

Variable Production of L2 English Unaccusatives by L1 Thai Speakers

Nattama Pongpairoj & Nabhidh Kijparnich

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Abstract

The paper reports on L2 English unaccusative verb production by two groups of undergraduate L1 Thai students from two universities. The L2 learners' English proficiency was at the intermediate level. Two sets of data were obtained, one of which was derived from the grammaticality judgment test (GJT) and the other from a corpus by Thai learners of English. The study predicted that L1 Thais would show impaired judgment in the use of English unaccusatives and that misjudgment data from the two learner groups would be at approximate levels. Also, the learners were predicted to make two types of misjudgment, i.e. incorrect judgments in both active and passive unaccusatives. The statistical results from a dependent *t*-test from the GJT support the predictions. The data from the corpus also exhibited the L2 learners' variable production of English unaccusatives. The Thai-speaking learners tended to overgeneralize passive morphology to unaccusatives. In line with the Failed Functional Feature Hypothesis within the framework of generative grammar, it is assumed that the parameter of unaccusatives not instantiated in the L1 Thai grammars are not attainable by the learners. Such non-existence of L2 unaccusative verbs in the L1 is postulated to have a negative impact on L2 acquisition as the production is not syntactically-triggered. The results contradicted the Missing Surface Inflection Hypothesis as it cannot explain variability in the production of L2 English unaccusatives by L1 Thais. The implications of the results are considered with regard to the debate on the causes of L2 variable production of functional morphology.

Keywords: (variable production, unaccusatives, L1 Thai, L2 English)

1. Introduction

Variability in second language (L2) production of functional features, even among adult learners, is well-documented (cf. Goodluck 1991; Ellis 2009; Lardiere 2000; Prévost and White 2000; Hawkins 2000, 2001; Ionin and Wexler 2002; White 2003; Jiang 2004; White et al. 2004; among others). Proposals have been made as to why post-childhood learners encounter considerable problems in producing some aspects of L2 functional features. One aspect of English commonly known to cause persistent difficulties to L2 learners is unaccusative verbs (cf. Yip 1990; Balcom 1997; Yuan 1999; Oshita 2000; Su 2008; among others). The aim of this article is therefore to investigate the causes of variable production of English unaccusatives among Thai-speaking learners.

The organization of the paper is as follows. Section 2 discusses two perspectives on L2 variable production of functional features. Section 3 presents English unaccusative verbs. In relation to this, Section 4 examines if this type of verb exists in Thai. Section 5 looks into some studies of variability in the production of L2 English unaccusatives. It is shown why variable production of L2 English unaccusative verbs by L1 Thai speakers needs to be investigated. Sections 6 and 7 report on empirical studies employed to explore variable production of L2 English unaccusatives by L1 Thai speakers, with data

presentations and analyses of the results. Section 8 discusses the findings and implications based on the theoretical assumptions. Section 9 concludes the study.

2. Two perspectives on L2 variable production of functional features

Within the framework of generative grammar, there exist two perspectives on variability in L2 production of functional features. The first perspective attributes variability to processing problems in production whereas the alternate view postulates that non-target-like syntactic representations cause problems in L2 production.

According to the first perspective, L2 learners are assumed to possess fully specified syntax despite non-existence of L2 functional feature values in the L1. Variability in production occurs due to problems in accessing the representations (cf. Haznedar and Schwartz 1997; Herschensohn 2001; Herschensohn and Stevenson 2003; Slabakova 2003; Ionin and Wexler 2002; Lardiere 1998a, b, 2000; Lardiere and Schwartz 1997; Prévost and White 1999, 2000; Sorace 2000; White 2003a; White et al. 2004; Sundquist 2005; Bergeron-Matoba 2007; among others). Under Universal Grammar (cf. Chomsky 1986), L2 acquisition is based on universal innate knowledge (cf. Larsen-Freeman and Long 1991). Thus, it is assumed that an L2 feature non-existent in the learners' L1 does not result in inappropriate L2 behaviors. The Missing Surface Inflection Hypothesis (MSIH) is a hypothesis based on this account.

The second perspective explains variability in terms of syntactic deficit. According to this view, Universal Grammar is partially accessed in L2 acquisition via L1. Non-existence of L2 functional feature values in the L1 is postulated to have a negative impact on L2 acquisition. As a result, parameters not instantiated in the L1 are not attainable by L2 learners (cf. Tsimpli and Roussou 1991; Smith and Tsimpli 1995; Hawkins 2000, 2001, 2003; Hawkins and Chan 1997; Beck 1997, 1998; Eubank and Grace 1998; Tsimpli and Stavrakaki 1999; Franceschina 2001a, b, 2002; Liszka 2002; Hawkins and Liszka 2003; Hawkins and Franceschina 2004; among others). A hypothesis favoring this account is the Failed Functional Features Hypothesis (FFFH).

3. English Unaccusativity

The phenomenon known as "unaccusativity" in English has attracted considerable attention from L2 researchers since Perlmutter (1978) proposed the Unaccusative Hypothesis. The hypothesis holds that there are two subclasses of intransitive verbs: unaccusatives (e.g. *arrive, appear, come, leave, occur, exist, thrive, emerge, remain, seem, die, thrive, emerge, arise, fall, glisten, transpire, drift, elapse*¹), and unergatives (e.g. *laugh, telephone, speak, walk, smile, talk, grin, frown, lie, bark, sleep, jump, yawn, run, shout, play, paddle*²). Both types of intransitive verbs exhibit distinct underlying representations:

¹ See more examples in Perlmutter (1978) and Levin (1993)

² See more examples in Perlmutter (1978) and Levin (1993)

- (1) a. Unaccusative: $[_{IP} [_{NP} \textit{Three girls}_i] [_{VP} [_V \textit{arrived}] [_{NP} t_i]]]$
 b. Unergative: $[_{IP} [_{NP} \textit{John}_i] [_{VP} [_{NP} t_i] [_V \textit{spoke}]]]$

The unaccusative *arrive* in (1a) originally has an underlying object *three girls* as an internal argument, thereby assuming the participant role Theme (a participant affected by the event denoted by the verb *arrive*) but lacks an underlying subject. The underlying object *three girls* (the internal argument of *arrive*) moves to a subject position to serve as a surface subject in order to satisfy the syntactic requirement in English. On the other hand, the unergative *spoke* in (1b) originally has an underlying subject as an external argument which bears the participant role Agent (the instigator of an event/action denoted by the verb *spoke*). Syntactic configurations pertaining to unergative and unaccusative verbs at the underlying level of representation, i.e. the D-structure and the surface level of representation, i.e. the S-structure are shown in Table 1:

	D-Structure	S-Structure
Unergative	$[_{IP} e [_{VP} \textit{John} [_V \textit{ran}]]]]$	$[_{IP} \textit{John}_i [_{VP} t_i [_V \textit{ran}]]]]$
Unaccusative	$[_{IP} e [_{VP} [_V \textit{fell} \textit{John}]]]]$	$[_{IP} \textit{John}_i [_{VP} [_V \textit{fell} t_i]]]]$

Table 1: Syntactic configurations of unaccusative and unergative verbs

Within the Government-and-Binding paradigm, Chomsky (1980; 1981) proposes that unaccusative verbs have a D-structure object which moves obligatorily into subject position at S-structure. No such movement is required for unergative verbs which already have a subject present at D-structure.

4. Previous studies of L2 English unaccusative verbs

Much research has been done in the past two decades on the acquisition of unaccusative-unergative verbs by L2 learners to investigate the universality and the validity of Perlmutter's Unaccusative Hypothesis in English. Intransitive verbs do not require a grammatical object. However, as mentioned in Section 3, the structure of both unaccusative and unergative verbs surfaces identically as S-V in English, but they have distinct underlying representations. It seems that L2 learners treat the structure of unergatives and unaccusatives as if observing the distinction between the two types of verbs. For example, the unaccusative verbs co-occurring with the auxiliary *be* and the past participle are evidenced in L2 learners' English interlanguage. Kondo (2005) argues that unaccusative verbs are syntactically akin to passive verbs in that the internal argument moves from an object position to a subject position. However, unlike the English passive construction which carries the morphological reflex of *be + past participle* as in (2a), when a Theme argument of an unaccusative verb moves to a subject position, there is no morphological reflex accompanying such a type of NP-movement as in (2b).

- (2) a. $[_{IP} [_{NP} \textit{John's uncle}_i] [_{VP} \textit{was killed} [_{NP} t_i]]]$
 b. $[_{IP} [_{NP} \textit{The problem}_i] [_{VP} [_V \textit{arose}] [_{NP} t_i]]]$

Previous studies show that L2 learners tend to overgeneralize passive morphology to intransitive verbs and it is usually argued that they are more likely to do this with unaccusatives than with intransitive unergatives. Levin and Rappaport Hovav (1995) propose the semantic determinant to differentiate unergatives from unaccusatives, that is to say, an event denoted by an unergative verb is internally caused, because its subject referent is solely responsible for, or instigates, the event. Hence, some property intrinsic to the argument of the verb (i.e. volition and intentionality) assumes responsibility for a lower likelihood of overpassivization by L2 learners with unergatives (e.g. *run, laugh, smile*) than with unaccusatives (Levin 1993; Levin and Rappaport Hovav 1995; Montrul 1999). On the contrary, unaccusatives tend to be externally caused, (e.g. *happen, arise, appear, emerge*), since the events denoted by unaccusatives are not caused by their subject referents, but rather external power. It could be therefore claimed that L2 learners are more likely to passivize unaccusative verbs which are claimed to be externally caused than unergatives (Kondo 2005).

A number of studies found variable production of L2 English unaccusative verbs; i.e. passive unaccusatives such as Chinese (Su 2008; Oshita 2000; Yuan 1999; Balcom 1997; Yip 1990), Japanese (Kondo 2005; Hirakawa 1995, 2001; Oshita 2000), Italian (Oshita 1997), and Spanish (Kondo 2005; Montrul 1999; Oshita 1997).

The reason why overgeneralization of passive morphology to unaccusative verbs can be found in L2 production might be that neither passive nor unaccusative predicates need a logical subject in the argument structure of the verbs (Zobl 1989; Balcom 1997). Therefore, to resolve the overgeneralization issue, it is further speculated that L2 learners may associate the lack of the logical subject in the surface structure with passive morphology in syntax. Yip (1990) assumes that learners are likely to reject grammatical unaccusatives and overextend passive morphology to unaccusatives due to their assumption that unaccusatives are derived from transitives. Furthermore, Oshita (1997) assumes that L2 learners might extend the use of passive morphology to unaccusative verbs might treat the passive morphology with unaccusatives, i.e. the *be + past participle* form as an overt marker of NP movement, i.e. moving the object NP to the subject position, syntactically required by both passives and unaccusatives. That is, in L2 learners' grammar, Theme subjects are likely to take passive morphology on the verb (Su 2008). Oshita (2000) and Yip (1990) claim that L2 learners probably perceive that a Theme subject is being acted upon and tend to overgeneralize passive morphology to unaccusative verbs. In the case of L1-Thai speaking learners, Simargool (2006) reported that the learners overgeneralize passive morphology to unaccusatives verbs since they assume that any sentence with unaccusatives containing a Theme subject should have an overt marker, herein *be + past participle*, whenever the surface subject bears the Theme role, and that the implicit Agent role underlies the specific event.

A number of studies have been conducted on the variable production of English unaccusatives by learners from some native language backgrounds. However, there has hardly been any research on L2 acquisition of English unaccusatives by native speakers of Thai, except for Simargool (2006)'s small-scale study. The aim of this study is thus to investigate the causes of variability in English unaccusative production among L1 Thai speakers.

5. Intransitive verbs in Thai

Thai is an isolating language and thus lacks inflectional morphosyntactic categories such as case-marking, person, number, gender, mood, and voice (Lekawatana et al. 1968; Warotamasikkkhadit 1972; Panthumetha 1982; Pankhuenkhat 1998; Thonglor 2004; Iwasaki and Ingkaphirom 2005). There is no tense and agreement marking in a Thai clause, and no distinction between finite and non-finite verb forms. Thepkanjana (1992) and Iwasaki and Ingkaphirom (2005) claim that Thai verbs cannot be classified neatly into transitive and intransitive subclasses; rather, they constitute a continuum of relative degrees of transitivity, which enables some transitive verbs in Thai to allow a direct object to be omitted in an appropriate context. Interlocutor intelligibility is facilitated through discourse contexts.

Unlike English, it is assumed that unaccusativity is not manifested in Thai. There have not been any diagnostics to prove that Thai intransitive verbs do fall neatly into unaccusatives and unergatives. However, the closest reliable account as to the classification of intransitives in Thai would go to Thepkanjana (1992), who distinguishes intransitives on the basis of volitional and nonvolitional controls. Volitional intransitive verbs are likely to bear an Agent subject (i.e. body motions such as /*khlaan*/ 'crawl,' /*wîn*/ 'run,' /*tên*/ 'dance,' etc; unspecified body actions such as /*rîip*/ 'hurry,' /*phákph* (rest,' etc; and verbalizations (vocalizations) such as /*ph* (murmur,' /*hàw*/ 'bark,' etc), while nonvolitional intransitive verbs are likely to bear a Patient/Theme/Experiencer subject (i.e. intransitives indicating processes such as /*buam*/ 'swell,' /*rúan*/ 'fall,' /*nâw*/ 'become rotten,' etc; and intransitives indicating states and properties such as /*talòk*/ 'be funny,' /*sūay*/ 'be beautiful,' /*kròop*/ 'be crispy,' etc. It can thus be assumed that unaccusatives is non-existent in Thai.

6. Hypotheses

The two contrasting perspectives discussed in (2), i.e. the explanations for variable production of functional structure in terms of target-like and non-target-like syntactic representations, would predict different L2 behaviors in English unaccusative verb production by L1 Thai speakers. The two hypotheses based on the two perspectives, i.e. the Missing Surface Inflection Hypothesis and the Failed Functional Features Hypothesis were tested:

H1 (the Missing Surface Inflection Hypothesis): Incorrect production of L2 English unaccusative verbs by L1 Thai speakers does not result from syntactic impairment but from problems of syntax-morphology mapping or accessing target-like grammars in production.

H2 (the Failed Functional Features Hypothesis): Variability in L2 English unaccusative verb production by L1 Thai speakers is caused by non-target-like grammars, i.e. non-existence of unaccusatives in Thai.

7. The Studies

To examine the issue of L2 variable production of English unaccusatives by L1 Thais, two studies were employed: A corpus study (7.1) and a grammaticality judgment test (7.2). The rationale for each study is formulated, followed by the objective of the study, materials and procedures, including the selection of participants. Data are presented and results are then analyzed.

7.1 The Corpus Study

The reason why the corpus study was used was largely in light of the availability of a sample size of written English in the hope that the corpus chosen (see 7.2.1) would meet the shortcomings in databases of written English produced by L1 Thais of L2 English.

7.1.2 Method

7.1.2.1 The Corpus

The data were retrieved from the Thai English Learner Corpus (TELC) with the total size of 880,000 words. Assembled from writing assignments (e.g., essays, reports, journals), the corpus is a medium-scale computerized database produced by first-year Thai-speaking undergraduate students majoring in English from two universities in Thailand: Chulalongkorn University and Thammasat University (Departments of English at the Faculty of Arts and Faculty of Liberal Arts, respectively).

The participants were considered homogenous due to two reasons. One reason is that these L2 learners passed the national entrance examination, whose required subjects include English. The other reason is that there is very limited space per academic year to accommodate students who want to major in English in the two universities and so there are certain criteria used to select English majors. That is, at Chulalongkorn University, seats for English majors are usually designated for students obtaining the required grades from a number of obligatory English courses. At Thammasat University, the selection criterion is based on eligible top scorers on the national English entrance examination. The participants' English proficiency was at the intermediate level as categorized beforehand by the TELC.

The study focuses primarily on eight unaccusative verbs: *appear*, *disappear*, *happen*, *die*, *occur*, *arrive*, *exist*, and *fall*. The verbs were selected based on Perlmutter's (1978) list of unaccusative predicates claimed to be semantically and syntactically comparable, i.e. predicates that are Theme/Patient, and express inherently directed motion (e.g. *arrive*, *fall*), existence (e.g. *exist*), appearance (e.g. *appear*), disappearance (e.g. *die*, *disappear*), and occurrence (e.g. *happen*, *occur*) (Levin 1993; Levin and Rappaport Hovav 1995). The selection was also primarily due to the existing literature which has documented common occurrences of these verbs in the form of passive unaccusatives (Yip 1990; Hirakawa 1995; Balcom 1997; Oshita 1997; Kondo 2005; Montrul 1999; Yuan 1999; Oshita 2000.)

Concordance lines were extracted through search criteria which took in infinitive, past tense and past participle forms of the same verb. Given an unaccusative verb like *fall*, hence, *fall*, *fell* and *fallen* were to be analyzed. If any token sentences failed to sufficiently

contribute to the interpretation of the misuses of the verb intended by the learner, the additional, both preceding and following, lines were drawn for further consideration.

7.1.2.2 Data and Results

In this section, we examine the passive unaccusative structure retrieved from the corpus. Out of 1,037 sentences, 49 token sentences (concordances) produced with passive unaccusatives, which is 4.73 %, were extracted, as illustrated in Table 2.

Unaccusative Verbs	Passive Unaccusatives (be + past participle)
happen	21
die	16
occur	5
disappear	2
arrive	2
fall	2
appear	1
exist	0
Total	49

Table 2: breakdown of tokens of passive unaccusatives into each unaccusative verb

The following present some examples of passive unaccusatives extracted from the corpus.

(2) 'happen'

- a. *Auttoe was imbedded with his jet-ski. The accident *was happened* because Auttoe's jet-ski was crashing to the banana boat....
- b. *I never thought that a terrible event would *be happened* in my dormitory.
- c. *In one day, the sadly event *was happened* to me when I came from study.

(3) 'die'

- a. *My favorite pets are cat and dog. Both cat and dog *were died* because they cross the street,....
- b. *Owen *was died* from car cashing.
- c. *The car fell into abyss. He was only one person that *was died*.

(4) 'occur'

- a. *...allow readers to imagine about things that will never *be occurred* in reality. I am certain that people would do their job....
- b. *They bring a hundred of alive human to sacrifice by torturing and killing them *is occurred* at the midnight in order to show their loyalty to the Satan.
- c. *Finally, this fair *is occurred* only once every 3 years.

It can be seen that, among the eight unaccusative verbs examined, 'happen' and 'die' were most frequently found in the passive unaccusative patterns, which were 21 and 16 tokens

respectively, followed by 'occur' (5 tokens). Only 2 tokens with 'disappear', 'arrive' and 'fall' were found, but no occurrence of 'exist' was found.³

7.2 The Grammaticality Judgment Test

The grammaticality judgment test (GJT), which is a means of exploring learners' knowledge of grammatical structures, is widely employed in the area of L2 acquisition as the results are assumed to reflect learners' syntactic knowledge. A theoretical rationale for employing GJT data was that they could distinguish competence, i.e. internalized mental knowledge and performance, i.e. actual language use (Ellis 1990). Sorace (1985: 240) claims "the learner's interlanguage representations cannot be accessed directly, but only through her intuitions of grammaticality." Thus, it can be assumed that GJT data play a role as a window into L2 learners' linguistic competence as they exhibit what the learners know, which is not the same as what they do.

GJT was considered appropriate to be used in this study due to two reasons. The first reason is that as unaccusatives rarely appear in L2 learners' naturally occurring data, it was expected that manipulating the sentences in the test would elicit data on the use of unaccusative verbs. More importantly, as mentioned above, it is commonly assumed that judgment data could reflect underlying knowledge of a morphosyntactic form. Thus, it was anticipated that the data yielded from the grammaticality judgment test could be used to investigate if the L1 Thais in the experiment possess internalized mental knowledge of English unaccusatives.

7.2.1 Method

7.2.1.1 Participants

There were two L2 learner groups in this experiment. One participant group was first-year undergraduate students of the Faculty of Arts, Chulalongkorn University and the other group was first-year undergraduate students of the Faculty of Liberal Arts, Thammasat University. All the students were enrolled in the academic year 2010. Each group was composed of 20 participants.

The reason why the participants were selected was mainly based on homogeneity, i.e. similar ages and educational background. The participants were in their first year of the undergraduate level. At the time of the experiment, they were 18 years old on average and had received approximately 12 years of formal English instruction before taking an entrance examination to the university. It is widely accepted that students who can pass an entrance examination to the two faculties of the two universities have approximately the same level of English skills.

The data from the grammaticality judgment test were comparable to those retrieved from the corpus since the corpus contains language production by freshmen of the two faculties of the two universities (see 7.1.1). So, it can be considered that the participants from the two studies were sufficiently homogeneous enough in terms of English proficiency levels and there were no outliers to bias statistics in the data (Field 2004).

³ It is worth exploring in future research the non-existence of the unaccusative verb "exist" in the result.

Besides the L1-Thai speaking groups, a native English control group (5 participants) was included so that baseline data, i.e. data on English unaccusatives judged by native speakers of English would be looked at. The native English participants were in the same age range (i.e. in their 30s) and had received undergraduate degrees.

7.2.1.2 Materials and Procedures

A grammaticality judgment test was designed for English unaccusative verbs. To be consistent with the data retrieved from the corpus, the test focused on 8 unaccusative verbs, i.e. *appear*, *disappear*, *happen*, *die*, *occur*, *arrive*, *exist*, and *fall* (See 7.1.1.2 for the criteria used in the selection of these verbs). The test was composed of 40 items, 16 of which were on the use of unaccusatives. The other 32 items were distracters on other English grammatical aspects. Each sentence consisted of one underlined part which the participants were required to judge whether it was grammatical or ungrammatical. All the items were arranged in random order.

Each unaccusative verb appeared twice, i.e. 2 items. One item was on the correct use of the verb and the other was on the incorrect use, the passive unaccusatives in this case. For consistency, the variables concreteness, countability and singularity were kept constant in all the NPs with which the unaccusative verbs appeared in the test items (See appendix 1).

The test was administered in a classroom environment. The participants were given 30 minutes to do the test. They were instructed not to revise the answers and to hand in the test paper once they finished the task. Also, the participants were informed that their personal information would be kept confidential.

Each participant's total number of incorrect answers was added up. The incorrect judgment items were calculated relative to the total number of contexts where unaccusative verbs appeared. The two types of misjudgments in the use of unaccusative verbs, i.e. judging that the passive construction of unaccusative verbs was correct and judging that the active construction of unaccusative verbs was incorrect were first combined. Examples of the two types of misjudgments are shown below.

- (5) a. ___ The movie star was appeared at the awards ceremony.
 b. ___ It is not clear yet when this animal appeared on earth.⁴

Comparisons of the two types of incorrect judgment were then also looked into.

The statistical method employed was a dependent *t*-test (i.e. a paired-samples *t*-test). It was used to investigate two things. Firstly the *t*-test was used to determine the significance of the participant groups' grammatical misjudgments in the use of English unaccusative verbs. Secondly, it was used to determine two types of incorrect judgment data, i.e. incorrectly judging that English passive unaccusatives are appropriate and incorrectly judging that English active unaccusatives are inappropriate (See details in Section 8).

⁴ Note that, in the test, items with the same unaccusative verb were not placed next to each other (see Appendix 1).

7.2.1.3 Predictions

Based on the hypotheses in (6), the predictions for the grammaticality judgment test were as follows:

If the assumption of the Missing Surface Inflection Hypothesis is correct and variable production of L2 English unaccusative verbs is not caused by impaired syntax but by mapping between syntax and morphology, the following predictions could be made:

- (a) The L1 Thai speakers would be able to judge correct and incorrect use of English unaccusative verbs.
- (b) Appropriate judgment data from the two L2 participant groups would be at a consistent level.

If the assumption of the Failed Functional Features Hypothesis is correct and variability in L2 production of English unaccusative verbs does not result from accessing target-like grammars in production, the following predictions could be made:

- (a) The L1 Thai speakers would show poor judgment in correct/ incorrect use of English unaccusative verbs.
- (b) Impaired judgment data from the two L2 participant groups would be at a consistent level.
- (c) The two types of incorrect judgment data, i.e. incorrectly judging that English passive unaccusatives are appropriate and incorrectly judging that English active unaccusatives are inappropriate would be at approximate levels.

8. Results and Discussions

Results from the grammaticality judgment task from the 2 participant groups are shown in the following table:

Grammatical Judgment Scores	Scores (Total 320)	Percentage	Mean	SD
Participant Group 1 (CU) ⁵ (<i>n</i> = 20)	187	58.44 %	9.35	2.134
Participant Group 2 (TU) ⁶ (<i>n</i> = 20)	163	50.94 %	8.15	1.531
Native Control Group (<i>n</i> = 5)	320	100%	0	0

Table 3: Grammatical judgment scores of the participant groups

Individual learner proportions of grammaticality judgment scores out of the 16 obligatory contexts for unaccusative verbs were calculated into percentages. It can be seen that the grammaticality judgment scores among the participant groups were at low rates and they were all at similar levels, i.e. 58.44 % for participant group 1 and 50.94% for

⁵ 'CU' refers to 'Chulalongkorn University'

⁶ 'TU' refers to 'Thammasat University.'

participant group 2. As expected, the native control group made correct judgments for all the 16 items.

The MSIH predicts that the L1 Thai speakers would be able to judge correct and incorrect use of English unaccusative verbs and that appropriate judgment data from both the L2 participant groups would be at a consistent level. On the other hand, based on the FFFH, the L1 Thai-speaking learners would exhibit incorrect judgment in correct and incorrect use of English unaccusative verbs and the inappropriate judgment data from all four L2 participant groups would be at a consistent level.

The statistical method, a dependent *t*-test (or a paired-samples *t*-test) was performed on the participant groups' grammatical misjudgments in the use of English unaccusative verbs. Results were as follows:

On average, the two participant groups received low scores on the grammaticality judgment test. The total score of the L2 learner group from CU ($M = 9.35$, $SE = .48$) was higher than that of the L2 learner group from TU ($M = 8.15$, $SE = .34$). This difference was not significant $t(19) = 2.00$, $p > .05$; however, it did represent a medium-sized effect $r = .34$.

The results from the grammaticality judgment test from the two L2 learner groups therefore supported the predictions of the FFFH. The same patterning of misjudgments in unaccusative verb structure was evidenced in both L2 learner groups. The two L1 Thai participant groups show high levels of impaired judgments in the use of English unaccusative verbs. The scores from the grammaticality judgment test were also at a consistent level.

The results discussed so far were combined misjudgments in the use of English unaccusatives. It was anticipated that two types of grammatical misjudgments would occur: incorrectly judging that English unaccusatives in the passive construction are appropriate and incorrectly judging that English unaccusatives in the active construction are inappropriate. In the next section, the results were split into the two types of misjudgments. The FFFH predicts that scores from the two types of misjudgment would occur at an approximate level. The initial results (Table 1) were scores from the combined judgments. So, the next step was to explore the distribution rates of the two types of misjudgment.

The results on grammatical misjudgments in the use of English unaccusative verbs were compared across types (See 7.2.1.2) and across groups in Table 4 and the distribution of the misjudgments is represented in Figure 1:

	Incorrect judgments in Passive Unaccusatives as Appropriate		Incorrect judgments in Active Unaccusatives as Inappropriate	
	%	ratio	%	ratio
Participant Group 1(CU) (<i>n</i> = 20)	37.5	60/160	41.88	67/160
Participant Group 2(TU) (<i>n</i> = 20)	46.25	74/160	51.88	83/160

Table 4: Comparison of the two types of grammatical misjudgments in the use of English unaccusative verbs (*n* = 20 per group)

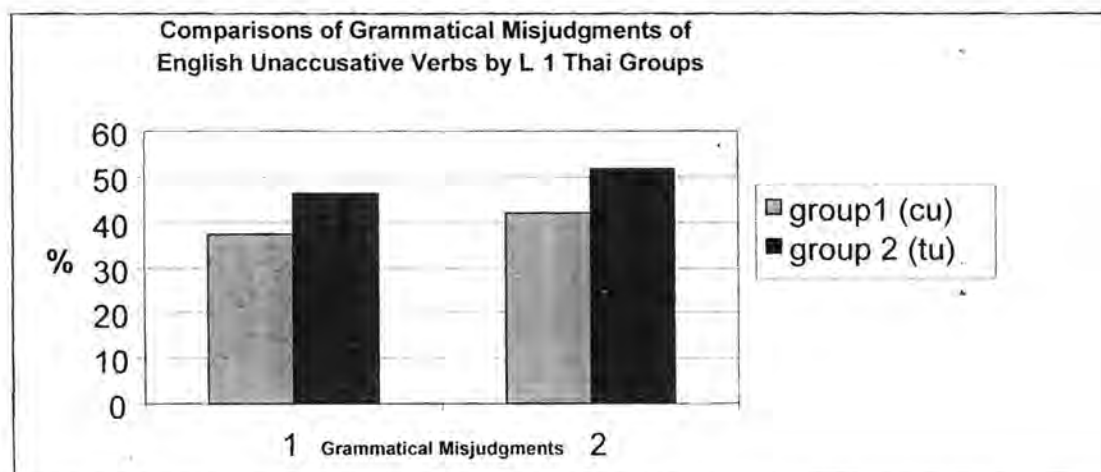


Figure 1: Percentages and ratios of two types of grammatical misjudgments in the use of English unaccusative verbs (*n* = 20 per group)

The misjudgment rates were higher in the “passive unaccusatives as appropriate” type than in the “active unaccusatives as inappropriate” type in the two participant groups, i.e. 41.88% and 37.5%, respectively, in Group 1 (CU). The same patterning of grammatical misjudgments was found in Group 2 (TU), although at higher rates, i.e. 51.88% for the “passive unaccusatives as appropriate” type and 46.25% for the “active unaccusatives as inappropriate” type.

To determine the significance of the contribution of the two types of inappropriate use of English unaccusatives to grammatical misjudgments by individual learners in the grammatical judgment test, a dependent *t*-test (or a paired-samples *t*-test) was performed on grammatical misjudgments in the two types of incorrect use.

Results were as follows:

- On average, L2 learner group 1 (CU) misjudged “passive unaccusatives as appropriate” ($M = 3.35$, $SE = .33$) more than “active unaccusatives as inappropriate” ($M = 3.20$, $SE = .30$) in non-premodified contexts ($M = .15$, $SE = .42$, $t(19)$). This difference was not significant $t(19) = .36$, $p > .05$; however, it did represent a small-sized effect $r = .08$.

- On average, L2 learner group 1 (TU) misjudged "passive unaccusatives as appropriate" ($M = 4.15$, $SE = .27$) more than "active unaccusatives as inappropriate" ($M = 3.70$, $SE = .24$) in non-premodified contexts ($M = .45$, $SE = .39$, $t(19)$). This difference was not significant $t(19) = 1.16$, $p > .05$; however, it did represent a small sized effect $r = .08$.

Crucial for the hypotheses was the evidence that no statistical difference was found between the two types of grammatical misjudgments in English unaccusatives.

To summarize thus far, the results from the grammatical judgment test showed that the L1 Thai learner groups misjudged the use of English unaccusative verbs at high levels. The misjudgments occurred in both passive unaccusatives and active unaccusatives. Although the misjudgment rates for passive unaccusatives were higher than active unaccusatives, they were at approximate levels in both L2 learner groups.

It can be seen that unaccusative verbs tend to pose problems in production among L1 Thai-speaking learners. The predictions of the FFFH on L2 misjudgments in the use of English unaccusatives seem to be borne out by the statistical results that emerged from the grammaticality judgment test (7.2). The findings contradicted the predictions of the MSIH since the misjudgments were exhibited by the L2 learners.

According to the FFFH, it is assumed that this subcategory of intransitive verb, i.e. unaccusatives, does not exist in the L1 Thai learners' native language. It is therefore not acquirable by the learners. This type of subcategory could not be transferred from their L1 into L2 English production.

The data from the corpus (7.1) seem to go along the same line as the results from the grammaticality judgment test. The data retrieved from the corpus showed that errors on the use of English unaccusative verbs were mainly with the passive unaccusatives.

Taken together, the results from the grammaticality judgment test and the data from the corpus lent support to the FFFH. A lack of unaccusatives could lead to syntactically impaired production since the learners were assumed not to possess this subcategory of intransitive verb to be transferred from their L1 into L2 English unaccusative verb production. It could then be postulated that the unaccusative category might exert a negative influence on the L1 Thai speakers' unaccusative production, causing the production of this subcategory not to be syntactically motivated.

For future research, it might be worth investigating English unaccusative verb production by L2 learners whose L1s possess this verb type to be compared with production by L2 learners from languages without unaccusative verbs.

What is worth observing is that the results from the grammaticality judgment test showed higher rates of misjudgment in passive unaccusatives than active unaccusatives (although the difference is not significant). Also, the data from the corpus showed overgeneralization of passive unaccusatives. It is assumed that the production of passive unaccusatives by L1 Thai speakers can be accounted for by the learners' inability to distinguish between unaccusatives and transitives. Unaccusatives do not exist in their grammars and so no such rigid distinction can also be drawn from their syntactic representations. Therefore, the learners were likely to treat unaccusatives no differently

from transitives, leading them to assume the passivizability of unaccusative verbs (Yip 1990; Oshita 2000).

The predictions of the MSIH were therefore contradicted. The MSIH could not explain why the L1 Thai groups exhibited variability in the production of L2 English unaccusative verbs. According to the MSIH, it is assumed that L2 learners' syntactic representation is intact and variable production of functional morphology results from problems of mapping between syntax and morphology. L1 backgrounds are postulated as not having any influence on L2 production. However, in this study, the results from the grammaticality judgment test indicated that the L1 Thai learners' syntactic representation of L2 English unaccusatives is impaired, causing their production to be variable. So, the MSIH cannot be used to account for variability in the production of English unaccusative verbs by L1 Thai speakers. It can then be postulated that a lack of grammatical representations of English unaccusative verbs in L1 Thai is responsible for variable production in the L2.

9. Conclusions

The implications of the results are considered important for the debate on the causes of variability in L2 production of functional morphology. The findings from the two sets of data; i.e. the grammaticality judgment test and the corpus study seem to be in line with the predictions of the explanation which assumes non-target-like syntactic representations, i.e. the Failed Functional Features Hypothesis. The explanation assuming target-like syntactic representations, i.e. the Missing Surface Inflection Hypothesis was falsified as it cannot account for the variable production of English unaccusative verbs by the L1 Thai groups.

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Appendix

Name..... Last name.....

Age..... Sex..... Faculty.....

(Your information will be kept confidential.)

Instructions : Indicate if each underlined word or phrase is correct. Put ✓ if you consider that it is correct and X if you consider that it is incorrect. Once you have made your decision, please do not go back and reconsider your answer (40 items).

- _____ 1. This terrible event occurred on Monday as people had expected.
- _____ 2. Some people think it's time we all learn a single international language.
- _____ 3. In some places there rains almost every day.
- _____ 4. The tourist was arrived in Chiangmai last weekend.
- _____ 5. Most of people don't know what it's really like in other countries.
- _____ 6. After he had won an Olympic gold medal he became a professional boxer.
- _____ 7. The movie star was appeared at the awards ceremony.
- _____ 8. Scientists are exploring why this tree can exist without water.
- _____ 9. He has travelled a lot both as a boxer and as a world-famous personality.
- _____ 10. If he had lost his first fight, no one would have been surprised.
- _____ 11. Many people are believing he was the greatest boxer of all time.
- _____ 12. His religious beliefs made him change his name when he became champion.
- _____ 13. Like any top sportsman must train very hard.
- _____ 14. The thing that was remained after the fire was this old house.
- _____ 15. The conflict arose from a misunderstanding between the two parties.
- _____ 16. To be the best of the world is not easy.
- _____ 17. In England people are always talking about the weather.
- _____ 18. Learning a second language is not the same like learning a first language.
- _____ 19. The woman fell from this ladder before.
- _____ 20. It takes a long time to learn a language.
- _____ 21. English is quite difficult because of all the exceptions which have to be learnt.
- _____ 22. Many adult students of English wish they would start their language studies earlier.
- _____ 23. In some countries students have to spend a lot of time working on their own.
- _____ 24. It is not clear yet when this animal appeared on earth.

- _____ 25. It's no use to try to learn a language just by studying a dictionary.
- _____ 26. There aren't easy ways of learning a foreign language in your own country.
- _____ 27. When the president arrived back from the trip to Canada, he was very tired.
- _____ 28. The accident was occurred last night due to the driver's carelessness.
- _____ 29. His uncle died of heart disease.
- _____ 30. A lot people aren't used to studying grammar in their own language.
- _____ 31. The cat was fallen from the tree so it got injured.
- _____ 32. In cold countries people wear thick clothes for keeping warm.
- _____ 33. The man cannot be existed without her.
- _____ 34. Despite the big storm, the small tree still remained.
- _____ 35. People will always remember him to be a champion.
- _____ 36. Many students of English would rather not to take tests.
- _____ 37. The difficulty was arisen from uncertainty.
- _____ 38. Living with a foreign family can be a good way to learn a language.
- _____ 39. Water boils at a temperature of 100 *C.
- _____ 40. The cow was died from the heat.