã* đọc sách.
PRN ASP read book
'He read books/has read books.'
b. Nó *đã* không đọc sách.
PRN ASP NEG read book
'He did not read books./*He has not read books.' [Trinh 2005: 10]
c. Nó *chưa* đọc sách.
PRN not.yet read book
'He has not read books.'

The clear suggestion here is that sentential negation blocks aspectual head-movement to T in Vietnamese, something that should be familiar to anyone who has ever read Pollock (1989). Working with this intuition, Trinh (2005) analyzes preterite *đã* as inserted directly into T, thus void of any aspectual features. My own analysis—set out in Duffield (2013a)—is only slightly different at the level of syntax: lexically however, our analyses are much further apart. For Trinh, there must be two *lexical entries for đã*, ($đã_1$ and $đã_2$) one specified with only Tense features, the other bearing two sets of features:

30.



But this homophony approach seems completely redundant: if *đã* only gains its preterite specific meaning from its position, and if there is clear evidence that the higher position expresses temporal rather than aspectual values, as evidenced by the future marker *sẽ*, which cannot occur anywhere else), why bother to state this in the lexical entry? If, instead, we assume a functional cartography in which Tense is syntactically encoded, we obtain the intended readings without any lexical stipulation: supposing that *đã* is only minimally specified with phonological features, lexicalization of Asp will result in an aspectual interpretation, movement to Tense will result in an element that expresses both tense and aspect. Trinh's lexicalist-based approach simply misses the generalization that interpretation of *đã* is given by its structural position, not the other way around.

Matters become even worse for the standard lexicalist when examples such as those in (31) below are taken into account. These sentences show that *đã* also appears on the right edge of imperatives, as an exhortative discourse marker. There is still a trace of anteriority here—as suggested by the English translation 'first': in this position, however, *đã* has no perfect interpretation, much less a preterite one. (The appearance of *đã* on the right edge of the sentence is also puzzling for a strictly derivational approach, in so far as it is hard to see how or where it should be syntactically adjoined.)

31. a. [Nghỉ] đã, rồi hãy làm!
rest ANT then IMP work
'Rest first, and then work!'
b. [Anh nghe tôi giải thích] đã.
PRN listen PRN explain ANT
'Let me explain to you first.'

The solution to this puzzle, I'd like to suggest, is that it isn't [syntactically adjoined]: in (31), *đã* is extra-syntactic, a discourse marker beyond the edge of the sentence. This idea is further developed in the final part of the paper: for now, it's worth noting that the

exhortative discourse expressions ‘Come on!’ and ‘Come off it!’ display very similar properties in English, as evidenced by the anomaly of embedding such terms in reported speech, as in (32b).[10]

32. a. ‘Come on! Come on, you can do it!’
    b. She told me #to come on (and) that I could do it.’

The interaction of anterior *đã* with negative *không* illustrates another significant property of multifunctional items, namely, that they may also derive their interpretation through their scopal relationship to other MFCs. In Vietnamese, it turns out to be important not only where you *are*, but where you are *not:* elements can derive particular interpretations by evading the scope of other functional operators. This is brought out most clearly when we consider the indefinite expressions *ai* and *gì* (also *nào*, *đâu:* see below).

Vietnamese *ai* is typically translated as ‘who’, but ‘one’ or ‘body’—as in ‘someone’, ‘no-one’, ‘anyone’, ‘everyone’—would better serve. These grammatical senses are of course related in many languages, but whereas they are differentiated morphologically in languages like Japanese and Korean by means of (multifunctional) affixes, and distinguished quasi suppletively in English,[11] in Vietnamese such distinctions are

[10] Compare also Robins’ (1989: 217) distinction between FAVOURITE and NON-FAVOURITE sentences, and, in particular, to the first class of non-favourite sentences… ‘those that are not referable to a longer sentence syntactically, are independent of a previous sentence, and may initiate a discourse or conversation. Sentences of this sort are often exclamatory: *John! hello! bother! drat!...* Others may be gnomic, such as *the more, the merrier, easy come easy go*. Sentences of this latter type are lexically restricted in most cases, and little or no variation of their particular word content is normally permitted in them; in consequence, they are hardly at all productive…’

[11] Though see the Elvis Costello lines cited above, from *Alison.* In spite of its rhetorical value above, not clear to me whether this example challenges or proves the validity of the Lexical Integrity hypothesis; at all

achieved purely syntactically. The Japanese examples in (33) illustrate the morphological strategy:

33. a. John-ga dare-*ka*-o dare-mo-ni syoukaisita.
John-NOM someone-ACC everyone- DAT introduced
'John introduced someone to everyone.'
b. Dare-*mo*-ga i-na-katta.
no-one-NOM be-NEG-PAST
'No-one was there.'
c. Dare-mo-o mi-na-katta.
anyone-NOM see-NEG-PAST
'I didn't see anyone.'
d. Dare-*ga* John-o dare-*mo*-ni syoukaisita-ka?
who-NOM John-ACC everyone.DAT introduced-Q
'Who introduced John to everyone?'

In contrast to these lexical strategies, when we consider the Vietnamese paradigm in (34), it is impossible to differentiate the various interpretations of *ai* or *gì, other than* by considering their syntactic position. In (34a), for example *ai* is obligatorily interpreted as a *wh*-element—*anh quen ai* is an object question, whereas in (34b), *ai* functions as a negative polarity item: within the scope of negative khong, {*ai, gì, nào*, etc} are all interpreted as negative indefinites. In order for *không* to have scope over indefinite subjects, *ai* must remain *in situ*—{spec, vP}, as in (30c). Finally, example (30d) shows that specific indefinite readings are derived by combining *ai* with the demonstrative morpheme *đó*: through this (syntactic?) composition they are immune to other scope effects.

34. a. Anh quen *ai*?
PRN know ai
'Who(m) do you know?'

---

events, we generally think of words like *everyone, someone,* as morphologically opaque, which is why the line is so effective.

b. Tôi không quen *ai.*
I NEG know ai
'I don't know anyone.
c. Khong (có) [*ai* quen tôi].
NEG exist ai know I
'No-one knows me.'
d. Có *ai* đó đang sử dụng tài khoản của bạn.
EXIST ai DEM ASP use account POSS friend
'Someone is using your account.'

This leaves only the universal reading. In principle, *ai* could be combined with the universal quantifier *moi*, illustrated in (35); however, in the case of underspecified MFCs, this is not what happens.

35. a. Ai cũng nhớ mọi từ.
ai also remember every word.
'Everyone remembers every word.'
b. Vài thấy giáo biết mọi sinh viên.
several teachers know every student
'Some teachers know every student.'

(Before considering this problem further, it is worth noting that *Google Translate*—as might have been predicted—is hopeless at dealing with multifunctionality. The title of a recent sports interview, in May 2014, 'What did Ryan Giggs say about Louis van Gaal?' is correctly translated to Vietnamese as 'Ryan Giggs nói gì ve Louis van Gaal?', but is then falsely back-translated as 'Ryan Giggs says nothing about Louis van Gaal?'. See Figure 4. Failures such as these are virtually guaranteed for a parser that draws exclusively on lexical information, in a language where these distinctions are syntactic encoded.

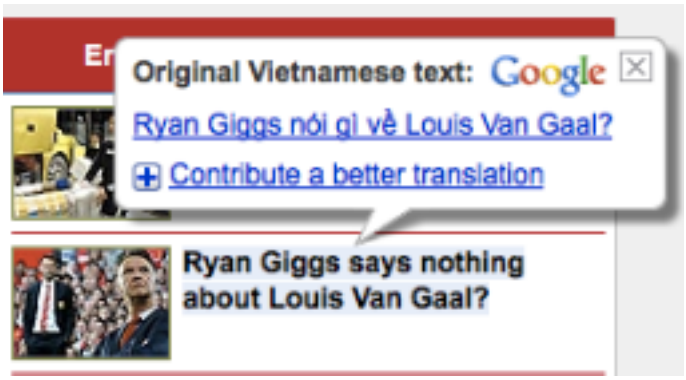


Figure 4. Google Translate's problem with underspecified 'what'. [12]

With this in mind, back to universal readings. As shown in (36), these are derived by moving the underspecified DP out of the VP entirely, and adjoining it higher in the phrase-structure:

36. a. *Ai* cô ấy [cũng quen.]
ai PRN DEM also know
'She knows everyone.' (OS [cũng [V]])
b. Cô ấy *ai* [cũng quen.]
PRN DEM ai also know
'She knows everyone.' (SO [cũng [V]])

There are two significant points to observe here. First, as evidenced by the equal acceptability of (36a) and (36b), it really doesn't matter whether the underspecified object is moved before or after the subject (*cô ấy*): in (32a), it precedes the subject, in (32b), it follows, but the interpretation remains the same. All that is crucial for a universal interpretation that the underspecified indefinite should be scrambled outside the thematic domain (vP). In Duffield (2007), it was claimed that the object is moved to the left of AsrP, to which the pre-verbal adverbial *cũng* adjoins; in subsequent work, I suggested

[12] At the time, I was tempted to contribute a better translation, but life is short; in any case, the interview was quickly superceded by events: Ryan Giggs is long since out of the frame.

that the key node may be PolP (Duffield 2013c). Whatever the precise label, the point remains the same: this is an instance of 'scope evasion'.

The second point to observe is that this kind of object-shift is completely unacceptable with regular (lexically-specified) objects, such as *mọi từ* (35a): Vietnamese is otherwise a rigidly configurational language without the slightest possibility of argument scrambling.

Here once again, the diehard lexicalist could maintain that there were 4 different *ai*, 4 different *gì*, four different *nào*, etc, all lexically represented, and assign different abstract features to each one just so that they were attracted to the correct higher positions after being inserted into the derivation in their thematic position. But aside from the fact that it is begining to look desperate—and that it misses the obvious point that the grammatical meaning comes from the position—not from the lexeme, it is far from clear how any Agree-type approach should capture the optionality of the alternations in (36): the object isn't being moved *to* a position, it is simply *moved* away, out of range.

Proceeding from left to right, we come (again) to the sentential negation morpheme *không*. Several of the examples cited up to this point—including especially those in (23) and (29)—have demonstrated that negative *không* occupies a fixed clause-medial position, to the right of Tense, to the left of the emphatic assertion marker *có* (another MFC: see Figure 2). The examples (37a) reiterates this pattern: the clause-medial position of *không* is further established by the examples in (37b) and (37c), where *không* is reinforced by the emphatic negative morpheme *đâu*, which may either precede *không* or follow the verb-phrase:

37. a. Anh *không* (có) mua sách!
PRN NEG ASR buy book
'He did NOT buy the book!'
b. Ông *đâu không* đến!
PRN WHERE NEG come
'He did *not* show up!'
c. Ông *không* đến *đâu*!
PRN NEG arrive where
'He is *not* coming/did *not* come!' (≠ 'Where didn't he go?')

One point to observe about these examples is that in argument position, outside of the scope of negation, *đâu* is obligatorily interpreted as a locative expression (= English *where*); in (37b) and (37c) however, the same element is obligatorily interpreted as an emphatic negative. (Of course, this shouldn't be *at all* surprising, given that English *at all* is also a covert locative, etymologically at least.)[13]

The more pressing reason for presenting the examples in (37) is to contrast them with those in (38), in which the otherwise medial elements *không* and *chưa* appear in clause-final position, and are now interpreted—not as negation elements—but instead as *Yes-No* question particles.

38. a. Anh (có) mua sách *không*?
PRN ASR buy book NEG
'Did he buy the book?'

[13] The complementary distribution of locative *vs*. emphatic negative *đâu* has been observed by other authors, who then fail to draw the obvious conclusion. Do & Le (1994), for instance, note:

đâu: mot placé à la fin d'une phrase négative pour renforcer la négation. Il ne faut pas le confondre avec son homonyme *đâu* qui exprime l'interrogation de lieu. *En principe,* đâu *interrogatif ne s'emploie jamais dans une structure négative* [emphasis mine: NGD] (1994: 82)

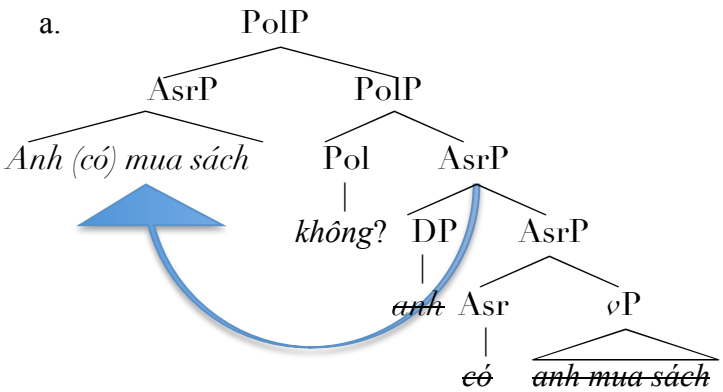
b. Con đã (*có) uống thuốc *chưa*?
PRN ANT ASR drink medicine not.yet
'Have you (child) taken your medicine yet?'

c. Hôm.qua anh ấy đã không *có* đến nhà chị.
yesterday PRN DEM[2] ANT NEG ASR go house PRN
'He didn't go to your house yesterday.'

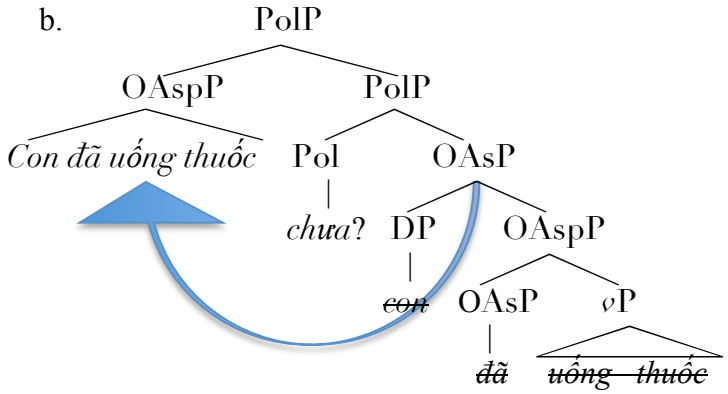
As the examples in (34) reveal, *Yes-No* questions in Vietnamese are formed by means of two 'brace constructions': in the default case (38a) the brace consists of sentence-medial *có* plus final *không*; just in the case of perfect questions—with medial đã and final *chưa*, as in (38b). Notice that these two options are in strict complementary distribution: even though, as example (38c) shows, *đã* and assertion *có* may co-occur in medial position in declaratives—the same is true of medial *không* and *chưa*—in *Yes-No* questions, only one or other strategy is permitted.

In (38a) and (38b), we appear to have reached the right edge of Vietnamese at last. Except that (perhaps) we haven't. In Duffield (2013a), I set out some arguments in support of the Kaynian turns, diagrammed in (39a) and (39b), respectively. These diagrams articulate the claim that 'medial' and 'final' *không* occupy one and the same (medial) position: to form a *Yes-No* question, it is not negation that moves to the *right*, but its immediate complement that moves to the *left*.

39. a.



b.



Aside from considerations of 'cross-category harmony'—if it really were on the right periphery, interrogative *không* would be the only rightward functional head in what is a massively head-initial language—the analyses in (39) account for three otherwise unexpected constraints on *Yes-No* questions. To wit: (i) the absence of negative *yes-no* questions in Vietnamese, as indicated by the unacceptability of the examples in (40); the impossibilibity of *Yes-No* questions containing (ii) the future morpheme *sẽ* , which we have already seen, occupies T (41a), or the topic marker *thì*, or any topicalized constituent (42b). These restrictions follow directly from the analyses in (39), which only allows predicate-raising to target material lower than negation, and prevents *không* from moving around itself.[14]

40. a. *Anh ấy không đến không?
PRN DEM NEG come NEG
'Isn't he coming?'
b. *Con chưa uống thuốc chưa?
PRN not.yet drink medicine not.yet
'Haven't you [child] taken your medicine yet?'

41. 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?'

[14] See Duffield (2013a), for more detailed discussion and justification (including arguments against an analysis of final *không* as a tag-question particle.

b. *Xã bên *thì* ruộng tốt không?
village side TM rice field good NEG
'(As for) the neighboring village, are its rice-fields good (fertile)?'

Supposing this analysis to be correct begs the question of *why*: why should the extended predicate phrase move out of the scope of negation? Here, the same functionalist answer suggests itself as applied to the position of universal quantifier: by moving out from under the scope of negation, the predicate phrase (with its immediately superordinate functional categories, can 'avoid a lot of trouble')—that is to say, it can avoid being negated. Conversely, by having nothing to take scope over, *không* is free to assume another grammatical function, that of a *Yes-No* question morpheme.

Readers who are prepared to accept the transformational analysis but who feel queasy at the very hint of any kind of functionalist explanation can always invoke some [+*wh*] features in AsrP that will force the predicate phrase to move above *không*. Yet—as was the case for the universal quantifier structures—it is far from clear where the predicate phrase should move *to*, only that (once again) it must move *from* its point of origin. As for those who also hate the derivation, the core examples still make a good case for multifunctionality: in surface medial position, *không* is unequivocally negative, whereas in surface final position…it isn't.

We have nearly reached the end of this discussion, and with it, the (right) end of Vietnamese syntax. *The end is where we start from.* At the outset, it was suggested that a strictly derivational approach driven by the projection principle cannot in principle admit of extragrammatical elements beyond the right edge, for the obvious reason that there is no 'right edge' to adjoin to in a purely bottom-up, monotonic, computational model. It follows logically that if it can be shown that there are discourse elements 'beyond the

edge,' so to speak, this calls into question both the derivational approach, and by implication any strict interpretation of the projection principle: if at least some lexical elements are syntactically extrametrical, there must be some phrase-structure for them to be extra (to)…

The element in question is the Vietnamese *realis* particle *thế*. *Thế* is of particular interest because of a paper by Bruening & Tran (2006), in which it is argued that Vietnamese admits of two different strategies for resolving *wh*-dependencies: the first, a covert extraction mechanism—now handled, presumably, by Agree—which is subject to standard island effects; the second, a mechanism of unselective binding, which is signalled by the presence of final *thế*, and where island effects are allegedly suspended. The sentences in (42) are supposed to illustrate acceptable *wh*-interpretations for the indefinite element *ai* ('who') contained within three kinds of 'syntactic islands': complex NPs (42a), sentential subjects (42b) and adjunct clauses (42c). The annotations on the parentheses around *thế* indicate that omission of this final element leads to the expected island violations:

42. a. Tân vừa chụp hình con hổ đã dọa ai ??(?*thế)*?
Tan ADV catch picture CL tiger ASP scare who PRT
'Tan took a photo of the tiger that scared who?'
b. Ai (vừa) bỏ đi làm mọi người bối rối ??(?*thế*)?
Who ASP leave make everyone embarrass PRT
'That who left made everyone embarrassed?'
c. Tân thua cuộc *vì* ai làm hư xe của anh ta ??(?*thế*) ?
Tan lose event because who do damage car POSS PRN PRT
'Tan lost the race because who damaged his car?'

In Duffield (under revision), I offer an extended critique of Bruening & Tran's paper. The central claim of that response article is that B&T's theoretically-driven treatment simply misses the point, and that *thế* is a discourse particle that only attaches to root clauses, and

thus signals that—what would otherwise be analyzed as a subordinate sentence should be reparsed as a main clause. Once this happens, island effects assuredly disappear, but not for any theoretically interesting reason.

To understand what is going on here, one need look no further than Subject-Auxiliary Inversion (SAI) in English. Except for some L2 learners of English, and speakers of certain varieties of Hiberno-English (as Jim McCloskey discussed about 15 years ago) embedded SAI is generally viewed as ungrammatical, a judgment supported by the minimal contrast in (43):

43. a. Do you know [*where* I can find the toy department ~~*where*~~?]
    b. %Do you know [*where* can I find the toy department ~~*where*~~?]

This is well-known, as is the less-acknowledged fact that long-distance *wh*-extraction in English is typically quite marginal (except for the statistical outliers *say, tell*, and *think)*. One instance of marginal acceptability involves the so-called 'factive islands' in (44):[15]

44. a. '**Where* would you (happen to) know [~~where~~ (that) I can find the toy department ~~where~~?]'
    b. '**What* do you know [~~*what*~~ (that) [her maiden name was ~~*what*~~]?'

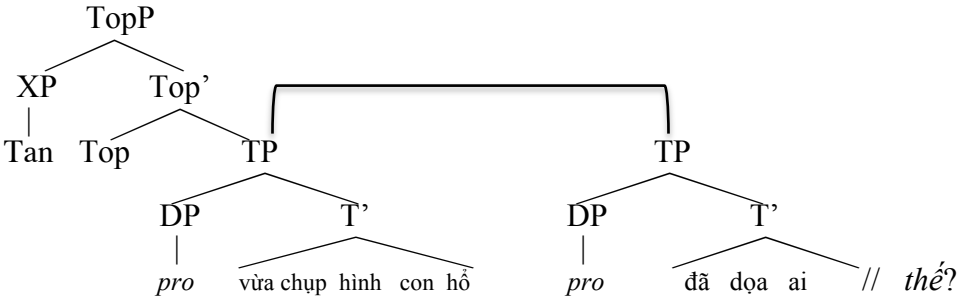
It turns out, though, that by applying subject-auxiliary inversion, the 'island effects' apparent in (44) are immediately suspended, as evidenced by the acceptability of the the sentences in (45).

[15] Arguably, the marginality of LD movement is the norm: unbounded movement with 'bridge verbs' represents the exception.

45. a. '?*Where,* would you (happen to) know, [can I ~~can~~ find the toy department ~~where~~?]'
a'. '*Where* can I ~~can~~ find the toy department ~~where~~, would you (happen to) know?'
b. '?[*What,* do you know, [was her maiden name ~~was~~ ~~*what*~~]]?'
b.' '?[*What* was her maiden name ~~was~~ ~~*what*~~], do you know?'

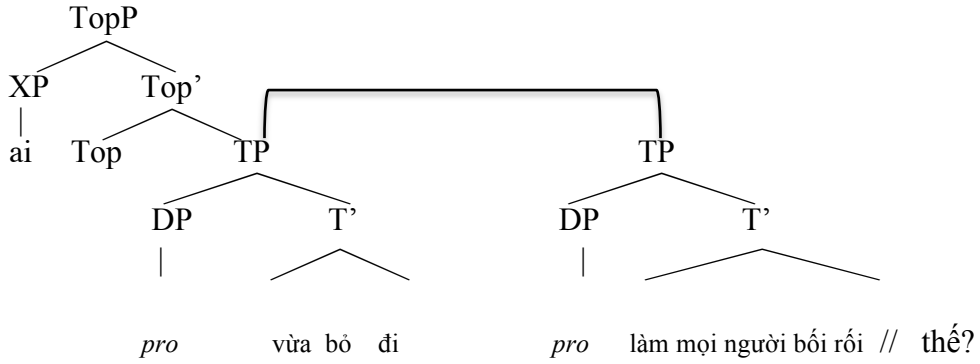
Is this because AUX-in-COMP acts as a scope marker, allowing unselective binding? Though theoretically possible, that would seem to be a very unlikely explanation. A much more plausible reason for the acceptability of (45) is that the presence of SAI causes the embedded clause to be reparsed as a main clause, with the original main clause simply being parsed out (treated as a parenthetical). In Duffield (under revision), I argue that the same is true of Bruening & Tran's illusory islands: alternative analyses of the strings in (42) are given in (46) below.[16]

46. a.



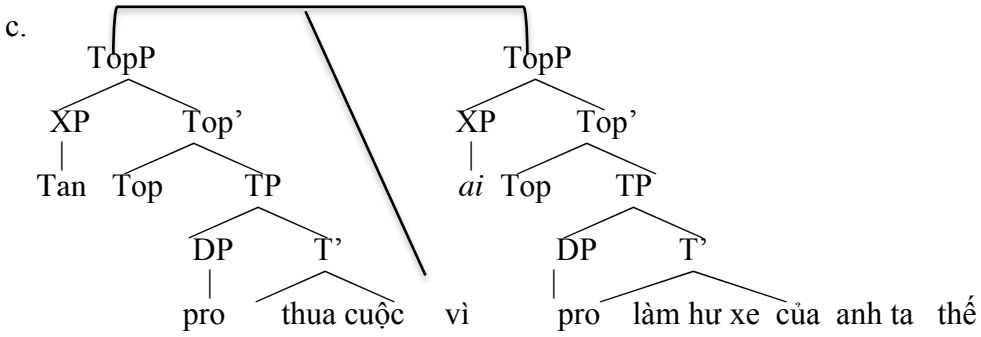
'Tan, (he) (just) took a picture of a tiger, and (then) who did (he) [= Tan] scare?'

b.



"Who just left, and embarrassed everyone (by doing so)?"

[16] Significantly, these also better capture native-speakers' intuitions about the interpretation of the strings.



"Tan lost the race because … *who* damaged his car?"

This re-analysis is also more in spirit with Mary-Beth Clark's (1992) observations about Vietnamese. She writes:

> 'Ideas in Mainland South East Asia tend to be expressed in seemingly co-ordinate or sequential units in a linear fashion, rather than in clause-within-clause constructions. These units are frequently unmarked by conjunctions. Therefore, when conjunctions are used, they signal the likelihood that the speaker wishes to make some point about the relationship between the clauses involved with that construction. *Some constructions do not have meanings that are restricted enough to be quite clear about the relationship being expressed* (Clark 1992: 91, emphasis mine).

Our theoretical prejudices may lead us to ignore, or downplay the significance, of Clark's insight: having spent 50 years investing in developing tools to deal with hierarchical structure, there is an understandable reluctance to view linear relationships for what they are. But that is our loss. The behaviour of *thế́* and other discourse particles force us to recognise that there are many elements in utterances that are undeniably lexical—*thế́* is a Vietnamese word, not an English one, *innit* is an English word—but which do not enter

into syntactic computations. From which it follows that syntax cannot be a projection of lexical properties, at least not exhaustively.

Conclusion

Over the previous sections, I have examined data that support a multifunctionality approach to functional categories, and which in turn inveighs against the more traditional lexicalist assumptions forced upon generative analyses by the projection principle (or *vice versa*). In place of standard assumptions, I hope to have made a reasonable *prima facie* case for lexical Minimalism—a lexicon stripped of functional homonyms and abstract formal features—and for Anti-Projection. As might be expected, this inverse view of the relationship between syntax and the lexicon leads to a set of answers to the 'big questions' of grammatical theory that are diametrically opposed to the usual responses of current Minimalism, viz:

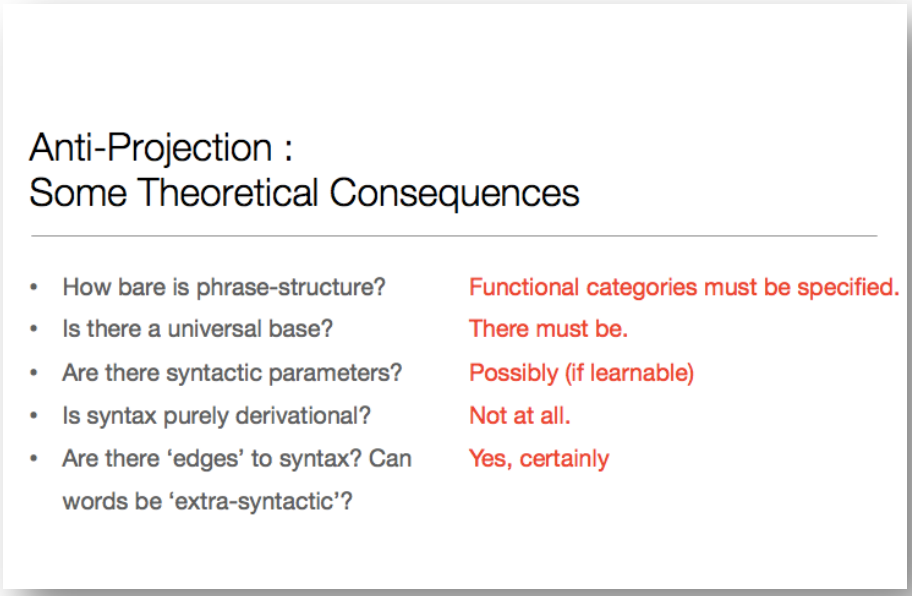


Figure 5. Some implications of Antiprojection

Whether this way of looking at things proves to be more than a distraction from orthodoxy, is for others to judge: at least, it serves that purpose well, which is a useful contribution in itself.

You snatch a tune, you match a cigarette…

Elvis Costello, *Watching the Detectives*

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