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IN SEARCH OF SYSTEMATICITY: A CONCEPTUAL FRAMEWORK FOR THE ENGLISH ARTICLE SYSTEM

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Benjamin J. White

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IN SEARCH OF SYSTEMATICITY: A CONCEPTUAL FRAMEWORK FOR THE ENGLISH ARTICLE SYSTEM

By

Benjamin J. White

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ABSTRACT

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By

Benjamin J. White

With numerous rules for use and even more exceptions to those rules, English articles have long been recognized as a challenging topic by both ESL learners and teachers. This research project set out to achieve three main objectives: (1) to identify how articles are currently explained by ESL textbooks and teachers, (2) to propose a systematic perspective through which to interpret article meaning, and (3) to examine how exposure to this new perspective influences the ways international MA TESOL students with article-less first languages (L1s) explain articles.

Toward the first objective, two ESL grammar books and one article workbook were reviewed for how they present articles to readers. Additionally, an experiment was carried out in which twelve ESL teachers wrote explanations for twenty examples of article use found in authentic texts. Confidence levels were also rated for each explanation. Patterns across teachers' explanations were identified, and results were discussed in terms of what they imply about the current practice of article instruction.

Toward the second objective, a conceptual framework was created. Through this framework, all uses of *the* map to the same abstract schematic image, all uses of *a* and unstressed *some* map to a second schematic image, and all uses of the zero article (\emptyset) map to a third schematic image. This framework was applied to a range of article uses as

well as pedagogical rules for article use, and implications for linguistic theory and classroom practice were discussed.

Toward the final objective, five MA TESOL students with L1s of Korean, Thai, and Chinese were introduced to the framework through a series of training sessions. The participants' explanations of examples of article use in authentic texts before and after exposure to the framework were analyzed for changes. It was found that post-exposure explanations were more unified across individual article uses. Results were discussed in light of what they suggest about the potential use of the framework as pedagogical aid in the classroom.

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TABLE OF CONTENTS

LIST OF TABLES	x
LIST OF FIGURES	xiv
CHAPTER 1	
INTRODUCTION	1
CHAPTER 2	
LITERATURE REVIEW	5
2.1 Linguistic Perspectives on Articles	
2.2 ESL Textbook Perspectives on Articles	
2.3 Research Questions	
CHAPTER 3	
ESL TEACHERS	22
3.1 Methodology	22
3.1.1 Participants	22
3.1.2 Procedure	23
3.1.2.1 Explanation elicitation task	24
3.1.3 Data Analysis	
3.2 Results	28
3.2.1 Patterns for Individual Items	29
3.2.2 Patterns for Article Type	37
3.2.2.1 Explanations of <i>the</i>	37
3.2.2.2 Explanations of Ø	
3.2.2.3 Explanations of <i>a</i>	40
3.2.2.4 Explanations of some	41
3.2.3 Contrasting Explanations	42
3.2.4 Reference to Writer/Reader	43
3.2.5 Confidence	45
3.3 Discussion	45
3.3.1 ESL Teacher Explanations and Textbooks	45
3.3.2 Variety in Explanations	
3.3.3 Textbook Rules and Teacher Confidence	
3.3.4 Implications for the Classroom	
3.4 Conclusion	52
CHAPTER 4	
CONCEPTUAL FRAMEWORK	54
4.1 Concentual Framework Design	54

4.1.1 Discourse Frame and Use of the	57
4.1.1.1 Situation frame	57
4.1.1.2 Concept frame	59
4.1.1.3 Text frame	62
4.1.1.4 Application to text	63
4.1.2 Individuation and Use of a/some	64
4.1.3 Boundedness and Use of Ø	68
4.1.4 Generic Reference	
4.2 Application of Framework	
4.2.1 Examples of Article Use	
4.2.2 Textbook Rules	
4.3 Discussion	
4.3.1 Linguistic Theory	
4.3.2 Pedagogy	
4.4 Conclusion	99
OVA POTEN S	
CHAPTER 5 MA TESOL STUDENTS	101
5.1 Methodology	
5.1.1 Participants	
5.1.2 Explanation Electation Task 5.1.3 Comparative Reflection Task	
5.1.4 Procedure	
5.1.4.1 Meeting 1	
5.1.4.2 Meeting 2	
5.1.4.3 Meeting 3	
5.1.4.4 Meetings 4 and 5	
5.1.4.5 Meeting 6	
5.1.5 Data Analysis	
5.2 Results	
5.2.1 Participant 13	
5.2.1.1 Likeness of explanations	
5.2.1.2 Patterns in Elicitation B explanations	
5.2.1.3 Observations on changes in explanations	
5.2.2 Participant 14	
5.2.2.1 Likeness of explanations	
5.2.2.2 Patterns in Elicitation B explanations	
5.2.2.3 Observations on changes in explanations	118
5.2.2 Participant 15	119
5.2.2.1 Likeness of explanations	119
5.2.2.2 Patterns in Elicitation B explanations	120
5.2.2.3 Observations on changes in explanations	
5.2.2 Participant 16	125
5.2.2.1 Likeness of explanations	
5.2.2.2 Patterns in Elicitation B explanations	127

5.2.2.3 Observations on changes in explanations	128
5.2.2 Participant 17	
5.2.2.1 Likeness of explanations	
5.2.2.2 Patterns in Elicitation B explanations	
5.2.2.3 Observations on changes in explanations	
5.3 Discussion	
5.3.1 Changes in Explanations	
5.3.1.1 Potential value of the framework	
5.3.1.2 Challenges for the framework	
5.4 Conclusion	
CHAPTER 6	
CONCLUSION	146
6.1 Limitations	148
6.2 Future Directions	148
APPENDICES	
Appendix A: ESL Teacher Elicitation	150
Appendix B: Protocols for MA TESOL Student Meetings	
Appendix C: MA TESOL Student Interview Questions	
Appendix D: MA TESOL Student Handout on Framework	
Appendix E: Framework Application Worksheet	
Appendix F: Narrative to be Applied to Framework	
Appendix G: Project Feedback Questionnaire for MA TESOL Students	
REFERENCES	182

LIST OF TABLES

Table 3.1 Background of ESL Teachers
Table 3.2 Key Terms for Item 1 (When \underline{O}_1 new foreign language teaching methods and textbooks are introduced, they are often said to be based on the latest research in psychology, linguistics, or pedagogy.) 29
Table 3.3 Key Terms for Item 2 (Sometimes, they are simply ordered and distributed to <u>O</u> ₂ teachers who have to do their best to use them effectively.)
Table 3.4 Key Terms for Item 3 (Teachers have seen many different approaches over the past fifty years.)
Table 3.5 Key Terms for Item 4 (Another emphasizes the value of having students imitate and practice <u>a</u> ₄ set of correct sentences and memorize entire dialogues.)
Table 3.6 Key Terms for Item 5 (Yet another stresses the importance of encouraging "natural" communication between students as they engage co-operatively in tasks or projects while using the new language.)
Table 3.7 Key Terms for Item 6 (<u>The</u> ₆ reader should not see it as a finished product, therefore, but rather as a snapshot of work in progress, an illustration of an open-ended process that can and should have no closure.)
Table 3.8 Key Terms for Item 7 (At the same time I have not taken any of the common meanings of terms such as theory, practice, research, curriculum, and learning as given, but) 31
Table 3.9 Key Terms for Item 8 (but tried to find <u>O</u> ₈ new meaning for them that fit new ways of thinking, and achieve terminological integrity throughout.)
Table 3.10 Key Terms for Item 9 (I have not gone far enough in all these matters, but hope I have made some useful notes in the margin of our ideals.)

Table 3.11
Key Terms for Item 10 (there are places where I have felt it necessary to provide some 10 more theoretical backup, and these sections have been)
Table 3.12
Key Terms for Item 11 (<u>The_11</u> mind is inherently embodied.)
Table 3.13
Key Terms for Item 12 (Because of these discoveries, <u>O</u> ₁₂ philosophy can never be the same again.)
Table 3.14
Key Terms for Item 13 (When taken together and considered in detail, these three findings from the science of <u>O</u> ₁₃ mind are inconsistent with central parts of Western philosophy.)
Table 3.15
Key Terms for Item 14 (They require a thorough rethinking of the 14 most popular current approaches, namely, Anglo-American analytic philosophy and postmodernish philosophy.)
Table 3.16
Key Terms for Item 15 (The answer is that \underline{an}_{15} empirically responsible philosophy would require our culture to abandon some of its deepest philosophical assumptions.) 35
Table 3.17
Key Terms for Item 16 (It is a remarkable fact about the United States that it fought \underline{a}_{10} civil war without undergoing a change in its form of government.)
Table 3.18
Key Terms for Item 17 (The war was fought to preserve the system of government that had been established at <u>the_17</u> nation's founding)
Table 3.19
Key Terms for Item 18 (But in almost every other respect, <u>the</u> ₁₈ United States became <u>a</u> ₁₉ different country.)
Table 3.20
Key Terms for Item 19 (But in almost every other respect, <u>the</u> ₁₈ United States became <u>a</u> ₁₉ different country.)
Table 3.21
Key Terms for Item 20: (The war alone did not make $\underline{\mathcal{O}}_{20}$ America modern, but the war marks the birth of modern America)

Table 3.22 Key Terms for the	7
Table 3.23	
Frequent Terms for the	8
Table 3.24	
Key Terms for Ø	8
Table 3.25 Frequent Terms for Ø 3	39
Table 3.26 Key Terms for a	40
Table 3.27 Frequent Terms for a	1
Table 3.28 Key Terms for some	1
Table 3.29 Frequent Terms for some	11
Table 3.30 Examples of Writer/Reader Reference	13
Table 3.31 Frequencies of Writer/Reader Reference by Participant	14
Table 3.32 Average Confidence Ratings by Item	15
Table 3.33 Average Confidence Ratings by Participant	15
Table 3.34 Explanations for the in Item 11	7
Table 3.35 Examples of Variety in Explanations for the by Participant 6	18
Table 3.36 Examples of Variety in Explanations for a by Participant 3	18

Table 4.1	
Article Form-Meaning Mappings	77
Table 5.1	
MA TESOL Participants	102
Table 5.2	
Activity Outline by Week	104
Table 5.3	
Actual Schedule by Participant: Dates and Lengths of Meetings	105
Table 5.4	
Likeness of Explanations for Participant 13	112
Table 5.5	
Likeness of Explanations for Participant 14	116
Table 5.6	
Likeness of Explanations for Participant 15	120
Table 5.7	
Likeness of Explanations for Participant 16	126
Table 5.8	
Likeness of Explanations for Participant 17	132

LIST OF FIGURES

Figure 2.1. Continuate-words in zero-form and the-form
Figure 4.1. Conceptual framework
Figure 4.2. Conceptualization for the steering wheel
Figure 4.3. Conceptualization for the teacher. 60
Figure 4.4. Conceptualization for the tiger in (4.1).
Figure 4.5. Conceptualization for the tiger in (4.2).
Figure 4.6. Example conceptualizations for individuation and non-individuation 64
Figure 4.7. More example conceptualizations for individuation and non-individuation. 65
Figure 4.8. Conceptualization for an apple, some water, and some pretzels in (4.5) 66
Figure 4.9. Conceptualization for apples in (4.7).
Figure 4.10. Conceptualization for water in (4.8).
Figure 4.11. Conceptualization for prison in (4.10b).
Figure 4.12. Conceptualization for the Brazilians in (4.12)
Figure 4.13. Conceptualizations for the birds, some birds, and birds in (4.13) 78
Figure 4.14. Conceptualizations for style NPs in (4.14).
Figure 4.15. Conceptualizations for the television in (4.15)
Figure 4.16. Conceptualizations for NASA, the CIA, and an ATM in (4.16)
Figure 4.17. Conceptualization for the wall in (4.19).
Figure 4.18. Conceptualization for the foot in (4.20).
Figure 4.19. Conceptualizations for the hospital and hospital
Figure 4.20 Concentualization for the tallest mountain in the world

Figure 4.21. Conceptualization for the screen of a laptop.	90
Figure 4.22. Conceptualization for a computer with lots of memory.	90
Figure 4.23. Conceptualizations for the Czech Republic.	91
Figure 4.24. Conceptualization for Spain.	92
Figure 4.25. Conceptualizations for the Snake River and the Pacific Ocean	92
Figure 4.26. Conceptualization for Lake Erie.	93
Figure 4.27. Conceptualization for the Cascade Mountains.	93
Figure 4.28. Conceptualization for the flu.	94

CHAPTER 1: INTRODUCTION

Teaching English as a second language (ESL¹) in various settings over the last fifteen years has made me keenly aware of the frustration associated with the article system. I have seen both how students struggle to use *the* and *a* appropriately and how teachers struggle to answer questions on article use. So often these questions cannot be explained by textbook rules. Many instructors – both novice and experienced – have informed me that English articles simply cannot be taught. I disagree with this view and suggest that what is needed is a new understanding of articles, an understanding based less on traditional article rules and more on systematic conceptualization.

The challenge that articles present second language (L2) learners of English is well attested in the second language acquisition (SLA) literature (e.g., see Lee, 2007, for an overview and García Mayo & Hawkins, 2009, for a collection of recent studies). In fact, an authoritative introductory textbook on SLA (Gass & Selinker, 2008) states: "the English article system... appears to be virtually impermeable to instruction" (p. 323). The greatest challenge is posed to ESL learners with first languages (L1s) that lack articles (Master, 1987). Whereas Spanish and German speakers need to learn the nuances that distinguish the usage of articles in English from those in their L1s, Korean and Russian speakers must learn this system without reference to comparable linguistic items in their own languages. Even learners at higher levels of proficiency make persistent article errors (Kharma, 1981; Master, 1997), which take the form of omission (e.g., book instead of the book) or substitution (e.g., the chair instead of a chair). When it comes to article

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¹ The term ESL is meant to include settings where English is taught as a second language (e.g., in the United States) and settings where English is taught as a foreign language (e.g., in China).

errors, it is not just an issue of persistence but also a matter of frequency. Research on ESL writing has found inaccurate article use to be one of the most frequent errors committed (Bardovi-Harlig & Bofman, 1989; Bitchener, Young, & Cameron, 2005).

Articles present a considerable challenge to teachers as well as learners. According to research by Covitt (as cited in Celce-Murcia & Larsen-Freeman, 1999, p. 295), ESL instructors working in the Los Angeles area in the 1970's claimed articles were their greatest teaching problem. I heard this sentiment echoed some three decades later at the 42nd Annual Teaching English to Speakers of Other Languages (TESOL) Convention, held in New York City. In a discussion session (organized by Monika Ekiert) on teaching articles, dozens of ESL teachers crowded into a small conference room and aired their frustration. They expressed feeling intimidated by the complexity of the article system as well as a lack of confidence in current pedagogical materials. What was remarkable from my perspective was the response by participants when asked to explain particular article uses that were suggested by the discussion organizer. The same uses prompted a wide range of explanations from different teachers. Hearing the variety in these responses and reflecting on my own teaching experiences, I decided at that moment that my dissertation project would focus on the article system. It would be an attempt to develop a more systematic way to understand articles.

This research project was undertaken with three objectives in mind. The first was to survey the pedagogical landscape of article instruction for advanced ESL learners.

Having spent the majority of my own teaching experience working with higher-level learners, I was curious to identify what such learners might expect from popular ESL grammar books in terms of article presentation and from their teachers in terms of article

explanations. The second objective was to create a novel way for learners and teachers to view the meaning of articles, a view that might be understood as systematic. The third objective was to see how this new perspective would be received by MA TESOL students who are L1 speakers of an article-less language. What follows are the results of my effort to meet these objectives.

The work is organized into six chapters. After the Introduction, Chapter 2 reviews prominent theoretical accounts that have been proposed on the meaning of articles. These particular accounts were chosen because of their role in motivating the novel perspective to be proposed in Chapter 4. In addition, the article presentation found in popular ESL texts is reviewed. These reviews are followed by the research questions for the current project. Chapter 3 presents the methodology and results of an experiment in which ESL teachers were asked to write how they would explain examples of article use found in authentic texts to advanced learners. Results are discussed in terms of what they imply about the current practice of article instruction. Chapter 4 presents a conceptual framework for the article system. After the different components are explained, the framework is further illustrated through its application to a range of article uses and ESL textbook rules. Chapter 5 presents the methodology and results of a second experiment that exposed five MA TESOL students to the framework. Of particular interest was how a series of training sessions would influence the participants' explanations of examples of article use in authentic texts. Results are discussed in light of what they suggest about the potential use of the framework as a pedagogical aid in the classroom. Chapter 6 serves as the conclusion to the paper.

I would like to close this introductory chapter by invoking a metaphor. Our current understanding of the English article system resides within a shattered mirror. Through the many cracks and multiple pieces of glass, the reflection is difficult to perceive. What we assume to be a system appears as a collection of inchoate parts. Each jagged piece reflects one particular use, one rule, or one exception. This broken mirror constrains how we view articles. While particular aspects of the article system have been studied in detail, a coherent picture of the system's totality has eluded linguists, ESL teachers, and ESL learners. In simple terms, there always seem to be exceptions within existing analyses of articles. This project strives to fashion the many pieces of the English article system into an intelligible whole. The proposed conceptual framework is meant to unify disparate article uses by mapping them to an overarching schema, thus cohering rules and exceptions into one seamless, comprehensible, systematic reflection.

CHAPTER 2: LITERATURE REVIEW

This chapter considers some of the key elements in prominent attempts, within the linguistics literature, to explain the meaning of English articles. It goes on to review the presentation of articles in two ESL grammar books and one ESL article workbook. The chapter concludes with the three research questions for the current project.

Linguistic Perspectives on Articles

As implied by the names *definite article* and *indefinite article*, the notion of definiteness is central to semantic analyses of the article system. Traditionally, definiteness has been treated as dependent on either uniqueness or familiarity. Russell (1905) held the former to be the core meaning of the definite article: "*the*, when it is strictly used, involves uniqueness" (p. 481). Thus, any use of *the* X denotes X as one and only one entity. Meanwhile, Christophersen (1939) asserted that familiarity is the principal requirement for the definite article:

The article *the* brings it about that to the potential meaning (the idea) of the word is attached a certain association with previously acquired knowledge, by which it can be inferred that only one definite individual is meant. That is what is understood by *familiarity*. (p. 72)

This familiarity may be of an indirect variety. For example, when talking about a hotdogeating contest, a speaker may say "the winner will be decided in 10 minutes." The speaker anticipates that the hearer is familiar with the knowledge that contests usually have one winner. These two interpretations of definiteness have continued to play an important role in more recent work. For example, Kadmon (1990) relies on uniqueness for her description of definite noun phrases (NPs), while the theory of "file-change semantics" in Heim (1988) relies on familiarity.

Over the years, problems have been pointed out for interpretations of definiteness based on uniqueness. There are uses of the definite article that do not appear to meet this criterion. DuBois (1980) gives the following example.

(2.1) The boy scribbled on the living-room wall. (ex. 86)

At issue is the fact that most living rooms have four walls. While the hearer may be familiar with the living room in question, the italicized NP above does not specify one unique wall. Problems have also been identified for interpretations of definiteness based on familiarity. Again, there are uses of the definite article that seem not to meet this criterion. Birner and Ward (1994) give this example.

(2.2) In her talk, Baldwin introduced the notion that syntactic structure is derivable from pragmatic principles. (ex. 1a)

Although the italicized NP refers to what may be a unique notion, it is not a notion with which the hearer is familiar.

Hawkins (1978) offers an account for the meaning of *the* that replaces familiarity and uniqueness with location and inclusiveness. To summarize greatly, when a speaker uses the definite article, she instructs the hearer to locate the referent of the NP within a pragmatically shared set of objects. Inclusiveness represents the idea that "reference must be to the totality of objects or mass" of the referent (p. 160). Thus, in a room with three windows that are all open, the NP in the request "close *the windows*" refers to all three windows. Similarly, if someone were to spill his drink in that same room, the NP in the request "clean up *the wine*" refers to all the wine that fell to the floor.

Hawkins (1978) identifies four major usage types of the for non-generic reference.

Each reflects a different pragmatic set in which referents can be located. For anaphoric use, referents are to be found in "the set of objects which [the speaker and hearer]... have talked about" (p. 109). For immediate situation use, referents are to be found among those objects that populate the space in which the speaker and hearer find themselves.

The examples above of the windows and the wine illustrate this use. A third usage type is larger situation use. One example given by Hawkins is of inhabitants of the same town talking about the town hall (p. 115). It is not necessary that the interlocutors be standing near the building in question, that it be in their immediate situation. The final major usage type is associative anaphoric use. The idea is that the mention of an NP in the discourse triggers associations. These associations then serve as the pragmatic set of objects in which a definite NP can be located. Hawkins gives the example of speaking about the bride or the bridesmaids after a wedding has been mentioned.

Hawkins (1978) proposes one additional category of various "unfamiliar" uses of the definite article. These include uses of *the* that do not fit into any of the major usage types above and that appear to be counterexamples to Christophersen's requirement of familiarity. The examples Hawkins presents all include NPs that in some way involve modification, such as those listed below.

- (2.4) What's wrong with Bill? Oh, the woman he went out with last night was nasty to him. (ex. 3.16)
- (2.5) I remember the beginning of the war very well, because I happened to be in my garden pulling up marrows, when all of a sudden I heard a noise in the sky. (ex. 3.83)

Hawkins claims that "the modifier itself takes over the role of previous discourse, and enables the hearer to identify some set of objects within which he is to locate the referent" (p. 149). In (2.4), the relative clause (who) he went out with last night provides enough information for the hearer to locate the woman in question. In (2.5), the prepositional phrase of the war triggers associations for war, among which the beginning can be located.

Certain weaknesses in Hawkins's analysis of articles have been identified. Lyons (1999) challenges the notion of inclusiveness with the following examples.

- (2.6) [In a room with three doors, one open and two closed]

 Close the door, please. (ex. 19, p. 262)
- [In a hallway with four doors, all closed, the speaker stands dressed for a journey, a suitcase in each hand]

Open the door for me, please. (ex. 20, p. 262)

Lyons suggests that for neither of these situational uses of the definite article, does inclusiveness apply. In an earlier criticism, Lyons (1980) adds a qualification to the criterion of location. He claims that there are uses of *the* where the hearer cannot locate the referent in a shared set and must therefore presuppose its existence. This happens when the hearer lacks any knowledge of the referent. Lyons gives the following example in which the hearer has no idea what a *zócalo* is.

(2.8) When you arrive in Mexico City, make your way to the zócalo. (p. 87) In this instance, "shared knowledge does not previously exist, but is established by means of the definite reference" (p. 90).

To account for the meaning of the indefinite article, Hawkins (1978) introduces the notion of exclusivity. The suggestion is that for an indefinite reference, the NP "refers to a proper subset, i.e. not-all, of the potential referents of the referring expression" (p. 187). That is, other possible referents are excluded. This is so for specific, non-specific, and generic uses of a. Consider the following examples.

- (2.9) A cat just walked through my yard.
- (2.10) We should buy a cat. Any one that catches mice will do.
- (2.11) A cat is a good household pet.

For each of these uses of *a cat*, other possible cats in the set of cats are excluded. Like Yotsukura (1970), Hawkins considers unstressed *some* an indefinite article. Its use follows the same principle of exclusivity. To illustrate, the next two examples from Hawkins are to be read as part of the same text.

- (2.12) Fred bought a book from Heffer's. (ex. 4.05)
- (2.13) He was dismayed to find that *some pages* were torn. (ex. 4.07)

 The italicized NP in (2.13) refers to at least two pages of the book in (2.10). At the same

time, it excludes other pages, pages that were not torn.

Hawkins (1991) offers a few modifications to his descriptive theory of articles.

Among these modifications, he redefines the shared sets as "P-sets" or pragmatic sets.

These align more closely with relevance theory in Sperber and Wilson (1986). In particular, Hawkins wishes to free the speaker from complete reliance on the hearer's knowledge. In his previous account, if a referent is not known to the hearer through specific or general knowledge or is not necessarily locatable based on the modification of the NP, the speaker is obligated to avoid use of the definite article. However, now "the

speaker can simply extend or construct a P-set for a unique entity" (p. 413). An example given is *the dog in my car* (p. 413). By the previous account, the prepositional phrase *in my car* would presumably fail to trigger associations among which *the dog* could be located.

Although Hawkins (1978, 1991) makes a clear distinction between the definite and indefinite articles, the analysis says little about NPs that appear with no articles. Christophersen (1939), in his description of the article system, does make a three-way distinction between the *the*-form, the *a*-form, and the zero-form. In order to fully account for these forms, Christophersen also makes the distinction between continuate-words and unit-words, which are essentially mass and count nouns. They are explained as follows:

A unit-word calls up the idea of something regarded as single and complete in itself, an individual or unit belonging to a class of similar objects. It is viewed as a point. A continuate-word represents something apprehended as continuous and extending indefinitely in space and time. Parts of it may be circumscribed with precise limits having a definite shape, but the object as such is still viewed as continuous. (p. 26)

When the zero article is used with a continuate-word or a plural unit-word, there is the "impression of something continuous with indefinite limits" (p. 36). This contrasts with the definite article, which signals the view of "having precise limits" (p. 34).

Christophersen (1939) offers the following diagrams to illustrate the limiting effect of *the* with continuate-words.



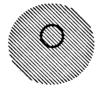




Figure 2.1. Continuate-words in zero-form and the-form.

The first image, on the left, represents use of the zero article, as in *truth*. The second image, in the middle, represents what Christophersen calls "the usual meaning of the *the*-form" (p. 35), as in any of the four major usage types of *the* found in Hawkins (1978). The idea is that the NP refers to only a portion of what the continuate-word in the zero-form denotes. In one example given by Christophersen, a sign reading "Keep off the Grass" would refer only to the grass in the situation in which the sign appeared, not to grass in other situations. The third image, on the right, represents instances when *the* imposes limits that are "equal to the whole genus" (p. 34), as in *the truth*.

Christophersen (1939) accounts for use of the zero article with proper nouns in the following way. A proper noun "denotes only one definite individual and is therefore always concrete"; whereas, a common noun "is only an idea with potential realizations; the idea itself is abstract, the realizations are concrete" (p. 65). While the articles *the* and a serve to realize abstract ideas in concrete forms with common nouns, they are unnecessary with proper nouns because these are already concrete. Hewson (1972) adds that with proper names, such as the names of people, one normally gets both an exterior or container view and an interior or qualitative view (p. 107). This is in contrast to the zero article with a singular common noun, which provides "an interior, qualitative view" of the referent (p. 106). In the statement "Bob likes wine," one can imagine a

conceptualization of wine that is formless and without a container; whereas, the conceptualization of Bob involves the container of a human body.

Chesterman (1991) expands the article system to include five articles (null, the, a, some, zero). The argument is made that what Christophersen calls the zero-form can be divided into uses that are definite and indefinite. These two usage types represent different articles which appear at opposite ends of a continuum of definiteness. At one end is the null article, which appears with singular proper nouns and with some singular common nouns. Examples of the null article with common nouns include *be in bed*, *go by bus*, *at dawn*, *in spring*, *dinner is served*, etc. (p. 55). The nouns in these last examples would be considered singular count nouns by Stvan (2007). At the indefinite end of the definiteness continuum is the zero article, which appears with plural and mass nouns. Chesterman gives the following examples of uses of the zero article.

- (2.14) John loves *bees*. (ex. 63, p. 56)
- (2.15) This is made of *plastic*. (ex. 64, p. 56)

As revealed in this section, a number of issues have been considered important in previous attempts to explain the meaning of English articles. A lack of agreement exists on exactly what these issues are (uniqueness vs. familiarity vs. inclusiveness) and even on how many articles should be acknowledged in the system. The presentation of articles within ESL texts is similarly disjointed and reflects an underlying variety in descriptions of article use.

ESL Textbook Perspectives on Articles

As one of the goals of the current project is to advance article pedagogy, it is worth considering how articles are treated in current ESL grammar books. This section reviews

the presentation of articles in two popular textbooks: *Understanding and Using English Grammar* by Betty Azar and Stacy Hagen (2009) and *Focus on Grammar 5* by Jay Maurer (2006). Henceforth, the former book is referred to as UUEG and the latter as FOG. This section also examines the presentation of articles in one workbook: *The Article Book* by Tom Cole (2000).

These particular textbooks were chosen because of their relevance to the context in which the project took place. First, these books are targeted toward higher-level learners of English – UUEG for intermediate to advanced, FOG for advanced. Second, both books were available for use by the teachers who participated in the project. That is, copies were owned by the library of the center at which the participating teachers worked. The popularity of the textbooks may be attested by the fact that UUEG is in its fourth edition while FOG is in its third. Both are comprehensive reference grammars that feature communicative activities and exercises. Both present information and exercises first on the count/noncount distinction in English nouns and then on article usage. To these topics, UUEG devotes 12 pages out of 437 and FOG 26 out of 444.

Turning first to countability, the textbooks distinguish count from noncount nouns in the same way. Namely, three basic distinctions are made: (a) count nouns may be counted while noncount nouns may not; (b) count nouns in the singular can appear with a/an while noncount nouns cannot; (c) count nouns have plural forms while noncount nouns do not. The first of these distinctions is conceptual, whereas the latter two are morphosyntactic.

Each book gives a list of different categories of typical noncount nouns with examples. On both lists are fluids/liquids, solids, gasses, particles, abstractions,

subjects/fields of study, activities, and natural phenomena. The list in UUEG also includes languages (e.g., Arabic), recreation (e.g., baseball), and groups comprised of different parts (e.g., furniture). The list in FOG includes diseases (e.g., AIDS), foods (e.g., beef), occupations (e.g., dentistry), and a category called "others" (e.g., equipment, news). Both UUEG and FOG warn that "many nouns," such as hair or noise, can be used as a count or noncount noun. Both books mention the use of partitive expressions, such as a cup of or a piece of, to express a quantity of noncount nouns.

FOG offers readers slightly more information on the topic of countability. It is explained that some traditionally noncount nouns can be used as count nouns to express types (e.g., teas) or discrete amounts (e.g., two orange juices). It is also explained that the use of some or Ø before noncount nouns refers to "things that don't have any particular boundaries" (p. 119). Additionally, notes are included on noncount nouns that end in –s (e.g., mathematics), count nouns with irregular plural forms (e.g., criteria), and the difference in meaning between people used as a noncount and count noun.

The presentation of the count/noncount distinction in UUEG and FOG situates countability in nouns themselves and not in the conceptualizations of speakers and listeners. The lists of typical noncount nouns encourage readers to memorize the count status of individual words rather than to consider similarities in conceptualization across noncount categories. Although UUEG does emphasize the concept of "whole" with three of the presented categories (groups of different parts, particles, and abstractions), it fails to make this connection to the remaining eight categories. Although FOG mentions a lack of boundaries for noncount nouns, this is not illustrated with examples from across the noncount categories, nor is it contrasted with the existence of boundaries in count nouns.

In both books, the uses of a noun as countable on one occasion and uncountable on another are presented as exceptions to be careful of. Instead of being asked to explore systematic differences in meaning for such uses, readers are directed to consult dictionaries in order to avoid errors in usage. Furthermore, in neither textbook is it explained what it actually means to be able or unable to count something.

An examination of the presentation of articles in UUEG and FOG reveals similar approaches. Both books begin with a classification chart that includes example sentences for article use. This is followed by a second chart comprised of article use guidelines, again with example sentences. The two books define the terms *definite* and *generic* in similar ways. For the former, UUEG states "a noun is definite when both the speaker and the listener are thinking about the same specific thing" (p.114), and FOG states "a noun is definite when the speaker and listener both know which particular person, place, or thing is being talked about" (p. 132). For the latter, UUEG states "a generic noun represents a whole class of things; it is not a specific, real, concrete thing, but rather a symbol of a whole group" (p. 114), and FOG states "a noun is generic when it represents all members of a class or category of persons, places, or things" (p. 131). Both books mention that the definite article for generic reference is often restricted to use with inventions, instruments, and species. A further similarity is that the two books present the traditional subsequent-mention guideline to use *the* with the second mention of a noun.

The main difference between the presentations in UUEG and FOG lies in how the article system is classified in the initial charts. UUEG makes three distinctions for reference type: generic nouns, indefinite nouns, and definite nouns. Within each of these types, a single article choice is presented for each of three noun subcategories (singular

count, plural count, and noncount)². Meanwhile, FOG begins with three article distinctions: the indefinite, zero, and definite articles. Examples are given of a/an with singular count nouns for non-specific reference and generic reference. Examples are then given of \emptyset with plural count nouns and noncount nouns for non-specific reference and generic reference, as well as of \emptyset with proper nouns. Finally, examples are given of the (1) with singular count nouns and plural count nouns for specific reference and generic reference, (2) with noncount nouns for specific reference and (3) with proper nouns.

It is entirely possible that the presentation of articles in UUEG and FOG contributes to a fragmented understanding among ESL learners. Although readers receive helpful rules of thumb for particular article uses, no comprehensive explanation for the system is put forward. There is both limited information on individual aspects of the article system and a lack of information on how the various aspects fit together. As argued in Negueruela (2008), "the rule-of-thumb approach to explaining language often fails to capture with consistency and coherence the conceptual meaning of the grammatical point at hand" (p. 148). If learners are consulting UUEG or FOG (or any other current ESL textbook, for that matter), a coherent conceptualization of the entire article system appears unobtainable.

A number of factors in the presentations within UUEG and FOG make a systematic understanding of the range of article usage difficult to achieve. First, as seen above, the definitions given for definiteness require the speaker and hearer to share knowledge of a specific thing. A learner will soon realize that this definition is unable to account for a

² Although a is presented as the article choice for generic reference with singular count nouns, a footnote to the chart does address the possibility of using *the*.

variety of uses of the. For example, what if a speaker says that she is "going to the store", but the listener does not know which specific store the speaker has in mind? And what if in another conversation the speaker refers to the name of a ship (e.g., the Leedstown) of which the listener has never heard? In fact, the definitions of definiteness in UUEG and FOG do not hold for many examples of first-mention use of the. The result is that learners likely create a special category for exceptional use of the definite article, uses that fall outside of the basic definition of definiteness. Additionally, although both books present the first-mention/subsequent-mention guideline, they do not explicitly state how second mention of a noun makes that noun definite. As such, readers may make regular use of this rule without connecting it, at a conceptual level, to the notion of definiteness.

Generic reference and proper nouns appear to add more complexity to the article system. While both books consider article use with generic nouns, these uses are not systematically connected to other uses. UUEG does not relate article use for generic reference on the one hand with indefinite and definite reference on the other. FOG does not relate article use for generic reference with article use for non-specific and specific reference. In regard to proper nouns, FOG suggests that the zero article is used with most names, while the definite article is used with certain types of names (e.g., names of geographical features, some countries, and ships (p. 132)). No similarities are drawn between the use of \emptyset with proper nouns and the use of \emptyset with common (noncount and plural count) nouns; nor is any similarity drawn between use of *the* with proper nouns and its use with common nouns. UUEG ignores proper nouns entirely.

Further complications exist for readers who wish to gain a systematic understanding of the entire range of article usage. For instance, FOG's classification chart does not

include the possibility of using a/an with a specific referent. An example of such use is found in (2.1).

- (2.1) Here's a book that I have found extremely useful for my studies.
 Use of the indefinite article in FOG is restricted to non-specific and generic reference.
 UUEG's classification chart does not include the possibility of using Ø with an indefinite non-generic referent. An example of such use is found in (2.2).
- Use of the zero article in UUEG is restricted to generic reference. A final complication for both books is that they ignore any distinction between Ø and some with non-generics.

 UUEG presents only some for non-generic reference with plural count and noncount nouns, whereas FOG presents only Ø for such reference. Neither book contrasts a conceptual difference between using some and the zero article with indefinite nouns.

It should be noted that UUEG and FOG are both comprehensive grammars. Given their scope, they can devote only a few pages to the article system. What if learners seek more information on article use by consulting workbooks written exclusively on articles? The sense of fragmented understanding may, in fact, be compounded. To illustrate, sider Cole (2000). It is a 114-page workbook that provides 50 rules on article use along with short fill-in-the-blank exercises. The rules, in addition to 15 exceptions, are of the "do" and "don't" variety, instructing readers when to use the definite, indefinite, or article. Some is not considered at all.

Many of the criteria presented for making article choices reside in the language itself

i.e., particular words, collocations, or constructions trigger a particular article) and not in

conceptualizations speakers wish to convey. Attention to conceptualization in Cole

(2000) is restricted to rules that mention definiteness or indefiniteness. The former is defined as "when the noun is understood or very obvious, it is already definite or "known" (p. 14), the latter as "indefinite means not already known, not already understood, or not already mentioned" (p. 1). Although these definitions show sensitivity to a conceptualization of the unfolding of discourse, they remain vague on who exactly is doing the knowing or understanding. Is it the speaker, or the listener, or both? The terms definiteness and indefiniteness are applied to only seven of the fifty rules in the book. When they are applied, it is not always clear how readers should distinguish definite from indefinite. For example, Rule 15 states "use *the* when the noun is made definite by a prepositional phrase," and Exception to Rule 15 states "do not use *the* when the prepositional phrase does not make the noun definite" (p. 112). The challenge for readers is to understand how some prepositional phrases, and not others, make the nouns they modify "understood or very obvious."

The rules and guidelines in Cole (2000) cover an impressive variety of article uses. Rules that direct readers to base their article decisions on the identification of certain words or types of words may certainly help learners choose appropriate articles in their language production. However, such rules can also reinforce a sense of arbitrariness and idiosyncrasy within the article system. For example, Rule 21 states "do not use an article with the names of countries, cities, or states," while Exception to Rule 21 states "use the in the names of countries that contain the words united, union, kingdom, or republic" (p. 112). Learners are left to wonder what is special about these four words. Rule 28 states "use the with the names of rivers, oceans, seas, and deserts," while Rule 31 states "do not use an article with the names of single lakes, mountains, islands, or canyons" (p. 113).

Learners are left to puzzle over the distinction between rivers and oceans on one side and lakes on the other. Rule 47 states "do not use an article with the names of diseases," while Exception to Rule 47 states "use the with the flu, the measles, and the mumps" (p. 114). Learners are, again, left to wonder what is special about these last three diseases.

As revealed in this brief review of textbooks, ESL learners can expect to find variety in terms of how articles are described. The descriptions appear not to cover the entire range of article uses, and those uses that are covered are not necessarily considered in relation to one another. Rules often seem to be based more on word collocations than on any type of conceptual meaning that a speaker wishes to convey. Without an explanation of how individual uses and rules fit together, a unified understanding of the article system remains elusive.

Research Questions

The current research project addresses the following questions:

- 1. What patterns exist in how ESL teachers explain article usage in authentic texts?
- 2. How does one conceptual framework elucidate systematicity across disparate article uses and numerous pedagogical rules for article use?
- 3. How does exposure to the framework influence international MA TESOL students' explanations of article use in authentic texts?

The first research question allows for an examination of the words teachers use and the reasons they give to explain article use. In particular, it can be determined if teachers are using explanations similar to those found in ESL texts. It can also be established if variety among teacher explanations is commonplace (as at the TESOL Convention workshop, mentioned in the Chapter 1). The second question motivates the presentation

of the conceptual framework. The illustration of systematicity serves as a counterpoint to the presentation of articles revealed in the review of the ESL texts above. The third question guides an investigation of how the framework is received by individuals who are both studying to teach English and who have learned English as a foreign language. Does exposure to the framework influence their article explanations and in what ways? The answers should say something about the potential of the framework as a pedagogical tool for the classroom.

CHAPTER 3: ESL TEACHERS

What patterns exist in how ESL teachers explain article usage in authentic texts? This question guides the current chapter. The chapter first details the methodology for how the question was addressed. Next, results are reported. Finally, the results are discussed in terms of what they suggest about the current state of article instruction.

Methodology

To investigate how currently-practicing ESL teachers explain English articles, a group of teachers was asked to complete an explanation elicitation task (see Appendix A). The task required participants to write explanations for highlighted article uses within excerpts from published works of nonfiction and to rate confidence levels for these explanations. In completing the explanation task, participants applied their own understanding of English articles to authentic contexts of article use.

Participants

ESL teachers employed at Michigan State University's English Language Center were solicited for participation in the project. Of those who agreed to participate, 17 completed the explanation task by an imposed deadline. The decision was made to examine data from teachers with at least five years of experience. This resulted in analysis of explanations from 12 participants. Data from five less-experienced participants, who were all employed as Teaching Assistants, were excluded. The resulting sample of 240 article explanations (12 participants each explaining 20 article uses) was considered of sufficient size to address the research question. Table 3.1 reveals background information for each participant.

Table 3.1 Background of ESL Teachers

Participant	Years	L1(s)	Countries Taught In
	Teaching		
P1	18	English, Bengali,	U.S., India
		Hindi	
P2	6	English	U.S.
P3	13	English	U.S., Japan, China, Thailand,
			Czechoslovakia
P4	6	English	U.S., Thailand
P5	27	English	U.S., Saudi Arabia, Japan,
			Malaysia, Singapore
P6	5	English	U.S., Japan
P7	38	English	U.S., Tunisia, Saudi Arabia, Spain,
			Japan
P8	14	Japanese	U.S., Japan
P9	23	English	U.S., China, Japan
P10	30	English	U.S.
P11	14	English	U.S., Korea, Japan, Morocco
P12	17	Chinese	U.S., China

Procedure

ESL teachers who had agreed to participate were emailed the explanation task as an attached file. They were instructed to complete it and to return it to the researcher via email within two weeks. Participants were free to spend as much time on the task as they wished³. Those participants who did not return the completed task within the originally requested time frame received up to two email reminders before a cut-off date, after which no tasks were accepted by the researcher. Once all files had been collected by the researcher, participant numbers were randomly assigned to the ESL teachers.

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³ The possibility exists that some participants may have referred to outside sources when writing their explanations. Most participants reported spending between 30 and 60 minutes on the task.

Explanation elicitation task.

A short background questionnaire was included at the beginning of the explanation task. Questions elicited information on participants' teaching experience, as well as country of origin and L1. In addition, participants were asked to make comments on how comfortable they were teaching articles. The questionnaire was followed by three individual tasks. Task A required the reading of four excerpts. No articles were highlighted within the excerpts in this task in order to encourage participants to read simply for content. It was considered important that participants build an overall understanding of the extracts before they set out o make article explanations. It was assumed that stopping at various points through a text to write explanations would be distracting during the first reading. In Task B, participants read the same four extracts — this time with 20 individual articles highlighted. Participants were to imagine that their explanations were in response to questions (e.g., "Why is this article used here?") from advanced ESL learners. In Task C, participants rated their confidence for each explanation given.

The sources for the excerpts were chosen to reflect expository types of writing that might appear in university courses for advanced ESL students. Furthermore, texts were selected on topics that were thought to be of interest to the participants. One book was on language pedagogy (Interaction in the Language Curriculum: Awareness, Autonomy and Authenticity by Leo van Lier), one on language learning (How Languages are Learned by Patsy Lightbown and Nina Spada), one on philosophy with attention to language (Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought by

George Lakoff and Mark Johnson), and a final book on leading American intellectuals (*The Metaphysical Club* by Louis Menand).

The excerpts consisted of text from the opening page of each book, either from the forward or the main text. This decision was made because article choice is discourse sensitive (e.g., the definite article may be chosen to refer to an entity which has previously been mentioned in the discourse). By including only the beginnings of books on the task, participants were required to offer explanations based exclusively on what they read and not on what they thought may have appeared in earlier elided text. Excerpts were kept under 350 words in length and complete paragraphs were included.

Within each excerpt in Task B, five articles were highlighted in bold. The particular target items to be explained on the task were chosen to reflect a variety of article uses. Target items included eight instances of *the*, six instances of the zero article⁴, four instances of a (or an), and two instances of $some^5$. In cases of the zero article, the highlighted symbol of \emptyset was placed before the noun phrase. These articles appeared before a range of noun types – including common and proper nouns with singular, plural, and noncount forms. The intention was to challenge the participating teachers. While some article uses could be interpreted to reflect traditional rules such as *use the indefinite* article for first mention and use no article with the names of countries, a greater number

⁴ All instances of Ø are referred to simply as the zero article. No distinction is made between the zero and the null article.

⁵ The author of the excerpt in which the two instances of *some* appeared was contacted and asked if he intended the two instances to be interpreted as unstressed articles. In response, he stated, "I have no idea or recollection of consciously choosing "some." I think it is merely a softening or mitigating device." (personal communication, September 28, 2009)

of items were less easily explained by such rules. For instance, most targeted uses of the definite article appeared with nouns that had not been previously mentioned in the text.

The explanation task simulates exchanges typical in a language classroom, where it is not uncommon for students to inquire why a particular linguistic form has been used. In their responses, participants were expected to draw on their language awareness (Andrews, 2001) in order to make sense of the authors' article choices. Responses provide a snapshot of the knowledge resources and terminology teachers make use of for article instruction. Asking participants to give explanations was thought to elicit teacher cognition (Borg 2003) – "what teachers know, believe, and think" (p.81) about uses of English articles.

Beyond shedding light on what participants know, the explanation elicitation task was designed to gauge how teachers feel about their ability to explain articles. Task C directed participants to reflect on their explanations and to rate their confidence for each on a Likert scale of 1-5, 1 representing least and 5 representing most confident. In this way, confidence levels could be compared across items and across participants.

Data Analysis

The ESL teacher data were coded through an iterative process (Kennedy, 2005). First, each individual explanation was initially coded for key terms, defined as words or expressions used to convey reasons for the particular article choice. These ranged from linguistic terms to more general expressions (e.g., plural noun, count noun, collocation, general, introduce, etc.). Using an Excel spreadsheet, a matrix was created with all tokens of key terms, listed by item and by participant. The researcher then tabulated frequencies for key terms used by more than one participant within each item. For the

frequency count, different forms of one root word or different ways of expressing the same idea were tagged as one key term. For example, *count* and *countable* were coded as one term, as were *introduce* and *first mention*.

In search of larger patterns, frequency counts for terms by individual item were resorted to reflect counts by individual article. That is, the frequency of key terms used in explanations for all choices of *the* was tabulated, as were frequencies of key terms for \emptyset , a, and *some*. The terms with the highest frequency (at least 8 tokens) were further analyzed to establish with how many items and by how many participants each term was used.

During the initial coding, the researcher noticed a few instances where different participants used directly contrasting terms (e.g., *count* and *noncount*) for the same item. Such cases were flagged and coded as conflicting explanations. Identifying these cases was considered an important step in documenting inconsistencies in article instruction to which learners may be exposed.

Given the centrality of speaker and hearer knowledge of referents in linguistic accounts of the article system (e.g., Christophersen, 1939; Hawkins, 1978), in investigations of article acquisition (e.g., Butler, 2002; Huebner, 1983), and in ESL textbook explanations of definiteness (e.g., UUEG; FOG), article explanations were specifically examined for reference to the writer and reader. Each mention of writer(s), author(s), and reader(s) was coded. In addition, each use of a pronoun to refer to writers (e.g., they or he) or to readers (e.g., we) was coded. Explanations for Item 6 were excluded from the coding because the target item itself is the reader, and all mentions of reader here referred to the word in the text and not to individuals reading the text. Upon

completion of coding, references were sorted into three categories: (1) reference to the writer and the reader, (2) reference to the writer, and (3) reference to the reader.

References were further sorted by article type and by participant.

Again using Excel, the researcher entered confidence ratings for explanations by item and by participant. Average rating and standard deviation were calculated for each item on the task, as well as for each participant. In this way, a picture could emerge not just of which items were felt to be more difficult and which less difficult to explain, but also of which participants were more confident and which were less confident in their explanations overall. A few notes should be made on the coding. The instructions on the explanation elicitation task failed to specify that ratings be reported in whole numbers. As a result, one participant reported values of 2.5 and 3.5. These were entered as such into the spreadsheet. A second participant reported a value of 0.5. Given that the lowest possible value in the instructions was 1, the 0.5 was entered as a 1 into the spreadsheet. A third participant reported values for only two of her explanations and left 18 of the items blank. Just above the place for ratings on her sheet, this participant wrote that she had no confidence in her explanations except for the ones that were marked. The researcher thus entered values of 1 for the unmarked items.

Results

Results for teacher explanations of article use are reported below. Commonalities across explanations by individual item are presented first. This is followed by commonalities by article, as well as complete lists of key terms used for each article (the, \emptyset , a, and some). Next, contrasting explanations within individual items are reported. Results for reference to writer/reader are then presented. Finally, average confidence ratings are reported.

Patterns for Individual Items

The key terms identified in explanations for individual items are presented in the following tables. For a key term to appear in the tables, it has to have been used by at least two participants. Frequencies for terms and example explanations are included in the tables. The explanations are reproduced in their entirety, as the participants wrote them. For illustrative purposes, relevant key terms have been underlined. Additional key terms may be present in the example explanation. While these are not underlined in the tables, they were counted in the frequency tabulations for those terms. Because participants were not restricted to the use of one key term within one explanation, the combined total for the numbers within one *Total Explanation* column may exceed the number of participants (twelve).

Table 3.2 Key Terms for Item 1 (When $\underline{\mathbf{0}}_1$ new foreign language teaching methods and textbooks are introduced, they are often said to be based on the latest research in psychology, linguistics, or pedagogy.)

Key	Total	Example Explanation
Term	Explanations	-
plural	9	method is a count noun; plural: do not use an article (P9)
general	7	Here we are talking about teaching methods and textbooks
		in general, and the nouns are in plural form. Hence no articles. (P12)
not	3	neither a definite nor indefinite article is needed here
specific		because we're talking about general terms here, not
		specific as well as a plural quantity. "The" would be the
		only choice but then it would denote specificity. (P11)
indefinite	2	indefinite plural – We aren't talking about a specific
		method or textbook, so we can't use the definite article
		"the." (The indefinite article "a" is used with singular
		indefinite nouns.) (P6)
first	2	=some, many – idea of indefinite, general, or non-specific
mention		could be considered in ellipsis. Also, the concept is
		introduced here and shifts with "the new approaches" – a
		good teaching point. (P7)

Table 3.3
Key Terms for Item 2 (Sometimes, they are simply ordered and distributed to $\underline{\mathcal{O}}_2$ teachers who have to do their best to use them effectively.)

Key	Total Explanations	Example Explanation
Term	<u>-</u>	
not	7	non-specific usage, re. to some teachers out of the
specific		whole category of teachers (P10)
plural	7	like "methods," "teachers" is plural and does not
		require an article in this instance (P2)
general	5	General (not a specific group of teachers). Cannot use
_		"a" because "teachers." (P1)
indefinite	2	indefinite plural (P6)
count	2	Again, we are dealing with a general/generic plural
		countable noun. Same as 1. (P11)

Table 3.4
Key Terms for Item 3 (Teachers have seen many different approaches over <u>the</u>₃ past fifty years.)

Key	Total Explanations	Example Explanation
Term		
specific	8	referring to a specific thing; in this case a period of
_		time (rather than a specific point in time) (P3)

Table 3.5

Key Terms for Item 4 (Another emphasizes the value of having students imitate and practice <u>a</u>₄ set of correct sentences and memorize entire dialogues.)

Key	Total	Example Explanation
Term	Explanations	
one of	5	"set" is indefinite, in that it could be one of many sets
many		(P2)
count	3	First of all, "a set of" is a collocation. Second, "set" is a
		countable noun. So you need an indefinite article. It does
		not begin with a vowel; therefore, "a" is used. (P8)
not	3	It's not a specific correct set but rather one of many
specific		correct sets, so it wouldn't take a definite article. (P4)
singular	2	set is a count noun; singular; use a. (P9)

Table 3.6

Key Terms for Item 5 (Yet another stresses the importance of encouraging "natural" communication between students as they engage co-operatively in tasks or projects while using the new language.)

Key Term	Total Explanations	Example Explanation
specific	6	'Importance' is a abstract notion requiring the definite article. Importance here is specific in terms of that approach being used. (P11)
collocation	5	specific/definite reference; also seems to be a "chunk" of language or collocation (P3)
definite	4	definite; introducing a noun that represents a quality. (P1)

Table 3.7

Key Terms for Item 6 (<u>The</u>₆ reader should not see it as a finished product, therefore, but rather as a snapshot of work in progress, an illustration of an open-ended process that can and should have no closure.)

Key	Total	Example Explanation
Term	Explanations	
specific	7	It is referring to the specific group of readers, the readers
		of this book. Therefore, "the" is used. (P8)
generic	3	generic usage, "the reader" symbolizes all readers, as
		"The automobile" can symbolize all autos (P10)
definite	2	<u>definite</u> (specific reader who reads this book) (P1)

Table 3.8

Key Terms for Item 7 (At the same time I have not taken any of the common meanings of terms such as theory, practice, research, curriculum, and learning as given, but...)

Key Term	Total	Example Explanation
	Explanations	
specific	6	It is referring to specific and limited meanings, not one
		meaning of many or meanings in general. (P4)
collocation	4	the phrase "any of" requires "the + Noun", could also
		say "any common meanings" (P10)
definite	2	meanings is definite, specific and, thus, requires the (P9)

Table 3.9

Key Terms for Item 8 (...but tried to find $\underline{\mathcal{O}}_8$ new meaning for them that fit new ways of thinking, and achieve terminological integrity throughout.)

Key	Total Explanations	Example Explanation
Term		
noncount	5	not unique, in particular not "given" info; meaning is
		non-count so no determiner required (P5)

Table 3.10

Key Terms for Item 9 (I have not gone far enough in all these matters, but hope I have made <u>some</u>, useful notes in the margin of our ideals.) [For this item and the next see Footnote 2 above.]

Key Term	Total Explanations	Example Explanation
quantity	6	This is not an article. I don't think students have problems with it. It's used because the exact <u>amount</u> is not known or it's unnecessary to know the exact amount. (P12)
plural	4	used before <u>plural</u> ("notes"); shows quantity—not a lot, not too little (P1)
count	2	"Notes" is <u>countable</u> and plural. The writer assumes that not everything she/ he wrote in the book is useful to everyone. Rather, she /he thought that "some" of them are useful to each reader. Therefore, "some" is used. (P8)
first mention	2	He's <u>introducing</u> new objects, his notes, which are among the many other notes that others have made. If he referred to them again, he'd use the definite article. (P4)
not specific	2	non-specific usage (P10)

Table 3.11

Key Terms for Item 10 (...there are places where I have felt it necessary to provide some₁₀ more theoretical backup, and these sections have been...)

Key	Total	Example Explanation
Term	Explanations	
quantity	4	limited, unclear but still substantial quantity (P7)
first	2	'backup' although seems singular, is a non-count noun,
mention		again the backup hasn't been previously mentioned (P11)
indefinite	2	indefinite quantity (P6)
noncount	2	non-specific usage, "backup" is functioning as a non-
		count N, some is determiner (P10)

Table 3.11 (cont'd)

not	2	backup is a concrete noun, as yet unspecified. Plural
specific		count. Therefore some"(P9)

Table 3.12

Key Terms for Item 11 (<u>The_11</u> mind is inherently embodied.)

Key	Total	Example Explanation
Term	Explanations	
general	3	used to refer to a set (e.g., the poor, the disadvantaged, the obese); in this case "the mind" refers to the general idea of the mind and all it entails: intellect/emotions/thoughts/reactions (P3)
specific	3	refers to the <u>specific</u> idea of the mind, thus the definite article (P2)
generic	2	Again, just one legitimate form of generic reference; could just as well be "A mind is" or "Minds are" (P5)

Table 3.13 Key Terms for Item 12 (Because of these discoveries, $\underline{\mathcal{O}}_{12}$ philosophy can never be the same again.)

Key	Total	Example Explanation
Term	Explanations	
discipline	7	subjects do not take an article (P1)
general	3	It's abstract and refers to philosophy in general. (P12)
name	3	"Philosophy" is a <u>name</u> of a discipline. No articles are necessary for <u>names</u> of disciplines or subjects, such as math, science, and English. Therefore, there is no article. (P8)
noncount	2	philosophy in general, not one unique or previously mentioned philosophy. Here "philosophy" is <u>non-count</u> . Later, in #15, it is countable. (P5)

Table 3.14 Key Terms for Item 13 (When taken together and considered in detail, these three findings from the science of $\underline{\mathcal{O}}_{13}$ mind are inconsistent with central parts of Western philosophy.)

Key Term	Total Explanations	Example Explanation
prefer the	5	I don't know. If I had written this, I would have used

Table 3.14 (cont'd)

		"the mind". Perhaps this is also used as a discipline (as in "philosophy" above) and an article is not used. Or, it may
		be that "the" preceding "science" is sufficient for the entire phrase "the science of mind" (P3)
uncertainty	5	Not sure how to explain this. Is this a reference to the book Science of Mind and its philosophy? (P1)
discipline	2	in this sentence "mind" is used as a <u>subject of study</u> (like math, English, philosophy). However, it would also be acceptable in this sentence to add "the" (following the reason in #11 above) (P6)
general	2	General. (P12)
generic	2	generic usage, referring to mind (here a non-count), representing all mind (P10)
noncount	2	Interesting. Mind in general. It's a form of generic reference, but "a mind" is not possible because the meaning changes to that of an individual. Author has turned mind into a <u>non-count</u> noun to accommodate. (P5)

Table 3.15
Key Terms for Item 14 (They require a thorough rethinking of <u>the_14</u> most popular current approaches, namely, Anglo-American analytic philosophy and postmodernist philosophy.)

Key Term	Total Explanations	Example Explanation
specific	7	It's referring to a <u>specific</u> group of approaches, requiring the definite article. (P4)
superlative	4	When you use a <u>superlative</u> , "the" is usually put before the adjective or adverb. That is because there supposed to be only one which is the "most." (P8)
definite	2	approach is specific and <u>definite</u> – they are current and popular. Therefore, use the. (P9)

Table 3.16

Key Terms for Item 15 (The answer is that <u>an</u>₁₅ empirically responsible philosophy would require our culture to abandon some of its deepest philosophical assumptions.)

Key Term	Total Explanations	Example Explanation
one of many	6	He is introducing one philosophy among many although not with a name as in #12. (P4)
first mention	4	the writer is referring to a type of philosophy, so philosophy becomes countable, but since it hasn't been mentioned before or named now, it is still general at this point. (P11)
indefinite	2	indefinite (doesn't point to one philosophy. There may be many possibilities.) (P6)
not a discipline	2	philosophy here is <u>not a discipline</u> and it is indefinite (P1)
not specific	2	non-specific, refers to one empirically responsible philosophy out of the category of empirically responsible philosophies, i.e. refers to one out of a group (P10)

Table 3.17
Key Terms for Item 16 (It is a remarkable fact about the United States that it fought \underline{a}_{16} civil war without undergoing a change in its form of government.)

Key	Total	Example Explanation
Term	Explanations	
one of many	6	He is referring to one type of war among many. (P4)
first	4	Civil war not previously mentioned. Reference is to the
mention		wider universe of civil wars, not to this particular one yet. (P5)
not specific	4	Non-specific works for the sentence meaning here, and "a civil war" parallels and balances "a change in the form of government" (P7)
general	3	reference to civil war <u>in general</u> as a construct, not the specific Civil War in the USA. This needs an article to show that it is the construct, not the specific War. (P3)
count	2	The noun is <u>countable</u> and it's indefinite here. Also, first mention. (P12)

Table 3.18
Key Terms for Item 17 (The war was fought to preserve the system of government that had been established at <u>the</u>₁₇ nation's founding...)

Key	Total	Example Explanation
Term	Explanations	
specific	8	definite article because a specific nation is being
		referenced (P2)
USA	3	the nation = $\underline{\text{the USA}}$ vs. other nations, specific, the full,
		formal title of an political entity (P7)
definite	2	a <u>definite</u> noun which refers to the U.S.A. Use the. (P9)

Table 3.19
Key Terms for Item 18 (But in almost every other respect, <u>the</u>₁₈ United States became \underline{a}_{19} different country.)

Key Term	Total	Example Explanation
	Explanations	
name	8	definite article accompanying the name of the nation (P2)
collection	3	as I have always been told, use "the" before any nation
of areas		name that indicates a collection of areas into one nation
		(often referred to in the plural); e.g,: the Netherlands, the
		United Arab Emirates, The United Kingdom, the
		Kingdom of Saudi Arabia, the Philippines, the USSR, the
		Republic of Ireland, The Peoples Republic of China
		(P3)
specific	3	specific – the states that are united – the United States,
		also, a phrase like "the United Kingdom (P7)
common	2	Names of countries that include a common noun
noun in		("republic", "kingdom", "states") almost always require
name		"the". (P5)

Table 3.20
Key Terms for Item 19 (But in almost every other respect, \underline{the}_{18} United States became \underline{a}_{19} different country.)

Key Term	Total Explanations	Example Explanation
one of many	3	He is introducing a new object: a country. It is one among many. (P4)
not specific	3	Country is countable and becomes <u>non-specific</u> in this context. (P12)

Table 3.20 (cont'd)

count	2	First of all, "country" is a countable noun, and it is
		singular, so you need some article. There were some
		choices as to in what way the country is going to be
		different. And the States chose one of them. Therefore,
		"a" is used. (P8)

Table 3.21
Key Terms for Item 20: (The war alone did not make $\underline{\mathcal{O}}_{20}$ America modern, but the war marks the birth of modern America)

Key	Total	Example Explanation
Term	Explanations	
name	9	U. States is plural in nature, whereas 'America' is a singular name which doesn't take an article. (P11)
country	7	most countries don't use an article (France, China, etc). Exceptions: the US, the UK, etc. (P10)

Patterns for Article Type

Explanations of the.

There were a total of 96 explanations for the definite article (8 items x 12 participants). The following table reveals all identified key terms in explanations for the definite article.

Table 3.22
Key Terms for the

Abstract	hypothetical	prepositional phrase
All	identified	previous mention
collection of areas	idiomatic	singular
Collocation	individual thing	specific
common noun in name	limited	superlative
Country	memorize	USA*
Definite	name	unique
Familiar	noncount	uncertainty
General	not generic	whole unit
Generic	plural	writer/reader knowledge

^{*} Refers to the nation's in explanations for Item 17.

The key terms most used across these explanations for the were the following: specific, definite, and collocation. No other key terms appeared more than eight times. The term specific was the most frequent, appearing 48 times. Eleven of the twelve teachers used it, and it appeared in explanations for all eight items. Variations of the term included specific, specific reference, specifically refer and specify. The term definite occurred twelve times. It was used by six of the teachers, and it appeared in explanations for five items. Variations included definite and definite reference. The term collocation occurred nine times. It was used by seven of the teachers, and it appeared in explanations for two items. Variations included collocation, chunk, phrase, set phrase, always use the with importance, many the _ of X phrases, any of goes with the + defined group, and any of requires the + noun.

Table 3.23
Frequent Terms for the

Key Term	Explanations (96)	Items (8)	Participants(12)
specific	48	8	11
definite	12	5	6
collocation	9	2	7

Explanations of Ø.

There were a total of 72 explanations for the zero article (6 items x 12 participants).

The following table reveals all identified key terms in explanations for the zero article.

Table 3.24

Key Terms for Ø

Abstract	generic	plural
All	indefinite	prefer a
Any	informal	prefer plural form
common usage	multiple meanings	prefer the
Collocation	name	Some

Table 3.24 (cont'd)

Count	noncount	Specific
Country	not sentence subject stylistic preference	
discipline	not specific	Uncertainty
first mention	not unique	writer/reader knowledge
general	overarching concept	

The key terms most used across these explanations for Ø were the following: general, plural, name, not specific, noncount, and discipline. No other key terms appeared more than eight times. The term *general* was the most frequent, appearing seventeen times. Eight of the twelve teachers used it, and it appeared in explanations for four items. Variations of the term included general, in general, and generalization. The term plural occurred sixteen times. It was used by nine of the teachers, and it appeared in explanations for two items. The term *name* occurred twelve times. It was used by seven of the teachers, and it appeared in explanations for two items. Variations included *name*, proper noun, and proper name. The term not specific occurred ten times. It was used by nine of the teachers, and it appeared in explanations for two items. Variations included not specific and non-specific. The term noncount occurred nine times. It was used by seven of the teachers, and it appeared in explanations for three items. Variations included non-count and uncountable. The term discipline also occurred nine times. It was used by seven of the teachers, and it appeared in explanations for two items. Variations included discipline, subject, subject of study, and field of study.

Table 3.25
Frequent Terms for Ø

Key Term	Explanations (72)	Items (6)	Participants(12)
general	17	4	8
plural	16	2	9

Table 3.25 (cont'd)

name	12	2	9
not specific	10	2	9
noncount	9	3	7
discipline	9	2	7

Explanations of a.

There were a total of 48 explanations for the indefinite article (4 items x 12 participants). The following table reveals all identified key terms in explanations for the indefinite article.

Table 3.26
Key Terms for a

any	hypothetical	not unique
collocation	indefinite	one of many
concrete	not a discipline*	particular
count	not identified	singular
first mention	not particular	specific
generic	not specific	uncertainty

^{*} Refers to philosophy in explanations for Item 15.

The key terms most used across these explanations for a were the following: one of many, not specific, and first mention. No other key terms appeared more than eight times. The term one of many was the most frequent, appearing twenty times. Ten of the twelve teachers used it, and it appeared in explanations for all four items. Variations of the term included one of many, one of many Xs, one X among many, one Y of X, and one X out of Y. The term not specific occurred twelve times. It was used by six of the teachers, and it appeared in explanations for all four items. Variations included not specific and non-specific. The term first mention occurred eight times. It was used by seven of the teachers, and it appeared in explanations for two items. Variations included first mention,

is introducing, is introduced, no previously mentioned X, not previously mentioned, no previous mention, and hasn't been mentioned before.

Table 3.27
Frequent Terms for a

Key Term	Explanations (48)	Items (4)	Participants(12)
one of many	20	4	10
not specific	12	4	6
first mention	8	2	7

Explanations of some.

There were a total of 24 explanations for *some* (2 items x 12 participants). The following table reveals all identified key terms in these explanations.

Table 3.28

Key Terms for some

among other(s)	group of	plural
concrete	indefinite (quantity)	quantity
count	limited (quantity)	uncertainty
definite	noncount	unknown (quantity)
first mention	not specific	used diminutively

Only one term was used more than eight times. *Quantity* occurred in ten explanations. It was used by six of the teachers, and it appeared in explanations for both items. Variations of the term included *quantity*, *amount*, and *quantifier*.

Table 3.29
Frequent Terms for some

Key Term	Explanations (24)	Items (2)	Participants(12)
quantity	10	2	6

Contrasting Explanations

Seven instances of directly contrasting terms were identified. One contrast was found in the explanations for *the*. For Item 6 (*the reader*), three participants (P5, P6, P10) wrote that this noun phrase was an example of generic reference. Participant 9, however, wrote "reader is not generic." One contrast was found in the explanations for Ø. For Item 8 (Ø new meaning), five participants (P1, P5, P6, P7, P8) identified the noun as noncount, while one participant (P9) referred to it as plural.

Three contrasts were found in the explanations for a. For Item 4 (a set of correct sentences), three participants (P4, P6, P10) referred to set as not specific. Participant 11, however, wrote that the indefinite article "denotes that a specific set of sentences should be used, but it doesn't mention which specific set." Although the participant appears to be suggesting that set is in fact not specific here, his choice of words in the beginning of the explanation does provide a direct contrast with the expression not specific. For this same item, Participant 1 wrote "here students are practicing a (any) set of correct sentences and not a particular set", whereas Participant 3 wrote "reference to a particular item or set, yet may be one of many sets or items." Although these explanations are quite similar in terms of the main idea, they do contrast in their use of the word particular. For Item 15 (an empirically responsible philosophy), two participants (P7, P10) referred to philosophy as being not specific, while Participant 3 offered the following explanation: "a specific philosophical thought or system, which differs from the discipline."

Two contrasts were found in the explanations for *some*. For Item 9 (*some useful notes*), Participant 6 wrote "indefinite quantity", while Participant 9 wrote "*notes* refers to definite thoughts, which are unspecified." Obviously, the adjectives in question are

modifying different nouns: quantity vs. thoughts. Yet, the adjectives by themselves are opposite terms: indefinite vs. definite. Another contrast was found for Item 10 (some more theoretical backup). Whereas Participant 10 and 11 both referred to backup as a noncount noun, Participant 9 labeled it count plural.

Although not an instance of directly contrasting terms, there was a discrepancy among explanations for Item 17. The article to be explained appeared within the following prepositional phrase: at the nation's founding. The definite article here is a determiner for nation, and most participants addressed this fact in their responses. However, three participants (P6, P8, P10) explained the choice of the as dependent on the noun founding.

Reference to Writer/Reader

Out of a total of 228 explanations (19 items⁶ x 12 participants), 24 made reference to the writer and/or reader. Reference both to the writer and the reader in the same response occurred seven times. Twelve explanations referred exclusively to the writer, and five referred exclusively to the reader. Examples of each type of reference are presented in the following table.

Table 3.30 Examples of Writer/Reader Reference

Reference	Item	Participant	Explanation
Writer &	the ₇	P8	"Both the readers and the writer share the same
Reader			concept of meaning of these words. Therefore, "the" is used."
Writer	a4	P6	"Use the indefinite article because the writer isn't referring to one specific set of sentences."

⁶ As noted in the Data Analysis section, Item 6 was excluded from analysis.

Table 3.30 (cont'd)

Reader	an ₁₅	P7	"No need to be specific. There are many philosophies. There are
			many responsible philosophies (logically responsible,
			gastronomically responsible). The reader is introduced to a
			("one") possible empirically responsible philosophy to illustrate its
			consequences. It doesn't matter if there are others."

Examining writer/reader references by article type, it was found that ten occurred in explanations for *the*. Of these, five mentioned the writer and the reader, two the writer only, and three the reader only. Of three writer/reader references in explanations for \emptyset , two mentioned the reader only, and one mentioned the writer and reader. Of seven writer/reader references in explanations for a, five mentioned the writer only, and two the reader only. Of four writer/reader references in explanations for *some*, three mentioned the writer only, and one the writer and reader. Seven of the twelve participants made at least one reference to the writer and/or reader, as may be seen in the following table.

Table 3.31
Frequencies of Writer/Reader Reference by Participant

Participant	Item (Type of Reference)	Total
P1	$the_{17}(R)$	1
P2	-	0
P3	-	0
P4	some ₉ (W); some ₁₀ (W); \emptyset_{13} (W); an ₁₅ (W);	6
,	$a_{16}(W); a_{19}(W)$	
P5	the ₅ (W/R); \emptyset_{13} (W)	2
P6	$a_4(W)$; the ₇ (W)	2
P7	$a_4(R)$; the ₇ (R); $an_{15}(R)$	3
P8	the ₃ (W/R); the ₅ (W/R); the ₇ (W/R); \emptyset_8 (W/R);	7
	some ₉ (W/R); some ₁₀ (W); the ₁₇ (W/R)	
P9	$the_3(R)$	1
P10	-	0
P11	the ₁₄ (W); an ₁₅ (W)	2
P12	-	0

R = reader; W = writer; W/R = writer and reader

Confidence

On a 5-point scale with 1 the least and 5 the most, average confidence scores by item ranged from 2.25 to 4.46. Average confidence scores by participants ranged from 1.4 to 4.75. Results by item are presented in Table 3.32, and results by participant are presented in Table 3.33.

Table 3.32
Average Confidence Ratings by Item

Item	Score	SD	Item	Score	SD	Item	Score	SD	Item	Score	SD
\emptyset_1	3.5	1.46	the ₆	3.5	1.24	thell	2.79	1.47	a ₁₆	3.83	1.47
O_2	3.38	1.37	the ₇	3.42	1.38	\emptyset_{12}	3.54	1.41	the ₁₇	3.92	1.31
the ₃	3.58	1.31	Ø ₈	2.58	1.56	Ø ₁₃	2.25	1.54	the ₁₈	4.46	0.58
a4	4	1.28	some ₉	3.33	1.44	the ₁₄	3.75	1.36	a ₁₉	2.92	1.38
the ₅	3.58	1.08	some ₁₀	3.33	1.56	an ₁₅	3.25	1.42	\emptyset_{20}	3.92	1.44

SD = standard deviation

Table 3.33
Average Confidence Ratings by Participant

Participant	Score	SD	Participant	Score	SD	Participant	Score	SD
P1	4.6	0.99	P5	4.1	0.45	P9	1.4	1.23
P2	3.3	1.59	P6	2.1	1.07	P10	4.75	0.55
P3	3.15	0.93	P7	3.65	0.67	P11	3.58	1.26
P4	2.9	1.07	P8	3.55	1.19	P12	4.23	1.26

SD = standard deviation

Discussion

In this section, the findings from the analysis of the ESL teacher responses to the explanation elicitation task and what these imply about the current practice of article instruction are discussed.

ESL Teacher Explanations and Textbooks

It is not surprising that the article explanations given by the ESL teachers on the elicitation task mirror the presentation of articles in ESL textbooks. One would expect

experienced teachers to be familiar with grammar presentation techniques in popular ESL texts. As reported above, patterns were found for repeated use of key terms such as specific, definite, non-specific, indefinite, general, generic, count, and noncount. These terms reflect the content of the classification charts in both UUEG and FOG. Furthermore, the ESL teachers mentioned specific rules (or guidelines) that can be found in these textbooks or in Cole (2000). For instance, first mention of the noun was given as a reason for the article choice of Ø in Item 1, of some in Items 9 and 10, and of a in Items 15 and 16. This explanation is a counter to the rule to use *the* with the second mention of a noun. Other examples of rules include the use of the with the superlative for Item 14, the use of Ø with a discipline or field of study for Item 12, the use of Ø with names for Item 20, and the use of the with countries that include a common noun in their names for Item 18. It is interesting to note that the participants did not consistently make reference to the writer and/or reader in their explanations. Even though UUEG and FOG consider the point of view of the speaker and the hearer when discussing the concept of (in)definiteness, only two of the twelve participants (P4 and P8) explicitly referred to the writer and/or reader in more than three of their explanations.

Variety in Explanations

Although the data analysis focused on finding patterns and similarities in article explanations across participants, what is perhaps most striking is the variety or difference that was found in explanations. The ESL teachers employed a range of terminology to explain uses of *the*, Ø, a, and *some* (see Tables 3.22, 3.24, 3.26, and 3.28 above). For none of these four articles was there a key term that was used by all twelve participants (see Tables 3.23, 3.25, 3.27, and 3.29 above). The most consistently applied term was

specific, given as a reason for the authors' choice of the definite article and used at least once by eleven of the participants. Still, this term appeared in only half of the 96 total explanations for *the*. For each of the other articles, the most common term used always appeared in less than 50% of the total explanations for that article. This result highlights a lack of uniformity in how the articles were explained on the elicitation task.

In addition to variety across participants' explanations for the eight uses of the, the six uses of O, the four uses of a, and the two uses of some, variety was found across participants' explanations for individual uses. That is, for most individual items on the elicitation task, a range of reasons was produced by the twelve participants. Tables 3.2-3.21 above give a sense of this variety; however, it should be remembered that only repeated key terms were reported in these tables. Even more variation exists when non-repeated key terms are considered. To illustrate, the table below lists responses from just five participants for Item 11. In these explanations for the mind, one can see a range of reasons given for why the authors chose the definite article.

Table 3.34 Explanations for the in Item 11

Participant	Explanation
P1	"the mind" here refers to the mind in general—mind is used as a non
	count here.
P3	used to refer to a set (e.g., the poor, the disadvantaged, the obese); in this
	case "the mind" refers to the general idea of the mind and all it entails:
	intellect/emotions/thoughts/reactions
P7	A specific concept, idiomatic. "The body, the world", here, "the human
	mind"
P8	If you use "the + singular noun," it represents the whole unit of it. In
	other words, by saying "the mind," it can refer to all mind that people
	have. It is like "The lion is strong." Therefore, "the" is used.
P12	Not sure how to explain. I think here mind with the refers to ideas. It's
	just the way it is. I would ask my students to memorize this.

It is worth briefly considering the consistency in explanations within participants. While no formal examination of this was undertaken (i.e., the data analysis focused on patterns and similarities across participants), it became apparent through coding that consistency in explanations varied among teachers. Some of the ESL teachers showed a higher degree of such consistency than others. For example, Participant 5 used the term *unique* in five of eight explanations for *the*, and Participant 12 used the term *general* in five of six explanations for \varnothing . These examples contrast with the variety of explanations evident in the two tables below.

Table 3.35
Examples of Variety in Explanations for the by Participant 6

Item	Explanation
#3	refers to a specific time period, so the definite article is used
#5	this is part of a set phrase: "the importance ofing"
#6	definite article "the" is used with archetypes (a representative of one category
	of people) (e.g., the housewife, the businesswoman, the busy student).
#18	"The" is used with country names that include "states" "kingdom" "republic"
	"islands" etc.

Table 3.36
Examples of Variety in Explanations for a by Participant 3

Item	Explanation
#4	reference to a particular item or set, yet may be one of many sets or items
#15	a specific philosophical thought or system, which differs from the discipline
#16	reference to civil war in general as a construct, not the specific Civil War in the
	USA. This needs an article to show that it is the construct, not the specific War.
#19	not sure

Given that no systematic analysis of consistency within participants' explanations was undertaken, no major conclusions can be drawn. It is simply observed that variety did exist in explanations by the same teacher for different instances of the same article.

One cause of variety in teachers' explanations might lie in the presentation of articles found in ESL textbooks. Pica (1983), in an analysis of article usage in the speech events of requesting/giving directions and of ordering food at a restaurant, noted a mismatch between "real" language use and textbook rules. Traditional rules were unable to cover the article use found in the examined speech acts. In the absence of obvious rules for specific examples of authentic article use, the current project's participating ESL teachers were forced to create their own explanations – sometimes applying common textbook terminology such as *general* and *specific*, sometimes stretching a particular rule to a novel context such as in the explanation by Participant 3 in Table 3.34 above, and sometimes resorting to "that's just the way it is" explanations like the one by Participant 12 in the same table.

Textbook Rules and Teacher Confidence

The notion of textbook rules' inability to explain all examples of article use was supported in participants' responses to the pre-task question on comfort level in teaching articles. Seven of the twelve participants expressed that they were uncomfortable or not very comfortable. For example, Participant 1 wrote, "I feel that in most cases article usage is difficult to place under specific rules." Participant 12 wrote, "I don't feel very comfortable teaching articles mainly because many uses of articles don't follow any rules introduced in grammar books." It is interesting to note that these two participants exhibited the second and third highest levels of confidence in their article explanations on the elicitation task. Three of the five participants who wrote that they were comfortable teaching articles qualified their claims, using the following adjectives: *moderately*, *reasonably*, and *fairly*. Another expressed comfort teaching articles to low-level learners

only. An extreme view of discomfort was expressed by Participant 9, who had the lowest overall level of confidence. She wrote:

I feel that after a certain point, it is all intuition. Even highly proficient L2s can't get it, and it gets frustrating both for the L2 learner and for me. I've given up on teaching articles a long time ago and usually only address it when a particular student really wants to discuss it. Beyond the introductory definite, indefinite, and plural/singular distinctions, I can't do it. (P9)

Although such a strong sense of frustration was not expressed by others, the participants overall did not appear extremely confident in their explanations of articles. The confidence levels reported above show that only four of the twelve teachers averaged a score above 4 (on a scale of 1-5, with 5 being the highest) for their article explanations. For individual items on the elicitation task, only Item 18 (the United States) produced an average confidence rating above 4. The higher confidence for this item may have resulted from the fact that participants could explain the choice of the through reference to one of two rules (use the with the names of countries that designate a collection of states or areas, and use the with the names of countries that include a common noun) or as a consistent exception to the rule of using \emptyset with names. That other items could not be so easily explained through textbook rules, may have contributed to the lower ratings of confidence.

Implications for the Classroom

It is worth considering what implications the observations above hold for the ESL classroom. If teachers question their ability to explain article usage successfully, it is not unreasonable to assume that they are more likely to attempt to avoid the topic of articles

in class. Participant 9, with the lowest average confidence across the elicitation task, highlights this possibility in her comment above. Beyond avoidance, it is also possible that instructors may pass on their own lack of confidence with articles to their students.

The variety (both inter-teacher and intra-teacher) noted in the participants' article explanations is a sign of what learners can expect from their ESL instructors. Hearing different explanations from different teachers for the same example of article use as well as hearing different explanations from the same teacher for different uses of the same article is a challenge learners have to face. Such variety is likely to leave learners with the impression that the article system is an arbitrary one that cannot be consistently and completely explained. A variety of explanations will also likely foster a sense of frustration, as learners struggle to make sense of different (sometimes directly contrasting) reasons for article use.

Learners, of course, can expect some consistency when it comes to article instruction. As noted above, terms like *specific*, *definite*, *non-specific*, *indefinite*, *general*, *generic*, *count*, and *noncount* were regularly used in the participants' explanations. They are also likely to appear in the presentation of articles in ESL textbooks. An important concern, however, is how well these terms are understood by learners. For example, what does it mean to say something is *specific*? Such an abstract term eludes a precise, concrete definition. If learners possess only a vague sense, if they cannot visualize a clear meaning, how helpful is this for their larger understanding of articles? The use of abstract terms to explain article usage would be especially problematic for lower-level learners.

Another point worth considering is the tendency by the participants not to mention the writer and reader in their article explanations. The responses in Table 3.34 above

illustrate this pattern. In not addressing the perspectives of the writer and reader (or the speaker and hearer), teachers give learners the impression that article choices are based on the language itself rather than the intentions of language users. For example, the message is that a particular article is chosen because a noncount noun refers to something that is not specific; the article is not chosen because of what the speaker wishes to convey to the hearer. If teachers rely exclusively on abstract textbook terms and traditional rules, they likely signal to learners that choosing appropriate articles is a complicated task, a task over which learners have little control and flexibility.

Perhaps, the biggest implication the teachers' results and the textbook survey hold for the ESL classroom is that there is room for a more unified account of article usage. An account able to tie usage to the intentions and conceptualizations of language users, to concretize the way articles are explained, and to improve teachers' confidence in regard to articles would be a most welcome addition to article pedagogy.

Conclusion

This chapter outlined the methodology of an experiment that sought to identify patterns in ESL teachers' explanations for article usage in authentic texts. Common key terms were found in explanations for individual test items as well as in explanations by article type. A good deal of variety was also present in these explanations. The most common key terms used in explanations by article type were as follows: *specific* for *the*, *general* for the zero article, *one of many* for *a*, and *quantity* for *some*. Examples of directly contrasting terms were identified as was a tendency by participants to avoid reference to the writer/reader in their explanations. Confidence ratings for explanations were found to vary across items and across participants.

In the discussion, it was noted that participants employed similar terminology to that found in textbooks. The frequent inability of textbook rules to account for actual examples of article usage was considered as a potential cause for the variety within participants' explanations and for the limited ratings of confidence. Implications these results pose for the classroom were discussed. In particular, learners may expect to receive a variety of explanations from different teachers for the same article use as well as a variety of explanations by the same teacher for different uses of the same article. Furthermore, learners can expect explanations to convey that article choice is more about the language itself (e.g., particular collocations) than about the perspective-taking of language users.

CHAPTER 4: CONCEPTUAL FRAMEWORK

How does one conceptual framework elucidate systematicity across disparate article uses and numerous pedagogical rules for article use? This question guides the current chapter. A conceptual framework is first presented and then applied to a variety of contrasting article uses, including those that have been considered problematic in the literature. Next, the framework is applied to a range of pedagogical rules and guidelines. Finally, implications for both linguistic theory and teaching practice are considered.

Conceptual Framework Design

The framework to be proposed here is a conceptual tool with which to see systematicity across article usage. It is predicated on a cognitive linguistics view of language. As stated in Robinson and Ellis (2008), "Language, communication, and cognition . . . are mutually inextricable. Cognition and language create each other.

Language has come to represent the world as we know it; it is grounded in our perceptual experience (p. 3)." Within the cognitive linguistics paradigm, understanding conceptualization is crucial to understanding language (e.g., Gibbs 1994; Johnson, 1987; Lakoff, 1987; Lakoff & Johnson, 1980; Langacker, 1987, 2002; Talmy, 2000).

Following Langacker (2002), grammar is understood to provide "the speaker with an inventory of symbolic resources, among them schematic templates representing established patterns in the assembly of complex symbolic structure" (p. 16). From this perspective, articles are symbolic tools. The framework presented below proposes schematic imagery as a means toward interpreting the influence articles have on meaning construction. Through abstract schema, consistent patterns in the meaning of NPs may be identified.

It should be acknowledged from the outset that the framework has not been designed as an instrument to predict article use. It is descriptive, not predictive. A quick glance at the multitude of rules and exceptions in Cole (2000) should make it apparent that article prediction is an incredibly challenging task. Halliday and Matthiessen (1999) point out that because grammar "evolved with the human species, it is full of anomalies, contradictions and compromises..." (p. 516). Perhaps, nowhere is this more apparent than with articles. One can find both puzzling regional differences in article use as well as usage changes in progress. How is it that Americans say in the hospital while Brits say in hospital? How could one predict the current shift from saying the Ukraine to simply Ukraine?

Instead of prediction, the framework strives to offer categories of meaning that describe individual examples of article use. It establishes one-to-one form-meaning mappings, whereby uses of *the* map to one schematic image, uses of *a* and *some* to another image, and uses of \emptyset to a third image. This is the systematicity that is sought through the framework. With it, one has the ability to adopt a perspective which sees commonalities across a variety of uses for each article.

The framework relies on the basic assumption that in communication through language, utterances prompt conceptualizations that are shared between the speaker and the hearer. The same holds true for written texts, which prompt conceptualizations that are shared between the writer and the reader. Noun phrases (NPs) signal conceptualizations of entities. In its current form, the framework accommodates only NPs headed by articles (*the*, *a*, *some*, or Ø) and not other determiners. All article-headed NPs can be mapped to the schematic image in Figure 4.1, which represents conceptual space

shared by the speaker and hearer. Noun phrases headed by *the* prompt conceptualizations that are situated within the *discourse frame*, whereas noun phrases headed by any of the three other article choices prompt conceptualizations situated outside this frame.

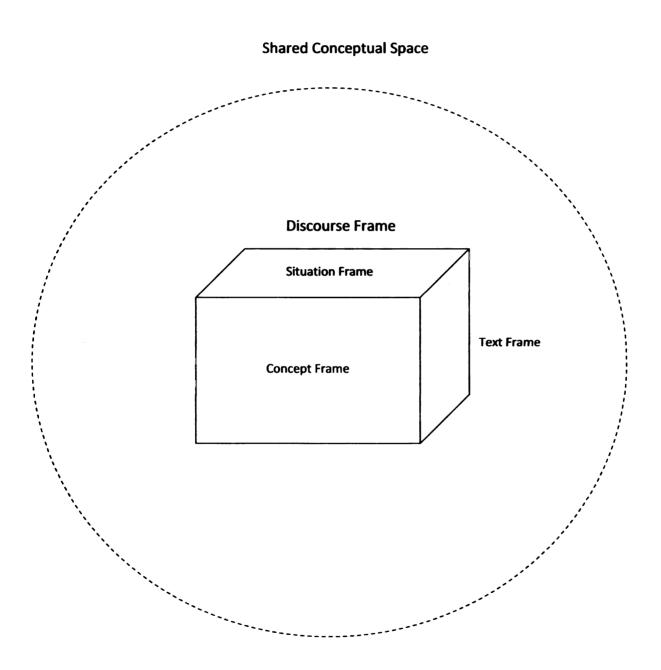


Figure 4.1. Conceptual framework.

Discourse Frame and Use of the

The discourse frame is an abstract conceptual space to which the speaker/writer and hearer/reader have access. It is a mental space evoked through use of the definite article. Within it are mental representations or conceptualizations of entities that are distinguishable from one another. In choosing *the* to head an NP, the speaker believes that both she and the hearer can identify the same, exact entity and distinguish it from other entities within the discourse frame. Thus, use of the definite article amounts to a form of abstract deixis, where the speaker points to one representation within a mental space. The discourse frame may be broken down into three sub-frames: the situation, concept, and text frames. The contents of the discourse frame may vary depending on the sub-frame from which it is being viewed. Each sub-frame is detailed below.

Situation frame.

The situation frame accounts for the visible situation use of the definite article in Hawkins (1978). It represents the immediate situation in which the speaker and hearer find themselves. This frame is populated with mental representations of the things the speaker and hearer can identify through their five senses. Imagine two passengers having a conversation within a taxicab as it travels down a gravel road. Each may reasonably assume that the other can uniquely identify the driver, the steering wheel, the meter, the windows of the car, the seats of the car, the sound of gravel crunching under the car's tires, the vibration within the seats as the car bounces along the road, the smell of an air freshener, etc. The passengers could introduce any of these entities into their conversation by using the definite article. The phrase the steering wheel is a signal that this entity is uniquely identifiable within the situation frame. Figure 4.2 (images in this dissertation are

presented in color) displays what the situation frame might look like for this NP. The index finger reflects that the mental representation of the steering wheel is being singled out from among representations of other entities. One can imagine this image – and those of other frames in the figures below – as being transposed on one of the sides of the box labeled *discourse frame* in Figure 4.1 above. This particular image would sit in the square labeled *situation frame*.

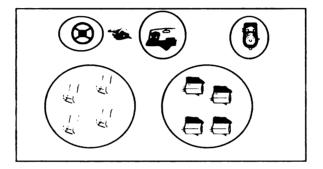


Figure 4.2. Conceptualization for the steering wheel.

Plural entities may be represented in the situation frame, as with *seats* and *doors* above. Notice, however, that they appear as a group of like entities. The phrase *the seats* signals that the group of entities to which this phrase refers can be singled out from other circled entities in the frame. Slightly more information, however, is necessary for use of the definite article with an individual entity from this group. If a passenger said *the seat*, without any particular seat having been previously specified, this phrase would likely be infelicitous. Mention of *the seat next to the driver*, however, would be felicitous. The point is that the speaker and hearer rely on their immediate surroundings, or rather a

schematized situation frame based on a cognitive scene of these surroundings, to identify one and only one relevant entity (or group of entities).

Concept frame.

Humans, of course, are able to conceptualize more than their immediate physical environs. They are able to construct imagistic scenes based on their experience and interaction in the world. This ability is something Charles Fillmore (e.g., 1977a; 1977b) has long stressed in his research in semantics. As argued in Fillmore (2007), "words represent categorizations of experience, and each of these categories is underlain by a motivating situation occurring against a backdrop of knowledge and experience" (p. 238). The *concept frame* relates the human ability to construct scenes from knowledge and experience to the semantics of article usage.

In essence, the concept frame is a more abstract extension of the situation frame. It consists of mental representations of entities that are not physically before the speaker and hearer but that are part of some type of familiar scene. For example, experience in education enables individuals to imagine a typical class in session. In that scene, one anticipates a teacher, a teacher's desk, students, seats for them, a blackboard, chalk, etc. One also anticipates entities of a more abstract quality such as a beginning, a middle, and an end to the class.

The concept frame helps account for definite article use in associative anaphora (Hawkins, 1978). A concept frame is triggered by use of the definite article and may be shaped by an entity already mentioned in a conversation or text. Returning to the taxi passengers above, one may say to the other, "I attended an interesting class this morning." This is likely to evoke the scene of a prototypical class in the mind of the

hearer. This scene is transformed into a concept frame when the speaker goes on to talk about *the teacher*. The definite article signals that the entity to which this phrase refers is uniquely identifiable within the frame. The figure below represents what this concept frame might look like.

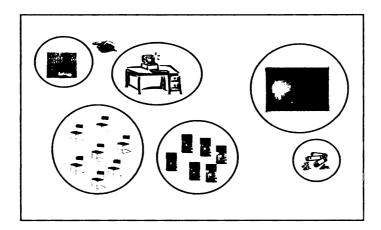


Figure 4.3. Conceptualization for the teacher.

A concept frame may also relate to the immediate situation in which interlocutors find themselves. For instance, one of the passengers might say, "I'll pay the fare if you pay the tip." Because the passengers are sitting in a taxi, a concept frame of entities that make up a typical cab ride is easily accessible. Both *the fare* and *the tip* are uniquely identifiable within this frame.

There are occasions when the NP itself, rather than the immediate situation or the previous conversation/text, conditions a concept frame. For example, an individual may begin a late-evening conversation by talking about *the sun*. The definite article here triggers a concept frame, yet there is no obvious cognitive scene implied by the situation (as it is nighttime) or by the preceding conversation (as there has been none). In cases

like this, it is general knowledge and experience that allow for the construction of a concept frame. What is crucial is that the mental representation for *sun* be uniquely identifiable within the frame. One possibility is a concept frame based on the sky. This could include entities like the sun, clouds, the moon, stars, etc. Another possibility is a concept frame based on the earth's solar system, including entities like the sun, the earth, and other planets.

Within the capacity to construct cognitive scenes and situations is the ability to conceptualize taxonomies. This ability and the human propensity to think through metaphors (Lakoff & Johnson, 1980) enable the same schematic image to be applied to uses of the definite article in NPs of generic reference. Consider the sentence in (4.1).

(4.1) The tiger is a dangerous animal.

Under a generic interpretation of this sentence, *the tiger* refers not to one individual tiger, but to the individual class of tigers. The mental representation of this referent is uniquely identifiable in a frame filled with other classes of animals. Figure 4.4 provides an example of such a concept frame. "Animals" with the descending lines has been included in the figure to illustrate the taxonomical nature of this frame, while "etc..." reflects that there would be additional entities (animal classes) in the conceptualization.

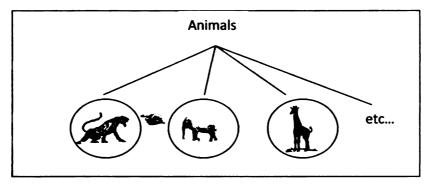


Figure 4.4. Conceptualization for the tiger in (4.1).

Such generic use can be contrasted with a non-generic use of *tiger*, as in the following example.

(4.2) The tiger at our zoo is a dangerous animal.

Here one single tiger is distinguished from other animals at the zoo. Given that felicitous use of the definite article requires the referent be uniquely identifiable, the sentence in (4.2) implies that there is only one tiger at the zoo in question. A concept frame for this use of *the* might look like Figure 4.5.

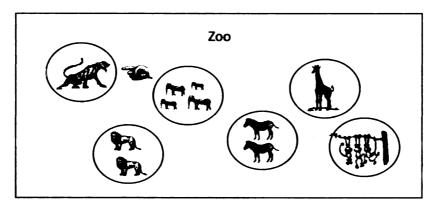


Figure 4.5. Conceptualization for the tiger in (4.2).

Text frame.

Just as the concept frame is a more abstract extension of the situation frame, so too is the *text frame*. This frame is comprised of mental representations for entities mentioned in an ongoing conversation or text. As with the other sub-frames, these representations are distinguishable from one another. The contents of the text frame change over time as a conversation progresses over time. New information requires new entities be added to the frame while changes in topic and limits on memory force entities to exit. The text frame provides the conceptual space within which anaphoric reference takes place.

Application to text.

To see how the text frame and the concept frame are called upon through the same text, consider the following example.

(4.3) A teacher walked into his classroom. He went to the front of the room and pulled out his teaching materials. There were still 10 minutes before the class was scheduled to begin. The teacher sat down and waited for the students.

In this brief narrative, there are five NPs headed by the definite article: the front of the room, the room, the class, the teacher, and the students. Two of these can be said to trigger the text frame. The room and the teacher refer to entities (his classroom and a teacher) that have already been mentioned in the text. The remaining NPs with the trigger the concept frame. For the front of the room, the concept frame is shaped by the NP itself. General knowledge that a prototypical room has a front, a back, and two sides allows for the construction of a frame containing representations of these distinct entities. For the class and the students, the concept frame is shaped by the content of the preceding text. Previous mention of a teacher, his classroom, and teaching materials evokes a mental image of an individual teaching. Representations for class and students are part of the accompanying concept frame.

The critical point is that the discourse frame provides a conceptual space in which the speaker/writer may point to a referent through use of *the*. Such abstract deixis is consistent with the origins of the definite article, which is derived from the demonstrative *that* (Halliday & Matthiessen, 2004). Like pointing a finger toward one individual within a framed group portrait, use of the definite article points toward one representation

among others in a mental space. The term *discourse frame* emphasizes that the frame is always somehow related to the discourse, whether it is configured with representations of entities mentioned in the discourse, of entities associated with entities mentioned in the discourse, or of entities associated with the context in which the discourse is taking place.

Individuation and Use of alsome

If it is to cover the entire article system, the framework must be able to reflect the count/mass distinction, a distinction which has been shown to be problematic for many L2 learners of English (Butler, 2002; Hiki, 1991; Master, 1987; Yoon, 1993). The framework does so by adopting the term *individuation* from Yule (1998): "the process of classifying [an entity] as a single unit" (p. 30). Following Wierzbicka (1985), this process is a conceptual one. Entities may be conceptualized as individuated or non-individuated. Individuated entities usually have clear borders and are perceived as single units within a class. For example, in the class of apples, one finds individual apples. Non-individuated entities often lack clear borders. In the class of water, single units of individual waters are not distinguished. Instead, one mass of the same substance is perceived. These two possibilities for conceptualization are represented in the following figure.



Figure 4.6. Example conceptualizations for individuation and non-individuation.

Of course, it is important to note that things can be perceived in different ways. For instance, an entity that is usually non-individuated can be conceptualized as though it

were individuated. For example, at a restaurant, someone might order "four waters" for his table. In this scenario, the four waters represent four individuated things – four glasses of water. The opposite is also possible. An entity that is usually individuated can be conceptualized as though it were non-individuated. For example, one could utter (4.4).

(4.4) After we crashed into the cart near the orchard, our car was covered with apple.

In this statement, *apple* does not refer to an individuated apple but instead to the non-individuated substance of apple. Figure 4.7 displays these alternate conceptualizations.

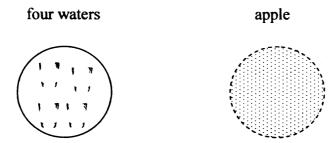


Figure 4.7. More example conceptualizations for individuation and non-individuation.

The main distinction between a and some lies in individuation and number. The choice of a occurs when the speaker conceptualizes an entity as a single unit within a larger class. The choice of some occurs when the speaker conceptualizes an entity as a group of single units or as a portion of a non-individuated entity. All three possibilities are present in the following sentence.

(4.5) I would like an apple, some water, and some pretzels.

Corresponding conceptualizations for the NPs in (4.5) are schematized in the figure below.

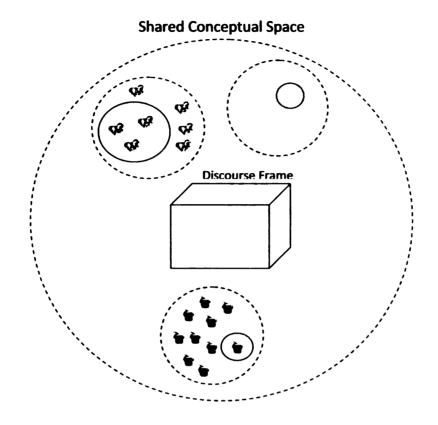


Figure 4.8. Conceptualization for an apple, some water, and some pretzels in (4.5).

The broken circles in Figure 4.8 reflect that the classes of apples, water, and pretzels are not discrete. They are filled with an infinite number of individuated members (e.g., apples, pretzels) or an infinite amount of non-individuated mass (e.g., water). The solid circles within the broken circles reflect that one member (e.g., an apple), group of members (e.g., some pretzels), or portion (e.g., some water) is highlighted within the larger class. In essence, *a* and *some* act as quantifiers. Such a perspective is consistent with the origins of the indefinite article, which is derived from *one* (Halliday & Matthiessen, 2004; Lyons, 1999).

Notice in Figure 4.8 that the schematic representations fall within the shared conceptual space, but outside the discourse frame. This placement indicates that a and some trigger a different cognitive background than does the. Mental representations triggered by a are perceived against a backdrop of like individuated entities, and representations triggered by some are perceived against a backdrop of like individuated entities or a like non-individuated entity. Across these backdrops, there is homogeneity. That is, the individuated entities within the schematic image cannot be distinguished from one another (i.e., the apples and pretzels above all look the same). If the schematic image is of one non-individuated mass (e.g., water above), different areas of that mass cannot be distinguished from one another. Such abstract conceptualizations produce the notion of class, wherein all members are identical. In essence, a and some signal the semantic function of classifying, as in Master (1990). The entity to which the NP refers is construed as part of a class. In contrast, for an NP headed by the, the mental representation is of an entity construed against a backdrop of distinct entities within the discourse frame.

Why might a speaker choose a or some over the? The speaker may assume that the entity to which she wishes to refer is not distinguishable from other entities in a mental scene evoked by the discourse or the context of the discourse. One can imagine two people playing tennis. One player wishes to take a second serve but realizes that all of the balls are on the opposite side of the net. Because tennis balls are not especially distinguishable from one another, this player would likely ask her playing partner for a ball rather than the ball.

The speaker may also assume that the entity to which she wishes to refer is not part of a shared mental scene evoked by the discourse. Examples of this second case are found in the following sentences from Pica (1983).

(4.6) His car struck *a tree*. He was surprised to see how much damage a car could do to *a tree*. (p. 224).

The first mention of *a tree* introduces an entity into the discourse. The speaker is signaling that there is no mental scene (shared with the hearer) within which to identify the tree in question. Although utterance of the first sentence enables a representation of this entity to appear in the text frame, *a tree* in the second sentence does not refer to this representation. Instead, this is an example of the indefinite article used for generic reference. Following Hawkins (1978), "both speaker and hearer do not have a particular included referent in mind. The identity of this referent is random and arbitrary for both" (p. 215). Thus, rather than construing this tree as an entity within a discourse-related scene, the speaker signals that it should be perceived against the backdrop of trees as a class.

Boundedness and Use of Ø

No uses of \emptyset have thus far been discussed. To do so, it is necessary to consider the concept of *boundedness*. Like individuation, boundedness is a function of construal (Langacker, 2002). Radden and Dirven (2007) state that the "boundedness of a conceptual unit refers to its limits in space, time or other domains" (p. 336). According to the framework, any use of *the*, a, or *some* signals that the entity to which the NP refers should be conceptualized as possessing limits. Solid lines in the figures above symbolize this. The definite article indicates that the referent is bounded within the discourse frame,

among other bounded entities. The articles a and some indicate that the referent is bounded within a larger class, outside of the discourse frame.

Unboundedness is the equivalent of having no limits within the conceptual schema. When the zero article (i.e., no determiner) appears before an NP, the referent is conceptualized as unbounded, or without limits. Consider (4.7) and the corresponding Figure 4.9.

(4.7) Apples are nutritious.

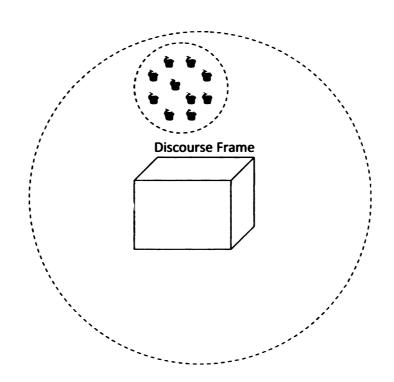


Figure 4.9. Conceptualization for apples in (4.7).

As with mental representations for NPs headed by *a* or *some*, the representation for apples in (4.7) falls outside the discourse frame. And as with *an apple* (see Figure 4.8), the representation is populated with like entities – homogeneous apples. However, no one

entity (i.e., individual apple) is circled with a solid line. The broken line symbolizes that there is no discrete quantity of apples being identified. As such, one can see how this conceptualization works well to express generic reference. The unbounded individuated entities may be interpreted as the representation of a class (e.g., the class of apples).

Unboundedness in non-individuated entities is reflected in the same way. Consider (4.8) and the corresponding Figure 4.10.

(4.8) Water is essential.

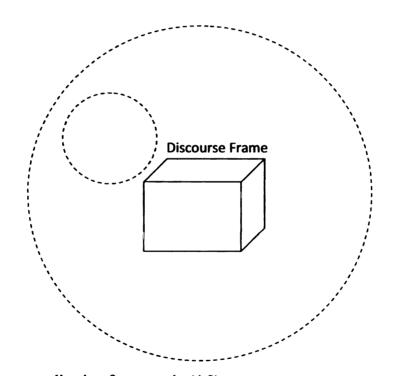


Figure 4.10. Conceptualization for water in (4.8).

The lack of a definite article locates the representation for the NP outside the discourse frame. As with *some water* (see Figure 4.8), the representation is populated with a mass of homogeneous entity, but no portion of it is encircled by a solid line. The broken line symbolizes that there is no discrete amount of water. Again, one can see how this

conceptualization works well to express generic reference. The unbounded nonindividuated entity may be interpreted as the representation of a class (e.g., the class of water).

These conceptualizations align with how Christophersen (1939) viewed the semantics associated with the use of \emptyset :

When continutate-words [mass nouns] and plurals are used in zero-form [without determiners], the preponderant element in them is quality, not quantity.... Only the common properties of the objects denoted are thought of, not special features, and as far as quantity, the limits are imagined as vague and indefinite. (p. 66)

Unboundedness, as reflected by the broken lines in the schematic images above, conveys the idea of undefined limits. The homogeneity of the contents within the broken lines conveys an emphasis on common properties. It is possible to say, following

Christophersen, that the choice between \emptyset and *some* is about foregrounding quality or quantity in the mental representation of a referent. Consider the following two dialogues, both of which take place on a hot day.

- (4.9) a. A: I sure am thirsty.
 - B: There's beer in the fridge.
 - b. A: I sure am thirsty.
 - B: There's some beer in the fridge.

B's utterance in (4.9b) signals a bounded portion within a non-individuated entity, thus highlighting a quantity of beer. The corresponding conceptual schema would be the same as for *some water* in Figure 4.8 above. B's utterance in (4.9a) signals an unbounded non-individuated entity, thus highlighting the quality of beer (not some other type of drink

like soda or wine). The corresponding conceptual schema would be the same as that for water in Figure 4.10 above. Now obviously, there can only be a limited amount of beer in any given refrigerator. Yet, it is up to the speaker whether to suggest a construal with limits or without. This example clearly illustrates the observation in Langacker (2002) that "bounding is a function of how we construe the conceived entity, and is not invariably motivated by objective considerations" (p. 66).

For NPs headed by Ø, number plays a significant role in conceptualization. There are only two possibilities: an unbounded collection of homogeneous individuated entities as in Figure 4.9 or an unbounded collection of homogeneous non-individuated mass as in Figure 4.10. The plural form triggers the former construal, and the singular form triggers the latter. Thus, against the claim of Stvan (2007) and in agreement with Christophersen (1939), bare singular count nouns are impossible in English.

There are, of course, occasions when nouns normally understood as countable (i.e., individuated) do appear in the singular without a determiner. But in all such cases, the construal is one of a non-individuated entity. For example, compare the following two sentences.

- (4.10) a. A prison is being built across the street.
 - b. *Prison* is something to avoid.

Rather than a concrete building where criminals are locked up, *prison* in the second sentence could represent the activity of being locked up. A schematic image, like the one for *water* in Figure 4.10, captures this abstract sense of activity. There are no clearly marked borders that could distinguish the walls of a prison.

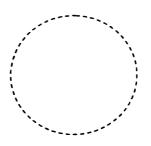


Figure 4.11. Conceptualization for prison in (4.10b).

Instead of borders, there is an unbounded uniform mass in Figure 4.11.

An example by Langacker (2002), perhaps best illustrates the idea of conceptualizing entities as unbounded. He presents the following situation:

I am looking at a white wall some 30 feet away, and ... painted on this wall is a solid red circle about 5 feet in diameter. In this context, I can felicitously say *I see a red spot*, for I see not only the region painted red but also the background of white that defines its boundaries. (p. 65)

Langacker goes on to contrast this with the situation of standing closer to the wall, so close that one sees only the color red. With one's nose against the wall and one's eyes directed at the center of the red area, the surrounding white remains outside of the visual field. In this context, one is likely to say "I see (nothing but) red (where red functions as a mass noun)" (p. 65). The unbounded nature of the visual input leads to a mass (or non-individuated) interpretation of the entity. Use of \emptyset with singular nouns prompts just such an unbounded non-individuated conceptualization, as represented in Figure 4.11 above.

What does this mean for proper nouns that appear with \emptyset ? They, too, are conceptualized as unbounded and non-individuated⁷. This is perhaps the most

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⁷ The dissertation committee remains divided on this analysis of proper nouns.

controversial proposal being made for the current framework. The suggestion here is that when someone says simply the name *John*, the construal is the same as for *water* in Figure 4.10 and for *prison* in Figure 4.11. In all these cases, Ø acts as a linguistic symbol that prompts a conceptualization of an unbounded non-individuated entity. There is no abstract background against which the entity is construed. This can be analogized to the up-close perspective on Langacker's wall, where there is no white background for the red spot – there is only red. The utterance *John* does not trigger the schema for an individuated entity within the class of all Johns. Instead, the construal is of an entity *sui generis*. There is only John.

To conceptualize John as an unbounded non-individuated entity requires a certain amount of abstraction. One must abstract away from the physical borders of a person's body. It might help to consider that a person also has emotions, a sense of humor, an intellect, a history, a future, etc. All of these qualities or values and more can be thought of as the material or mass that is John, a non-individuated entity that extends indefinitely. In contrasting *Shakespeare* with *the young Shakespeare* and *the old Shakespeare*, Hewson (1972) asserts "the bare unqualified noun (article zero) calls into play all the potential values together" (p. 76). This is not to claim that one cannot conceptualize John as one person among other people; obviously, this is something one can and does do. Instead, the claim is that Ø is a linguistic prompt toward a more abstract conceptualization.

It is not the case that proper nouns can never be used with articles. When they are, however, there is an appropriate shift in conceptualization. Consider the following sentences.

- (4.11) a. Mr. Smith is here to see you.
 - b. A Mr. Smith is here to see you.
 - c. The Mr. Smith you met with last week is here to see you.

The subjects in these three sentences are conceptualized differently. For (a), Mr. Smith is construed as unbounded and non-individuated. For (b), one Mr. Smith is construed against a larger class of Mr. Smiths. For (c), one Mr. Smith is construed within a concept frame that might be filled with individuals from meetings in the previous week. Through the framework, the basic principles of article use are the same for proper nouns as they are for common nouns. The key is accepting an unbounded non-individuated construal for proper nouns with \emptyset .

Generic Reference

Celce-Murcia and Larsen-Freeman (1999) identify five patterns of article use for generic reference: the + singular noun, a + singular noun, the + plural noun, 0 + plural noun, and 0 + to no to no to no the separaterns, with the exception of the third, has been mentioned above. For the first pattern (<math>the tiger is a dangerous animal), the NP signals the schematic image of a uniquely identifiable class among other classes within the concept frame. For the second pattern (thow to the total notation to the total no

How is the third pattern (*the* + plural noun) to be conceptualized? The plural form of the noun prompts the construal of individuated entities, while *the* signals that this construal is bounded within the discourse frame. Consider the example below.

(4.12) The Brazilians are passionate about football.

In the corresponding conceptual schema, Brazilians are represented as a bounded group of like entities. As with the first pattern (*the* + singular noun), the relevant sub-frame is the concept frame. This group is uniquely identifiable from other groups, which represent other nationalities.

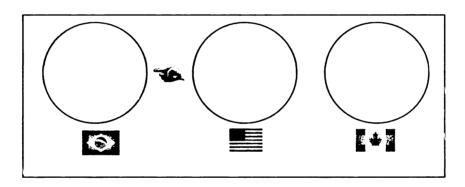


Figure 4.12. Conceptualization for the Brazilians in (4.12).

Application of Framework

This section demonstrates how the framework can be consistently applied to a range of article uses as well as pedagogical rules for use. Each application requires a choice between the same three basic mappings of article form to abstract schematic meaning, as illustrated in the following table.

Table 4.1
Article Form-Meaning Mappings

the → entity bounded within discourse frame a/some → entity bounded within larger class Ø → entity unbounded

Within these three choices, the schematic images themselves will vary depending on individuation and number in the NP. Because the situation and text frames are more straightforward, most uses of the definite article considered below focus on the concept frame.

Examples of Article Use

Imagine a customer walking through the front door of a pet shop. The three exchanges below differ only slightly.

- (4.13) a. A: Welcome to the store. How can I help you?
 - B: We're here to see the birds. We might buy one or two.
 - b. A: Welcome to the store. How can I help you?
 - B: We're here to see *some birds*. We might buy one or two.
 - c. A: Welcome to the store. How can I help you?
 - B: We're here to see birds. We might buy one or two.

Following the framework, each of the NPs that contains *birds* will prompt different conceptualizations. These are displayed in the figure below.

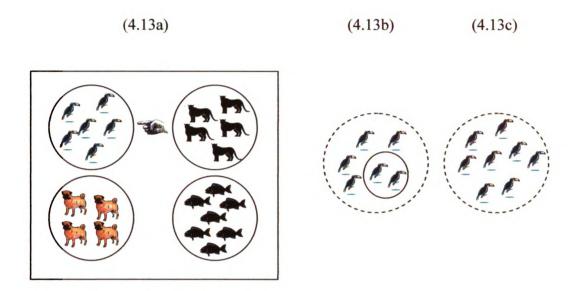


Figure 4.13. Conceptualizations for the birds, some birds, and birds in (4.13).

The NP in (4.13a) foregrounds the referent against the backdrop of other animals in the store. The NP in (4.13b) foregrounds the referent against the backdrop of the class of birds. The NP in (4.13c) provides no foreground or background for the referent; the construal is simply of birds.

Consider another scenario in which two friends are watching the Academy Awards.

Again, the three exchanges below differ only slightly.

- (4.14) a. A: Do you like that actor?
 - B: Yeah, I do. He's been great in all the roles that he's played. And, of course, he's got *the style of a big time movie star*.
 - b. A: Do you like that actor?
 - B: Yeah, I do. He's been great in all the roles that he's played. And, of course, he's got a style like no one else.

c. A: Do you like that actor?

B: Yeah, I do. He's been great in all the roles that he's played. And, of course, he's got *style*.

Corresponding schematic images for each of the style NPs are found in Figure 4.14.

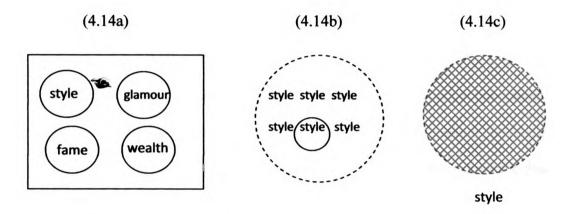


Figure 4.14. Conceptualizations for style NPs in (4.14).

No matter how abstract a noun is generally considered to be, the framework clearly dictates that an NP of a + singular noun refers to an individuated entity. This is reflected in the schema for a style like no one else in Figure 4.14. While the framework dictates that an NP of \emptyset + singular noun refers to a non-individuated entity (as seen for style in Figure 4.14), it says nothing about the individuation for an NP of the + singular form. Whether the style of a big time movie star is an individuated or non-individuated entity is an open question. The framework is also unable to specify what the exact contents of a concept frame are. The bounded entities in the frame for the style of a big time movie star in Figure 4.14 might be other qualities that a big time movie star possesses – like glamour, fame, wealth, etc.

The next two exchanges take place between roommates in a shared apartment. This example underscores how the contents of the discourse frame are shaped by the meaning of the NP within the larger context.

- (4.15) a. A: Did you know the television was left on all night?
 - B: Whoops, sorry about that.
 - b. A: Did you know the television was invented in the 1920's?
 - B: No, I didn't realize that.

Here the same NP, *the television*, has different meanings. In (4.15a), it has a specific reading; whereas in (4.15b), it has a generic reading. The definite article, however, is performing the same semantic function. It is singling out the referent from the discourse frame. What happens to be different is the content of the discourse frames as displayed in the following figure. The first schematic image is filled with representations for actual items in the shared apartment, such the TV, the stereo, the oven, and the lights.

Meanwhile, the second schematic image is comprised of more abstract-level representations for inventions, such as the television, the telephone, the radio, and the telegraph.

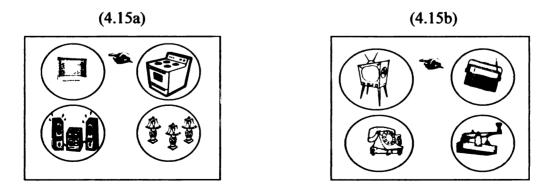


Figure 4.15. Conceptualizations for the television in (4.15).

Article use with NPs made up of acronyms or abbreviations follows the same formmeaning mapping. Consider the brief exchange between two friends at a cinema complex in (4.16) and the conceptualizations for the italicized NPs in Figure 4.16.

(4.16) A: Which movie are we going to see? The one about *NASA* or the one about *the CIA*?

B: I don't care. But I do need to find an ATM so I can get some cash.

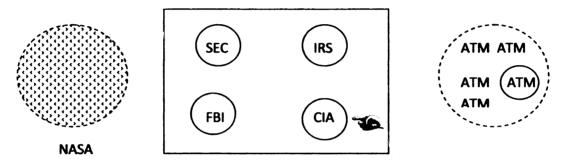


Figure 4.16. Conceptualizations for NASA, the CIA, and an ATM in (4.16).

The construal of NASA is one of an unbounded non-individuated entity, like water or John; whereas, the CIA is construed as one distinct entity within a concept frame. Again, while the definite article triggers conceptualization of the referent within a frame, it does not specify what is in the frame. The concept frame in this particular case might include other government agencies and bodies like the IRS, the FBI, the SEC, etc. Finally, the indefinite article with ATM triggers the construal of one entity within a class of homogeneous entities.

How does the framework account for article uses pointed out as problematic in the literature? Some uses of *the* have been claimed to refer to non-unique entities, as in the examples below.

- (4.17) [Hotel concierge to guest, in a lobby with four elevators] You're in Room 11. Take *the elevator* to the sixth floor and turn left. (Birner & Ward, 1994, ex. 2b)
- (4.18) [At a table containing four pitchers of milk, all equidistant from the hearer] Please pass the milk. (Birner & Ward, 1994, ex. 10)

To felicitously respond to the imperatives in the situations above, the hearer could take any of the elevators or pass any of the pitchers of milk. Thus, the argument goes, the speaker does not have a unique referent in mind when uttering the elevator or the milk. These examples would cause problems for the framework if the discourse frame were limited to the situation frame, which is comprised of entities distinguishable from one another in the immediate environs. The discourse frame, however, may take the shape of a more abstract concept frame. In a concept frame comprised of modes of ascending and descending the floors of a building, the elevator in (4.17) is distinguishable from the stairs or even from the fire escape. In a concept frame comprised of types of food and drink at a breakfast table, the milk in (4.18) is distinguishable from the toast, the cereal, the coffee, the juice, etc. The felicity of the definite article in these two examples is due to the speaker and hearer's cognitive ability to abstract away from the immediate situation. The key to interpreting any use of the definite article, through the framework, is identifying the nature of the discourse frame.

For (4.19) and (4.20), it is not abstraction from the immediate situation, but abstraction from prototypical conceptualizations that is required.

- (4.19) My uncle wrote something on *the wall*. (Abbott, 2006, ex. 11a)
- (4.20) She shot herself in *the foot*. (Abbott, 2006, ex. 11c)

Abbott (2006) suggests these examples are problematic for accounts of the definite article that are based on uniqueness, as "rooms typically have more than one wall... and people more than one foot" (p. 4). There is insufficient description within the NPs to identify one particular wall within the mental image of a room or one specific foot within the mental image of a human body. Unique identifiability, however, is possible if the imagery is more abstract. Instead of a room with four walls and a body with two feet, the mental images are more like taxonomical listings of types of room parts and types of body parts. For instance, the contents of the concept frame for *the wall* in (4.19) could include other distinct parts of a room (e.g., window, floor, ceiling, furniture, etc.). Unique identifiability for *the foot* in (4.20) is possible if the contents of the concept frame include other distinct body parts (e.g. head, arm, stomach, etc.). Figures 4.17 and 4.18 display potential conceptualizations for these NPs.

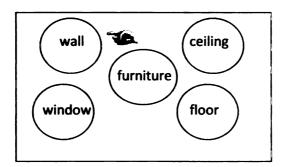


Figure 4.17. Conceptualization for the wall in (4.19).

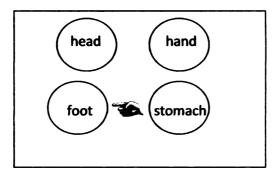


Figure 4.18. Conceptualization for the foot in (4.20).

How does the framework address the claim by Epstein (2002) that the two instances of the wrong number in the next example have non-unique referents?

(4.21) Researchers who reported in July that family history appeared to play a slightly smaller role in breast cancer than previously believed backed off, saying they had erred... "We took *the wrong number* and multiplied it by *the wrong number*", said Dr. Graham A. Colditz, a co-author of the study. (Los Angeles Times, 7 October 1993, p. A20; in Epstein, 2002, ex. 15)

According to the framework any use of *the* triggers the discourse frame, which may only be populated with bounded entities that are uniquely identifiable by both the speaker and the hearer. Given that the person to whom Dr. Colditz was speaking probably did not know the two numbers that were multiplied, the NPs are not meant to evoke conceptualizations of exact numbers. Instead, they may be construed within a concept frame in which there are only two distinct entities: the right number and the wrong number. Against this backdrop, the hearer understands that there is only one appropriate entity being picked out by *the*.

In many of the examples above, it is evident that the discourse frame is flexible. It is not necessarily restricted by previous text or by the situation in which the discourse is occurring. It may take the form of a concept frame that is called forth by the NP itself. This is exactly the case in the following example.

(4.22) When I was six years old, I had to spend a night in *the hospital*, and I was terrified. (Birner & Ward, 1994, ex. 16b)

In the words of Birner and Ward (1994), "there is no mention of a city or any similar scene to give rise to a frame that might plausibly contain a hospital" (p. 6). The same could be said for many first-mention uses of *the bank*, *the post office*, *the store*, etc. However, when any of these NPs is uttered, it is quite possible for speakers and hearers to construe a concept frame filled with distinct locations or institutions found within a prototypical small town. Such a construal allows for unique identifiability of the referent.

This focus on abstract conceptualization can be applied to dialectical variations in article use. For example, the difference between *the hospital* in American English and *hospital* in British English becomes a matter of construal. Applying the framework would result in the following schematic images in Figure 4.19. The use of \emptyset with *hospital* (like *school* or *prison* in the American dialect) prompts a construal of unboundedness. In this case, *hospital* is more like an abstract sense or quality unto itself (like *style* in (4.14c)) rather than one building or one place among others.

the hospital hospital hospital store bank

Figure 4.19. Conceptualizations for the hospital and hospital.

For many first-mention cases of *the*, it is the NP that is able to trigger an appropriate concept frame (e.g., *the hospital* or *the style of a big time movie star*). However, there remain some uses of the definite article that seem unable to do this. For instance, what possible concept frame is there for *the fight* in the dialogue below?

(4.23) M: Did you hear about the fight?

A: What fight?

M: Between Bob and Grandpa... (Epstein, 2002, ex. 11)

In such cases, it appears that the relevant part of the discourse frame that is being activated is not the concept frame, but the text frame. The claim made here is that mention of *the fight* activates a mental representation within the text frame. Even though M may presume that A knows nothing about a particular fight, M can assume that by uttering *the fight*, A now has a representation for this NP (even if it is an impoverished one) in the text frame and is able to uniquely identify it. If this is the beginning of the conversation, such identification should be especially easy because there are few contents populating this frame. Epstein observes that this example "involves the introduction into

the discourse of an entity that manifestly requires further elaboration, that is, the speaker intends it to be a new topic and assumes that the addressee is aware of this intention" (p. 355). As M goes on to describe the fight, A's mental representation of it will become richer. Yet, right from the start, the decision to introduce the referent with *the* is a symbolic gesture. It signifies that the hearer – even without background knowledge – can uniquely identify the referent somewhere in the discourse frame, which may help to convey the sense of discourse prominence noted by Epstein.

Interpreting these problematic uses of *the* through the framework requires recognition that any use of the definite article places the referent in the discourse frame. The next step is determining the likely conceptual background against which the referent is being singled out. In which sub-frame (situation, concept, or text) is this abstract deixis occurring? And from what other entities is the referent being singled out?

Textbook Rules

As was noted in Chapter 2, the variety of article rules and guidelines that textbooks present can foster a sense of arbitrariness and idiosyncrasy. Learners and teachers may quite reasonably wonder how one rule relates to another. Textbooks, at least the ones surveyed here, do not make a serious effort to explain how article rules are connected. Can application of the framework to textbook rules yield a more coherent, systematic picture of the article system? The remainder of this section interprets a range of article rules and guidelines.

Perhaps the most basic guideline for article use is the subsequent-mention rule. FOG states, "Use *the* for the second mention of an indefinite noun" (p. 118). UUEG states, "A noun is often indefinite the first time a speaker mentions it. It is usually definite after the

first mention" (p. 131). The framework offers a conceptual basis for this rule. *The* is used not simply because "the noun has already been mentioned" (Cole, 2000, p. 112), but because the bounded entity to which the NP refers is considered by the speaker to be uniquely identifiable in the text frame. *A* is used not simply because a noun is mentioned for the first time, but because the entity to which the NP refers is considered by the speaker to be individuated and bounded within a class outside of the discourse frame. Under this interpretation, the second mention of *a tree* and *a car* in Pica's example, repeated below, is a symbolic choice by the speaker and not a violation to the subsequentmention rule.

(4.6) His car struck a tree. He was surprised to see how much damage a car could do to a tree. (p. 224).

From the hearer's perspective, the use of a in the second sentence signals that the two NPs must refer to different entities than those referred to by his car and a tree in the first sentence.

A more conceptual understanding is possible for the traditional guideline to "use the definite article with nouns that describe something unique" (FOG, p. 132). Through the framework, uniqueness is understood to reside not in the world itself, but in human conceptualization. Thus, when *the sun* is uttered, there is only one such entity in a concept frame of entities in the earth's sky or of entities in the earth's solar system. Such an interpretation enables another example from Pica (1983) to be seen, again, as a symbolic choice by the speaker and not as a rule violation.

(4.24) A sun and some planets were sighted by a group of astronauts during a recent space probe. (p. 224)

The choice of a at the start of the sentence signals to the hearer that the NP refers to an individuated entity that is outside the discourse frame and bounded within a class of suns.

A more conceptual understanding is also possible for the rule to "use *the* with the superlative degree" (Cole, 2000, p. 113). Through the framework, such uses of *the* may be mapped to a schema in which the mental representation for the NP is uniquely identifiable within a concept frame. For instance, a description of Mt. Everest as *the tallest mountain in the world* triggers a concept frame of mountains of varying heights, as in the following figure.

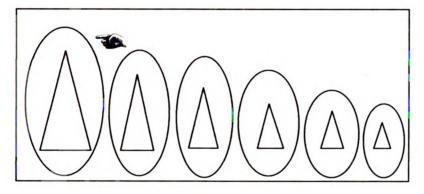


Figure 4.20. Conceptualization for the tallest mountain in the world.

Within this schematic image, both speaker and hearer can identify the relevant entity, the mountain that is the tallest.

Textbooks sometimes present postmodification of a noun as a cue for *the*. Cole (2002) states that nouns may be "made definite by a prepositional phrase" (Rule 15, p. 112) or "by an adjective clause or an adjective phrase" (Rule 16, p. 112). However, what does it mean for a noun to be made definite through postmodification? The answer provided by the framework is that for any utterance of a postmodified noun headed by *the*, the speaker

is construing an entity within the discourse frame. Postmodification may be considered sufficient to evoke a shared frame with the hearer. For example, with the NP the screen of a laptop, both the speaker and hearer can uniquely identify the screen among the other parts of a prototypical laptop computer. A corresponding schematic image is displayed in the figure below.

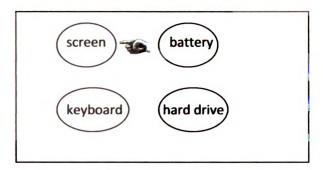


Figure 4.21. Conceptualization for the screen of a laptop.

This is in contrast to a postmodified noun that is headed by *a*, such as *a computer with lots of memory*. Here, the NP refers to an individuated entity that is outside the discourse frame and bounded within a class of computers with lots of memory. A corresponding schematic image is displayed in Figure 4.22.



Figure 4.22. Conceptualization for a computer with lots of memory.

The framework can be applied to some of the more seemingly arbitrary textbook rules as well. As discussed in Chapter 2, Cole (2002) includes the following guidelines (p. 112):

Rule 21: Do not use an article with the names of countries, cities, or states.

Exception to Rule 21: Use *the* in the names of countries that contain the words united, union, kingdom, or republic.

Through the framework, exceptions to Rule 21 may be interpreted in a more meaning-based fashion. For instance, *the Czech Republic* can be viewed as an entity within a concept frame comprised of other republics, as in the following figure.

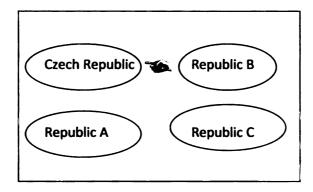


Figure 4.23. Conceptualizations for the Czech Republic.

The image above enables *the* to maintain its function of abstract deixis: *the Czech Republic* is being singled out among other entities. Meanwhile, Rule 21 can also be interpreted in a meaningful way. Use of Ø with the name of a country (e.g., *Spain*) prompts conceptualization of an unbounded non-individualized entity, as in Figure 4.24. Although Spain is bounded on a map by territorial borders, the zero article prompts a more abstract construal.

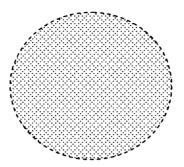


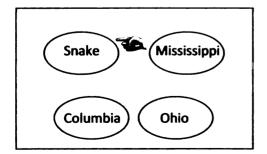
Figure 4.24. Conceptualization for Spain.

This same approach can be taken with other seemingly arbitrary rules. Consider the next two, also from Cole (2002, p. 113):

Rule 28: Use the with the names of rivers, oceans, seas, and deserts.

Rule 31: Do not use an article with the names of single lakes, mountains, islands, or canyons.

While the framework cannot explain how these particular patterns in article usage came to be, it does offer learners the ability to map NPs that follow these patterns to schematic images. Thus, the Snake River and the Pacific Ocean may be mapped to concept frames like those in Figure 4.25, whereas Lake Erie is construed as an unbounded non-individuated entity, as in Figure 4.26. Although the lake itself has borders, the abstract conceptual schema triggered by the NP does not.



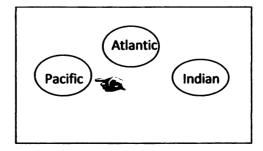


Figure 4.25. Conceptualizations for the Snake River and the Pacific Ocean.

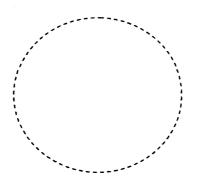


Figure 4.26. Conceptualization for Lake Erie.

Furthermore, the framework provides a conceptual basis for the use of *the* with proper nouns that are plural. For example, the NP *the Cascade Mountains* is construed within a concept frame, as in the following figure.

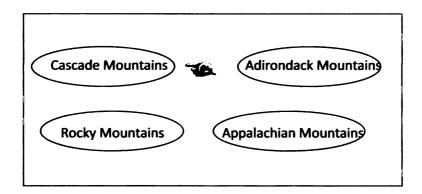


Figure 4.27. Conceptualization for the Cascade Mountains.

The additional bounded entities in the frame represent other mountain ranges, such as *the Rockies*. In contrast, the NP *Mt. Rainier* is construed outside the discourse frame as unbounded and non-individuated, just like *Lake Erie* in Figure 4.26 above.

In a final example of application of the framework to textbook rules, consider the following guidelines in Cole (2002, p. 114):

th

pra

ŞU

Rule 47: Do not use an article with the names of diseases.

Exception to Rule 47: Use the with the flu, the measles, and the mumps.

Again, the framework does not explain the origin of these patterns of article use. It does, however, provide learners a systematic means with which to view these guidelines. The names of most diseases are conceptualized as unbounded non-individuated entities, whereas the exceptions above are understood to reside in concept frames. For instance, Figure 4.28 displays a possible concept frame for *the flu*.

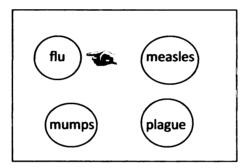


Figure 4.28. Conceptualization for the flu.

The textbook rules above have been interpreted through the conceptualization proposed in the framework. Although these rules may at first appear unrelated and unsystematic, they can all be mapped to the same schematic images. Application to the framework should help learners to see coherence and systematicity within existing rules and guidelines for article use.

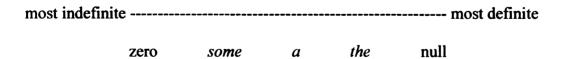
Discussion

The proposed framework holds implications for both linguistic theory and teaching practice. In this section, linguistic and pedagogical considerations are discussed.

Linguistic Theory

The framework operates on at least two key assumptions. The first of these is the flexibility of the human mind in regard to construal. That multiple perspectives can be taken on the same situation or entity is a cornerstone of cognitive linguistics (Langacker, 2008). Metaphor, metonomy, and polysemy would be impossible without this cognitive ability to shift perspective. Just one example of the framework's reliance on this ability is generic reference through the pattern *the* + singular noun, where a shift in perspective is necessary in order to recognize the NP as representing an individual class rather than an actual individual in the world. Equally important for this last example, and for the framework in general, is the assumption that meaning is subjective. Meaning does not lie in an objective reality, separate and distinct from language users. Instead, it is a socially-constructed, subjective experience. Articles, in a small way, help shape that experience. The framework attempts to account for this shaping through schematic images. These images are meant to guide the conceptualization of entities to which NPs refer.

The most significant implication the framework holds for linguistic theory is that it challenges the need for a continuum of definiteness, such as that found in Chesterman (1991, p. 182):



It does this by removing the distinction between the zero and null articles. Use of \emptyset signals neither of the extreme ends of definiteness. In place of a continuum, the framework proposes a three-way distinction: boundedness within the discourse frame, boundedness within a class, and unboundedness. One could say the first option represents

definiteness, the second represents indefiniteness, and the third requires a new term. The most apt one, perhaps, is *sui generis*. Use of \emptyset (whether it be with a plural noun, a mass noun, or a proper noun) signals the conceptualization of an entity unto itself. While construing such an entity, one does not consider its limits or borders.

Pedagogy

As stated from the outset, the conceptual framework is conceived of as a pedagogical tool. It is thus worth considering how the framework might be utilized in the classroom.

Theoretical and practical matters are considered below.

The conceptual framework aligns with L2 pedagogical approaches from a cognitive linguistics perspective (e.g., Pütz, Niemeier, & Dirven, 2001). As argued for in Achard (2008), instructors should focus learners' attention on construal by language users rather than on traditional rules. The framework, with its emphasis on conceptualization, would allow teachers to do this. The schematic images for article use are understood as symbolic resources (Langacker, 2002), which learners may utilize in their efforts to understand and acquire the article system. With these images, teachers may provide "explanations that draw on learners' everyday experience by tapping into an intuitive reservoir of knowledge" (Tyler, 2008, p. 462). This is especially so for class time spent on situation and concept frames. When discussing the possible contents of these frames, teachers can tap learners' knowledge of their surroundings, of prototypical scenes and situations, of hierarchies and classifications, etc.

Use of the framework also fits well within pedagogical approaches from a sociocultural theory perspective (e.g., Lantolf & Poehner, 2008). For example, one such approach, concept-based instruction, holds that: 1) concepts (not rules) are the currency

of instruction, 2) material aids or tools help learners to understand concepts, and 3) verbalization prompts learners to internalize concepts (Lantolf & Thorne, 2006; Negueruela & Lantolf, 2006). Toward the first point, by laying out one-to-one form-meaning mappings for each article, the framework delineates "conceptual categories of meanings" (Negueruela, 2008, p. 161) for the article system. Toward the second point, these meaning categories are represented through the material form of the schematic images. To meet the third point, teachers may direct learners to talk about how they would map examples of article use to the framework (as was done with the MA TESOL students in the current project; see Chapter 5). This provides an exercise in languaging, which Swain (2006) defines as "producing language in an attempt to understand – to problem-solve – to make meaning" (p. 96).

While teachers may value the framework's ability to identify systematic meaning across a range of article uses, learners may find that the framework does not meet some of their traditional expectations. For example, learners want rules. The framework, however, encourages reflection on article use rather than memorization of rules. Learners also want explanations. Although the framework can systematically link meaning to individual examples of article use, it cannot explain how particular article uses came about. Furthermore, learners want to be able to predict "correct" forms and usages. Again, the framework cannot do this. It can neither predict nor explain why Americans say the hospital and Brits say hospital.

The inability of the framework to predict article use is a point of departure from traditional article instruction. Textbook rules are designed to give learners some basis for the prediction of articles in their own language use. Even attempts from an applied

linguistics perspective, like Master's (1990) division of articles into a and \emptyset for classifying and *the* for identifying or Master's (2002) division of a and the zero article for new information and *the* and the null article for old information, have been undertaken with the idea of producing pedagogical tools that help learners select appropriate articles. The conceptual framework proposed here is about reflection rather than prediction. It is about making sense of the myriad article uses that exist and that are used regularly in everyday language.

The framework enables teachers to focus learners' attention on the meaning of articles. It allows all article uses to be interpreted systematically. Examples like *the hospital* and *hospital* do not need to be relegated to a category of idiomatic use and left unstudied. Teachers do not have to settle for the "just memorize it" response. Rather than rules of thumb that work most of the time, the schematic images of the framework give learners categories of meaning that can be referenced all the time. These meaning categories may even be directed toward the rules of thumb themselves, as was done earlier in this chapter in the section on textbook rules. And importantly, meaning categories can also be used to interpret instances of rule exceptions, of which there are many. In this way, the framework may serve as a supplement to traditional article instruction. With it, teachers can incorporate perspective-taking and conceptualization into the presentation of traditional rules and guidelines.

An important question is whether, over time, the framework will aid learners in their acquisition and control of the article system. Because they are most often unstressed in speech, articles are difficult for learners to notice. In an experiment by Pierce and Ionin (2010) that involved the transcription of sentences, L2 learners of English often

transcribed articles incorrectly. This result occurred even though the participants were able to listen to the sentences as many times as they wanted. Another fact which makes it difficult to notice articles is that errors are not likely to lead to communication breakdowns (Master, 1995). As such, learners are unlikely to receive evidence that an error has been committed. Given these challenges, the framework may serve as a pedagogical tool with which to increase learners' awareness of articles.

Guiding learners to reflect on the meaning of articles in context is a means toward consciousness raising (Rutherford & Sharwood Smith, 1988). Under Schmidt's (1990, 1994) noticing hypothesis, such reflection may aid in the eventual acquisition of articles. As noted in Negueruela (2008):

The challenge for teachers and learners is to transform grammatical conceptualizations – systematic and coherent grammatical explanations based on concepts – into functional concepts that can be used as tools of the mind when communicating in a second language. (p. 158)

The goal is for learners to make use of the framework's conceptual schemas when choosing articles in their own language production. Indeed, the ultimate goal is innovation not imitation (Larsen-Freeman, 2003) – for learners to "feel confident enough to extend [target language conventions] creatively to convey specific nuances" (Achard, 2008, p. 442). Whether the framework can help learners to do this is an empirical question for future study.

Conclusion

This chapter presented a conceptual framework for the English article system. By applying the framework to a variety of article uses and pedagogical rules, the chapter

attempted to illustrate how the framework can elucidate systematicity. Implications for both linguistic theory and teaching practice were considered. In particular, it was discussed how the framework may readily be employed within a cognitive linguistics or sociocultural theory approach to language pedagogy.

CHAPTER 5: MA TESOL STUDENTS

How does exposure to the framework influence international MA TESOL students' explanations of article use in authentic texts? This question guides the current chapter. The chapter first details the methodology for how the question was addressed. Next, results are reported. Finally, the results are discussed in relation to future use of the framework in ESL classrooms and directions for future research are suggested.

Methodology

To investigate how exposure to the framework influences the ways in which MA TESOL students explain examples of article use in authentic texts, this project utilized a pretest-posttest design. A small group of graduate students was asked to explain the same article uses as those given to the ESL teachers. The participants completed a pretest (the explanation elicitation task) before and a posttest (the same task) after a series of instructional meetings in which they were presented the framework by the researcher. In addition to the posttest, a comparative reflection was performed by the participants. They were asked to consider any differences in their explanations given before and after exposure to the framework.

Participants

International graduate students at Michigan State University were solicited for participation in the project. Given the intensive, time-consuming nature of the treatment and the qualitative approach to data analysis, an original target of 3-6 participants was set. The researcher sought students who (a) spoke an L1 without articles, (b) were enrolled in the university's M.A. TESOL program, and (c) expressed both frustration with and an incomplete understanding of the English article system. A total of five

students, all in their second year of the M.A. program, participated in this component of the project. Each of these participants had begun studying English in primary school in their home country. Basic background information for these individuals is presented in the table below.

Table 5.1

MA TESOL Participants

Participant	L1	Home Country
P13	Korean	Korea
P14	Thai	Thailand
P15	Chinese (Mandarin)	China
P16	Korean	Korea
P17	Korean	Korea

These students were considered a particularly attractive group to work with for a number of reasons. Given that they were native speakers of an article-less language and had learned English as an L2, they would be sensitive to the difficulties of mastering appropriate use of articles. By their own admission, the participants were frustrated by articles and had yet to master their use. In this respect, these participants were viewed as highly advanced learners. Because they planned to teach English in the future and had expressed dissatisfaction with their own understanding of articles, they were expected to be motivated to take part in the study. Finally, these individuals possessed a high level of English proficiency enabling them to carry out the explanation and reflection tasks in English.

Explanation Elicitation Task

While the elicitation task included the same highlighted articles from the same excerpts as those for the ESL teachers, the actual task performed was slightly different

for the MA TESOL students. Rather than write explanations directed toward hypothetical advanced learners and rate the confidence of those explanations, the graduate students verbally explained to the researcher why they thought the authors had used the 20 highlighted articles. In this way, these participants were being engaged more as learners than as teachers. Asking them to explain the authors' article choices exposed them to the practice of languaging (Swain, 2006). By talking about the article choices of the authors, the participants would be problematizing articles and seeking reasons for why particular choices were made. The excerpts were thought to be of potential interest to the MA TESOL students and to reflect the academic environment of graduate school in which the participants found themselves.

Comparative Reflection Task

In the reflection task, participants compared their responses given on the first completion of the explanation elicitation task (Elicitation A) with those given on the second (Elicitation B). Immediately after completion of Elicitation B, participants read a transcript of what they had said in Elicitation A. They were asked to (a) identify any explanations that were different from what they had just said, (b) explain how the explanations were different, and (c) describe any changes in their thinking. The task combines elements of stimulated and immediate recall (Gass & Mackey, 2005). That is, the transcripts prompt participants to think back to their original explanations and the timing of the task draws upon their immediate recollection of explanations given in their second completion of the explanation elicitation task. The comparison of pre-exposure and post-exposure explanations was considered an effective means of eliciting participants' conscious reflection on their own thought processes and understanding of

articles. In this reflection, they were afforded the opportunity to discuss possible influences of the framework.

Procedure

Each participant undertook a series of one-on-one meetings with the researcher. All sessions were audio-recorded with a Sony MP3 IC Recorder. Most sessions took place in a small conference room in the same building in which the MA TESOL program was housed. When there was a conflict with room scheduling, sessions took place in a private meeting room in the university library. This happened on five occasions. The original plan consisted of five 60-90 minute meetings for each participant over seven weeks. However, at the participants' request an extra session was scheduled, resulting in a total of six meetings. Week 6 was originally meant to be a week with no meetings. Table 5.2 displays the schedule.

Table 5.2
Activity Outline by Week

Week 1	Interview; Elicitation A
Week 2	Presentation and Application of Framework Concepts
Week 3	Application of Framework
Week 4	No Meeting
Week 5	Application of Framework
Week 6	Application of Framework
Week 7	Elicitation B; Comparative Reflection

The researcher entered each meeting (1-6) with a protocol of basic instructions for tasks to be conducted. The same protocol was followed for each participant (see Appendix B for protocols). Throughout the project, the researcher made field notes as tasks were carried out. The decision not to enforce a strict time limit on meetings was made in recognition of the fact that participants would differ in terms of time required to

complete tasks. The length of meetings ranged from 60 to 100 minutes. Due to illnesses and other unforeseen events, some meetings with individual participants had to be rescheduled. Thus, the actual schedule differed somewhat from the original plan. Table 5.3 reveals the actual schedule, including length of meetings, for each participant.

Table 5.3
Actual Schedule by Participant: Dates and Lengths of Meetings

Participant	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting	Meeting
					5	6
P13	9/21 (60m)	9/29	10/13	10/19	10/26	11/02
		(90m)	(90m)	(95m)	(60m)	(75m)
P14	9/22 (60m)	9/29	10/08	10/20	10/27	11/03
		(90m)	(85m)	(100m)	(50m)	(75m)
P15	9/23 (60m)	9/30	10/07	10/21	10/28	11/04
		(90m)	(60m)	(75m)	(60m)	(60m)
P16	9/24 (60m)	10/01	10/08	11/05	11/12	11/19
		(90m)	(85m)	(80m)	(60m)	(80m)
P17	9/28 (60m)	10/02	10/09	10/21	10/28	11/5
		(90m)	(90m)	(85m)	(60m)	(100m)

m = minutes

Meeting 1.

Meeting 1 allowed for the administration of the pretest to each participant. The meeting also consisted of an initial interview with questions about participants' experiences learning, using, and teaching English articles (see Appendix C for list of questions). The purpose here was both to prompt participants to begin thinking about the topic of articles and to collect information on their backgrounds. The audio-recorder (as with all the meetings) was placed on the table at which the participant and researcher sat. The researcher made handwritten notes as the participant spoke. Following the interview, participants were given the explanation elicitation task.

Meetings 2-5 served as the treatment between pretest and posttest. The purpose of these meetings was to expose the participants to the conceptual framework and to give them practice applying it. The conversational nature of these one-to-one sessions allowed participants to freely engage in languaging (Swain, 2006) as they sought to explain examples of article use through the framework. The researcher was free to ask questions and seek clarification on statements that were made by the participants.

Meeting 2.

In Meeting 2, the conceptual framework was presented by the researcher to the participant. The participant was given a handout which contained information on concepts basic to the framework (see Appendix D). The researcher, holding his own copy of the handout, instructed the participant to read the first section on *individuation*. Once the participant finished reading, the researcher asked (a) which ideas in the section were familiar, (b) which ideas were new, and (c) if the participant had any questions. This procedure was repeated for the two remaining sections on the handout.

Next, the participant was given an application worksheet (see Appendix E) as well as a few copies of a handout with the framework's schema. In Part I of the worksheet, participants were asked to explain to the researcher how highlighted noun phrases could be mapped to the schema. For initial explanations, participants were required to draw representations on the schema handout. Participants continued to draw as they moved through items on the worksheet. The highlighted noun phrases contrasted different article choices for similar contexts. The contexts took the form of short dialogues created by the researcher.

Meeting 3.

After a brief five-minute review of the basic concepts within the framework, Meeting 3 saw the continued explanation of noun phrases in Part I of the application worksheet. Next, the participant considered a list of article rules in Part II. The participant explained how highlighted noun phrases in examples of and exceptions to the rules could be mapped to the schema within the framework. Again, copies of the schema were provided by the researcher and the participant could use these to make sketches. The final task for the third meeting was to read a short narrative text (see Appendix F) and to consider how highlighted uses of the definite article could be mapped to the framework's *discourse* frame. The narrative was created by the researcher in order to spotlight a variety of uses for the definite article.

Meetings 4 and 5.

In preparation for Meeting 4, each participant was asked to email the researcher the name of a journal article the participant was currently reading for a graduate course and one academic paper that the participant had written in a previous semester at the university. The researcher brought two copies of each document (the journal article and the academic paper) to the next session, which began with a 10-minute review of the framework's basic concepts. The next 35-45 minutes of Meeting 4 were spent on noun phrases in the journal article. Starting with the abstract of the article, the participant read one sentence at a time and underlined uses of *the*, *a*, *some*, and Ø. If the participant missed an article in his/her underlining, the researcher pointed it out. For each sentence, the participant explained how the noun phrases of the identified articles could be mapped to the framework. Within the allotted time period, only article uses within the journal

abstract were discussed. No participant managed to finish the abstract and to consider sentences in the main text.

In the remainder of the meeting, the participant followed the same procedure for his/her own academic paper. Article uses were identified and discussed in relation to the framework. The participant was specifically asked why each identified article had been chosen during the writing of the paper and how the framework could be applied to the corresponding noun phrase. Time spent on this task ranged from 20-40 minutes. Meeting 5 saw the continued consideration of article uses in participants' academic papers. It was this meeting which was added to the original schedule. The participants wanted another opportunity to discuss the application of the framework to their own writing.

The decision to use authentic texts and the participants' own writing in Meetings 4 and 5 was made in an effort to respect the context in which the MA TESOL students found themselves. Namely, graduate school at an American university is replete with the reading of journal articles and the writing of formal research papers. It was assumed that by working with contextually relevant texts, participants would be engaging in a more meaningful endeavor as they examined article uses.

Meeting 6.

In Meeting 6, participants were again given the explanation elicitation task. As they completed the task, participants did not have access to any of their notes or to handouts from earlier sessions. At no prior point were participants told that they would be performing the explanation task a second time. In fact, the researcher asked participants at the end of final meetings not to divulge anything about this task to other participants

who had yet to complete Meeting 6. Feedback on the project was elicited through an emailed questionnaire to each participant (see Appendix G).

Data Analysis

After Meeting 1, the audio-file of Elicitation A for each participant was transcribed. It was necessary to do so before the completion of data collection because the transcripts of this elicitation were used in Meeting 6 for the Comparative Reflection. With the meetings completed, audio-files of Elicitation B and the Comparative Reflection were transcribed for each participant.

The first step in analysis was to code for article explanations that had changed from Elicitation A to B. The researcher went item by item for each participant, reading the explanation for an item on the A transcript and then immediately reading the explanation for the same item on the B transcript. Each pair of A and B explanations was coded as one of three possibilities. If the reasons given in the B explanation were the same or similar as those in the A explanation, the pair was coded as *similar*. If the reasons given in the B explanation were novel from those given in the A explanation, the pair was coded as *different*. Finally, if the B explanation both repeated any reasons in the A explanation and contained novel reasons, the pair was coded as *amended*. The results of the coding were entered into an Excel spreadsheet by item and by participant. Next, the researcher read transcripts of the Comparative Reflection in search of any discrepancies between the above coding and what the participants expressed. Any reflection that either (1) stated the A and B explanations were similar where the coding was *different* or (2) stated the A and B explanations were different where the coding was *similar* were noted.

The next step was to return to the Elicitation A transcripts and highlight each and every reason given in the explanations. These were entered by item and by participant into the same spreadsheet as above. Reasons given in the explanations on the Elicitation B transcripts were then highlighted. As these were entered into the spreadsheet, the original coding of *similar*, *different*, or *amended* was confirmed for each item. Next, the transcripts of the Comparative Reflection were read, and reflective comments on the participant's thinking and comfort were highlighted. These were then entered into the spreadsheet.

In order to identify patterns in Elicitation B explanations, the researcher examined the spreadsheet for reasons given by article type. The researcher flagged any reason given by the same participant in more than two explanations for items with the same article. Recurring reasons, along with the item numbers for which they were given, were entered into the spreadsheet.

In order to identify patterns in changes between Elicitation A and B explanations by participant, the researcher (1) compared reasons across the two elicitations, (2) examined patterns identified in Elicitation B explanations, and (3) considered comments made in the Comparative Reflection. Within items of the same article (e.g., all explanations for *the*), themes and trends were noted. These included recurring differences in reasons given (e.g., phrases no longer used in B explanations), qualities among changes (e.g., more unity in B explanations), and repeated comments in reflections made (e.g., expression of more confidence in B explanations). These observations were also entered into the spreadsheet.

Results

Results for the MA TESOL students are reported below. For each participant, likeness of explanations in Elicitation A and Elicitation B is reported first, followed by patterns in explanations on Elicitation B, followed by observations on changes in explanations across the two explanation elicitation tasks.

Participant 13

In the interview, this L1-Korean participant expressed both a lack of confidence with her own article use and a lack of comfort teaching articles, especially when covering article use in students' writing. Participant 13 did express the belief that she would continue to improve the accuracy of her own article use: "even though it will not be perfect, but I believe it will be improved."

Likeness of explanations.

Comparison of explanations of individual items on Elicitation A and Elicitation B revealed the following for Participant 13. Explanations for 15 of the 20 items were different on Elicitation B than those which had been offered on Elicitation A. One item was coded as similar and four as amended. See Table 5.4 for coding by individual item. For the similar item (Item 19), the participant said, "among the other countries, United States is one different country" on Elicitation A and "United States becomes, is just a different country from the other countries" on Elicitation B. An example of an amended explanation is Item 2. While repeating that the author was not referring to "specific teachers", Participant 13 added that "teachers are not bounded concept, even though it's individuated" to her explanation on Elicitation B.

Table 5.4

Likeness of Explanations for Participant 13

the		Ø		а		some	
Item 3	D	Item 1	D	Item 4	Α	Item 9	D
Item 5	D	Item 2	Α	Item 15	Α	Item 10	D
Item 6	D	Item 8	D	Item 16	D		
Item 7	Α	Item 12	D	Item 19	S		
Item 11	D	Item 13	D				
Item 14	D	Item 20	D				
Item 17	D						
Item 18	D						

S = similar: A = amended: D = different

There were three instances (Items 3, 16, 17) where Participant 13's comments in the Comparative Reflection suggested feelings of similarity for item explanations that had been coded as different by the researcher. For example, for Item 3 on Elicitation A, the participant gave the following two reasons for the definite article: 1) a specific time period mentioned by the author, 2) "over the sounds natural rather than over a." For the same item on Elicitation B, the participant explained that "there can be any, like, past fifty years" and that the author assumes readers are familiar with the fifty years in question. During the Comparative Reflection after reading the transcription of her explanation for Item 3 on Elicitation A, the participant said, "But I think I have kinda similar concept before and now."

Patterns in Elicitation B explanations.

Examination of explanations by article type on Elicitation B revealed the following patterns for Participant 13. For all eight explanations of the definite article, the participant mentioned that the target item referent was *one among others* (other sets of 50 years for Item 3, other important points for Item 5, other people associated with the book for Item 6, other common meanings for Item 7, other inherently embodied things for Item 11,

other popular current approaches for Item 14, other nations for Item 17, and other countries comprised of united states for Item 18.) A further pattern was the mention of *frames* within explanations for two *the*-items. The participant used the term *context frame* for Item 6 and *contextual frame* for Item 14.

For all six explanations of the zero article, Participant 13 labeled the target item referents as unbounded and +/- individuated (Items 1 and 2 as individuated; Items 8, 12, 13, 20 as not individuated). Half of the explanations for Ø (Items 1, 2, 8) included the expression not specific or not specified (e.g., "Like teaching methods and textbooks, and it's not like specified into certain methods or textbooks, even though it's a plural." (Item 1)). In all four of the explanations for the indefinite article, Participant 13 referred to other like entities (many sets of correct sentences for Item 4, many empirically responsible philosophies for Item 15, many types of civil war for Item 16, and many countries for Item 19). The same was true for both explanations of some (many notes for Item 9 and many theoretical things for Item 10).

Observations on changes in explanations.

When considering changes from Elicitation A to B, the following observations were noted for Participant 13. First, there was a move toward more uniformity in the participant's explanations by article type. This was evident for *the*, \emptyset , a, and *some*. For example, all explanations for the author's choice of *the* in Elicitation B included the idea of reference to one entity among others. This is in contrast to Elicitation A, in which the following varied reasons were given: specific referent (Items 3, 6, 7), modification (Item 5), superlative degree (Item 14), emphasis (Item 17), rule (Item 18), and phrase (Item 18). Whereas all explanations for \emptyset in Elicitation B included the ideas of unboundedness and

individuation, reasons given in Elicitation A ranged from modification (Items 1, 8, 13) to not specific (Item 2), to not countable (Item 8), to emphasis of preceding adjective (Item 8), to discipline name (Item 12), to rule (Item 20). Whereas all explanations for *a/some* in Elicitation B included reference to other like entities, this reference appeared only for Item 19 in Elicitation A. There was, however, some consistency shown for these items in Elicitation A. For instance, the participant used the term *indefinite* in three explanations of *a* (Items 4, 15, 19) and one explanation of *some* (Item 10).

Second, Participant 13 took a more image-based approach to article explanations in Elicitation B. Comments made in the Comparative Reflection clearly show this. When reflecting on differences between her explanations for the definite article in Item 14, Participant 13 said, "Before I just said the rule, and today I kinda had a picture, like concept of this frame." For the zero article in Item 12, she stated, "Um, today it was easy to understand to me, 'cause I could see, like, philosophy is not individuated, unbounded, things like name of John, people, person John." For the indefinite article in Item 4, she said, "But today I have more, like clearer concept of, like clearer, image of the set of correct sentences." During consideration of explanations for *some* (Items 9 and 10) in the Comparative Reflection, the researcher commented on sketches the participant had made during Elicitation B:

BW: Now you have a picture there.

P13: Yeah, right here. And for number 10, right here.

A third observation is that in Elicitation B, Participant 13 relied less on rules or strategies she had learned in the past. When reflecting on her Elicitation A explanation for *the* in Item 5, she noted, "Maybe it's because... I learned like that in high school. If

there is like modified sentences, the article should be *the* for the noun." The participant's quote on Item 14 in the preceding paragraph suggests that she understood use of the definite article with the superlative degree as a rule. As further evidence of her reliance on rules in Elicitation A, she made the comment "I cannot come up with any rule(s)" for Items 11 and 13 and the statement "That's a rule" for Items 18 and 20. In Elicitation B, the participant did not mention rules in explanations for any of these items.

A fourth observation is that Participant 13 appeared to feel more comfortable with her Elicitation B explanations for Ø than for those for *the* or a. This is suggested by the following exchange during the Comparative Reflection":

P13: Interesting. Today, it's more like easy to... kinda capture the idea, easy to have a kinda concept.

BW: OK.

P13: About the zero article.

BW: Mhmm.

P13: Yeah. Like the, like the article the and a, it's still...

BW: They're still challenging.

P13: Yeah, still challenging. But zero article, it became really easier than before. This exchange took place as the participant was reflecting on her explanations for \emptyset in Item 13.

Participant 14

In the interview, this L1-Thai participant said she was not very confident with her own articles use or with her ability to teach articles. She said she could explain rules but not "the sense" of articles. Participant 14 expressed the belief that if she paid more attention

to article use in scholarly articles, she might be able to improve her own understanding of articles.

Likeness of explanations.

Comparison of explanations of individual items revealed the following for Participant 14. Explanations for 10 of the 20 items were different on Elicitation B than those which had been offered on Elicitation A. Four explanations were coded as similar and six as amended. See Table 5.5 for coding by individual item. An example of a similar explanation is Item 16. On Elicitations A and B, the reason given for the author's choice of the indefinite article was that the noun *civil war* was being introduced. An example of an amended explanation is Item 12. On Elicitation A, the participant said that because "philosophy is just like an abstract noun", no article was necessary. On Elicitation B, she repeated that the noun was abstract and added, "You cannot really pick up, um, the philosophy, pick up which one. It's just philosophy in general."

Table 5.5
Likeness of Explanations for Participant 14

the		Ø		a	а		some	
Item 3	D	Item 1	D	Item 4	D	Item 9	Α	
Item 5	D	Item 2	S	Item 15	D	Item 10	Α	
Item 6	S	Item 8	D	Item 16	S			
Item 7	D	Item 12	Α	Item 19	D			
Item 11	Α	Item 13	D					
Item 14	Α	Item 20	D					
Item 17	S							
Item 18	Α							

S = similar: A = amended: D = different

Patterns in Elicitation B explanations.

Examination of explanations by article type on Elicitation B revealed the following patterns for Participant 14. In five of eight explanations for the definite article (Items 3, 5,

11, 14, 18), the participant used the expression *pick up* for the referent in question. For the first three items, she spoke of the author picking up (e.g., "There are many, there are like in the conceptual framework, um, maybe there are many different category of importance, and he just pick up one that's related to the encouraging of natural communication." (Item 5)). For Items 14 and 18, she spoke of a more general "you" doing the picking (e.g., "Maybe in this, like, framework, in this framework there are many popular approaches. I mean correct one, but you pick up the one that is related to – uh, what? – Anglo-American and postmodernist philosophy." (Item 14)). In three of her explanations for *the* (Items 5, 6, 7), the participant linked choice of the definite article to the notion of *emphasis* (e.g., "Here he used *the common meanings*, um, I think because, like, he would like to emphasize that he will focus on the meaning of the, like, the term about the *theory, practice, research, curriculum.*" (Item 7)).

In five of six explanations for the zero article (Items 1, 2, 8, 12, 13), Participant 14 used the term *general* (e.g., "Because teachers here, um, they just general teacher, every teachers... that have to do their best to use the... method or material effectively." (Item 2)). In three of these explanations (Items 1, 8, 12), she mentioned an inability to *pick up* the referent (e.g., "You cannot really pick up, um, the philosophy, pick up which one. It's just philosophy in general." (Item 12)). The term *pick up* was again used by the participant in three of four explanations for the indefinite article (Items 4, 15, 19) and in both explanations for *some* (Items 9 and 10) (e.g., "This is maybe... a set of sentences is just like a category. There are many different sets of, um, sentences, but you just pick up one." (Item 4)).

Observations on changes in explanations.

When considering changes from Elicitation A to B, the following observations were noted for Participant 14. First, the most widespread pattern was a new reliance on the idea of *picking up* the referent. The participant made use of this term with all four article types and with 13 of 20 items in Elicitation B. There was an additional item for which she did not use the term in the explanation, but did so later in the Comparative Reflection.

This is seen in her reflective comments for Item 7:

P14: So, but I think it's now a little bit different. Because, ah... I think I told you that he would like to emphasize it, right? Emphasize the meaning of the term, that's theory, practice, and something.

BW: Umhmm.

P14: So this time, um, although the meanings are plural, but the reader use, ah, the writer use *the* with the kind of plural because he would like to emphasize and he would, he – what? – pick up the plural things from the – how to say that? – plural things among many different kind of plural, but it's still plural. But it's definitely, you can pick, differentiate that from another things.

Not once in Elicitation A did the participant use the term pick up.

Second, Participant 14 was able to offer more explanations after her exposure to the conceptual framework. Whereas six items (Items 3, 5, 7, 8, 13, 15) were left unexplained in Elicitation A⁸, explanations were provided for all twenty items in Elicitation B. It

⁸ Given her comments for Item 19 (I don't know here. But we, we... I mean when you read it out loud, it doesn't sound right become the different country. But become a different country."), one could argue that seven items were unexplained in Elicitation A.

should be noted that in her Comparative Reflection, the participant felt she was still unable to explain Items 3 and 5 successfully.

Third, Participant 14 felt she had given the same explanations for a number of the items on Elicitation A and Elicitation B. For example when reflecting on Item 6, the participant said, "It's still the same, exactly the same thing." She felt this way for Items 2, 6, 9, 10, 11, 14, 16, 17, and 18. The comments corresponded to all the items that had been coded as similar and all but one (Item 12) that had been coded as amended (see Table 5.5 above).

Participant 15

In the interview, this L1-Chinese participant said he felt more confident in his own article use since recently coming to the realization that article choices are less about speaker knowledge and more about what the speaker assumes the listener knows. Participant 15 said he felt "pretty confident" in his ability to teach articles, especially when teaching lower level students. He also said he felt he would be unable to improve the accuracy of his article use, that he was "sort of stuck."

Likeness of explanations.

Comparison of explanations of individual items revealed the following for Participant 15. Explanations for 12 of the 20 items were different on Elicitation B than those which had been offered on Elicitation A. One explanation was coded as similar and seven as amended. See Table 5.6 for coding by individual item. For the similar item (Item 6), the participant said, "the author is talking about the reader of this specific book, this particular book" on Elicitation A. On Elicitation B, this reason was repeated: "when he says the readers, we know that, ah, he's talking about the reader of this specific book."

An example of an amended explanation is Item 20. On Elicitation A, the reason given for Ø was that "we don't use articles in front of, before names of countries." On Elicitation B, the participant again pointed out that "America is a name," but added that "we don't further identify a name."

Table 5.6
Likeness of Explanations for Participant 15

the)	6	7	Some		
Item 3	Α	Item 1	D	Item 4	D	Item 9	D
Item 5	D	Item 2	Α	Item 15	D	Item 10	D
Item 6	S	Item 8	D	Item 16	Α		
Item 7	D	Item 12	Α	Item 19	D		
Item 11	D	Item 13	D				
Item 14	Α	Item 20	Α				
Item 17	Α						
Item 18	D						

S = similar; A = amended; D = different

There were three instances (Items 11, 18, 19) where Participant 15's comments in the Comparative Reflection suggested feelings of similarity for item explanations that had been coded as different by the researcher. For example, for Item 18 on Elicitation A, the participant explained the use of the definite article by stating that *the United States* was a chunk and that he was taught by his English teacher that this was the only name of a country that required *the*. On Elicitation B, he commented that when using the name *the United States*, "we know exactly what are these states" and "they are very uniquely identified." However, on the Comparative Reflection, Participant 15 said, "It's still a chunk to me."

Patterns in Elicitation B explanations.

Examination of explanations by article type on Elicitation B revealed the following patterns for Participant 15. In six of eight explanations for the definite article (Items 3, 5,

7, 14, 17, 18), the participant used the term *uniquely identified* (e.g., "Here *the importance* is uniquely identified." (Item 5)). Four *the-*explanations (Items 3, 7, 14, 18) made reference to reader knowledge or familiarity (e.g., "So, um... I guess when, when he [the author] talks about these things again, ah, the reader of this article already, ah, has a sense of what they are." (Item 7)), and three explanations (Items 6, 11, 17) included the term *specific* (e.g., "Um, here, when the author said *the nation*, um, it's very specific." (Item 17)).

In three of six explanations for the zero article (Items 1, 2, 13), Participant 15 mentioned that the referent was not being picked out (e.g., "Um, the author introduced *methods* for the first time and he's not, he's not picking them out from any larger class." (Item 1)). The participant also expressed the idea of unboundedness in three Ø-explanations (Items 8, 12, 13). For example, to explain Item 8, he said:

He [the author] talks about *new meaning* for the first time. But he does not give the meaning any boundaries. So we don't know what exactly are these new meanings.

The participant further talked about identifying the referent. For two items (12 and 20), he explained that the referents were already identified and so did not need further

identification:

So, ah, there, there are, here new meanings. New, new meaning is unbounded.

It's like the name of a person. Um, we don't put boundaries, um... before a, a name, like a, a noun like that because it's already, it's always uniquely identified. We don't need to further identify them. (Item 12)

For two other items (1 and 2), the participant spoke of the referents as not being identified (e.g., "Um, here *teachers* are not individually identified and, um, the author is just talking about teachers in general." (Item 2)).

In all explanations for the indefinite article, Participant 15 invoked the idea of picking the referent out from a larger class. For instance, he said the following for Item 19:

Again, here, when you talk about a different country, he's picking out a country, ah, from many other countries, but like randomly. He doesn't say specifically what kind of country it is or what country it is. So, he's picking out a country from a larger class of countries, but, um, does not identify it.

The participant made use of the same idea in both explanations for *some*. For example, he offered the following for Item 9:

They are a set of notes that is picked by the author, um, to illustrate *the margin of ideals*, I guess. But still, um, we don't know what exactly these notes are. And they can be any notes about this topic. So he just pick this set of things from a larger class, but ah, doesn't really uniquely identify them.

Observations on changes in explanations.

When considering changes from Elicitation A to B, the following observations were noted for Participant 15. First, in explanations for \emptyset , a, and some, there was less attention to countability and number. The participant commented on this multiple times in the Comparative Reflection. For example, when reflecting on explanations for \emptyset before *philosophy* in Item 12, he said:

See the, the first time, I still, I still kept saying that you don't count it. Um, I was, I was really focused on the countability of all these. I think that, that was a pretty,

um, obvious trend I had the first time. I always talk about the countability of that thing. But now I guess, when I explain *philosophy*, I have realized it's not about, it's not about countability. It's the content, it's the, it's that, it's that discourse frame that makes it, um, automatically uniquely identified.

The following exchange for Item 4 reveals a shift in thinking about the relevance of countability and number for a and some.

P15: Um, so number 4, the next one. Um... Yeah, it's ah, I almost talk about count status every time the first time. But I didn't talk about them today.

BW: Not so much, yeah.

P15: Hmm, no... 'Cause they don't...

BW: Is that surprising for you... that that's what you were...?

P15: I don't think we, I, I need, I don't think I have, I don't think I have needed to talk about them. Not even if it is plural. It's still, it's, we still wouldn't use, when, we still wouldn't use, um, zero article or definite article when we shouldn't. So I don't think... we justify the... Now I will probably talk about count status a lot less.

BW: Interesting.

P15: Yeah. Because now when I see... it's picking out, um, something from a larger class, ah, it's gonna be a or some. So the count status doesn't really matter in that sense.

BW: Well, I mean it might matter for which one you choose.

P15: Yeah. But that's not the point. 'Cause we are comparing indefinite article to zero article and to definite article, right? So, yeah, I probably wouldn't say all this plural and singular thing.

BW: OK.

P15: Um, they seem irrelevant.

The following interaction for Item 8 in Elicitation A shows how these issues had been of major concern for the participant:

P15: Research, curriculum, and learning as given, but tried to find new meaning for them that fit... I would say new meanings or a new meaning, 'cause meaning is countable, right? So why... there's no article here? Yeah, I wouldn't, I wouldn't just... put nothing here.

BW: So you would put a or you would put zero article plus meanings?

P15: Right. Yeah. Meanings, yeah.

BW: OK.

P15: I don't, I don't... for... well, in my mind, I don't think it's correct to put a... to use no article with a countable noun. That's how I know it.

A second observation is the introduction of new concepts in article explanations. Identifiability, unboundedness, and the notion of picking a referent out from a larger class were not mentioned by Participant 15 in Elicitation A but were frequently used to explain article choices in Elicitation B. A final observation is that the participant felt the most similarity in Elicitation A and B explanations for the definite article. Although only one the-item was coded as similar, with four as different and three as amended (see Table 6.3), the participant expressed the opinion that explanations after exposure to the

framework were not all that different from pre-exposure. When addressing Item 14 in the Comparative Reflection, he said, "Every one with *the* I think I explained more similar, my explanation today, or more similar to the... 'Cause they are easy." The following exchange for Item 3 reveals more about why the participant felt this way:

P15: Number 3. Teachers have seen many... This is about the same. I think, probably with the, um, 'cause it's easier to, to justify the use of the. So, it may not have changed that much.

BW: Um, what do you mean by "It's easier to justify the use of the"?

P15: Well, when you, when you just find *the*, you always talk about, it's unique, it's identified, it's specific, it's something we know.

BW: OK.

P15: That won't change much.

Participant 16

In the interview, this L1-Korean participant said she was more confident in her article use in writing than in speaking. She also spoke of a particular lack of confidence regarding the use of *the* with abstract words. Although Participant 16 expressed comfort teaching general article rules, she said she was unsure of exceptions to rules and uncomfortable answering students' questions about article use in authentic texts. This participant said the key to continuing to improve the accuracy of her article use was in learning exceptions to article rules.

Likeness of explanations.

Comparison of explanations of individual items revealed the following for Participant 16. Explanations for 14 of the 20 items were different on Elicitation B than those which

had been offered on Elicitation A. One explanation was coded as similar and five as amended. See Table 5.7 for coding by individual item. For the similar item (Item 3), the participant mentioned that *the past* was a phrase and that she could not really offer an explanation beyond that. An example of an amended explanation is Item 17. During Elicitation A, the participant explained that "the United States is already mentioned before." For Elicitation B, she added new terminology by saying "I feel that the author already mentioned United States before. So, this kinda text frame."

Table 5.7

Likeness of Explanations for Participant 16

the		Q	Ø		а		Some	
Item 3	S	Item 1	D	Item 4	D	Item 9	Α	
Item 5	D	Item 2	D	Item 15	D	Item 10	Α	
Item 6	Α	Item 8	D	Item 16	D			
Item 7	D	Item 12	D	Item 19	D			
Item 11	D	Item 13	D					
Item 14	Α	Item 20	D					
Item 17	Α							
Item 18	D							

S = similar; A = amended; D = different

There was one instance (Items 15) where Participant 16 suggested that the explanation on Elicitations A and B were similar for an item which the researcher had coded as different. In her first explanation, the participant expressed uncertainty over the author's choice of the indefinite article. Although she considered *philosophy* an abstract word requiring zero article, she did say *an* may have been used "to introduce one specific philosophy." On Elicitation B, the participant identified *philosophy* as individuated and one of "many empirically responsible philosophies." In the Comparative Reflection, the participant noted that, "I think the concept is similar because today I explained that there are many reasonable, ah, responsible philosophies."

Patterns in Elicitation B explanations.

Examination of explanations by article type on Elicitation B revealed the following patterns for Participant 16. In five of eight explanations for the definite article (Items 5, 6, 7, 14, 18), the participant suggested that the referent was *one of many* (e.g., "It means, the reader, means out of many readers, this reader is just for this book... um, the people who are reading this book." (Item 6)). The participant mentioned the term *frame* in four explanations for *the* (*concept frame* for Items 3, 5, and 7, and *text frame* for Item 17). Twice (Items 3 and 11) she referred to writer and reader knowledge. For example, the following was said for Item 11:

And also, I think the reader and the author, both of them, know what it is, what they're, what the author is talking about. If he says *mind*, both of them are, know what the mind is. *The mind* means the human body's mind.

As for patterns in explanations for the zero article, Participant 16 used the term *non-boundary* for all six items. Within each \emptyset -explanation, she also distinguished whether a referent was *individuated* (Items 1 and 2) or *non-individuated* (Items 8, 12, 13, 20). For example, the participant said the following for Item 2 in Elicitation B:

Before *teachers*, there is no article, like *the*. Hmm, because they, it is plural. That means it is individuated, but it is non-boundary. So it means just general teachers, not limited ones, not limited teachers.

Like for the definite article, Participant 16 identified the referent as *one of many* in all explanations for the indefinite article (many sets of correct sentences for Item 4, many empirically responsible philosophies for Item 15, many civil wars for Item 16, and many different countries for Item 19). In both explanations of *some*, the participant spoke of the

fr dif author limiting the amount of the referent. For Item 9, she said, "there are many useful notes, but the author wanna pick some of them out of many useful notes." For Item 10, she gave the following reason:

Because the author want to add, um, a limited amount of backup. So if the author used *provide* without *some*, *provide more theoretical backup*, it means too broad, to the author, I think.

Observations on changes in explanations.

When considering changes from Elicitation A to B, the following observations were noted for Participant 16. First, there was a move toward more uniformity in the participant's explanations for the zero article and the indefinite article. Whereas all explanations for Ø in Elicitation B included the ideas of unboundedness and individuation, Elicitation A yielded a variety of reasons: introduction of new information (Items 1, 2, 8), plural noun (Items 1 and 2), no modifying words (Item 8), abstract noun (Items 12 and 13), metaphor (Item 13), phrase (Item 20), and country name (Item 20). There was also a clear shift in how the indefinite article was explained. Whereas number (Items 4, 16, 19), countability (Items 16 and 18), and first mention (Items 4, 15, 16) had been used as reasons in Elicitation A, the participant replaced these with the idea that the referent was *one of many* in her Elicitation B explanations.

Second, Participant 16 acknowledged that in Elicitation B she was taking a new perspective on article use. This is evident in a number of her Comparative Reflection comments such as for Item 7 ("But, now I think I can explain a little bit more, and I see from a little bit different perspective.") and for Item 9 ("But now I can see it from different view."). For Item 13, she spoke more explicitly of the transition:

I feel that before, I just tried to remember what I learned so far, and I just tried to explain it from, from the grammar books. But now today, I feel more, try to think about what the author's perspective is, and how he tried to express that word in this context.

The nature of the shift in perspective is further addressed in reflective comments for Item 19:

P16: Ah, yeah. But today, I can add more. Before, I just say, I just, um, I just looking for, looking at surface, surface sentence.

BW: Yeah.

P16: But today, I can see under that, under that meaning.

The participant's words *see*, *perspective*, and *look* underscore a new sensitivity to the role of visualization in the task of understanding articles. This is further exemplified in her reflection on Item 16:

But now, I think I can see... Before, I have only one way to take a look at the article. But now I feel that I have many views to take a look at... the article. And... and now, I feel that I have, I have more, the broader way, the broader eyes to take a look at the article.

A third observation is that Participant 16 appeared to feel more confident in her Elicitation B explanations. For example, the following comments were made in the Comparative Reflection:

And I think this is more appropriate, um, reason for this article. (Item 7)

And I think, that is more logical way to explain it and to think, to accept it, it. (Item 9)

And, it's much more reasonable to me. So, I think today's explanation is much better than, just keep saying the countable and non-countable, new information or not. (Item 16)

Oh, I explained it as a, like a phrase. But now... hmm, I feel that... America is non-boundary and non-individuated. I feel that is much more sensible. Just, yeah, better, much more than keep saying this is a rule, because this is a rule. (Item 20) In addition to newfound confidence, the participant also questioned the utility of some of her Elicitation A explanations. For instance, for Item 4, she pondered the value of using the reason of new information to explain the indefinite article:

P16: Hmm, before I explained it as the new information. So the author prefer to use *a*, prefer *a* to *the*. Um, but now, I explained it as a concept frame. And I think the framework explanation is better, because, ah, the, the explanation of new, just new information is too broad. And, it, I, now I think it cannot be the expla-, the appropriate explanation for the article *a*.

BW: 'Cause you, you feel it's too broad?

P16: Too broad, and doesn't make sense.

BW: Um, I'm curious. When you say "too broad", what do you mean by that?

P16: Um... because not every new information... does not, have the same case.

So...

BW: So, we can, we can find plenty of examples of new information that take *the...* nouns that are expressing new information, but yet they have *the* in front of them. So, yeah. It can be problematic.

For Item 11, the participant similarly questioned the effectiveness of how she had explained the authors' use of the definite article in *the mind*. In Elicitation A, she said she attributed choice of *the* to uniqueness of the noun; in Elicitation B, she considered *mind* as a subset of *body*. Regarding this second explanation, she stated, "I think that is better explanation, to the students, to understand the article. Because there is many words, even though it is unique, but without, without *the*..."

Participant 17

In the interview, this L1-Korean participant expressed "60% confidence" with her own article use and "60% confidence" with her ability to teach articles. She did say she was "80-85% confident" in her ability to continue to improve the accuracy of her article use.

Likeness of explanations.

Comparison of explanations of individual items revealed the following for Participant 17. Explanations for 17 of the 20 items were different on Elicitation B than those which had been offered on Elicitation A. No explanations were coded as similar and three were coded as amended. See Table 5.8 for coding by individual item. An example of an amended explanation is Item 16. On Elicitation A, the only reason given by the participant was that *a civil war* was "a general thing." On Elicitation B, in addition to talking about "just a general civil war," the participant mentions that this is one civil war among "unbounded civil wars."

Table 5.8

Likeness of Explanations for Participant 17

the		Ø		а		Some	
Item 3	D	Item 1	D	Item 4	D	Item 9	D
Item 5	D	Item 2	D	Item 15	D	Item 10	D
Item 6	D	Item 8	D	Item 16	Α		
Item 7	D	Item 12	Α	Item 19	D		
Item 11	Α	Item 13	D				
Item 14	D	Item 20	D				
Item 17	D						
Item 18	D						

S = similar; A = amended; D = different

Patterns in Elicitation B explanations.

Examination of explanations by article type on Elicitation B revealed the following patterns for Participant 17. In six of eight explanations for the definite article (Items 3, 7, 11, 14, 17, 18), the participant suggested that the referent was *one among other entities* (e.g., "OK, I think the mind is, ah, one of, among other entities about... the physics, or physical thing, the mind, the mind, soul, mind thing." (Item 11)). In three *the*-explanations (Items 5, 6, 18), the term *concept frame* was mentioned.

Participant 17 used the term *unbounded* in all six explanations for the zero article. She labeled five items as +/- *individualized* (Item 1 as *individualized*; Items 8, 12, 13 as *non-individualized*; and Item 20 as *unindividualized*). She also mentioned the term *unidentified* for Items 1 and 8. All three of these moves can be seen within her explanation for Item 8: "New Meaning. Ah, here, um, it is unbounded... and, unbounded. And, ah, unidentified. Non-individualized."

For all explanations of the indefinite article, the participant expressed the idea that the referent was one of a larger group (one set of sentences among other sets in Item 4, one approach of philosophy among other approaches in Item 15, one civil war among other

civil wars in Item 16, and one country among other countries⁹ in Item 19). In three of these explanations (Items 4, 16, 19), she spoke of the larger group as being unbounded. For example, in the exchange below, the participant was speaking while she was making a sketch:

P17: And, number 4. Imitate and practice a set of correct sentences, a set of correct sentences... a set of correct sentences. It, OK, it is, um, kind of unbounded, ah, unbounded... What is this? There's a lot, same entities then one of them, a.

BW: And what are the same entities?

P17: Maybe another set of correct sentences, another set of sentences.

BW: OK.

P17: Set, set, set. And one of them.

Similarly, the participant made use of sketches and the term *unbounded* in both explanations for *some*. The following exchange for Item 10 reflects this:

P17: Provide some more theoretical, theoretical backup. OK, unbounded... backup, unbounded. Ah, un, un, I, no... it was, um, non-individualized. BW: OK.

P17: And, some part. OK, picture is easy.

Observations on changes in explanations.

When considering changes from Elicitation A to B, the following observations were noted for Participant 17. First, there was a move toward more uniformity in the

⁹ Although the participant did not articulate the plural form when she said "one of country" in Elicitation B, she did refer to a sketch in which she had drawn multiple circles that presumably represented countries.

participant's explanations by article type. This was evident for the, Ø, and a. For instance, all explanations for the author's choice of the in Elicitation B included the idea of reference to one entity among others. While this was explicitly stated in six of the eight explanations, the idea was implied in the remaining two explanations because in these, the participant talked about the referent being in a concept frame. This unity in explanations was lacking in Elicitation A, where the following reasons for the definite article were given: assumed reader knowledge (Item 3), modification (Items 5 and 7), previous mention (Items 6 and 17), uniqueness (Items 11 and 18), and superlative degree (Item 14). Whereas all explanations for Ø in Elicitation B included the idea of unboundedness and all but one included some form of the term individualized, reasons given in Elicitation A were more varied: plural noun and first mention (Item 1), preference for the and general (Item 2), other possible forms (Item 8), academic name (Item 12), word order (Item 13), name (Item 20). Whereas the core explanation for all a items in Elicitation B was that the referent was one of a larger group, there were three distinct reasons given in Elicitation A: first mention (Item 4), modification (Item 15), and general reference (Items 16 and 19).

A final observation on changes made by Participant 17 is that there was less reliance on surface structures in Elicitation B. This was commented on in the Comparative Reflection. For example, when reflecting on her Elicitation A Item 1 explanation, the participant said, "I think in that case, I didn't think about meaning... never, just, ah, you know, according to the form." Her comments when considering Item 4 in the Comparative Reflection signal a significant change in thinking between the two elicitation tasks:

Yeah, only depend on the structure, form [in Elicitation A]. Here [Elicitation B], I, now, I do not depend on the form, structure, because... article can be changed according to the meaning, you know. Yes. There's no rule of article about form, just, ah... just, according to meaning, article can be changed. I mean, you know, before, I thought there's a fixed rule.

This shift may be seen by comparing explanations for individual items across the two elicitation tasks. For Item 5 in Elicitation A, the participant said, "Modify the noun, then the noun always keep the *the*." For Item 15, she said, "If this academic subject name, don't need the article. But in front of it, the adjective modify the noun, then you need *an*" (i.e., the names of academic disciplines take the zero article unless they are preceded by adjectives). For both these items in Elicitation B, there was no mention of modification.

Discussion

The patterns identified in the article explanations by the MA TESOL students are discussed below. This section considers, in particular, what these patterns suggest about the framework as a pedagogical tool.

Changes in Explanations

That the MA TESOL students changed the majority of their article explanations from Elicitation A to Elicitation B is not surprising. Between the two elicitations, the participants had been introduced to a novel way of conceptualizing articles. They had each met with the researcher on four occasions, during which they had applied the conceptual framework to a range of article uses. Each participant spent somewhere between 285 and 335 minutes practicing application of the conceptual framework. Given such focused attention, it is reasonable to expect individuals to alter their performance on

the explanation task. It is also possible that the participants may have felt obligated in Elicitation B to try to use the ideas they had been practicing throughout the meetings.

Of more interest is the nature of the changes made in participants' article explanations. For example, are there patterns in changes that signal potential value in the framework as an instructional tool? And what implications do the participants' experiences hold for the current design of the framework? These questions are important given that the conceptual framework has been proposed for the express purpose of facilitating the instruction of articles in ESL contexts. Each question is considered in turn.

Potential value of the framework.

Based on explanations in the Elicitation Tasks and comments in the Comparative Reflection, one can observe at least four patterns that highlight the framework's potential utility as a tool for improving learners' (and teachers') understanding of articles¹⁰. Those patterns are (1) more unity in participants' Elicitation B explanations by article type, (2) a more imagistic approach in these explanations, (3) more explicit verbalization of participants' intuitions, and (4) less reliance on surface-level rules to explain article use.

Because there currently exists no unified, systematic way of explaining articles, ESL students may expect to receive a variety of article explanations from their teachers. This variety comes in two forms: a range of explanations from different instructors for a particular article use, and a range of explanations from the same instructor for different uses of the same article. Both types of variety were exhibited by the ESL teachers' article explanations (see Chapter 3). Based on analysis of the MA TESOL student results,

¹⁰ Given that the focus was on participants' article explanations and not on their article use, nothing can be said here about the potential of the framework to improve the accuracy of learners' article usage.

exposure to the framework appears to encourage uniformity in explanations by article type. A change toward more uniform explanations (from Elicitation A to B) was explicitly noted for Participants 13, 16, and 17. Meanwhile, both Participants 14 and 15 were found to apply new terminology consistently to their Elicitation B explanations. Perhaps, more consistency in how articles are addressed in class would relieve some of the frustration so often invoked by this grammar topic. The framework offers the possibility of a more consistent approach to article explanations.

A second observed pattern that may be beneficial for the instruction of articles is participants' increased reliance on imagery. The introduction of terms such as *individuated*, *unbounded*, and *frame* in Elicitation B suggests a more imagistic approach to article explanations. Two participants commented explicitly on this in the Comparative Reflection. Participant 15, when referring to his Elicitation B explanation for the indefinite article in Item 15, said, "Yeah, it's all about the picture [referring to the framework]." Participant 13, when considering her Elicitation A and B explanations for use of the definite article with the superlative degree in Item 14, entered into the following exchange:

P13: So... yeah. Before I just said the rule, and today I kinda had a picture, like concept of this frame.

BW: Yeah, and you didn't even mention the rule. [P13 had explained that the superlative was the reason for *the* in Elicitation A.]

It should be noted that the treatment explicitly guided participants toward an imagistic approach. After presentation of the framework in Meeting 2, all participants were asked to sketch diagrams for examples of article use. Schema handouts upon which participants

could make sketches were provided in Meetings 2 through 5. Although no efforts were made to collect or track sketches produced throughout the project, informal observation revealed that some participants made more use of drawing than others. In the extreme, Participant 17 drew in all sessions after Meeting 1 and even sketched diagrams across her Elicitation B form as she gave article explanations in Meeting 6.

Just as it may be used to concretize abstract explanations through imagery, the framework may also be used as a tool to make intuitions explicit. That is, the framework can provide learners and teachers concepts with which to clarify and express their feelings regarding articles. While reflecting on her Elicitation A and B explanations for the in Item 5, Participant 16 made the following comments:

P16: Yeah. But I think, I thought like that way before, as well, but I think I don't know how to explain it. But now I know how to explain it. I, I, um, I feel that I have kinda bridge between my concept, between my brain and my tongue.

P16: So, I think, I thought my, the way that I thought is the, is the same, before and now. But now, ah, now I know how to explain, how to express.

When reflecting on her explanations for an in Item 15, Participant 13 recognized that in both Elicitations A and B she had said an empirically responsible philosophy was equivalent to any empirically responsible philosophy. This prompted the following exchange:

B: It sounds very similar.

BW: OK.

P: Similar, I, yeah, similar. 'Cause, you, you know... the rule is not the wrong thing. You know, the bad, the bad one was like I had no idea about the rule, I just

memorized rules and used them. But, I feel comfortable with thinking this as like any. Oh, I don't know I felt like this, I, before too. Like any. Yeah. Right

The ability to express one's intuition may be especially important for teachers who are native speakers of English, who have no troubles using articles but who may have a difficult time explaining various uses.

Another pattern suggesting the framework's utility in classrooms is the MA TESOL students' reduced reliance on the surface language of the texts and on textbook rules. All five participants made at least one comment about this trend in the Comparative Reflection. For example, Participant 14 said the following about her Elicitation A explanation for Ø in Item 1:

Like because, at the first time, I think the first time when I explain it, I just – what?

– memorize that if you have the plural here, you don't use any article. And I don't know why, I don't know why.

Also reflecting on her first explanation for this Item, Participant 17 said, "I think in that case, I didn't think about meaning... never, just, ah, you know, according to the form."

As was noted above, Participant 17 commented that in Elicitation B she was trying to explain article choices based more on the author's perspective than on what she had learned in grammar books. More attention in article instruction on meaning and on writers' and speakers' perspectives fits well with Achard's (2008) suggestion for language instructors to teach construal. The framework prompts teachers and students to

focus on the meaning behind a speaker's article choice, to contemplate how the noun phrase is being construed. Doing so puts the focus squarely on meaning.¹¹

Challenges for the framework.

A second question worth considering is what implications the participants' experiences hold for the design of the conceptual framework. That is, what can be learned from the ways the MA TESOL students appropriated the framework and from their reflections on the project? In particular, what challenges does the framework pose and how might these be addressed before implementing it in the classroom?

Based on examination of Elicitation B explanations, one challenge appears to be terminology. Three participants produced variations on terms that had been used in the presentation of the framework. Participant 13 uttered "contextual frame" in her explanation for Item 6 and "context frame" for Item 14. Both phrases appear to be variations on text frame. In place of the term unbounded, Participant 16 spoke of "non-boundary words" in all of her explanations for Ø. In place of the terms individuated and non-individuated, Participant 17 used "individualized" and "non-individualized" throughout Elicitation B. Although these examples appear to represent the original concepts within the framework and are not major changes from the original terminology, they do signal that the terms are not necessarily easy to remember. If this is so for highly advanced L2 speakers studying to teach the language, it is expected to be a problem for lower level learners studying the language.

¹¹ The need for a more meaning-based approach to article instruction is illustrated in the following comment from Participant 13 on her project feedback form: "I didn't [before having participated in the project] think article conveys meaning."

In fact, in participant feedback on the project, the language of the framework was mentioned as a challenge for teachers wishing to use the framework in their classes.

Considering the perspective of students, Participant 13 wrote:

The framework is, I would say, very cognitive. It does not seem easy to teach to ESL or EFL students if they don't have enough knowledge to understand the framework if the framework is explained by their L2. I think, for beginner or intermediate learners would better learn this through their L1.

Considering the perspective of teachers, Participant 15 wrote, "I feel that the framework is still a bit too abstract and theoretical and that may stop the teachers from using it because they are afraid that they cannot explain it to students very clearly."

Fears of teachers' inability to explain and students' inability to understand might be alleviated by simplifying the framework's terminology or by avoiding use of the terms in instruction. Simplification could include finding alternative phrases that are less abstract. In place of *unbounded*, for example, *no borders* might be used. Simplification could also include using terms that are fewer in syllables and thus easier to pronounce. For instance, *non-individuated* might be replaced with the more traditional *non-count* or *mass*. Another option is to cut out metalanguage entirely and present learners only images. Given traditional classroom contexts, where teachers are expected to do some lecturing, this might seem especially challenging. There are, however, methodologies, such as the Silent Way (Gattegno, 1972), that place emphasis on visuals and that direct teachers not to lecture.

Should instructors use the framework to explain article usage, they should be sure to cover the importance of the speaker/writer's assumptions about the hearer/reader in

explanations for the definite article. This explicit consideration of the writer's perspective on the reader was often lacking from the participants' explanations in Elicitation B. Of course, any mention of a *frame* implies such perspective-taking by the writer, as frames represent conceptualizations shared by the speaker/writer and hearer/reader. Still, over half of the explanations for *the* lacked any reference to a frame or to the writer's assumptions about the reader.

Explanations for the definite article that do not mention the writer's assumptions about the reader can appear quite similar to explanations for the indefinite article. For example, notice the likeness of the following explanations by Participant 16 for Item 18 (the United States) and Item 19 (a different country).

Item 18: "I think out of many united things, united states, united nations, united people, this is one of them."

Item 19: "There are many different countries, and this is one of them."

In Elicitation B, Participant 16 included the reason *one of many* in five of eight explanations for *the* and in all her explanations for *a*.

It is not hard to imagine that the repetition of this same phrase in explanations for the definite article and the indefinite article might lead to confusion among students. The implication for instructors is to make clear what *many* stands for in each article explanation. Recourse to the framework might help. For *a*, the referent is one of many homogeneous entities in a larger abstract class. For *the*, the referent is one among different entities (which may be many, depending on the context) that comprise the discourse frame. Still, teachers should emphasize that there is an assumption by the speaker/writer that the hearer/reader can call forth the discourse frame.

Another specific challenge for explanations of the definite article is identifying the contents of the discourse frame. This is especially so for the concept frame (as opposed to the text and situation frames). For it is this frame that is most removed from the actual text. To identify the contents of the text frame, learners can look back across a conversation to see what referents have been mentioned. To identify the contents of the situation frame, learners can look around the immediate environs in which the conversation is taking place. But to identify the contents of the concept frame, learners must imagine prototypical scenes and taxonomies. This is a more challenging task.

In her feedback on the project, Participant 14 wrote, "To me, it's difficult to explain and give the examples when we talked about each element which fits into the conceptual frame." Participant 17 commented on the challenge learners face in constructing the same concept frames as NSs:

Article *the* is assumed to share a concept between speakers and hearers, but foreigners have different imaginary scenes in their mind. For example, I had a hard time to think of the other things of backgrounds in *the water in the basement*. I don't get used to the basement because we don't use a basement except for as parking lots under a big building. For a house I just thought of the floor with dust. This comment underscores the influence of culture and experience on conceptualization and, in turn, on language.

In efforts to address this challenge, teachers can ensure that learners are first exposed to concept frames that are easily inferred and simple to picture. Such an example is the scene of the classroom (see Figure 4.3 in Chapter 4) that was presented in the original framework handout in Meeting 2 and that was invoked in the narrative exercise in

Meeting 3. In his project feedback, Participant 15 wrote, "I recall myself constantly referring back to the 'classroom with tables and chairs and teacher and students' and if it could help me, it may be able to help other students too." Teachers can also discuss variations in perspective-taking. Examples of definite article use that may rely on prototypical scenes which are not prototypical for the learners' culture and experience, such as *the basement* example above, can be spotlighted in class. Learners should be made aware that the identification of contents within a concept frame is not necessarily a straightforward process.

Conclusion

This chapter outlined the methodology of an experiment that examined how exposure to the framework might influence international MA TESOL students' explanations of article use in authentic texts. Participants' article explanations before and after exposure to the framework were compared. Individual changes in explanations were reported as were larger patterns in these changes, which included more unity in participants' Elicitation B explanations, more reliance on imagery, more explicit verbalization of intuitions, and less reliance on traditional rules. These results were interpreted as signs of the potential value of the framework as a pedagogical aid. Namely, the framework may enable teachers to approach article instruction in a more systematic and concrete manner. Other observations included some struggle by the participants with the framework's terminology, a reluctance to consistently consider the perspective of the writer and reader in explanations, and an expressed difficulty in identifying the contents of concept frames. Potential ways to address these issues – such as simplifying the framework's

terminology, emphasizing perspective-taking, and grading students' exposure to the concept frame – were discussed.

CHAPTER 6: CONCLUSION

This paper has addressed the English article system, a particular area of grammar that is known to provide challenges for ESL learners (and their teachers). Linguistic efforts to explain the semantics of articles have been reviewed as has the presentation of articles in ESL textbooks. It has been shown that there has been no one way to explain article meanings or to present articles to learners. In fact, learners can expect a variety of descriptions as well as rules for article use.

The first research question addressed how ESL teachers explain article usage in authentic texts. Among explanations by twelve teachers, common patterns were found for individual items and for article type. Variety, however, was also found in these explanations. At times, this variety took the form of directly contrasting terms by different teachers for the same item. It was also found that teachers generally avoided reference to the writer/reader in their article explanations. Confidence ratings for explanations revealed a range of ratings across items and across participants. It was suggested that both the variety in explanations and the predominance of confidence scores below 4 (on a scale of 1-5) might have something to do with the challenge of applying textbook rules and terminology to article use in authentic texts.

The second research question asked how one conceptual framework could elucidate systematicity across disparate article uses and numerous pedagogical rules for article use. A conceptual framework was first proposed. Individual components, in the form of schematic images, were illustrated through examples of article use. The framework was then applied to more article uses, including ones that have been pointed out in the literature as problematic for existing semantic descriptions of the article system. A range

of pedagogical rules were also considered through the perspective of the framework. All of these examples (both of article uses and article rules) were systematically linked to the conceptual schema of the framework. The question of whether there is a need for a continuum of definiteness was posed and key assumptions were discussed, including the flexibility of cognition and the nature of meaning. Also discussed was the compatibility the framework holds with pedagogical approaches from a cognitive linguistics and a sociocultural theory perspective. Finally, the potential use of the framework in the classroom was contrasted with traditional article instruction.

The final research question investigated the influence of the framework on MA
TESOL students' explanations of article use in authentic texts. Explanations before and
after exposure to the framework were compared. Individual patterns for each of the five
participants were identified. Patterns across the participants were also observed.

Explanations in Elicitation B were found to contain more unity by article type, more
imagistic terminology, more explicit verbalization of intuitions, and less reliance on
traditional surface-level rules. In these explanations and in participants' reflections,
participants were found to display some difficulty with the terminology of the
framework, avoid consistent consideration of the perspectives of the author and the
reader, and express difficulty with the task of identifying the contents of concept frames.

Discussion centered on potential pedagogical advantages to using the framework and on
how difficulties experienced by the participants might be addressed before implementing
the framework in the classroom.

Limitations

Certain limitations in the current study should be recognized. First, the focus in the textbook review was on texts for advanced learners. It would be worthwhile to consider the presentation of articles in lower-level texts. This would enable a more comprehensive picture of what learners at all levels can expect to face in terms of article presentation.

Second, a larger sample size of ESL teachers would allow for stronger claims to be made about how teachers explain articles in general. It would also be interesting to ask teachers to explain more items and then to study the patterns and variety within individual teachers' explanations. A further limitation in the current design is that participants were asked to imagine that their written explanations were intended for learners. A more authentic way to get at teacher cognition would be to examine how teachers explain articles during actual lessons with real learners.

As for the final research question regarding the influence of the framework on MA TESOL students' article explanations, again, a larger sample size would allow for more generalizability in the results. Including participants with a wider variety of L1s would also facilitate this. It would be interesting to test not just the framework's influence on article explanations but also its influence on actual article production. This would, of course, require a different methodology and a longer time period in which to carry out the study.

Future Directions

The obvious next step is to study the framework's effectiveness in real ESL classrooms. While lessons learned from the MA TESOL students' response in the current project can be used to shape how the framework is implemented in classes (e.g., the use

of simplified terminology and less metalanguage in the presentation of the framework to learners), even more can be learned from actual implementation. A number of research questions are worth pursuing. For instance, a sociocultural theory perspective could be adopted to explore how the framework is appropriated. Are learners able to internalize it as a conceptual tool with which to understand articles and how do they go about doing this? Longitudinal studies might investigate potential influence of the framework on article production. Classroom-based studies could examine the value of various framework-related activities. It would be interesting to compare how students at different levels of English proficiency respond to the framework. It is also important to consider how teachers respond to the framework. The pursuit of these questions will further explore the utility of the framework as a pedagogical tool.

An additional area of research lies in the expansion of the conceptual framework. For the moment, the framework is able to account only for *the*, *a*, *some*, and Ø. Can other elements of the nominal domain (e.g., quantifiers, possessives, pronouns, etc.) be explained through the same schematic images? If this is possible, a more comprehensive conceptual tool will be available to students and teachers.

The framework proposed here is, however, a start. It gives learners and teachers a tool with which to view articles, a schema through which to map multiple uses of the same article to one abstract meaning. Such mapping may be done not only for disparate article uses but also for pedagogical rules and exceptions to those rules. The ability to find one-to-one form-meaning connections may serve to reduce some of the frustration traditionally associated with articles. In adopting the novel perspective proposed here, learners and teachers might just recognize systematicity within the English article system.

Appendix A: ESL Teacher Elicitation Task

Thank you for participating in this project, which addresses the challenge of teaching definite and indefinite articles. You will be asked to (1) supply some background information, (2) read four very short texts, (3) explain five article uses within each text, and (4) rate confidence for your explanations. Your responses will be kept confidential, and any reporting of data will be by participant number only. Your contribution is very much appreciated.

Teacher Background Questionnaire

Please provide the following information on your background and experience. Type your answers directly into this document.
Number of years teaching English:
Countries in which you have taught English:
Highest level of TESOL training:
Native language(s):
Country of origin:

How comfortable are you teaching English articles? Please explain.

Task A

Instructions: Imagine that you are teaching an advanced EAP reading class and that the extracts below appear in the reading materials for the course. Please read the extracts, each of which is taken from the first pages of a work of nonfiction.

Extract 1

When new foreign language teaching methods and textbooks are introduced, they are often said to be based on the latest research in psychology, linguistics, or pedagogy. Teachers are told that they will be more effective than those that have gone before. In many cases, the new approaches are prescribed for immediate implementation in a school or region. Sometimes, the new materials come with opportunities for extensive training in their implementation. Sometimes, they are simply ordered and distributed to teachers who have to do their best to use them effectively.

Teachers have seen many different approaches over the past fifty years. One approach requires students to learn rules of grammar and lists of vocabulary to use in translating literary texts. Another emphasizes the value of having students imitate and practice a set of correct sentences and memorize entire dialogues. Yet another stresses the importance of encouraging "natural" communication between students as they engage co-operatively in tasks or projects while using the new language. In some classrooms, the second language is used as the medium to teach subject matter, with the assumption that the language itself will be learned incidentally as students focus on the academic content.

* from Lightbown, P. M., & Spada N. (2006). How languages are learned (3rd ed.). Oxford: Oxford University Press.

Extract 2

This is a book for language educators. It is the report of an ongoing project which has been evolving for the past half dozen years or so, and to which I am continually making changes. The reader should not see it as a finished product, therefore, but rather as a snapshot of work in progress, an illustration of an open-ended process that can and should have no closure.

The book is intended as a philosophical approach to the language curriculum, as an attempt to resolve dichotomies such as knowledge and values, theory and practice, research and teaching, and an illustration of what happens when we think consistently in process rather than product terms. At the same time I have not taken any of the common meanings of terms such as theory, practice, research, curriculum, and learning as given, but tried to find new meaning for them that fit new ways of thinking, and achieve terminological integrity throughout. I have not gone far enough in all these matters, but hope I have made some useful notes in the margin of our ideals.

I hope that the reader will find the book practical as well as theoretical, down-to-earth as well as philosophical, in fact, I hope that it will not fit in any of the usual pigeon holes. Most of all I hope that it will encourage readers to think for themselves and to construct their own lifelong project of language education. Although I have done my best to be as clear and non-technical as possible, there are places where I have felt it necessary to provide some more theoretical backup, and these sections have been set off from the main body of the text by indentation, spacing and a vertical line in the left margin. The reader is of course free to skip such passages, though I feel they are important for the argument they support.

* from van Lier, L. (1996). Interaction in the language curriculum: Awareness, autonomy, and authenticity. London: Longman.

Extract 3

The mind is inherently embodied.

Thought is mostly unconscious.

Abstract concepts are largely metaphorical.

These are three major findings of cognitive science. More than two millennia of a priori philosophical speculation about these aspects of reason are over. Because of these discoveries, philosophy can never be the same again.

When taken together and considered in detail, these three findings from the science of mind are inconsistent with central parts of Western philosophy. They require a thorough rethinking of the most popular current approaches, namely, Anglo-American analytic philosophy and postmodernist philosophy.

This book asks: What would happen if we started with these empirical discoveries about the nature of mind and constructed philosophy anew? The answer is that an empirically responsible philosophy would require our culture to abandon some of its deepest philosophical assumptions. This book is an extensive study of what many of those changes would be in detail.

Extract 4

It is a remarkable fact about the United States that it fought a civil war without undergoing a change in its form of government. The Constitution was not abandoned during the American Civil War; elections were not suspended; there was no coup d'état. The war was fought to preserve the system of government that had been established at the nation's founding – to prove, in fact, that the system was worth preserving, that the idea of democracy had not failed. This is the meaning of the Gettysburg Address and of the great fighting cry of the North:

^{*} from Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. New York: Basic Books.

"Union." And the system was preserved; the union did survive. But in almost every other respect, the United States became a different country. The war alone did not make America modern, but the war marks the birth of modern America.

Task B

Instructions: Imagine that your students have some questions about the use of articles in these texts. Please consider the highlighted articles below (there are five within each extract). Explain why you think each article has been used. Note that Ø represents a use of neither the definite nor the indefinite article. Please type your explanations directly into the document, and feel free to write as much as you wish. After finishing this task, please complete Task C.

Extract 1

When $\underline{\mathcal{O}}_1$ new foreign language teaching methods and textbooks are introduced, they are often said to be based on the latest research in psychology, linguistics, or pedagogy. Teachers are told that they will be more effective than those that have gone before. In many cases, the new approaches are prescribed for immediate implementation in a school or region. Sometimes, the new materials come with opportunities for extensive training in their implementation. Sometimes, they are simply ordered and distributed to $\underline{\mathcal{O}}_2$ teachers who have to do their best to use them effectively.

Teachers have seen many different approaches over <u>the</u>₃ past fifty years. One approach requires students to learn rules of grammar and lists of vocabulary to use in translating literary texts. Another emphasizes the value of having students imitate and practice <u>a</u>₄ set of correct sentences and memorize entire dialogues. Yet another stresses <u>the</u>₅ importance of encouraging "natural" communication between students as they engage co-operatively in tasks or projects while using the new language. In some classrooms, the second language is used as the medium to teach subject matter, with the assumption that the language itself will be learned incidentally as students focus on the academic content.

Explanations for Ext	tract 1
(1) Ø:	
(2) Ø:	
(3) the :	
(4) a:	
(5) the :	

^{*} from Menand, L. (2001). The metaphysical club: A story of ideas in America. New York: Farrar, Straus and Giroux

Extract 2

This is a book for language educators. It is the report of an ongoing project which has been evolving for the past half dozen years or so, and to which I am continually making changes. <u>The</u>⁶ reader should not see it as a finished product, therefore, but rather as a snapshot of work in progress, an illustration of an open-ended process that can and should have no closure.

The book is intended as a philosophical approach to the language curriculum, as an attempt to resolve dichotomies such as knowledge and values, theory and practice, research and teaching, and an illustration of what happens when we think consistently in process rather than product terms. At the same time I have not taken any of the, common meanings of terms such as theory, practice, research, curriculum, and learning as given, but tried to find p, new meaning for them that fit new ways of thinking, and achieve terminological integrity throughout. I have not gone far enough in all these matters, but hope I have made some, useful notes in the margin of our ideals.

I hope that the reader will find the book practical as well as theoretical, down-to-earth as well as philosophical, in fact, I hope that it will not fit in any of the usual pigeon holes. Most of all I hope that it will encourage readers to think for themselves and to construct their own lifelong project of language education. Although I have done my best to be as clear and non-technical as possible, there are places where I have felt it necessary to provide some10 more theoretical backup, and these sections have been set off from the main body of the text by indentation, spacing and a vertical line in the left margin. The reader is of course free to skip such passages, though I feel they are important for the argument they support.

_	•		•		
-Yn	ana	tions	mr	-ytm	~~

- (6) **the**: (7) **the**:
- (8) **Ø**:
- (9) **some**:
- (10) some:

Extract 3

<u>The</u>₁₁ mind is inherently embodied.

Thought is mostly unconscious.

Abstract concepts are largely metaphorical.

When taken together and considered in detail, these three findings from the science of $\underline{\phi}_{13}$ mind are inconsistent with central parts of Western philosophy. They require a thorough rethinking of $\underline{\text{the}}_{14}$ most popular current approaches, namely, Anglo-American analytic philosophy and postmodernist philosophy.

This book asks: What would happen if we started with these empirical discoveries about the nature of mind and constructed philosophy anew? The answer is that <u>an</u>₁₅ empirically responsible philosophy would require our culture to abandon some of its deepest philosophical assumptions. This book is an extensive study of what many of those changes would be in detail.

Explanations for Extract 3

- (11) the:
- (12) Ø:
- (13) Ø:
- (14) the:
- (15) an:

Extract 4

It is a remarkable fact about the United States that it fought \underline{a}_{16} civil war without undergoing a change in its form of government. The Constitution was not abandoned during the American Civil War; elections were not suspended; there was no coup d'état. The war was fought to preserve the system of government that had been established at \underline{the}_{17} nation's founding – to prove, in fact, that the system was worth preserving, that the idea of democracy had not failed. This is the meaning of the Gettysburg Address and of the great fighting cry of the North: "Union." And the system was preserved; the union did survive. But in almost every other respect, \underline{the}_{18} United States became \underline{a}_{19} different country. The war alone did not make $\underline{0}_{20}$ America modern, but the war marks the birth of modern America.

Explanations for Extract 4

- (16) a:
- (17) the:
- (18) the:
- (19) a:
- (20) Ø:

Task C

(20) Ø:

Instructions: Please look back at the explanations you have just provided. How confident are you that the explanations above would help improve learners' understanding of the particular article uses? Please rate your confidence for each explanation on a scale of 1-5. [1 = not confident at all; 5 = completely confident]

(1) Ø :		
(2) Ø :		
(3) the :		
(4) a:		
(5) the :		
(6) the :		
(7) the :		
(8) Ø :		
(9) some :		
(10) some:		
(11) the :		
(12) Ø :		
(13) Ø :		
(14) the:		
(15) an :		
(16) a :		
(17) the :		
(18) the :		
(19) a :		

Appendix B: Protocols for MA TESOL Student Meetings

Day 1 Protocol

"Today I'm going to ask you a few questions about your experiences learning and teaching English. After that, I'll ask you to do a small task. Although today's session will be audio-recorded, just try to relax and forget that the recorded is here on the table."

Interview

Explanation Elicitation Task

Task A: "Here are four short extracts from the beginnings of four books. Please read each extract. When you are finished reading, I'll ask you some questions."

"Having read the four extracts, do any of these books sound interesting to you?"

"Do you have any questions on any of the texts?"

Task B: "Please consider the highlighted articles below (there are five within each extract). Explain why you think each article has been used. Note that Ø represents a use of neither the definite nor the indefinite article. Tell me why the author or authors chose the articles they did."

Day 2 Protocol

"Today we'll look at the basic ideas of the framework (FW) and try to apply the framework to some examples of article use."

"This packet is comprised of 3 sections: countability, \emptyset vs. article, THE. After you read each section, I'll ask some questions."

- 1. What ideas are familiar to you?
- 2. Is any of this new to you?
- 3. Do you have any questions?
- 4. What do you think of conceptualizing names in this way? [for section on \emptyset vs. article]

Dialogues

"Let's apply the FW to the following examples of article use. Here's how I would do the first one..."

"How would you do the next one?"

Interaction guidelines:

- Make sure participant draws the first few examples
- Ask for explanations if not given w/ drawing (individuation, boundedness, contents of frame, etc.)
- Prompt correction if drawing doesn't match framework (location in FW, boundedness, w/in class, etc.)
- Encourage reference back to informational handout
- Show how I would do it if prompt fails
- Remain open to alternative explanations (e.g., contents of frame)
- Discuss alternate construals of fame w/ movie star example
- Discuss generic reference w/ whale example: similar idea, slightly different conceptualizations
- Finish at 1h30m look at rest at home, will start w/ next time, another task for discourse frame, article that you have read recently

Day 3 Protocol

Review basics:

- Ø = unbounded entity → It could refer to whole class or could refer to just more than 1 individual (e.g., there are chairs in this room). It could also refer to an unspecified portion on non-individuated entity(e.g., there is water in the basement)
- 2. a/some = bounded entity within larger class, situated outside the discourse frame
- 3. **the** = bounded entity, situated in the discourse frame (uniquely identifiable when compared to other bounded entities in the frame)

Page 6: "Apply the FW to these dialogues."

Pages 7-8: "How would you relate the FW to each of the following rules (and exceptions)?"

- Can you use the FW to help explain the rules?
- What would the exceptions look like inside the FW?

Teacher Story

1. Read the story.

- 2. In which part of the DF might we find each noun phrase in bold? For example, the front might be in the concept frame b/c we understand that classrooms generally have a front and a back; whereas the room would be in the text frame b/c it refers to "the classroom" which has already been mentioned in the text and thus can be uniquely identified among other entities in the text.
- 3. Can you explain why there is no definite article before the second mention of "grammar rules" and "ESL student"? (grammar rules unbounded so it doesn't move into DF; an ESL student does not necessarily refer to the same individual a random, representative individual chosen each time)
- 4. Can you explain why there is a definite article before the second mention of "sentences"? (sentences are bounded by the context [there must be a certain number of sentences on the handout] and so are able to move into the DF [as a bounded entity either in the text frame or in the situation frame])

"What do you think of these tasks today?"

Day 4 Protocol

Review:

- Can you explain the difference between individuated and non-individuated?
- Can you explain the conceptualization behind **Ø**, a, some, the?
- Can you explain the conceptualization for a proper noun?

Journal Article (no more than 45 minutes)

- In one sentence, identify all uses of \emptyset , a, some, the; ignore all other determiners (this, those, each, all, etc.) and \emptyset before pronouns.
- Apply these article uses to FW.
- Repeat.
- What do you think about this task? [ask in last 5 minutes]

Participant Essay (remainder of time)

- In one sentence, identify all uses of \emptyset , a, some, the; ignore all other determiners (this, those, each, all, etc.) and \emptyset before pronouns.
- Why do you think you chose the article?
- Can you apply the FW to this noun phrase?

Day 5 Protocol

Continue procedure for participant essay.

Day 6 Protocol

Repeat article explanation task.

Comparative Reflection:

"Please consider the explanations for article use you gave in the first meeting." [Transcript will be presented]

"Are any of these different from what you have just said? How are they different? Has anything changed in your thinking?"

Wrap up:

"I really value your feedback on this project. I will email you 8 questions. Please type your answers right into the document and send it back."

Appendix C: MA TESOL Student Interview Questions

When did you begin studying English?

What do you remember about first learning definite and indefinite articles?

Did your teachers give you rules? Do you remember any that you were taught?

Did your teachers talk about exceptions to rules? Do you remember any?

What were the feelings of students, including yourself, when articles were discussed in class?

Did your teachers ever correct article use in your writing assignments? Did they offer explanations?

Did you do anything special to study articles outside of class? What?

How confident are you when teaching articles to your students?

Do you present rules? Which ones?

Do your students ask about exceptions? If so, how does this make you feel?

How would you characterize your students' interest and motivation to learn articles?

How do your students feel when articles are discussed in class?

Have any of your ideas about articles changed since you moved to the U.S.? Which ones? How?

How confident are you now about your use of articles? Please explain.

Do you ever think about article use while you are speaking in English? When?

Do you follow any strategies for using articles in your academic writing?

Have you ever had native speakers of English edit your writing? Have they commented on article use?

How did you feel about these comments?

How important do you think it is to be completely accurate in your article use when speaking or writing in English?

Do you think nonnative speakers of English can truly master English articles?

Why do you think articles provide problems for nonnative speakers?

How confident are you that you can continue to improve the accuracy of your article use?

Appendix D: MA TESOL Student Handout on Framework

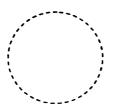
Individuation

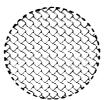
During a conversation, spoken words prompt conceptualizations that are shared between the speaker and the listener. Nouns prompt conceptualizations of things.

There are two basic ways to conceptualize things. They may be perceived as **individuated** or **non-individuated** entities. Individuated entities usually have clear borders and match what grammar books call countable nouns. We perceive these things as individuals within a class. For example, in the class of apples, we can distinguish individual apples.

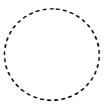


Non-individuated entities usually do not have clear borders and match what grammar books call mass (or uncountable) nouns. In addition to mass nouns, abstract nouns are often perceived in the same way. Both water and love may be perceived as non-individuated.

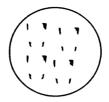




Proper names also tend to be perceived in this way. When we say the name John, we are not thinking of an individuated thing within the class of all Johns. We just think of John, as we might think of love or of water.

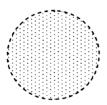


It is important to note that a thing can be perceived in different ways. The same noun can refer to different conceptualizations of an entity. For example, an entity that is usually non-individuated (i.e., a noun that is usually uncountable) can be perceived as though it were individuated. For example, at a restaurant, someone might order "four waters" for his table. In this scenario, the four waters represent four individuated things – four glasses of water.



The opposite is also possible. An entity that is usually individuated (i.e., a noun that is usually countable) can be perceived as though it were non-individuated. For example, apple in the statement below does not refer to an individuated apple but instead to the non-individuated substance of apple.

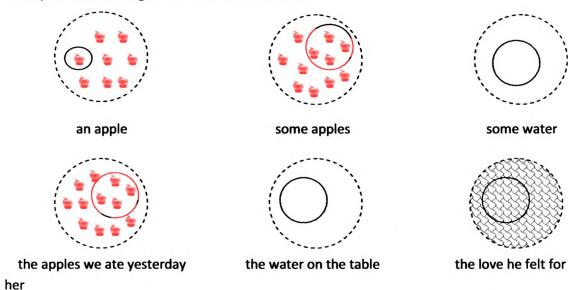
"After we crashed into the cart near the orchard, our car was covered with apple."



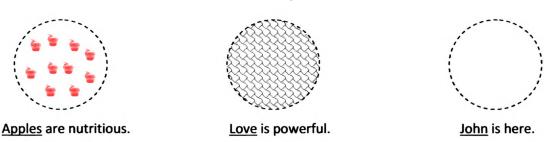
Boundedness

When looking at a class of individuated entities, we are able to pick out individuals. When looking at a class of a non-individuated entity, we are able to pick out a portion. To do so, we can imagine putting a line around the individuals or the portion. This line bounds (or puts a boundary around) what we have picked out.

The articles **a**, **some**, or **the** before a noun help pick out an individual or a portion. We may conceptualize the thing as bounded within its class.

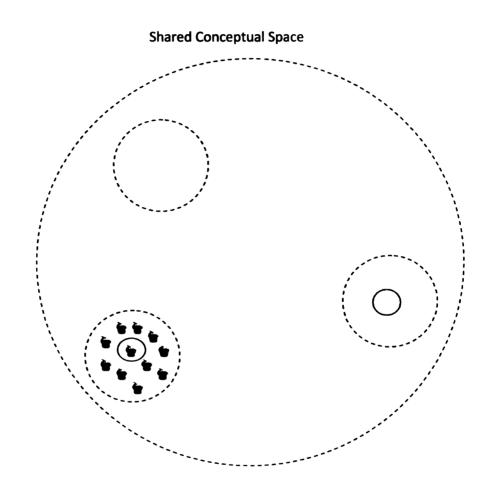


When zero article (i.e., no determiner) appears before a noun, we may conceptualize the entity as unbounded or without borders. The broken line represents unboundedness.



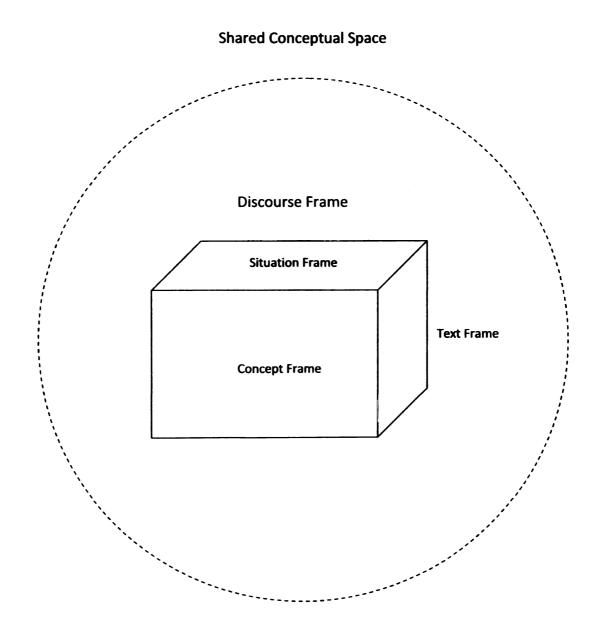
The main point is that when we hear a noun preceded by an article, we understand that it is bounded. When we hear a noun that is preceded by zero article, we understand that it is unbounded. These two possibilities for conceptualization are reflected in the conceptual space shared by the speaker and the listener. Notice the conceptualizations prompted by the nouns in the sentence below.

"John would like an apple and some water."



Discourse Frame

Thus far, we have seen a conceptual difference between nouns preceded by an article and nouns preceded by zero article. To further distinguish the conceptual difference between definite and indefinite articles, we need to consider the discourse frame. We can imagine this as a cube within the center of the shared conceptual space. Within the discourse frame are bounded entities that are distinguishable from one another. Each entity is considered by the speaker to be uniquely identifiable. That is, the speaker believes that both she and the listener can identify the same, exact entity. The discourse frame is made up of three sub-frames: the situation frame, the concept frame, and the text frame.



Within the **situation frame** are all those things the speaker and listener can identify in the immediate situation. In the SLS conference room, we have this floor, this ceiling, this door, these walls, these tables, these chairs, these whiteboards, etc. The definite article may be used with any entity that is uniquely identifiable within this room. For example, we could say the floor, the ceiling, the walls, the tables, etc. Notice that we need to provide a little more information to identify a singular entity from within a group of plurals: the big table, the chair that you are sitting in, the wall with the door.

The **concept frame** is something like the situation frame, but extended to a more abstract, conceptual level. Our experience as humans allows us to conceptualize common situations and scenes that are not immediately before us. For example, our experience of classes or of interviews leads us to anticipate particular entities within each. In a class, we can picture a teacher, a teacher's desk, a blackboard, some chalk, some students, and some chairs. In an interview, we can picture an interviewer, an interviewee, a recorder, some questions, and some answers. In both a class and an interview, we picture a beginning, a middle, and an end.

T = Teacher

TD = Teacher's Desk

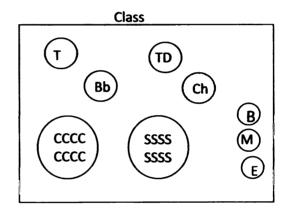
Bb = Blackboard

B = Beginning

M = Middle

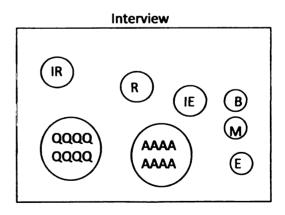
E = End

Ch = Chalk C = Chair S = Student



IR = Interviewer B = Beginning
IE = Interviewee M = Middle
R = Recorder E= End

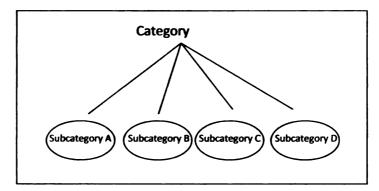
Q = Question A = Answer



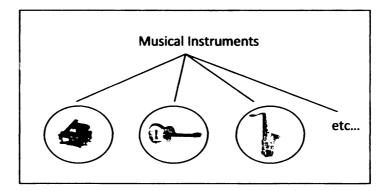
All these things that we picture are bounded entities and are uniquely identifiable within their frames. Therefore, when a class is the topic of a conversation, the speaker may refer to "the

teacher" or "the students". When an interview is being discussed, the speaker may refer to "the questions" or "the answers".

One aspect of human thought is our ability to conceptualize not just situations but also taxonomies. That is, we think of categories and subcategories within those categories. In such cases, a category may be seen as a frame that contains subcategories. The subcategories may be thought of as bounded portions of the larger category frame.



Within the category of musical instruments, we have the piano, the guitar, the saxophone, etc. Notice the use of the definite article with each instrument, which refers to a unique subcategory of musical instruments.

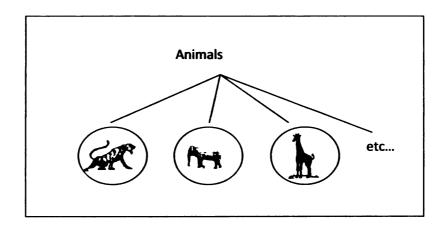


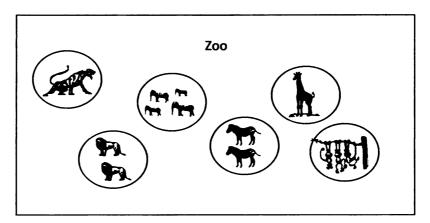
We see that it is possible for some nouns with the definite article to refer (a) to a subcategory within a larger category or (b) to an individual member within that subcategory. For example, the tiger in the first sentence below refers generically to a subcategory of the animal category, whereas the tiger in the second sentence refers to a specific animal.

"The tiger is a dangerous animal."

"We saw the tiger in the zoo."

In both sentences, the tiger is uniquely identifiable within a concept frame. In one, the tiger is a bounded entity in an animal category frame. In the other, the tiger is a bounded entity in a zoo frame (a zoo which is understood to have only one tiger along with other uniquely identifiable animals).





The final part of the discourse frame is called the **text frame**. Here we find bounded entities that have already been mentioned in a conversation. They may be uniquely identified from other entities that are in the text of the conversation. The contents of the text frame, like that of other frames in the discourse frame, will change over time as a conversation progresses over time. New topics, new information, even new situations in which the speaker and listener find themselves will force the contents of the discourse frame to be continually updated.

How articles prompt conceptualization

 $\emptyset \rightarrow unbounded$

A/SOME → bounded within larger class

THE → bounded within discourse frame, uniquely identifiable

Appendix E: Framework Application Worksheet

PART I

Directions: apply the conceptual framework to the following article uses in bold.

During a newscast

The President is speaking at a school in Lansing today.

During a newscast

The President is speaking at the school on Michigan Avenue today.

During a newscast

The President's children are attending their first day of school today.

In a pet store

A: Welcome to the store. How can I help you?

B: We're here to see **some birds**. We might buy one or two.

In a pet store

A: Welcome to the store. How can I help you?

B: We're here to see the birds. We might buy one or two.

In a pet store

A: Welcome to the store. How can I help you?

B: We're here to see birds. We might buy one or two.

In a family home

A: Hey honey, I think you should come down here.

B: Why? What's going on?

A: It looks like we have some water in the basement.

In a family home

A: Hey honey, have you seen the water in the basement?

B: No. Are you serious? How much is down there?

In a family home

A: Hey honey, I think you should come down here.

B: Why? What's going on?

A: It looks like we have water in the basement.

Watching a movie-awards ceremony

A: Do you like that actor?

B: Yeah, I do. He's been great in all the roles that he's played. And, of course, he's got a style like no one else.

Watching a movie-awards ceremony

A: Do you like that actor?

B: Yeah, I do. He's been great in all the roles that he's played. And, of course, he's got the style of a big time movie star.

Watching a movie-awards ceremony

A: Do you like that actor?

B: Yeah, I do. He's been great in all the roles that he's played. And, of course, he's got style.

On a hot day

A: I sure am thirsty.

B: There's beer in the fridge.

On a hot day

A: I sure am thirsty.

B: There's some beer in the fridge.

On a hot day

A: I sure am thirsty.

B: There're **beers** in the fridge.

On a hot day

A: I sure am thirsty.

B: There're some beers in the fridge.

In a shared dorm room

A: Oh, I just remembered I'm supposed to give you a message.

B: What's that?

A: A guy you went out with last night called about an hour ago.

in a shared dorm room

A: Oh, I just remembered I'm supposed to give you a message.

B: What's that?

A: The guy you went out with last night called about an hour ago.

During a lecture

Whales are extremely interesting animals. They are the largest mammals on earth.

During a lecture

A whale is an extremely interesting animal. It is the largest mammal on earth.

During a lecture

The whale is an extremely interesting animal. It is the largest mammal on earth.

In a restaurant

- A: Where you think you can find the best cooking in the world?
- B: I'm not sure, but I know Italians make great food.

In a restaurant

- A: Where you think you can find the best cooking in the world?
- B: I'm not sure, but I know the Italians make great food.

In a shared apartment

- A: Did you know the television was left on all night?
- B: Whoops, sorry about that.

In a shared apartment

- A: Did you know the television was invented in the 1920's?
- B: No, I didn't realize that.

In a shared apartment

- A: Did you know television is bad for you?
- B: I suppose it is.

On a beach

A: What are you reading?

B: It's a book about crime.

On a beach

A: What are you reading?

B: It's a book about a famous crime.

On a beach

A: What are you reading?

B: It's a book about the crime of the century.

In a family home

A: What should we have for dinner tonight?

B: Let's roast a chicken.

In a family home

A: What should we have for dinner tonight?

B: Let's have chicken.

In a family home

A: I hope you enjoy the meal.

B: It looks great. Please pass the chicken.

At an office

A: Mr. Smith is here to see you.

B: Oh, thanks. Please send him in.

At an office

A: The Mr. Smith you met with last week is here to see you.

B: Oh, thanks. Please send him in.

At an office

A: A Mr. Smith is here to see you.

B: Oh, thanks. Please send him in.

At a cinema complex

A: Which movie are we going to see? The one about **NASA** or the one about **the CIA**?

B: I don't care. But I do need to find an ATM so I can get some cash.

During a radiocast of a baseball game

The batter has been hit by the pitch. I'm not sure if he was hit on **the head** or on **the** arm.

In the lobby of the Empire State Building

A: So, how should we get to the top?

B: Well, we can take the elevator or the stairs.

PART II

Directions: apply the framework to the following article rules and exceptions.

Rule¹: A noun is often indefinite the first time a speaker mentions it. It is usually definite after the first mention.

Example: A cat was chasing a squirrel around my backyard. The cat nearly caught the squirrel.

Exception² (?): His car struck a tree. He was surprised to see how much damage a car could do to a tree.

Rule³: Use *the* with the superlative degree.

Example: Our university has the biggest library in the state.

Exception² (?): Our university library has a most famous art collection.

Rule³: Do not use *the* with the comparative degree.

Example: Obama is a better politician than McCain.

Exception (?): Between McCain and Obama, Obama is the better politician.

Rule¹: Use the definite article with nouns that describe something unique.

Example: The sun sets around 8pm.

Exception² (?): **A sun** and some planets were sighted by a group of astronauts during a recent space probe.

Rule⁴: Names of rivers and oceans usually use *the*. Names of lakes, islands, and mountains usually don't.

Example: On our last vacation, we went to Oregon to see the Columbia River and the Pacific Ocean. We also visited Crater Lake and Mt. Hood.

Rule³: Use the with plural names.

Example: Some beautiful sites in the U.S. include the Rocky Mountains, the Great Lakes, and the Hawaiian Islands.

Rule¹: Use the definite article with public places.

Example: Whether we go to the mall or to the movies, we should go to the bank first.

Rules³: Do not use an article with the names of universities or colleges.

Use *the* with the names of colleges and universities that contain the word *of*.

Example: She had a hard time deciding between **Michigan State University** and **the University of Michigan**.

Exception: He went to the Ohio State University.

¹Maurer, J. (2006). Focus on grammar: An integrated skills approach (3rd ed.). White Plains, NY: Pearson Longman.

²Pica, T. (1983). The article in American English: What the texts don't tell us. In N. Wolfson & E. Judd (Eds.), Sociolinguistics and language acquisition (pp.222-233). Rowley, MA: Newbury House.

³Cole, T. (2000). The article book: Practice toward mastering a, and, and the (2nd ed.). Ann Arbor: The University of Michigan Press.

⁴Ackles, N. M. (2003). The grammar guide: Developing language skills for academic success. Ann Arbor: The University of Michigan Press.

Appendix F: Narrative to be Applied to Framework

Step 1: Read the following text.

A teacher walked into his classroom.

He went to the front of the room and pulled out his teaching materials.

There were still 10 minutes before the class was scheduled to begin.

The teacher sat down and waited for the students.

As they came in, the teacher went to the board and began to write the class agenda.

He turned and noticed one empty seat.

"Where's Mary?" he asked.

"I think she has the flu," said the student sitting closest to the empty seat.

"Alright, well hopefully the rest of you are feeling healthy... because today we're going to talk about grammar rules and then we'll do some vocabulary work.

"An important point to remember is that grammar rules often have exceptions. An ESL student should always remember this. For example, an ESL student might learn the –ed rule and then wonder why English has irregular verbs.

"On this handout are sentences and a few pictures. Read the sentences and see if you can identify some traditional grammar rules. Later we'll see if we can think of some exceptions to the rules."

Step 2: In which part of the discourse frame might we find each noun phrase in bold?

A teacher walked into his classroom.

He went to the front of the room and pulled out his teaching materials.

There were still 10 minutes before the class was scheduled to begin.

The teacher sat down and waited for the students.

As they came in, the teacher went to the board and began to write the class agenda.

He turned and noticed one empty seat.

"Where's Mary?" he asked.

"I think she has the flu," said the student sitting closest to the empty seat.

"Alright, well hopefully **the rest of you** are feeling healthy... because today we're going to talk about grammar rules and then we'll do some vocabulary work.

"An important point to remember is that <u>grammar rules</u> often have exceptions. <u>An ESL student</u> should always remember this. For example, <u>an ESL student</u> might learn **the –ed rule** and then wonder why English has irregular verbs.

"On this handout are <u>sentences</u> and a few pictures. Read **the sentences** and see if you can identify some traditional grammar rules. Later we'll see if we can think of some exceptions to **the rules**."

Step 3: Can you explain why there is no definite article before the second mention of "grammar rules" and "ESL student"? Can you explain why there is a definite article before the second mention of "sentences"?

Appendix G: Project Feedback Questionnaire for MA TESOL Students

Please respond in writing to the following questions:

1.	What do you think about the conceptual framework presented to you in this project?
2.	What do you think about the activities in which you used the framework to help explain article use in texts and in your own writing?
3.	How much time did you spend thinking about articles outside of our meetings?
4.	How confident are you that you can continue to improve the accuracy of your article use?
5.	Have your views on the English article system changed at all since participating in this project? If so, how?
6.	Do you believe the framework would be helpful for students in ESL/EFL classes? Why (not)?
7.	Can you think of other ways to use the framework in the classroom?
8.	What challenges do you see for teachers who wish to use the framework with their students?

References

- Abbott, B. (2006). Definite and indefinite. In K. Brown (Ed.), *The encyclopedia of language and linguistics* (2nd ed.) (Vol. 3, pp. 392-399). Oxford: Elsevier.
- Achard, M. (2008). Teaching construal: Cognitive pedagogical grammar. In P. Robinson & N. C. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 432-455). New York: Routledge.
- Andrews, S. (2001). The language awareness of the L2 teacher: Its impact upon pedagogical practice. *Language Awareness*, 10, 75-90.
- Azar, B., & Hagen, S. (2009). *Understanding and using English grammar* (4th ed.). White Plains, NY: Pearson Longman.
- Bardovi-Harlig, K., & Bofman, T. (1989). Attainment of syntactic and morphological accuracy by advanced language learners. Studies in Second Language Acquisition, 11, 17-34.
- Birner, B., & Ward, G. (1994). Uniqueness, familiarity, and the definite article in English. In S. Gahl, C. Johnson, & A. Dolbey (Eds.), *Proceedings of the twentieth annual meeting of the Berkeley linguistics society* (pp. 93-102). Berkeley, CA: Berkeley Linguistics Society.
- Bitchener, J., Young, S., & Cameron, D. (2005). The effect of different types of corrective feedback on ESL student writing. Journal of Second Language Writing, 14, 191–205.
- Borg, S. (2003). Teacher cognition in language teaching: A review of research on what language teachers think, know, believe, and do. *Language Teaching*, 36, 81-109.
- Butler, Y. G. (2002). Second language learners' theories on the use of English articles: An analysis of the metalinguistic knowledge used by Japanese students in acquiring the English article system. Studies in Second Language Acquisition, 24, 451-480.
- Celce-Murcia, M., & Larsen-Freeman, D. (1999). The grammar book: An ESL/EFL teacher's course (2nd ed.). Boston: Heinle/Cengage.
- Chesterman, A. (1991). On definiteness: A study with special reference to English and Finish. Cambridge: Cambridge University Press.

- Christophersen, P. (1939). The articles: A study of their theory and use in English. Copenhagen: Munksgaard.
- Cole, T. (2000). The Article Book: Practice toward Mastering a, an, and the (Revised ed.). Ann Arbor, MI: University of Michigan Press.
- DuBois, J. W. (1980). Beyond definiteness: The trace of identity discourse. In W. L. Chafe (Ed.), *The pear stories: Cognitive, cultural, and linguistic aspects of narrative production* (pp. 203-274). Norwood, NJ: Ablex.
- Epstein, R. (2002). The definite article, accessibility, and the construction of discourse referents. *Cognitive Linguistics*, 12, 333-378.
- Fillmore, C. J. (1977a). Scenes-and-frames semantics. In A. Zampolli (Ed.), *Linguistic structures processing* (pp. 55-81). Amsterdam: North-Holland.
- Fillmore, C. J. (1977b). Topics in lexical semantics. In R. W. Cole (Ed.), *Current issues in linguistic theory* (pp. 76-138). Bloomington, IN: Indiana University Press.
- Fillmore, C. J. (2007). Frame semantics. In V. Evans, B. K. Bergen, & J. Zinken (Eds.), *The cognitive linguistics reader* (pp. 238-262). London: Equinox.
- García Mayo, M. P., & Hawkins, R. (Eds.). (2009). Second language acquisition of articles: Empirical findings and theoretical implications. Amsterdam: John Benjamins.
- Gass, S. M., & Mackey, A. (2005). Second language research: Methodology and design. Mahwah, NJ: Lawrence Erlbaum.
- Gass, S. M., & Selinker, L. (2008). Second language acquisition: An introductory course (3rd ed.). New York: Routledge.
- Gattegno, C. (1972). Teaching foreign languages in schools: The silent way. New York: Educational Solutions.
- Gibbs, R. W. (1994). The poetics of mind. Cambridge: Cambridge University Press.
- Halliday, M. A. K. & Matthiessen, C. M. I. M. (1999). Construing experience through meaning: A language-based approach to cognition. London: Continuum.
- Halliday, M. A. K. & Matthiessen, C. M. I. M. (2004). An introduction to functional grammar (3rd ed.). London: Hodder Arnold.
- Hawkins, J. A. (1978). Definiteness and indefiniteness. London: Croom Helm.

- Hawkins, J. A. (1991). On (in)definite articles: implicatures and (un)grammaticality prediction. *Journal of Linguistics*, 27, 405-442.
- Heim, I. R. (1988). The semantics of definite and indefinite noun phrases. New York: Garland.
- Hewson, J. (1972). Article and noun in English. The Hague: Mouton.
- Hiki, M. (1991). A study of learners' judgment on noun countability. Unpublished doctoral dissertation, Indiana University.
- Huebner, T. (1983). A longitudinal analysis of the acquisition of English. Ann Arbor, MI: Karoma.
- Johnson, M. (1987). The body in the mind. Chicago: University of Chicago Press.
- Kadmon, N. (1990). Uniqueness. Linguistics and Philosophy, 13, 273-324.
- Kennedy, M. M. (2005). *Inside teaching: How classroom life undermines reform*. Cambridge, MA: Harvard University Press.
- Kharma, N. (1981). Analysis of the errors committed by Arab university students in the use of the English definite/indefinite articles. *IRAL*, 19, 333-345.
- Lakoff, G. (1987). Women, fire, and dangerous things: What categories reveal about the mind. Chicago: University of Chicago Press.
- Lakoff, G., & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Langacker, R. (1987). Foundations of cognitive grammar: Theoretical prerequisites. Stanford, CA: Stanford University Press.
- Langacker, R. (2002). Concept, image, and symbol: The cognitive basis of grammar (2nd ed.). Berlin: Mouton de Gruyter.
- Langacker, R. (2008). Cognitive Grammar as a basis for language instruction. In P. Robinson & N. C. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 456-488). New York: Routledge.
- Lantolf, J. P., & Poehner, E. M. (Eds.). (2008). Sociocultural theory and the teaching of second languages. London: Equinox.
- Lantolf, J. P., & Thorne S. L. (2006). Sociocultural theory and the genesis of second language development. Oxford: Oxford University Press.

- Larsen-Freeman, D. (2003). *Teaching language: From grammar to grammaring*. Boston: Heinle/Cengage.
- Lee, E-H. (2007). English article usage in online graduate forums by non-native EFL teachers. Unpublished doctoral dissertation, Indiana University.
- Lyons, C. (1980). The meaning of the English definite article. In J. Van der Auwera (Ed.), *The semantics of determiners* (pp. 81-95). London: Croom Helm.
- Lyons, C. (1999). Definiteness. Cambridge: Cambridge University Press.
- Master, P. (1987). A cross-linguistic interlanguage analysis of the acquisition of the English article system. Unpublished doctoral dissertation, UCLA.
- Master, P. (1990). Teaching the English articles as a binary system. *TESOL Quarterly*, 24, 461-478.
- Master, P. (1995). Consciousness raising and article pedagogy. In D. Belcher & G. Braine (Eds.), Academic writing in a second language: Essays on research and pedagogy (pp. 183-204). Norwood, NJ: Ablex.
- Master, P. (1997). The English article system: Acquisition, function, and pedagogy. *System*, 25, 215-232.
- Master, P. (2002). Information structure and English article pedagogy. System, 30, 331-348.
- Maurer, J. (2006). Focus on grammar: An integrated skills approach (3rd ed.). White Plains, NY: Pearson Longman.
- Negueruela, E. (2008). Revolutionary pedagogies: Learning that leads (to) second language development. In J. P. Lantolf & E. M. Poehner (Eds.), Sociocultural theory and the teaching of second languages (pp. 189-227). London: Equinox.
- Negueruela, E., & Lantolf, J. P. (2006). Concept-based pedagogy and the acquisition of L2 Spanish. In R. M. Salaberry & B. A. Lafford (Eds.), *The art of teaching Spanish: Second language acquisition from research to praxis* (pp. 79-102). Washington, DC: Georgetown University Press.
- Pica, T. (1983). The article in American English: What the textbooks don't tell us. In N. Wolfson & E. Judd (Eds.), *Sociolinguistics and language acquisition* (pp. 222-233). Rowley, MA: Newbury House.

- Pierce, L., & Ionin, T. (2010). Perception of article in L2-English. Paper presented at the annual conference of the American Association for Applied Linguistics, Atlanta, GA.
- Pütz, M., Niemeier, S., & Dirven, R. (Eds.). (2001). Applied cognitive linguistics II: Language pedagogy. Berlin: Mouton de Gruyter.
- Radden, G., & Dirven, R. (2007). Cognitive English grammar. Amsterdam: John Benjamins.
- Robinson, P., & Ellis, N. C. (Eds.). (2008). Handbook of cognitive linguistics and second language acquisition. New York: Routledge.
- Russell, B. (1905). On denoting. *Mind*, 14, 479-493.
- Rutherford, W., & Sharwood Smith, M. (Eds.). (1988). Grammar and second language teaching. New York: Newbury House.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 129-158.
- Schmidt, R. (1994). Implicit learning and the cognitive unconscious: Of artificial grammars and SLA. In N. Ellis (Ed.), *Implicit and explicit learning of languages* (pp. 165-209). London: Academic Press.
- Sperber, D., & Wilson, D. (1986). Relevance: Communication and cognition. Oxford: Blackwell.
- Stvan, L. S. (2007). The functional range of bare singular count nouns in English. In E. Stark, E. Leiss, & W. Abraham (Eds.), Nominal determination: Typology, context constraints, and historical emergence (pp. 171-187). Amsterdam: John Benjamins.
- Swain, M. (2006). Languaging, agency, and collaboration in advanced second language learning. In H. Byrnes (Ed.), Advanced language learning: The contributions of Halliday and Vygotsky (pp. 95-108). London: Continuum.
- Talmy, L. (2000). Toward a cognitive semantics. Cambridge, MA: MIT Press.
- Tyler, A. (2008). Cognitive linguistics and second language instruction. In P. Robinson & N. C. Ellis (Eds.), Handbook of cognitive linguistics and second language acquisition (pp. 456-488). New York: Routledge.
- Wierzbicka, A. (1988). The semantics of grammar. Amsterdam: Benjamins.

- Yoon, K. K. (1993). Challenging prototype descriptions: Perceptions of noun countability and indefiniteness vs.zero article use. *IRAL*, 31, 269-289.
- Yotsukura, S. (1970). The articles in English: A structural analysis of usage. The Hague: Mouton.
- Yule, G. (1998). Explaining English grammar. Oxford: Oxford University Press.

