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# THIS IS DEFINITELY SPECIFIC: SPECIFICITY AND DEFINITENESS IN ARTICLE SYSTEMS\*

This paper argues for the reality of specificity as *noteworthiness*, a concept built upon Fodor and Sag's (1982) view of referentiality. Support for this view of specificity comes from the behavior of indefinite *this* in spoken English, as well as from specificity markers in Samoan, Hebrew, and Sissala. It is shown that the conditions on the use of *this*indefinites cannot be accounted for by previous analyses of specificity. The relationship between definiteness and specificity in article systems crosslinguistically is examined, and a distinction between *presuppositions* and *felicity conditions* is argued for. Additional evidence for the reality of specificity comes from a study of article choice in the English of adult second language learners (whose L1s, Russian and Korean, lack articles). It is shown that the learners' errors are tied to specificity: they consist largely of overuse of *the* in specific indefinite contexts, and overuse of *a* in non-specific definite contexts. It is concluded that specificity is a universal semantic distinction, which receives morphological expression crosslinguistically and is available to second language learners.

## 1. INTRODUCTION

There has been much work in the semantic literature on the interpretation of indefinite and definite DPs. This has included work on referential readings of indefinites (Fodor and Sag 1982) as well as definites (Donnellan 1966), presuppositional readings of indefinites (Diesing 1992), and the choice-function literature (Reinhart 1997, Winter 1997, Kratzer 1998, among others). Much work has been done on the role of *specificity* in the interpretation of DPs, a term that has been differentially viewed as referentiality, wide scope, and presuppositionality. The goal of the present paper is to add to the discussion by considering empirical issues that have not previously been addressed in the literature on specificity.

First, while literature on specificity and choice functions has typically been concerned with indefinites headed by *a* or *some* (or *a certain* – see Schwarz 2001), I pay particular attention to indefinites headed by *this* which occur in spoken (informal) English. Use of a *this*-indefinite is exemplified in (1).

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(1) There is *this man* who lives upstairs from me who is driving me mad because he jumps rope at 2 a.m. every night.

(Maclaran 1982, p. 85)

I show that the behavior of this lexical item (specifically, the felicity conditions on the use of *this*-indefinites) cannot be fully accounted for by any existing view of the interpretation of indefinites. I propose that indefinite *this* encodes the semantic feature which I call *specificity as noteworthiness*, a concept built upon Fodor and Sag's view of referentiality. Drawing a distinction between *presuppositions* and *felicity conditions*, I account for the distribution of specific, definite, and underspecified articles via Heim's (1991) "Maximize Presupposition" Principle. While the proposal is built on the basis of English articles, supporting evidence comes from specificity markers in Hebrew (Givón 2001, Borer 2005), Samoan (Mosel and Hovdhaugen 1992), and Sissala (Blass 1990).

Finally, I address article use in acquisition. I argue that errors made by learners of English provide a potential source of evidence for the reality of semantic features. My focus are errors of article misuse (as opposed to omission) made by learners of English as a second language (L2) who have no articles in their first language (L1) and are arguably not influenced by L1 transfer. The results of a forced-choice elicitation task (Ionin, Ko and Wexler 2004) show that L2-English learners overuse *the* primarily in indefinite contexts which involve *specificity as noteworthiness*, and conversely, overuse *a* in definite contexts which do not involve specificity. Thus, L2-English data provide further support for the reality of *specificity as noteworthiness*: in the absence of an article system in their L1, L2-English learners draw on this semantic distinction in their L2 article choice.

This paper is organized as follows. In section 2, I review the basic facts about the behavior of indefinite *this*, drawing on work by Prince (1981) and Maclaran (1982); I show that this lexical item is in fact indefinite, and highlight the differences between indefinite *this* and *a*. In section 3, I propose my analysis of indefinite *this*, which is built upon Fodor and Sag's analysis of referential *a*, and provide an account for the distribution of *the*, *a* and *this* in English. Section 4 then reviews other proposals involving the interpretation of indefinites, and shows that none of them can fully account for the behavior and distribution of referential *this*. Section 5 reviews the cross-linguistic evidence for specificity as noteworthiness. Finally, section 6 discusses our study of articles in L2-English, which provides further support for the reality of specificity; this section also briefly reviews existing evidence

on articles in child L1 acquisition of English. Section 7 concludes the paper and suggests some directions for further study.

## 2. BACKGROUND: THE, A, AND REFERENTIAL THIS

In this paper, I will be concerned with the distribution of three English determiners: the definite *the*, the indefinite *a*, and the referential indefinite *this*. Henceforth, I will use the term referential *this* (or *this*<sub>ref</sub>) to denote referential indefinite *this*, as distinct from the standard deictic use of *this*.

In this section, I outline my assumptions and discuss the ways in which the behavior of *this*<sub>ref</sub> differs from that of both *the* and *a*. Following Prince (1981), I consider referential *this* a specific indefinite article; I will elaborate on what I mean by *specific* in section 3.

## 2.1. Definites and Indefinites in English

For the purposes of this paper, I assume a standard presuppositional (Fregean) analysis of English definites,<sup>1</sup> given in (2), and a standard quantificational analysis for English *a*-indefinites, given in (3) (but see section 4 for a discussion of other readings of English indefinites).

(2) Fregean analysis:
[the ζ] ξ expresses that proposition which is
-true at an index i, if there is exactly one ζ at i, and it is ξ at i,

-false at an index i, if there is exactly one  $\zeta$  at i, and it is not  $\xi$  at i, -truth-valueless at an index i, if there isn't exactly one  $\zeta$  at i. (Heim 1991, p. 9)

(3) A sentence of the form  $[a \zeta] \xi$  expresses that proposition which is true if there is at least one individual which is both  $\zeta$  and  $\xi$  and false otherwise. (Heim 1991, p. 26)

The semantics of (2) and (3) assure that any context compatible with the semantics of *the* is also compatible with the semantics of *a*. Nevertheless, as noted by Hawkins (1978), *the* and *a* cannot be used interchangeably, as illustrated by (4).

 $<sup>\</sup>overline{}^{1}$  Nothing in this paper hinges on the choice of the Fregean analysis of definites over a different presuppositional analysis. What is crucial for me is that English definites carry some sort of a presupposition (of uniqueness, familiarity, identifiability, etc.; see Abbott (2003) for more discussion), while indefinites do not. I will come back to a discussion of presuppositions in section 3.3.2.

(4)a.	The weight of our tent is under 4 lbs.	
b.	#A weight of our tent is under 4 lbs.	(Heim 1991, p. 27)

Heim proposes that the choice of *the* over a is mandatory whenever the presuppositions for *the* have been satisfied. She proposes the "Maximize Presupposition" Principle in (5).

 (5) The Maximize Presupposition Principle:
 "Make your contribution presuppose as much as possible!" (Heim 1991, p. 28)

Since *the* carries more presuppositions than *a*, it is preferable to use *the* whenever its presuppositions are met. I will come back to the Maximize Presupposition Principle in section 3.4.1, and show that it also successfully derives the relationship between *the* and *this*<sub>ref</sub>. I now turn to a discussion of *this*<sub>ref</sub>.

## 2.2. Evidence That Referential This Is Indefinite

As Prince (1981) first pointed out,  $this_{ref}$  behaves like an indefinite rather than a definite article. This is illustrated by the example in (6). Here, Prince shows that the *this* in (6a) cannot be replaced by *the*, but can be replaced by *a*.

- (6) From Prince 1981, p. 233:
  - a. "I work in electronic and auto shows. Companies hire me to stay in their booth and talk about products. I have *this speech* to tell." (Airline stewardess; Terkel, 1974, p. 79).
  - b.\*...I have the speech to tell.
  - c. ...I have *a speech* to tell.

Furthermore, as Prince points out, DPs headed by  $this_{ref}$  pass the classic test for indefiniteness, occurrence in existential *there*-sentences. This is shown in (7).

(7) From Prince 1981, p. 233:
"...A few years ago, *there was this hippie*, long-haired, slovenly. He confronted me..." (Policeman; Terkel, 1974, p. 756)

Following Prince, I conclude that  $this_{ref}$  is an indefinite determiner. In this it differs from the standard demonstrative use of *this*, on which *this* is a definite determiner, as shown by the examples in (8).

- (8)a. Edith read a book. This/the/#a book was interesting.
  - b. Pointing gesture to a chair: Look at this/the/#a chair!

There are two ways of dealing with the existence of both indefinite and definite uses of *this* in (colloquial) English. The first is to explain the referential indefinite use of *this* as an extension of its basic deictic use. This is the approach pursued by Maclaran (1982), among others, who suggests that the special indefinite use of *this* is, like the definite use of *this*, tied to proximity to the speaker: "The hearer is being instructed that the referent is to be found in the speaker's world, not in the shared world of speaker and hearer. This/these expresses proximity to the speaker..." (Maclaran 1982, p. 91).

An alternative approach, which I will pursue in this paper, is to treat the deictic *this* and the referential indefinite *this* as two separate lexical items. Support for this approach comes from the fact that demonstratives in most languages do not have a referential indefinite reading. According to Lyons (1999, p. 177), the phenomenon of a demonstrative having a referential indefinite reading is fairly uncommon crosslinguistically: the only other examples of this phenomenon that Lyons reports are the German *dieser* 'this', which Lyons notes may be a borrowing from English, and the Sissala specificity marker  $n\acute{e}$ , which may be a form of the general demonstrative  $n\acute{e}$  (Blass 1990). As will be seen later in this paper, other languages (Hebrew, Samoan) encode specificity through lexical items which are not demonstratives. This suggests that the meaning carried by *this*<sub>ref</sub> is not simply an extension of the deictic use of the demonstrative, but a meaning that can in principle be encoded by different kinds of determiners.

# 2.3. Referential Indefinite This vs. A

Although *this*<sub>ref</sub> appears in indefinite contexts, its behavior is not identical to that of *a*. There are two major differences between *this*-indefinites and *a*-indefinites. First, *this*-indefinites, unlike *a*-indefinites, are never interpreted as being inside the scope of an intensional/modal operator or negation. Second, the felicity of *this*-indefinites is affected by the *noteworthiness* of the individual denoted by the indefinite. I discuss each of these differences in turn.

## 2.3.1. This-Indefinites and Scope

Indefinites headed by *this*<sub>ref</sub> cannot appear in the scope of an intensional/ modal operator, or in the scope of negation, as the following examples (modeled after examples in Prince 1981, p. 237) show. In the (a) cases of (9) through (11), the indefinite DP is not in the scope of the operator, and both

*a* and *this*<sub>ref</sub> are allowed. In the (b) cases, the indefinite DP is in the scope of the operator, and *this*<sub>ref</sub> is disallowed.

- (9)a. Sarah wants to read  $\sqrt{a}/\sqrt{this}$  book about butterflies, but she can't find it.
  - b. Sarah wants to read  $\sqrt{a}/\#$ this book about butterflies, but she can't find one.
- (10)a. Jeff must read  $\sqrt{a}/\sqrt{this}$  book about butterflies for his class, but he can't find it.
  - b. Jeff must read  $\sqrt{a}/\#$ this book about butterflies for his class, but he can't find one.
- (11)a. Lorraine didn't read  $\sqrt{a}/\sqrt{this}$  book about butterflies because she couldn't find it.
  - b. Lorraine didn't read  $\sqrt{a}/\#$ this book about butterflies because she couldn't find one.

Thus, the lexical entry for *this*<sub>ref</sub> has to account for why *this*-indefinites obligatorily take (or give the appearance of taking) wide scope with respect to an operator.

## 2.3.2. This-Indefinites and Noteworthiness

The second difference between  $this_{ref}$  and a is that, as Maclaran (1982, p. 90) notes, use of  $this_{ref}$  "draws attention to the fact that the speaker has a particular referent in mind, about which further information may be given." This is shown in Maclaran's example in (12). Neither sentence in (12) contains any intensional or modal operators, or negation: in both sentences, the indefinite takes widest scope by default. However, use of  $this_{ref}$  is infelicitous in (12a), where the identity of the 31 cent stamp is completely irrelevant, and where nothing further is said about this stamp. On the other hand,  $this_{ref}$  is felicitous in (12b), where the identity of the stamp is important, and where the stamp is talked about at some length. A similar point is made by (13).

- (12)a. He put on  $\sqrt{a}/\#$ this 31 cent stamp on the envelope, so he must want it to go airmail.
  - b. He put on √a/√this 31 cent stamp on the envelope, and only realized later that it was worth a fortune because it was unperforated. (Maclaran 1982, p. 88)

# (13)a. Becky wrote some thank-you notes using $\sqrt{a}/\#$ this purple pen; then she mailed the notes to her friends.

b. Becky wrote some thank-you notes using  $\sqrt{a}/\sqrt{this}$  purple pen, which suddenly exploded, spilling purple ink all over Becky's clothes and furniture!

I will henceforth call this property of *this*-indefinites *noteworthiness*: the use of a *this*-indefinite requires the statement of something noteworthy about the individual denoted by the indefinite. I will come back to a more detailed discussion of noteworthiness in section 3.2.

## 3. Analysis of $This_{REF}$ as a Specificity Marker

The previous section established three properties of  $this_{ref}$ , summarized in (14):

- (14) Properties of DPs headed by *this*<sub>ref</sub>:
  - a. They are indefinite;
  - b. They do not take narrow scope with respect to intensional/modal operators or negation;
  - c. Their felicity is affected by *noteworthiness*.

In this section, I will propose an analysis of *this*<sub>ref</sub> which covers the above properties. This analysis builds upon Fodor and Sag's (1982) analysis of referential indefinites, which I now briefly summarize.

#### 3.1. Fodor and Sag (1982): Referential vs. Quantificational Indefinites

Fodor and Sag (1982) argued that English *a*-indefinites are ambiguous between the standard quantificational reading and a *referential* reading. Heim's (1991) formulation of Fodor and Sag's referential reading for indefinites is given in (15).

Fodor and Sag's proposal was based on the availability of long-distance scope readings of indefinites, which I discuss in section 4.1.1. For the purposes of the present section, I am concerned with the semantics in (15), rather than with the original motivation for this semantics.

(15) A sentence of the form  $[a_r \zeta] \xi$  expresses a proposition only in those utterance contexts c where the speaker intends to refer to exactly one individual **a** and **a** is  $\zeta$  in c. When this condition is fulfilled,  $[a_r \zeta] \xi$  expresses that proposition which is true at an index i if **a** is  $\xi$  at i and false otherwise. (Heim 1991, p. 30)

As an illustration, consider the pair of sentences in (16). In (16a), the speaker most likely has a particular referent in mind when she utters *a man*: this is suggested by the fact that the speaker is clearly aware of the identity of the man who proposed to her, and in fact wishes to hide his identity from the hearer. The man's identity is relevant from the speaker's viewpoint, and the condition in (15) is likely to be satisfied.

In contrast, the speaker has no particular referent in mind in (16b), where she is concerned simply with the presence of some man or other in the women's bathroom. For Fodor and Sag, (16a) contains a referential indefinite while (16b) contains a quantificational indefinite.

- (16)a. *A man* just proposed to me in the orangery (though I'm much too embarrassed to tell you who it was).
  - b. *A man* is in the women's bathroom (but I haven't dared to go in there to see who it is).

(Fodor and Sag 1982, ex. 7 and 8)

Crucially, given the semantics in (15), the extension of a referential indefinite is defined if and only if the speaker intends to refer to the unique individual denoted by the indefinite. The referential indefinite is an indexical: it is not influenced by the index of evaluation, so it has the same reading regardless of the presence of an intensional operator. Thus, it always gives the appearance of taking widest scope over an operator.

On the other hand, not all wide-scope indefinites are referential. This is illustrated in (17). In (17a), the wide-scope indefinite may be referential:<sup>2</sup> it is quite plausible that the speaker intends to refer to a particular colleague, as evidenced by the fact that the speaker subsequently identifies a particular colleague, Jane Brown. In contrast, (17b) is a case of a quantificational indefinite (since the speaker has no particular colleague in mind) which nevertheless takes wide scope. Finally, (17c) contains a narrow-scope indefinite which is obligatorily quantificational: the speaker is not talking about any particular colleague in the actual world.

- (17)a. Sarah wants to talk to a colleague of mine Jane Brown, who is very famous.
  - b. Sarah wants to talk to a colleague of mine, but I don't know which one.
  - c. Sarah wants to talk to a colleague of mine any colleague will do.

<sup>&</sup>lt;sup>2</sup> But does not have to be. See section 4.1.1 for more discussion.

Fodor and Sag note that *this*-indefinites are obligatorily referential on their analysis. In fact, the properties of *this*-indefinites summarized in (14) can to some extent be explained if *this*-indefinites are given the semantics of referential indefinites in (15). This semantics accounts for the lack of narrow-scope readings of *this*-indefinites (see ex. (9) through (11)). The semantics in (15) also gives some indication of why *this*-indefinites are infelicitous in contexts such as (12a) and (13a): here, the speaker arguably does not *intend to refer* to a particular stamp or purple pen. However, the term *speaker intent to refer* is not very precise and does not capture the intuition that the referent of a *this*-indefinite is somehow noteworthy. In the following section, I propose a more precise analysis of *this*-indefinites, which goes further towards capturing this intuition.

## 3.2. This-Indefinites and Noteworthiness

In section 2.3.2, I suggested that the felicity of a *this*-indefinite is affected by noteworthiness. I will now explore in more detail what noteworthiness means.

## 3.2.1. Noteworthiness and Speaker Knowledge

Examples such as (6) and (7) suggest the use of a *this*-indefinite involves some form of speaker knowledge of the referent of the indefinite. In fact, at first glance, it looks like *this*-indefinites are incompatible with an explicit denial of speaker knowledge of the referent, as shown in (18a). However, the same speakers who considered (18a) infelicitous considered (18b) and (18c) perfect or nearly perfect.<sup>3</sup> Yet, in neither (18b) nor (18c) can the speaker actually name the movie under discussion, or even say anything about its content – which is also the case for the infelicitous (18a).

- (18)a. #Mary wants to see *this new movie*; I don't know which movie it is.
  - b. Mary wants to see *this new movie*; I don't know which movie it is, but she's been all excited about seeing it for weeks now.

 $<sup>\</sup>frac{3}{3}$  The sentences in (18) were administered to five native English speakers (linguists). Three of these informants made a very strong distinction between (18a), which they rated as very bad, and (18b, c), rated as very good; the badness of (18a) was attributed to lack of any statement concerning Mary's attitude towards the movie. The remaining two informants made no distinction between the three sentences in (18), rating all of them as good (see also footnote 5). What is crucial for my purposes is that a distinction between (18a) and (18b, c) is present for at least some speakers.

c. I want to see *this new movie* – I can't remember its name and I have no idea what it's about, but someone mentioned to me that it's really interesting.

Crucially, in (18b,c), the speaker is able to say *something* about the movie, even if it is not something about its name or content. In (18b), the speaker can state that the relevant movie has *the property of being a movie that Mary has been talking about for weeks*, and in (18c), the speaker can state that the relevant movie has *the property of having been described to me as interesting* – i.e., the speaker is stating a *noteworthy* property in both cases. In contrast, in (18a), the speaker does not exhibit knowledge of anything connected to the movie – hence the infelicity.

## 3.2.2. Where Can Noteworthiness Come From?

In (18), *this*-indefinites are licensed only when the speaker follows the indefinite with a statement of some *noteworthy property* that holds of its referent. In fact, this is probably the most typical use of *this*-indefinites: Prince (1981) found that 209 out of 243 instances of *this*-indefinites (86%) introduced a referent which was referred to again within a few clauses, either explicitly or implicitly.<sup>4</sup>

However, there are also sentences in which a *this*-indefinite is felicitous even though it is not followed by a separate statement. As an illustration,

<sup>&</sup>lt;sup>4</sup> Unfortunately, Prince does not report a corresponding statistic for *a*-indefinites. In order to compare *this*- and *a*-indefinites more directly, I did a brief, informal corpus search using a portion of the Saarbrücken Corpus of Spoken English (http://www.uni-saarland.de/fak4/nor-rick/scose.htm). I examined the first 40 pages of the corpus of oral stories (audiotaped at Northern Illinois University) for occurrences of *a/an* and of *this/these* on its referential indefinite use. Discarding all unclear as well as formulaic instances (e.g., *a lot of*), I found 19 uses of indefinite *this/these* and 92 uses of *a/an*. Of the 19 *this/these*-indefinite instances, 17 (89%) denoted a referent which was referred to again in a few clauses either explicitly (12 cases) or implicitly (5 cases). Of the 92 uses of *a/an*-indefinites, only 34 were directly comparable to *this*-indefinites by (1) occurring in argument position; and (2) not scoping under any intensional/modal operators. Of these 34, 24 (71%) were subject to follow-up mention either explicitly (20 cases) or implicitly (4 cases).

The difference between *this*-indefinites (89% follow-up mention) and *a*-indefinites (71% follow-up mention) may not be great, but it is suggestive. It should also be noted that *a*-indefinites were used a lot (58 out of 92 instances) in situations where no new entities are introduced, such as in predicative position, in narrow-scope environments, and in time expressions such as *a year ago*. *This*-indefinites were never used in such contexts: the primary use of *this*-indefinites was to introduce new referents which were then discussed later in the discourse.

consider (19). Speakers note a contrast between (19a), which is rather infelicitous (in the absence of any continuation), and (19b), which is fine.<sup>5</sup> The sentence in (19b), in which the *this*-indefinite bears RC-modification, is as felicitous as (19c), in which the *this*-indefinite is followed by a separate statement conveying speaker knowledge. Crucially, in both (19b) and (19c) there is a statement of a noteworthy property. In (19b), the noteworthy property is conveyed by the restrictor NP itself. The presence of RC-modification makes this possible: the property *x* is a new movie that my friends have been recommending to me for ages is more likely to be construed as noteworthy than the property *x* is a new movie.

(19)a. #I want to see this new movie.

- b. I want to see *this new movie that my friends have been recommending to me for ages.*
- c. I want to see *this new movie* it's one that my friends have been recommending to me for ages.

However, RC-modification is not necessary for noteworthiness. Use of a *this*-indefinite in (20a) (suggested by David Pesetsky, p.c.) is much more felicitous than in (20b), despite having no RC-modification or explicit statement of speaker knowledge. What makes the referent of the indefinite in (20a) noteworthy is that it is blue. Apples are not normally blue, and the "unexpectedness" conveyed by the DP *this blue apple* is sufficient to make the referent noteworthy.

(20)a. I found *this blue apple* on my plate!

b. #I found this apple on my plate!

<sup>&</sup>lt;sup>5</sup> The sentences in (19) were tested on the same five speakers as the sentences in (18) (see footnote 3). The same three speakers who made a distinction between the sentences in (18) also made a distinction between those in (19), rating (19a) as infelicitous but (19b-c) as fine. The two speakers who accepted all the sentences in (18) also accepted all the sentences in (19). Given that judgments about *this*<sub>ref</sub> require a fairly subtle evaluation of felicity (rather than an evaluation of grammaticality), it is not surprising that some informants would rate any use of indefinite *this* in a wide-scope environment as good. It is possible that they either considered the property *x* is a *new movie* to be noteworthy in and of itself, or, alternatively, that they were accommodating the noteworthiness, assuming that there is something noteworthy about the referent even if the speaker is not saying it (see also section 3.4.3). Whatever the case with these speakers, it is notable that for the other speakers, the presence of a spelled-out noteworthy property led to greater felicity.

Finally, consider (21) (suggested by Irene Heim, p.c.), in which use of a *this*-indefinite is quite felicitous. Being a cat is not particularly noteworthy, and the speaker makes no follow-up statement of a noteworthy property. The noteworthy property of the cat is that *it jumped onto the roof of my car*. Thus in this case, the noteworthy property is conveyed by the predicate.

(21) I was driving down the road, and suddenly, *this cat* ran out of the bushes and jumped onto the roof of my car!

### 3.2.3. Previous Statement of Noteworthiness

The previous sections make clear that use of a *this*-indefinite is felicitous only when the speaker acquaints the listener with some noteworthy property which holds of the DP's referent. This noteworthy property can be part of the restrictor NP (as in (19b)); it can be part of the predicate (as in (21)); or it can be stated in a separate statement (as in (19c)).

What's crucial is that the hearer be acquainted with the noteworthy property at some point. This predicts that if the hearer has been acquainted with the noteworthy property *prior* to hearing a *this*-indefinite, the speaker can felicitously utter a statement like (19a), with no continuation. This is indeed the case. An illustration is (22), due to Martha McGinnis (p.c.), who points out that here, the use of a *this*-indefinite with no follow-up is more felicitous than in (19a).

(22)A: Are you leaving?

B: Yeah, I want to see this new movie.

In (22), the noteworthy property of the movie is x is such that I am leaving because of x/because I want to see x. It is clear to A that the noteworthiness of the movie comes from the fact that the movie is important enough to cause B to leave. Thus, A does not necessarily expect B to say anything else noteworthy about the movie.

All of the above examples show that use of a specificity marker on the part of the speaker is only felicitous if the hearer understands why the speaker is using it (see also section 3.4.3 for more discussion of why such explicit mention is necessary). If the speaker has used a specific indefinite, there must be something important about the individual that the speaker is talking about. As discussed above, this "something important" does not have to be directly related to the identity of the individual.

## 3.3. The Semantics of Specificity

The previous section showed that *noteworthiness* plays an important role in the licensing of a *this*-indefinite. Therefore, in giving the semantics of *this*-indefinites, I amend Fodor and Sag's semantics for referential indefinites to include the concept of *noteworthy property*.

## 3.3.1. The Semantics of this<sub>ref</sub>

In (23a), I give the proposed semantics for specificity. Its more natural language variant is given in (23b). I am using *sp* to mean *specificity marker*; in English, the article corresponding to *sp* is *this*<sub>ref</sub>.<sup>6</sup>

- (23)a. λi. [[sp α]]<sup>c,i</sup> is defined for a given context c if the following felicity condition is fulfilled: s<sub>c</sub> in w<sub>c</sub> at t<sub>c</sub> intends to refer to exactly one individual x<sub>c</sub>, and ∃φ<sub>(s, et)</sub> which s<sub>c</sub> in w<sub>c</sub> at t<sub>c</sub> considers noteworthy, and α(w<sub>c</sub>)(x<sub>c</sub>) = φ(w<sub>c</sub>)(x<sub>c</sub>) = 1. If this condition is fulfilled, λi. [[sp α]]<sup>c, i</sup> = λi. x<sub>c</sub>.
  - b. A sentence of the form [sp α] ζ expresses a proposition only in those utterance contexts c where the following felicity condition is fulfilled: the speaker of c intends to refer to exactly one individual x<sub>c</sub> in c, and there exists a property φ which the speaker considers noteworthy in c, and x<sub>c</sub> is both α and φ in c. When this condition is fulfilled, [sp α] ζ expresses that proposition which is true at an index i if x<sub>c</sub> is ζ at i and false otherwise.

As an illustration of how the definition in (23) works, consider (24a), with the semantics in (24b–c).

(24)a. This strange letter just came in the mail.

b. [[α]]<sup>c, i</sup> = λw.λx.x is a strange letter in w
[[ζ]]<sup>c, i</sup> = λx.x just came in the mail in w
λi. [[this strange letter]]<sup>c, i</sup> is defined for a given context
c if the following felicity condition is fulfilled: s<sub>c</sub> in w<sub>c</sub> at t<sub>c</sub> intends to refer to exactly one individual x<sub>c</sub>, and ∃φ<sub>(s, et)</sub> which s<sub>c</sub> in w<sub>c</sub> at t<sub>c</sub> considers noteworthy, and x<sub>c</sub> is a strange letter in c and x<sub>c</sub> is φ in c. If this condition is fulfilled,
λi. [[sp α]]<sup>c, i</sup> = λi. x<sub>c</sub>

<sup>&</sup>lt;sup>6</sup> Note that nothing in the semantics in (23) forces specificity markers to be indefinite; however, we have seen in section 2.2 that *this*<sub>ref</sub> is in fact indefinite. The question of why *this*<sub>ref</sub> cannot be used with definites is discussed in section 3.4.1. For the purposes of the present section, I discuss only specific indefinites, in order to examine the felicity conditions on *this*<sub>ref</sub>.

c. [[this strange letter just came in the mail]]<sup>c, i</sup> expresses a proposition only in those utterance contexts c where the following condition holds:  $s_c$  in  $w_c$  at  $t_c$  intends to refer to exactly one individual  $x_c$ , and  $\exists \phi_{\langle s, et \rangle}$  which  $s_c$  in  $w_c$  at  $t_c$  considers noteworthy, and  $x_c$  is a strange letter in c and  $x_c$  is  $\phi$  in c. If this condition is fulfilled, [[this strange letter just came in the mail]]<sup>c, i</sup> = 1 iff  $x_c$  just came in the mail.

The term *noteworthy* is used here in its most literal sense: *worthy of note* (in a given discourse). A property that is considered noteworthy in one discourse setting may be completely irrelevant in another. For instance, in the scenario described by (20), the property of *being a blue apple* is noteworthy, since I do not expect apples to be blue. On the other hand, suppose that I am participating in a game in which the goal is to collect plastic apples of various colors. If a player wants to express the fact that she has collected yet another apple, which happens to be blue, it would be infelicitous for her to say *I found this blue apple*. The property of *being a blue apple* would not be considered noteworthy.<sup>7</sup>

The lexical entry in (23) can apply to plural as well as singular DPs, as long as instead of "exactly one individual  $x_c$ " we talk about a set of individuals which the speaker intends to refer to, and the property  $\varphi$ , as well as the property denoted by the restrictor NP, hold for the maximal member of this set. In English, *this*<sub>ref</sub> has a plural counterpart in *these*.

Finally, the lexical entry in (23), like Fodor and Sag's original entry for referential indefinites, ensures that specific indefinites obligatorily take scope above intensional verbs and modals: since the speaker intends to refer to a particular individual in the world of utterance, this individual must exist in the world of utterance. This is a correct prediction, since we

<sup>&</sup>lt;sup>7</sup> Much of the time, noteworthiness more or less coincides with *importance/relevance* for the discourse: for instance, I might say "*I saw this new movie the other day*...", where the identity of the movie is relevant for the discourse, and the movie is quite worthy of note. However, as an anonymous reviewer points out, noteworthiness and relevance do not always coincide: in the "apple-collecting" scenario described in the text, the property of being blue may be quite important (perhaps because the player who collects the most blue apples wins), but it is not noteworthy (since lots of the apples are blue, and there is nothing special about being blue). In this scenario, use of  $this_{ref}$  is infelicitous.

have seen that *this*-indefinites cannot scope under intensional or modal operators.<sup>8</sup>

## 3.3.2. Noteworthiness as a Felicity Condition

The lexical entry in (23) contains a *felicity condition* on the context. A felicity condition is crucially different from a presupposition, as follows.

A presupposition is a statement presupposed to be true by *both speaker* and *listener*. For instance, on the Fregean analysis, a definite carries the

Prince (1981) has other examples, given in (ii), in which a *this*-indefinite does not reflect the speaker's state of mind. In (iia), the speaker is clearly not intending to talk about any Eskimo restaurant that exists in the world of utterance – (iia) does not entail that the speaker even believes Eskimo restaurants to exist. Similarly, in (iib), the belief in the existence and importance of a particular Eskimo restaurant is on the part of John rather than the speaker (who believes John to be delusional). While (iib) does not have embedding under an attitude verb, it may be understood as having implicit embedding: the meaning expressed by (iib) is, roughly, *Poor old delusional John said that he wanted to eat in this Eskimo restaurant*.

(ii)a. John dreamt that he was in this Eskimo restaurant.

b. Poor old delusional John wanted to eat in this Eskimo restaurant.

(Prince 1981, p. 241)

If *this*-indefinites are indexicals, as I have been claiming, they should always refer to individuals in the actual world and not be affected by embedding. One possible solution to the above facts is to treat *this*-indefinites in the framework of Schlenker (2003a, b), who proposes that attitude verbs such as *say* manipulate the context variable, as shown in (iii). Under this proposal, the first sentence in (ia) would have the truth-conditions in (iv). This proposal can also account for (iib) (if we assume implicit embedding) but not for the *dream*-case in (iia).

- (iii) John says  $_{ci}$  that p is trues iff every context c compatible with John's claim is such that p is trues  $_{s[ci>c]}$  when uttered in c. (Schlenker 2003a, ex. 28)
- (iv) Sarah said <sub>ci</sub> that she found this unicorn in her garden expresses a proposition when the following condition is met: in every context c compatible with Sarah's claim, the speaker of c (namely, Sarah) intends to refer to exactly one individual  $x_c$  in c, and there exists a property  $\varphi$  that Sarah considers noteworthy in c, and  $x_c$  is a unicorn in c and  $x_c$  is  $\varphi$  in c. When this condition holds, Sarah said <sub>ci</sub> that she found this unicorn in her garden is trues iff every context c compatible with Sarah's claim is such that Sarah in  $w_c$  at  $t_c$  found  $x_c$  in her garden.

<sup>&</sup>lt;sup>8</sup> There is, however, evidence that *this*-indefinites can take scope under attitude verbs. When a *this*-indefinite is embedded under an attitude verb, it can sometimes reflect the state of mind of the referent of the matrix subject, rather than that of the speaker. Consider for instance (ia), where the speaker is unlikely to be referring to a particular unicorn which exists in the actual world – the speaker does not even believe that unicorns exist. The belief that unicorns exist, and the intent to refer to a particular unicorn, is all on the part of Sarah. Compare (ia) to (ib), where there is no embedding. By stating that *Sarah found this unicorn in her garden*, the speaker is committing herself to referring to a particular unicorn.

<sup>(</sup>i)a. Sarah said that she found this unicorn in her garden. Unicorns don't exist, so she is either lying or crazy!

b.#Sarah found this unicorn in her garden. But unicorns don't exist!

presuppositions of existence and uniqueness; this means that the speaker can felicitously use a definite DP only if she can be reasonably certain that her listener shares the knowledge that the set denoted by the restrictor NP contains a unique member. The speaker cannot felicitously utter (25) simply because she is aware of a unique cat: she must assume some hearer knowledge of the fact that the (contextually restricted) set of cats contains a unique member.<sup>9</sup> A sentence like (26), on the other hand, will always be felicitous: the semantics of superlatives ensures that speaker and hearer always share the knowledge that the set denoted by *tallest person in the world* contains a unique member.<sup>10</sup>

(25) I saw the cat.

(26) She knows the tallest person in the world.

(v) John dreamt that he was in this Eskimo restaurant expresses a proposition only in those utterance contexts c where the following felicity condition is fulfilled: the speaker intends to refer to exactly one individual  $x_c$  in c, and there exists a property  $\varphi$  that the speaker considers noteworthy in c, and  $x_c$  is a (fictional) Eskimo restaurant in c and  $x_c$  is  $\varphi$  in c. When this condition holds, John dreamt that he was in this Eskimo restaurant is trues iff John in  $w_c$  at  $t_c$  dreamt that he was in  $x_c$ .

The fictional-object proposal can be extended to cover other cases besides dreams: for instance, reports such as (ia), where Sarah's story has established a fictional unicorn. This is particularly plausible when the matrix speaker possesses some information about the fictional object, as in the scenario in (vi). Here, the speaker is intending to refer to a particular unicorn: the fictional unicorn of Sarah's imagination.

(vi) Sarah said that she found this unicorn in her garden. She named it Mabel, and feeds it on grapes and mozzarella cheese.

This predicts that sentences such as (ia) in principle have two readings available to them. On the first reading, the *this*-indefinite is evaluated with regard to the reported context: the referent of the matrix subject (in this case, Sarah) is the person who intends to refer to a particular unicorn. On the second reading, the *this*-indefinite is evaluated with regard to the original matrix context, and the matrix speaker is intending to refer to a particular (fictional) unicorn. This seems like an intuitively correct prediction, since (ia) does appear to have both the reading on which the matrix speaker considers the unicorn noteworthy and the reading on which Sarah considers the unicorn noteworthy.

<sup>9</sup> The speaker and hearer must share knowledge that there is a unique cat in some *contextually given domain*. The standard analysis in the literature is to assume a contextually-given restriction on the set denoted by the NP (see Evans 1980, Kadmon 1990, Roberts 2003, among others). Uniqueness is then computed with respect to a contextually relevant domain, which typically is a proper subset of the set of all individuals. Crucially, the contextually given domain must be part of the shared knowledge of speaker and listener: it is infelicitous for me to talk about *the cat* unless my listener is aware of a unique, contextually salient cat, or can at least accommodate knowledge of such a cat.

<sup>10</sup> Thus, I am concerned not with hearer knowledge as *discourse-old* knowledge (cf. the *familiarity* view of definiteness, Heim 1982), but with shared speaker-hearer knowledge of uniqueness. For a review of the role of mutual knowledge under different analyses of definiteness, see Abbott (2003).

<sup>(</sup>Footnote continued)

An alternative explanation, suggested by Irene Heim (p.c.), is that it is possible to use a *this*-indefinite to refer to fictional objects. Thus, in (iia), the matrix speaker is referring to the fictional restaurant of John's dream, with the truth-conditions given in (v).

In contrast, a felicity condition focuses on the knowledge state of the speaker. In deciding to use a *this*-indefinite in English, the speaker considers only her own view of what's noteworthy, and not the state of her listener's knowledge. Furthermore, uniqueness is not required: in fact, nothing in the lexical entry in (23) precludes the existence of multiple individuals which are both  $\alpha$  and  $\varphi$ . This is as it should be: I can say (27a) while having in mind the noteworthy property *x* is one of only three books about the habits of underwing moths, where by definition there are three elements with this noteworthy property. In contrast, I cannot say (27b) in the same context, since *the* presupposes uniqueness.

- (27)a. I read *this book about the habits of the underwing moths* the other day. There are only three books about the habits of the underwing moths in existence.
  - b. I read *the book about the habits of the underwing moths* the other day. #There are only three books about the habits of the underwing moths in existence.

Thus, we see that the speaker can use a specific indefinite any time she wishes, but cannot do so with a definite – she must evaluate her listener's state of knowledge first. From the standpoint of the discourse, a felicity condition is weaker than a presupposition: the former takes only speaker knowledge into account, and the latter takes both speaker and hearer knowledge into account. This distinction between felicity conditions and presuppositions will become crucial to my account of English determiners.

Finally, it is necessary that the conditions on speaker intent to refer and the noteworthy property  $\varphi$  in (23) be part of the felicity conditions rather than part of the truth-conditions: when the speaker fails to state any noteworthy property, as in (18a), repeated below, the sentence is infelicitous, not false.

(18)a. #Mary wants to see *this new movie*; I don't know which movie it is.

# 3.4. The Pragmatics of Specificity

In the previous sections, I provided an account of the semantics of  $this_{ref}$ . However, the lexical entry by itself cannot account for all the instances where  $this_{ref}$  is vs. isn't used: pragmatic considerations also come into play. In particular, there are three issues to be considered: (1) why can  $this_{ref}$  be used with indefinites only? (2) what determines the choice of  $this_{ref}$  vs. a? and (3) why does the noteworthy property need to be spelled out? I discuss each question in turn.

## 3.4.1. Specificity with Definites

So far, I have discussed use of *this*<sub>ref</sub> with indefinites only. However, nothing in the semantics in (23) specifies indefiniteness. We might therefore expect use of *this*<sub>ref</sub> with definites. However, this is not the case: (28) shows that *this*<sub>ref</sub> is incompatible with DPs that are obligatorily definite, even when the conditions on noteworthiness are satisfied by the material in parentheses. (See also section 2.2 for evidence that *this*<sub>ref</sub> is indefinite.)

(28)a. #I talked to this mother of my friend Sam (she is really nice!)b. #I want to meet this best teacher in the school (I've heard a lot about her!)

One possible solution would be to say that  $this_{ref}$  is incompatible with the presupposition of uniqueness: that it carries a "non-uniqueness condition". However, this proposal does not work, for the same reason that, as Heim (1991) shows, a proposal assigning a non-uniqueness condition to the use of *a* does not work. The sentences in (29) (based on sentences with *a*-indefinites from Heim 1991) are perfectly felicitous both with *a* and with *this*<sub>ref</sub>, and yet do not presuppose the existence of multiple 20 ft. long catfish or multiple pathologically nosy neighbors of mine.

- (29)a. Robert caught a/this 20 ft. long catfish yesterday!
  - b. A/This pathologically nosy neighbor of mine broke into the attic last night!

Thus, a different explanation is needed for why *the* rather than *this*<sub>ref</sub> must be used in (28). I suggest that the answer lies in the difference between *presuppositions* and *felicity conditions*. While *the* is used whenever both speaker and hearer are able to presuppose the existence of a unique individual in the restrictor set, *this*<sub>ref</sub> is used whenever the speaker wishes to convey that the DP's referent has some noteworthy property. From the standpoint of the hearer, use of *the* is much more informative than use of *this*<sub>ref</sub>. As an illustration, consider (30). Upon hearing *the* in (30a), the hearer classifies *the cat* as a definite DP and understands that there must be a unique cat in the discourse; the logical candidate for the referent of *the cat* is the cat that was previously mentioned.

Next, consider (30b), and imagine for a moment that English does allow  $this_{ref}$  with definites (ignore the deictic use of *this* for the purposes of this example; this is easier if *this one* is used). Upon hearing *this*, the hearer classifies *this cat* as a specific DP and understands that the speaker intends to convey something noteworthy about a particular cat. There are a number

of possible candidates for noteworthiness: perhaps what's noteworthy is that *the speaker just saw x*; or perhaps it is that *x started meowing*; or perhaps it is some property that the speaker hasn't stated yet, such as *x was obviously hungry*. Suppose that the hearer will settle on one of the last two possibilities: he will then not necessarily know that the cat that started meowing is the same cat that the speaker saw – which, after all, is what the speaker was trying to convey.

- (30)a. I saw a cat. Suddenly, the cat started meowing.
  - b. I saw a cat. Suddenly, *this<sub>ref</sub> (one) cat* started meowing.

Similarly, consider the case of a definite whose referent has not been previously mentioned, as in (31). Use of *the* in (31a) clearly conveys that the store has one owner. Use of *this*<sub>ref</sub> in (31b) conveys that there is something noteworthy about a particular owner (e.g., that her name is Ms. Greene) but in principle allows for the possibility of multiple owners, and moreover, multiple owners *who possess the same noteworthy property* (see the discussion of (27) above).

- (31)a. I need to talk to the owner of this store Ms. Greene.
  - b. I need to talk to *this*<sub>ref</sub> (one) owner of this store Ms. Greene.

Thus, use of *the* in definite environments is clearly more informative than use of *this*<sub>ref</sub>. When the speaker uses *the* in order to establish uniqueness, she can still list various noteworthy properties of the referent. However, when she uses *this*<sub>ref</sub> in order to establish noteworthiness, she cannot easily establish uniqueness.

Given this discussion, I propose that felicity conditions, which are known only to the speaker, should not be given the same status as presuppositions, which are known to both speaker and hearer. It can be argued that from the standpoint of "Maximize Presupposition", a determiner whose lexical entry contains a felicity condition, such as *this*<sub>ref</sub>, has the same status as a determiner with no felicity conditions or presuppositions, such as *a*. This means that *the* will be used rather than *this*<sub>ref</sub> in all specific definite environments. This is a desirable prediction, since *this*<sub>ref</sub> is in fact infelicitous with definites, as seen in (28). Thus, the pragmatic "Maximize Presupposition" principle explains why *this*<sub>ref</sub> occurs only with indefinites in English.

#### 3.4.2. Article Use with Indefinites

The previous section showed that when both *the* and *this*<sub>ref</sub> are compatible with a given context, *the* wins out. Next, I consider what happens when

*this*<sub>ref</sub> and *a* compete – i.e., in a specific indefinite context, a context which satisfies the felicity conditions on specificity but does not allow *the* insertion (since uniqueness is not presupposed).

Since neither  $this_{ref}$  nor *a* carries a presupposition, "Maximize Presupposition" does not come into play, and both items should be possible. This is a correct prediction, since in fact  $this_{ref}$  is nearly always optional: the existence of a noteworthy property does not force the speaker to use  $this_{ref}$  over *a*. In fact, Fodor and Sag's original referential indefinites are instances where *a* rather than  $this_{ref}$  is used, even though a noteworthy property is stated.

Note that I say *nearly* always: there are cases where  $this_{ref}$  is felicitous but *a* is not. An example is (32), which is modeled after an example from Prince (1981, p. 247) (Prince's example is with a plural, contrasting *these eyes* with the bare NP *eyes*; since my discussion has concerned singulars, I give a parallel singular example). (32) shows that  $this_{ref}$  is possible where *a* isn't.

- (32)A: Why do you like him?
  - B: Oh, he has this/#a nose...

Maclaran (1982) explains such contrasts by appealing to Grice's Maxim of Quantity. The statement *He has a nose* is completely uninformative, since all human beings have noses, and does nothing to explain why A likes the person in question: B is not providing enough information. On the other hand, when B uses *this*<sub>ref</sub>, she does convey additional information: namely, that there is something noteworthy about this particular nose (in Maclaran's terms, B draws attention to the individuality of the nose). Note that with the addition of an adjective such as *gorgeous*, as in (33), *a* is no longer infelicitous: the adjective, even without *this*<sub>ref</sub>, provides information that sets this nose apart from other noses.

- (33)A: Why do you like him?
  - B: Oh, he has this/a gorgeous nose!

Thus, I conclude that  $this_{ref}$  is preferred over *a* in those contexts where use of an *a*-indefinite does not provide enough information to explain why the statement is being made at all. When the restrictor NP provides enough

information to satisfy the Maxim of Quantity, the choice of  $this_{ref}$  over *a* becomes optional.<sup>11</sup>

Leaving aside cases such as (32), why is *this*<sub>ref</sub> ever used at all, when *a* would do just as well? A natural answer is that a speaker uses *this*<sub>ref</sub> whenever she wants to signal the existence of a noteworthy quality that holds of a particular individual in the restrictor set. Hence the famous line, "So this guy walks into a bar...", designed to attract the hearer's attention to the importance of the protagonist. The hearer can then reasonably expect the speaker to talk about the referent again, perhaps explaining what the noteworthy quality is. This expectation is apparently confirmed, given Prince's (1981) finding that individuals denoted by *this*-indefinites are nearly always referred to again later in the discourse.

On the other hand, if the speaker uses an *a*-indefinite in place of a *this*indefinite, noteworthiness is not being signaled. At the same time, there is no implication that noteworthiness is absent: i.e., use of *a* does not imply that use of *this*<sub>ref</sub> would have been infelicitous. A joke may felicitously start with the line "So a guy walks into a bar...", where the guy in

- (i)a. Chris wants to see a movie.
  - b. Chris wants to see this movie.
  - c. Chris wants to see a certain movie.
  - d. Chris wants to see some movie.
  - e. Chris wants to see a movie about frogs.
  - f. Chris wants to see a movie about frogs that has been playing in the neighborhood cinema for the past 8 weeks.

<sup>&</sup>lt;sup>11</sup> There is one other scenario in which *this*<sub>ref</sub> appears to be preferred over *a*, and which has to do with scope. Simple, unmodified *a*-indefinites, as in (ia), tend to take narrow scope with respect to intensional operators (this is a preference, not a categorical judgment). Putting in  $this_{ref}$  instead, as in (ib), brings out (and in fact forces) a wide scope reading (however, for (ib) to be fully felicitous, more information about the movie is needed, to indicate just how it is noteworthy). Note that it is not necessary to use *this*<sub>ref</sub> to give wide scope to the indefinite: *a certain* (ic) or *some* (id) can be used instead, and modification of the *a*-indefinite, as in (ie-f), helps to bring out the wide scope reading: the more modification, the easier it is to get a wide scope reading for the indefinite (see also Fodor and Sag 1982).

These facts suggest that the reason *a* is sometimes infelicitous in contexts where *this*<sub>ref</sub> is felicitous has to do with the interpretation of *a*-indefinites. By default, in the absence of modification or an appropriate context, speakers may prefer to interpret *a*-indefinites as having narrow scope. Note that what is a preference for *a*-indefinites in English is a grammatical requirement for bare singulars in such languages as Hebrew (see section 5.3.3). Use of specificity markers, such as the English *this*<sub>ref</sub>, or the Hebrew *xad*, is one of the ways of forcing wide scope readings, but not the only way.

question is quite noteworthy.<sup>12</sup> Given the apparent optionality of a and  $this_{ref}$  (in most contexts), I conclude that there is no "Maximize Felicity Conditions" principle.

Importantly, the relationship between *this*<sub>ref</sub> and *a* is not scalar, the way that the relationship between *some* and *every* is, for instance. Rather, the relationship between *this*-indefinites and *a*-indefinites is parallel to that between modified and unmodified NPs. For instance, compare the sentences *I* saw a beautiful cat and *I* saw a cat. The former is clearly more informative; however, the latter does not imply that the cat is not beautiful. At most, it implies that the cat's beauty (or for that matter, its color, size, and predisposition) are not considered by the speaker to be relevant to the immediate discourse. Similarly, while *I* saw this beautiful cat is more informative than *I* saw a cat, the latter does not imply a lack of noteworthiness: at most, it implies that the cat's noteworthiness is not immediately relevant.

## 3.4.3. Statement of Speaker Knowledge

As discussed above, the speaker may use referential *this* without assuming any prior knowledge of the referent on the part of her listener. At the same time, we have seen that the speaker does need to acquaint her listener with what makes the DP's referent noteworthy: as the examples in section 3.2 show, use of the specificity marker *this*<sub>ref</sub> is infelicitous unless the hearer is given some indication as to what the noteworthy property in question is. This effect does not follow straightforwardly from the semantics of specificity in (23). Why should use of *this*<sub>ref</sub> require a noteworthy property to be stated? Another way of phrasing the same question is, why can't *this*<sub>ref</sub> be used when a noteworthy property is *not* explicitly stated, as in, for instance, (12a), repeated below?

(12)a. He put on  $\sqrt{a}/\#$ this 31 cent stamp on the envelope, so he must want it to go airmail.

Maclaran (1982) discusses precisely this question, and proposes that the answer lies in Grice's Maxim of Quantity. She proposes that the use of *this*<sub>ref</sub> in (12a) is too informative, since the identity of the particular stamp in question is unimportant. In my terminology, use of *this*<sub>ref</sub> is too informative because there is nothing noteworthy to say about the particular stamp (for why noteworthiness is not the same as importance of identity, see footnote 7). By using *this*<sub>ref</sub>, the speaker conveys the information that the stamp is

<sup>&</sup>lt;sup>12</sup> In fact, a Google search yielded a multitude of examples with both variants of the famous first line (with *this guy* and with *a guy*), showing that the choice of *this*<sub>ref</sub> over *a* is, indeed, up to the speaker.

somehow worthy of note, but there is nothing in the context to show that it is indeed worthy of note. Minimal changes to the context, as in (12c), make use of  $this_{ref}$  more felicitous, because it is now clear where the noteworthiness comes from.

(12)c. He put on  $\sqrt{a}/\sqrt{this}$  expensive 5-dollar stamp on the envelope, so he must want it to get there overnight!

Alternatively, one can argue that use of  $this_{ref}$  without a statement of noteworthy property means not providing *enough* information: the speaker conveys that there is something noteworthy about the referent but does not say what, leaving the hearer wondering.

Whether too much or not enough information is the problem, the situation with *this*<sub>ref</sub> is analogous to a speaker saying "I have something to tell you", and then leaving the room. This can be viewed as not enough information (the speaker does not say what it is she has to tell the hearer), or too much information (why bother making the statement at all, if she is going to leave the room afterwards?). Either way, the speaker is being uncooperative. I would argue that using *this*<sub>ref</sub> without any mention of the noteworthy property is similarly uncooperative.

This pragmatic view helps explain why the conditions on noteworthiness can be expressed in such a multitude of ways, as shown in section 3.2: the information about what exactly makes a particular individual noteworthy can be gleaned from any portion of the discourse, including the restrictor NP itself, a preceding statement, a follow-up statement, etc. All that's necessary is that the hearer somehow learn why the speaker considered the entity or individual in question to be *worthy of note*.

#### 4. Other Accounts of Specificity

In the previous section, I have analyzed specificity, as expressed by *this*<sub>ref</sub> in English, as involving *speaker intent to refer* and the concept of *noteworthy property*. In this section, I will review previous proposals related to specificity in indefinites, in order to show that none of these proposals can fully account for the behavior of *this*-indefinites.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> For space considerations, I will not review the work on the specificity (or referentiality) distinction with definites (Donnellan 1966, Stalnaker 1970, and Kaplan 1978, among others). The arguments for a referential/attributive distinction parallel Fodor and Sag's arguments for a referential/quantificational distinction with indefinites, and face a similar problem with the availability of intermediate scope readings. See Heim (1991) for a review of the literature on the ambiguity of *the* and for arguments against such an ambiguity. The referential/attributive distinction with definites is not directly relevant to the present paper, which is concerned with the specificity of indefinite *this*. See section 3.4.1 for an explanation of why *this*<sub>ref</sub> marks specificity with indefinites only.

# 4.1. Different Readings of A/Some-Indefinites

On the standard quantificational analysis of indefinites, they are expected to behave just like other quantifiers (*every*, *each*, *many*, etc.) However, it has long been noted that indefinites do not in fact behave like other quantifiers. As Fodor and Sag (1982) first showed, indefinites are able to scope out of *if*-clauses, *that*-clauses, and other scope islands. As an illustration, consider the example in (34). (34a) has a reading which can be paraphrased as follows: Mary read every book recommended by one particular teacher (e.g., Professor Smith); on this reading, the indefinite scopes over the relative clause. In contrast, (34b) does not have the reading on which *every teacher* scopes over the relative clause. This reading, if it existed, would be paraphrased as follows: for every teacher x, x recommended a book and Mary read that book. This reading is clearly unavailable.

- (34)a. Mary read every book that *a*/some teacher had recommended.
  - b. Mary read a book that *every teacher* had recommended.

The exceptional scope-taking properties of long-distance indefinites would not be a problem if we simply said that indefinites, unlike other quantifiers, are not subject to locality constraints. However, this stipulation has no independent motivation, so various alternative analyses have been proposed to account for long-distance indefinites. I discuss these below.

## 4.1.1. Referential Readings of A-Indefinites

Fodor and Sag (1982) proposed an explanation of long-distance indefinites by arguing that indefinites are ambiguous. As discussed in section 3.1, they proposed that English indefinites are ambiguous between a referential and a quantificational reading. On the *referential analysis*, the indefinite in (34a) is not scoping out of an island at all: rather, it is a referring expressions, and as such, gives the appearance of widest scope (similarly to deictic expressions like *that book* or proper names like *Mary*). Under this analysis, (34a) can be paraphrased as (35).

(35) Mary read every book that [the unique teacher that the speaker intends to refer to in the world and time of utterance] had recommended.

Under Fodor and Sag's analysis, *a*-indefinites are ambiguous between the referential reading in (15) and the standard quantificational reading in (3). On the latter, they behave like other quantifiers, taking wide or narrow scope and being subject to locality constraints. Thus, *a*/*some teacher* in (34a) can also scope inside the *that*-clause.

## 4.1.2. Choice-Function Analyses

Fodor and Sag's analysis has been challenged a number of times. Ludlow and Neale (1991) argue that there is no need to posit an ambiguity for English indefinites: they propose that there is only one semantic analysis of indefinite descriptions, and that the different uses of indefinites (e.g., referential vs. non-referential) can be derived pragmatically from Gricean principles.

Other researchers, however, such as Reinhart (1997) and Kratzer (1998), have followed Fodor and Sag in positing a semantic ambiguity, but have argued against Fodor and Sag's implementation of the ambiguity. The challenge to Fodor and Sag has to do with the availability of intermediate scope readings. Fodor and Sag's analysis makes a clear prediction: a longdistance indefinite can never give the appearance of being in the scope of another quantifier. Either an indefinite is quantificational, and therefore subject to island constraints (i.e., it's not a long-distance indefinite); or, it's referential and therefore gives the appearance of widest possible scope. Fodor and Sag argued that long-distance indefinites in fact cannot take intermediate scope.

However, more recent literature (Ruys 1992, Abusch 1994, Reinhart 1997, Winter 1997, Kratzer 1998, among others) has shown that intermediate scope readings do exist. Thus, (36) has a reading on which the sentence is true as long as every student read every book that had been recommended by a particular teacher: e.g., Mary read every book recommended by Dr. Smith, Alice read every book recommended by Dr. Brown, etc. On this reading, *some teacher* is clearly taking intermediate scope, below *every student* but above *every book* and the *that*-clause.

(36) Every student read every book that *some teacher (of hers)* had recommended.

Recent analyses that have accounted for these intermediate scope readings are choice function analyses, on which the indefinite article is translated as the variable f, which ranges over choice functions – functions which map any non-empty set in their domain to an element of this set.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> A completely different approach is taken by Schwarzschild (2002), who argues that longdistance indefinites are in fact existentially quantified singleton indefinites: indefinites whose (implicitly restricted) domain has a singleton extension. For instance, on the widest-scope reading of the indefinite in (36), *some teacher* in fact takes scope inside the relative clause, but its restrictor has a singleton extension: there is only one teacher in the contextually relevant domain.

One variant of the choice function analysis is that of Reinhart (1997) / Winter (1997). On their view, the choice function variables are bound by Existential Closure (EC), which is not syntactically restricted and is not subject to locality constraints. On this view, (37a) receives the LF in (37b). This reading can be paraphrased as follows: there exists a way of choosing an element from a set which, when applied to the set of teachers, chooses the teacher x such that Mary read every book which had been recommended by x. This proposal can account for the intermediate scope reading of the indefinite in (36) via EC below *every student*, as shown in (37c).

- (37)a. Mary read every book that *a*/*some teacher* had recommended.
  - b.  $\exists f [Mary read every book f(teacher) had recommended]$
  - c. [every student]  $\lambda_1$  [ $\exists f [t_1 \text{ read every book } f(\text{teacher}) \text{ had recommended}]$ ]

A different variant of the choice function analysis is that of Kratzer (1998), for whom choice function variables are free variables, not subject to Existential Closure. Thus, (37a) receives the LF in (38). The choice function variable is contextually determined: it is necessary that the speaker have a particular function in mind, which she does not reveal to the audience. For instance, in the case of (38), the speaker may have in mind a function which, when applied to the set of teachers, picks out Dr. Smith. Kratzer's analysis is closer to Fodor and Sag's original analysis in that it ties the long-distance reading of the indefinite to the speaker's state of mind.

(38) Mary read every book f<sup>s</sup>(teacher) had recommended

A minimally different version of Kratzer's proposal was formulated by Matthewson (1999): choice function variables on her analysis are not left free, but are bound by EC; however, unlike the Reinhart/Winter free EC analysis, Matthewson's analysis requires EC to occur in the topmost position. The LF in (38) then becomes the LF in (39).

<sup>(</sup>Footnote continued)

The singleton indefinite view can also account for intermediate scope readings: on the apparently intermediate scope reading of (36), for instance, for each value of the bound pronoun *hers*, the indefinite has a restrictor whose extension is a singleton, including the one and only contextually relevant teacher of the student. In the absence of an overt bound variable, the apparent intermediate scope reading is derived through a covert bound variable in the implicit restriction. The singleton indefinite view can thus account for much of the same phenomena as the "choice function with topmost EC" view discussed below, but the explanation is pragmatic rather than semantic. Regarding *this*-indefinites, the singleton indefinite view faces the same issue as the choice function view, namely, the lack of intermediate scope readings for *this*-indefinites (see section 4.1.3).

#### (39) $\exists f [Mary read every book f(teacher) had recommended]$

The Kratzer/Matthewson analysis accounts for intermediate scope readings by assuming that the function denoted by f can take an additional argument, which appears as a Skolem index on the function variable at LF – see Chierchia (2001) for an explicit formulation of this proposal. Chierchia's analysis of the intermediate scope reading of the indefinite in (36) is given in (40a), with topmost EC; the minimally different analysis with a free choice function variable is given in (40b). The Skolem index is bound by the higher quantifier *every student*, so that the choice of teachers varies with the students.

- (40)a.  $\exists f [[every student] \lambda_1 [t_1 read every book [f_1 teacher]] had recommended] (from Schwarz 2001, ex. 7a)$ 
  - b. [every student]  $\lambda_1$  [t<sub>1</sub> read every book [f<sup>s</sup><sub>1</sub>teacher] had recommended]

#### 4.1.3. A-Indefinites vs. This-Indefinites

To summarize, there is evidence that English a/some-indefinites are ambiguous between a quantificational reading and a different reading (referential or choice function);<sup>15</sup> the latter reading gives an indefinite the appearance of taking long-distance scope. Some analyses (Fodor and Sag 1982, Kratzer 1998) tie the readings of long-distance indefinites to some form of speaker knowledge, while others (Winter 1997, Reinhart 1997) do not consider speaker knowledge at all. I will now consider how these proposals relate to my analysis of *this*-indefinites.

First, speaker knowledge and noteworthiness do not play the same role in the analysis of *a*-indefinites as they do for *this*-indefinites. Even for the proposals which consider speaker knowledge (Fodor and Sag, Kratzer), an explicit expression of speaker knowledge or noteworthiness is not crucial. In (34a), for instance, *a teacher* receives a referential (or choice function) reading as long as it scopes out of the *that*-island; no statement of what makes a particular teacher noteworthy is required.<sup>16</sup> In contrast, we have seen that the use of *this*-indefinites does require an expression of noteworthiness.

<sup>15</sup> One exception is Winter (1997), for whom there are no quantificational readings of indefinites at all.

<sup>&</sup>lt;sup>16</sup> Fodor and Sag do note that RC-modification (which provides additional information about the referent) makes the long-distance, obligatorily referential reading easier to bring out (see also footnote 11). However, long-distance readings are also possible without RC-modification.

Furthermore, an *a*-indefinite which does not take long-distance scope is never obligatorily referential. Thus, in (41a), the *a*-indefinite may receive a referential or choice function reading (giving the appearance of wide scope) or may be quantificational (taking wide scope over *wants*, as any quantifier can). While the expression of speaker knowledge may make the referential/ choice function reading more likely, nothing in Fodor and Sag's or Kratzer's analysis *requires* the indefinite in this instance to be non-quantificational. In contrast, the *this*-indefinite in (41b) is, under my proposal, obligatorily referential.

- (41)a. Sarah wants to talk to a colleague of mine Jane Brown, who is very famous.
  - b. Sarah wants to talk to this colleague of mine Jane Brown, who is very famous.

And finally, *this*-indefinites do not appear to have intermediate scope readings on a par with *a*-indefinites: in (42), the teachers do not vary with the students. In fact, *this*-indefinites, unlike *a*-indefinites, can never scope under a higher quantifier (43a), even when bound variables force this reading (43b).<sup>17</sup>

- (42)a. Every student read every book that *this teacher* had recommended.
- (43)a. Every girl saw a/\*this great movie (Alice saw "Harry Potter", Laura saw "Lord of the Rings", etc...).
  - b. [Every girl]<sub>i</sub> saw a/\*this movie that she<sub>i</sub> liked (Alice saw "Harry Potter", Laura saw "Lord of the Rings", etc...).

These differences suggest that long-distance a/some-indefinites arise from a different mechanism than do *this*-indefinites. The long-distance readings of a/some-indefinites arise through a choice-function mechanism and are not tied to any felicity conditions. On the other hand, *this*-indefinites have truly referential readings, with the felicity condition of noteworthiness.

My analysis of *a*-indefinites therefore differs from those of Fodor and Sag (1982) as well as Kratzer (1998). Since there are no felicity conditions on the use of *a*-indefinites, an *a*-indefinite neither denotes a particular individual that the speaker has in mind, nor is tied to a particular choice function that the speaker has in mind. On my view, the readings of *a*-indefinites may

 $<sup>1^{7}</sup>$  Three native speakers (linguists) were asked to judge the sentences in (43) and found the distributive readings of *this*-indefinites to be impossible. The same speakers found *this*-indefinites fine on the widest-scope reading.

correspond either to regular quantificational readings or to existentially closed choice functions, per Reinhart (1997)/Winter (1997). In my terminology, both types of readings are non-specific.

## 4.2. Indefinites with A Certain

Indefinites of the form *a certain X* have received much attention in the literature on specificity. I now briefly discuss the behavior of *a certain*-indefinites, and show how they are similar to, as well as different from, *this*-indefinites.

## 4.2.1. Properties of A Certain Indefinites

It is well known that *a certain*-indefinites are more restricted in their interpretation than regular *a*/*some*-indefinites (see Hintikka 1986, Kratzer 1998, Schwarz 2001, Farkas 2002, among others). Notably, like *this*-indefinites, they cannot scope under intensional operators, as shown in (44).

- (44)a. Mary wants to read *a book* any book will do.  $\checkmark$  narrow scope,  $\checkmark$  wide scope
  - b. Mary wants to read a certain book #any book will do.
     \*narrow scope, √ wide scope

However, unlike *this*-indefinites, *a certain*-indefinites may scope under higher quantifiers, as shown in (45a), where the dates vary with the men. They may have intermediate scope readings, as in (45b), where the indefinite scopes above the *if*-clause but below the higher quantifier.

(45)a. Every man forgot *a certain date*: his wife's birthday.

(from Hintikka 1986)

b. Every professor will rejoice if *a certain student of his* cheats on the exam. (from Ruys 1992, p. 114)

Kratzer (1998) notes that, in the absence of bound pronouns, intermediate scope readings of *a certain*-indefinites are difficult or impossible to get. This is shown in (46): the bound variable pronoun in (46a) makes the intermediate scope reading obligatory, while in (46b), the widest-scope interpretation of the indefinite is highly preferred.

- (46)a. [Every professor]<sub>i</sub> rewarded every student who read *a certain* book she<sub>i</sub> had reviewed for the New York Times.
  - b. Every professor rewarded every student who read *a certain book I had reviewed for the New York Times.*

(Kratzer 1998, p. 168)

The wide-scope-taking behavior of *a certain*-indefinites has led many linguists, including Kratzer (1998), to treat them as *specific*. This view is supported by the observation that they require some form of knowledge on the part of the speaker. Abusch and Rooth (1997, p. 15) state that the contribution of *a certain* in (47) "would be that the speaker can answer the question *which city is it*?" (this observation is attributed to Lauri Carlson). Farkas (2002) also argues for an identifiability requirement on *a certain*.<sup>18</sup>

# (47) Solange has moved to a certain city in Italy.

Thus, *a certain*-indefinites pattern in between *a*/*some*-indefinites and *this*-indefinites: they obligatorily take wide scope over intensional/modal operators, but may scope under higher quantifiers. They also carry some form of a felicity condition that makes reference to the speaker's state of mind.

### 4.2.2. Choice Function Interpretations of A Certain-Indefinites

Schwarz (2001) examines the behavior of *a certain*-indefinites, and contrasts it with that of *a/some*-indefinites, showing that only *a certain*-indefinites have truly functional readings. To illustrate the point fully, Schwarz shows that *a/some*-indefinites which can scope out of islands (i.e., long-distance indefinites) nevertheless cannot have a functional reading. In (48), both *a certain woman he knows* and *some woman he knows* can take intermediate scope, so that for every boy x, there is a woman y, such that x ate all the cookies that y brought. On the other hand, the two sentences in (49) have different readings. (49a) can mean that every boy who hates his mother will develop a serious complex; hating an aunt is not sufficient for developing the complex. (49b), on the other hand, means that every boy who hates *any* woman that he knows will develop a serious complex.

(ii) I dreamt that I had to catch a certain unicorn. (from Farkas 2002, p. 16)

<sup>&</sup>lt;sup>18</sup> Abusch and Rooth (1997) further note that *a certain*-indefinites may pick up on attitudes other than those of the speaker, as in (i), where *a certain* picks up on a communication attitude.

<sup>(</sup>i) There was a story in Spy about Solange. According to the story, she has moved to *a certain remote island in the Pacific*. I don't know which one, it was some exotic-sounding place.

<sup>(</sup>from Abusch and Rooth 1997, p. 15)

Farkas (2002) also notes that *a certain* does not have to be interpreted with respect to the world of evaluation. In (ii), the indefinite may either take widest scope or appear in the scope of *dream*.

This behavior of *a certain*-indefinites parallels that of *this*-indefinites, as discussed in footnote 8, and may be explained in similar ways. See Abusch and Rooth (1997) and Farkas (2002) for DRT-based analyses.

- (48)a. Every boy ate all the cookies that *a certain woman he knows* had brought.
  - b. Every boy ate all the cookies that *some woman he knows* had brought.
- (49)a. Every boy who hates *a certain woman he knows* will develop a serious complex.
  - b. Every boy who hates *some woman he knows* will develop a serious complex. (from Schwarz 2001)<sup>19</sup>

Schwarz concludes that *a certain*-indefinites are interpreted through a Kratzer-like free-variable choice function mechanism, with the intermediate scope readings arising from Skolemization, as described in section 4.1.2. Thus, in (49a), there is a contextually determined function (such as the mother function) which maps each boy to a particular woman (his mother). Per Kratzer (1998), the presence of a bound variable facilitates the intermediate scope reading by making the function from boys to women contextually relevant (in the absence of a bound variable, the choice function picks up a particular woman known to the speaker).

On Schwarz's analysis, *a certain*-indefinites are the only type of English indefinite to have free variable choice-function readings. On the other hand, *a*/*some*-indefinites are interpreted either quantificationally (with scope-shifting accounting for the long-distance readings) or through existentially closed choice functions (but see Chierchia 2001 and Schwarz 2001 for problems faced by the analysis of existentially closed choice functions in downward-entailing environments).

Schwarz's analysis is fully compatible with what I have argued so far: like Schwarz, I have been treating *a*/some-indefinites as involving no special condition of speaker knowledge or referentiality. I adopt Schwarz's analysis of *a certain* as an expression of a free variable. First of all, this analysis captures the differences between *a certain* and *this*<sub>ref</sub>: only the former gives the appearance of narrow scope under a higher quantifier, thanks to the possibility of Skolemization. This contrast is illustrated in (50), where the continuation in parentheses is intended to bring out the Skolemized reading of the indefinite, on which the movies vary with the girls.<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Schwarz uses *someone* in (48b) and (49b); I am substituting it with *some woman he knows* to create a closer parallel to *a certain woman he knows*.

<sup>&</sup>lt;sup>20</sup> The judgments in (50) are due to the same three speakers as the judgments in (43). All three speakers found use of *a certain* here grammatical (although two of the three speakers noted that it is slightly odd), and found use of *this*<sub>ref</sub> impossible.

(50) [Every girl]<sub>i</sub> saw *a certain*/\**this* movie that she<sub>i</sub> liked (Alice saw "Harry Potter", Laura saw "Lord of the Rings", etc...)

At the same time, we have an account for the intuition that *this*<sub>ref</sub> and *a certain* are both 'specific': both types of indefinites make reference to the speaker's state of mind. In the case of *this*<sub>ref</sub>, the speaker has in mind a particular individual, and in the case of *a certain*, the speaker has in mind a particular choice function.

The precise way in which speaker knowledge comes into play may be different for the two types of indefinites, however. Even if we abstract away from register (*this*<sub>ref</sub> is used only in colloquial spoken English, while *a certain* is typically used only in formal speech and writing), there are apparent differences between the felicity conditions on these two elements. For instance, recall the example in (20a), repeated in (51a) below. While (51a) is a perfectly felicitous use of *this*<sub>ref</sub> to indicate the speaker's surprise at finding a blue apple, the replacement of *this* by *a certain* in (51b) leads to infelicity (thanks to Ken Wexler, p.c., for pointing this out).

(51)a. I found *this blue apple* on my plate!b. #I found *a certain blue apple* on my plate!

A possible explanation is that the felicity conditions on use of *a certain* are not those of noteworthiness (or at least, not only noteworthiness). Following Abusch and Rooth (1997), I assume that the felicity of *a certain* is related to identifiability: in order for (51b) to be felicitous, the speaker needs to be able to answer the question, *Which blue apple is it?*, where the answer somehow sets this blue apple apart from other blue apples (e.g., an acceptable answer is "My grandmother's blue apple, which has been lost since last week!"; simply saying "The blue apple that I just found!" is not a felicitous response).

The felicity conditions on *a certain* are tied to the adjective *certain* rather than to the article *a* (cf. *I found certain blue apples on my plate*, which appears to have the same felicity conditions as (51b)). Other adjectives, notably *specific* and *particular*, also appear to make reference to some form of speaker knowledge, as do the equivalents of *certain* in other languages (e.g., German *ein bestimmter*, Dutch *zeker*, Russian *opredelennyj*; see Haspelmath 1997, p. 38).<sup>21</sup> The existence of such adjectives, which have varying felicity conditions, suggests that it may be fruitful to view *specificity* as

 $<sup>\</sup>frac{21}{21}$  There are also other adjectives besides *certain*, notably *local, different*, and *another*, that have been argued to have implicit arguments which can have bound variable interpretation (see Mitchell 1986, Partee 1989, Kratzer 1998).

broad phenomenon, of which the semantics in (23) is a particular instantiation. Note that *definiteness* is a similarly broad phenomenon: *the* is definite, but so are demonstratives, pronouns, and possessives. There are important differences among these elements, but there is also similarity, which has to do with uniqueness/familiarity to the hearer. Similarly, different elements expressing specificity all have in common relevance to the speaker, but may differ in the precise felicity conditions. While the differences between various definite expressions are well understood, the variations among different specific expressions have not received much attention. By providing a detailed discussion of *this*<sub>ref</sub>, and highlighting the differences between *this*<sub>ref</sub> and *a certain*, I hope to provide a starting point for an investigation into these differences.

## 4.3. Specificity as Presuppositionality

I have proposed that  $this_{ref}$ , is a marker of specificity in English. Crucially, the kind of specificity that I am concerned with is inherently different from the kind of specificity discussed by Enç (1991) and Diesing (1992), among others.

## 4.3.1. Presuppositional Indefinites

Enç's (1991) view of specificity is based on the behavior of accusative case marking in Turkish. Accusative case marking in object position in Turkish is obligatory for definites, for quantificational DPs with determiners like *every*, *most*, and *all*, and for overt partitives (see Enç 1991, Kelepir 2001, among others). Indefinites in object position, on the other hand, may appear both with and without accusative case marking.

Enç argues that accusative case marking on Turkish indefinites marks specificity. However, Enç's view of specificity is quite different from the view of specificity that I have been discussing here. Enç views specificity as partitivity: she argues that specific indefinites in Turkish (i.e., indefinites marked with accusative case) denote members of a previously mentioned set. For instance, according to Enç, the presence of accusative case on an indefinite such as *iki kiz*, 'two girls', results in the partitive interpretation 'two of the girls', while lack of accusative case marking indicates a non-partitive interpretation.

Similarly to Enç, Diesing (1992) argues that specific indefinites crosslinguistically are always presuppositional – i.e., they presuppose the existence of the set denoted by the restrictor NP. However, unlike Enç, Diesing does not consider specific (presuppositional) indefinites to be obligatorily partitive: an indefinite such as *some ghosts* is presuppositional as long as the

existence of ghosts is presupposed (as in (53b) below); explicit previous mention of a set of ghosts is not necessary (although previous mention is the most common way of establishing presuppositionality with indefinites).

One of the tests that Enç and Diesing both use to distinguish presuppositional and non-presuppositional indefinites is occurrence in *there*constructions. Enç shows that partitive indefinites are incompatible with *there*-insertion (52). Diesing, following Milsark (1974), argues that only those determiners which assert rather than presuppose existence occur in *there*-constructions, as illustrated in (53).

- (52) \*There are some of the cows in the backyard. (Enç 1991, p. 14)
- (53)a. There are some ghosts in my house. (unstressed *some*, asserts existence of ghosts)
  - b. SOME ghosts are in the pantry; the others are in the attic. (presupposes the existence of ghosts)

(Diesing 1992, p. 59)

Diesing ties specificity to syntactic position. Under her *Mapping Hypothesis*, specific (quantificational, presuppositional) indefinites map into the restrictive clause (IP-level), while non-specific (cardinal, non-presuppositional) indefinites map into the nuclear scope (VP-level).

## 4.3.2. Different Types of Specificity

Importantly, the view of specificity advocated by Enç and Diesing is quite distinct from the kind of specificity encoded by  $this_{ref}$ . Indefinites headed by *this* do not presuppose existence: for instance, in order for the speaker to make the statement in (54), it is not necessary that a contextually salient set of teapots be presupposed to exist (in fact, as noted by Prince 1981, among others, *this*-indefinites are typically used to introduce a completely new discourse topic).

(54) I was walking down a city street, and suddenly *this big teapot* landed on top of my head! It was thrown out of somebody's window!

Furthermore, as discussed in section 2.2, and as shown again in (55), *this*-indefinites can easily appear in the existential *there*-construction, which suggests that they do not carry a presupposition of existence.

(55) There is this plant in my garden that's been giving me a lot of trouble.

Prince (1981) argues that *this*-indefinites do in fact presuppose existence, on the basis of the fact that they obligatorily take wide scope over negation. The lack of narrow scope under negation is, however, explained under my analysis of *this*-indefinites as indexicals.

Interestingly, while *this*-indefinites can occur in affirmative *there*-sentences, they cannot occur in negative *there*-sentences, as shown by (56).

(56) \*There isn't this plant in my garden that's been giving me a lot of trouble.

Once again, this is explained by my analysis of *this*-indefinites as indexicals. A negative *there*-construction denies existence of the set denoted by the indefinite in its scope. At the same time, the semantics of a *this*-indefinite require that the speaker intend to refer to a particular individual. It is not possible for the speaker to intend to refer to an individual whose existence she is simultaneously denying. Note that this explanation does not require a *presupposition* of existence: unlike presuppositional DPs, *this*-indefinites are fully compatible with *assertion* of existence, as shown by (55).

The behavior of *this*-indefinites in *there*-construction is paralleled by *a certain*-indefinites. As noted by Enç (1991), among others, indefinites such as *a certain young man* may appear in affirmative *there*-constructions, as in (57a). However, *a certain*-indefinites may not appear in negative *there*-constructions, as shown in (57b).

- (57)a. There is a certain young man at the door.
  - b. \*There isn't a certain young man at the door.

These facts show that *a certain* indefinites, like *this*-indefinites, are not presuppositional. In fact, the behavior of *a certain*-indefinites led Enç to argue for the existence of two classes of specifics – partitive specifics, which presuppose existence, and relational specifics such as *a certain*-indefinites, which do not (Enç proposes that both types of specifics involve linking to a previously established referent).

The contrast between affirmative and negative sentences in (57) receives an account under the analysis of *a certain* as a free variable choice function (see section 4.2.2): informally, (57b) states that a contextually determined choice function picks out a young man out of the set of young men; at the same time, the negative *there*-construction denies the existence of a set of young men. The resulting conflict leads to ungrammaticality.

Thus, the kind of specificity encoded by  $this_{ref}$  and *a certain* (which involves felicity conditions on the utterance) is quite distinct from presuppositionality.

# 4.3.3. Morphological Expression of Presuppositionality

The question next arises whether there is any lexical item which encodes presuppositionality – i.e., a lexical item which carries a presupposition of existence, but no other presuppositions or felicity conditions. On the lexical entry in (2), definites carry a presupposition of existence, but it is tied with a presupposition of uniqueness/maximality. Similarly, while partitive expressions such as one of the books presuppose the existence of a set of books, this presupposition arises from the presuppositions of existence and maximality on the definite *the books*, rather than a special lexical entry for the partitive. What about other determiners? Diesing (1992), following Milsark (1974), argues that weak determiners such as a, some, two, many, etc., are ambiguous between cardinal and presuppositional readings (Diesing also extends her analysis to the scrambling facts of German). Diesing uses examples such as (58) to illustrate her point: according to Diesing, (58) is ambiguous between a presuppositional reading of three ghosts (i.e., where a set of ghosts is presupposed to exist, and where the DP is a covert partitive, meaning three of the ghosts) and a cardinal reading of three ghosts (where there is no presupposition that ghosts exist).<sup>22</sup>

(58) Every person saw three ghosts.

Reinhart (1995), in a critique of Diesing, argues that the fact that (58) is compatible with both contexts (the context where ghosts are presupposed to exist, and the one where they aren't) is insufficient evidence for positing an ambiguity of *three ghosts*. Von Fintel (1998), while in full agreement with Reinhart's critique, uses tests for the presupposition projection to show that sentences with clearly presuppositional readings of indefinites do exist. I give one of von Fintel's examples in (59).

- (59) I'm not sure yet whether there are any mistakes at all in this book manuscript, but we can definitely not publish it...
  - a. if there turn out to be some major mistakes in there
  - b. *#*if some mistakes are major

As von Fintel discusses, there is a clear contrast between (59a) and (59b), which is explained if (59b) carries a presupposition of existence: the presupposition that some mistakes exist is in conflict with the assertion that "I'm not sure whether there are any mistakes." (Von Fintel shows a similar effect for scrambled indefinites in German.)

<sup>&</sup>lt;sup>22</sup> Note that the sentence is actually ambiguous in multiple ways, since under both presuppositional and non-presuppositional readings, *three ghosts* may take wide or narrow scope with respect to *every person*. This is irrelevant for the present discussion.

Thus, there are clearly sentences in which indefinites have presuppositional readings. As von Fintel discusses, there are two ways of accounting for the presupposition of existence in (59b). One is to posit a lexical ambiguity of weak quantifiers, along the lines of the Milsark/Diesing proposal. The alternative is to attribute the presuppositionality effect to a different source, such as the topic-focus structure of the sentence, along the lines of Reinhart (1995).

The view that presuppositionality is encoded at the DP-level would receive support if lexical items were found that unambiguously and obligatorily encode presuppositionality. Diesing (1992), following Enç (1991), argues that accusative case markers in Turkish are such markers of presuppositionality. However, Kelepir (2001) shows that accusative marked indefinites are in fact possible in certain non-partitive contexts, and proposes an analysis in terms of choice functions. I know of no other language which has unambiguously presuppositional lexical items. If in fact there are no such languages, a possible explanation is that presuppositionality comes from information structure or another sentence-level source, rather than being encoded at the DP-level. On the other hand, the view that presuppositionality is lexically encoded does receive some preliminary support from acquisition data, as discussed in section 6.4. I leave the issue open for the time being, and focus on *specificity as noteworthiness* for the remainder of this paper.

# 4.4. Summary

In this section, I have reviewed the referential, choice-function, and presuppositional analyses of English indefinites, and have shown that none of them can account for the behavior of referential *this*. I conclude that while *a* (and, by extension, *some*) may be ambiguous (between a quantificational reading and a choice-function reading; between a cardinal reading and a presuppositional reading; etc.), it does not have the reading that I assign to referential *this*. Only *this*<sub>ref</sub>, alone among English articles, can encode specificity as noteworthiness (although adjectives such as *certain* appear to bear similar felicity conditions).

My concern now is with the distribution of *the*, *a*, and *this*<sub>ref</sub> in English, as well as with the distribution of definite and specific determiners in other languages. I move on to this next.

## 5. Specificity and Definiteness Crosslinguistically

In this section, I will consider some possible ways in which languages encode definiteness and specificity, and present relevant crosslinguistic data.

# 5.1. Classification of Determiners

Given the discussion in this paper so far, it is now possible to classify each DP as satisfying or not satisfying the conditions on definiteness, as well as satisfying or not satisfying the conditions on specificity.

#### 5.1.1. Article Specifications

It is also possible to classify lexical items as *definite*, with the standard Fregean lexical entry for the definite article ((60a)), as *specific*, with the lexical entry that I have proposed ((60b)), or as *underspecified* for both definiteness and specificity. For the purpose of this paper, I ignore number specifications and focus on singular DPs only. In principle, everything that I say about singular DPs can be extended to plural DPs.

(60)  $\begin{aligned} & [[def]]^{c, i} = \lambda \alpha_{\langle e, t \rangle} \text{. the unique individual x such that } [[\alpha]]^{c, i}(x) = 1. \\ & [[sp]]^{c, i} = \lambda \alpha_{\langle s, et \rangle} \text{. the individual } x_c, \text{ as long as the following conditions on the context c are fulfilled: } \exists \phi_{\langle s, et \rangle} \text{ such that } s_c \text{ in } w_c \\ & \text{at } t_c \text{ considers } \phi \text{ noteworthy, and } s_c \text{ in } w_c \text{ at } t_c \text{ intends to refer to exactly one individual } x_c, \text{ and } \alpha(w_c)(x_c) = \phi(w_c)(x_c) = 1. \end{aligned}$ 

Importantly, the true opposite of a *definite* or a *specific* article is an article underspecified for definiteness or specificity, respectively, rather than an article expressly specified as *indefinite* or *non-specific*. An article specified as *indefinite* would have to carry a condition of non-uniqueness (see Heim 1991, and section 3.4.1 of this paper, for why *a* and *this*<sub>ref</sub> do not carry such a condition). An article specified as *non-specific* would have to carry a condition such as "lack of speaker knowledge."<sup>23</sup> Such articles would not be true opposites of definite and specific articles, respectively: there are contexts which involve neither uniqueness nor non-uniqueness (e.g., *I saw a unicorn* does not presuppose the existence of either one unicorn or a set of unicorns); and there are contexts which involve neither speaker

<sup>&</sup>lt;sup>23</sup> There is evidence that something akin to *no speaker knowledge* is frequently encoded by indefinite pronouns. Haspelmath (1997, pp. 45–48) states that out of the 40 languages in his sample, ten were found to have indefinite pronoun series expressing "lack of knowledge of the speaker". Examples of this phenomenon include indefinite pronouns preceded by *irgend* in German; the wh-*to* series pronouns in Russian (e.g., *kto-to*, 'someone'); and the *kazh* series pronouns in Lithuanian. Determiners which are part of such indefinite pronoun series appear to behave the same way: for instance, the Russian *kakoj-to* 'some', the determiner in the wh-*to* series, behaves like the corresponding indefinite pronouns in requiring a lack of speaker knowledge. English appears to be fairly exceptional in that the determiner *some* requires "lack of speaker knowledge" (when used with singular NPs, as in *Mary read some book (or other)*), but this is not the case for other frequent members of the series, such as *someone*, *something* (for more on the *some X or other* expression, see Becker 1999).

knowledge of noteworthiness nor lack of speaker knowledge. The discussion throughout this section concerns three article types: definite, specific, and underspecified.

Finally, I assume that there is no such thing as a lexical item which expresses both definiteness and specificity at the same time, since no principle of semantic composition can combine the lexical entries for definiteness and specificity in (60). For the same reason, it is not possible to use a definite article and a specific article within the same DP (cf. \**the this*<sub>ref</sub>, *book*, \**this*<sub>ref</sub> *the book*) – semantic composition would fail.

## 5.1.2. Lexical Insertion

While articles come in three types (definite, specific, and underspecified), the contexts in which they occur come in four types: specific definite contexts, which satisfy the presuppositions on definiteness as well as the felicity conditions on specificity; non-specific definite contexts, which satisfy the presuppositions of definiteness only; specific indefinite contexts, which satisfy the felicity conditions on specificity only; and non-specific indefinite contexts, which satisfy neither.

Lexical insertion of an article into a context proceeds as long as the specification of the article is compatible with the conditions of the context, and as long as *Maximize Presupposition* is not violated. Spoken (colloquial) English serves as an illustration. As discussed in the previous sections, spoken English requires *the* whenever the presupposition of uniqueness has been satisfied; allows both *this*<sub>ref</sub> and *a* whenever the felicity conditions on noteworthiness have been met (as discussed earlier, *this*<sub>ref</sub> may be preferred when *a* is not sufficiently informative); and allows only *a* in the absence of both presuppositions and felicity conditions.

<sup>(</sup>Footnote continued)

In addition to having "no speaker knowledge" pronoun series, languages also have pronoun series which can occur only in the scope of intensional/modal operators (e.g., the Russian wh-*nibud* series, the Lithuanian wh-*nors* series, etc.), as well as pronoun series which require "speaker knowledge", i.e., express specificity in the sense discussed in this paper (e.g., the *koe*-series in Russian, the *kai*-series in Lithuanian).

I conclude that the encoding of "speaker knowledge" vs. "lack of speaker knowledge" and wide scope vs. narrow scope by indefinite pronoun series is a phenomenon distinct from specificity on articles. To the extent that determiners can encode "lack of speaker knowledge", they can apparently do so only when they are a part of an indefinite pronoun series (such as the English *some* or the Russian *kakoj-to*). The reason for this may have something to do with the origin of the "lack of speaker knowledge" pronouns. According to Haspelmath (1997, pp. 130-133), some (but not all) of the pronoun series which express "lack of speaker knowledge" in fact arose as grammaticizations of clauses which deny speaker knowledge. For instance, the Old English *nathwa* 'somebody' arose from *new at hwa* '(I) don't know who', while the Lithuanian *kazhkas* 'somebody' arose from *kas zhino kas* 'who knows who'.

## 5.2. A Note about Discourse-Based vs. Grammatical Distinctions

In the discussion throughout this section, I am focusing only on articles which encode the discourse-based distinctions of definiteness and specificity. However, languages also encode grammatical (non-discourse-based) distinctions in their article systems: examples include articles in St'át'imcets (see Matthewson 1999) and in Maori (see Chung and Ladusaw 2003), among others. Matthewson (1999) analyzes St'át'imcets as having two types of articles: "wide scope" determiners (ti...a and others) which receive choice function interpretations with top-level existential closure; and the polarity determiner ku, which must be licensed by a c-commanding operator. Chung and Ladusaw (2003) analyze Maori as having two indefinite determiners (as well as a definite determiner, te): he, which require event-level Existential Closure, and  $te^{-tahi}$ , which is interpreted through a Reinhart/Winter-style choice function.

This means that the spectrum of possible article interpretations needs to be extended: articles which are underspecified for both definiteness and specificity may encode a variety of quantificational and choice-function readings. It would be productive to investigate whether there is a constrained set of interpretations that indefinite, non-specific articles can encode crosslinguistically. However, such an investigation is beyond the scope of this paper. I restrict my attention to languages which encode only the discoursebased distinctions of definiteness and specificity in their article systems. I believe that definiteness and specificity are qualitatively distinct from other semantic properties that articles can encode in that they are discourse-based: a definite or specific article can appear in any syntactic configuration (e.g., it does not require a c-commanding operator, is not restricted to the VP-domain or to the subject position, etc.), as long as the relevant conditions on speaker/hearer interactions are satisfied.

## 5.3. Crosslinguistic Evidence for Specificity

Lyons (1999) notes that a number of languages use articles to encode *referentiality*, where "referentiality and non-referentiality are extended to embrace instances where the speaker may be in a position to identify the referent of the noun phrase but chooses to treat its identity as significant or not" (Lyons 1999, p. 178). This is reminiscent of the specificity distinction that I have been discussing.

## 5.3.1. Two-Article vs. Three-Article Languages

Of the languages discussed by Lyons, Samoan is of particular interest because it encodes specificity while having only two articles, rather than

three, as spoken English does. Importantly, a language which has only two articles cannot encode both definiteness and specificity: if one article is specified as *definite* or *specific*, the second article must by necessity be underspecified. If the second article is also specified for definiteness or specificity, then a third article will be needed to cover cases which are neither definite nor specific, and we will no longer be dealing with a two-article language.<sup>24</sup> A case in point is standard (written) English, with no *this*<sub>ref</sub>: the two articles of standard English, *the* and *a*, encode the definiteness distinction but not the specificity one. Due to "Maximize Presupposition", *the* occurs in definite environments (specific as well as non-specific), while the underspecified *a* is restricted to indefinite environments (specific as well as non-specific).

In contrast, if a language uses its two articles to encode the specificity distinction, it should use one article to mark specific contexts (definite as well as indefinite) and a different (underspecified) article to mark non-specific contexts (definite as well as indefinite). Note that since there is no "Maximize felicity conditions" principle, as discussed earlier, the distinction between the two articles should be much less rigid than that between *the* and *a*: an article underspecified for specificity may in principle be used in a context where the felicity conditions on specificity have been met, as long as the speaker chooses not to signal noteworthiness.

## 5.3.2. Samoan: A Two-Article Language with a Specificity Distinction

A good candidate for a two-article language with a specificity distinction is Samoan, discussed by Mosel and Hovdhaugen (1992) and Lyons (1999). According to Mosel and Hovdhaugen, Samoan uses one article (*le*) with specific DPs, and another article (*se*) with non-specific DPs. As Mosel and Hovdhaugen (1992, p. 259) state, "[t]he specific article singular le/l = ARTindicates that the noun phrase refers to one particular entity regardless of whether it is definite or indefinite."

Consider (61). In (61a), the speaker is beginning to tell a story, introducing new characters who will be important later on in the story. This is arguably a specific indefinite use of *le*: in English, *this*<sub>ref</sub> could be used in this context.

<sup>&</sup>lt;sup>24</sup> For the purposes of this paper, a "no article" option for singular DPs is considered on equal terms with overt articles: so if a language has a definite article, a specific article, and no article whenever both definiteness and specificity are absent, I classify it as a three-article language. In fact, Modem Hebrew is precisely such a case, as discussed in section 5.3.3.

In (61b), the story continues – the characters have been previously mentioned, so the DPs are definite: again, *le* is used. Mosel and Hovdhaugen give other examples of *le* use to mark definite and specific DPs (as well as generics in affirmative sentences and predicative NPs in equative clauses). There is no plural specific article: the plural counterpart of *le* is absence of an article.

(61)a. Specific indefinite contexts:

<i>'O</i>	le	ulugāli'i	i, fānat	u = a	lā	
PRES	ART	couple	give	birth AR	$\Gamma = Poss  3.6$	du.
tama	<i>`</i> 0	le	teine	<i>`</i> 0	Sina	
child	PRES	ART	girl	PRES	Sina	
"There	e was <u>a</u>	couple w	ho had	<u>a</u> child, <u>a</u>	girl called S	Sina."

b. Specific definite contexts:

Māsani	<i>`</i> 0	le	tamāloa	е	usua'i = i	ina
used	PRES	ART	man	GENR	get up e	arly = ES
lava	ia	'ae nonofo	<i>`</i> 0	le	fafine	
EMPH	3sg	but stay(pl.)	PRES	ART	woman	
$ma \ l = a$	= na		tama	i	le	fale
and AR	T = PO	SS = 3.sg	child	LD	ART	house
"It was the man's practice to get up early and while the						
woman	stayed	at home with	her child	.,,		

(Mosel and Hovdhaugen, p. 259)

Consider next the use of se: "[T]he nonspecific singular article se/ s = ART(nsp.sg.) expresses the fact that the noun phrase does not refer to a particular, specified item, but to any member of the conceptual category denoted by the nucleus of the noun phrase and its adjuncts" (Mosel and Hovdhaugen 1992, p. 261). This use of se is illustrated in (62a), where a coconut is a narrow-scope indefinite. Crucially, se is also used in wide-scope indefinite environments, as illustrated in (62b). This sentence is about "a certain lady whose identity has not been recognized by the speaker or is not of any interest to him"(Mosel and Hovdhaugen 1992, p. 261); this is arguably a [non-specific] indefinite use of se.

- (62) Non-specific indefinite contexts:
  - a. 'Au=mai se niu! take=DIR ART(nsp.sg.) coconut "Bring me <u>a</u> coconut [no matter which one]!"

b.	<i>Sa</i> PAST	<i>fesili</i> ask	<i>mai</i> DIR	<i>se</i> ART (nsp.sg.)	<i>tamaitai</i> lady	po = o O-PRES
	<i>ai</i> who	l = o ART = Poss	ma 1.exc.du.	tama. father	5	× ·
	' <u>A</u> lady asked us who our father was.'					

(Mosel and Hovdhaugen 1992, p. 261)

The specific and non-specific articles can be used in very similar contexts. As Mosel and Hovdhaugen (1992, p. 262) note, "comparing the beginnings of stories shows that common noun phrases introducing the discourse topic are marked by the nonspecific article if its exact identity is not known or is unimportant." This is shown by the contrast in (63): the discourse topic is important in (63b), but is unimportant in (63a). This is consistent with my prediction that the distinction between specific and non-specific articles is not a rigid one: in wide-scope environments, the speaker can use either, depending on whether she wants to draw attention to a particular individual. In the English equivalents of the sentences in (63), *this*<sub>ref</sub> would similarly be possible but not obligatory.

(63)a.	Sa i ai se matua=moa ma					
	PaST exist ART (nsp.sg.) old = hen and					
	s = a = na toloai. O $l = o$ latou					
	ART(nsp.sg.) = Poss = 3.sg. brood. PRES $ART = Poss 3p1$ .					
	<u>aiga</u> o lalo o le fai. <u>family</u> PRES under Poss ART banana=tree					
	"Once upon <u>a</u> time there was <u>a</u> hen and her brood. Their home was beneath the banana tree."					
b.	Sa i ai le ulugalii o Papa le tane PAST exist ART couple PRES Papa ART husband					
	a o Eleele le fafine I Manua. but PRES Eleele ART woman LD Manua					
	"There was <u>a</u> couple, Papa, the husband, and Eleele, the wife, who lived in Manua." (Mosel and Hovdhaugen 1992, p. 262)					

Most of the discussion on use of *se* concerns indefinites (*se* and its plural counterpart, *ni*, are also used in indefinite generic contexts, in negative generic sentences, and in the predicative position of negative predicative constructions). However, note that in (63a), the non-specific article *s* is used as part of the possessive determiner *her*; in English, the DP *her brood* would be

considered definite. Mosel and Hovdhaugen have some other examples of use of *se* with definite DPs, given in (64). The possessives *your family* and *your father* are obligatorily definite in English. To express the meaning that *se* contributes to the possessive phrases in (64), Mosel and Hovdhaugen insert phrases like *whoever that is* in the translation to indicate the lack of specificity.

- (64) Non-specific definite contexts:
  - a. *Alui se tou aiga e moe. Pe* go LDART(nsp.sg.) 2.pl. family GENR sleep. Q *se tama a ai*! ART(nsp.sg.) boy POSS who

"Go to your family – whoever that may be – and sleep! [I wonder] whose boy you might be!" [said to a boy who is selling necklaces at night in front of a hotel]

b. Tapagai lava ulavale 1 = o = u[term of abuse] EMPH troublesome ART = Poss = 2.sg. pua'a po = 'o ai s = o = u tamā.<sup>25</sup> pig Q = PRES who ART(nsp.sg.) father "Oh you filthy little bastard, you pig, whoever is your father."

(Mosel and Hovdhaugen 1992, p. 262)

Based only on the few examples in Mosel and Hovdhaugen, it is impossible to develop a theory of article semantics in Samoan. However, a preliminary generalization can be made: Samoan is an example of a language which uses one article in specific environments and a different article in non-specific environments.

## 5.3.3. Modern Hebrew: A Three-Article Language

A language with three articles for encoding discourse-based distinctions should have the following distribution of articles: one definite article, one specific article, and one underspecified article. I have already discussed spoken English as an example of such a three-article language, with *the*, *this*<sub>ref</sub>, and *a*. Another example is Modern Hebrew.

Modem Hebrew has a definite article, ha, and no indefinite article. It does, however, have a specificity marker on indefinites, xad, 'one', as was pointed out by Givón (1981). For the purposes of this paper, Hebrew can be considered a three-article language, with a definite article, a specific article,

 $<sup>^{25}</sup>$  It is not clear whether *your father* in this case is predicative, and whether this makes any difference for article use.

and a third option (a null article or a bare article-less NP) used in the absence of both definiteness and specificity.

As Borer (2005, Ch. 5) explains, "[i]n contrast with the usual use of 'exád', 'one', on which it takes primary stress and occurs as a modifier of a noun which itself receives a secondary stress (cf. [(65a)]), when 'one' occurs as a specificity marker it is unstressed and phonologically reduced, essentially a clitic on the head N, which in this case bears the primary stress, as illustrated by [(65b)]." Thus, Hebrew is an example of a language in which the specific indefinite determiner is derived not from a definite demonstrative (as in English) but from a numeral (which is inherently indefinite).

(65)a.	baxurá	axát	
	young-woman	one	
	'one young won	nan'	
b.	baxurá. <b>xət</b>		
	'a certain young	woman'	(Borer 2005, ch. 5)

Borer (2005) shows that *xad*-indefinites must take scope over a higher "quantifier ((66a)), while bare indefinites must take narrow scope ((66b))." According to Givón (2001), indefinites marked with *xad* also obligatorily scope over intensional operators, while bare indefinites take narrow scope.

- (66)a. kol geber raqad γim baxurá.xət (\*ve- hi nišga raq 'oto) every man danced with woman.xit (\*and she kissed only him) \*narrowest; √ widest
  'Every man danced with one specific woman (\*and she kissed only him).'
  - b. kol geber raqad γim baxura (ve- hi nišga raq 'oto/\*=rina) every man danced with woman (and she kissed only him/\* = Rina) √ narrowest; \*widest
    'Every man danced with a woman (and she kissed only him).'

(Borer 2005, ch. 5)

In the absence of any operators, both *xad*-indefinites and bare indefinites are possible, as shown in the following example from Givón 1981 (cited in Givón 2001):

(67)a. ...az nixnasti le-xanut sfarim ve-kaniti <u>Sefer-xad</u> then entered-I to-store-of-books and-bought-I book-one ve-ratsti habayta ve-karati oto, ve-ze beemet haya and-ran-I home and-read-I it and-it truly was-it sefer metsuyan... book excellent

"...so I went into a bookstore and bought *a book*, and I ran home and read *it*, and *it* was truly a terrific book..."

b. ...az nixnasti le-xanut sfarim ve-kaniti sefer, ve-ratsti then entered-I to-store-of-books and-bought-I book and-ran-I habayta ve-axalti aruxat erev ve-halaxti li-shon... home and-ate-I meal-of evening and-went-I to-sleep
"...so I went into a bookstore and bought a book, and I ran home and ate supper and went to sleep..." (Givón 2001, p. 456)

Givón (2001, p. 456) explains the difference between (67a) and (67b) as follows: in (67a), "where one runs home and proceeds to read the book and discusses it, the specific referential identity of the book *matters*, it remains *topical* in the subsequent discourse. In [(67b)], one does some 'book-buying', then goes about one's routine. The book is never mentioned again, its specific referential identity doesn't matter." Thus, as is the case with the English *this*<sub>ref</sub> and the Samoan *le*, the Hebrew *xad* is related to discourse prominence, and therefore to noteworthiness. In (67a), the book has the noteworthy property of being terrific: the speaker intends to refer to a particular book, giving it the quality of *noteworthiness*. In contrast, in (67b), the identity of the book that the speaker bought does not matter, and there is nothing noteworthy to set this book apart from other books. Thus, there is good reason to believe that *xad*-indefinites are specific on the definition that I gave.<sup>26</sup>

Definites in Hebrew are incompatible with the *xad* specificity marker. The explanation, I would argue, is the same as for why *this*<sub>ref</sub> is incompatible with definites in English: "Maximize Presupposition".<sup>27</sup>

## 5.3.4. Definiteness and Specificity in Sissala

Another language which appears to have both definiteness and specificity markers is Sissala (a language of the Niger-Congo family). According to

<sup>&</sup>lt;sup>26</sup> One might wonder why non-specific (bare) indefinites in Hebrew *must* take narrowest scope in intensional contexts, given the fact that in English, non-specific indefinites are perfectly compatible with wide scope. Borer (2005) argues that bare indefinites in Hebrew must be existentially closed in the c-command domain of the VP, while English indefinites have no such requirement; Borer further supports this proposal by showing that bare indefinites cannot appear preverbally in Hebrew. In order for a Hebrew indefinite to be interpreted outside of the VP, it must bear lexical marking such as *xad* or *eyze* 'some'.

<sup>&</sup>lt;sup>27</sup> An interesting case is presented by Russian, which, like Hebrew, has a specificity marker derived from a numeral: *odin* 'one'. Although Russian has no definite or indefinite articles, *odin* is used only with indefinites, which does not follow from "Maximize Presupposition". However, there is independent evidence that *odin* bears some form of a "non-uniqueness" condition, which makes it incompatible with all definite contexts. I explore the semantics of *odin* in more detail in Ionin (in preparation), and draw parallels between *odin* and *this one* in English.

Blass (1990, Ch. 6), Sissala has three non-deictic determining particles, which appear postnominally:  $r\acute{e}$  'non-specific',  $n\acute{e}$  'specific', and  $n\acute{a}$  'definite'. (Sissala also uses morphology and/or tonology on the noun itself to distinguish between non-specific, specific, and definite readings.) The definite marker  $n\acute{a}$  behaves much like the English *the*. The distinction between  $r\acute{e}$  and  $n\acute{e}$  appears to be a specificity distinction in the sense discussed so far. Both markers can be used in the absence of any intensional or modal operators, as shown in (68). According to Blass (1990, p. 185), in (68a), "the speaker has no specific market in mind. The purpose of mentioning the market is not for subsequent reference, but merely as part of a characterization of the sort of place he went to,"<sup>28</sup> while in (68b), "the purpose of mentioning the market is."

(68)a.	ν mυ yowó rέ	
	'He went to a market' (non-specific)	
b.	ν mυ yowo nέ	
	'He went to a market' (specific)	(Blass 1990, p. 185)

Furthermore, when the indefinite occurs in the scope of negation, the noun obligatorily has non-specific morphology/tonology, and the determining particle ra is used, as in (69a), or alternatively, no particle at all, if a negative copula is present, as in (69b). This is consistent with my analysis of specificity markers as indexicals. Blass notes that specific indefinite DPs never occur with negation in Sissala, and attributes this to pragmatic oddness (cf. #It is not this<sub>ref</sub> man).

(69)a.	Bál ra <sup>29</sup>
	man neg-article
	'He is not a man' (a typical one)
	'It is not a man' (What you have identified is not a man.)
b.	v to bal.
	it is-not man
	'He is not a man' (a typical one)
	(What you have identified is not a man.) (Blass 1990, p. 188)

Blass goes on to note that  $n\acute{e}$  often occurs on subject-NPs or in discourseinitial utterances, stating (p. 190) that "my hypothesis is that  $n\acute{e}$  is used to

<sup>&</sup>lt;sup>28</sup> Blass further shows that  $r\acute{e}$  is omitted in some non-specific contexts, and hypothesizes that  $r\acute{e}$  is a marker of typicality rather than non-specificity, with non-specificity being marked morphologically or tonologically on the noun itself. Blass similarly analyzes  $n\acute{e}$  as a marker of discourse function, with specificity being expressed through the morphology and/or tonology of the noun.

<sup>&</sup>lt;sup>29</sup> Blass does not provide English glosses for (69a, b), only translations; I have provided the glosses on the basis of Blass's glosses in other examples.

indicate to the hearer that the individual in question *will* play a subsequent role, and that it is thus worth opening an encyclopaedic entry where subsequent information about the individual can be stored." While more investigation into the semantics of Sissala determining particles is needed,<sup>30</sup> the evidence is suggestive that Sissala patterns with spoken English and modern Hebrew in encoding both definiteness and specificity.

## 5.4. Summary

In this section, I discussed the logical possibilities for languages which encode definiteness and/or specificity in their article systems. I have shown that evidence for the reality of the semantic concept *specificity* comes from languages as typologically diverse as Hebrew, Samoan, and Sissala. I have suggested that spoken English, modern Hebrew, and Sissala are examples of three-article languages, which encode both definiteness and specificity. On the other hand, two-article languages encode just one or the other: Samoan marks specificity only, and formal English, as well as various other western European languages, mark definiteness only. The opposing patterns exemplified in standard English and in Samoan are illustrated pictorially in Table 1.

Importantly, while there are many similarities between the uses of specificity markers crosslinguistically, there are also some variations (see footnotes 27 and 30, for instance); the contexts in which *this*<sub>ref</sub> is felicitously used are not necessarily identical to those in which the Hebrew or Sissala specificity markers are used. A detailed survey of the felicity conditions on specificity markers crosslinguistically would probably show some variations in the felicity conditions. As discussed in section 4.2, even within a single language, English, *this*<sub>ref</sub> and *a certain*, both considered markers of specificity, carry slightly different felicity conditions.

<sup>&</sup>lt;sup>30</sup> There are differences between the use of  $n\dot{\epsilon}$  in Sissala and *this*<sub>ref</sub> in English. For instance, the Sissala specificity marker is used in (i) in a postcopular position; the specificity marker here indicates that the storey houses will be talked about further (as indeed they are in the next sentence in the discourse). Referential *this* in English is not typically used in postcopular position, although a sentence such as (ii) is possible, provided the *this*-indefinite carries some modification.

 <sup>(</sup>i) Abijan juse náηá ká jutukni ni Abidjan houses some are storey-houses SDM [= specific discourse marker]
 "Some of the houses of Abidjan are storey houses" (i.e., houses with more than one floor) (Blass 1990, p. 191)

<sup>(</sup>ii) Some of the houses of Abidjan are these multiple-storey houses that are really beautiful...

Furthermore,  $n\acute{e}$  differs from *this*<sub>ref</sub> in that it can be used generically in contexts where English might use *the* (see Blass 1990, pp. 233–235).

a) The Definiteness option (English)			b) The specificity option (Samoan)			
	definite	indefinite		definite	indefinite	
specific			specific	le		
	the	а				
non-specific	uie	u	non-specific			
				se		

Table 1. Possible options of article choice in two-article languagesa) The Definiteness option (English)b) The Specificity option (Samoan)

What unites all instances of specificity markers, however, is reference to the speaker's state of mind, which can be expressed as a felicity condition, coupled with a lack of presuppositions (i.e., specificity markers do not encode definiteness). An investigation of exactly how the precise felicity conditions may vary crosslinguistically lies beyond the scope of the present paper. What I hope to have done here is to provide a starting point for such an investigation.

## 6. Specificity in L2 Acquisition

Empirical evidence for the reality of specificity can come not only from crosslinguistic data but from acquisition data as well. My goal in this section is to show that, in the domain of article choice, linguistic theory and second language (L2) acquisition form a two-way relationship: linguistic theories allow us to formulate precise hypotheses about article choice in L2 acquisition, and L2 data, in turn, can provide support for linguistic theories.<sup>31</sup>

The L2 study described in this section is reported in greater detail in Ionin, Ko and Wexler (2004), as well as in Ionin (2003), so here I summarize only those aspects of the study most relevant to the question at hand.

#### 6.1. Background and Hypotheses

My concern here is with L2 learners of English who do not have articles in their native language, and therefore do not have L1-transfer to guide their acquisition of English articles. The question is, how will these learners come to acquire the specifications of English articles – the fact that *the* is a definite article.

Much previous literature on L2 acquisition of English by speakers of article-less languages (Huebner 1983, 1985, Master 1987, Thomas 1989, among others) has shown that a common error of L2-English learners is the use of *the* in place of *a* in indefinite contexts. (Another prevalent error is article omission; I will not be concerned with this error here.) Thomas (1989)

 $<sup>^{31}</sup>$  The same should in principle hold for L1-acquisition. See section 6.4 for some discussion of articles in child English.

noted that, across different studies, overuse of *the* was more common in wide-scope than in narrow-scope environments.<sup>32</sup>

# 6.1.1. Hypothesis

These findings led us to hypothesize that overuse of *the* with indefinites is tied to an erroneous association of *the* with *specificity* (since specific indefinites obligatorily give the appearance of widest scope, while non-specific indefinites may take wide or narrow scope). That is, L2-English learners may be treating *the* as having the semantics of *this*<sub>ref</sub>.

The rationale for this is as follows. Suppose that L2-English learners have access to the semantic concepts of definiteness and specificity; given their crosslinguistic nature, these concepts may be part of a universal semantic inventory available to all learners. However, it will not, at least initially, be obvious to the learners which of these features is encoded by English articles. I am assuming that L2-English learners are unfamiliar with *this*<sub>ref</sub>: the colloquial referential use of *this* is not part of standard English, and is not part of all dialects and registers of English; it is highly unlikely that L2 learners receive enough exposure to referential *this* to incorporate it into their article system.<sup>33</sup> This means that L2-English learners have to decide whether *the* is a definite article or a specific article: they have to settle on one of the options in Table 1. In the absence of articles in their L1, the learners will have no *a priori* reason to choose one option over the other.

Even after receiving some English input, the learners will not necessarily be able to determine the feature specifications of English articles, since many contexts of *the* use satisfy the conditions of both definiteness and specificity. For instance, in (70a, b), the speaker can reasonably expect the hearer to accommodate the uniqueness of a particular girl or author, respectively; the presuppositions of definiteness are satisfied. At the same time, the speaker is

 $<sup>\</sup>frac{32}{32}$  The actual terminology used by Thomas (1989) and other L2 researchers is [+/- specific referent], where *specific referent* is used to mean *assertion of existence in the actual world*, i.e., wide scope with respect to an intensional or modal operator.

<sup>&</sup>lt;sup>33</sup> Anecdotal support for this view comes from informal responses of Ll-English control participants in our studies, who described *this*<sub>ref</sub> as a lexical item more likely to be used by younger speakers. The L2-English participants in our studies rarely went to high school or college in the U.S. (although a number of the Ll-Korean participants attended graduate school in the U.S.), so it's possible that they did not have much interaction with the populations for whom *this*<sub>ref</sub> is most acceptable. Furthermore, in classrooms, L2 learners are taught that English has two articles, *the* and *a*, and may not even realize that *this* has an "article" use, treating all instances of *this* that they hear as demonstratives.

While classroom instruction undoubtedly influences L2-English learners' understanding of what lexical items qualify as articles, not enough details about the semantics of English articles are provided to help the learners unambiguously decide whether *the* is definite or specific; see Ionin (2003, ch. 8) and Ionin et al. (2004) for a discussion of L2 textbook instruction on articles.

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stating something noteworthy about the girl (*she used to live in Greenland*) and about the author (*I've heard so much about her*); the felicity conditions of specificity are also satisfied. Similarly, in (70c), the uniqueness of the cat has been established by previous discourse, but the same discourse may have established the cat's noteworthiness (*it's the cat that my grandfather has*).

- (70)a. My brother talked with the girl from next door this morning; guess what she once lived in Greenland!
  - b. I'd like to meet the author of this book I've heard so much about her.
  - c. My grandfather has a dog and a cat. I like the cat more.

Of course, not all of the contexts of *the* use are ambiguous in this way – if they were, there would be no distinction between definiteness and specificity to speak of. However, given the ambiguity present in the input, we may well expect even fairly advanced L2- English learners to lack the knowledge of whether *the* is a definite or a specific article. Our hypothesis is that the learners will exhibit *fluctuation* between the two options: they will optionally analyze English as a language whose articles encode the definiteness distinction, vs. as a language whose articles encode the specificity distinction, as formulated in (71).<sup>34</sup>

(71) Hypothesis: Fluctuation between possible semantic distinctions L2-English learners will fluctuate between distinguishing English articles on the basis of definiteness vs. on the basis of specificity.

#### 6.1.2. Predictions

Importantly, this fluctuation will *not* result in random article use: it is not equivalent to random guessing. Rather, we expect L2 learners' errors to be highly constrained. Whenever the learners decide that *the* is a definite article, they will use both *the* and *a* correctly. Whenever they decide that *the* is a specific article, they will use *the* in all specific contexts and *a* in all non-specific contexts, essentially treating English as if it were Samoan. The learners' errors will therefore come in two types: the learners should overuse *the* in specific indefinite contexts (i.e., contexts compatible with *this*<sub>ref</sub> in spoken English), and conversely, overuse *a* in non-specific definite contexts. However, they should be perfectly accurate in using *the* in specific definite contexts. This is summarized in Table 2.

 $<sup>\</sup>overline{}^{34}$  For a more detailed discussion of this *Fluctuation Hypothesis*, and suggestive evidence that it operates in domains of the grammar other than article choice, see Ionin (2003, ch. 1) as well as Ionin et al. (2004).

Table 2. Predictions for L2-Engilish article use

CONTEXT	definite: target the	indefinite: target a		
specific	correct use of the	overuse of the		
non-specific	overuse of a	correct use of a		

## 6.2. Methodology

The predictions in Table 2 were tested in a forced-choice elicitation task with adult L1-Russian and L1-Korean L2-English learners. Russian and Korean have no articles and no direct way of encoding definiteness or specificity across the board, making any L1 transfer effects unlikely.<sup>35</sup> I report here the results from those L2-English learners who placed as intermediate or advanced on the Michigan test of L2 proficiency: 26 L1-Russian L2-English learners and 39 L1-Korean L2-English learners. The task described below was piloted with seven adult L1-English speakers (seven other native English speakers took an earlier version of the test). For discussion of the participant characteristics, and the rationale for excluding the few beginner L2 learners from the final analysis, see Ionin et al. (2004). In addition to the proficiency test, the learners completed a forced-choice elicitation task, as well as a naturalistic production task which is not reported here (see Ionin et al. 2004). The forced choice elicitation task consisted of 76 short English-language dialogues. The target sentence in each dialogue was missing an article: the learner had to choose between a, context. Only the context types most relevant to the predictions in Table 2 are discussed here: two definite and two indefinite context types, with eight items per context type.<sup>36</sup>

 $<sup>\</sup>frac{35}{35}$  Russian does have a specificity marker, *odin*, 'one'. However, since, as noted in footnote 27 *odin* marks specificity with indefinites only, it cannot influence L1-Russian speakers' treatment of English definites. Furthermore, since *odin*, being a numeral, is inherently indefinite, it is highly unlikely to lead to overuse of the definite article *the* in specific indefinite contexts in English.

<sup>&</sup>lt;sup>36</sup> Each of these four context types was further subdivided into two context types, extensional and intensional. This further division is not relevant to the present discussion. The learners performed in a similar manner across intensional or extensional contexts, as long as the factors of specificity and definiteness were held constant (while the effects of specificity were more pronounced in intensional contexts, they were also attested in extensional contexts). As discussed in Ionin et al. (2004), this shows that overuse of *the* in L2-English is not tied to *wide scope*, contrary to what has been proposed in previous studies of L2 acquisition (e.g., Thomas 1989). L2 learners did not behave uniformly on extensional contexts (contexts with no scope interactions, where the target DP takes wide scope by default). Rather, they used *the* more if the context involved a statement of noteworthiness than if it did not.

In all of the specific contexts, definite as well as indefinite, the target DP was followed by an explicit statement of a noteworthy property. In non-specific contexts, statement of any noteworthy property was absent. The target sentence in each example below is italicized, and the target article is underlined.

- (72) Specific definiteKathy: My daughter Jeannie loves that new comic strip aboutSuper Mouse.
  - Elise: Well, she is in luck! *Tomorrow, I'm having lunch with (a,* <u>the,</u> —) creator of this comic strip – he is an old friend of mine. So I can get his autograph for Jeannie!
- (73) Non-specific definite

Bill: I'm looking for Erik. Is he home?

Rick: Yes, but he's on the phone. It's an important business matter. *He is talking to (a, <u>the</u>, -) owner of his company!*I don't know who that person is - but I know that this conversation is important to Erik.

(74) Specific indefinite

(Meeting on a street.)

- Roberta: Hi, William! It's nice to see you again. I didn't know that you were in Boston.
- William: I am here for a week. *I am visiting* (<u>a</u>, the, —) friend from college – his name is Sam Brown, and he lives in Cambridge now.
- (75) Non-specific indefinite
  - Chris: I need to find your roommate Jonathan right away.
  - Clara: He is not here he went to New York.
  - Chris: Really? In what part of New York is he staying?
  - Clara: I don't really know. *He is staying with* (<u>a</u>, the, —) friend - but he didn't tell me who that is. He didn't leave me any phone number or address.

## 6.3. Results and Discussion

The seven L1-English control participants performed exactly as expected, supplying *the* in all the definite contexts exemplified above, and a in all of the indefinite contexts.

## 6.3.1. Results from L2 Learners

The overall results for the L1-Russian and L1-Korean L2 learners are reported in Table 3 and Table 4, respectively. These tables report the % of *the* use, *a* use, and article omission in each of the four major context types (8 items per context type). The results corresponding to target article use for each category are italicized. The results corresponding to predicted errors are underlined.

These tables show that L2 learners used *the* more in definite than in indefinite contexts, and used *a* more in indefinite than in definite contexts. Their greatest errors of article misuse involved overuse of *the* in specific indefinite contexts, and overuse of *a* in non-specific definite contexts. In contrast, the learners were quite accurate in using *the* in specific definite contexts, as well as in using *a* in non-specific indefinite contexts. While the L1-Korean speakers were overall more accurate than the L1-Russian speakers, the two groups showed qualitatively similar patterns of performance. Repeated-measures ANOVAs for both L1 groups showed that both definiteness and specificity had highly significant effects on article use (p < .001), regardless of whether use of *the* or use of *a* was measured. The two effects were largely independent (the only significant interaction was on use of *the* for the L1-Korean speakers, p < .05), suggesting that definiteness and specificity are two independent factors that operate in L2-English article choice.

## 6.3.2. Specificity for L2-English vs. Native English Speakers

An important question to address at this point is whether the concept of specificity that plays a role in L2 English is the same as the concept of specificity accessed by native speakers of English – i.e., to what extent does L2 English *the* correspond to English *this*<sub>ref</sub>? This question can be examined

Table 3. Performance of L1-Russian speakers (N = 26)

	definite: target the			indefinite: target a		
specific	79% the	8%a	13%null	<u>36% the</u>	54% a	10%null
non-specific	57% the	<u>33%a</u>	10%null	7%the	84% a	9%null

Table 4. Performance of L1-Korean speakers (N = 39)

	definite: target <i>the</i>			indefinite: target a		
specific	88% the	4%a	8%null	<u>22% the</u>	77% a	1% null
non-specific	80% the	<u>14%a</u>	6%null	4%the	93% a	3% null

only with respect to indefinites, since definites in English are unambiguously marked with *the* (see the discussion in section 3.4.1).

With regard to indefinites, the expectation is that the specific indefinite contexts in the elicitation test are contexts in which native English speakers are more likely to use  $this_{ref}$ . This prediction was tested in a small pilot study. Seven native English speakers (some of whom served as the control participants for the main experiment) were asked to take a test of referential *this* use. This test consisted of all the indefinite items from the original elicitation test,<sup>37</sup> but instead of a missing article, *this* was inserted into the target sentence (the participants were told, with the help of examples, that the indefinite referential use of this was intended, rather than the standard deictic use). The participants were asked to rate the felicity of the target sentence containing *this* in the given context, using a scale ranging from 1 (infelicitous) to 5 (felicitous).

The average felicity scores assigned to the sentences containing  $this_{ref}$  were 3.6 for specific indefinite contexts and 2.4 for non-specific indefinite contexts. This difference was statistically significant (two-tailed p < .05) – i.e., the native English speakers were more likely to consider  $this_{ref}$  felicitous in specific indefinite environments than in non-specific indefinite ones, supporting the prediction. The difference was more pronounced when scope was a factor (narrow-scope non-specific indefinites were almost never allowed with  $this_{ref}$ ), but the distinction held (and was marginally significant) even in the absence of scope interactions. On the individual level, four of the seven subjects made a strong distinction between specific and non-specific indefinites in terms of  $this_{ref}$  use, and a fifth made a small distinction.

It should be noted that the felicity of  $this_{ref}$  was affected by factors other specificity. First, there is an effect of register:  $this_{ref}$  is most acceptable in informal, colloquial speech, while some of the contexts in the test were quite formal. Second, there is a potential effect of prescriptivism: some of the participants viewed  $this_{ref}$  as 'slang', a judgment which may have influenced their performance. Despite these factors, however, there is suggestive evidence that the specific indefinite contexts in the test were not only more likely than non-specific ones to elicit overuse of *the* in L2 English, but also more likely to allow *this*<sub>ref</sub> in native English. This suggests that the specificity effects in L2 English parallel those in the English of native speakers.

 $<sup>\</sup>frac{37}{10}$  The test of *this*-indefinites described here was constructed and piloted before the final version of the elicitation test was created. Thus, some of the items, including one specific indefinite item, had slightly different wording from the final version of the elicitation test. Therefore, the results reported here should be viewed with caution. However, since the correspondence between the elicitation test and the *this*-test was, while not perfect, quite close, the results are suggestive.

## 6.3.3. Discussion

The results of the L2 study provide evidence for the reality of *specificity as noteworthiness* by showing that this semantic concept is accessed by L2-English learners who have no articles in their L1. We see that the learners' errors are constrained, falling primarily into two classes: overuse of *the* with specific indefinites and overuse of *a* with non-specific definites. These patterns are observed for speakers of both Russian and Korean who are learning English as an L2. The similar patterns of performance for the two L1 groups suggest that the results are not due to L1 transfer. The more accurate performance by L1-Korean speakers is likely to be due to the higher L2 proficiency of this group.

While L2 learners show an ability to differentiate between specific and nonspecific contexts, as well as between definite and indefinite contexts, they do not seem to know that *the* encodes definiteness rather than specificity (see Ionin et al. (2004) for evidence that this fluctuation holds at the individual as well as group level). This suggests that L2 learners are able to access the universal semantic distinctions of definiteness and specificity, but have difficulty generalizing from the input and choosing the appropriate distinction.

## 6.4. Articles in L1 Acquisition

Our proposal for L2 acquisition should be applicable to L1 acquisition as well: we should expect child L1-English learners, like adult L2-English learners, to make the error of associating *the* with specificity. I now briefly review some relevant data on articles in child English.

Young children learning English have often been found to overuse *the* in indefinite contexts in naturalistic production. For instance Brown (1973, p. 353) reports errors of article misuse on the part of the three young L1-English children in his study, and states that "[t]he result I think most significant is the large number of errors in the category: speaker specific and listener nonspecific. This is the case in which the points of view of the speaker and listener diverge." Brown's "speaker specific and listener nonspecific" contexts may at least to some extent correspond to the specific indefinite contexts in my terminology. Examples of *the* overuse found by Brown include cases like *The cat's dead, And the monkey hit the leopard*, etc., where the adult listener is clearly unaware of the identity of the cat, monkey, or leopard (Brown 1973, p. 354).

Similar results were found by Peterson (1974), cited in Maratsos (1976), who asked children to describe week-old, real-life events to someone who had not witnessed the event. Peterson found that "even when they were talking to the naive listener a majority of the articles used by three-year-olds

were, incorrectly, definite articles" (Maratsos 1976, p. 97, footnote 1). Peterson found that even four-year-olds overused definite articles, although not to the same extent as three-year-olds.

It is possible that such errors of *the* overuse do indeed stem from an association of *the* with specificity. An alternative explanation often proposed in the literature (see Maratsos 1976, Matthewson and Schaeffer 2000, among others) attributes errors in children's article use to psychological/pragmatic factors, such as children's inability to separate their own assumptions from those of their hearers. If it is found that child and adult learners of English make very similar errors of article use, then it would be more economical to propose a linguistic explanation in both cases (since adults arguably are able to separate their own assumptions from those of their hearers). Before this can be done, however, it is necessary to conduct direct comparisons of article use between L1 learners and L2 learners, looking at overuse of *the* as well as overuse of *a*. I leave the issue open for the time being.

Finally, it is possible that linguistic factors other than *specificity* are at work in L1 learners' acquisition of English articles, notably, presuppositionality (set membership) (see section 4.3). Maratsos (1976) and Schafer and de Villiers (2000), among others, found that children overuse the when referring to a member of a previously mentioned set (e.g., saying the boy when a set of four boys has been established in the discourse). Wexler (2003), reanalyzing the data from Maratsos, proposes that (at least some of the time) young children treat the as marking the presupposition of existence rather than the presupposition of uniqueness/maximality. In some recent work on L2 acquisition (Ko, Ionin and Wexler 2005; Perovic, Ko, Ionin and Wexler 2005), we have found evidence for the role of presuppositionality in L2 English as well (for speakers of Korean and Serbo-Croatian). Such acquisition findings have interesting implications for analyses of presuppositionality as a DP-level vs. sentence-level phenomenon (see the discussion in section 4.3.3). The relationship between specificity and presuppositionality in both L1 and L2 acquisition needs to be examined in more detail; preliminary results suggest that the two factors operate independently in L2 acquisition.

## 7. Conclusion

In this paper, I have argued for the reality of specificity as a universal semantic feature indicating *speaker intent to refer* and *noteworthiness*. On the basis of the behavior of referential *this*-indefinites in English, I have built upon the proposal of Fodor and Sag (1982) and have argued that *this*<sub>ref</sub> encodes specificity in English. I have drawn upon data from other languages (Hebrew, Samoan, Sissala) to show that specificity receives morphological

expression crosslinguistically. Finally, I have shown that data from L2 acquisition provide further support for the reality of this feature. I conclude that specificity is a universal concept that receives morphological expression linguistically, and that is also available to L2 learners.

A number of open questions remain, which require further investigation. First, as discussed in section 5.4, the behavior of specificity markers in different languages needs to be examined in more detail. An understanding of possible variations in the semantics of specificity markers such as *this*<sub>ref</sub>, the Hebrew *xad*, the Samoan *le*, and the Sissala *né* would contribute to our understanding of the nature of specificity. It would furthermore be fruitful, as discussed in section 5.2, to explore the relationship between the different types of semantic distinctions encoded by determiners crosslinguistically: on the one hand, the discourse-based distinctions of definiteness and specificity; and on the other hand, the more grammatical distinctions encoded by articles in languages such as St'át'imcets and Maori.

Turning to acquisition, it is important to compare determiners in L1 acquisition and L2 acquisition more directly, as well as to investigate the effects of L1 transfer on L2 article choice (e.g., one could compare the acquisition of English by speakers of Spanish, whose L1 encodes definiteness, and by speakers of Samoan, whose L1 encodes specificity). I hope that the study reported here illustrates the value of using acquisition data to test linguistic theories. Article choice among L1 or L2 learners of English (or any other language with articles) can in principle be as informative for the theories of article semantics as data from Samoan or Sissala. Morphological manifestations of semantic universals can be as evident in interlanguage grammars as in fully developed grammars.

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