

Specificity As a Grammatical Notion: Evidence from L2-English Article Use

Tania Ionin¹, Heejeong Ko² and Ken Wexler²

¹University of Southern California ²Massachusetts Institute of Technology

1. Introduction

Second language (L2) acquisition and linguistic theory form a two-way relationship. On the one hand, linguistic theory makes predictions for L2 acquisition. Conversely, findings from L2-acquisition can influence linguistic theory. In this paper, we examine the relationship between L2 acquisition and linguistic theory in the domain of article choice. We show that theories of article semantics, such as Fodor and Sag (1982), make predictions for article choice in L2-English. We show further that data from L2-English article choice provide evidence for a particular view of specificity, *specificity as speaker intent to refer*.

2. Article (mis)use in L2-English: The background

There have been many studies of L2-English errors in article choice (see, among others, Huebner 1983; Master 1987; Parrish 1987; Tarone and Parrish 1988; Thomas 1989; Murphy 1997; Robertson 2000; and Leung 2001). While article omission is quite common in L2-English, there are also cases of article misuse.

Many researchers (Huebner 1983; Master 1987; and Thomas 1989; among others) have found that L2-English learners often overuse *the* with indefinites. (One exception is Leung 2001, who found high overuse of *a* with definites in L2-English.) Some illustrations of this error are given in (1a) and (1b), extracts from written production data that we have collected from L1-Russian and L1-Korean learners of English, respectively. In (1), the target article for all underlined DPs was *a*: the referent was not previously mentioned.

* We would like to thank Hagit Borer, Suzanne Flynn, Danny Fox, Irene Heim, Nina Hyams, Ora Matushansky, David Pesetsky, Philippe Schlenker, and Bonnie Schwartz for many comments and suggestions. Thanks to the audience of WCCFL 22 for their comments. Any remaining errors are our own.

- (1) a. I lost the health tooth, and I have realized after some time how it was valuable for me. It happened unexpectedly – I bit off the solid sweet and that’s all: my nice – facial! – tooth was fractured.
- b. The most valuable object that I have received is the ball and the signature of the famous baseball player is signed on it.

A number of proposals have been made in the framework of Bickerton (1981)/Huebner (1983) to explain article misuse in L2-English – see Thomas (1989) for an overview. To our knowledge, there is currently no consensus in the literature for what causes L2-English learners to overuse *the*. In this paper, we will argue that overuse of *the* in L2-English is directly tied to the feature *specificity*. We now turn to a discussion of specificity.

3. Article choice and specificity

Fodor and Sag (1982) proposed that English indefinites are ambiguous between referential (specific) and quantificational (non-specific) readings. **A specific indefinite is used if the speaker intends to refer to a unique individual x, where x is in the restrictor set denoted by the NP.** Thus, in (2a), the speaker intends to refer to a particular man, so the indefinite *a man* is specific; in (2b), there is no intent to refer, so *a man* is non-specific.¹ (See Heim 1991 for more discussion.)

- (2) a. *specific (referential) indefinite*
A man just proposed to me in the orangery (though I’m much too embarrassed to tell you who it was).
- b. *non-specific (quantificational) indefinite*
A man is in the women’s bathroom (but I haven’t dared to go in there to see who it is). (Fodor and Sag, ex.(7) and (8))

3.1. Morphological expression of specificity

Specificity receives morphological expression cross-linguistically. In English, it is encoded by *this* on its referential use. As Maclaran (1982:90) notes, use of referential *this* “draws attention to the fact that the speaker has a particular referent in mind, about which further information may be

1. Fodor and Sag’s proposal was based on evidence from long-distance readings of indefinites. Their analysis has since been challenged by a number of researchers, including Reinhart 1997 and Kratzer 1998. In this paper, we are not concerned with long-distance indefinites, but rather with the fact that indefinites can have specific or non-specific readings, where *specificity* necessarily involves *speaker intent to refer*.

given”. This is shown in (3): the speaker intends to draw attention to a particular telephone in (3b), but not in (3a).

- (3) a. John has {a, #this} telephone, so you can reach me there.
 b. John has {a, this} weird purple telephone. (Maclaran 1982:88)

There is evidence that specificity is also encoded by articles in Samoan. According to Mosel and Hovdhaugen (1992:259), “The specific article singular *le/l...* indicates that the noun phrase refers to one particular entity regardless of whether it is definite or indefinite.”

3.2. Specificity, scope, and definiteness

Specificity is not identical to wide scope; this is shown by (2b) and (3a), which contain wide-scope non-specific indefinites. However, specific indefinites necessarily give the appearance of wide scope with respect to intensional or modal operators: in order to use a specific indefinite, the speaker must be referring to a particular individual in the actual world. Narrow-scope indefinites cannot be specific, as shown by the incompatibility of *this*-indefinites with narrow scope in (4).

- (4) I want to read a/#this book about butterflies – any book will do.

So far, we have seen that indefinites may be specific or non-specific. What about definites? For the purposes of this paper, we will take the simplified view that definites are obligatorily specific. This holds for definites on their *previous-mention use*. The speaker in (5) is necessarily referring to a particular cat: *the cat that has just been mentioned*. For the purposes of this paper, we ignore the existence of non-specific definites – but see Ionin (2003b) for more detailed discussion.

- (5) I saw a cat and a dog. I liked the cat more.

3.3. The Article Choice Parameter

The above discussion allows us to formulate a parameter governing article choice cross-linguistically. This binary parameter is given in (6). (We adopt the name of this parameter from Matthewson and Schaeffer 2000, who give it different specifications.) Samoan and English are examples of Setting I and Setting II languages, respectively (but English also marks specificity outside of the article system, via *this*). Since previous-mention definites are necessarily specific, Setting I languages should group them with specific indefinites.

(6) *The Article Choice Parameter*

A language which has two articles can distinguish them as follows:

Setting I. Articles are distinguished on the basis of specificity.

Setting II. Articles are distinguished on the basis of definiteness.

Article distribution under the two settings of the Article Choice Parameter is given pictorially in (7). As this table shows, the two settings draw the morphological distinction between articles in different places.

(7) *Article use crosslinguistically: possible UG options*

DP type	Setting I (Samoan)	Setting II (English)
Non-specific indefinites		
Specific indefinites		
Definites (previous-mention)		

4. **Elicitation study of article choice in L2-English**

We now turn to article choice in L2-English. What happens when an L2-learner whose L1 does not contain articles has to acquire a language with articles, such as English? We propose that L2-learners have access to both settings of the Article Choice Parameter in (6) but that, without sufficient input, they do not know which setting is appropriate for English. As a result, they fluctuate between the two settings.

4.1. **Predictions**

The above proposal makes explicit predictions for article use and misuse in L2-English. When L2-English learners adopt Setting I in (7), they use *the* with definites and specific indefinites, and *a* with non-specific indefinites. When they adopt Setting II in (7), they use *the* with definites, and *a* with all indefinites (specific and non-specific). Note that under both settings, definites get *the* and non-specific indefinites get *a*. However, the two settings are in conflict with respect to specific indefinites, so interchangeable use of *the* and *a* is predicted with specific indefinites. This is summarized pictorially in (8).

(8) *Article use cross-linguistically: predictions for L2-English*

DP type	Setting I	Setting II	L2-English: fluctuation
Non-specific indefinites			
Specific indefinites			
Definites			

4.2. Methods

We tested the predictions in (8) with a group of adult L1-Russian and L1-Korean learners of English.² Both Russian and Korean lack articles, and neither language has obligatory marking of definiteness or specificity on DPs. Thus, we did not expect any direct transfer effects.

4.2.1. Participants

The participants in this study were 50 L1-Russian and 38 L1-Korean learners of English. The age range was 17 to 57 for L1-Russian participants (mean = 38) and 17 to 38 for L1-Korean participants (mean = 28). Most of the participants had been exposed to English as children or adolescents in their native countries, but intensive exposure to English did not begin for any of the participants until they arrived in the US as late adolescents or adults. Average length of residence in the US was 3 years 2 months for the L1-Russian speakers and 1 year 10 months for the L1-Korean speakers.

This study was piloted with seven adult L1-English speakers, who performed as expected, supplying the target article in the contexts enumerated below.

4.2.2. Tasks

The main task was a forced choice elicitation test consisting of 56 short dialogues. Each dialogue was in the learner's L1 (Russian or Korean), with only the target sentence and any sentence(s) following it given in English. The target sentence was missing an article: the learner had to choose between *a*, *the*, and the null article (--) for singulars, and between *some*, *the*, and -- for plurals.

There were 14 contexts types of four items each in the task. Of these, 10 context types are relevant to the discussion of specificity.

Each example below corresponds to a single context type. The contexts are given in English here. The sentences which were in English in the actual test are given in bold. The target DP is always in object position.

Three of the context types aimed to elicit singular specific indefinites. One context type was designed to give the indefinite wide scope over an operator, and involved speaker knowledge of the referent (9). A second specific indefinite context type (10) involved wide scope over an operator as well as use of *certain*, a marker of specificity (see Fodor and Sag 1982). A third context type (11) explicitly stated speaker knowledge of the referent and contained no intensional or modal operators.

2. The study reported here is a follow-up to a smaller study with L1-Russian learners of English only, reported in Ionin (2003a).

- (9) Singular specific indefinite (wide scope over an operator)

In a “Lost and Found”

Clerk: Can I help you? Are you looking for something you lost?

Customer: Yes... I realize you have a lot of things here, but maybe you have what I need. **You see, I am looking for (a, the, --) green scarf. I think that I lost it here last week.**

- (10) Singular specific indefinite (use of *certain*)

In a school

Becky: Tom seemed very nervous to me. I think he is having problems in class. Do you know why he is so nervous right now?

Ben: **He is going to meet with (a, the, --) certain professor – someone that Tom is really afraid of.**

- (11) Singular specific indefinite (no scope interactions)

At a university

Rob: Hi Katie - can you help me? I need to talk to Professor Christina Jones, but I haven't been able to find her. Do you know if she is here this week?

Katie: Well, I know she was here yesterday. **She met with (a, the, --) student - he is in my physics class.**

Three context types were designed to elicit singular non-specific indefinites. In the context exemplified in (12), the indefinite took narrow scope under an operator. The context type in (13) had no operators, and speaker knowledge of the referent was neither stated nor denied. This context type was considered non-specific, since no importance is attached to the identity of the referent. Finally, the context type in (14) involved explicit denial of speaker knowledge.

- (12) Singular non-specific indefinite (narrow scope)

In a clothing store

Clerk: May I help you?

Customer: Yes, please! I've rummaged through every stall, without any success. **I am looking for (a, the, --) warm hat. It's getting rather cold outside.**

- (13) Singular non-specific indefinite (no scope interactions)

Visitor: Excuse me - can you help me? I'm looking for Professor James Smith.

Secretary: I'm afraid he's not here right now.

Visitor: Is he out today?

Secretary: No, he was here this morning. **He met with (a, the, --) student... but I don't know where Professor Smith is right now.**

(14) Singular non-specific indefinite (denial of speaker knowledge)

At a university

Professor Clark: I'm looking for Professor Anne Peterson.

Secretary: I'm afraid she is out right now.

Professor Clark: Do you know if she is meeting somebody?

Secretary: I am not sure. **This afternoon, she met with (a, the, --) student – but I don't know which one.**

Two contexts tested plural indefinites. The wide-scope environment in (15) was designed to elicit a specific indefinite, and the narrow-scope environment in (16) was designed to elicit a non-specific indefinite. In both environments, *some* can be used in L1-English; a bare plural is somewhat infelicitous with wide-scope indefinites and fine with narrow-scope indefinites.

(15) Plural specific indefinite (wide scope)

Phone conversation

Jeweler: Hello, this is Robertson's Jewelry. What can I do for you, ma'am? Are you looking for a piece of jewelry? Or are you interested in selling?

Client: Yes, selling is right. **I would like to sell you (some, the, --) beautiful necklaces. They are very valuable.**

(16) Plural non-specific indefinite (narrow-scope)

Phone conversation

Salesperson: Hello, Erik's Grocery Deliveries. What can I do for you?

Customer: Well, I have a rather exotic order.

Salesperson: We may be able to help you.

Customer: **I would like to buy (some, the, --) green tomatoes. I'm making a special Mexican sauce.**

Finally, two context types were designed to elicit definite DPs in previous-mention environments. One context type was singular (17) and one plural (18).

In addition to the forced-choice elicitation task, the L2-learners completed the written portion of the Michigan test of L2 proficiency.³ This 30-item multiple choice test groups L2-learners by level into beginner, intermediate, and advanced groups.

3. Another task not reported here involved translation from the learners' L1 into English.

(17) Singular definite

Richard: I visited my friend Kelly yesterday. Kelly really likes animals - she has two cats and one dog. Kelly was busy last night - she was studying for an exam. So I helped her out with her animals.

Maryanne: What did you do?

Richard: **I took (a, the, --) dog for a walk.**

(18) Plural definite

Rosalyn: My cousin started school yesterday. He took one notebook and two new books with him to school, and he was very excited. He was so proud of having his own school things! But he came home really sad.

Jane: What made him so sad? Did he lose any of his things?

Rosalyn: Yes! **He lost (some, the, --) books.**

4.3. Results

The results of the Michigan proficiency test grouped the learners as follows. The L1-Korean group contained 1 beginner, 12 intermediate, and 25 advanced L2-learners. The L1-Russian group contained 13 beginner, 15 intermediate, and 22 advanced L2-learners. In order to be able to perform comparisons between L1-Korean and L1-Russian speakers, we concentrate on the results of intermediate and advanced L2-learners, excluding beginners.

4.3.1. Overall results: Intermediate and advanced L2-learners

The overall results for the two intermediate/advanced groups are given in (19) and (20), for singular and plural contexts, respectively. In (19), the three singular specific indefinite contexts are grouped together, as are the three singular non-specific indefinite contexts.

(19) Article use and omission in singular contexts: intermediate/advanced L2-learners

Category	Target	L1-Russian participants (N=37)			L1-Korean participants (N=37)		
		%the	%a	%null	%the	%a	%null
definite	the	85%	14%	1%	83%	14%	3%
specific indefinite	a	44%	46%	10%	24%	71%	5%
non- specific indefinite	a	11%	80%	9%	7%	89%	4%

(20) Article use and omission in plural contexts: intermediate/advanced L2-learners

Category	Target	L1-Russian participants (N=37)			L1-Korean participants (N=37)		
		%the	%some	%null	%the	%some	%null
definite	the	53%	16%	31%	62%	17%	21%
specific indefinite	some/ø	27%	53%	20%	19%	53%	28%
non-specific indefinite	some/ø	11%	66%	22%	2%	78%	20%

As these tables show, use of *the* is higher with definites than with specific indefinites, and higher with specific than with non-specific indefinites. These differences are significant for both singulars and plurals (paired two-sample t-tests for means, $p < .01$). While article omission is higher with plural than with singular DPs, the patterns of article use are similar across singular and plural contexts.

The results for singular contexts are broken down by context type in (21). Overuse of *the* was generally higher in specific indefinite contexts than in non-specific indefinite contexts, with one exception: L1-Korean speakers' use of *the* in the non-specific context in (14) was as high as in the specific context in (11).⁴

(21) Performance in singular indefinite contexts: detailed breakdown by context type

Category	L1-Russian participants (N=37)			L1-Korean participants (N=37)		
	%the	%a	%null	%the	%a	%null
specific indefinite						
exemplified in (9)	55%	37%	7%	28%	70%	2%
exemplified in (10)	41%	41%	19%	32%	59%	8%
exemplified in (11)	36%	59%	4%	13%	84%	3%
non-specific indefinite						
exemplified in (12)	9%	86%	5%	7%	90%	3%
exemplified in (13)	14%	85%	1%	2%	95%	3%
exemplified in (14)	10%	89%	1%	13%	83%	4%

4. The unexpectedly high overuse of *the* in (14) among the L1-Korean speakers may have resulted from a partitivity effect induced by the phrase *...I don't know which one* in this context (where the use of *which one* implies the existence of a contextually salient set). See Ionin (2003b) for more discussion.

4.3.2. Group differences

As evident from the above tables, L1-Korean speakers outperformed L1-Russian speakers on most categories (the differences in *the* overuse between the two groups were in fact statistically significant on most categories of singular specific indefinites, and on the category of plural non-specific indefinites). We suggest that this group difference may be due to the type of input the two groups receive. The L1-Korean participants were predominantly international students receiving intensive English instruction, while the L1-Russian speakers came from a wide variety of backgrounds. Student status is known to have a positive effect on L2-acquisition (cf. Flege and Liu 2001), and the Michigan test may not have been a very accurate measure of L2-proficiency. In fact, we found that scores on the Michigan test of L2-proficiency did not correlate significantly with *the* overuse in any specific indefinite context.

Importantly, the patterns of performance between the L1-Russian and L1-Korean groups are very similar, despite the quantitative differences. Both groups exhibit overuse of *the* with specific indefinites, singular as well as plural.

4.3.3. Individual results

We now examine individual results of the L2-learners in order to see whether individual learners in fact show the fluctuation predicted in (8).

In principle, we might expect any given L2-learner to show one of five patterns of article use, as described in (22) through (26).⁵

(22) The Definiteness Pattern (target-like grammar)
 (adopting Setting II of the Article Choice Parameter)
 high use of *the* with definites only
 little or no overuse of *the* with indefinites

(23) The Fluctuation Pattern
 high use of *the* with definites
 optional use of *the* with specific indefinites
 little or no overuse of *the* with non-specific indefinites

5. The terms used in (22) through (26) are defined as follows: for each category (definite, specific indefinite, and non-specific indefinite), “high use of *the*” refers to a 75% or higher use of *the* across all contexts; “optional use of *the*” refers to use of *the* in at least 25% but less than 75% of all contexts; and “little or no use of *the*” refers to use of *the* that is below 25%. The percentages of *the* use were calculated across all singular contexts. Plural contexts were excluded, since the high rate of article omission may obscure the effects of *the* overuse with plurals.

- (24) The Specificity Pattern
 (adopting Setting I of the Article Choice Parameter)
 high use of *the* with both definites and specific indefinites
 little or no overuse of *the* with non-specific indefinites
- (25) Miscellaneous Pattern 1
 optional (or high) use of *the* with all indefinites, specific and non-specific
- (26) Miscellaneous Pattern 2
 optional use of *the* with definites

Figure 1 reports the number of L2-learners in each pattern. As this figure shows, the vast majority of the L2-learners fall into one of two groups: 26 L2-learners exhibit the Definiteness Pattern, and 25 L2-learners exhibit the Fluctuation Pattern. Thus, most of the L2-learners either have target-like grammar or are fluctuating between the two possible settings of the Article Choice Parameter. Very few (N=5) L2-learners exhibit the Specificity Pattern (Setting I of the Article Choice Parameter), which is what we would expect, since the input should lead L2-learners to abandon fluctuation in favor of Setting II, the correct setting for English.

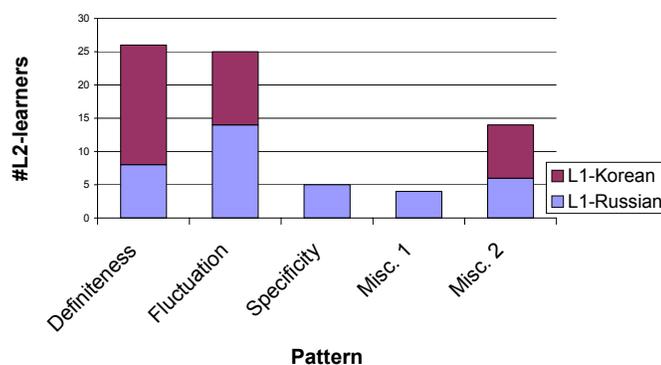


Figure 1: Number of intermediate/advanced L2-learners exhibiting each pattern.

4.4. Discussion

The data reported in the previous section for intermediate and advanced L2-English learners support our predictions. We have observed the

following pattern of article use in L2-English: L2-learners are quite accurate at using *the* with definites and *a/some/--* with non-specific indefinites, but they show interchangeable article use on the category of specific indefinites.

This suggests that, as we predicted, L2-English learners fluctuate between the two settings of the Article Choice Parameter. This results in interchangeable article use with specific indefinites, as illustrated in (27).

(27) Article use cross-linguistically and in L2-English

<i>DP type</i>	Setting I	Setting II	L2-English: fluctuation
Non-specific indefinites			
Specific indefinites			
Definites			

This leads us to conclude that there is UG access in L2-acquisition; L2-learners have access to both settings of the Article Choice Parameter. The learners do not show random performance. However, the L2-learners do not necessarily know which setting is correct for English: 25 of the L2-learners in our study fluctuate between the two parameter settings.

It *is* in principle possible to set the Article Choice Parameter in L2-acquisition: 26 L2-learners in our study exhibited target-like use of articles.

5. Written production data

As part of a follow-up study,⁶ we collected samples of written production data from L1-Russian and L1-Korean learners of English, and analyzed article use in the data.

While there was almost no overuse of *a* with definites in the data, there was some overuse of *the* with indefinites. The results are reported in (28) for singular indefinites. The category of *wide scope indefinites* in (28) excludes indefinites in *there* and *have* constructions. The results for these constructions are reported separately in the last column in (28).

(28) Article use with indefinites: %overuse of *the* across singular contexts

L1 group	wide scope indefinites	narrow scope indefinites	indefinites in <i>have</i> / <i>there</i> constructions
<i>L1-Russian</i>	28% (13/46)	8% (2/24)	2% (3/124)
<i>L1-Korean</i>	13% (8/60)	6% (4/66)	0% (0/133)

6. For details concerning the follow-up study, see Ionin (2003b).

Most cases of *the* overuse occurred in wide-scope indefinite contexts such as (29). Indefinites in these contexts may be specific: the speaker attaches importance to a particular Siamese kitten, picture frame, etc.

There was little overuse of *the* with narrow-scope indefinites, which are obligatorily non-specific. There was almost no overuse of *the* in *there* and *have* constructions. These constructions are unlikely to contain specific indefinites, since no importance is attached to the identity of the referent, as shown in (30).

(29) Extracts from written production data: overuse of *the* with indefinites

a. When I was living in Ulan-Ude yet unmarried my friends presented me the small seamese kitten.

b. I received the frame with picture for Chritmas from my roommate.

(30) Extracts from written production data: *there/have* constructions

a. There are a bed, a table, four chairs, a TV, and some pictures on the walls.

b. Here in the US I have a room which has a middle size. In my room I have a bed, desk, chairs, bookshelf and computer.

These findings further support our conclusion that overuse of *the* with indefinites in L2-English is linked to specificity.

6. Conclusion

In this paper, we have examined the relationship between linguistic theory and L2-acquisition: specifically, the relationship between article semantics and article choice in L2-English. Fodor and Sag's (1982) theory of specificity in indefinites allowed us to make a hypothesis for L2-English article choice. This hypothesis was supported by both elicitation and written production data from L2-English learners: we found that L2-learners associate *the* with specificity. We showed that errors in L2-English article use are not random but stem from the learners optionally dividing English articles on the basis of specificity rather than on the basis of definiteness.

Our findings provide support for Fodor and Sag's view of specificity as *speaker intent to refer*. They also provide evidence for UG access in L2-acquisition, since L2-English learners are shown to have access to universal semantic distinctions underlying article choice. The finding that L1-Russian and L1-Korean speakers exhibited similar patterns of article use suggests that the role of specificity in L2-English article choice is not an effect of L1-transfer, but rather of direct access to UG.

References

- Bickerton, Derek. 1981. *Roots of Language*. Ann Arbor: Karoma.
- Flege, James and Serena Liu. 2001. The effect of experience on adults' acquisition of a second language. *Studies in Second Language Acquisition*, 23, 527-552.
- Fodor, Janet and Ivan Sag. 1982. Referential and quantificational indefinites. *Linguistics and Philosophy*, 5, 355-398.
- Heim, Irene. 1991. Articles and definiteness. Published in German as "Artikel und Definitheit," in A. v. Stechow and D. Wunderlich (eds.), *Semantics: An international handbook of contemporary research*. Berlin: de Gruyter.
- Huebner, Thomas. 1983. *A Longitudinal Analysis of the Acquisition of English*. Ann Arbor: Karoma.
- Ionin, Tania. 2003a. The interpretation of *the*: A new look at articles in L2-English. In B. Beachley, A. Brown, and F. Conlin (eds.), *Proceedings of the 27th Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 346-357.
- Ionin, Tania. 2003b. Article semantics in second language acquisition. Ph.D. thesis, MIT. Distributed by *MIT Working Papers in Linguistics*.
- Kratzer, Angelika. 1998. Scope or pseudo-scope? Are there wide-scope indefinites? In S. Rothstein (ed.), *Events in grammar*, 163-196. Dordrecht: Kluwer.
- Leung, Yan-kit Ingrid. 2001. The initial state of L3A: Full Transfer and Failed Features? In X. Bonch-Bruевич, W.J. Crawford, J. Hellermann, C. Higgins and H. Nguyen (eds.), *The Past, Present and Future of Second Language Research: Selected Proceedings of the 2000 Second Language Research Forum*, 55-75. Somerville, MA: Cascadilla Press.
- Maclaran, Rose. 1982. The semantics and pragmatics of the English demonstratives. Ph.D. thesis, Cornell University.
- Master, Peter. 1987. A cross-linguistic interlanguage analysis of the acquisition of the English article system. Ph.D. thesis, UCLA.
- Matthewson, Lisa and Jeannette Schaeffer. 2000. Grammar and pragmatics in the acquisition of article systems. In J. Gilkerson, M. Becker, and N. Hyams (eds.) *UCLA Working Papers in Linguistics: Language Development and Breakdown 1*, University of California, Los Angeles, 1-39.
- Mosel, Ulrike and Even Hovdhaugen. 1992. *Samoan reference grammar*. Oslo: Scandinavian University Press.
- Murphy, Susan. 1997. Knowledge and production of English articles by advanced second language learners. Ph.D. dissertation, University of Texas at Austin.
- Parrish, Betsy. 1987. A new look at methodologies in the study of article acquisition for learners of ESL. *Language Learning*, 37, 361-383.
- Reinhart, Tanya. 1997. Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and Philosophy*, 20, 335-397.
- Robertson, Daniel. 2000. Variability in the use of the English article system by Chinese learners of English. *Second Language Research*, 16, 135-172.
- Tarone, Elaine and Betsy Parrish. 1988. Task-related variation in interlanguage: The case of articles. *Language Learning*, 38, 21-45.
- Thomas, Margaret. 1989. The acquisition of English articles by first- and second-language learners. *Applied Psycholinguistics*, 10, 335-355.