

Asymmetric patterns of English article omissions in L2A*

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Abstract

This paper reports English article production by three groups of L2 participants, i.e. 10 intermediate and 10 advanced L1 Thai, and 10 advanced L1 French learners. The data were elicited through a guided spontaneous task designed to compare article omissions in 'Article + N' vs. 'Article + Adj + N' contexts. Based on the Syntactic Misanalysis Hypothesis (Trenkic, 2007), the study predicted that L1 Thai learners of English would omit articles more often in adjectivally premodified than in non-premodified structures, whereas no such asymmetry was predicted to occur in L1 French speakers' production. L1 French learners are assumed to transfer the functional category determiner from their L1 into their L2 English, making their production syntactically motivated and so not dependent on the difficulty of the task. L1 Thai learners, on the other hand, are speculated not to have this syntactic category in their grammars, and to analyse and produce English articles as adjectives. Such article production is postulated to be lexically triggered.

The L1 Thai learners' article production would depend on a strategic decision to explicitly mark the (un)identifiability status of discourse referents, and such strategic production would be constrained by the available cognitive resources. The more complex the task, the higher the likelihood that the resources would be exceeded and the article dropped in production. All other things being equal, then, a higher article omission rate is expected in more complex 'Article + Adj + N' sequences than in the less complex 'Article + N' sequences. Based on the significance of difference between two proportions (z-scores): non-premodified and adjectivally premodified contexts, the results support the prediction. The implications of the results are considered for the debate on the causes of variability in L2 production of functional morphology.

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1. Introduction

This paper focuses on the issue of article omission in non-premodified and adjectivally premodified contexts by second language learners of English who are L1 speakers of Thai and French respectively. The paper is organized as follows. Section 2 spells out the background of the study: 2.1 introduces two conflicting explanations about L2 variable production in generative grammar; 2.2 discusses the strengths and weaknesses of each account, leading to a reason why this study needs to investigate the variable issue further; and 2.3 looks at recent research on L2 English article omissions and discusses gaps that need to be filled in. Section 3 outlines the hypotheses and predictions. Sections 4 and 5 present the methodology and results, respectively. Section 6 explores implications of the results. Finally, section 7 summarizes the main aspects of the paper.

2. Background of the study

Variability in L2 production of functional morphology by adult L2 learners (shortened in this paper to “L2ers”) is well-documented in empirical research studies (e.g. Franceschina, 2001a; Hawkins, 2000, 2001; Hawkins & Chan, 1997; Herschensohn, 2001; Ionin & Wexler, 2002; Lardiere, 2000; Liszka, 2002; Prévost & White, 2000; Sorace, 1999; Trenkic 2000; White, 2003a, 2003b). A question is why post-childhood learners encounter persistent difficulties in producing some aspects of L2 functional morphology. Several explanations have been proposed, and some of them will be discussed in 2.1.

The most extensively studied L2 so far has been English. One aspect of English which is known to cause considerable problems to L2ers from some language backgrounds is the system of articles (e.g. Goad & White, 2004; Ionin & Wexler, 2003; Ionin, Ko & Wexler, 2004; Kuribara, 1999; Leung 2001, 2005; Robertson, 2000; Trenkic, 2000, 2002, 2007, in press; White, 2003a). This problem has certainly been documented with first language (L1) Thai learners of L2 English (e.g. Lekawatana, 1968; Oller & Redding, 1971; Pongpaioj, 2002, 2004; Srioutai, 2001; Ubol, 1988). The aim of this paper is to explore the causes of L2 English article omissions among L1 Thai learners of L2 English by comparing the omissions with those by L1 French/L2 English speakers.

2.1 Two explanations for L2ers’ variable production of functional morphology

Within the framework of generative grammar, two broad perspectives on L2ers’ variable production of functional elements can be identified. Section 2.1.1 introduces a view that assumes target-like syntactic representations, but problems in accessing them in production. Section 2.1.2 presents a view which attributes variability to non-target-like syntactic representations.

2.1.1 *Explanation in terms of target-like syntactic representations*

Perhaps the most intuitively appealing explanation is the one that involves non-target-like syntactic knowledge as the cause of non-target-like production. However, Lardiere (1998a, 1998b, 2000) assumes that inappropriate L2 behaviours do not by necessity mean that L2ers' grammar is impaired. It is logically possible that they are consequences of the learners' processing problems despite their fully specified syntax. These observations by Lardiere led many researchers to propose a processing problem explanation which assumes target-like syntactic representations (e.g. Epstein *et al.*, 1996; Haznedar & Schwartz, 1997; Ionin & Wexler, 2002; Lardiere, 1998a, 1998b, 2000; Prévost & White, 1999, 2000; White, 2003a; White *et al.*, 2004). As L2A is postulated to be constrained by Universal Grammar (UG), non-existence of an L2 feature in the learners' L1s might not have any negative impact on L2 production. A hypothesis favouring target-like syntactic representations is the Missing Surface Inflection Hypothesis (MSIH).

Another proposal on the processing problem assuming L2 syntactic representations is the Prosodic Transfer Hypothesis (PTH) (e.g. Goad & White, 2004, 2005, 2006; Goad, White & Steele, 2003). Within UG, L2ers' syntax is target-like, but processing problems are posited to be due to representations at the phonological level. The PTH predicts that if prosodic structures representing L2 functional morphology are not available in the L1, variable production in the L2 will appear, and vice versa.

Studies advocating fully specified syntax seem to indicate strong arguments in that L2ers' variable production of functional morphemes is attributed to the processing problem. Although the learners show inappropriate syntax, their syntactic representations are intact rather than impaired. For example, Lardiere (1998a, 1998b) reported non-native grammars on inflection for past tense and third person agreement on thematic verbs, but sensitivity to associated functional categories; i.e. appropriate nominative case assignments and verb placement with respect to *not* and internal-clause adverbs. White (2003a) also found L2 variable production of English past tense morphemes and third person agreement on main verbs in her study. However, the fact that the subject made appropriate production of associated properties such as nominative case, as well as correct verb placement, is taken to suggest that tense and agreement in English were not underspecified in the subject's syntactic representations. Prévost & White (1999, 2000) reported that their L2 participants overused English nonfinite verb forms in [+finite] contexts, but their suppliance of finite verbs in [-finite] contexts was at depressed rates. The data was taken to suggest that variability is largely non-random.

2.1.2 *Explanation in terms of non-target-like syntactic representations*

The alternate view postulates that non-target-like syntactic representations cause L2ers not to be able to produce correct morphological forms in the L2. Within this proposal, there exist two strands: 'global' and 'local' impairments. The position of *global impairments* assumes crucial differences between first language acquisition (L1A) and L2A. Accessibility to UG is posited to exist only in L1A, whereas UG is not operative in

L2A (e.g. Bley-Vroman, 1989; Clahsen, 1988; Clahsen & Muysken, 1986). Proponents of the *local impairment* view postulate that access to UG is partially available in L2A by means of L1. Any features or functional categories not instantiated in the L1 will not be acquired by L2ers (see Smith & Tsimpli, 1995). This impairment or underspecification of feature values prevents correct production of surface forms in the L2 (e.g. Beck, 1997, 1998; Franceschina, 2001a, 2001b; Hawkins, 2000; Hawkins & Chan, 1997; Hawkins & Liszka, 2003; Liszka 2002; Smith & Tsimpli, 1995; Trenkic, 2007, in press). This hypothesis is usually referred as the Failed Functional Features Hypothesis (FFFH).

The syntax-deficit account appears to claim the strongest evidence, in that learners whose L1 lacks a functional property of the L2 usually perform worse than those whose L1 has identical syntactic features. For example, such differences between L2 behaviours can be found in poorer performance on English restricted relative clauses ([±wh]) by L1 Chinese than by L1 French learners (Hawkins & Chan, 1997); poorer performance on English past tense inflections ([±past]) by Chinese than by Japanese and German speakers (Hawkins & Liszka, 2003); and poorer performance by L1 speakers of English than by L1 Italian learners on Spanish gender agreement between determiners and adjectives (Franceschina, 2001a).

2.2 Strength and weakness of the two accounts

Studies advocating the processing problem explanation (i.e. assuming target-like syntax representation) seem to present strong arguments in that, while L2ers' production of certain functional elements might exhibit variability, appropriate production of associated syntactic categories is made, indicating the learners' underlying competence. Variability is also assumed to be non-random. However, appropriate morphological production might be accounted for within a non-target-like syntax view. While L2ers may not develop a fully specified syntax, they can still attribute some meanings to grammatical morphemes and develop metalinguistic rules for their use. Such production would not be random but principled, reflecting the meanings and 'rules' which learners operate under (Trenkic, 2007).

On the other hand, proponents of the non-target-like syntax representation appear to claim the strongest evidence, in that learners whose L1 lacks a functional property in the L2 usually perform worse than learners whose L1 has identical syntactic features. Put differently, failure in syntax-morphology mapping does not occur across the board. If L2 syntax is fully specified, L2ers from whatever L1 backgrounds should experience approximately the same level of mapping difficulties. Nevertheless, different levels of production by L2ers might equally corroborate the target-like syntax account. If the production mechanisms are primed for certain morphological use in L2ers' native language, and these mechanisms are shared for L1 and L2 production, it is expected that less variability will occur. In contrast, more variability will be predicted on the part of learners whose L1 does not possess L2 categories, even if their L2 grammatical competence includes these features. There is thus a possibility that variable production by learners whose L1s do not license L2 properties is due to processing reasons, i.e. performance errors and/or pressures, consistent with the correct syntax position.

Given the research so far, a problem is that the findings from the empirical data presented by each account can be interpreted in more than one way. In fact, Jiang (2004) claims that when L2 morphological production is at an 80% accuracy level, each position can account for the production equally well, and L2 data could therefore be interpreted by more than one explanation.

Summarising the position so far, neither claim can be taken at face value. As discussed in 2.1.1 and 2.1.2, L2 variability could be accounted for by either position. The debate is still on-going. As the problem of L2 variable production of functional morphology is still unresolved, this controversial issue will be investigated further in this study by focusing on variable production of L2 English articles by L1 Thai learners.

2.3 Studies on L2 English article omissions

This section discusses two recent studies of L2 English article omissions that led me to fill a gap in this area, i.e. Goad & White (2004) and Trenkic (2007). Both studies focus on article omissions in non-premodified (Art + N)¹ and adjectivally premodified NP contexts (Art + Adj + N).

2.3.1 Goad & White (2004)

Goad & White (2004) took a close look at the oral production of nominal morphology by SD, an end-state L1 speaker of Turkish (a language without the definite article) in White (2003a).² They reported that SD tended to omit more articles in 'Art + Adj + N' than in 'Art + N' contexts. SD's syntax was postulated to be intact (see White, 2003a). However, based on the PTH (Goad, White & Steele, 2003), Goad & White claimed that different phonological representations in Turkish and English were responsible for SD's deletions of the English articles (see Goad & White, 2004; Goad, White & Steele, 2003 for a comprehensive overview of the PTH). The PTH predicts non-native-like productions in two ways. The first prediction is an extreme case whereby deletion of functional material is 100%. The second case is that, if prosodic structures in the L1 are used to accommodate those required in the L2, variable production is expected to occur.

One of the results of SD's production is more article deletion in 'Art + Adj + N' (67% of *the* and 49% of *a(n)*) than in 'Art + N' contexts (i.e. 77% of *the* and 70% of *a(n)*). SD is assumed to be able to accommodate a non-target-like prosodic structure in Turkish to prosodify the English 'Art + N' structure, but such accommodation to represent the 'Art + Adj + N' context is not possible (e.g. *iyi bir adam*³ 'good a man' 'a good man' is prosodically appropriate in Turkish but not **bir iyi adam*, a good man).

¹ 'Art' stands for 'article'.

² The investigation was on both the verbal and nominal morphological production. However, only the latter type of production is focused on in this study.

³ *Bir* is a quasi-indefinite article in Turkish.

See analyses of the prosodic structures of these nominal phrases in Goad & White, 2004).

Although the PTH was interpreted as evidence for SD's English article omissions, especially in adjectivally premodified NPs, there appeared some internal problems with the PTH account on Goad & White's own data. First, it was reported that SD's overall article suppliance was 67%; but he produced approximately 74.5% of *the* and 61.5% of *a(n)*. So, the total percentage of article suppliance actually constituted incompatible suppliance rates of the two article types. Given a prosodic structure to represent English articles, it is not clear why SD's suppliance of the definite article was more accurate than the indefinite article. Goad & White (2004: 138) themselves mentioned that the production rates of *a(n)* and *the* should have been about the same, and they could not account for such a discrepancy in the data. Second, inconsistent article suppliance rates were also evidenced in 'Art + Adj + N' contexts. The data showed that *a(n)* was supplied much less frequently, only 49%, in contrast to 67% of *the*. With unavailability of a prosodic structure in Turkish to represent English articles in this structure, suppliance of the indefinite and the definite articles in these contexts should have been approximately the same. Moreover, although the prosodic structure of adjunction in Turkish could be used to accommodate English articles in 'Art + N', it cannot represent 'Art + Adj + N'. Goad & White assume that this non-existence of prosody in the L1 caused SD to omit more English articles in premodified contexts. The question is, if there are no prosodic representations available for adjectivally premodified structures, why were articles produced at all in such contexts? Put differently, why did not article deletions occur across the board in these NP environments? These problems led me to investigate further whether the PTH can account for asymmetries of English article omissions in these two NP contexts.

2.3.2 *Trenkic (2007)*

Trenkic (2007) also investigated L2 English article omission in non-premodified and adjectivally premodified NP contexts. The results were based on the data from Trenkic (2000). The subjects were adult L1 Serbian speakers of different proficiency levels. They were tested on two tasks: a Map Task⁴ and a short-story written translation task (from Serbian into English). The results of the two tasks showed that, irrespective of the proficiency levels the learners were at, they had a tendency to omit articles significantly more often in 'Art + N' than in 'Art + Adj + N' contexts.

As the asymmetric pattern of article omissions was found in the learners' written data (translation), it was assumed that the PTH would not be able to account for it, as the PTH is restricted to prosody. Furthermore, as far as the oral production is concerned, Trenkic showed that the prosodic structure of 'Art + N' in English also existed in 'Det-like element + N' in Serbian. So, it is assumed that the same prosodic representations in English and Serbian cannot cause the L1 Serbian learners' variability in English article production.

⁴ A Map Task is a type of a referential communication task whereby exchanged information between two participants is partially shared.

Based on the Syntactic Misanalysis Hypothesis (SMH) (see Trenkic, 2007), languages without articles do not have a syntactic category determiner in their grammars. Determiner-like elements are argued to behave syntactically as adjectives (see Lyons, 1999). Due to the adjectival nature of determiner-like elements in such languages, L2ers from these languages are assumed to mistreat L2 determiners, including articles, as adjectives (see Kuribara, 1999; Trenkic 2007).⁵ The L1 Serbian learners in the study are therefore posited to misanalyse English articles (functional elements) as adjectives (lexical material) and attribute to the articles referential meanings of definite/indefinite ('that can be/cannot be identified').

It is postulated that an alternative account under fully specified syntax, the MSIH, could not claim that asymmetric patterns of article omissions in non-premodified and adjectivally premodified sequences occur because L2ers have more difficulties with syntax-morphology mapping in premodified structures. Crucial evidence can be found in Grandfelt (2000). It was reported that the 'Art + Adj + N' pattern did not exert any negative influence on French article production by the Swedish-speaking learners of French in the study. Grandfelt assumes that, as the category determiner exists in both Swedish and French, the L1 Swedish learners were able to transfer this syntactic category from their L1 into the L2 production.

In sum, it is assumed that the account based on fully specified syntax, the PTH, could account for the asymmetric pattern of English article production in non-premodified and adjectivally premodified contexts in Goad & White (2004). However, as the same prosodic structure as the English article and noun exists in Serbian, Trenkic (2007) argues that the PTH should not cause the L1 Serbian speakers' English to have more article omissions in 'Art + Adj + N' than in 'Art + N' sequences. It is also assumed that the MSIH could not account for the asymmetries in the two NP contexts (see Grandfelt, 2000). This same patterning of article omissions is claimed to be equally well explained by the SMH.

Since both interpretations seem compatible with the findings on asymmetries in English article omissions in 'Art + N' and 'Art + Adj + N' contexts, further research is needed. The present study aims at testing which assumption can account for L2 English article omissions in the two NP environments. Goad & White (2004) and Trenkic (2007) worked with L2ers from languages without articles, i.e. Turkish and Serbian respectively.⁶ The study will be extended with another L2 learner group from an articleless language, i.e. Thai, and compare this L2 learner group's article production with an L2 group from a language containing articles, i.e. French. To my knowledge, no study has actually explored whether asymmetry in article omissions in these two NP sequences is attested with learners from different language backgrounds (i.e. with and without the article system); this study aims to fill this gap.

⁵ See a similar analysis in Kuribara (1997). Results from the grammaticality judgment test showed that there was no sharp improvement in performance on English constructions containing determiners by the L1 Japanese learners of different proficiency levels. The findings were taken to suggest that, as the functional category D is assumed not to exist in Japanese and linguistic elements before nouns are analysed as prenominal modifiers like adjectives, the category D is not accessible to the learners.

⁶ As discussed in 2.4.1, Turkish is a language without the definite article. and the quasi-indefinite article *bir* exists in the language.

3. Hypotheses and predictions

3.1 Hypotheses

The study set out to test two contrasting hypotheses on L2 English article omissions:

- H1 (the SMH): In article production of L2 speakers of English from articleless backgrounds, omissions are the result of syntactic misanalysis (L2 articles = nominal modifiers).
- H2 (the MSIH): Article omissions are the result of the difficulty in the mapping between syntax and morphology.

3.2 Predictions

Based on the hypotheses in 3.1, the predictions were as follows:

If H1:

- (a) L2ers from articleless L1 backgrounds (e.g. Thais) should make more omissions in 'Art + Adj + N' contexts than in 'Art + N' contexts.
- (b) L2ers from articleless L1 backgrounds (e.g. Thai) should show this asymmetry at the advanced level as well, even though their overall production may be more accurate.
- (c) L2ers from L1 backgrounds with articles (e.g. French) (who are not expected to analyse English articles as adjectives) should not make more omissions in 'Art + Adj + N' than in 'Art + N' contexts.

If H2:

L2ers from both articleless L1 backgrounds (e.g. Thai) and L1 backgrounds with articles (e.g. French) should omit articles more in 'Art + Adj + N' contexts than in 'Art + N' contexts (even though the overall rate of omissions may be lower for L2ers from L1 backgrounds with articles).

4. Methodology, materials and procedure

The task employed was a guided spontaneous production task. The objective was to explore English article omissions in both 'Art + N' and 'Art + Adj + N' sequences by L2ers, in both spoken and written production.

4.1 Materials and procedures

Two sets of cartoon strip sequences were designed for article production in discourse. One cartoon set was used for eliciting spoken production, and the other for written

production. The cartoon serial events (four pictures each) were devised on the basis of contexts for numerous nominal productions on characters, things and places. All the pictures *were in colour*, and provided contexts to elicit data which would address the predictions of article productions in 'Art + N' and 'Art + Adj + N' contexts. The participants were instructed to describe the pictures, being as specific as possible; this was expected to elicit spontaneous production. They were also asked to describe the pictures from the beginning until the end at their natural speed. Certain objectives lay behind these instructions. First, through specific descriptions, there was a greater tendency for adjectivally premodified NPs to be produced. Second, the pressure of natural speed processing should discourage the L2ers from accessing their metalinguistic knowledge, and lead them to rely on their linguistic intuition (see Ellis, 2003: 137). The spoken and the written production tasks were counterbalanced across the participants so that better performance in one task could not have been attributed to learning.

The data sets from the spoken and the written tasks were transcribed. Each noun phrase was underlined. Certain noun phrases with articles were excluded from the analysis:

- NPs with determiners and quantifiers
- NPs in fixed expressions or the so-called 'set phrases', e.g. *in the morning* and *make a decision*
- NPs with specific rules of article use, e.g. *the* in the superlative form, and *the* with an ordinal number
- unique NPs, e.g. *the sun*

Two native speakers were asked to read each participant's oral and written production data and act as raters. The total number of NP tokens produced was added up, based on a) all nominal contexts where the use of articles was obligatory, and b) contexts in which the L2ers supplied articles, but should not have. The participants' article omission rates in each NP context were calculated from the omission number in a particular NP structure out of the total number of that NP structure produced. The data set comprised the results of article omissions in definite and indefinite NPs combined.

4.2 Participant groups

There were three participant groups in this experiment: one intermediate L1 Thai group, one advanced L1 Thai group and one advanced French group (10 participants each). The Thai groups were the experiment groups, and the French group acted as the control group. A native speaker control group was also included (5 participants). The participants' English proficiency levels were determined by the Oxford Placement Test (Allen, 2004).

Thai controls were used to assess any potential impact that any Thai expression of definiteness might have on L1 Thai learners' English article production related to the predictions in the study. Ten native speakers from the Thai participants were therefore randomly asked to produce spoken and written baseline data or 'task performance in

the L1'.⁷ The data showed that most nominals occurred bare in the native speakers' production. There were only two instances of the English 'Art + N' structure where the Thai demonstrative for 'this' was used when the NPs were mentioned for the second time. It was also observed that there were no phonological aspects such as stress or word order to signify definiteness involved in the production.

4.3 Selection of the participants

The participants included undergraduate and postgraduate students at the University of York in the UK. At the time of the experiment, the intermediate Thai participants' age range was 23.8 - 40.2 (mean = 28.9); the advanced L1 Thai learners' age range was 23.1 - 37.5 (mean = 28.3); the French participants' age range was 20.9 - 28.3 (mean = 23.9); and the native English controls' age range was 20.8 - 30.5 (mean = 24.7). All the L2 participants had studied English for at least 10 years, but almost all of them had not lived in an English-speaking country for more than 2 years (only one had done so for more than that: an intermediate Thai student, for 3.5 years). However, there were no outliers to bias statistics in the production data (see Fields, 2004).

5. Results

The results on English article omissions from the spoken production are shown in table 1 and figure 1 on the next page:

Table 1: article omission rates in non-modified and pre-modified contexts, in the spoken production

Spoken production	Art + N		Art + Adj + N	
	%	ratio	%	ratio
Inter Thai (n = 10)	6.25	15/240	16.48	15/91
Adv Thai (n = 10)	3.06	7/229	7.98	13/163
Adv French (n = 10)	0.47	1/214	2.33	3/129
NS controls (n = 5)	0.00	0/55	0.00	0/107

⁷ Baseline data, according to Yule (1997: 31-2), refers to data in the target language in the study produced by native speakers of that target language (e.g. English, produced by native speakers of English, in this study) or data in the native language of L2ers produced by L2ers (e.g. Thai, produced by L1 Thai learners of L2 English, in this study).

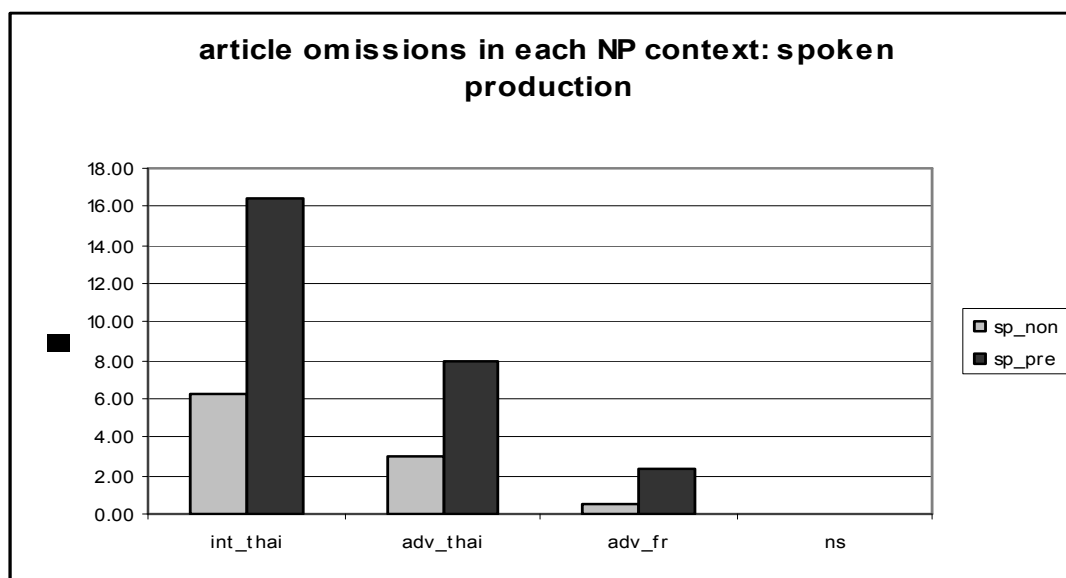


Figure 1: article omission rates in non-modified and pre-modified contexts, in the spoken production

In the spoken production, the omission rates were higher in premodified than in non-premodified contexts in the two Thai groups and the French group. The intermediate Thai group omitted articles considerably more often in 'Art + Adj + N' contexts than in 'Art + N' structures: 16.48% vs. 6.25%. The same patterning of article omissions was evidenced in the advanced Thai group, although at lower rates, i.e. 3.06% in non-premodified and 7.98% in premodified sequences. Article omissions in both NP structures were also different in the advanced French group: 0.47% in the non-premodified and 2.33% in the premodified contexts. No article omissions were found in either context type in the native English control groups.

It was predicted that article production would be negatively influenced by prenominal adjectives. So, the independent variable was the prenominal modification in premodified contexts and the dependent variable was the proportion of article omissions. Since the number of 'Art + N' and 'Art + Adj + N' contexts produced by each L2 learner group was not the same, frequencies were calculated into proportions. To assess the impact of the independent variable on article production, the statistics used was the z-test for evaluating the significance of the difference between two proportions, article omissions across contexts. The usual formula or the z-basic was employed here (e.g. Butler, 1985: 92-5; Field, 2004: 72).⁸

The significance of difference between omission proportions in the two grammatical contexts: 'Art + N' and 'Art + Adj + N' for a non-directional, two-tailed test was as follows:

- the intermediate Thai group $Z = 2.895, p < 0.01$
- the advanced Thai group $Z = 2.181, p < 0.05$
- the advanced French group $Z = 1.553, p > 0.05$

⁸ Another formula is the z-corrected, which involves a small correction, and is normally a fraction smaller than the z-basic (see Woods *et al.*, 1986).

According to the group results, the difference ratios of omission rates in non-modified and premodified contexts were statistically significant in both Thai groups, but not in the French group. The difference in article omission rates between the non-premodified and the premodified constructions was significant at the 1% level in the weaker Thai group and at the 5% level in the advanced Thai group. In contrast, the result in the French group was non-significant even at the 5% level. Table 2 and figure 2 illustrate and sum up the proportions of English article omissions from the written production:

Table 2: article omission rates in non-modified and pre-modified contexts, in the written production

Written production	Art + N		Art + Adj + N	
	%	ratio	%	ratio
Inter Thai (n = 10)	9.15	15/164	16.19	34/210
Adv Thai (n = 10)	4.84	9/186	12.13	33/272
Adv French (n = 10)	0.58	1/173	1.71	5/292
NS controls (n = 5)	0.00	0/69	0.00	0/147

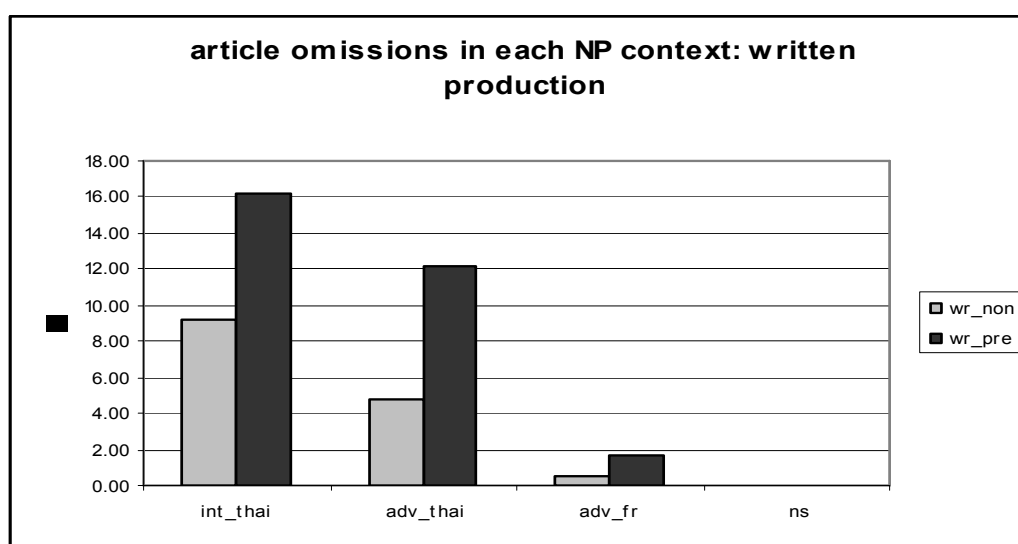


Figure 2: article omission rates in non-modified and pre-modified contexts, in the written production

The data from the written task seemed to reflect those from the spoken production. The two Thai groups omitted more articles in 'Art + Adj + N' sequences than in 'Art + N' structures (16.19% vs. 9.15% in the intermediate group, and 12.13% vs. 4.84% in the advanced group). In the French group, article omission rates were 0.58% and 1.71% in non-modified and modified structures, respectively. As in the spoken task, the native English control group did not make any omissions in either NP context.

The significance of difference between two proportions in the two NP contexts for a non-directional, two-tailed test was as follows:

- the intermediate Thai group $Z = 2.003, p < .05$
- the advanced Thai group $Z = 2.656, p < .01$
- the advanced French group $Z = 1.048, p > .05$

The ratio of omission rates in non-modified and premodified contexts were statistically significant in both Thai groups, but not in the French group. Article omission rates in 'Art + N' constructions were significantly different from those in the premodified sequences in the intermediate Thai group, $p < 0.05$, and $p < 0.01$ in the advanced Thai group. In contrast, the difference between article omissions in the two contexts were non-significant ($p > 0.05$) in the French group.

6. Discussion and implications

The predictions of the SMH on L2 English article omissions in non-premodified and adjectivally premodified contexts seemed to be borne out by the patterning of omissions. The L2er groups of different L1 backgrounds exhibited behavioural differences in article omissions in 'Art + N' and 'Art + Adj + N' sequences. The L1 Thai groups (-article background) of both proficiency levels had a tendency to omit more articles in 'Art + Adj + N' than 'Art + N' structures. Despite improvement in article production in the advanced Thai group, a significant difference between the two types of omissions could be observed. However, there was no significant difference in article production in the two contexts by the L1 French group (+article background). The predictions of the MSIH were therefore contradicted. If the L2 problems had really been caused by syntax-morphology mapping problems, the L2ers from whatever L1 backgrounds should have *all* made more article omissions in more complex than in simpler NP contexts.

Circumstantial evidence was found from this experiment. Higher article omission rates in premodified than in non-premodified contexts were not restricted only to the spoken task. The results were along the same lines as Trenkic's (2007).⁹ The results were taken to suggest that the PTH could not account for such asymmetries in written production. Therefore, L2 English article omissions cannot result from L2ers from articleless languages not being able to represent English articles prosodically.

Based on the SMH (Trenkic, 2007), since there is no functional category determiner in Thai (an articleless language), and as determiner-like elements in such a language behave like syntactic adjectives, the L1 Thai learners might erroneously treated English articles as adjectives. The learners' article production is therefore posited to be lexically-based, i.e. based on the meanings assigned to the articles. Articles are produced only when the learners see a perceived need to express the meaning of "(un)identifiability of a referent." The L2ers are postulated to rely on their general cognition. The learners' article production would depend on a strategic decision to mark the identifiability status of discourse referents explicitly, and such strategic production would be constrained by the available cognitive resources. Misanalysing English articles as prenominal modifiers, the L1 Thai speakers were assumed to place an article and an adjective in premodified contexts in different adjectival positions. There is usually a need to encode more elements of meanings in the more complex 'Art

⁹ Recall that Trenkic reported the L1 Serbian learners' asymmetric patterns of article omissions in the two NP structures in both writing and speaking.

+ Adj + N' than in the less complex 'Art + N' contexts. So, the more meaning elements there are to be encoded, the fewer cognitive resources are left to respond to the demands of the tasks. When the learners' cognitive resources (i.e. processing constraints) could not cope with the cognitive demands of the tasks, articles were omitted.

One might question why, compared to the articles, adjectives were not equally frequently omitted in the production (if the articles were misanalysed as adjectives). Following Trenkic (2007), in communication, the meaning of an adjective is usually contextually more salient than that of an article, so an adjective is usually paid more attention in production (e.g. Sperber & Wilson, 1986/1995). Encoding an adjective, then, is typically a priority. The lexical meaning of an article will be encoded only when sufficient cognitive resources are left.

In contrast, since determiners exist in French, the L1 French learners are assumed to have this functional category in their grammars and therefore analyse English determiners, including articles, appropriately as determiners. English article production is then postulated to be motivated by syntax, and hence obligatory. As a result, no matter whether the NP contexts were simpler or more complex, they did not seem to negatively affect French L2ers' English article production.

7. Conclusion

Higher rates of article omissions in adjectivally premodified contexts as compared to those in non-premodified constructions were strongly evident among the L1 Thai learners, but not the L1 French group. The patterning of omissions persisted all the way through the advanced Thai level. The findings were in line with the SMH in that, given the absence of the category 'determiner' in Thai, and taking into account the adjectival nature of determiner-like elements in this language, English articles were posited to be misrepresented as adjectives. The L1 Thai speakers were assumed not to rely on syntax but rather on general cognition in article production. In contrast, article production by the L1 French/L2 English speakers was posited to be syntactically-triggered due to the existence of the category 'determiner' in French. The findings, therefore, did not support the MSIH, as it could not account for such an asymmetric pattern of L2 English article omissions by L2ers from articleless languages. Also, the PTH could not explain the variable production of articles in both speaking and writing.

It is hoped that the findings will contribute to the existing theoretical debate on causes of L2 variable production of functional morphology. Practically, understanding the underlying cause of the problem should hopefully inform the teaching of English articles to L2ers, and their learning, in a more effective way.

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