Lech Zabor
University of Wrocław

Approaches to the Study of the Second Language Acquisition of English Articles

1. Introduction

The English article system is one of the most difficult structural elements for second language (L2) learners. Explanations for the various uses of the definite and indefinite articles are complex and the issue has attracted attention of linguists and language teachers as well as logicians and philosophers. Early descriptions of articles were based on the construct of definiteness referred to in terms of uniqueness (c.f. Russell 1901; Hawkins 1978) and/or familiarity/identifiability (c.f. Christophersen 1939; Chafe 1976).

More recently, Bickerton (1981) proposed a binary semantic system [±specific referent, ±hearer knowledge] for noun phrase (NP) reference. It considers the presence/absence of articles in obligatory contexts in relation to the semantic or linguistic context in which they appear. All NPs used in discourse in any language can be classified as one of the combination of the four features [±HK] (information assumed to be known by the hearer) and [±SR] (specific referent).

Previous studies of L2 learners' use of articles carried out in the 1980s and 90s were largely influenced by Bickerton's semantic system; for example, Huebner (1983), Parrish (1987), Thomas (1989) and Young (1996), among others. They have shown that speakers of an article-less first language (L1) diverge from native speaker use of language in two ways: (1) L2 learners use a null form Ø in contexts where *the*/*a* is obligatory for native speakers (omission errors), and (2) they use *the* where *a* is required or vice versa (commission errors). Those studies have also shown that article misuse in the acquisition of English as a second language is not random, but it is connected to language and discourse universals which determine interpretation of the target determiner phrase (DP).

In recent years there has been growing interest in the L2 acquisition of properties of the nominal domain, including articles in languages like English. According to Lyons (1999), languages marking (in)definiteness represent a distinct minority of the world's languages and "most of the world gets along quite well without being obliged to distinguish consistently *the article* from *an article*" (Lyons 1999: 48). This observation leads to a number of interesting questions on the learner's mental representation for articles in the L2, the role of the speaker's L1 or the availability of Universal Grammar (UG) in second language acquisition.

Various positions have been proposed by researchers in the generative SLA field as to whether L2 learners transfer their L1 grammar at the initial stage of second language acquisition (SLA) and whether they have full access to UG, including new parameter settings. The underlying assumption of all those positions is that L2 interlanguage (IL) grammars are UG-constrained. White (2003b) describes these positions as Full Transfer/No Access (Bley-Vroman 1989), No Transfer/Full Access (Flynn 1996), Partial Transfer/Full Access (Vainikka and Young Scholten 1998), Full Transfer/Full Access (Schwartz and Sprouse 1996) and Full Transfer/ Partial Access (Hawkins and Chan 1997).

This article investigates the most recent, and from the author's viewpoint, the most influential approaches, theories and hypotheses concerning the acquisition of the English article system, mostly framed within the so-called UG approach, which originated from Principles and Parameters Theory (Chomsky 1981) and were later developed by other researchers such as White (2003b) and Hawkins (2005).

2. The Representational Deficit Hypothesis (Hawkins 2005)

The question of "representational deficits" has been a much-debated topic in generative studies of second language acquisition (SLA). The main focus of research has been on how learners' IL grammars develop and whether learners can achieve native-like attainment. The apparent failure of most adult learners to achieve native-like success is investigated in terms of the access to UG and parameter resetting. In principle learners of a second language can draw on at least three sources of linguistic knowledge as they acquire the target language: (1) the structures of their native language (L1), (2) the L2 input (naturalistic and/or classroom-based) and (3) innate linguistic knowledge not traceable to L1-transfer or L2-input (c.f. Ionin, Zubizarreta and Maldonado 2008). The existence of the first two sources is not controversial as all researchers recognize the importance of L2 input in second language development and most researchers acknowledge the role of L1-transfer. The existence of the third source, innately guided knowledge is a subject to debate.

A number of hypotheses have been generated from this perspective, they can broadly be divided into two approaches in an attempt to account for optionality in article use (Liszka 2009). The first major position is the Full Functional Representation position (Slabakova 2003), which assumes that L2 speakers are able to acquire L2 functional categories, their features and properties, and native-like representations (the Full Transfer/Full Access position). The necessary condition is sufficient exposure to target language input, which leads to a UG-constrained restructuring of the learner's grammar. As Liszka (2009: 230) points out, "successful parameter resetting requires positive evidence from L2 data for specific L2 properties to be instantiated and restructuring can happen at any point, producing a distinct IL grammar at any stage of development." However, if input is unavailable or insufficient, L2 speakers may not establish correct, unambiguous representations for certain categories, leading to variability in production.

The second approach, the Representational Deficit position, attributes variability in L2 use to L1-L2 parametric differences, where a feature of the L2 that is not present in the L1 is unavailable to post-childhood learners. Hawkins and Chan (1997) in their early Failed Functional Feature Hypothesis (FFFH) claim that beyond childhood, L2 learners cannot acquire new functional categories, their features and feature strength after the end of a critical period. In other words, in case of learners whose L1 functional feature specifications are different from the L2 fossilization will occur, and grammatical development will stabilize short of the target grammar. More recently, Hawkins and Hattori (2006) in the revised version of the RD approach explicitly claim that source of impairment in the use of overt forms by L2 learners is restricted to uninterpretable features, whereas the remaining elements of UG are available for second language acquisition. This means that any uninterpretable feature associated with a functional category that is encoded in the L1 is also available in the L2. Conversely, L1 uninterpretable features that differ from those in the L2 are not available in post-childhood SLA.

According to the Representational Deficit Hypothesis adult learners of a second language fail to represent syntactic features that are not present in their L1s (Hawkins and Chan 1997). A deficit resulting from the influence of the learner's L1 will affect the assignment of native-like meanings to surface forms. Similarly, any feature encoded in the L1 that is also a feature of the L2 is available in L2 production, leading to native-like syntactic and semantic representations. The fact that adult L2 speakers fail to acquire *uninterpretable* formal features which are not realized in the L1 grammar (i.e. syntactic features without semantic content) in contrast to *interpretable* syntactic features (i.e. features which affect semantic interpretation) has a number of consequences as far as overt inflection is concerned. Learners are unable to acquire certain elements in a second language, which results in permanent misinterpretation of L2 features. This is manifested in the patterns of acquisition of English articles by learners of article-less L1s such as Polish, Russian and Chinese. Similarly, English speaking learners of Spanish are argued

to be unable to acquire gender and to fully master gender agreement within the determiner phrase (DP) due to the lack of this feature in English (Franceschina 2001). The inability to acquire L2 *uninterpretable* features leads, in the case of articles, to omission or inappropriate substitution/overuse of one form for another (*a*/*the*, *the*/*a*, *the*/*Ø*, *a*/*Ø*). This statement is based on the crucial assumption shared by generative researchers that L2 interlanguage grammars are UG-constrained and to some degree impaired or defective as compared to native speakers' grammars (Snape et al. 2009). The failure of most adult L2 learners native-like success in the use of English articles is explained by Hawkins in terms of parameter resetting as he claims that this is impossible in adult SLA.

The existing studies of the acquisition of L2 English articles (see e.g. Snape 2009 for the study of Chinese L2 learners of English) are not fully consistent with the Representational Deficit Hypothesis, but they provide partial evidence that interpretable features are acquirable (the difficulty is selecting the correct feature of definiteness for English articles). Unlike the FTFA position (Schwartz and Sprouse 1996), under the FFFH the L2 learner gradually builds up syntactic structures from an initial point at which there are only lexical projections, which can then be modulated by the learner's L1. This entails that learners are able to acquire only those functional projections which exist in their L1.

3. The Fluctuation Hypothesis (Ionin, Ko and Wexler 2004)

Ionin, Ko and Wexler (2004) have proposed that the crosslinguistic differences in the organization of the article system stem from a parametrized principle of UG, which they call the Article Choice Parameter (ACP). This parameter has two options: (1) the definiteness setting and (2) the specificity setting. Since L2 acquisition is constrained by UG, the article choice of L2 learners must be derived from the settings of the ACP. Ionin, Ko and Wexler claim that languages with articles can either have the setting for definiteness and specificity. Languages such as English mark definiteness in their article system and distinguish between definite and indefinite nouns. The Fluctuation Hypothesis (FH) focuses on article misuse, specifically on substitution errors learners of article-less languages make when they acquire articles in L2 English. The claim is that those errors are the result of a failure to set the proposed ACP defined as follows (Ionin, Ko and Wexler 2004):

> The Article Choice Parameter (for two-article languages)
> A language that has two articles distinguishes them as follows:
> — the Definiteness setting: articles are distinguished on the basis of definiteness;
> — the Specificity setting: articles are distinguished on the basis of specificity.

The definitions of definiteness and specificity adopted by Ionin, Ko and Wexler are based on Fodor and Sag's (1982) claim that specificity involves the speaker's intent to refer. This definition implies that the feature [±definite] is related to the knowledge of both speaker and hearer, whilst the feature [±specific] is related to the knowledge of the speaker alone. Informal definitions of definiteness and specificity are presented below (from Ionin, Ko and Wexler, 5).

If a Determiner Phrase (DP) of the form [D NP] is:
— [+definite], then the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP;
— [+specific], then the speaker wants to refer to a unique individual to process some noteworthy property.

In English articles *the* and *a* encode [±definite], but they do not encode [±specific]. An NP co-occurring with *the* must always be interpreted as definite, and an NP co-occurring with *a* must always be interpreted as indefinite. The interpretation of an NP as [±specific] depends upon context. The following sentences illustrate the English article system with definiteness setting (Lyons 1991: 167); the interpretation of the NPs as [±specific] depends upon context.

(1) Peter intends to marry *a* merchant banker
  a. … even though he doesn't get on at all with her.   [–definite +specific]
  b. … though he hasn't met one yet.   [–definite –specific]

(2) Joan wants to present the prize to *the* winner
  a. … but he doesn't want to receive it from her.   [+definite +specific]
  b. … so she'll have to wait until the race finished.   [+definite –specific]

The finding that there is variation between the uses of the features [+definite] and [+specific] means specificity plays a role in the IL grammars. Learners who overuse *the* in the [–definite +specific] contexts are also likely to overuse *a* in [+definite –specific] contexts. If we compare the patterns of article grouping in standard English and the predictions for article choice in L2 English, we can observe that main source of difficulty in L2 English article choice is the perception of the two semantic universals of definiteness and specificity by L2 learners. In a study on first language acquisition Cziko (1986) found that children who acquire L1 English overgeneralize to [+specific –definite] contexts. Similarly, Thomas (1989) concluded that L2 English learners first interpret *the* as denoting specific reference rather than assumed hearer knowledge. Tables 1 and 2 present the pattern of article use in English and the predicted article choice in L2 English.

Table 1. The English article system with definiteness setting (from Ionin, Ko and Wexler, 13)

	[+definite]	[–definite]
[+specific]	*the*	*a*
[–specific]	*the*	*a*

Table 2. Predictions for article choice in L2 English (from Ionin, Ko and Wexler, 19)

	[+definite] (target: *the*)	[–definite] (target: *a*)
[+specific]	correct use of *the*	overuse of *the*
[–specific]	overuse of *a*	correct use of *a*

According to the Fluctuation Hypothesis (FH) and the premises underlying the Article Choice Parameter (Ionin, Ko and Wexler 2004) learners of L2 English whose first language (L1) lacks articles go through a period of "fluctuation," where articles can express both definiteness and specificity. They appear to fluctuate between their use of definite and indefinite articles, specifically between the two settings of definiteness and specificity. In consequence, they select *the* in both definite and indefinite specific contexts and *a* in both definite and indefinite non-specific contexts. Table 3 illustrates the FH in terms of the four types of DP.

Table 3. The Fluctuation Hypothesis (based on Ionin, Ko and Wexler 2004)

Type	Determiner phrase (DP)	Definiteness setting in English	Fluctuation in L2 English
I	[definite, specific]	THE	THE
II	[definite, non-specific]	THE	A/THE
III	[indefinite, non-specific]	A	A
IV	[indefinite, specific]	A	A/THE

The following examples illustrate the four types of DP and the predicted cases of fluctuation.
I. I want to talk to **the winner**. She is a good friend of mine.   [definite, specific]
II. If you want to talk to **a/the winner**, wait until the end of the race.
[definite, non-specific]
III. I'm looking for **a hat** to go with my new coat.   [indefinite, non-specific]
IV. I'm looking for **a/the hat**. I must have left it here yesterday. [indefinite, specific]
(*The conversation takes place in a lost property office*)

L2 learners who speak article-less languages will either fluctuate between definiteness and specificity when learning a language that encodes the features [±definite] and [±specific], or will select the appropriate value for the target language. When learners fluctuate evidence from L2 input should lead them eventually to set the parameter to the appropriate value. L1 speakers of [+article] languages, such as Greek or Spanish, that encode definiteness learning L2 English are predicted not to fluctuate. Since fluctuation is a temporary property of the learners' IL system, we can expect that longer exposure will fix the appropriate value of the parameter and the advanced learners will outperform the intermediate learners. The finding that there is variation between the uses of the features [+definite] and [+specific] means specificity plays a role in the IL grammars. Learners who overuse *the* in the [–definite +specific] contexts were also likely to overuse *a* in [+definite –specific] contexts. Definiteness and specificity are not regarded as the only noteworthy properties of articles but "the only discourse-related features that underlie article choice" (Ionin, Ko and Wexler, 6).

The Fluctuation Hypothesis (FT) claims that L2 learners have full access to UG, thus they have access to the semantic features of definiteness and specificity. Due to the absence of articles in their L1 there is no transfer between article semantics and learners are expected to fluctuate between the two settings of an article choice parameter. This view, however, is questioned by some researchers (e.g. Tryzna 2009), who argue that L2 English article use is better characterized by variability rather than fluctuation.

4. The Missing Surface Inflection Hypothesis (Prévost and White 2000)

The Missing Surface Inflection Hypothesis (henceforth MSIH) was originally proposed by Prévost and White (2000) to investigate the variation in the suppliance of finite and non-finite forms. The MSIH accounts for errors of omission in the use of inflectional morphology in L2 production. Prévost and White (2000) argue that L2 learners' variability in producing inflectional morphology does not result from the absence of abstract syntactic categories associated with those features but rather it represents a mapping problem. The MSIH claims that the absence of surface forms in L2 production does not necessarily mean that the corresponding underlying knowledge is lacking from the learner's grammar (Prévost and White 2000). The MSIH predicts that the omission of articles in L2 production does not imply that interlanguage grammars do not have the features relevant to the acquisition of the article system, such as definiteness or specificity.

Optionality of use of English articles is explained in terms of a break in the relation between the underlying grammar and its overt morphological realization. It is assumed that learners have full access to UG, but they may have difficulties

mapping abstract features, such as definiteness, onto surface morphological forms. Prévost and White claim that the problem is one of lexical access as speakers sometimes select a lexical item instead of a syntactic form, especially when they are unsure of the lexical form, or when they are under communicative and/or processing pressure. Thus, lexical items with unspecified features can replace fully specified syntactic features and the unmarked forms may occur in marked contexts. In consequence learners use default forms where more specified forms are required, for example, L2 speakers opt for the null article *Ø* where *the* and *a* are required.

Examples of studies of article acquisition include those of Lardiere (2006) and White (2003). Lardiere reports naturalistic data from a case study of an adult L1 Chinese speaker of English collected over a period of 16 years. The subject produced more omission errors than substitution errors in her oral production data and was more accurate with definites than with indefinites. The source of omission was the failure to consistently map the appropriate article form onto its representation as the subject tended to select the less specified article form *Ø* where the more specified forms *the* or *a* were required. Lardiere (2006) claims that the reason why the subject is more accurate in using definites than indefinites is because the specification of the definite article in English is less complex than the specification of the indefinite article as definites do not take number count/mass distinction into account (the dog — the dogs) whereas indefinites do (a dog — dogs).

Further evidence for the MSIH comes from White (2003). She reports results of production data from an adult Turkish speaker. Omission of the indefinite article is higher than omission of the definite article with very few cases of substitution errors. The following examples come from White (136):

> So *Ø* brain is already shaped and it's not producing new cells, or whatever.
> But, if you're *Ø* doctor, if you're *Ø* lawyer, you cannot come!
> These days, generally business people wear…..wear *the* ties.

White also used written elicited production tasks in definite and indefinite contexts as presented in 4 (definite) and 5 (indefinite):

> Colin had two pets, a pig and a crocodile. He decided to sell one of them. Which do you think it was?
> (Expected answer: The pig/The crocodile.)
> You probably have something on your desk in your room at home. What is it?
> (Expected answer: A diary/A telephone/etc.)

White comments that the main problem in the acquisition of the English articles is omission rather than their wrong distribution. The subject established semantic contrasts involving definiteness, which is obvious from the correct suppliance of the articles. Although the subject omitted articles to a high extent, when

they were produced, they were appropriate. The variability in the use of definite and indefinite articles White explains in terms of the MSIH, although she admits that the hypothesis does not have sufficient predictive power as it only accounts for omissions once they have been found in production but it does not predict which surface forms will be missing. In sum, the MSIH is the example of the mapping approach, which assumes that learners' linguistic representation of features is a result of mapping linguistic knowledge onto the relevant morphological forms and the observed deficits are a result of the learner's inability to retrieve the required item.

5. The Prosodic Transfer Hypothesis (Goad and White 2004)

According to the Prosodic Transfer Hypothesis (the PTH) (Goad and White 2004), interlanguage production of inflectional morphology and functional words is limited by L1 prosodic constrains, which restrict the types of representations that can be built in the L2. Goad and White (2004) argue that difficulties in L2 production are situated in the phonological component rather than in syntax. It is evident that the PTH is fully compatible with the FTFA model proposed by Schwartz and Sprouse (1996). It is assumed that syntactic features are available to all adult L2 learners (*full access*); however, prosodic structures and other L1 properties are transferred into the L2 and constrain target language grammatical development (*full transfer*). Goad and White assert that if the learner's L1 is an article-less language, it is possible to make predictions about the suppliance of article in the L2 if the L1 lacks or has a different corresponding prosodic structure.

When the target prosodic representation is not present in the L1 grammar, high rates of article deletion are expected, especially at low levels of proficiency. Learners are expected to become aware of the need for overt articles in the L2 as their proficiency improves; in consequence the article suppliance increases, although non-target patterns of article use may also appear in the learner's L2 production. Goad and White (2004) argue that target prosodic representations can be built in IL grammar under two conditions. Specifically new structures are possible "(a) when they can be built through pre-existing (L1) licensing relations; or (b) when they involve L1 structures being licensed in new positions" (Goad and White, 9). Since languages without articles do not permit free clitics at either edge; that is every phonological phrase (PPh) must start with a prosodic word (PWd), i.e. a lexical or a stressed functional element, no adaptation of article-less L1 structures is possible to allow the representation of the English definite and indefinite free clitics *a*/*the* as in Fig. 1. This precludes the adoption of the structure through condition (b) and rates of article suppliance are then expected to be significantly lower.

   In English articles are represented in phonology as free clitics (Selkirk 1996) that link directly to the phonological phrase (PPh) and precede the prosodic word (PWd).
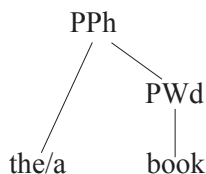
```
        PPh
       /   \
      /    PWd
     /      |
  the/a    book
```

Figure 1. English definite and indefinite free clitic (from Goad and White, 4)

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      PPh
     /   \
    /    PWd
   /      |
  Ø      book
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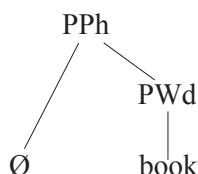
Figure 2. Predicted non-target production (from Goad and White, 11)

   The underlying assumptions of the PTH is that speakers of L1s that do not have articles will delete them in L2 English because they lack the corresponding prosodic structure. Success or lack of success in spoken production of L2 inflection and functional words depends (at least in part) on L1 prosodic representations. L2 learners are predicted to have difficulty in producing functional morphology when the L2 requires a prosodic representation which is unavailable in the L1. Learners may employ a variety of strategies in production of English articles, including deletion, stressing of articles or asymmetric (incorrect) suppliance of TL articles depending on prosodic conditions.
   White and Goad (2004) have demonstrated that prosodic transfer affects the production of English articles as well as patterns of article omission. In English, for example, the presence of an adjective has no effect on the position of articles, indicating that articles link higher in the structure at the level of the PPh.

```
        PPh
      /  |    \
     /  PWd   PWd
    /    |     |
  the/a good  man
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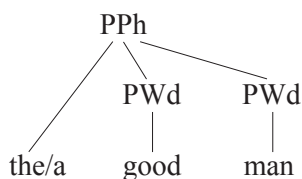
Figure 3. English free clitic in adjectival PPh (from Goad and White, 6)

Goad and White (2004) investigated the asymmetry in the use of articles in contexts with and without adjectives. They claim that articles should be supplied less frequently in DPs with adjectives than in DPs without adjectives. This is because, as Goad and White (2009: 12–13) argue, "affixal clitics must prefix onto the head noun, which can only be achieved if the article directly precedes the noun, and not if it directly precedes and adjective … In consequence, deletion and stressing of articles, as well as substitution of other determiners in place of articles, are all expected to be higher in the presence of adjectives." They argue that Turkish, the language of their subjects, does not have a prosodic structure necessary to represent articles in English, although an L1 Turkish structure could be adopted to represent English articles in the *Art + N* contexts but not in the *Art + Adj + N* contexts. Goad and White (2004) claim that this is the reason for a higher percentage of article omission in adjectivally modified DPs.

Trenkic (2009), however, questions this explanation pointing out that Serbian speakers of L2 English display a similar pattern of article omission, even though their L1 Serbian has, as Trenkic claims, a prosodic representation equivalent to the one used for articles in English, that is Serbian monosyllabic demonstratives prosodify in the same way as English articles, i.e. as free clitics, e.g. [PPh ta [PWd žena]] ("that woman"). Trenkic notes that a similar pattern of article omission was also observed in the written production of Serbian learners of L2 English for which a prosodic account does not offer an adequate explanation.

6. The Syntactic Misanalysis Hypothesis (Trenkic 2007)

One of the recent hypotheses that have been proposed to investigate the omission of articles in L2 English is the Syntactic Misanalysis Hypothesis (henceforth SMH) (Trenkic 2007). Trenkic suggested that speakers of languages which do not have a syntactic determiner category, such as Serbian (Trenkic 2009), misanalyse determiners, including English articles, as nominal modifiers, specifically as adjectives. She found out a difference between the suppliance of articles for adjectival nominal nouns (Art + Adj + N), e.g. *a white mug*, and for those with no modifying adjective (Art + N), e.g. *a mug*, demonstrating that Serbian learners of L2 English omit articles in the context of an adjective. Trenkic argues that learners whose L1s lack DP fail to analyse English articles as determiners, instead treating them as adjectives with meanings associated with that of identifiability. Trenkic claims that articles appear in the learner's speech if he or she has registered a need to express the "identifiability of the referent at the conceptual level, the level that is open to general cognition" (Trenkic 2007: 315–316). This occurs if learners attend to the most salient and meaningful parts of the utterance, before they turn to those with little, or no, additional information. It is suggested that articles may have some

meaning for L2 learners, for example the semantic concept of identifiability, as a result they will attempt to include articles into their speech produced. This will require considerable control and speech monitoring and it is predicted that article omission will occur more frequently in more complex contexts of *Art + Adj + N*, where learners must process an additional element of meaning. Deletion of articles occurs because redundant information is likely to be omitted under communication pressure. Overt expression of definiteness is largely redundant because identifiability can be inferred from the context, thus articles in general are subject to omission.

In her analysis of article omission Trenkic presents a radically different position from the previously discussed approaches. She maintains after Hawkins (1991) that nominal referents can be interpreted as definite or indefinite irrespective of whether they are formally marked or not. The definite article signals that a referent is uniquely identifiable, that it exists and is unique in one of the pragmatically delimited domains. Speakers of languages without articles do not have a choice of a definite article as in the examples below.

English: Pass me *the black mug*, please.
Serbian: Dodaj mi *crnu šolju*, molim te.
Pass me black mug, please.

The nominal phrase is not marked for definiteness in Serbian, yet the context is the same. There is a black mug in front of the speaker and the hearer, thus the referent exists, and it is unique. If the speaker wanted one of the several white mugs passed to him, this request is expressed in English as in (3) and in Serbian as in (4).

English: Pass me *a white mug*, please.
Serbian: Dodaj mi *belu šolju*, molim te.
Pass me white mug, please.

Similarly, the NP in English is marked for definiteness by the indefinite article *a* which signals that the criteria for identifying the unique referent are not met (there are several white mugs and therefore any of them is a potential referent), whereas the equivalent NP in Serbian is not formally marked as indefinite. If the speaker wanted a particular white mug then additional information would have been provided, otherwise the hearer must interpret the NP as indefinite.

The above examples illustrate that nominal referents can be interpreted as definite or indefinite irrespective of whether they are formally marked as such. Trenkic analyses this issue in terms of the communicative redundancy of articles. She asserts that it is ultimately context of use that determines the interpretation of an NP as definite or indefinite and articles are just another way of communicating information that is already available in a context. Communicating explicitly the information about the existence and the uniqueness of the referent is pragmatically redundant

as the information about the colour of the mug in the context when there is only a single mug present and it is black. In this case the speaker would simply refer to it as *the mug*. *Pass me the black mug* would wrongly suggest to the hearer that there was another mug or more mugs of a different colour there as well and the adjective was used to resolve a potential ambiguity. Trenkic claims after Hawkins (2004) that the primary function of articles is not that of signaling (in)definiteness but a nominal phrase. This is attributed to the loss of case inflection in English as there is some contingency between articles and the lack of case on nouns. For example, Slavic languages have a rich nominal case paradigm of seven cases on average but no articles and the only two Slavic languages with a definite article, Macedonian and Bulgarian, have a reduced case system (nominative and accusative). The function of articles *as noun markers* is important due to the ambiguity between nouns and verbs in English as in the following examples.

Are you going to talk?
Are you going to the/a talk?

L2 learners begin the acquisition of articles with L1-based structural expectations. It is likely that because of their similarities with demonstratives and numerals, articles are perceived as new procedural adjectives. The relation between the saliency of a referent and level of complexity of the referential forms produced by an L2 learner: the less complex and semantically specified referential expressions are used when the referent is highly salient in memory. Semantically more specified expressions such as definite NPs are used when the referent is less salient. The distribution of definite nominal forms on a saliency scale can be presented in the following way (Trenkic 2009: 129):

more salient referent ←---→ less salient referent
Ø   it   the NP

L2 speakers operate within a similar scale following a similar pragmatic principle of form distribution, but they allow bare nominals as referents whose saliency is between those encoded by pronouns and those encoded by *the NP*. The L2 grammar allows both NP and the NP as legitimate referential expressions in the same context: L2 rules require the use of the NP, L1 grammar and discourse pragmatic rules favour the use of bare NP.

more salient referent ←---→ less salient referent
Ø   it   NP   the NP

The observed patterns of article choice can be seen as the outcome of competition between the two sets of rules influenced by the cognitive mechanisms of language

processing, a syntactic misanalysis of articles as adjectives. Trenkic draws on an account of first language processing of referential forms in terms of the learner's working memory system, formulated in the Information Load Hypothesis. (Almor 2005 qtd. in Trenkic 2009: 131–132). This model goes beyond the representational deficit vs. processing constraints debate, in that it suggests that variability in article choice is caused by processing limitations, because the production of misanalysed elements is not syntactically motivated, and has to rely on general cognition instead.

7. Summary

During the past decade there have been numerous studies investigating the acquisition of articles by second language learners. The authors of those studies have attempted to find explanations to the fundamental question in second language acquisition research; why do L2 learners continue to have difficulties with L2 acquisition with reference to articles in English?

These difficulties can be attributed to a number of factors: (1) the acquisition of uninterpretable formal features, which are not present in the L1 grammar (the Representational Deficit Hypothesis); (2) fluctuation between semantic features of definiteness and specificity (the Fluctuation Hypothesis); (3) lack of corresponding L1 prosodic structures, which results in difficulties in producing functional morphology (the Prosodic Transfer Hypothesis); (4) problems with mapping linguistic knowledge onto the relevant morphological forms, which results in a break in the relation between the underlying grammar and its overt realization (the Missing Surface Inflection Hypothesis) and (5) problems with language processing of referential forms in terms of the learner's working memory system, which results in syntactic misanalysis of determiners in L2 English (the Syntactic Misanalysis Hypothesis).

The hypotheses discussed in this article differ in a number of respects; some focus on semantic factors, discourse/pragmatic functions, others offer an account in terms of syntactic and prosodic representation. Some analyse the process of second language acquisition in terms of representational deficits or processing constrains, others go beyond those models. Yet, they all present a range of new findings and explore a range of potential explanations for those findings. They certainly stimulate reflection and may prompt further research into the mechanisms of article acquisition as well as other aspects of second language acquisition.

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