# **Aspect Marking and Modality in Child Vietnamese**

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This paper examines the acquisition of aspect morphology in the naturalistic speech of a Vietnamese child, aged 1;9. It shows that while the omission of aspect markers is the predominant error, errors of commission are somewhat more frequent than expected (~20%). Errors of commission are thought to be exceedingly rare in child speech (<4%, Sano & Hyams, 1994), and thus it appears as if these errors in child Vietnamese are more common than in other languages. They occur exclusively with perfective markers in modal contexts, i.e., perfective markers occur with non-perfective, but modal interpretation. We propose, following Hyams (2002), that these errors are permitted by the child's grammar since perfective features license mood. Additional evidence from the corpus shows that all the perfective-marked verbs in modal context are eventive verbs. We thus further propose that the corollary to RIs in Vietnamese is perfective verbs in modal contexts.

#### 1. INTRODUCTION AND BACKGROUND

There has been considerable debate regarding the acquisition of tense and aspect by young children. Studies on the acquisition of tense-aspect morphology have either attempted to make a general distinction between tense and aspect, or the more specific distinction between grammatical and lexical aspect, or they have centered their analyses around Vendler's (1967) four-way classification of the inherent semantics of verbs: achievement, accomplishment, activity, and state. The majority of the studies have concluded that the use of tense and aspect inflectional morphology is initially restricted to certain semantic classes of verbs (Bronkard and Sinclair 1973, Antinucci and Miller 1976, Bloom et al. 1980), and that the inherent lexical aspect of verbs (also known as *Aktionsart*) can have a strong influence on the development of tense-aspect morphology (Shirai and Andersen 1995).

Intertwined with the acquisition of tense-aspect morphology is the phenomenon of root infinitives (RIs) and bare forms which have been of great interest for researchers in first language acquisition in the past decade. Extensive cross-linguistic studies on root infinitives have been done to address the question of what the properties of root infinitives are and what temporal references they have as opposed to bare forms and finite verbs. The following representative examples illustrate the RI-phenomenon very common in languages such German, Dutch, French, Swedish.

(1) a. Thorsten das haben. (German)

Thorsten that have-inf.

b. Papa schoenen wassen. (Dutch)

Daddy shoes wash-inf.

c. Michel dormir. (French)

Michel sleep-inf.

d. Jag också hoppa där å där. (Swedish)

I also hop-inf. there and there

A recently growing number of studies on tense-aspect morphology have specifically addressed the interaction and relationship between tense, aspect, and mood. In this section, a brief review of the relevant literature on aspect and mood relationship is provided.

Hoekstra and Hyams (1998) addressed the importance of the properties of root infinitives and underscored the distinction between true root infinitives and English bare forms. They argue that languages that have root infinitives are subject to the Eventivity Constraint (EC): Only eventive verbs can occur in RI-constructions. In other words, non-finite verbs are typically eventive (non-stative), whereas non-eventive verbs (i.e. stative) are exclusively finite. Concurrently RIs also are subject to the Modal Reference Effect (MRE), which means that RIs receive a modal interpretation or an irrealis meaning rather than a deictic tense interpretation. Hoekstra and Hyams argue that the modal interpretation comes from the infinitival morpheme itself. English bare forms, on the other hand, are not subject to EC and MRE as they do not bear infinitival morphology. Their study shows that English bare forms occur predominantly with non-eventive verb.

Varlokosta et al. (1998) found that very young Greek children produce a 'bare perfective' form, which in adult Greek is ungrammatical. Even if Greek is a language without infinitival morphemes, these 'bare perfective' forms occurring in child Greek do share the central properties of root infinitives. The MRE of root infinitives is thus prevalent in child Greek, i.e. Greek bare perfective verbs have a modal or future interpretation. The following adult and child utterances illustrate the difference between the -i affix in adult speech the -i form in child utterance.

(2) a. O Spíros exi δiavási. (adult Greek) the Spiros has read-participle

'Spiros has read.'

b. O Spíros θa/na δiavás**i.** (adult Greek)

the Spiros fut/subj read-perf.pres.3sg 'Spiros is going to/should read.'

(3) Pio vavási. (child Greek)

Spiros read-perf.3sg

'Spiros is going to/wants to read.'

The -i affix in adult Greek reflects two homophonous forms: a perfect participle as in (2a), and the 3rd person singular perfective form as in (2b) occurring in future and subjunctive clauses. The child's verbal utterance in (3), on the other hand, is a perfective verb with an -i affix and is missing either an auxiliary, such as exi in (2a), or the modal particle  $\theta a/na$  as in (2b). Due to the absence of an auxiliary or a modal verb, the child's verbal form in (3) is referred to as a "bare perfective", but claimed by Varlokosta et al. to bear the RI-properties. They characterize the -i form in this bare perfective as a participle, on the grounds that the child's bare perfective is a non-finite, non-agreeing form, resembling more the adult version of the participle structure in (2a) rather than the future/subjunctive structure in (2b). They claim that the child -i affix is rather a participle and analogous to the child Italian bare participle, which lacks the support of an auxiliary, as exemplified in (4a) and (4b) below:

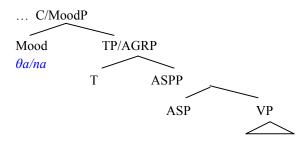
(4a) Presa Checco campana. (child Italian) taken Checco bell

(4b) Francesco ha preso la campana. Francesco have-3sg taken the bell 'Francesco has taken the bell.'

Hyams (2002) discusses the development of functional structure in the early grammar of Greek and addresses the resemblance of this bare perfective construction in child Greek to root infinitives found in RI-languages. After a thorough analysis of the structure of the bare perfective, she argues, however, against identifying the Greek bare perfectives as participles, because root infinitives and bare participles are structurally and semantically distinct. She proposes an alternative that captures the semantic property of bare perfectives, namely their very close correspondence to the modal/future structure. Thus the Modal Reference Effect of root infinitives shared by bare perfectives in Greek is a phenomenon that rather results from the match between perfective features and mood, i.e., perfective features check mood features in the syntax.

The following relative ordering of functional heads in Greek is proposed by Roussou (2000) and adopted by Hyams (2002: 251).

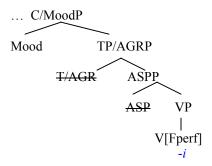
#### Adult Greek:



In adult structure, T/AGR and ASP projections are above VP. The modal and future particles  $\theta a/na$  are generated in the lower C head specified for Mood or C  $_{\text{M(ood)}}$ , hence license MoodP through Merge.

Hyams proposes that in child Greek, T/AGR is unspecified because "the bare perfective is necessarily a non-agreeing form, with the unmarked -i affix emerging as the default where AGR is unspecified" (p.258), and ASP is underspecified as the perfective verb does not bear an aspectual meaning. Hence, the irrealis interpretation of the bare perfective is given by the active MoodP, which has to be licensed by syntactic features. Hyams suggests that it is the perfective feature in the bare perfective verb that checks and licenses MoodP because there are no intervening features between Mood and the perfective verb. The structural analysis of bare perfective proposed thus involves an active Mood licensed by the perfective feature in the verb under Attract.

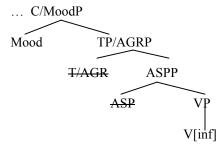
#### Child Greek bare perfective:



This explains both the modal meaning associated with the bare perfective (from MoodP), which is unexplained in VVR's participle analysis, as well as the restriction to perfective verbs...In the absence of modal particles the early grammar avails itself of the feature checking option. The adult system emerges as the modals reach adult-like productivity. We may assume, as proposed in Chomsky (1995), that Merge takes precedence over Move/Attract, such that once the modals are acquired, they push out the feature checking option. (Hyams, 2002: 258)

This proposal by Hyams (2002) not only explains the irrealis –*i* form used by Greek children, but also the vast occurrence of root infinitives in child RI-languages. In child Greek, perfective features license mood in child language. In RI-languages, it is the irrealis feature in the infinitive itself that licenses MoodP through Attract:

### Child root infinitive in RI-languages:



## 1.1 Purpose and organization

In this paper, we investigate the following questions:

- (1) What aspectual markers occur in child Vietnamese? What errors (if any) are manifested?
- (2) Is there a correlation between Aspect and Mood in child Vietnamese?

The present paper is organized as follows. Section 2 provides a brief grammatical sketch on how aspect is used in adult Vietnamese. Section 3 describes the methodology. Section 4 illustrates and analyses the necessary results, from general to specific. Some actual examples from the data are included. Section 5 turns to the gist of the paper, namely the errors of commission and the relationship between aspect and mood with regard to the data. Section 6 concludes the paper.

# 2. ADULT VIETNAMESE

Vietnamese is an SVO and isolating language, thus has no inflectional morphology. Verbs are not inflected, i.e. they never have a stem change, but there are various markers (separate morphemes) that accompany the verb to express Tense and Aspect.

There are two types of expressions for tense and aspect. One type (a set of three: dang,  $d\tilde{a}$ ,  $s\tilde{e}$ ) comprises preverbal markers. These markers are used in writing and formal conversation, except for the progressive marker đang which is also commonly used in informal conversation. The other type is a postverbal aspect morpheme, rồi. This morpheme is very common in informal conversational context.

Table 1: Tense and aspect morphemes in declaratives

Morphemes	Interpretation
Ø	present stative
Ø	present habitual
đang	present progressive
rồi	perfective
đã	past
sẽ	future

## Meaning (Ngo, 1999)

to be happening, occurring (progressive) đang rồi finished, completed, already (perfective) đã to have happened, occurred (past) to happen, occur [in the future] (future) sẽ

In reliance with the distinction between grammatical and lexical aspect explained by Shirai & Andersen (1995), all of the tense and aspect marking morphemes (T/A markers) in table 1 involve grammatical aspect, simply because they cannot stand by themselves.

The next distinction to be made is the positioning of  $d\tilde{a}$  and  $r\hat{o}i$ . All preverbal aspect markers must immediately precede the verb; no lexical item can intervene. On the other hand, the postverbal  $r\hat{o}i$  does not have to immediately follow the verb. Other lexical items can come between the verb and this morpheme. The following examples show the contrast:

- Em bé đã uống sữa. (5) a. Baby Pst drink milk. 'The baby drank milk.'
- Em bé uống sữa rồi. Baby drink milk Perf 'The baby drank milk.'

Tense and aspect can also be signaled by the use of a time adverb. When such a time adverb is used, both preverbal and postverbal aspect morphemes are optional.

One idiosyncrasy in the Vietnamese verbal system is the lack of the copula be when used with an adjective. Instead, adjectives can function as verbs. These are referred to as adjectival verbs and they are stative.

(6) Con mèo dễ thưởng. cl cat cute

'The cat is cute.'

<sup>1</sup> "GRAMMATICAL ASPECT (what Smith 1983 calls VIEWPOINT ASPECT) refers to aspectual distinction marked explicitly by linguistic devices, usually auxiliaries or inflections, as in the English progressive and Spanish, Russian, or Greek perfective and imperfective INHERENT LEXICAL ASPECT, also called SITUATION ASPECT (Smith 1983) refers to characteristics inherent in the lexical items which describe the situation. For example, *live* is inherently stative, while *jump* is inherently punctual." (Shirai and Andersen, 1995: 743/4)

### 3. METHODOLOGY

The data used for analysis is taken from the naturalistic speech of a monolingual Vietnamese female child, Kim, at the age of 1;9 (MLU = 2.0) The recording was done by the child's father primarily at home, and the last 45 minutes in the car and at the playground. The duration of the recording is approx. 3 hours on audiotape. The total number of utterances in this three-hour-stretch of data including imitations and repetitions is 897. Of these, 201 utterances were eligible for counting. These are spontaneous one-word to multiword utterances excluding imitations, repetitions, and unintelligible utterances. Out of the 201 utterances eligible for counting, 46 were nominal utterances and 155 were verbal utterances. For analysis, only verbal utterances are considered.

Table 2: Types of verbal utterances

Declaratives	118
Imperatives	37
Total	155

The types of verbal utterances used for analysis are only declaratives (118 total) as they contain aspect marking morphemes.

#### 4. RESULTS

#### 4.1 General verbal utterances

At first, a general analysis and counting of the verbal utterances was conducted. This is presented in table 3.

Type of VP / IP Occurrences Example 24 write V + N27 draw dog V + P4 go in V + (N) + Subj. NP5 hug Daddy V + V + Ndraw kick horse 1 V + N + N1 change diapers horse Subj. NP + V 25 Daddy eat Subj. NP + V + Obj. NP Daddy take milk 4 Subj. NP + V + V1 Daddy come lie 26 dirty too

Table 3: General breakdown of verbal utterances

The sentence types shown in table 3 indicate that the child is in stage I according to Brown's Stages. Her utterances are characterized as telegraphic speech.

## 4.2 General breakdown into bare verbs and bare verbs with markers

The total of 118 declaratives taken from the corpus consists of bare verbs and verbs with aspect marking (figure 1).

The next step of analysis involves a more specific breakdown, focusing particularly on correct utterances and errors. Table 4 shows the number of the child's correct uses, as well as errors in declaratives. The errors are

categorized into errors of omission and errors of commission. Errors of omission involve errors in which an obligatory inflection, a marker or morpheme, such as agreement or tense/aspect marker, is omitted. Omission errors are the predominant error type in the speech of young children. Errors of commission involve the misuse of an inflection, a marker or morpheme, for example, the misuse of a 3rd person singular marker for 1st person singular. These commission errors are exceedingly rare in child speech (usually <4%, according Sano & Hyams, 1994).

Of 118 declaratives, 36 tokens were excluded because of unclear reference, yielding a total of 82 tokens.

Table 4:	Correct use and	l errors of as	spect marking

aspect		correct	omission	commission	Total
marker	anagant stations 2	16	0	0	16
Ø	present stative <sup>2</sup>	16	U	U	16
Ø	present habitual	4	0	0	4
đang	present progressive	0	13	0	13
rồi	perfective	36	4	9	49 <sup>3</sup>
đã	past	0	0	0	0
					82

Table 4 shows a noticeably high number of the perfective morpheme  $r\partial i$  (total of 45 out of 82), with 9 tokens used incorrectly. The present progressive dang never occurs in the entire corpus – a total of 13 errors of omission. There were no errors in the present stative and habitual. No utterances with the past aspect marker  $d\tilde{a}$  and the future marker  $s\tilde{e}$  were produced at all.<sup>4</sup>

### Brief summary of the observations taken from table 4:

The child

- always uses a bare verb when a bare verb is required (present stative and habitual);
- produces the postverbal aspect making morpheme  $r \hat{o} i$  both with verbs and adjectival verbs;
- omits the copula verb 'be' and has the knowledge of using the adjective as a full verb;
- does not produce any preverbal aspect marker; consequently, she is does not refer to the progressive and the future

The following actual utterances from the data exemplify the child's typical errors of omission:

## (A) Omission of the **progressive** aspect marker:

			•
a. viết		adult form:	ba đang viết
write	;		Dad Prog write
	'Daddy is	writing.'	
o. vė	cá	adult form:	ba đang vẻ cá
draw	fish		Dad Prog draw fish
	'Daddy is	drawing a fish.'	•
c. xích	ra	adult form:	con đang xích ra
move	e out		child Prog move out
	'I'm mov	ing out.'	
để dớ	3	adult form:	con đang để dô
put ii	n	-	child Prog put in
•	'I'm putti	ng in.'	
	write  ve draw  xích move  để để	write 'Daddy is  o. vẻ cá draw fish 'Daddy is  c. xích ra move out 'I'm move để đô put in	write  'Daddy is writing.'  o. vẻ cá adult form: draw fish 'Daddy is drawing a fish.'  c. xích ra adult form: move out 'I'm moving out.' để dô adult form:

<sup>&</sup>lt;sup>2</sup> These are utterances containing the stative nature of the verb 'to be' manifested by the adjectival verb,

flower pretty too

'The flower is (very/too) pretty.'

e.g., bông đẹp quá

<sup>&</sup>lt;sup>3</sup> The total number of the perfective includes those utterances containing adjectival verbs.

The counting of perfective markers excluded those utterances in which the child omitted the verb. These utterances were just N + Asp, such as *ngựa rồi* (horse Asp) with the intended meaning of rode horse.

<sup>&</sup>lt;sup>4</sup> Our interpretation of whether the child's intended meaning in an utterance is stative habitual, progressive, or perfective is based on discourse context. The surrounding utterances, especially the parent's responses, help in determining the appropriate aspect intended by the child.

e. Kim đổ *adult form:* Kim đang đổ Kim pour Kim Prog pour

'Kim is pouring.'

f. ôm chó adult form: Con đang ôm chó hug dog child Prog hug dog

'I'm hugging the dog.'

g. ba ăn *adult form:* ba đang ăn Dad eat Dad Prog eat

'Dad is eating.'

h. ăn cháo adult form: con đang ăn cháo eat soup child Prog eat soup

'I'm eating soup.'

i. ba đi nằm *adult form:* ba đang đi nằm Dad go lie Dad Prog go lie

'Dad is going to lie down.'

j. bỏ thùng đồ quá adult form: Con đang bỏ nhiều thùng đồ. put box things too child Prog put many box things

'I'm putting too many boxes.'

## (B) Omission of the **perfective** aspect morpheme:

(8) a. má đi tắm adult form: má đi tắm rồi Mom go bathe Mom go bathe Perf

'Mom went bathing / to take a shower.'

b. ma-mi đi chợ *adult form:* ma-mi đi chợ rồi Mommy go market Mommy go market Perf

'Mommy went shopping.'

c. ba-bi ăn adult form: ba-bi ăn rồi baby eat baby eat Perf

'Baby has eaten.'

d. trúng đầu adult form: bị trúng đầu rồi bang head suffer bang had Perf

'(My) head banged / was banged.'

The research question (1), repeated here again,

(1) What aspectual markers occur in child Vietnamese? What errors (if any) are manifested?

can now be answered: The only aspectual marker that occurs in the child's speech is the perfective morpheme  $r\hat{o}i$ . Errors of omission occurred 8% of the time (4/49) with  $r\hat{o}i$ , but with the progressive markers dang they occurred all the time (100%). Interestingly, errors of commission are manifested as well: 9 out of 45 utterances containing the perfective  $r\hat{o}i$ , yielding 20%. It is these errors of commission that we now turn to in the remainder of the paper.

### 5. DISCUSSION

## **5.1 Errors of Commission**

Errors of commission from the data set involve errors occurring exclusively with perfective markers in modal contexts, i.e. perfective morpheme  $r\hat{o}i$  occurs with non-perfective, but modal interpretation, as shown in (9):

(9) child form: adult form:
vẻ cá **rồi** Con muốn vẻ cá.
draw fish Perf. child want draw fish

'I want to draw a fish.'

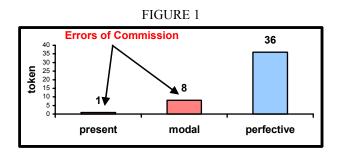
Table 5 below shows the child's use of the perfective marking morpheme  $r\hat{o}i$  for meanings other than the perfective. The perfective marking is overextended and overgeneralized to the present (1 token) and the modal meaning (8 tokens). The child overuses the perfective aspect marking morpheme  $r\hat{o}i$  to refer to mood.

Table 5: Temporal and mood reference of perfective verbs

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	Present	Perfective	Modal	Total utterances
				containing <i>rồi</i>
	1	36	8	45
	(2%)	(80%)	(18%)	
	1		1	

Commission errors

Figure 1 illustrates the proportion of these commission errors in relation to the correct use of the perfective marker. The rate of errors of commission: 9/45 (20%).



#### COMMISSION DATA

The following actual examples from the present data will illustrate this commission phenomenon:

#### (A) Present

The only one time the child makes an error in the overuse of the perfective aspect marker  $r \delta i$  to mean the present is the following:

(10) Kiến nhỏ quá rồi.

Ant small too Asp

'The ants were too small.'

Intended: 'The ants are too small.'

This utterance was produced when the child was sitting on a bench and ants suddenly started to come out. In this context, the present should have been used (without the aspect marker  $r\hat{oi}$ ), but the child used the perfective. This is evidence for an error of commission.

## (B) Modal

All the remaining times, the child's intended meaning is modal, as exemplified in the following three actual samples from the data:

This utterance takes place at the playground. The child has been playing on the slide for a while and the father spent the last five minutes talking on the phone. The child wanted to sit down on the bench but there were ants that bit her, so she wanted to go home.

It is clear from the context that Kim wanted to go home. She got bit by the ants and the father's response shows that he agreed that they should go home.

The next stretch of utterances is taken from home. Right before this, Kim repeatedly asked her Dad to draw a fish for her, and he didn't do it. In this utterance, she wants to draw it herself. Note that sometimes Kim uses the verb 'write' for 'draw'.

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(12) CHI: vẻ - viết rồi - viết - viết rồi - viết (child makes very demanding sounds) viết (9x)
draw - write Asp - write - write Asp - write ..... write
'Draw - I want to write - Want to write - write .... write (9x)'
DAD: hả? cái gì? hả? hả? cái gì đây? Kimbi lấy đi, lại đay 3x, lại hung ba 'n miếng ba lấy, hung ba miếng huh? what? huh? huh? what's the matter? Kimbi take IMP - come here - come kiss Daddy a piece '.....Kimbi, take (it) - come here - come here give Daddy a kiss.'
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The father's response, 'take it' signifies that it = pen. So he finally understood her desire to draw. The father's multiple short utterances for clarification indicate that he is confused about what his child wants. It would be inappropriate to code the child's utterance  $vi\acute{e}t$   $r\grave{o}i$  as wrote as it is very unlikely that the child says wrote if it did not write anything before. Father and Kim had been conversing in the last 40 minutes, and there was no clue at all from the tape that Kim wrote anything.

The context for the dialogue listed below between father and child is that Dad has already changed Kim's diapers, as is understood from the stretch of verbal exchange preceding this one. In this dialogue, the child still wants her diapers to be changed:

```
(13) CHI:
              thay
                     tå (2x)
              change diapers
              hả? thay tả
                                  rồi
    DAD:
              huh? change diapers Asp
              'Huh? I changed the diapers.'
    CHI:
              thav tả
              change diapers
    DAD:
              thay rồi
              change Asp
              'I changed.'
    CHI:
              thay tả
                                                nữa rồi (2x)
                            rồi - thay tả
              change diapers Asp – change diapers again Asp
              'I want to change diapers – I want to change diapers again.'
```

The crucial hint for coding the last utterance as having modal meaning is the word *nita* (*again*). It would be inaccurate to code it as perfective because Dad changed the diapers <u>only once</u> before, so the child cannot mean to say *changed diapers again*, but she wants her diapers to be changed again at the moment she produces this utterance. Thus, the incorrect use of the perfective aspect marker together with the bare verb here signifies mood.

## **5.2** Eventivity Constraint and Modal Reference Effect

Although the Vietnamese child utterance  $v^{\dot{e}}$   $c\acute{a}$   $r\grave{o}i$  in (9) is clearly non-infinitival due to the presence of the perfective morpheme, it appears to have a resemblance to the Greek bare perfective verbs and the root infinitives in RI-languages. Our proposal is thus the following:

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<u>Hypothesis</u>: Vietnamese perfective aspect marker, analogous to the Greek 'bare perfective' (Varlokosta et al. 1998), can also have RI-like properties.
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Recall that root infinitives are known to be subject to the Modal Reference Effect, which entails that they typically have an irrealis or modal meaning. Since the Eventivity Constraint is derived from the Modal Reference Effect, the most appropriate way to test our hypothesis is to investigate whether the Eventivity Constraint holds in child Vietnamese child verbal utterance.

Eventivity Constraint (Hoekstra & Hyams 1998)

- a) Non-finite verbs are typically eventive (non-stative)
- b) Stative verbs are exclusively finite

To determine the eventivity of the child's verbal utterances, we examined all the verbs that occurred with the modal  $r \hat{o} i$  and all the verbs that occurred with the perfective  $r \hat{o} i$ , in terms of their inherent lexical aspect (Shirai and Andersen 1995), along the lines of the four-way inherent-aspectual classification (Vendler), as shown in table 6 below:

Table 6: Vendler's (1967) four-way classification of the inherent semantics of verbs (in Shirai and Andersen 1995):

Semantic type	<u>Definition</u>	<u>Example</u>
STATE (non-eventive)	that which has no dynamics, and continues without additional effort or energy being applied	see, love, hate, want, etc.
ACTIVITY (eventive)	that which has duration, but with an arbitrary endpoint, and is homogeneous in its structure. For example, in <i>John is running</i> , at every moment the fact of his running has the same quality of running	run, sing, play, dance, etc.
ACCOMPLISHMENT (eventive)	that which has some duration, but has a single clear inherent endpoint	run a mile, make a chair, build a house
ACHIEVEMENT (eventive)	that which takes place instantaneously, and is reducible to a single point in time	recognize, die, reach the summit, etc.

Each verb was classified according to this schema, and the results are presented in tables 7 below.

Table 7: Verb occurring with modal  $r \hat{o} i^5$  Verb occurring with perfective  $r \hat{o} i$ 

Verb	Gloss	Type	Eventi- vity	Verb	Gloss	Type	Eventi- vity
vẻ	draw	Act.		chật	is tight	Stat.	
viết	write	Act.		dσ	is dirty	Stat.	
để	put	Acc.		nắng	is sunny	Stat.	
để dô	put in	Acc.		nóng	is hot	Stat.	
đánh răng	brush teeth	Acc.	√ 	thay tả	change diapers	Acc.	$\sqrt{}$
thay tả	change diapers	Acc.	<b>√</b>	ăn (N)	eat (N)	Acc.	√ 
đi về	go home	Ach.	V	đánh răng	brush teeth	Acc.	V
				gấy	break	Ach.	$\checkmark$
				về	come	Ach.	
				ngå	fall	Ach.	
				té	fall	Ach.	
				ướt	get wet	Ach.	V
				đổ	spill	Ach.	
				đi	leave	Ach.	
				ra	come out	Ach.	V
·				trời mưa	start to rain	Ach.	

The results from table 7 indicate that all the verbs that appear with the modal  $r\hat{o}i$  are eventive and all the verbs that appear with the perfective  $r\hat{o}i$  are both eventive and non-eventive. There were a total of 8 utterances occurring

<sup>&</sup>lt;sup>5</sup> The classification of the inherent lexical aspect of the verbs in this table is based on Shirai and Anderson (1995: 754-6). For some of the verbs that are not listed in Shirai and Anderson, we based the classification on our own interpretation and inferences from the description given in Vendler's schema.

with modal  $r \partial i$  and 36 utterances occurring with perfective rồi. In the left part of table 7, one of the verbs occurs twice in modal context. Hence 7 verbs are listed but the total number of occurrences is 8. In the right part of table 7, some of the verbs occurred more than once. Hence 16 verbs are listed but the total number of occurrences is 36.

The contrast between modal and perfective use of the perfective morpheme  $r \hat{o} i$  is summarized in table 8.

Table 8: Eventivity with *rồi* 

	eventive	non-eventive
Modal rồi	8	0
Perf. rồi	26	10

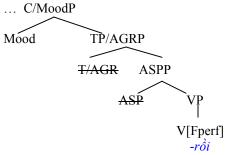
The Eventivity Constraint holds true based on the following pieces of evidence from the data:

All modal  $r \delta i$  utterances are eventive. The claim we would like to make is that the Vietnamese child modal  $r \delta i$  constructions are equivalent to the RI-construction due to the MRE that obtains in these constructions, i.e. the modal or irrealis meaning obtains in these modal  $r \delta i$  utterances. The discussion in the next section can account for this claim.

## **5.3 Aspect-Mood connection**

First, the modal features in the Vietnamese child modal  $r \partial i$  construction are licensed in the syntax, hence the incompatibility with non-eventives. Roussou's syntactic structure proposal and Hyams' structural analysis of child Greek can be applied here:

Child Vietnamese perfective verb:



In child Vietnamese modal perfective construction, ASP is underspecified as the perfective verb used in modal context does not bear an aspectual meaning. Hence, the modal/irrealis interpretation of the perfective verb, V[Fperf]- $r\hat{o}i$ , is provided by its perfective feature under Attract. In other words, analogous to child Greek, perfective features check mood in child Vietnamese, hence there is a modal reference with perfective  $r\hat{o}i$ .

Second, the properties that Vietnamese modal perfectives share with Greek bare perfectives and root infinitives constitute another convincing piece of evidence for the claim we made above that the Vietnamese corollary to root infinitives corresponds to perfective verbs in modal contexts.

Table 9: Shared properties
Root infinitive and Greek bare perfective

Vietnamese modal perfective

<sup>&</sup>lt;sup>6</sup> The only statives occurring in the data are adjectival verbs (be + Adj.).

DATA: (Spiros 1;9) Ego katiti I sit-PERF-3.sg.

'I am going to/want to sit'

CHARACTERISTICS:

- are overwhelmingly eventive

- express modal meaning (MRE)

DATA: (Kim 1;9) Vẻ rồi draw PERF.

'(I) am going to/want to draw.'

CHARACTERISTICS:

- all perfective-marked verbs in modal context are <u>eventive</u>

-express modal meaning (MRE)

#### 6. CONCLUSION

Errors of commission are not that rare (up to 20%, 9 out of 45), unlike <4% as reported in Sano & Hyams, 1994. The particular errors of commission are not random, but are permitted by the child's grammar because perfective features license Mood. This answers the research question (2): There is a correlation between Aspect and Mood in child Vietnamese. The Vietnamese perfective verb in modal context is the equivalent of the root infinitive in German/Dutch/French/Swedish and the bare perfective in Greek.

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