The Projection of Telicity in Vietnamese*

Shin Fukuda

University of California, San Diego

1. Introduction

Vietnamese is an SVO language with isolating morphology, no morphological case marking, wh-in-situ, and a rich classifier system. As an SVO language, objects follow the verbs that subcategorize for them. While a verb and its object are normally adjacent, there is a group of particles that can intervene between them.

(1) a. Lan tìm hai quyển sách
   Lan search two CL book
   ‘Lan looked for two books.’

   b. Lan tìm ra hai quyển sách
   Lan search T-PART two CL book
   ‘Lan found two books.’

(2) a. Tân đọc hai quyển sách
   Tân read two CL book
   ‘Tân read two books’

   b. Tân đọc xong/hết hai quyển sách
   Tân read T-PART/T-PART two CL book
   ‘Tân has read two books.’

*All the grammatical judgments are based on elicitations conducted between summer 2005 and fall 2006, with four native speaker informants. I would like to thank them for their time and patience. Many thanks are also due to the audience at NELS 37 for their helpful comments and suggestions. Finally, I would like to thank the following individuals for their generous help which improved this paper in various stages of its development: Brian Agbayani, Ivano Caponigro, Grant Goodall, James Kirby, Nayoung Kwon, John Moore, Maria Polinsky, and especially Thuan Tran. Needles to say, all the remaining errors are my responsibility.

1Abbreviations: T-PART = telic particle, CL = classifier, NEG = negation, PERF = perfective

In Emily J. Elfner and Martin Walkow (eds.), NELS 37, 219-231. GLSA Amherst.
These particles are interesting for several reasons. Syntactically, they appear to form constituents with objects, as they can be coordinated.

(3) Lan tìm [ra sách đó] nhưng [không ra từ điển]   
   Lan search [T-PART book that] but [NEG T-PART dictionary]  
   ‘Lan found the book but not the dictionary.’

There are also restrictions on the positions of these particles with respect to objects. Quantified NPs (i.e. NPs with a classifier phrase) and some bare NPs can be either preceded or followed by these particles (4). With some other bare NPs, however, these particles must follow them (5).

(4) a. Kim mở (ra) cửa (ra)   
   Kim open (T-PART) door (T-PART)   
   ‘Kim opened (the) door.’

   b. Lan bày (xong) hai trăm bức tranh (xong)   
   Lan display T-PART two hundred CL picture T-PART   
   ‘Lan finished displaying two hundred pictures.’

(5) a. Lan bày (*xong) tranh xong   
   Lan display T-PART picture T-PART   
   ‘Lan finished displaying pictures.’

   b. Lan cắt (*ra) cỏ ra   
   Lan cut T-PART grass T-PART   
   ‘Lan cut grass.’

Semantically, the presence of these particles induce a telic interpretation of events, as can be seen in the contrast between the a examples and b examples in (1) and (2). In (1b), an atelic verb tìm ‘search’ denotes a telic event with an addition of the particle ra, creating an event whose appropriate English translation appears to be find. Thus, once the particle is present, a time interval adverbial ‘for X-time’ is ungrammatical (6). For this reason, I refer to these as telic particles.

(6) Lan tìm ra hai quyển sách (*trong một giờ)   
   Lan search T-PART two CL book (*for one hour)   
   ‘Lan found two books (*for one hour).’

The syntactic distribution and semantic effect of telic particles have been reported in Duffield (1998, 1999), where he suggested two analyses. In one of the analyses, the small clause analysis, a telic particle forms a small clause-like constituent with an object,
which comes under the main verb (7a) (Duffield 1998). In the other, the functional projection analysis, telic particles head a functional projection above VP, with the main verb raising to a position yet higher than telic particles, deriving the surface word order (7b) (Duffield 1999).

(7) a. \([\text{VP} \ V \ [\text{SC} \ NP \ \text{T-PART}]]\)  
   b. \([\text{VP} \ V_1 + Y \ [\text{XP} \ \text{T-PART} \ [\text{VP} \ V_2 \ NP]]]\)

In this paper, I present novel evidence for the functional projection analysis and argue that the projection of telic particles is best analyzed as an instance of aspect phrase located between \(\nu P\) and VP, where aspectual information about events are syntactically encoded (Travis 1991, Borer 1994 among others). I also propose a preliminary analysis of the word order alternations between telic particles and objects.

2. The Small Clause Analysis  
2.1 Arguments for the Small Clause Analysis

Under the small clause analysis, an object and a telic particle together form a clause under the matrix verb.

(8) \([\text{VP} \ V \ [\text{SC} \ NP \ \text{T-PART}]]\)

A clear conceptual advantage of the small clause analysis over the functional projection analysis is that the surface word order directly reflects the base-generated positions of the elements in the former. The empirical motivation for the small clause analysis comes from a causative construction in Vietnamese. One of the causative constructions in Vietnamese involves either the causative verb \(\text{làm} \) ‘make’ or a verb of physical contact, i.e. \(\text{đánh} \) ‘hit’, followed by an object and a verb or an adjective predicated of the object (Kwon 2004). Interestingly, the word order between the object and the secondary predicate can be altered (Duffield 1998).

(9) a. Tân làm trà ngọt  
    Tân make tea sweet  

b. Tân làm ngọt trà  
    Tân make sweet tea  
    ‘Tân made tea sweet.’

---

2 In Duffield (1998), what I refer to as small clause is a projection of aspect, or aspect phrase, which is different from aspect phase in Travis (1991), which is found above VP. I refer to aspect phrase in Duffield (1998) as small clause in this paper, in order to avoid confusion.  
3 See also Rosen (2003) for an overview of the literature on syntactic analysis of aspect or event structure.
Duffield (1998) analyzes the object and the secondary predicate to form a constituent under the main verb. Under this analysis, the word order alternations described above derive from the secondary predicate incorporating into the main verb.

(10) Tân làm+ngọt [trà ngọt]

The causative construction and the ‘telic particle-object’ complexes share certain similarities. First, both the causative construction and the ‘telic particle-object’ complexes allow for the word order alternations. Second, they both create a telic interpretation of events. If the small clause analysis of the causative construction is extended to the ‘telic particle-object’ complexes, as Duffield (1998) suggests, the ‘verb-telic particle-object’ word order can be derived from the incorporation of a telic particle into the main verb.

(11) [VP V+ T-PARTi [SC NP T-PARTi]]

2.2 Arguments against the Small Clause Analysis

Despite the initial plausibility of the small clause analysis of the ‘telic particle-object’ complexes, there are reasons to believe that the causative construction and the ‘telic particle-object’ complexes are very different, and the small clause analysis should not be extended to ‘telic particle-object’ complexes. First, while the word order alternations with telic particles and objects are limited to certain NPs ((4) and (5)), the grammaticality of the word order alternations with the causative construction depends on the nature of the secondary predicate. Only when the secondary predicate denotes a result-state of the object, the alternation is possible (Duffield 1998). Therefore, with an unergative/activity verb such as khóc ‘cry’ as the secondary predicate, the alternation is ungrammatical.

(12) a. Tân làm Lan khóc
    Tân make Lan cry

b. *Tân làm khóc Lan
    Tân make cry Lan
    ‘Tân made Lan cry.’

Thus, the conditions that license the word order alternations appear to be different between the causative construction and the ‘telic particle-object’ complexes. Second, while the secondary predicates in the causative construction are clearly in a predication relation with the objects, telic particles are predicated of events, as they create telic events from otherwise atelic events. Thus, telic particles tell us nothing about the objects’ states. The telic particle ra in (13) below, for instance, provides us with no information about the state of the object, the job.

The Projection of Telicity in Vietnamese
Third, for unknown reasons, the negative marker không cannot precede the small clause complement of the causative construction, although it can appear inside of it (14). In contrast, the negative marker can precede a telic particle-object complex (15).

(14) a. *Tân làm không [sc trà ngọt]/[sc ngọt trà]
    Tân make NEG [sc tea sweet]/[sc sweet tea]

    b. Tân làm [sc trà không ngọt]
    Tân make [sc tea NEG sweet]
    ‘Tân made tea not sweet.’

(15) Dũng ăn không [hết quả táo]
    Dũng eat NEG [T-PART CL apple]
    ‘Dũng ate the apple without finishing it.’

Theses data suggest that the causative construction and the ‘telic particle-object’ complexes are different from each other both semantically and syntactically. Thus, they should not be analyzed to have the same structure.

3 The Functional Projection Analysis

In the functional projection analysis, telic particles head a projection above VP, and the word order is derived via movement of the main verb to a functional projection yet higher than the projection of telic particles (Duffield 1999).

(16) \[YP \quad V_1^+ Y [XP \quad T-PART [VP \quad V_1 \quad NP]]\]

In this section, I first show that the semantic characteristics and syntactic distribution of telic particles are consistent with the structure proposed in the functional projection analysis. Specifically, I present independent evidence for verb raising in Vietnamese, which is crucial to the functional projection analysis. I then introduce an additional argument for the functional projection analysis from a construction that creates inchoatives from statives, which involves one of the telic particles, ra.

3.1 Interpretation

Under the structure proposed in the functional projection analysis, telic particles dominate (i.e. c-command) VP (16). This structural assumption is consistent with the interpretation of telic particles, that they add telicity to otherwise atelic events, given the assumption that VP is the locus of determining the event type of a given sentence (Verkuyl 1972, Dowty 1979, Tenny 1994 among others).
3.2 Verb Raising

In the functional projection analysis, the main verb rises to a position that is higher than telic particles, deriving ‘verb-telic particle-object’ word order. In Duffield (1998), this line of analysis was rejected, assuming that the verb raising cannot be motivated for Vietnamese (ibid: 104). On the contrary, there exists independent evidence for verb raising in Vietnamese. A manner adverb such as nhanh chóng ‘quickly’ can intervene between a verb and its object, suggesting that Vietnamese main verbs move out of VP.

(17) Chúng nó bày nhanh chóng năm mươi bức tranh
   They display quickly five ten CL picture
   ‘They quickly displayed fifty pictures.’

Assuming verb raising takes place in Vietnamese, the functional projection analysis predicts that a manner adverb may also occur between a telic particle and an object, since a ‘stranded object’ alone may represent the remnant VP under the analysis. This prediction is borne out by (18).

(18) Tân tìm ra [VP nhanh chóng] [VP t$_i$ [các chương trình]]
    Tân search, T-PART [VP quickly] [VP t$_i$ [all program]]
    ‘Tân found quickly all the programs.’

Moreover, with a raised main verb, the constituency fact in (3) can be analyzed as an instance of across-the-board extraction of the main verb, as in (19).

(19) Lan tìm [ti ra sách đó] những [không [t$_i$ ra từ điển]]
    Lan search [t$_i$ T-PART book that] but [NEG t$_i$ T-PART dictionary]
    ‘Lan found the book but not the dictionary.’

Finally, the negation fact in (15) can also be accounted for, with the assumption that the negative marker không adjoins to the projection of telic particles.

(20) [YP Dũng [Y' ăn [không [XP hết [VP t$_i$ quả táo]]]]
    [YP Dũng [Y' eat [NEG [XP T-PART [VP t$_i$ CL apple]]]])
    ‘Dũng ate the apple without finishing it.’

---

4 Agbayani and Zoerner (2006) also explicitly argue that Vietnamese lacks V-to-v movement, due to lack of VP ellipsis and left-peripheral ellipsis.

5 A possible alternative analysis of (17) is that the object is post-posed. However, since extraction of the post adverbial object is grammatical (i), the post-posing analysis is unlikely.

(i) Anh ấy uống hàng ngày bao nhiêu trà?
    He drink every day how much tea
    ‘How much tea does he drink everyday?’

6 However, I have no account for why (14b) is ungrammatical at this point.
3.3 Stative-Inchoative Alternation: an Additional Argument

There is an additional set of data which provides further support for the functional projection analysis. In Vietnamese, stative predicates are simply concatenated with an NP (21a). Interestingly, when stative predicates are combined with the telic particle *ra*, the resulting sentence denotes an inchoative event. In this ‘inchoative construction’, *ra* must follow the stative predicate (21b).

(21) a. Kim đẹp/béo/giàu
    Kim pretty/fat/rich
    ‘Kim is pretty/fat/rich.’

    b. Kim (*ra) giàu ra
    Kim (*T-PART) rich T-PART
    ‘Kim became rich’

Given a clear similarity between the inchoative construction and the instances of telic particles with transitive predicates — namely, telic particles create telic events from atelic events/situations in both — a unified account is desirable.

Under the small clause analysis, (21b) would require a structure like (22), in which *giàu* ‘rich’ is the matrix predicate and *Kim* and *ra* form a small clause complement of *giàu*, with the embedded subject *Kim* raising to be the matrix subject.

(22) [Kim,giàu [sc,Kim,ra]]

(22) is quite problematic, however, as the predicate denoting the result-state, *giàu* ‘rich’, dominates the predicate providing the inchoative meaning, *ra*. It is not clear how the appropriate interpretation of the sentence can be compositionally derived from this structure, given the common assumption that an inchoative event derives from the inchoative component of the meaning operating on a state, not vice versa (i.e. Dowty 1979). Under the functional projection analysis of telic particles, on the other hand, *ra* would be the head of the functional projection above the projection of the stative predicate, with *Kim* as the embedded subject. The stative predicate would raise to the head position of a projection higher than that of *ra*, with the embedded subject *Kim* also raising to become the matrix subject.

(23) [Kim,dep [xp,ra [vp/ap,Kim,dep]]]

Thus, applying the functional projection analysis to the inchoative construction enables us to postulate a more plausible structure for the construction, in which the inchoative predicate dominates the result-state predicate. More importantly, the functional projection analysis enables us to account for the instances of telic particles with transitive verbs and the inchoative construction in a unified way.
The Projection of Telicity in Vietnamese

Thus, unlike the small clause analysis, which is only consistent with some of the data, the functional projection analysis has been shown to be consistent with and supported by the original data as well as the additional data from the verb raising and inchoative construction. In the rest of the paper, therefore, I pursue the functional projection analysis of telic particles.

4. Aspect Phrase in Vietnamese

Thus far, our analysis of telic particles suggests that there are two functional projections above VP in a Vietnamese sentence: one that is headed by telic particles, and the other that is the landing site for the raising main verbs. In this section, I first argue that the landing site for the rising main verbs is v, based on the distribution of elements around the surface position of the main verb. Second, given this analysis, as well as the unique semantic effect of telic particles, I argue that the functional projection of telic particles is aspect phrase, where aspectual information of events is syntactically encoded (Travis 1991, Borer 1994, Ritter and Rosen 1998, Diesing 1998, Rosen 2003 among others).

4.1 V-to-v Movement in Vietnamese

If Vietnamese main verbs move to a position that is higher than the projection of telic particles, an obvious question is where main verbs move to. Elements occurring in the vicinity of the main verb help us determine the main verb’s position. First, there are several elements that must precede the main verb in a Vietnamese sentence: (i) viewpoint aspect markers, such as òđã ‘perfective’; (ii) modals, such as phải ‘must’; and (iii) the subject-oriented element, tự ‘self’.

(24) Lan òđã (phải) tự tìm (*òđã) (*phải) (*tự) ra việc
Lan PERF (must) self search (*PERF) (*must) (*self) T-PART job
‘Lan found the job by herself.’

For the purpose of this study, I assume that viewpoint aspect markers and the modals head their own projections. Under this assumption, the linear order in (24) shows that Vietnamese main verbs land in the position that is lower than the projections of viewpoint aspect and modals. Within the standard assumptions about phrase structure in the Minimalist Program, such an intermediate projection would be vP or VoiceP (Kratzer 1994, 1996, Chomsky 1995).

In fact, the distribution of the third element, tự ‘self’, suggests that v is indeed the landing site of Vietnamese main verbs. As can be seen in (25) below, tự is grammatical only when a sentence denotes an event. It is ungrammatical with a locative verb ở ‘be’ or stative predicates such as giàu ‘rich’ (25a), unless the stative predicates become eventive in the inchoative construction (25b).

(25) a. Dũng (*tự) ở San Diego/già
Dũng (*self) beLOC San Diego/rich
‘Dũng lives in San Diego/is rich (*by himself).’
I take this distribution of tự to suggest that tự expresses that the subject of a given sentence is an instigator or causer of the event. Assuming that states by themselves do not involve instigation or causation, sentences with stative predicates are incompatible with tự. On the other hand, sentences that denote caused event, such as (24), and inchoative events, such as (25b), can have an instigator or causer, whether it is an external or internal force (Levin and Rappaport Hovav 1995). Thus, tự is grammatical with these sentences. If this analysis of tự is on the right track, one may argue that tự can only be adjoined to the projection introducing instigation/cause, namely, vP (Travis 1991, Harley 1995, Ramchand 2001, Folli and Harley 2005 among others).

If tự adjoins to vP, the most likely landing site for Vietnamese main verbs is v.7

Another important question is how the main verbs move to v, which I leave for future research.
The Projection of Telicity in Vietnamese

Given the syntactic position of the projection of telic particles (between vP and VP), combined with their semantic effect, I conclude that telic particles head aspect phrase.

5. Remaining Issues

The proposed analysis of telic particles leaves one interesting fact about them unexplained: the selective nature of the word order alternation between telic particles and objects. In this last section, I suggest an analysis of the word order variation with telic particles and object NPs, which divides instances of ‘telic particle-object’ complexes in two types. One is a case of complex verb formation between a verb and a bare NP object, which imposes strict adjacency between them. The other is a case of object NP licensing inside and outside of VP, which allows for an object NP to appear in two positions.

5.1 Complex Verb Formation

As seen earlier, telic particles must follow some bare NPs and cannot intervene between these NPs and the verb. This strict adjacency requirement between some bare NPs and the subcategorizing verbs appears to be independent of telic particles, however, as adverbs also cannot intervene.

(29) *Chúng nó bày nhanh chóng tranh
    They display quickly picture
    ‘They displayed quickly picture.’ (cf. (5a))

Given the general nature of the adjacency restriction, I propose that some bare nouns form complex predicates with the subcategorizing verbs. The resulting complex predicate raises to v, deriving the ‘verb-object-telic particle’ order.

(30) [vP Subj [v V+N_i] [AspP T-PART [VP V+N_i]]]

Evidence supporting the complex predicate analysis comes from an apparent “(outbound) anaphoric island” effect (Postal 1969) seen with some frequent ‘verb + noun’ combinations, as in (31).

(31) Tàn lái xe và quyết định mua pro
    Tàn drive car and decide buy pro
    ‘Tàn drove a car; and decided to buy pro.’

In (31), the pro object in the second conjunct cannot have the object in the first conjunct, xe ‘car’, as its antecedent, suggesting that xe ‘car’ cannot have the referential interpretation. Such an effect is absent with less frequent combinations, such as thử ‘try’ and xe ‘car’ in (32).

(32) Tàn thử xe và quyết định mua pro
    Tàn try car and decide buy pro
    ‘Tàn tried a car and decided to buy pro.’
5.2 Object NP Licensing inside and outside of VP

In contrast with the case of strict adjacency, some other bare NPs and quantified NPs in general can precede or follow telic particles (4). This optionality is reminiscent of the derived object positions in other languages, in which object NPs are argued to be licensed either inside or outside of VP (Mahajan 1990, Runner 1993, Diesing 1995, de Hoop 1996, Ramchand 1997). If object NPs can be licensed either inside or outside of VP in Vietnamese, the object-telic particle order obtains when an object moves out of VP (33a), while the telic particle-object order obtains when an object stays inside VP (33b).

(33) a. Tận [vP tạo [XP [nhỉu vấn đề] [VP ra [VP t_i t_j]]]]
   Tàn [vP create [XP [many problem]] [VP ra [VP t_i t_j]]]]

   ‘Tàn created many problems.’

In the languages with derived object positions, different positions of objects correlate with different interpretations of them, such as specificity, definiteness, and referentiality (the references above). With Vietnamese, there appear to be differences between two positions (Duffield 1998), yet they are not always reported. Even when they are, the nature of the differences is not clear. Thus, I leave an account for the optionality of object positions for future research.

6. Conclusion

In this paper, I have argued that Vietnamese telic particles, which intervene between verbs and their objects and create a telic interpretation of events, head an aspect phrase between vP and VP. I have also proposed a preliminary analysis of the word order alternations between telic particles and objects. If the proposed analysis is on the right track, Vietnamese adds a piece of evidence for syntactic encoding of verbal aspect (Rosen 2003 and references therein). Further data and careful analyses are required, however, in order to gain insight into a potential interaction between aspect phrase and the variability of object positions.

References


---

There is a strong preference for quantified NPs to be sentence final in Vietnamese (Simpson 2001). Whether this has a grammatical or production/processing explanation (i.e. heaviness) is not clear.
The Projection of Telicity in Vietnamese


Simpson, Andrew. 2001. Focus, presupposition and light predicate raising in East and
Fukuda


Department of Linguistics
University of California, San Diego
9500 Gilman Dr. La Jolla, CA 92093-1018

fukuda@ling.ucsd.edu