Minimalism and Semantic Syntax: Interpreting Multifunctionality in Vietnamese

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Prelude

This paper is concerned with a deceptively simple question: where does grammatical meaning come from? Within generative grammar, at least since the demise of Generative Semantics, the received view has been that the meaning of a sentence is exhaustively a function of the lexical elements of which it is comprised (setting aside the effects of constituency and scope). In particular, Government-Binding Theory (Chomsky 1981) is normally taken to incorporate a general claim that syntax is (only) a direct projection of the lexicon. This is apparently made explicit at the outset to *Lectures on Government and Binding:*

'The lexicon specifies the abstract morphophonological structure of each lexical item and its syntactic features, including its categorial features and its contextual features. Chomsky (1981: 5)'

The claim appears to be further reinforced by the guiding principle of GB, namely, the Projection Principle, which states that "the theta-marking of each lexical item must be represented categorially at each syntactic level (Chomsky 1982: 8)." Notice though that much hangs on what counts as a lexical item: even if all lexical items (in a numeration) are required to project to the syntax, this does not mean necessarily that everything in the syntax is projected from lexical entries. This latter claim may be generally assumed, but it is not strictly entailed by the first quotation. Moreover, while it constrains the ability of the syntax to introduce or delete predicates or their associated arguments, the Projection Principle says nothing about the meanings carried by abstract functional categories such as Tense and Aspect, for example. In subsequent Minimalist approaches (Chomsky 1993, 1995, 2000) however, this loophole is effectively closed by the requirement that syntactic computations operate exclusively with the lexical items introduced in the *initial array* (numeration): the syntax admits no node labels or extraneous symbols (e.g., theta-roles, indices, movement

Notwithstanding some elaborations—the Extended Projection Principle (EPP), for instance, as well as syntactic constraints on linking rules (Theta Government), and of course, argument Binding).

Nor in fact does the Projection Principle apply to adverbials and other adjuncts see Lebeaux (1988), nor yet to expletive pronouns. Notwithstanding this fact, in GB it was usually assumed that lexical insertion took place 'in a block' either immediately following—or simultaneously with—the creation of d-structure: what Seuren (1974:3) calls PRE-TRANSFORMATIONAL UNITARY LEXICAL INSERTION. Minimalism contrasts with GB in both respects: on the one hand, it dispenses with the notion of unitary lexical insertion, requiring each element to enter the derivation step-wise (deriving sentences through recursive merger). On the other hand—and crucially for our purposes, Minimalism requires all elements involved in the derivation to be in the initial numeration—since the initial numeration is drawn exclusively from the lexicon, it follows that all grammatical features must be lexically represented.

traces, levels of representation) which might contribute to sentence meaning. This does not exclude reference to abstract formal features—indeed, these are quite crucial to most Minimalist analyses—but it requires that all such features (e.g., EPP features) are ultimately drawn from the lexicon: they are themselves lexical entries alongside contentful, semantically arbitrary, lexical items (*table*, *cheese*, *octopus*, etc). Whatever the theoretical advantages of this approach for delivering an extremely spare syntax, this kind of Minimalism massively increases lexical complexity, leading to a multiplicity of different abstract features attaching to what are—intuitively speaking—the same lexical items. Grammatical theory is in this regard a 'zero-sum game': if the syntax does little or no semantic work, the burden necessarily falls on lexical specification.

In the case of languages with rich inflectional paradigms and/or an extensive inventory of phonetically-differentiated functional categories, this 'poor syntax—rich lexicon' approach makes some sense, since subtle differences in feature specification are reflected in different pronunciations that must in any case be lexically listed; e.g., English present perfect *has been* vs. preterite *was;* wh-interrogative *who* vs. indefinite *anyone;* locative *vs.* expletive *there;* nominative *she* vs. accusative *her.* However, for Vietnamese and other isolating languages, the desirability of a strict lexicalist approach is much less evident. In contrast to inflectional languages, Vietnamese does not appear to differentiate subtle meaning contrasts in the lexicon: instead, it disposes 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.

A particularly clear example of this multifunctionality is offered by the modal auxiliary *được* (also *phải*), which is variously interpreted as a deontic, epistemic or abilitative modal—even as a non-modal, aspectual, particle—in different structural positions. This is illustrated in (0); see Duffield (1999), Phan & Duffield (in prep.)

- 0. a. Ông Quang được mua cái nhà.

 PRN Q. CAN buy CL house
 'Quang was allowed to buy a house.'
 - b. Ông Quang mua được cái nhà.

 PRN Q. buy CAN CL house

 'Quang has bought (was able to buy) a house.'
 - c. Ông Quang mua cái nhà được.

 PRN Q. buy CL house CAN

 'Quang is able to buy a house/Quang may possibly buy a house.'

Other examples will be discussed directly. This multifunctionality suggests a radically different, though equally austere, conception of Minimalism: Minimalist Lexicalism (see also Marantz 2005, Borer 2007). A corollary of this, of course, is Semantic Syntax: meaning inheres in—and is read off—syntactic representations. In this paper, then, I elaborate an alternative Minimalist thesis: I argue that it is elucidating to introduce a limited amount of meaning into syntax, maintaining that this can be done without resurrecting Generative Semantics wholesale.

Acquisitions, Mergers and (Grammatical) Austerity

Many theories of syntax are inherently imperialistic, even monopolistic, in nature: an implicit aim of the theory-builders is to encroach upon other areas of grammar, and in doing so to

appropriate phenomena previously considered proper to the lexicon (morphology, argument structure, lexical semantics), or to compositional semantics (semantic modification, quantifier scope)—even to phonology (cf. Duffield 1995, Borsley & Tallerman 1996)—and to offer covering syntactic explanations of these phenomena such that researchers in other areas are reduced to listing idiosyncrasies or haggling over remnants. This is syntax as Wal-Mart, or to use an analogy from card games, syntax as 'beggar my neighbor'. In the history of generative grammar, Generative Semantics is often viewed as the robber-baron par excellence: at the height of GS, the lexicon was stripped virtually bare: even apparently synthetic forms were broken up for parts ('deriving kill from CAUSE [to die]', see McCawley (1968), also Lakoff (1965)—cf. Fodor (1970)), while the domain of syntax expanded, incorporating most of compositional semantics, and some pragmatics to boot. Other syntactic theories of the time were only slightly less acquisitive.

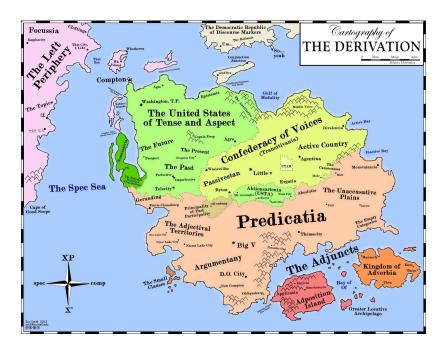
Whether by coincidence, or influenced by the economic *Zeitgeist*, Mainstream Minimalism represents the polar opposite of 'acquisitions+mergers capitalism': in the analogy of card games, it is a 'shedding game,' the theoretical goal being to get rid of (or shed) as many grammatical phenomena as possible. This urge to purge seems to be motivated, on the one hand, by the empirical demands of Universalism, and by a set of theoretical aesthetics that takes 'less is more' to its logical conclusion, on the other. What is meant by the first is that as more and more languages have been submitted to empirical syntactic inquiry, it has turned out to be increasingly difficult to determine any surface structural properties that they all share. Early hopes of determining easy structural universals just beneath the surface (Fillmore's 1968 UNIVERSAL BASE HYPOTHESIS) have proven elusive, such that not only outside, but also inside, generativism there is considerable skepticism that these exist at all: Evans & Levinson's (2009) conclusion about such universals (1) finds an unlikely echo in Adger's dismissive comments about the UBH, made in response to the challenge of Construction Grammar (Goldberg) (2).

- (1) "A widespread assumption among cognitive scientists, growing out of the generative tradition in linguistics, is that all languages are English-like but with different sound systems and vocabularies. The true picture is very different: languages differ so fundamentally from one another at every level of description (sound, grammar, lexicon, meaning) that it is very hard to find any single structural property they share (Evans & Levinson 2009: 3)."
- (2) "I don't think that anyone has said that all languages are 'underlyingly the same' since people were discussing the universal base hypothesis in the '70s. When Chomsky says that there is only one human language, he's saying that there is one set of principles that govern all human languages, not that all languages are underlyingly the same. Generativists argue that all languages obey a certain set of principles (and indeed make proposals as to what those principles are), and that individual languages vary from those principles in constrained ways. It's important, when one is criticizing a framework of ideas, not to criticize proposals that have been abandoned for 40-odd years (Adger 2013: 3)."

As cross-linguistic work has revealed evidence of much greater mid-level diversity than was previously imagined, generativists committed to the belief that the core of language must be innate have been forced to divest themselves of (what turned out to be language-particular) phenomena for which they previously had covering theories, dumping these bad assets, so to speak, and retreating to a much smaller and vastly more abstract portfolio of shares ("beyond explanatory adequacy", Chomsky 2001). For the most part, these dodgy

assets have been bought back at a discount by their original owners, though some things—such as substantive theta-roles, grammatical relations, and weak and strong features—have gone the way of sub-prime mortgages. GB/Principles & Parameters theory represents an intermediate step along that path of divestment: more austere than the theories that preceded it, but positively all-encompassing when compared to the 'scorched earth' policy of subsequent developments.

Not everyone, however, has given up on the Universal Base Hypothesis. Throughout the 1990s and continuing up to the present, a strand of generativist research has pursued a more representational approach to phrase-structure in which lexical and functional categories are universally hierarchically ordered and labelled in a precise fashion. This strand of generativism, most closely associated with the Italian school of Guglielmo Cinque and Luigi Rizzi, is sometimes referred to as the Cartographic framework. Cartographic Minimalism is nicely caricatured in the following map, recently shared on Facebook:³



As it turns out, Vietnamese provides striking confirmation of this type of approach.

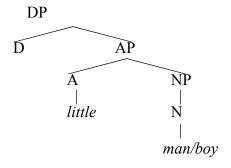
To ground this discussion, consider the following pairs of examples; each containing what seem to be the same words in different orders. Given that the two members of each pair are non-synonymous, it seems obvious that sentences generate meaning beyond the words they contain:

- (3) a. [The *little* man]/[He] waved at the boy.
 - b. [The man waved at [the *little* boy]/[him].

In the examples in (3), the interpretation of the attributive adjective <u>little</u> seems to depend on which noun-phrase it is contained *within*; that is, sentence meaning seems to derive from constituency. A moment's reflection, however, tells us that constituency is a hierarchical notion; once this is accepted, constituency can be reduced to syntactic scope (c-

³ Cited as: Rizziani, Carlos, L. P., The Cartography of the Derivation: A Brief History of the Louis and Clärque Expedition, SpecGram, Vol CLXVIII, No 3. I have not checked whether the attribution is genuine.

command), so that <u>little</u> is construed with <u>man</u> in (3a), and with <u>boy</u> in (3b), because these are the *only* elements in the respective sentences over which the adjective <u>little</u> has scope.

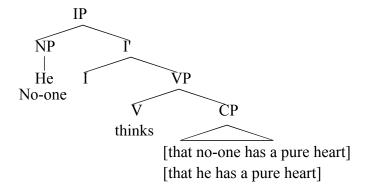


In 3(a) *little* commands *man* (but no other word to the right); In (3b) *little* commands *boy* (but no other word in either direction)

Once we analyze things in this way, we can relate the meaning contrast in (3) to that in (4) and—in a slightly more complex fashion—to that in (5):

- (4) a. He painted [the *grey* house] (*cf.* He painted it.)
 - b. He painted [the house] grey. (cf. He painted [it] grey.)
- (5) a. He thinks [that [no-one has a pure heart].
 - b. No-one; thinks that [he; has a pure heart].

In (4a), <u>paint</u> has scope over (<u>the</u>) <u>grey</u> (<u>house</u>), and <u>grey</u> over <u>house</u>, whereas in the resultative construction in (4b), this is not the case (whether the converse obtains—that is, whether <u>house</u> takes scope over <u>grey</u>, is a matter of analysis). In (5a), the pronoun <u>he</u> is preferentially interpreted as a bound variable—in virtue of being within the scope of <u>no-one</u>, whereas in (5b) no such reading is available; <u>he</u> may only be interpreted referentially, as an anaphor.



All of these cases of syntactically determined meaning are relatively unproblematic for Minimalist derivational syntax, in so far as scopal meaning can be directly read off phrase-structure; given some plausible assumptions, more complex cases such as quantifier-variable interactions (quantifier-raising and -lowering) also follow fairly naturally. There is no extra, hidden, meaning inherent in syntax. However, matters become more complex when we consider the seemingly banal examples in (6):

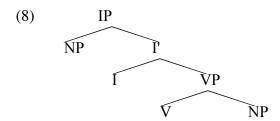
- (6) a. The cat attacked the mouse a few minutes ago.
 - b. The mouse attacked the cat a few minutes ago.
 - c. *A few minutes ago attacked the mouse/the cat the cat/the mouse.
 - d. *The mouse attacked a few minutes ago the cat.

Sticking with the problem of argument interpretation, two questions arise: why is the first animate NP in each string interpreted as the AGENT, the second as the PATIENT (or THEME) argument?; and, why are the alternatives order in (6c) and (6d) ungrammatical in English, but not in other languages, such as German?

One possible approach to the first question is to invokie primitive Grammatical Relations: [SUBJECT], [DIRECT OBJECT], etc: the first NP is assigned a SUBJECT role, the NP following the verb is assigned a [DIRECT OBJECT] role, and so on, according to a grammatical hierarchy. More sophisticated, multi-stratal, versions of GR theories relativized GRs to different levels of representation (e.g., 'initial2' vs. 'final1' in Relational Grammar, Perlmutter (1983)), in order to account for alternations such as the active-passive pair exemplified in (7). Theories invoking GRs, whether mono-stratal or multi-stratal, introduce semantic power into the syntactic component but at some lexical cost and considerable complexity: one has to specify not only which lexical items/positions can bear GRs, but also to come up with a set of linking rules (LRs) associating (initial) GRs with thematic roles (Perlmutter & Postal 1984 [1978]):

- (7) a. The cat has attacked the mouse.
 - b. The mouse has (been) attacked (by) the cat.

Though rejecting the idea of grammatical relations as primitives, Chomsky's GB theory nevertheless retained a good deal of their semantics in the interaction between X'-Theory (underlying phrase structure) and Theta Theory (the principles governing the distribution of arguments). Considering again the contrasts in (6), early versions of GB—prior to the VP-internal Subject Hypothesis—interpreted GRs configurationally: SUBJECT = $\{\text{Spec}, \text{IP}\}$, as in (8), DIRECT OBJECT = $\{\text{NP}, \text{VP}\}$, etc.



The contrasting interpretations of the cat attacked the mouse and the mouse attacked the cat was then achieved through conditions on theta-role assignment: internal theta-roles were obligatorily assigned under sisterhood with the verb, while external theta-roles were assigned compositionally by the VP. Though theta-roles were temporarily bled of much of their semantic content, the internal/external distinction was still crucial to establishing GRs, and had to be marked in the lexical specification of the predicate.

Subsequent theoretical developments, including especially the VP-INTERNAL SUBJECT HYPOTHESIS (VP-ISH), further constrained Theta Theory, with conditions on movement

(Minimality conditions) ensuring that arguments of a given predicate would always appear closer to that predicate than any other arguments, so deriving the result that (9a) and (9b) are non-synonymous.

- (9) a. The dog said the cat attacked the mouse.
 - b. The cat said the dog attacked the mouse.

However, the VP-internal subject hypothesis immediately raised the question of motivation: why move to {Spec,TP} (the clausal subject position)? The formal answer that was given for about a decade, was syntactic Case: DPs move to be assigned Case (alternatively, to have their Case features 'checked'). In languages with overt morphological case, the evidence that these features were initially specified in the lexicon seemed compelling: even in Modern English, with overt Case alternations only in the pronominal system (he/his/him, we/our/us, etc.) there are reliable correlations between case-features and structural case assigners:

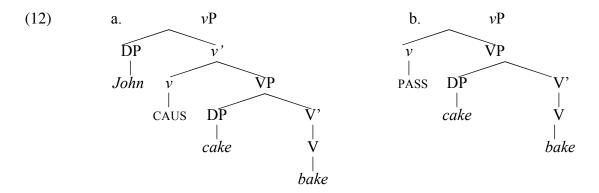
- (10) a. She attacked him.
 - b. He was attacked.
 - c. She wants [him to leave]. (ECM = accusative subject)

Moreover, in contexts lacking referential subjects, the existence of lexical expletives it and there, as in (11), provided *prima facie* support for the idea that +EPP features were also lexically represented.

- (11) a. It happens that [she doesn't [t believe him]].
 - b. She happens [t not to [t believe him]].
 - c. There are [two boys standing over there].
 - d. Two boys are [t standing over there].

The last piece of the theoretical puzzle was transitivity: why given a transitive verb, is the higher of the two arguments necessarily interpreted as an AGENT, the lower as a THEME? One possible answer was suggested by Alignment Hypotheses, such as Perlmutter & Postal's UAH 1984) or Baker's Thematic Hierarchy, the UTAH (Uniformity of Theta Assignment Hypothesis 1988); however, these implicitly assign semantics to particular syntactic configurations.

The way around this is to assume—with Hale & Keyser (1993), Kratzer (1996) and others—that all predicates are inherently monovalent, so that an apparently transitive predicate such as <u>attacked</u> in fact consists of two predicates, each taking one argument: the core predicate <u>attack (the mouse)</u> and a lexically represented causative 'little v', whose 'agentive' argument, the <u>mouse</u>, is merged outside the core VP, as in (12). Transitivization and de-transitivization then involve manipulations of a lexically-represented, but syntactically autonomous, set of v/Voice features (*cf.* Kratzer 1996).



John baked the cake. vs. The cake was baked.

Through each of these modifications to the theory, syntax has divested itself of more and more semantic constructs (Grammatical Relations, Case features, EPP features, Cause and Transitivity alternations); most of these have been (re)-located to the lexicon, either as abstract lexical primitives or as inherent features of lexical allomorphs.

Rethinking Austerity Measures: Multifunctionality

Languages like Vietnamese, however, suggest a very different conception of grammar. Vietnamese has no morphological paradigms (nominal declensions, verbal conjugations), no case markers—not even separable phrasal case-markers of the kind found in Japanese (-ga, -o, -ni)—nor, on most accounts at least, does it have any lexical expletives. There is, in short, no overt morphological evidence that would support the existence of any more abstract lexical-grammatical features. Of course, as is regularly pointed out—especially in discussions of language acquisition—"absence of evidence is not evidence of absence", and the universalist could argue that if such features are found in one language then it is reasonable to infer their existence in all languages. However, the multi-functionality of grammatical morphemes in Vietnamese suggests something more radical than simply invisible lexical features: meanings are not merely associated with syntactic positions through linking rules and syntactic merger; rather, the syntactic configurations themselves seem to endow a lexical item with a certain type of meaning, often stripping out or neutralizing what might be regarded as its inherent lexical semantics. If this is really the case, it spells trouble for the standard lexicalist approach.

The notion of multifunctionality assumed here is due to Travis, Bobaljik *et al.* (1998), also Lefebvre & Travis (2007), who define a multifunctional functional category (MFC) as in (13):

(13) 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. (Travis *et al.* 1998: 2–3, emphasis in original).⁴

⁴ One cited example of an MFC in another language variety is the Fongbe determiner element <u>ò</u>, analyzed in Lefebvre 1998 (extending a related proposal for Haitian Creole outlined in Lefebvre & Massam 1988). This element not only occurs as the head of Fongbe DPs, as expected, but also in various clausal positions, yielding distinct interpretations as a function of its distribution. In the example reproduced below, the clausal determiner (underlined) permits three slightly different interpretations (a-c):

It should be clear from this citation just how radically opposed this type of Minimalism is to more mainstream approaches. If lexical entries only encode the *intersection* of uses of a given item, and if additional meaning is provided by the syntax, then—as a matter of logic—syntactic positions must necessarily be semantically informed.

Let us now examine three salient examples of this multi-functionality in Vietnamese. These are simply indicative cases: it turns out that almost every grammatical morpheme in Vietnamese exhibits some type of structural ambiguity, altering its meaning as a function of syntactic position. I begin with two cases of MFC that can be regarded—under particular analyses at least—as scopal, in the sense that their interpretation depends on the co-occurrence of the MFC with some other functional category within the same clause: let us call these *relational* MFCs. I'll then consider absolute—or *autonomous* MFCs: categories that derive their meaning in part, or entirely, from the head position in which they occur.⁵

Consider first the alternations in (14), involving the indefinite pronoun *ai*, which translates variously as *who*, *someone*, (not) *anyone*, *no-one*, and *every one*. Of course, it is quite common cross-linguistically to find lexical associations among these grammatical meanings: even in English, all of the different lexical items except *who* contain the indefinite morpheme *one*, which may reasonably be regarded as expressing the intersection of the terms.

- (14) a. Anh quen *ai*?

 PRN know ai

 'Whom do you know?'
 - 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 PROG use account POSS friend
 'Someone is using your account.'

Súnu ó gbà mòtò ò ò. man DET destroy car DET <u>DET</u>

- a. 'Actually, the man destroyed the car.'
- b. 'The man has destroyed the car, as we knew he would.'
- c. 'The man has destroyed the car, as we knew the car would be destroyed.'

Lefevbre claims that these different interpretations result from the various syntactic head positions that où is able to occupy: MoodP1, MoodP2, TP and AspP are named as potential sites. The claim is that the element itself is 'specified as [+definite], but underspecified in categorial features.' In other words, it is primarily the configurational position of this element, rather than its inherent lexical properties, that determines its interpretation. Other potential MFCs mentioned in Travis et al. include the English preposition of (as head of PP or KP), and determiner elements in Mohawk VPs (Baker & Travis 1997). It is plausible to treat many other phenomena in this fashion, including certain copular elements in Celtic and Haitian Creole (Degraf 1997), and English do-support; see below.

In all cases, as far as possible, I keep to rather superficial characterizations of the phenomena, eschewing specific theoretical analyses (which, however, can be developed further in the discussion period). In the original draft of this paper, the distinction was between *relative* and *rigid* MFCs. This distinction is probably unecessary once we take a more thorough-going approach to scope as the determining semantic driver.

- e. Ai cô ấy cũng quen. ai PRN DEM also know 'She knows everyone.' (OSV)
- f. Cô ấy *ai* cũng quen.

 PRN DEM ai also know

 'Everyone knows her.' (SOV)

In other languages, such as Japanese, in (15) below, the intersection of the terms is represented by a shared stem (7% dare), with alternants morphologically distinguished by means of different suffixes (-7% -ga, 7% -ka, 4% -mo, 7% demo): these suffixes must be lexically represented, unless one wishes to assume that the syntax also carries phonological information (a bridge too far, for most researchers).

- (15) a. John-ga <u>dare-ka-o</u> dare-mo-ni syoukaisita. John-NOM someone-ACC everyone- DAT introduced 'John introduced someone to everyone.'
 - b. <u>Dare</u>-mo-ga i-na-katta. no-one-NOM be-NEG-PAST 'No-one was there'
 - c. <u>Dare</u>-mo-o mi-na-katta. anyone-acc see-neg-past 'I didn't see anyone.'
 - d. <u>Dare</u>-ga John-o <u>dare</u>-mo-ni syoukaisita-ka? Who-NOM John-ACC everyone.DAT introduced-Q 'Who introduced John to everyone?'

In Vietnamese, though, this differentiation is achieved purely syntactically. As the examples clearly show, it is the relative syntactic position of ai (also gi, nao) that determines the meaning of the MFC: to be interpreted as a (negative) polarity item, ai must be in the scope of negation, as in (14a) and (14b) above; conversely, to be interpreted as a universal quantifier ai must appear to the left of—outside the scope of— $c\tilde{u}ng$, as in (14e) and (14f). Observe the minimal contrast between the radically underspecified MFC ai in (14e) and (14f) vs. the inherently specified universal quantifier moi, in (16), which exhibits no similar obligatory leftward movement.

- (16) 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.'

Consider next the aspectual (anterior) morpheme $d\tilde{a}$. In previous and ongoing work, Duffield & Phan (2010), Phan (2013), and Phan & Duffield (in prep.) provide additional support for a traditional view, namely, that $d\tilde{a}$ is primarily an aspectual, rather than temporally-related, morpheme. The main evidence for this claim is the sensitivity of $d\tilde{a}$ to the

(lexical) aspectual properties of the predicate with which it is associated: contrast the perfect reading of $d\tilde{a}$ in (17ab) with a more tense-like interpretation in (17c). There is also the fact that $d\tilde{a}$ freely occurs in future and future-oriented conditional contexts, as exemplified in (18):

- (17) 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!'⁶
 - c. Cuối cùng Andy Murray đã thắng cuộc [from Phan, in prep.] Final Andy Murray ANT win contest 'Finally, Andy Murray won the contest.'
- (18) 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 be working as a teacher instead.'
 - b. Đến cuối năm nay, tôi đã ra.trường. arrive end year DEM¹ 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 early more TOP I ANT take.care work PRN
 'If you had told me [about earlier], I would have taken care of that business of yours.'

Yet, as is shown by the minimal contrasts in (19), from Trinh (2005), in the presence of sentential negation $d\tilde{a}$ loses any aspectual reading, and is interpreted purely temporally as a preterite marker:

(19) a. Nó đã đọc sách.

PRN ASP read book

'He read books/has read books.' [Trinh 2005: 16]

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

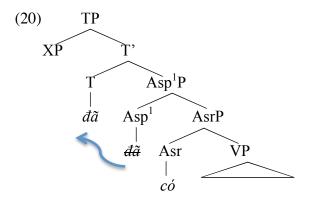
Nó chưa đọc sách.
 prn not.ye read book
 'He has not read books.'

How should this 'excluded aspectual reading' best be analyzed? Trinh (2005) and Duffield (2013b) offer similar, but contrasting, analyses. Both accounts share the proposal that in affirmative contexts $d\tilde{a}$ is initially projected under Asp and raised to T, as in (20),

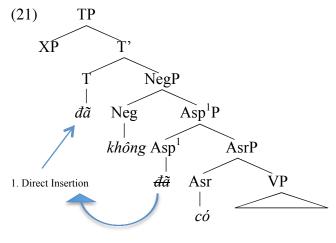
⁶ Film subtitle: translation of 'Harry Potter is dead!' in *Harry Potter and the Deathly Hallows* (Harry Potter và Bảo bối Tử thần).

giving rise to the ambiguity in (18a): they also assume that the presence of negation blocks this dependency, just as negation blocks Tense-lowering in English (Pollock 1989); see (21) below. For Trinh, however, this implies the existence of two homophonous lexical entries—aspectual vs. preterite $d\tilde{a}$ —the latter of which is inserted directly under T (as a last resort, similar to what has been traditionally been assumed for English do-support). The alternative proposed in Duffield (in prep.) is to treat $d\tilde{a}$ as an MFC: in this case, the purely temporal reading of $d\tilde{a}$ emerges as a function of lexicalizing T without first lexicalizing Asp, obviating the lexical redundancy of homophonous lexical entries.

In fact, the proposal advanced in Duffield (2013b, also in prep.) is slightly more complex: for a variety of reasons, it is claimed that negation does not block abstract movement of $d\tilde{a}$, but only the aspectual interpretation—Route 2 in (21) below. Whichever analytic option is adopted, the theoretical conclusion is that temporal anchoring resides in the syntax, rather than being an inherent property of the lexical item: $d\tilde{a}$ merely supplies anteriority—in paradigmatic opposition to the future (posterior) morpheme $s\tilde{e}$.



Both of the above cases illustrate relative MFCs in Vietnamese, where lexical meanings vary according the relative scope of two grammatical categories. By contrast, the element examined below exemplifies a more thorough-going kind of multi-functionality: rigid multifunctionality, by which a lexical item derives its whole semantics from the position into which it is inserted.



2. Movement

The element in question is $l\hat{a}$. One common use of this element is as an identificational copula, linking a subject to a nominal predicate in affirmative declarative clauses, as in (22) below.

- (22) a. Ông Richards *là* luật sư Anh.

 PRN Richards COP lawyer England

 'Mr Richards is a British lawyer.'
 - b. Cô ấy *là* một người rất thông mình.

 PRN DEM COP one person very intelligent

 'She's a very intelligent person.'
 - c. Đấy *là* lần đầu tiên mình gặp nhau. there BE time first REFL. meet each.other 'That was the first time we met.'

Notice that there are a number of crucial constraints on copular la which distinguish it from the English copular BE: first, as shown in (23), la is incompatible with non-nominal predicates (e.g., adjectival or prepositional predicates):

- (23) a. Cô ấy (*là) rất thông mình.

 PRN DEM COP very intelligent

 'She is very intelligent.'
 - b. Cô ấy (*là) (ở) trong nhà bếp.

 PRN DEM COP be.LOC. in kitchen

 'She is in the kitchen.'
 - c. *Dây *là* rất thú vị. this BE PRN interesting 'This is very interesting.'

Second, $l\hat{a}$ is morphologically distinct from, and in complementary distribution with the existential predicate $c\hat{o}$, as evidenced by the contrasts in (24):

- (24) a. Có khả năng anh ấy sẽ được thả tự do. EXIST chance PRN DEM FUT can free 'There is a chance that he will be freed.'
 - b. Có chút hy vọng nào không? EXIST little hope which NEG 'Is there any hope?'
 - c. *Là khả năng anh ấy sẽ được thả tự do. COP chance PRN DEM FUT can free 'There is a chance that he will be freed.'
 - d. *Là chút hy vọng nào không?

 COP little hope which NEG

 'Is there any hope?'

Finally, it is incompatible with regular sentential negation, emphasis and *Yes-No* question formation strategies, as shown by the examples in (25a-c); the examples in (26) show the acceptable alternatives involving *phải/đúng*:

- (25) a. *Ông Richards không là luật sư Anh.

 PRN Richards NEG COP lawyer England
 'Mr. Richards is not a British lawyer.'
 - b. *Ông Richards có là luật sư Anh!

 PRN Richards ASR COP lawyer England

 'Mr. Richards is a British lawyer!'
 - c. *Ông Richards có là luật sư Anh không?

 PRN Richards ASR COP lawyer England NEG

 'Is Mr. Richards a British lawyer?'
- (26) a. Ông Richards không phải là luật sư Anh.

 PRN Richards ASR right COP lawyer England

 'Mr. Richards is not a British lawyer.'
 - b. Ông Richards đúng là luật sư Anh.
 PRN Richards TRUE COP lawyer England
 'Mr. Richards is an English lawyer!'.
 - c. Ông Richards là luật sư Anh, có phải không? PRN Richards COP lawyer England, ASR TRUE NEG 'Mr. Richards is a British lawyer, isn't he.'

These facts suggest that in contrast to other lexical verbs, copular la is a functional category that occupies a functional position immediately above the predicate phrase, with which it competes with (existential and assertive) $c\delta$. See Duffield (in press, in prep., for details).

However, this is not the only context in which $l\hat{a}$ appears; the examples in (27) reveal $l\hat{a}$ to be a subordinating conjunction (complementizer), introducing clausal complements, apparently serving as an alternative to the more formal complementizer $r\hat{a}ng$:

- (27) a. Tôi mong-ước *là/rằng* mình có thể có ngọn đèn như thế. I wish COMP self can possess lamp like so 'I wish that I had a lamp like that.'
 - b. Sau khi biết *là* tôi biết chuyện, chị đã chủ động gọi điện cho tôi... after time know COMP I know story, PRN ANT active call phone give I 'After (she) knew that I knew, she actively phoned me...'
 - c. Hôm qua anh ấy nói *là* mai anh ấy không đến được. yesterday PRN DEM say COMP tomorrow PRN DEM NEG come CAN 'He said yesterday that he would not be able to come tomorrow.'

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⁷ This observation again finds parallels in the GS literature.

The examples in (28) show that $l\hat{a}$ may lexicalize both of these positions simultaneously within the same clause. However, in contrast to the situation of $d\tilde{a}$, each instance of $l\hat{a}$ is unambiguous: it is either a complementizer, when it appears clause-initially, or a copula, in sentence-medial position: as predicted, $r\hat{a}ng$ may only substitute for $l\hat{a}$ in the former position:

- (28) a. Tôi không thể nói *là* tôi *là* người tốt hơn, tốt nhất.

 I NEG can say COMP I COP person good comp., good superl.

 'I can't say that I'm the better person, or the best person.'
 - b. Tôi nói *là* tôi *là* cán bộ ngọai giao tới cần liên hệ với sứ quán. I say COMP I COP staff (member) foreign affairs need contact with embassy
 - 'I said that I was a diplomatic staff member who needed to contact the embassy.'
 - c. Tôi không thể nói *là/rằng* tôi *là/*rằng* người tốt hơn, tốt nhất.
 - d. Tôi nói *là/rằng* tôi *là/*rằng* cán bộ ngọai giao tới cần liên hệ với sứ quán.

Notice a further difference between $l\dot{a}$ and the MFC $d\tilde{a}$, discussed earlier: though both items exhibit a functional ambiguity, $d\tilde{a}$ only ever surfaces above negation, in T (*cf.* 20a above); this restriction is unexpected if there are two homophonous lexical items, as Trinh (2005) proposes: if $d\tilde{a}_1$ were a pure aspectual in its base position, then it should be compatible with its preterite twin $d\tilde{a}_2$ in T in (29a), just as progressive dang is compatible with preterite $d\tilde{a}$ in (29b):

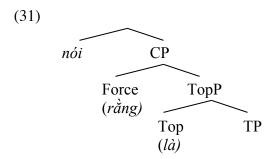
- (29) a. *Hôm qua anh ấy đã không đã đến nhà chị. yesterday PRN DEM² PAST NEG ASP arrive house ASP 'He hadn't gone to your house yesterday.'
 - b. Hắn làm thế chứng tỏ lúc đó chính hắn cũng đã không đang hài lòng về mình rồi. PRN do that prove time DEM indeed PRN also PAST NEG DUR happy about self already.
 - '(The fact that) he acted like that means that had not been happy with himself at that time.'

Returning to complementizer $l\dot{a}$, it turns out that $r\dot{a}ng$ and $l\dot{a}$ are not in fact in complementary distribution: although both are "C-related", clause-initial $l\dot{a}$ occupies a lower head position within the C-domain than does $r\dot{a}ng$. This is demonstrated by the examples in (30) below:

- (30) a. Phải nói *rằng là* thế hệ trẻ của chúng ta rất tài năng. modal say COMP COMP generation young of plural PRN very talented '(I) have to say that our young generation is very talented.'
 - b. Hy vọng *rằng là* giới trí thức sẽ không làm thinh trước sự việc đó. hope COMP COMP intelligentsia FUT NEG do quiet prep event DEM '(I) hope that the intelligentsia will not keep a still tongue in their heads (towards this event).'

- c. *Phải nói *là rằng* thế hệ trẻ của chúng ta rất tài năng.
- d. *Hy vong *là rằng* giới trí thức sẽ không làm thinh trước sư việc đó.

What might this slightly lower position be? A comparison with recent theoretical work on Italian by Rizzi and others suggests that this lower C-node is the head of a topic phrase, as schematized in (31) below; *cf.* Rizzi (1997, 2002):



Internal to Vietnamese, there is evidence—of both direct and indirect kinds—that supports exactly this analysis. The *direct* distributional evidence is found in the minimal contrast in (32), which shows the complementary distribution of complementizer $l\hat{a}$ with the regular topic marker $th\hat{i}$:

- (32) a. [Nó không học toán] là tốt.

 PRN not study maths COMP good

 'It's good that he didn't study mathematics.'
 - b. [Nó không học toán] thì tốt.
 PRN not study maths TM good
 'It would be good if he didn't study mathematics.'

It should be clear immediately that in (32a) $l\dot{a}$ cannot be a copula, since as was just noted, copular $l\dot{a}$ is incompatible with non-nominal predicates. As the English translations indicate, the sentences containing the two particles are not interpreted identically—(32b) is necessarily *irrealis*: nevertheless, the particles *are* in complementary distribution, providing *prima facie* support for the idea that $l\dot{a}$ lexicalizes the Topic head. Notice that in (32)—as is true across the board—the topicalized constituent appears as a specifier of the Topic phrase, preceding the topic head. ⁸ Compare the paradigm in (33):

- (33) a. (Còn) <u>tôi</u> (*thì*) (tôi) hoàn-toàn tán-thành. as for I TOP I completely approve 'As for me, I fully approve (of it).'
 - b. Người đó thì tôi không biết (anh ấy).

 person DEM² TOP I NEG know PRN DEM²

 'As for that person, I don't know (him).'
 - c. Th<u>àng bé này</u> thì tôi biết (nó) lắm. boy DEM¹ TOP I know PRN well 'This boy, I know (him) well.'

⁸ Hence, in (30), it must be assumed that the specifier position is null.

- d. <u>Lóp tôi</u> (thì) các em đều ngoan. class my TOP PLURAL student all obedient '(As for) my class, the students are all obedient.'
- e. Tôi thì răng đau.
 I TOP tooth hurt
 '(As for) me, (my) tooth hurts.'

The analysis of $l\dot{a}$ as a kind of topic marker is further supported by the existence of a kind of Sluicing construction in Vietnamese (Ross 1969), which also involves $l\dot{a}$. Representative examples are given in (34) below. Notice in particular the contrast between the acceptable combination of complementizer $l\dot{a}$ with the locative auxiliary $\dot{\sigma}$ in (34c), and the ungrammatical sequence in (23b) above, where $l\dot{a}$ is a copula.

- (34) a. Có ai đó đã gửi hoa cho Mary, nhưng tôi không biết ?(là) ai.

 ASR who DEM ANT send flower give Mary, but I NEG know COMP who 'Someone sent Mary flowers but I don't know who.'
 - b. Amy có mua một cái gì đó, nhưng tôi không biết ?(là) cái gì. Amy ASR buy one CLS what DEM, but I NEG know COMP CL what 'Amy bought something, but I don't know what.'
 - c. Alison đang trốn, nhưng tôi không biết (là) ở đâu. Alison PROG hide, but I don't know (COMP) be.LOC where 'Alison is hiding, but I don't know where.'
 - d. Kelly đã mở được cái lọ nhưng tôi không biết ?(là) bằng cái gì. Kelly ANT open CAN CL jar but I NEG know COMP by.means CL what 'Kelly managed to open the jar, but I don't know with what.'
 - e. Jason đã mở được cái lọ nhưng tôi không biết ?(là) bằng cách nào. Jason ANT open CAN CL jar but I NEG know know COMP by way which 'Jason managed to open the jar, but I don't know how.'

Space constraints preclude more detailed discussion of this construction: see Duffield, in prep.). Suffice it to say that there is independent evidence that Vietnamese sluicing—like "pseudo-sluicing" in other wh-*in situ* languages (*cf.* Kizu 1997, Merchant 1998, Potsdam 2006)⁹—may best treated as a type of cleft construction, in which the suppressed fronted material is topicalized, such that (34c), for example, has the analysis in (35):

(35) Alison đang trốn, nhưng tôi không biết [[Alison đang trốn] (là) [ở đâu.]

Alison PROG hide, but I NEG know (TM) be.LOC where 'Alison is hiding, but I don't know where.'

Thus it appears that $l\hat{a}$ derives all of its limited meaning from the syntactic position in which it occurs: in contrast to ai and $d\tilde{a}$, which take on (or lose) additional meanings as a

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⁹ However, see Wang, P, Wang C (2006), Chiu (2007), for evidence that Chinese sluicing involves a different operation from that found in Japanese. The same may hold of Vietnamese also.

function of their clausal positions, the inherent meaning of $l\hat{a}$ —the *intersection* of its various meanings appears to be null: it is an expletive predicate.

Moreover, as was observed at the outset, $l\hat{a}$ is just one example of a large set of relative and/or rigid MFCs in Vietnamese whose meanings are functionally determined in this way: other examples include $c\acute{o}$, $m\grave{a}$, $n\hat{e}n$, $ph\acute{a}i$ and $du\phi c$. Paraphrasing Chomsky (1982), Vietnamese provides clear evidence of the "functional determination of [functional—as opposed to empty—] categories." In all of these cases, the traditional lexical approach, which would treat these items as polysemous or homophonous entries fails on two counts: first, because it introduces massive redundancy into the lexicon; second, more importantly, because it fails to account for the fact that these meanings are reliably associated with particular syntactic positions {T, Top, C, etc} in Vietnamese and cross-linguistically. By contrast, the radical lexicalist approach adopted here captures both lay intuitions about Vietnamese grammatical categories as well the empirical cross-linguistic generalizations about the functional domain in phrase-structure.

Conclusion

In this paper, I have presented data from Vietnamese in order to make a prima facie case for an alternative form of Minimalist grammar: Lexical Minimalism. It has been argued that this alternative provides a more satisfactory and explanatory analysis of the functional vocabulary of isolating languages—especially Vietnamese—than do standard generative models, whose appeal to highly abstract functional features (Case, EPP features and the like) inherent to the lexicon, is unsupported by any relevant overt morphology, inflectional or otherwise. The price of this lexical austerity, which strictly limits lexical redundancies by eliminating most—if not all—abstract features, is a more semantically-informed syntax, in which underspecified lexical items can derive their interpretations from the positions in which they occur. Though many will object on theoretical grounds to this enrichment of core syntax beyond 'virtual conceptual necessity', I suggest that this is a price worth paying, at least for Vietnamese and typologically similar languages.

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