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**Acts of reference and the miscommunication of referents by first
and second language speakers of English**

A thesis

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of the requirements for the degree

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at

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Abstract

Central to communication are acts of reference, in which speakers clarify to hearers the identity of specific individuals (referents) through the use of referring expressions. Consequently, pragmatic competence in referring is likely to be an important skill for second language learners (SLLs). One of the complexities that speakers face is that the most appropriate referring expression (RE) on one occasion may be entirely inappropriate for that same individual on a different occasion. To explore pragmatic appropriateness in the use of REs, two approaches appear particularly apt. Firstly, Accessibility Theory (Ariel, 1990) holds that speakers select an RE type based on their best estimate of how recoverable the referent is in the addressee's memory. Secondly, acts of reference may be most helpfully viewed as occurring across discursal units above the level of the noun phrase. However, it appears that neither of these frameworks has been adopted in previous studies of SLL reference. In addition, it appears that little has been reported in relation to the factors that trigger referential miscommunication.

This study examined references by relatively advanced SLLs and by L1 participants. The focus was on pragmatic appropriateness in marking accessibility, and factors implicated in referential miscommunication. A film retelling task was used to elicit data from participants in twenty SLL-L1 and ten L1-L1 dyads; following each retelling, a two-part stimulated recall interview was conducted with the addressee to identify miscommunications. Individual acts of reference were analyzed according to an accessibility coding system. Miscommunications were analyzed and likely triggers identified in terms of, for example, accessibility marking and NP errors. Findings are reported in relation to SLL referential competence, triggers of referential miscommunication, and some more general issues relating to the nature of reference.

When introducing hearer-known referents into discourse, the SLL participants tended to be under-explicit for entities with low-accessibility but over-explicit for central characters. The least accessible entities were frequently either avoided or were under-explicit and, for this reason, were often miscommunicated, suggesting that these learners had difficulties constructing references across larger discourse

units. In subsequent references (*referent tracking*), the SLLs tended to be over-explicit, particularly in certain contexts. It appears that this resulted partly from a communicative strategy and partly from cognitive load. The most frequent trigger of miscommunication in referent tracking was pronoun errors. More generally, I argue that the present approach to miscommunication analysis complements error analysis.

The theoretical framework for the study involves a core definition of reference (adopted from Bach, 2008), which is then relaxed in two stages, thereby distinguishing three *levels of reference*. I argue that this framework enables principled definitions of reference and referential miscommunication, which partially bridge contrasting views found in philosophy and linguistics. The findings challenge three widespread assumptions about reference: (a) that all references require resolution, (b) that interactants attempt to clarify all references, and (c) that only highly accessible referents are felicitously referred to with pronouns. I propose a theory of referentiality in which speakers are held to signal the extent to which references require resolution.

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Transcription conventions used

The following transcription conventions were used in this study. They are adapted from Du Bois (2006, Appendix A.2a)

MEANING	SYMBOL	COMMENTS
Participation		
speaker attribution	J –	dash follows initial in CAPS, pseudonyms used
Pause		
pause	. . .	each dot represents approximately 1 second, but adjustments are made relative to speech speed
lag/prosodic lengthening	:	colon marks slowing of local tempo, segment lengthening
Sequence		
overlap / short intrusion	[]	
Boundary Tone/Closure		
terminative	. (full stop)	intonation signaling finality
continuative	, (comma)	intonation signaling continuation
truncated intonation unit	—	aborting projected IU (dash)
appeal	?	combines with final/continuing: ?. ?,
Dysfluency		
truncated/cut-off word	wor–	aborting projected word (en dash)
other dysfluency	< . . . >	extended stammer, recast, etc. no message conveyed, time indicated by dots for seconds
Vocalisms		
laugh	@	one per pulse or particle of laughter
laughing word	@you're @kidding	laugh symbol marks laughter during word
vocalism	(COUGH)	various notations: (SNIFF), (AHEM), etc.

Manner

manner/quality	<MISC> quietly </MISC>	various notations for manner of speaking
emphasis	you're KIDDING	capitals for strongly stressed syllables
quoting	'go go' he said	single speech marks indicate a change of voice when quoting or mimicking another person
pronunciation	/ði:s/	approximate IPA transcription for occasional pronunciations that may cause confusion
stressed articles	thi / ay	stressed articles approximating /ði:/ and /ei /

Metatranscription

unintelligible	###	one symbol per syllable
uncertain	#you're #kidding	transcribed words are uncertain
transcriber comment	[[continues]]	miscellaneous comments: 'continues', etc.

Other

gesture	((action))	various notations: ((action)), ((pointing)), etc.
new utterance start	Capitalization	Capitalize first letter for the beginning of new utterance following a terminative closure
timestamp	T = 3.14	time in minutes and second from the start of recording

1 Introduction

This study explores aspects of how native speakers (L1) and second language learners (SLL) of English use certain expressions to refer to specific people and objects when retelling a narrative, and how their infelicitous use of such expressions can trigger miscommunication. The study focuses, therefore, on issues of *speaker reference* (hereafter simply *reference*).

An initial working definition of reference (to be refined in Chapter 2) can be presented in relation to Example 1:

1. I saw Antonia in town. She was shopping for textbooks and bought a dictionary. She also wanted to buy a calculator.

There is a general sense in which any competent user of English would understand these three sentences, both individually and in relation to each other. Speakers will recognize that the name *Antonia* almost certainly relates to a woman (or girl), and recognize that the two pronouns are almost certainly in an anaphor-antecedent relationship with *Antonia*. However, in an important sense, the addressee will not have fully understood these three sentences unless they recognize who the speaker refers to by *Antonia*. This is the domain of *reference*: speakers making clear to hearers the identity of which individual(s) they mean. A reference is successfully *resolved* when the addressee identifies which individual the speaker intended.

Reference is defined in this study as “a four-place relation” in which “a *speaker* uses an *expression* to refer his [or her] *audience* to an *individual*” (Bach, 2008, p. 17; emphasis in the original). In this study, the terms *act of reference* and *referential act* are used interchangeably for the overall event in which reference is communicated. A number of implications arise from the four-place definition of reference, and these will be discussed in Chapter 2.1 and 2.2.

At this point, a preliminary distinction (seldom observed in linguistic approaches

to reference) can be made between using noun phrases (NP) to refer to an entity and using them to *mention* an entity. When a speaker mentions a specific entity, they do so *without* attempting to make clear which particular individual they mean. For example, in uttering Example 1, the speaker is evidently not attempting to clarify the specific identity of a particular dictionary or calculator. This distinction between referring and mentioning is critical to determining what constitutes communicative success. Its relevance can be illustrated by reflecting on what it means to misunderstand *a dictionary* in Example 1 and *the dictionary* in Example 2.

2. Pass the dictionary.

In Example 1, miscommunicating *a dictionary* involves misunderstanding the semantics of the lexical item ‘dictionary’, but the reference to *the dictionary* in Example 2 can be miscommunicated at the additional level of misunderstanding which specific dictionary is requesting (e.g. *pass the English-Khmer dictionary rather than the English-Spanish one*).

Like the references to Antonia in Example 1 and the dictionary in Example 2, much of what we communicate centrally concerns clarifying specific people and objects (*who did what to whom etc.*), and the understanding of these references becomes central to communication. Indeed, Sanford and Garrod (1981, p. 89) have argued that “reference resolution . . . constitutes the cornerstone of successful comprehension in terms of the reader’s [or hearer’s] task of building an appropriate mental model of what is being said” (although, in making this statement, Sanford and Garrod had in mind a broad definition of reference encompassing non-referential anaphora).

However, achieving successful reference can pose a considerable challenge. In particular, a single individual “may be referred to with any one of a number of different names and a single name may refer to any one of a number of individuals” (Glucksberg & Krauss, 1967, p. 309), yet an expression that is “perfectly adequate . . . in one situation may be entirely inappropriate in another” (Krauss & Glucksberg, 1969, p. 256). As such, to be competent in making and resolving references, speakers need to be competent in using a system of NPs and

other referential practices that is acutely sensitive to context. Several linguistic theories offer explanations of how speakers select the most appropriate type of NP for a particular occasion of reference, with the most prominent being Accessibility Theory (Ariel, 1990, 2001) and the Givenness Hierarchy (Gundel, Hedberg, & Zacharski, 1993).

Aside from these complexities faced by all speakers, second language learners (SLLs) may additionally face considerable challenges arising from typological differences between languages. For example, a great deal of research has focused on article errors, revealing that these can be frequent for those learners whose first language lacks an equivalent system (e.g. Master, 1987, 1997; Parrish, 1987; Thu, 2005). However, such determiner errors may be less communicatively problematic than those errors in which speakers select pragmatically inappropriate referring expressions (REs), such as when a pronoun is used where a proper name is required. Such errors occur in the speech of young children (Peterson & Dodsworth, 1991) and could be an issue in some second language learner (SLL) speech, as languages vary in how NPs are distributed; for example, the English third-person pronoun *he* is not functionally equivalent to the third-person Japanese pronoun *kare*, with *kare* perhaps being closer in use to the stressed version of the English pronoun *he* (Gundel et al., 1993). However, such source language influence on SLL reference remains under-explored, as few studies have considered learner reference within a comprehensive framework accounting for RE selection (notable exceptions include Kim, 2000 and Swierzbinska, 2004). Nevertheless, a number of studies suggest that language learners frequently make pragmatically infelicitous references, particularly in relation to violating pragmatic principles of economy (e.g. Chini, 2005; Gullberg, 2006; Tomlin, 1990).

Given these challenges in referring, it seems likely that reference is a relatively frequent source of miscommunication in SLL-L1 interactions, and perhaps also in L1-L1 interactions, although few previous studies have explored such issues. In relation to L1-L1 interactions, a small number of findings have been reported as to how miscommunications may be triggered, signalled, or repaired (e.g. Auer, 1984; G. Brown, 1995; Goodman, 1983, 1986; Schegloff, 1987), but no studies

were identified as specifically addressing issues of miscommunicated SLL reference. It thus appears that little is known about the frequency, triggers, and consequences of miscommunicated SLL reference.

There may be significant value in exploring these issues in problematic SLL reference. Miscommunication research in general has highlighted the sometimes serious consequences of miscommunication (Gumperz, 1982b; Jones, 2003; Naylor, 1979), provided substantial insights into aspects of communicative competence (Gumperz, 1982a, 1982c), and posed suggestions relating to the planning and prevention of further problems (Britten, Stevenson, Barry, Barber, & Bradley, 2000; Jones, 2003; Tajima, 2004). In relation to referential miscommunication, there may be value for course designers, teachers, and SLL and L1 interactants in being aware of recurring triggers, the contexts in which problems most often occur, and helpful communication strategies.

This study, therefore, focuses on how L1 and SLL speakers make third-person references in retelling oral narratives, and conditions under which those references are miscommunicated. More specifically, analysis is made of the REs that speakers use, and the extent to which these are pragmatically felicitous from the perspective of Accessibility Theory (Ariel, 1990, 2001). Further analysis is made of referential miscommunications, focusing on the role of REs in triggering such problems.

Chapter 2 reviews literature relating to the nature of reference, arguing that a suitable definition of reference for the present study is one essentially drawn from the philosophy literature (specifically the view expressed by Bach, 2008) rather than the very broad views typically found in linguistics and applied linguistics. For the purposes of exploring linguistic issues in reference, a framework is developed in which three 'levels of reference' are identified and distinguished from various types of non-reference. In the selection of single RE types, this study adopts an Accessibility Theory (Ariel, 1990, 2001) framework, but also views reference as a communicative act, in which a single reference may be achieved over multiple turns (Clark & Wilkes-Gibbs, 1986).

Chapter 3 reviews literature relating to SLL reference, firstly in terms of systems of referring expressions in learner language, and then in terms of pragmatic competence in referring. It is argued that most of the relevant studies have failed to adequately assess the accessibility of the entities that learners refer to, leaving them open to counter-explanations for many of the reported findings. Issues relating to the miscommunication of reference are then reviewed. The chapter concludes with the identification of three common assumptions about reference to be discussed in relation to the findings (Chapter 8), and with the identification of a number of specific research questions.

Chapter 4 discusses the research methods used in this study, including a narrative retelling task, the use of stimulated recall interviews to identify miscommunication, and the methods used in analysing referent accessibility and miscommunication.

Chapters 5, 6 and 7 present the relevant research findings. Chapter 5 presents a general description of the L1 and SLL narratives, comparing the retellings in terms of, for instance, the entities referred to, the RE types used, and linguistic errors. Some issues in applying the Accessibility Theory framework are also discussed. Chapter 6 presents a form-function analysis of acts of reference, in terms of the REs that speakers used to signal specific degrees of cognitive accessibility. Chapter 7 presents findings arising from an analysis of miscommunication, focusing particularly on the apparent role of infelicitous RE types.

Chapter 8 discusses the findings about L1 reference in relation to the framework outlined in Chapter 2 and the three common assumptions about reference discussed in Chapter 3. Some implications for Accessibility Theory (Ariel, 1990, 2001) are identified and a theory of referentiality is proposed.

Chapter 9 discusses the findings relating to SLL reference and miscommunication. Implications are discussed for theories of pragmatic development in SLL reference, and triggers of miscommunication and referential troublespots are identified. The chapter concludes with a discussion of the

potential applications of miscommunication analysis.

Chapter 10 concludes with an overview of the study, a discussion of its main contributions and limitations, and some suggestions for further areas of research.

2 Review of literature: The nature of reference

2.0 Introduction

The purpose of this chapter is, firstly, to establish a framework suitable for the study of reference as a communicative act. A critical aspect of this is establishing a basis from which individual acts of reference may be judged as communicatively successful or unsuccessful. The second goal is to establish a linguistic framework for the analysis of referring expressions (REs), in relation to the form-function relation that holds between an RE and its intended referent in a particular discourse context. The purpose of this framework is to enable judgements of the extent to which the use of a RE is pragmatically felicitous within a specific context.

This chapter begins (Section 2.1) by reviewing how reference is typically defined in the linguistics and philosophy literature. From this review, it is argued that Bach's (2008) philosophy-based approach provides the most useful definition of reference for studies relating to communicative outcomes. However, it is acknowledged that this definition is too narrow to provide a framework for discussing some similar uses of NPs that are of interest to linguists. A compromise position (levels of reference) is proposed and outlined in Section 2.2.

Section 2.3 summarizes key cognitive and social factors in reference, while theories of NP selection are reviewed in Sections 2.4 and 2.5. It is argued that, for the present purposes, Accessibility Theory (e.g. Ariel, 1990) is the most suitable account of the selection of REs. Section 2.6 discusses the most relevant aspects of phonology in relation to accessibility marking, and Section 2.7 discusses aspects of reference that occur above the level of the RE.

In Section 2.8, factors known to influence the cognitive accessibility of referents are reviewed. The purpose of this section is to establish, ahead of Chapter 4, the bases of a system of analysis for determining accessibility. Section 2.9 outlines aspects of reference that may be specific to narratives, and Section 2.10 briefly

outlines relevant aspects of RE resolution.

The overall framework which is established in this chapter draws heavily on perspectives from philosophy to define reference, while adopting a theory of RE use from linguistics.

2.1 A framework for distinguishing reference and non-reference

In Chapter 1, reference was briefly defined (following Bach, 2008), with an initial distinction made between referring to entities and merely mentioning them.

Reference involves the use of language to indicate specific individual entities to an addressee. This perspective considers the speaker's intention to be central, and focuses on the communicative act in which the speaker uses language (sometimes accompanied with gesture) to enable the hearer to identify the intended referent. Use involves consideration both of the audience and of the context.

This section begins by briefly outlining various approaches to reference in Subsection 2.1.1, before arguing in Subsection 2.1.2 that Bach's (2008) approach from philosophy is the most appropriate starting point for studies concerned with reference as an act of communication, and outlining key problems with typical linguistic definitions. Section 2.1.3 discusses the relation between anaphora and reference and Section 2.1.4 discusses what counts as a referent.

In the presentation of ideas in this section, the rhetorical move structure is perhaps sufficiently divergent from the relevant thesis literature (identified by Bitchener, 2010) to warrant some foreshadowing and an explicit rationale. In short, a very large number of works are relevant to any comprehensive review of how reference is to be defined, and, for reasons of space, much of the relevant detail is relegated to Appendix 2. The key theoretical perspective adopted in this study is stated outright and then contrasted with the dominant perspectives within applied linguistics and linguistics, highlighting problems with these latter approaches.

A feature of the approach pursued in this section (not found in the studies

reviewed) is an exploration of the referential/non-referential distinction in terms of what it means to miscommunicate the identity of an entity. The arguments lead to the development of a taxonomy of levels of reference which is summarized in the following section.

2.1.1 Approaches to reference

Reference is a topic of interest in philosophy, cognitive science, and linguistics and many of its sub-fields, including applied linguistics, psycho-linguistics, and computational linguistics. Perhaps unsurprisingly, definitions of reference vary widely, creating challenges when inter-disciplinary perspectives are adopted. The purpose of this subsection is to outline briefly some approaches from philosophy and linguistics that are relevant to the present study. In Appendix 2, a more detailed review of definitions of reference is presented, with the most relevant points being summarized below.

Two aspects of the contrasting approaches to reference appear particularly striking. Firstly, in linguistics, the term *reference* typically encompasses nearly all uses of definite NPs, as well as uses of specific indefinites (defined in Subsection 2.1.2) (e.g. Du Bois, 1980; Gundel et al., 1993). In philosophy, reference may be defined much more narrowly, often relating only to the identification of specific individuals through certain uses of definite NPs only (Bach, 2008), although in some approaches, this appears to be extended to specific events and locations (e.g. Strawson, 1950). Secondly, while in philosophy there is often a focus on establishing what counts as reference (e.g. Bach, 2008; Donnellan, 1966), this appears to be the case much less frequently in linguistics, where the focus is typically on accounting for the distribution of RE types (e.g. Ariel, 1990; Gundel, Bassene, Gordon, Humnick, & Khalfaoui, 2010).

Underlying these different approaches appear to be fundamentally different orientations to what Kronfeld (1990) identifies as the *internal* and *external* perspectives on reference. As Kronfeld argues (p. 4), the distinction sometimes appears to be misunderstood and, therefore, blurred.

From the internal perspective, our main interest is the relation of co-reference among symbols. From the external perspective, on the other hand, what interests us is the relation between symbols and the objects they represent. . . . The crucial difference between the two perspectives is this: from the external perspective, the criterion of success for the hearer is correct identification of the object being discussed. From the internal perspective, the criterion of success is the right matching among symbols. (Kronfeld, 1990, pp. 3-4)

In philosophy, the external perspective appears to be the primary consideration, as evidenced by the often very strict definitions of what can count as a referent (i.e. an object that exists in the real-world; discussed in Subsection 2.1.4); philosophers typically treat the internal perspective merely as *linguistic context* enabling the use of REs with less explicit semantic detail. Underlying this perspective is a fundamental concern with meaning and the relation of language to the external world. In linguistic studies, however, the internal perspective usually appears primary. Specifically, linguistic studies tend to focus on the establishment of what have been called *discourse referents* (Karttunen, 1976) (which do not necessarily relate to any external referent), and the subsequent tracking of such referents through discourse in anaphoric chains. This is evidenced through the wide range of abstract and hypothetical entities and attributes that many linguists (e.g. Gundel et al., 1993) count as referents. Underlying this perspective is a fundamental concern with accounting for patterns in language use. One consequence of the internal perspective appears to be the distinction, of limited consequence to the external perspective, held between referent introductions and subsequent references. A further consequence is that the fundamental distinction between knowing, in relation to the example on Page 1, that *she* links to *Antonia* is not the same as identifying who the speaker meant.

The difference between the external and internal perspectives results in fundamentally different understandings of what counts as reference, as a referent, and as reference resolution (as will be explored throughout this section). From a cognitive-linguistic perspective, Ariel (1990, p. 6) writes that “since it is naïve to

assume that referring expressions directly refer to physical entities . . . we must assume that in all cases an addressee looks for antecedents which are themselves mental representations.” Consequently, linguists may use expressions such as “to refer to a particular object” and “to identify correctly the intended referent” (Gundel et al., 1993, p. 274), yet the ‘object’ can be the mental representation of previous utterances relating to propositions, events, and situations (as apparent in examples presented by Gundel et al. 2005). For hearers to identify such a discourse-based referent, this essentially means locating an anaphor-antecedent relationship (discussed in 2.1.3).

The variety of approaches to reference leads to an obvious problem for research of an interdisciplinary nature, with the theoretical frameworks and findings from one discipline needing to be cautiously and critically evaluated before being related to those from another. There is, therefore, value in researchers clearly defining what they mean by reference. This is particularly the case in areas traditionally informed by interdisciplinary perspectives, such as pragmatics, cognitive science, and applied linguistics. In the present study, the external perspective is adopted in a ‘core’ definition of reference; this is broadened to include elements from theories that take an internal perspective, and a framework will be developed (as summarized in Section 2.2) to accommodate these views.

The goals of the remainder of this section are to establish clearly what counts as reference in the present study. The resulting framework has a broader overall scope than approaches in philosophy, accommodating a wider range of uses of REs. This is presented in Section 2.2.

2.1.2 Defining reference

As noted in Chapter 1, following Bach (2008, p. 17), reference is defined in this study as a four-place relation in which *a speaker* uses a *referring expression* (RE) to refer a *hearer* to an *entity* (the referent). The *referential intention* of the speaker is crucial, and the speaker selects an RE that will enable the addressee to recognize this intention and to identify the intended referent (Bach, 1992a, 1992b,

2008). This definition of reference embodies a fundamentally external perspective. It closely relates to what has been called the use of a *recognitional reference form* (Sacks & Schegloff, 2007; Schegloff, 1996), although the latter term has been used mostly in relation to references to people (Schegloff, 2000). Despite perhaps appearing to be a relatively straightforward account of reference, a large number of conditions and implications arise from Bach's definition. Only some of the most relevant of these implications are discussed here.

To illustrate some of the issues, Bach's definition of reference (and others) will be discussed in relation to the example introduced in Chapter 1 (Page 1), which is reproduced as Example 1 following. To enable these illustrations to be made, it must be presumed that these sentences represent an utterance made by a speaker (or writer) with the intention of clarifying which person is meant by *Antonia*.

1. I saw Antonia in town. She was shopping for textbooks and bought a dictionary. She also wanted to buy a calculator.

As discussed in Chapter 1, there is a fundamental way in which this short text can be misunderstood if the hearer misinterprets who the speaker means by *Antonia*. In contrast, although the addressee may also misinterpret the meaning of *dictionary* or *calculator*, this is a matter of misunderstanding the relation between these words and the class of entities they apply to in this context (*denotation*) rather than to the identity of an individual (reference). Consequently, there are only three acts of reference in Example 1, represented by the REs *Antonia*, *she*, and *she*.

Singular thoughts

A pre-requisite for reference is the ability to hold a *singular thought* about the referent (Bach, 2008). Essentially, singular thoughts may be considered mental representations of a particular entity, and are distinguished from thoughts that are conceptual in nature (Jeshion, 2010). According to some accounts (e.g. Bach, 2008; Bach, 2010), to be in a position to hold a singular thought about an entity,

one must have encountered that entity either through sensory perception (e.g. through seeing the entity), or from having been informed of it through a chain of communication originating from someone who has perceived it (this is, for example, how people today may hold a singular thought about Socrates). In contrast, a thought that is conceptual in nature derives from other cognitive abilities. For example, although to understand the meaning of *the last man on Earth* involves recognition that a single person is specified, this individual can only be thought of conceptually (in terms of the description encoded in *the last man on Earth*), and not as a singular thought (Bach, 1987, 2008, 2010; Jeshion, 2010). Only utterances relating to singular thoughts can be referentially mistaken rather than conceptually mistaken.

As such, in relation to Example 1, a pre-requisite for the use of *Antonia* to qualify as an act of reference is the speaker's presumption that the addressee knows (or knows of) the individual named Antonia.

Intentions

The role of speaker intentions in reference has been widely discussed in the philosophy literature (Bach, 1992a, 1992b; Kaplan, 1978; Reimer, 1991). The present study follows Bach (1992a, 1992b, 2008) in holding that the speaker's intention to refer is central to pragmatic reference, and, therefore, to defining referential miscommunication.

One of the key issues is illustrated in Lumsden's (2010) reformulation of an example from Kaplan (1978):

a speaker points above his head to where a photograph of Noam Chomsky normally hangs and says, 'That man uses his impressive intellect to defend a radical left wing viewpoint,' not realizing that a practical joker had replaced that photograph with one of George W. Bush. (Lumsden, 2010, p. 297)

In such cases, Bach (1992b) argues, two intentions can be distinguished. The speaker “did intend to point to and thereby refer to the picture behind him . . . but this was not the speaker’s referential intention” (p. 297), which was to prompt the hearer to identify Chomsky. If the hearer were to interpret the reference as being to George W. Bush, it could be argued that there is no problem with the hearer’s interpretation of the referring expression *per se* (what Lumsden calls the semantic referent of the expression), but there is, nevertheless, a communicative breakdown in the sense that the speaker was unable to successfully communicate what he or she had in mind (the speaker’s referential intention). In the terms of the present study, it is this latter type of miscommunication that is of interest.

Important to Bach’s view of reference is that a speaker’s referential intention “isn’t just any intention to refer to something one has in mind but is the intention that one’s audience identify, and take themselves to be intended to identify, a certain item as the referent by means of thinking of it a certain identifiable way” (1992a, p. 143). Later in this subsection, an implication of this is discussed in relation to the interpretation of indefinite NPs, in which a hearer’s mistaken belief about which entity the speaker had in mind does not count as miscommunication. Bach (2008) essentially argues that only those referential acts in which the speaker intends to clarify the identity of an individual can count as being either communicatively successful or unsuccessful. In particular, Bach argues that “if your audience identifies the individual in some way, that’s a matter of luck, not of successful communication” (2008, p. 20).

For the purposes of the present study, Bach’s approach to speaker intentions is useful for defining successful and unsuccessful reference. However, it must also be acknowledged that this may be viewed as a rather restricted definition of communication. Furthermore, the central role of speaker intentions in other areas of pragmatics has been questioned (Haugh, 2008a, 2008b, 2009). For these reasons, even within frameworks that view, like Bach (2008), reference as being fundamentally interpersonal, future studies may wish to re-examine the central role afforded to speaker intentions in acts of reference.

Reference as a four-place relation

Bach's definition of reference (the four-place view), can be distinguished from an alternative view in which reference is seen to minimally involve "a three-place relation – speakers use expressions to refer to entities" (Abbott, 2010, p. 270). Abbott does not develop this definition in much detail, but by removing the addressee from the equation, an obvious implication is that reference is conceived primarily as a speaker-oriented process. If so, then an act of reference is presumably to be considered successful so long as the speaker produces a RE with a particular referent in mind, "even if it does not identify the object unambiguously for the hearer, provided only that the speaker could do so on demand" (Searle, 1969, p. 82). As Searle suggests, such a definition is of limited use in his study of speech acts. It may also be of very little use in defining miscommunication.

It also appears that the three-place definition of reference faces a problem in accounting for how speakers select REs. In the four-place definition, speakers select REs that are appropriate to the referent, the addressee, and the speaker; a three-place relation suggests that it is sufficient to select a RE that is appropriate to the speaker-referent relationship. If so, it might be expected, for example, that L1 speakers would select REs partially on principles of least effort, such as a preference for pronouns over proper names. However, as can be seen in Example 1, this is not the case. As major linguistic theories of reference (Ariel, 1990; Gundel et al., 1993) hold, then, RE selection appears to be a matter of recipient-design.

Linguistic definitions of reference

Bach's definition of reference is also to be distinguished from the very broad definitions typical of linguistics, which typically identify only a small range of noun types as non-referential, such as equative constructions (*he's a teacher*), pleonastics (*it's raining*), idiomatic expressions (*Bob's your uncle*), noun classifiers (e.g. *a beach towel*) and "syntactically motivated noun phrases

(*whether the boy was stealing pears*)” (Du Bois, p. 206). These are non-controversial. In this subsection, a number of further uses of NPs are identified as being typically considered referential by linguists, but non-referential under the definition adopted from Bach (2008).

Unlike many linguistic studies, Du Bois (1980) provides a particularly clear linguistic definition of reference (discussed in greater depth in Appendix 2.2.5). Du Bois’ central idea is that “a noun phrase is *referential* when it is used to speak about an object as an object, with continuous identity over time” (p. 208). Du Bois defines *object* broadly to include objectified concepts and non-specific entities. Consequently, under Du Bois’ definition, the following NPs from Example 1 would be considered referential: *Antonia*, *(in) town*, *she*, *textbooks*, *a dictionary*, and *a calculator* (Du Bois excludes first and second-person pronouns, although these are included in some studies). Such expressions are discussed in the remainder of this subsection (expressions such as *in town* are discussed in Subsection 2.1.4). To facilitate reading, Example 1 is reproduced here as Example 2:

2. I saw Antonia in town. She was shopping for textbooks and bought a dictionary. She also wanted to buy a calculator.

In this context, *a calculator* (when used to mean *any calculator*) is labelled a *nonspecific-indefinite* use, as “there is no indication that the speaker has any particular thing in mind” (Bach, 2008, p. 28). This contrasts with the *specific-indefinite* use of *a dictionary* (cf. the nonspecific *I want a calculator*, *any calculator will do* with the specific *I bought a calculator*), for which the speaker does have an individual in mind, but is not attempting to clarify which one. For the purposes of the present study (and the four-place definition of reference), both specific- and nonspecific-indefinites are non-referential as neither expresses an intention for the hearer to identify a referent (only a class of objects known conceptually). Consequently, virtually no indefinite expressions are considered referential in the present study (a rare exception is given in Example 20, p. 42).

To relate this to miscommunication, it is useful to consider what would be

involved in the miscommunication of *dictionary* in Example 2. Clearly, the expression *a dictionary* could be misinterpreted. Perhaps, for example, the hearer could interpret *a calculator* to mean ‘an encyclopaedia’. However, this is a matter of *denotation* (the class of entities a lexical item can encode), not of reference. To be a matter of reference, the speaker would need to indicate a particular calculator with the intention of the hearer identifying it. There must, therefore, always be a hypothetical risk (however slight) of the hearer misidentifying the referent as a different individual. Even if the hearer pictures a Webster’s dictionary rather than the Concise Oxford dictionary that Antonia purchased, such a mistaken belief does not constitute miscommunication, as the hearer (presumably) recognizes that this interpretation goes beyond the speaker’s communicative intention (Bach, 2008, pp. 28-29).

For similar reasons, there is a type of definite NP considered referential in nearly all of the linguistic studies reviewed (e.g. Du Bois, 1980; Gundel et al., 1993) which is considered non-referential in the present study (and by many philosophers). These are NPs with *attributive* (rather than referential) meaning. The distinction was introduced by Donnellan (1966) with Examples 3 (referential) and 4 (attributive/non-referential):

3. *Smith’s murderer is insane* (uttered in court about Jones, who is on trial for Smith’s murder)
4. *Smith’s murderer is insane* (uttered at the crime scene when no suspect has been identified)

Considering, firstly, the referential use in Example 3, it is clear that the speaker intends the hearer to identify Jones. To misunderstand this utterance could be (among other possibilities) to wrongly think that the speaker is referring to a nearby prosecution witness rather than to Jones. In the attributive use (Example 4), the speaker uses a definite NP not with a particular individual in mind, but with a view to making a statement about *whoever* fits the description of being ‘Smith’s murderer’. This is clear when considering what would be involved in miscommunicating the utterance in the context of Example 4. Assuming that it is understood that there is no (primary) suspect, then to miscommunicate *Smith’s*

murderer is to misunderstand some other conceptual element of the NP (e.g. the meaning of *murderer*) rather than to misidentify an individual.

Many other definite NPs are also non-referential under Bach's (2008) definition, but considered referential in every linguistic study reviewed. Some of these are illustrated in Example 5:

5. We went to a restaurant and the waiter dropped my glass of wine.

It seems contextually clear that the speaker has a particular waiter in mind and a particular glass of wine, but equally clear that the speaker does not intend the hearer to identify the particular waiter or the particular glass of wine. These are, however, widely considered in the linguistics literature to be prototypically referential by virtue of being prototypically marked for *definiteness* (discussed in Section 2.4). However, as Bach (2008) notes, to single out an entity (as achieved through marking for definiteness) is not necessarily to refer to it (as seen in the attributive use of *Smith's murderer is insane*).

Although the semantic or pragmatic principles encoded by linguistic definiteness continue to be debated (Abbott, 2004; C. Lyons, 1999), the *familiarity* account is particularly relevant to illustrating the relationship between definiteness and reference. Christophersen (1939) argued that use of the definite article requires a "basis of [common] understanding and the purpose of the article *the* is to refer to this basis, to indicate 'the thing you know'" and further argued that this involves "the indication (not the creation) of familiarity" (pp. 70-71). In the terms of the present study, a definite NP may be used referentially when the basis of this familiarity is a pre-existing cognitive representation (a singular thought) of the particular individual that is part of the *common ground* (discussed in Appendix 2) shared by the speaker and the addressee.

However, in the case of *the waiter* and *my glass of wine* in Example 5, the basis of familiarity is not knowledge of the particular entity, but much more general schematic knowledge. For example, in mentioning *we went to a restaurant*, the speaker activates in the audience a "spectacular wealth of the corresponding

meaning construction” (Fauconnier, 2004, p. 658), a key part of which includes schematic knowledge relating to generic participant roles (waiter, customer, chef) and non-human entities (menu, dish, table), as well as goal-oriented activities, and likely sequences of events (Sanford & Garrod, 1981). Many entities (and objectified events, etc.) associated with such general knowledge are presumed to be familiar in the sense of fulfilling a predictable role. Such familiarity has been discussed in the literature in terms such as *bridging inferences* (Clark, 1975), and in relation to cognitive *scripts* and *scenarios* (Sanford & Garrod, 1981). Speakers and hearers can presume such familiarity because they know each other possesses such schematic knowledge and, as Schiffer (1972) notes, other cognitive and perceptual capacities. The crucial difference between these cases and reference (as it is defined here) is that only in the latter is the hearer prompted to identify a specific individual rather than a *role*.

It is also worthwhile to consider how the expression *the waiter* in Example 5 could be miscommunicated referentially. Clearly, the relevant lexical semantics could be misunderstood (e.g. as meaning *the chef*), and it is possible that *the waiter* could be interpreted as relating to a different role (perhaps, for example, as someone waiting in a queue). However, it equally appears that the speaker has no intention to clarify which individual fills the waiter role. A possible situation that is worth considering is one in which the hearer (unbeknown to the speaker) happens to know which restaurant the speaker dined in and also happens to know the waiter assigned to the speaker’s table. If the hearer uses this knowledge (which is not shared/common ground with the speaker) to interpret the utterance, then s/he will hold a belief about the identity of the referent which may be false (the wine may have been spilled by a waiter attending another table).

Nevertheless, in this case, what the speaker tried to communicate was not misunderstood. Rather, the hearer was mistaken due to inferences s/he applied to the utterance, despite recognizing that they were not implied by the speaker. Such ways of arriving at such false beliefs are not considered miscommunication in this study.

Turning now to plural references, it seems that plural expressions (in general) can pose a technical problem as the set of intended referents is not always clear. In

relation to the pronouns in Example 5, for example, it will be clear to the hearer that *we* refers to the speaker and one or more others who went to the restaurant, but it may not be clear who these others are. In such cases, it may be that such references are partially successful. For the purposes of the present study, these (and other) issues around plurals are not explored and the focus is restricted to singular REs.

In many linguistic studies, singular first (*I, me, my*) and second (*you, your*) person pronouns are considered to be referential although Bhat (2004) argues that these pronouns are best considered to be non-referential indicators of speech role. Of particular importance to Bhat's account is that pronouns are dissociated from their referents, such that they are "insensitive to any shifts that occur among their referents" (p. 38), so that *I* always refers to the speaker, and *you* to the addressee (at least in direct speech and non-generic uses). This particular issue is not explored further in the present study as accessibility marking in singular first- and second-person references appears entirely unproblematic, and the potential for miscommunication in these uses of *I* and *you* appear limited. This study, therefore, focuses on (singular) third-person reference.

To summarize this subsection, the present study adopts a core definition of reference as a four-place relation, in which "a *speaker* uses an *expression* to refer his *audience* to an *individual*" (Bach, 2008, p. 17). This narrow definition contrasts substantially with those typically found in the linguistics literature, with many uses of definite NPs and virtually all uses of indefinite NPs here considered non-referential. This four-place definition of reference is crucial to understanding the nature of referential miscommunication, and to distinguishing it from conceptual miscommunication. However, there is also a case for examining SLL reference within a framework that includes aspects of the broader linguistic system of definite NPs that can be used to refer. The present approach will be to preserve the core notion of reference as a four-place relation, but locate this within a broader taxonomy of reference. References conforming to the four-place relation will be labelled *Type I* reference; through the discussion in Sections 2.1.3 and 2.1.4, other types will be identified; the taxonomy that forms a central part of the framework for this study will be outlined in Section 2.2.

2.1.3 Anaphors

In linguistic-based research, a distinction is often maintained between referent introductions and subsequent references (anaphora). Underlying this distinction, it seems, is both the internal perspective on reference (discussed in 2.1.1) and evidence (e.g. Ariel, 1990) that linguistic context typically becomes the dominant factor in determining the most appropriate RE type for subsequent references (Ariel herself “does not assume (as fundamental) the first versus subsequent mention distinction” (2006, p. 15)). In this subsection, the present definition of reference is discussed in relation to anaphors.

The term anaphor is used here in the sense of *discourse anaphora*, applying to NPs (of any type) that specify the same entity as a previously used NP antecedent, either in the same clause or a previous one, or even a forthcoming one (*cataphora*, in the terminology of Halliday & Hasan, 1976). The antecedent is a key part of the linguistic context that influences how anaphors are encoded and interpreted. Anaphors can be either referential (REs) or non-referential. As discussed in Appendix 2, non-referential anaphors include those relating to propositions, events, and time.

Of interest in this subsection are cases where a NP is used to introduce a hearer-new entity, and this introduction establishes a ‘discourse referent’ (Karttunen, 1976) that can be tracked in an anaphoric chain. By definition, the introduction of a hearer-new entity is non-referential (i.e. there is no hearer-held singular thought and no speaker intention to clarify the identity of the referent), but it is argued here that some subsequent anaphors may be semi-referential. Furthermore, some non-referential anaphors are of interest to the present study for their potential for reference-like misinterpretation, whereby problems can occur in the tracking of anaphor-antecedent relations.

The first type of case to consider is one in which a speaker introduces to the discourse a specific entity which is known to the speaker but not to the hearer. This is illustrated in Example 6:

6. My friend Rich just called. He's getting married.

As it relates to a hearer-new entity, use of the initial NP *my friend Rich* is not referential in this context because the hearer possesses no singular thought about this person: there is no pre-existing cognitive representation of this individual for the hearer to identify. However, it is also true that singular thoughts can be established through a chain of communication as long as, at the beginning of the chain, the speaker had direct experience of the referent (Bach, 1987). A question which is unresolved in the literature is at which point communication about an individual leads to a singular thought for the addressee. There seems to be no clear answer to this.

It may be useful to consider this problem in terms of Heim's (2002) *file change semantics*. In Heim's discussion, discourse comprehension is discussed metaphorically in terms of *file-keeping*, in which an up-to-date mental file is maintained of the utterances in the present discourse. The use of a specific indefinite NP prompts the hearer to open a mental *file card*. For example, the first sentence represented in Example 6 would result in marking an (until now) empty card as F_1 , and recording the information 'named Rich', 'old friend of p ', 'phoned p '. Subsequent references to this entity should result in an updating of the file ('got engaged' etc.). Heim's file-keeping metaphor (although intended as a model of discourse comprehension) appears apt for describing the problem of identifying the point of transition from being a mental representation of a discourse referent to counting as a singular thought.

As discussed, one can establish a singular thought of Socrates through communication. Similarly, at some point, one could come to hold a singular thought about the individual described in Example 6 as *my friend Rich*, but it is unclear exactly when the information in a discourse file-card can lead to such a singular thought. This in turn leads to the question of whether, or at what stage, certain types of anaphoric chain can be considered referential. A feature of real-world referents is that they can be represented as file cards in many different discourse files, such that the mental representation of the referent is available to be updated based on any relevant act of communication. It seems clear, then, that

a minimal requirement of singular thoughts is to have a representation in long-term memory. Perhaps it could be argued that a referent could be introduced into discourse in such a rich and memorable manner that the hearer could immediately hold singular thought about it. In this study, however, for simplicity, the approach will involve a firm distinction between those entities that addressees knew about prior to the present discourse and those that they come to know about through the present discourse.

Consequently, some anaphors will be considered here to represent a type of quasi-reference. An example is the pronoun *he* in Example 6. A crucial quality of such references is that the referent has the potential to eventually be held as a singular thought. These will be labelled *Type II* references.

Type II references are to be distinguished from a number of other types of anaphor that relate to entities that cannot ‘germinate’ a singular thought. The most relevant to the present study are those NPs used attributively (Example 7), and those used generically (Example 8):

7. Smith’s murderer may be insane but he left no clues.
8. The liger is not mythical. It is the offspring of a male lion and a female tiger.

Similarly, some uses of nonspecific indefinites (as discussed by Karttunen, 1976) are also available to be linked in anaphor-antecedent relations. For example:

9. I’d like to buy a bouquet. *It* should look expensive but *it* shouldn’t cost too much.

In the present study, anaphors such as those in Examples 7 to 9 will be considered *Type III* references. Clearly, however, the terms *reference* and *referent* are used very loosely in the expression ‘Type III references’. This is motivated by convenience rather than any claim that such examples are genuinely referential.

Finally, it is worth noting that pronouns are sometimes mistakenly labelled

anaphoric (J. Lyons, 1977b, p. 667). Lyons provides the following example, in which it is clear that the referent of *that* is not the same as the referent of *it*:

10. A – That’s a rhinoceros.

B – A what? Spell it for me.

In this case, assuming that the interactants are in the presence of a rhinoceros and are speaking about it, *that* is referential (Type I) while *it* relates not to the antecedent (which is an individual rhinoceros) but to the spelling of the word *rhinoceros*. In this study, the referential chain begun by *it* is also to be considered Type III.

2.1.4 Referents

This subsection further refines the concept of reference used in the present study by examining the crucial issue, from an external perspective, of what counts as a referent. In short, it is argued here that a restricted definition in line with Bach’s (2008) perspective is most relevant to studies of communication and miscommunication.

This subsection begins by briefly outlining the linguistic perspectives of referents elaborated by Du Bois’ (1980) and Gundel et al. (1993, 2005). In what follows, these views are contrasted with the view arising from Bach’s (2008) definition of reference, with an emphasis on identifying which things one may hold a singular thoughts about (and, therefore, refer to). After establishing some types of entity considered referential in all of these studies, a wide range of entities are identified as being non-referents from the present perspective, but as being encompassed by one or both of the linguistic studies.

Linguistic definitions

Of the linguistic studies reviewed, Du Bois (1980) presents the most detailed

statement on what constitutes reference (this is reviewed in greater detail in Appendix 2.2.5). The central idea in this definition is that “a noun phrase is referential when it is used to speak about an object as an object, with continuous identity over time.” Du Bois further elaborates:

The *object* here may be a physical object or objectified concept; it may be specifically known or may be unknown; it may exist in the real world or in some hypothetical world; there may be more than one object. As long as a noun phrase is used to speak about such objects and the objects are conceived of as having continuity of identity, the noun phrase is referential (pp. 208-209).

Du Bois also provides a detailed discussion of what he does not consider referential (pp. 209-217), all of which are also considered non-referential in the present study. Nevertheless, there is much in his approach that diverges from the present perspective. For instance, as discussed in Subsection 2.1.2, a crucial element in the four-place view of reference is that the speaker and hearer must hold a singular thought about the referent, and, in many cases, Du Bois’ referents do not meet these criteria.

Referents are defined even more broadly within the Givenness Hierarchy framework (Gundel et al., 1993, 2005). These include nominalized events, times, locations, and propositions (discussed in Appendix 2.2.2), none of which is considered referential in the present study.

Genuine referents

Under the present definition of reference, genuine referents include specific individual people and objects that exist (or once existed) in the real-world. In the present study, this will be extended to the fictional characters in the film narrative task that was used to elicit data although this may be somewhat controversial. In support of such a view, Searle (1969) argued that fictional individuals such as Santa Claus and Sherlock Holmes can be referred to “*as fictional characters*

precisely because they do exist in *fiction*.” A further position is Salmon’s (1998) argument that “fictional entities are real, albeit abstract entities” and can, therefore, be referred to (cited by Bach 2008, p. 32). As Searle (1969, p. 78) argues, it may be that such references can only felicitously occur in certain limited “modes of discourse”, of which, the type of narrative retelling task used in the present study is clearly one (further discussion of existence and fictional entities is presented in Appendix 2.1.1).

Classes of entity, generic individuals, and entities singled out by description (i.e. with NPs used attributively) are not considered genuinely referential, although are included in the present study as Type III reference.

Abstract entities and objectified concepts

So far, the discussion has focused mainly on reference to concrete entities. It seems possible that a singular thought could be held about at least some abstract entities, for example *the company* in the utterance *He sold the company*, and to fictional characters if indeed Salmon (1988, as cited by Bach, 2008) is correct in treating these as being abstract. It is very doubtful, however, whether one could hold a singular thought about *the tension* in the utterance *Feel the tension* (uttered at a business meeting), and it is unclear whether the ‘identity’ of *the tension* could be miscommunicated independently of denotation (although interlocutors could agree on its attributes). Such an objectified concept relates to attributes of the event/situation in question rather than to an entity. In other cases, such as *love* or *20th century Spanish anarchism*, it seems equally clear that there is no corresponding singular thought. Overall, although it seems possible that at least some abstract entities can be referred to, it is unclear on what bases the referential/non-referential distinction can be maintained. The present study, therefore, focuses on reference to concrete entities although, for methodological reasons (as discussed in Chapter 4), these occur within the fictional world of a film narrative.

Propositions and stretches of discourse

Researchers working within a Givenness Hierarchy framework often include pro-forms that relate not to entities but to propositions and larger stretches of discourse. For instance, *that* in Example 11 relates to the entire previous clause:

11. A – The drought has broken.
B – That’s a relief.

A rationale is presented by Swierzbina (2010, p. 994), who argues that “from a theoretical viewpoint, where a referent is a mental representation, the type of entity being referred to is the same regardless of whether the representation matches up with a tangible object or a preceding piece of discourse.” According to this view, the mental representations of specific, known objects for which we hold singular thoughts (e.g. *Barack Obama*), are not qualitatively different to the representations of multiple propositions (e.g. *that the teacher placed the guitar away from the air conditioner was a good thing*). However, this position appears at odds not only with perspectives on reference from philosophy, but also with major theories of discourse representation, such as *Mental Space* theory (Fauconnier, 1985, 1997), in which mental representations of referents appear to be cognitively represented as basic elements that are distinguishable from stretches of discourse (in which relations hold between referents).

In terms of using pronouns and determiners, it may indeed be that anaphors relating to propositions and singular thoughts are *encoded* in similar ways, as Givenness Hierarchy theorists presume (Gundel et al., 1993, 2005; Swierzbina, 2004) (this position will be reviewed in Chapter 8). However, it may be that propositions are not *referred* to in the sense that specific individuals are, and, therefore, are communicated in ways that are qualitatively different to genuine referents (i.e. communicated or miscommunicated in terms of conceptual content). As such, propositions and larger stretches of discourse are not included in the focus of the present study.

Time and location

Many linguistic studies also use terms such as *time reference*, *event reference* and *location reference*, particularly those working within a *quaestio* model of discourse (discussed in Section 2.9) (e.g. Ahrenholz, 2005; Perdue, 1993b; von Stutterheim & Klein, 1989). These represent useful distinctions, although they are not to be confused with reference in the restricted sense adopted in the present study. Indeed, Von Stutterheim and Klein (1989, p. 46) make it clear that their use of the terms *referent* and *reference* “is simply a terminological convention”, and use these as shorthand for ““meaning entities based on linguistic meaning proper and on structure-based contextual features’.” However, linguists with a fundamentally internal perspective of reference may treat definite NPs relating to times, events, and locations in the same way as they do REs relating to hearer-known individuals (e.g. Gundel et al., 2005). The following discussion focuses on time and location, with events discussed in Appendix 2.1.3.

Considering ‘time reference’ firstly, it is illuminating to consider what is involved in the successful communication of time, and what a speaker could expect a hearer to identify when uttering the following expression:

12. On April 12th 2009 . . .

Even for the most memorable of days (e.g. his/her wedding day), the hearer is in no position to hold a singular thought about such a date, despite having direct experience of it. Typically, a hearer will have certain associations arising from the semantic content of the expression, for example a perception of typical April weather, or where the individual happened to be living in 2009. Clearly, the speaker is not, in fact, asking the hearer to identify a referent. Instead, the speaker is presumably intending one or more of a number of other communicative effects, for example, prompting the hearer’s schematic knowledge associated with mid-April and with 2009. To miscommunicate this use of *April 12, 2009* would be, it seems, in many cases virtually synonymous with mishearing the expression, or perhaps forgetting what the lexical item encodes. In other cases, it may best be considered a problem of interpreting non-referential deixis, whereby an element

within the expression signals a role for context-based interpretation (Levinson, 2004). In short, it seems that such miscommunication is not an issue of reference.

Importantly, it does not appear that the limitations of memory are a factor in this, as there appear to be strong reasons to believe that one cannot hold a singular thought about other time periods either. Like attributive reference, singular thoughts cannot be held for expressions of future time, for example *tomorrow*. There may be associations (*I'm leaving at 10am*) and predictions (*it'll be sunny*), but it seems impossible to hold a thought of tomorrow independently of these associations and predictions. It seems the same is also true of present time and the recent past. One cannot, it seems, hold a singular thought about *now* or about *three minutes ago*. Again, one may have associations based on what occurred approximately three minutes ago, but it seems impossible to hold a singular thought about the time period itself. As such, then, to miscommunicate time expressions is not a matter of reference, but perhaps, for example, a matter of mishearing, misinterpreting an illocutionary act, or misunderstanding an implicature (e.g. misunderstanding whether, in uttering *now*, a speaker means *this moment*, or *sometime soon*).

Similarly, in many (perhaps all) cases, expressions of location do not appear to be referential. Specifically, in at least three crucial ways, locations appear different from genuine referents. J. Lyons (1991, p. 142) argues that “it is obvious that there is an ontological distinction to be drawn between entities and places. It is also arguable that places (as distinct from spaces) are ontologically secondary, being identifiable as such by virtue of the entities that are located in or near them.” It therefore appears, in this view, that one cannot hold a singular thought about, for example, *the middle of this room*, but only about the objects that are located there, and the locative relations holding between them.

A further problem with locations is the issue of *individuation* (discussed in Appendix 2.1.3 in relation to events). Genuine referents exist as individuals in a way that is essentially imposed on one's cognitive representation; locations, at least in many cases, require interpretation to be individuated within space. As such, each interactant in a conversation may hold very different views (in some

cases non-over-lapping views) about locations such as *the middle of the room* and *the bakery*. Even in terms of countries, there may be very different views not only about legitimate land borders, but also about airspace and surrounding sea. As discussed in Appendix 2.1.3, this creates substantial problems clarifying the criteria for successful communication.

As J. Lyons (1991) notes, the suggestion that there are fundamental differences between referents and locations appears to be supported by linguistic analysis. Specifically, in languages such as English, despite considerable overlap with the types of NP that may be used referentially, there are very distinct linguistic phenomena that specialize for encoding locations (adverbs, prepositional phrases, certain deictic expressions).

To summarize this subsection, there are strong cognitive factors that motivate a restricted definition of referent that is suitable for studies concerned with referential communication. It will also be argued in later chapters that distinctions arising from this restricted definition may be useful in accounting for the distribution of RE types.

2.1.5 Summary and implications for the present study

Perhaps largely due to differences arising from the internal and external perspectives of reference (Kronfeld, 1990), the range of phenomena considered referential is much narrower in philosophy than in linguistics. One particular approach from philosophy, articulated by Bach (2008), provides perhaps the most coherent framework for discussing referential miscommunication (as distinct from other misunderstandings and false beliefs).

Despite Kronfeld (1990) having articulated the distinction between the internal and external perspectives some time ago, it appears to have often remained under-appreciated, and the motivations of those who adopt one perspective over the other seem not always to be acknowledged. For example, Bach (2008) has recently challenged linguists to define reference in accordance with an orthodox philosophical view. In some respects, this appears to have merit in potentially

enabling more fruitful interdisciplinary discussion and cross-fertilization of ideas. However, it also seems reasonable to counter-argue that linguists need to approach reference in a manner consistent with the aims of their field (Hedberg, 2008, March 26), and it seems that there is often an uncomfortable fit between uses of language and the transparent logic of philosophical categorization. Specifically, languages appear not to mark a clear distinction between genuine reference and what is here defined as non-reference. Further, the class of NPs that can be used to refer (essentially definite NPs) can also be used non-referentially. As it seems that no purely linguistic distinction can be drawn between definite NPs that are used referentially and non-referentially, it is unsurprising that linguistic accounts of reference usually seek a more general account of NP selection, and consequently define reference more broadly.

However, it is also true that studies relating to communication frequently benefit from the insights from both linguistics and philosophy, as well as areas such as psychology and sociology. This appears particularly true of studies relating to successful and unsuccessful communication. The present study adopts Bach's definition of reference as a core part of the analytic framework but, being largely linguistic in orientation, the framework will be broadened to enable discussion of some NPs which, from the internal perspective, are relevant to investigating referential miscommunication. These are incorporated into a framework that distinguishes levels of reference, and is outlined in Subsection 2.2.

2.2 Levels of reference

In this subsection, three levels of reference are defined and distinguished from other linguistically-related uses of language. Following the discussion in Section 2.1, the three levels of reference are defined in relation to Bach's (2008) four-place view of reference and are distinguished from the mention of entities, and so-called reference to times, places, propositions, and events. Also as discussed in Section 2.1.4, although it is likely that some types of abstract entity can be referred to, for the purposes of the present study, only physical entities qualify as referents (albeit, for methodological reasons, physical entities as they are

represented in a fictional film narrative). This subsection concludes with a brief discussion of the adequacy of describing these as levels rather than types.

2.2.1 Level I

At this level, reference is made to an entity (referent) for which both interactants have a pre-existing cognitive representation that constitutes a singular thought. This matches Bach's (2008) definition of reference that was discussed in Section 2.1.2.

The key factor that distinguishes between reference at this level and at Level II is that, at Level I, the referent can be cognitively identified (or misidentified) with a mental representation that exists independently of the present discourse. This level is, therefore, fundamentally reference from an external perspective.

2.2.2 Level II

As with Level I references, reference at Level II relates to a real-world entity (i.e. not merely to a discourse referent) which must be known to the speaker. Further, the hearer has a ready-formed mental representation of the referent. Crucially, however, the hearer's mental representation was formed during the current interaction (i.e. a Level II reference always involves subsequent reference to an entity that has been previously introduced into the discourse as hearer-new). The most significant implication arising from this is that such resolution of the RE merely involves tracking anaphoric chains within the discourse; resolution does not involve cognitively identifying a long-term mental representation of the real-world referent. Resolution is, therefore, entirely a matter of the *internal* (discourse) perspective. This is illustrated in the following short text:

13. I used to work with a guy called John. I just bumped into him. He's coming over.

In this example the resolution of *he* and *him* requires nothing more than to identify that the pronouns relate to the discourse model of John. At this stage, the hearer's mental representation of John contains perhaps a number of attributes (e.g. human, male, friend of *p*) and enables tracking of the referent in discourse.

In short, in Level II reference, the hearer has been instructed at a previous stage in the current discourse to create a 'mental file' for the referent. This file may, in due course, become a singular thought, but at this stage it is embryonic and available for reference tracking but not further identification. If a Level II referent is identified as being a Level II referent, yet misinterpreted, then this is solely a matter of incorrect anaphor-antecedent resolution.

2.2.3 Level III

At this level, neither the speaker nor the hearer is in a position to have a singular thought about the relevant entity; such uses of language can only be considered referential from an internal perspective. Like references at Level II, Level III references are anaphors linking to entities that were introduced non-referentially.

Referents at this level are those entities that may be (a) hypothetical, (b) generic, or (c) exist in the real world but be unknown to the participants (i.e. Donnellan's attributive reference; Section 2.1.2). Examples of the latter category include anaphors relating to *Smith's murderer (whoever that may be)* and *The first person born in the 25th century* both of which can only be understood descriptively (Bach, 2008; Donnellan, 1966). Hypothetical referents include entities that can be talked about only in a very limited way, such as *If I bought a car, it would be silver*. In this case, both *a car* and *it* denote a certain type of entity, and, from the internal perspective, *it* is referential in terms of linking to a (non-referential) antecedent. Generic entities include both individuated generics such as *The lion is a large carnivorous mammal, it . . .*, and classes of entities such as *Lions are carnivorous mammals, they prey on other large beasts*.

To reiterate, Level III references do not relate to any external referent or constitute

reference from an external perspective; it relates to subsequent mentions of discourse referents (Karttunen, 1976). The anaphor relates to an antecedent that the speaker has already introduced to the discourse, often through the use of an indefinite expression or through a definite expression via schematic knowledge (a bridging inference) or a generic entity. Like Level 2 reference, the hearer has been implicitly instructed to ‘open a mental file’ (in the sense of Heim, 2002; Karttunen, 1976), yet there is no corresponding implicit instruction from the speaker to start formulating a singular thought. The ‘file’ enables a representation of the entity to be constructed in the hearer’s mental model of the discourse, but cannot, in fact, lead to the formation of a singular thought.

Although this category could be further refined into subcategories, it is important to note that Level III does not relate to all uses of NPs that fail to qualify as Level I or II references, as not all nominalized expressions concern entities, even if they are presented as such. Such non-referential uses of NPs are discussed in Subsection 2.2.4.

2.2.4 Non-reference

Four types of non-referential NP are distinguished in this subsection.

Non-reference: Entity introduction

This category applies to the discourse introduction of entities, whereby a speaker presents an entity as being previously unknown to the hearer (*A dog chased me*). As such, there is no (reflexive) intention by the speaker to clarify for the hearer exactly which individual is meant. Subsequent anaphors linking back to this introduction are Level 2 and Level 3 references. Introductions at this level may be established by certain definite and indefinite expressions.

Such entity introductions are always non-referential according to the four-place definition of reference, but are often considered referential in linguistic studies (e.g. Gundel et al., 1993; Huebner, 1983, 1985).

Non-reference: NPs with nil reference

This category includes those NPs (outlined in detail by Karttunen, 1976) that cannot establish a referential chain, such as in certain fixed expressions (e.g. *on behalf of*), pleonastic constructions (Example 14), and certain NPs within the scope of modality for which there is no existential presupposition (Example 15):

14. It's raining.
15. *I don't have a car. It's black.

Noun phrases indicating time, event, and place

Noun phrases used referentially are distinguished from those used to indicate non-entities, such as times and places (discussed in Section 2.1.4) and events (discussed in Appendix 2.1.3). Examples include:

16. that morning
17. on the street
18. the accident

Noun phrases indicating propositions

Pro-forms may be used in place of a longer stretch of discourse, in which an expression relates to “a variety of third-order entities, such as facts, propositions and utterance-acts” (J. Lyons, 1977b, p. 668). Lyons terms these *impure textual deixis* and provides the following example:

19. X – I've never even seen him.
Y – That's a lie.

2.2.5 Levels or types?

The distinctions between Levels I, II, and III are proposed to represent *levels* of cognitive processing of reference rather than reference types. Moving up the scale

(from Level III towards Level I), the essential processing demands at one level are found at the next level, in addition to a new demand:

Level I > Level II > Level III

At Level III, the hearer has to recognize only that an entity is being singled out, and that this entity is to be understood through the semantic and/or procedural meaning of the RE. This is also true of Level II, but here the hearer has been additionally prompted to establish a discourse file for the referent *as a specific individual* (with the potential to become a singular thought). At Level I, the hearer is additionally required to identify the referent from among all those entities in the world for which s/he holds a singular thought.

In short, it is proposed that each new level of reference imposes an additional processing demand on the addressee, and can, therefore, be thought of as representing a distinct level rather than simply a type.

2.3 The speaker and the hearer: social and cognitive bases for referring

The four-place relation in reference involves a speaker, a hearer, a referent, and an addressee. Some aspects of this relationship were discussed in Subsection 2.1.2, and the nature of referents was discussed in Subsection 2.1.4 (REs will be discussed in 2.5). This section discusses some relevant aspects of the speaker/hearer relation.

2.3.1 Given and new information

Appendix 2.3 presents an overview of *common ground* (Clark, 1996), which is an important pre-condition for communication. Common ground relates specifically to reference in a number of important ways, including implications arising from shared knowledge of the referent (e.g. Keysar, Barr, Balin, & Paek, 1998;

Koschmann, LeBaron, Goodwin, & Feltovich, 2001; Wilkes-Gibbs & Clark, 1992). More importantly, perhaps, the preceding discourse represents common ground which greatly influences RE selection in discourse. Information in the preceding discourse has been variously described as *familiar*, *given*, *old*, and *activated*, and is seen by Chafe (1976, 1994) as being in a constant state of flux, whereby the introduction of new information into discourse causes the salience (givenness) of old information to subside, as do intervening sentences and discourse boundaries. This is very close to the concept of *accessibility* (Ariel, 1985, 1988a, 1990, 2001) that is adopted in the presented study to account for RE selection (discussed in Section 2.5.2). Many of the theories presented in Section 2.5 take some concept of givenness/accessibility to be central to RE selection and reference resolution.

Prince (1981) distinguishes a number of ways in which information can be considered *given* in a taxonomy of *assumed familiarity* (the key distinctions being *new*, *inferable*, or *evoked*). Although widely cited in linguistic studies of reference, Prince's subcategories relate mostly to discourse referents and do not capture the essential distinctions necessary for the present study (i.e. that reference involves a four-place relation, that interactants must share common ground in relation to the referent, that genuine referents exist independently of discourse, and that interactants must hold singular thoughts in relation to the referent). In a later work, Prince (1992) distinguishes between information that is new or old in relation to the hearer, and that which is new or old in relation to the discourse. Prince assumes that a referent cannot be both discourse-old and hearer-new, although a possible counter-example may be cases in which a third party is late to join in the discourse of an existing conversation (as the interactions of the present study are dialogic, this possibility is not further pursued here). This leaves three possibilities for characterizing information that are relevant to the present discussion. These statuses are presented below with the term preferred in the present study presented in parenthesis:

1. hearer-old, discourse-new (*referent introduction*)
2. hearer-old, discourse-old (*referent tracking*)
3. hearer-new, discourse-new (*non-referential introduction*)

2.3.2 Social aspects of referring

In this subsection, several relevant social aspects of reference are briefly described. These relate to human relationships within the four-place definition of reference: speaker-hearer, speaker-referent, hearer-referent, speaker-hearer-referent, and, more generally, to social aspects of the overall act of reference.

A number of lines of research indicate that speakers select REs appropriate to the social relations holding between interactants and referents. For example, interactants monitor the REs used in a conversation and collaborate to identify mutually agreeable names and descriptions of referents. This becomes part of interactants' common ground and enables brevity in subsequent references without compromising success (e.g. Clark & Wilkes-Gibbs, 1986; Krauss & Glucksberg, 1977) and, in interactive dialogues, allows accurate partner specific interpretations of otherwise ambiguous lexical REs (Brown-Schmidt, 2009). Consequently, overhearers may struggle to interpret references that are clear to addressees (Schober & Clark, 1989).

Other aspects of the speaker-hearer relationship are also found to influence reference resolution. In particular, the common ground among friends makes references easier to resolve than those made by strangers (Fussell & Krauss, 1989), while shared culture facilitates brevity (Hinds, 1985).

Aspects of the speaker-referent relationship are also important. In her English data, Stivers (2007) argues that speakers use kin terms as the unmarked RE types for their parent or grandparent, use names for other people they have a relationship with, and use descriptions when the referent's name is unknown or problematic. Stivers further argues that departures from these unmarked forms tend to be motivated by a communicative purpose *in addition to* identification of the referent (e.g. *poor old Gladys*). Ariel (1988a, 1990, 2001) also addresses the speaker-referent relationship, arguing that some speakers take less care in ensuring that hearers can resolve references to those who are less powerful (women, children, and minorities).

Murphy (1988) identifies a number of aspects of face management and politeness that arise from the three-way relationship between speaker-hearer-referent, and argues that, unlike reference to objects, reference to persons “always involves a question of social relations” (p. 317). Murphy identifies four rules of polite reference (in cooperative conversation). The first holds that a speaker chooses an RE sufficient to enable reference resolution. Although not clearly elaborated, this suggests that reference should be considerate in terms of the cognitive processing required for resolution. The second rule requires “that speakers cannot use a name that is more intimate than they are authorized to use” (p. 340). The third rule “prevents the use of [social] one-upmanship in reference”, by requiring that the speaker does not bring attention to a close relationship of which the hearer will be envious (p. 340). The fourth rule relates to consideration of what the hearer considers to be an appropriate relationship between the speaker and the referent. Murphy later modifies these four basic rules in relation to non-participating hearers (i.e. bystanders).

There may also be differences in how speakers from different social groups refer. For example, Bernstein (1973) and Hawkins (1973) reported greater use of pronouns by working class children than middle class children. In particular, Hawkins reported that these children made substantially greater use of exophoric pronouns. More recently, Cheshire (2005) reports substantial gender and class differences in how her participants signalled discourse-new entities in conversation. For example, her teenage male participants were more precise in marking discourse-new information. Cheshire suggested that the boys may have more strongly oriented to the task as an information-based activity, while girls may have attended to more affective aspects of the interaction. However, as Cheshire’s analysis conflates referential and non-referential NP use, it is unclear whether RE selection varies in similar ways or for similar reasons. It should also be noted that there may be substantial variation in how individuals refer, with Yule (1997, p. 26) arguing that there remains a “possibility that large numbers of older children, and even adults, have not developed effective referential communication skills in speaking their L1”.

Sacks and Schegloff (2007; also Schegloff, 1996) suggest that, in reference to

persons, there is a strong preference to use REs that allow the addressee to identify the referent (i.e. *Julian* is preferred over *someone*), but that this is constrained by a further preference to use a single reference form, such as a first name (i.e. economy is also required). In the terms of the present study, this means that, where conditions allow (e.g. the hearer knows the referent and is able to identify it without undue effort) speakers should refer to an entity rather than merely mention it. Use of an indefinite expression appears to implicate that the addressee (or the speaker, or both) cannot identify the referent. Sacks and Schegloff also argue that addressees follow a corresponding preference whereby “if recognition is possible, try to achieve it” (p. 25).

In summary, a number of important points arise from a discussion of social aspects of reference. Firstly, it seems that reference between interactants who know each other well will be more efficient and less likely to result in miscommunication than those among strangers. Secondly, the hearer-referent and speaker-referent relationships both influence the form of RE used. These will be accounted for in the present study, and should also be allowed for in theories of RE selection. It is also acknowledged that there may be substantial individual (Yule, 1997), gender, class, and regional differences in how speakers refer (Cheshire, 2005). Finally, it appears that referential NPs are used wherever possible, and that hearers are expected to resolve the reference.

2.4 Noun phrases as referring expressions

Although it can be argued that some expressions (e.g. proper names) have semantic reference (i.e. a direct semantic relation holds between certain words and real-world referents) (as discussed by, for example, Abbott, 2010; Kripke, 1997; Lumsden, 2010), the present study is concerned with the pragmatic act of (speaker) reference, in which certain expressions are used to refer an addressee to an entity. In relation to speaker reference, it is important to note that referring expressions (REs) do not form a distinct linguistic category that is identifiable by morphological or syntactic features, nor are REs identifiable as a purely semantic category (Jørgensen, 1998, p. 105). Rather, REs are defined in terms of a

speaker's communicative intention to use them to indicate a particular referent.

Nevertheless, REs are nearly always definite noun phrases. Definiteness is essentially a linguistic and semantic feature prototypically associated with the definite article in English, but also with a number of other linguistic forms: proper names, demonstratives, possessive constructions (*Finn's ball, his racquet*), personal pronouns, and universal quantifiers (e.g. *all, every*) (C. Lyons, 1999, pp. 15-33). In addition, some utterances may have a *zero* (\emptyset) RE, where the syntactic position of NP (as represented in a tree structure) has no surface realization, yet clearly relates to a specific referent.

Although there appears to be general consensus over the class of definite expressions in English, there remains much dispute over the nature of the semantic or pragmatic principle grammaticalized by definiteness. Abbott (2004) identifies two main, competing accounts of the basis for definiteness. A *uniqueness* account holds that the semantic content of a definite NP applies uniquely to one individual (B. Russell, 1905), while the *familiarity* account holds that the hearer has prior knowledge of the individual(s) being spoken of (Christophersen, 1939). A number of examples have been raised in the literature that are problematic for either or both of these accounts, prompting variations on these approaches, including the principles of *identifiability* and *inclusiveness* (discussed in Abbott, 2004; C. Lyons, 1999). Whichever account is correct in its details, it is agreed that definite NPs facilitate reference by clarifying that a particular entity is being singled out from within the much broader class of objects denoted by the bare noun.

As noted, however, not all uses of definite NPs are referential. It is perhaps surprising, therefore, that very few studies have sought to establish how hearers recognize that a definite NP is being used referentially, with a study by Jørgensen (1998) being a rare exception. Building on work by Kronfeld (1990), Jørgensen argues that "the manner in which the speaker wants the hearer to identify the referent" is crucial (1998, p. 108). For example, in uttering *Move the chest to the other corner* or *That chest is a valuable antique*, the speaker uses *identification constraints* (a "demand for physical manipulation" and deixis) that relate the chest

to the physical context (p. 113). The addressee consequently recognizes the act of reference (and identifies the referent).

However, not all references are achieved through definite NPs. Reference may also be achieved by gesture alone (Gullberg, 2006; Yoshioka, 2008; Yoshioka & Kellerman, 2006), and, in very rare cases, by indefinite expressions.

Indefiniteness is prototypically associated with the indefinite article *a*, as well as, for example, indefinite uses of *this* (Perlman, 1969) and *some* (e.g. *I saw this/some guy run away*), and the indefinite pronouns *somebody* and *anybody*. An example in which an indefinite expression may be used to refer occurs in Example 20:

20. A very happy man tells me you have agreed to marry him.

Here, it does seem that the speaker is prompting the addressee to resolve a reference. However, in nearly all other cases, indefinite expressions are used non-referentially and, as Bach (2008) argues, it is not relevant to this matter whether the hearer happens to guess which entity was mentioned.

Finally, it is important to note that the same definite NP may be used referentially on one occasion and non-referentially on another (e.g. Examples 3 and 4, p. 17).

2.5 Referring expressions as a system

Having established that certain NPs can be used as referring expressions, this section discusses referring expressions as a system. Glucksberg and Krauss articulate the key communicative problem for speakers and their addressees: “a referent may be referred to with any one of a number of different names and a single name may refer to any one of a number of referents” (1967, p. 309). The issue, then, is how to account for the linguistic choices that speakers make in an act of reference, and how hearers interpret these choices. In this section, the focus is on the choice of RE, while Section 2.6 discusses linguistic features above the NP level.

While a number of theories seek to account for how some determiners or RE types are used (e.g. Christophersen, 1939; Gundel et al., 1993; Strauss, 2002), Accessibility Theory (AT) (e.g. Ariel, 1990) represents a rare attempt to account for the use of all definite NP types, explaining why, for instance, a speaker would select *the tall man* rather than *the man*, *this man* or *he*. In Subsection 2.5.1, some of the immediate predecessors of AT are described before the major claims of AT are presented in Subsection 2.5.2.

A comparison of AT with the major competing theories is presented in Appendix 2.4. This includes discussion of the Givenness Hierarchy (e.g. Gundel, 2010; Gundel et al., 1993), theories of topic marking (e.g. Givón, 1983c), Chafe's discussion of discourse 'flow' (1994), neo-Gricean approaches (e.g. Huang, 2000; Levinson, 2007) and post-Gricean approaches (e.g. Wilson, 1992).

2.5.1 Earlier approaches

Predating the comprehensive theories of RE marking discussed in Appendix 2.4 and Subsection 2.5.2, a number of researchers correlated specific RE types with semantic and pragmatic features that have, more recently, been subsumed under AT. This subsection provides a very selective review of some of the pre-AT literature in order to describe some of the issues and phenomena addressed in AT. While Ariel (2001, 2006) has called AT "in effect a development of Sanford and Garrod (1981) and Givón" (1983c), this subsection will focus on the similarly important contributions of Chafe (1976), Prince (1981), and Yule (1981).

Earlier insights include those of Chafe (1976), who identified a number of ways in which NPs were marked for various discourse statuses. The most relevant of these include the marking of *given* information (which Chafe defines as "that which the speaker assumes to be in the consciousness of the addressee at the time of the utterance", p. 30), *contrastiveness*, and definiteness. Chafe argued that given information "is conveyed in a weaker and more attenuated manner than new information", such that it "is pronounced with lower pitch and weaker stress than

new, and it is subject to pronominalization” (1976, p. 31). In later work, Chafe (1994) distinguished given information from that which is activated (semi-active in consciousness) and that which is new. Contrastiveness involves marking information as being counter to the presumed expectations of the addressee, and is largely signalled through higher pitch and stronger stress, and may be expressed syntactically, such as through English cleft sentences (pp. 35-37). As discussed in Appendix 2, these ideas were further developed in a later work (Chafe, 1994).

Following Chafe’s earlier work, Prince (1981) and Yule (1981) introduced further conceptual distinctions and analyses of data, resulting in observations suggestive of a system of RE marking. These studies appear to be among the immediate forerunners of those by Ariel, Gundel et al. (1993), and Givón and his associates (1983c).

As discussed in Subsection 2.3.1, Prince’s (1981) taxonomy of assumed familiarity included primary distinctions between information that (at the moment of being mentioned) are (a) new to the discourse, (b) inferable (through schematic knowledge), and (c) evoked (e.g. previously mentioned or present in the perceptual context). These are further sub-categorized into seven types of familiarity. Under this framework, Prince’s analysis of two texts led to a proposed *familiarity scale* in which these subcategories were organized according to speaker preference. Speakers should use a NP indicative of the discourse status of the information. To use a particular form is to implicate that no higher form would be felicitous, and to use a NP indicative of a lower familiarity status is “to have been deviant in some way (e.g., evasive, childish, building suspense as in a mystery novel)” (p. 245). However, Prince’s focus was on more general aspects of the presentation of information in discourse, and this insight was not explored in further depth.

Closer in emphasis to AT is a study by Yule (1981), investigating the conditions under which speakers select one RE form over others in a particular type of restricted referential discourse. Besides the distinction between new and *non-new* (given) information, Yule drew a further distinction between given entities that are either *current* or *displaced*. When entities are introduced, they are new; these

entities become current non-new upon the introduction of the next new entity; and become displaced non-new when a further new entity is introduced (p. 47).

Yule found a number of clear distribution patterns in his data relating to current and displaced entities. In particular, current entities were most frequently referred to using pronouns and zeros, but such forms were rarely used for displaced entities. Most displaced entities in Yule's data involved use of the definite article with a noun and another property-expression (e.g. *the + adjective + noun*), and nearly all of the remainder were of the more simple form *the + noun*.

Demonstrative forms were infrequent in the data, but mostly used for current entities.

Among Yule's conclusions were that degrees of attenuation are partly attributable to the distinction between current and displaced entities (p. 49). Further, Yule suggested an interpretive strategy based on these data, such that after a *relator* expression (i.e. one that indicates location), the use of a pronoun or zero is interpreted as current entity reference. Such pragmatic rules "predispose the hearer to successfully identify the referent intended, and not even to consider other referents, whether they are potentially correct referents or not" (p. 51).

Yule concluded with the observations that the concept of givenness "appears to be capable of further refinement and should not be considered a primitive analytic category" (p. 52), and questioned whether speakers formally mark a greater number of distinctions in referents than new, current, and displaced. These speculations prefigure the theories that later emerged relating to the processing signals encoded in RE systems. In the following section, the major claims of Accessibility Theory (Ariel, 1990, 2001) are outlined.

2.5.2 Accessibility Theory

Ariel (1988a, 1990, 1991, 1999, 2001, 2004, 2006, 2008) presents Accessibility Theory (AT) as a linguistic theory accounting for the use of all RE types in discourse, including all registers, modes and genres, in all languages. "The basic

idea is that referring expressions instruct the addressee to retrieve a certain piece of Given information from his memory by indicating to him how accessible this piece of information is to him at the current stage of the discourse” (2001, p. 29). “Referring expressions often encode two types of information simultaneously: conceptual information and procedural information” (2010, p. 149). The pronoun *he*, for example, encodes the conceptual information ‘male’ and the procedural information ‘highly accessible’; zeros encode no conceptual information, but indicate that the referent is very highly accessible. Of primary importance to the present study is this idea that accessibility marking plays a central role in the selection of a RE, and that it facilitates referent identification.

Accessibility Theory relates to the nature of the relationship between a proposed hierarchy of RE types and the range of cognitive accessibility. It proposes that this relationship is at least partially grammaticized (Ariel, 2008). Entities that are deemed easy to retrieve from memory are expressed with RE types towards the end of the list in Figure 2.1, while entities that are harder to retrieve are expressed with fuller RE types found towards the beginning of the list.

Figure 2.1: Ariel’s (2001) hierarchy of RE types

Full name + modifier > Full name > Long definite description > Short definite description > Last name > First name > Distal demonstrative + modifier > Proximate demonstrative + modifier > Distal demonstrative (+ NP) > Proximal demonstrative (+ NP) > Distal demonstrative (- NP) > Proximal demonstrative (- NP) > Stressed pronoun + gesture > Stressed pronoun > Unstressed pronoun > Cliticized pronoun > Verbal person inflections > Zero

It should be noted that Ariel does not intend this list to be comprehensive, and notes that other form combinations are possible (1990, p. 75).

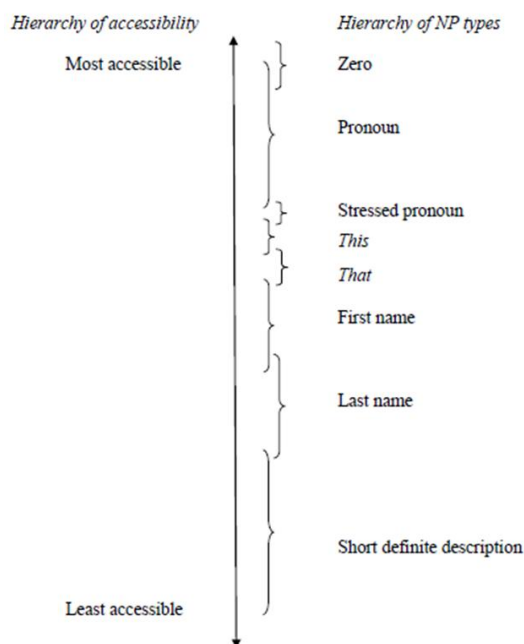
The RE hierarchy is organized along partially overlapping principles of informativity, attenuation and rigidity (Ariel, 1990). The most important of these is informativity, which relates to the amount of semantic information contained in a form. For example, because English pronouns provide only limited information (person, number, case and gender), they are used for more accessible referents than are names; lexical NPs tend to be richer in conceptual detail (e.g. *former U.S*

presidential candidate Al Gore) and so specialize for less accessible referents. Attenuation relates to reduced phonological size or articulation, and explains, for example, the difference between stressed and unstressed pronouns. Rigidity relates to how narrowly a RE applies to the intended referent. For example, there are probably more people with the first name Al than the surname Gore, and certainly more called Gore than called Al Gore. Consequently, first names signal greater accessibility than surnames, which, in turn, signal greater accessibility than full names.

Ariel (1990) argues that there are at least four factors which determine a referent's degree of accessibility: *distance*, *competition*, *salience*, and *unity*. These are discussed in greater detail in Section 2.8 and Appendix 2.5 and are only briefly introduced here. Distance relates to the gap between an anaphor and its linguistic antecedent. Competition relates to the presence of multiple potential antecedents available to compete for an anaphor. Salience relates to whether, for example, an entity is a topic or non-topic in the discourse, or whether it is animate or inanimate (the former remain prominent longer). Unity relates to breaks in continuity, such as episode boundaries or paragraphs. Ariel stresses that the overall accessibility of a referent is not determined by any one factor, but by the sum total of these four factors (and any hitherto unidentified factors).

In Figure 2.2, the interaction of the two hierarchies is represented graphically, although this should not be interpreted as an accurate representation of the distribution of NP forms, nor are all NP forms represented.

Figure 2.2: Interaction of the two hierarchies



What Figure 2.2 attempts to illustrate is that each NP type is associated by convention with a particular range of accessibility. Referring expressions, therefore, function partially as *accessibility markers*. The ‘size’ of each accessibility range varies, such that, for example, unstressed pronouns in English encode a much greater range than stressed pronouns. Although each NP is associated with a different range of accessibility, there is some overlap (i.e. there is no clear, mutually exclusive point of juncture between each range). It is suggested that this overlap may arise from the subjective nature of speaker assessments of accessibility (M. Ariel, personal communication, December 29, 2011).

Cross-linguistically, different RE types are available (e.g. many Asian languages have no definite article) but the forms that are available are ordered in the same way (e.g. zeros always specialize for a higher range of accessibility than pronouns). Further, the range of accessibility of a form varies cross-linguistically (e.g. compared to English, Japanese uses pronouns for a smaller range of accessibility and zeros for a larger range).

It should be noted that although the majority of Ariel’s work (particularly 1990, and onwards) has concentrated on the marking of NPs for the accessibility of

referents, Ariel argues (1985, 1988a, 1988b) that the general concept of accessibility relates to a much broader range of “accessible mental entities corresponding to referents, predicates and whole propositions” (1988b, p. 569).

A distinction that Ariel draws in earlier research (e.g. 1988a) is between high-accessibility markers (in English zero and pronouns), intermediate/mid-accessibility markers (demonstrative forms), and low-accessibility markers (e.g. definite descriptions). The terms are applied slightly differently in later work (Ariel, 1990), and are not used in the most recent accounts (Ariel, 2001, 2008), perhaps to avoid misinterpretation of the theory. That is, although they partially correspond to certain linguistic divisions, these terms are essentially just a convenient way of discussing the hierarchy rather than a claim for any fundamental division in the accessibility hierarchy. Nevertheless, these terms are retained in the present study for the convenience they afford.

2.5.3 Implications for the present study

Although AT is not alone in appearing to account adequately for the use of REs, it appears to be the most appropriate theory for addressing the research questions of the present study. This subsection presents a brief summary of the issues leading to the adoption of AT in this study, while further discussion of alternative systems is presented in Appendix 2.1.

Firstly, of all the theories reviewed, AT seeks to account for use of the widest range of RE types. For example, because the Givenness Hierarchy (Gundel, 1996, 2010; Gundel et al., 2010; Gundel et al., 1993, 2005) posits a relationship between cognitive statuses and determiners and pronouns, it holds that there are far fewer grammaticized relationships, thereby requiring a greater explanatory role for Gricean principles and the semantic content of lexical elements.

Secondly, in a related issue, AT appears to make the strongest predictions about RE selection, which arise from the central claim that each RE type specializes in encoding a particular range of accessibility. In contrast, the Givenness Hierarchy

(GH) proposes an implication scale that predicts only the lowest cognitive status for which a form can be felicitously used. This effectively means that the GH is unsuitable for addressing those research questions in the present study that relate to the issue of over-explicitness (discussed in Chapter 3).

Thirdly, the way accessibility is conceived in AT allows for the identification of greater detail in the different distributions of L1 and SLL accessibility markers than is possible in theories such as the Givenness Hierarchy. Specifically, because cognitive accessibility is conceived in AT as a range, coding systems could potentially be developed which distinguish many fine distinctions (for instance, in the range for which stressed pronouns specialize, numerous gradations in cognitive accessibility could, hypothetically, be identified). The present coding system (discussed in Chapter 4) distinguishes nine degrees of accessibility (compared, for example, to the three distinguished by Chafe, 1994, and the three or four relevant statuses in the Givenness Hierarchy).

Fourthly, in relation to neo-Gricean (Geluykens, 1994; Huang, 2000; Levinson, 2007) and Relevance Theory accounts of RE selection (Scott, 2008; Wilson, 1992), for the purposes of the present study there is a fundamental problem insofar as it is unclear how to analyse large sets of data within such a framework. Most previous studies working within such frameworks have focused on accounting for a few key examples.

In short, while there are a number of theories providing seemingly plausible accounts of RE selection, AT appears to provide the most suitable framework for the purposes of this study.

2.6 Phonology and accessibility marking

Although linguistic approaches to reference have largely focused on the use of NP types, prosody is also relevant to how interactants signal and interpret referent accessibility. Much of the relevant discussion relates to how phonological prominence influences interpretation of REs. This is illustrated in the contrasting

interpretations of the following examples (from Akmajian & Jackendoff, 1970, p. 124):

21. John hit Bill and then George hit him. (*him is Bill*)
22. John hit Bill and then George hit *him*. (*him is John*)

This effect has often been discussed in terms of contrastiveness (Akmajian & Jackendoff, 1970; Chafe, 1976), but is subsumed under AT (Ariel, 1990, 2001) as a factor in accessibility marking, with stressed REs taken to indicate referents with lower accessibility than those indicated by equivalent unstressed REs (more generally, phonological attenuation and stress are organising principles behind Ariel's hierarchy of NP types).

Elsewhere, the relevant discussion is not about reference *per se*, but about the presentation of information as either given or new. G. Brown and Yule (1983, p. 164) note that phonological prominence “has a general *watch this!* function and, inter alia, is used by speakers to mark new information as requiring to be paid attention to.” Conversely, non-prominence signals the continuity of ideas within the current focus of attention (and, therefore, givenness) (Chafe, 1994). Similar ideas have been presented by Fretheim (1996) from a Relevance Theory perspective, and by Yule (1980) and Mithun (1996). Recently, Baumann and Grice (2006) have argued that there is “a scale of intonational marking, along which differing degrees of activation are expressed” (p. 1655). In this scale, active information receives no accent, recoverable information (e.g. that which is predictable from relevant schematic knowledge) receives a low tone on the stressed syllable but is preceded by a high tone, and inactive (i.e. new) information receives a high tone.

One further issue is also worth noting. Recent research by Arnold and Tanenhaus (2011) indicates a role for rhythm, with hearers appearing to interpret dis-fluency as being associated with low-accessibility referents.

In summary, it appears that phonological prominence (including high pitch and pitch movement) is associated with low-accessibility referents (and introductions

of hearer-new entities), and this is relevant both to accessibility marking and to how hearers interpret references.

2.7 Acts of reference

The linguistic theories cited in Section 2.5 largely seek to account for the selection of certain noun phrases that can be used to refer. However, as outlined in Section 2.1, the RE is just one element in a four-place relation that together constitutes a communicative act (Bach, 2008). Searle (1969, 1971, 1979) discusses reference as a type of speech act, arguing that instances of reference are detectable not necessarily by linguistic form but by function (1969, p. 27). In the present study the basic unit of analysis is not the grammatical concept of the individual NP, but the referential act, as it is expressed in the entire linguistic expression ostensibly used to complete that act (although what is predicated on an RE can influence its interpretation [discussed in Section 2.10]).

When reference is viewed as a communicative act, the unit of analysis may comprise more than one RE, and may also take place over more than one speaker's *turn* in conversation (Clark & Wilkes-Gibbs, 1986; Geluykens, 1994; Hachohen & Schegloff, 2006; Schegloff, 1996; Smith & Jucker, 1998). For instance, in the following example, *John*, *my old flatmate*, and *the bearded guy* all appear to contribute to one act of reference enabling recognition of the same individual:

23. A: . and then John₁ my old flatmate, you remember him₁?

B: Ahh

A: The bearded guy₁?

B: Yeah

As these constitute a single act of reference, the RE *my old flatmate* is not analysed here as being in an anaphor-antecedent relation with *John*. If it was, then AT would predict the use of a pronoun. Rather, it is best viewed as a single communicative act in which the speaker presumably considered any single RE to

be insufficient for clarifying the referent.

Furthermore, Clarke and Wilkes-Gibbs (1986) demonstrate that reference may involve “a collaborative process requiring actions by both speakers and interlocutors” (p. 2), in which references may be initiated, refashioned (repairing, expanding, or replacing REs), and then judged (accepting, rejecting, or tentatively accepting the reference). An example of collaborative reference is:

24. A: Third one is the guy reading with, holding his book to the left.
B: Okay, kind of standing up?
A: Yeah.
B: Okay. (Clark & Wilkes-Gibbs, 1986, p. 22)

In this case the interlocutor contributes to the description, and also signals acceptance of the reference. A number of researchers have also acknowledged ways in which speakers adjust acts of reference in response to linguistic and paralinguistic feedback from addressees (e.g. G. Brown, 1995; Clark & Krych, 2004; Geluykens, 1994). An important means to elicit feedback is through the use of a *try-marker*, which is identified as “an upward intonational contour, followed by a brief pause” (Sacks & Schegloff, 2007, p. 26). This is considered “appropriate if the speaker anticipates that the recognitional form being used will on this occasion, for this recipient, possibly be inadequate for securing recognition” (p. 26).

A more recent study (Smith, Noda, Andrews, & Jucker, 2005) attends to similar linguistic phenomena. The authors found referent introductions such as the following:

25. B: and then he was turning around,
and it's you know
*there's **that lady** remember **that lady that he saw on the ship?***
A: uh huh
B: *that **he kind of fell in love with** or whatever?*
A: yeah.
B: *so and he saw **her*** (pp. 1867-1868)

As Smith et al. point out, such “introductions appeared to take place over a series of utterances and turns. There was not necessarily a discrete and identifiable introduction as such” (p. 1868). They argue that “in everyday conversations and narratives, speakers present introductions to new referents by means of a reference episode, consisting of several potential elements” (p. 1869). These are presented as:

Pre-introduction: Devices that set the stage for the introduction of an entity

Formal introduction: The expression that first refers directly to the entity

Self-repair: Adjustment of the characterization of the entity

Grounding: Acknowledgement or negotiation of the entity’s representation

(Smith et al., 2005, p. 1869)

Smith et al. define the concept of the *referential episode* (a term adopted in the present study) as beginning “at the first point at which the speaker gives a role to the referent or hints at the presence of the referent, and it ends when the speaker seems satisfied that the listener has constructed a good-enough representation” (p. 1868). As the expression ‘good-enough representation’ suggests, Smith et al. focus on discourse referents (the internal perspective on reference), yet the general concept of referential episodes applies equally well to the four-place definition of reference adopted in the present study.

In summary, the basic unit of analysis most relevant to the present study is the referential act. Although speakers prefer to use one RE to refer (Sacks & Schegloff, 2007), a single act of reference is sometimes achieved through an extended referential episode. This may involve multiple REs, may involve several stages, and may involve more than one turn (i.e. involving hearer collaboration). The term *episodic reference* is adopted in this study for those acts of reference involving more than a single RE.

2.8 Cognitive accessibility

A great deal of psycholinguistic research has investigated factors influencing how

REs (especially pronouns) are interpreted. Many such findings have influenced the development of AT (Ariel, 1990, 2001; Arnold, 2010, provides a recent review). The key findings from this literature are highly relevant for the present study, forming a basis for the system of analysis developed in Chapter 4, and being relevant to the interpretation of many of the findings reported in Chapters 6 and 7, and to the discussion in Chapters 8 and 9. Due to space constraints and the number of factors identified, the review of this literature is presented in Appendix 2.5, with only a summary of the key issues outlined here.

The nine key factors discussed in Appendix 2.5 are *distance* (the number of words of clauses between an anaphor and its antecedent), syntactic constraints on the use of REs (particularly *binding theory*, the clause as a structural unit, and syntactic restrictions on the distribution of zero in English), *competition* for RE resolution (particularly where more than one referent matches the semantic content of the RE), *saliency* and *topicality* (e.g. discourse topicality or character centrality in narratives), *episode boundaries* (e.g. the extent to which referents may be tied to a particular scenario), *parallelism* (e.g. the likelihood that the grammatical subject of a clause will also be the subject of the following clause), the issue of whether accessibility marking is influenced by genre or mode, factors relating to the speaker's cognitive load, and *animacy* (the finding that human referents tend to remain highly accessible longer than other entities).

The review presented in Appendix 2 excludes factors that are of marginal relevance to Bach's (2008) four-place definition of reference adopted in this study, but which are relevant to broader applications of Accessibility Theory, such as the role of scripts and scenarios in the accessibility of inferred referents (see Ariel, 2001; Sanford & Garrod, 1981).

2.9 Reference in narratives

This subsection focuses on issues of reference in conversational narrative. Although AT proposes accessibility as a single principle operating across all genres, registers, and modes, it is suggested in Appendix 2 that there may in fact

be genre-specific influences on referent accessibility. Evidence for this is found in Schiffrin's (2006) findings in relation to the relative strength of episode boundaries in narratives and lists. With this in mind, there are several aspects of conversational narratives that may be relevant to referent accessibility and, therefore, to RE selection. Specifically, narratives typically focus on one or more central characters, describe events occurring in (often fictional) time and space, and typically present these events chronologically. The macrostructure involves the presentation of problems, and the resolution of these problems brings an end to the narrative (e.g. Chafe, 1994; Fabb, 1997; Thorndyke, 1977). Each of these appears relevant to the use of REs.

Much of the discussion of reference in narratives has related to the distinction between major and minor characters. Specifically, because narratives are usually centred on one or more major characters, these individuals retain a high degree of saliency throughout the narrative (e.g. Chafe, 1994). One framework explaining this is the *quaestio* model, in which narratives (and other types of text) are proposed to answer a single question such as *What happened to character_m at time_t?* (von Stutterheim & Klein, 1989, p. 48). Linguistic evidence for the persistent salience of the main characters is discussed in Appendix 2.5.4. Von Stutterheim and Klein (1989, p. 52) note that minor characters are usually introduced either in the position of syntactic object (e.g. *then Charlie saw a girl*), or through a side structure (e.g. *there was also a girl*), and argue that there are special constraints when they are introduced in the position of syntactic subject. They also note that “generic reference is not allowed” in narratives (p. 51).

A feature of the episodic structure of narratives is that main characters move freely across discourse boundaries, such as scene changes, and other transitions in time and place. By comparison, minor characters are more likely to be bound to one episode or scene (e.g. Redeker, 1987), particularly when they fill a role closely associated with a cognitive *script* or *scenario* (e.g. a waiter in a restaurant) (Sanford & Garrod, 1981, pp. 145-154). Consequently, clear indications of episode boundaries may be presumed to reduce competition effects in references to main characters, while minor characters that transcend such boundaries need to be reintroduced as low-accessibility referents.

The macro-structure of narratives has further implications for reference. The *quaestio* model proposes that “the structure of a text is constrained on both global and local levels by the nature of the question which the text in its entirety is produced to answer” (von Stutterheim & Klein, p. 41). One implication is that main characters will typically be introduced very early in the narrative, and be present until the end, while minor characters may appear only briefly. In addition, each of the main events will typically involve the main characters in a central role. These, or similar, suggestions are made by a number of researchers (e.g. Chafe, 1994; Morrow, 1985; Redeker, 1987).

It may be that the addressee’s familiarity with the genre conventions of narratives could facilitate their comprehension of reasonably prototypical narratives, including the resolution of some references. For example, schematic knowledge is known to play an important role in reference resolution in the form of cognitive scripts and scenarios (Sanford & Garrod, 1981). Similarly, addressees may hold “expectations of certain structural elements based on a knowledge of implicit causal relations, underlying goals, and character motivations” (Thorndyke, 1977, p. 78); where these relate to the roles that specific characters play in a narrative, they may facilitate reference resolution (e.g. in *He rescued the princess*, the pronoun is likely to relate to the hero of the narrative). Therefore, it may be predicted that some infelicitous REs in the present data will, nevertheless, be interpretable, while greater precision in accessibility marking may be required for others.

2.10 Reference resolution

There is an extensive literature relating to the cognitive processes involved in reference resolution. These concerns are beyond the focus of this study, but some minimal assumptions are required to account for issues that arise in the findings.

Firstly, as discussed in Subsection 2.5.2, REs carry both conceptual and procedural information which facilitates the hearer’s identification of the referent

(Ariel, 1990, 2001; Gundel et al. 1993). It may be presumed, therefore, that both infelicitous accessibility marking and inappropriate semantic content may result in communicative strain or miscommunication.

In terms of accessibility marking, infelicitous RE selection can be characterized as the use of an accessibility marker that either indicates higher or lower accessibility than is appropriate. Marking for higher than warranted accessibility tends to result in *under-explicitness* (e.g. a pronoun provides less semantic detail than a lexical RE), while marking a referent for lower than warranted accessibility tends to result in *over-explicitness* (the provision of redundant semantic information). The terms under-explicitness and over-explicitness are hereafter used to differentiate the way in which REs are used infelicitously, even in cases where there is arguably no important semantic distinction (e.g. the use of *that* in place of *it* provides little or no additional conceptual information, but indicates a higher degree of accessibility).

The potential problems caused by under-explicitness are well-known, and may result in vague or ambiguous references. The hearer may misinterpret the reference or be unable to identify any likely referent. Problems caused by over-explicitness are perhaps less well-known, but appear to be predicted by theories such as AT (Ariel, 1990) and Relevance Theory (Sperber & Wilson, 1986), and are attested in some previous studies (e.g. Goodman, 1986). The principles of AT suggest that, in some cases, over-explicitness may prompt the hearer to bypass the intended referent (if it is the most highly accessible referent) in favour of a less-accessible competing referent; the same result is suggested by the key principles of Relevance Theory (Sperber & Wilson, 1986; Wilson, 1992), as the additional conceptual information found in (most) over-explicit REs is seen to come with an implicit guarantee of relevance (either to referent identification or some other communicative purpose). Similarly, the notion of *contrastive inference* holds that the use of restrictive modifiers (as in *the red cup*) creates an expectation that the intended referent contrasts with another salient, competing referent (Grodner & Sedivy, 2011).

These effects are illustrated in Example 26, where, in some cases, there appears to

be a strong preference to interpret over-explicit anaphors as being non-co-referential:

26. *She₁ took John₂ to the market. The woman₁ bought him₂ a cake.

However, this potential for miscommunication appears to be much reduced if the speaker is consistently over-explicit, as the following example suggests:

27. The woman took John to the market. The woman bought John a cake.

This suggestion is supported by Grodner and Sedivy (2011) who argue that hearers become accustomed to speakers who use REs with unnecessary semantic details, and become less willing to draw contrastive inferences.

Although Example 27 is unlikely to result in miscommunication, a number of psycholinguistic studies confirm that the avoidance of pronouns can result in slower processing time (Almor & Eimas, 2008; Cloitre & Bever, 1988; Gordon & Chan, 1995). In addition, lexical NPs with redundant modifiers (e.g. adjectives) have been shown to substantially increase processing time by appearing to signal reference switch (Engelhardt, Demiral, & Ferreira, 2011; Sedivy, 2003).

Unsurprisingly, adult subjects reject such over-explicitness in judgement tasks (Davies & Katsos, 2010). Over-explicitness may also cause other discourse-level problems, as it is associated with the signalling of episode boundaries and is thus used to structure discourse (Vonk, Hustinx, & Simons, 1992).

It should be noted that AT (and its alternatives) do not purport to fully explain reference resolution. One factor that appears particularly relevant to the present study is the effect of discourse coherence on reference resolution. This is illustrated in the following example from Kehler (2002, adapted from Winograd, 1972), where the interpretation of *they* in Example 28b is not predicted by theories relating to topic and attentional focus. Rather, it is determined by the semantic content of what is predicated on the RE:

28. The city council denied the demonstrators the permit because . . .
- a. . . they *feared* violence.
 - b. . . they *advocated* violence.

Although coherence-based interpretation has been illustrated mainly with examples of pronoun resolution (e.g. Hobbs, 1979; Kehler, 2002), it applies equally to other REs whose semantic content matches more than one referent.

In short, when interpreting references, hearers may be misled by REs that are infelicitous either in terms of accessibility marking or the conceptual information (e.g. ‘female’, ‘doctor’) encoded by their lexical elements. Hearers may also be misled by problems relating to what is (or appears to be) predicated on the RE.

2.11 Chapter summary

The literature reviewed in this chapter leads to the establishment of a framework for the present study. The framework is summarized in this subsection.

Firstly, the external perspective on reference is taken to be primary, such that REs are considered, first and foremost, in relation to whether they indicate to the addressee real-world entities (Kronfeld, 1990). Unlike the previous studies reviewed, this study combines the external perspective with elements of the internal perspective on reference, in which certain references link to an entity in co-text (i.e. that are co-referential). The internal perspective is considered secondary. The internal and external perspectives are incorporated into a proposed ‘levels of reference’ framework, where references are distinguished as occurring at Levels I, II, and III. Many uses of NPs remain outside this framework and are not addressed in this study.

At the heart of this framework is a definition of reference adapted from Bach (2008), in which reference is defined in this study as a four-place relation in which *a speaker* uses a *referring expression* (RE) to refer *a hearer* to an *entity* (the referent) (2008, p. 17). Uses of REs which meet the requirements of this

definition are labelled Level I references. Arising from this definition are certain restrictions in relation to the nature of the act of communication and the nature of the referent. These restrictions are relaxed, to some extent, in the definitions of what counts as reference at Levels II and III. Each level is proposed to have distinct processing requirements for the hearer. In addition, miscommunication at Level I always relates to problems in the identification of the external referent, while miscommunication at Levels II and III relates to the interpretation of anaphors and their antecedents

The basic unit of analysis in this study is the referential act. This may be achieved with a single NP or it may involve multiple REs; in some cases, an act of reference may be negotiated by interactants over several turns (Clark & Wilkes-Gibbs, 1986). Referential introductions may involve stages of *pre-introduction*, *formal introduction*, *self-repair*, and *grounding* (Smith et al., 2005).

The second major unit of analysis is the accessibility marking (Ariel, 1990, 2001) encoded by REs. In this approach, each RE type is said to conventionally encode a specific (and largely different) degree of accessibility in relation to the referent. A wide range of factors are identified as affecting referent accessibility (such as the distance between an RE and any previous mention). Also relevant to RE selection are phonological features (e.g. try-markers) and social factors (e.g. the relations holding between the interactants and the referent).

The accessibility marking and conceptual content of a RE facilitates reference resolution, or, where infelicitous, may lead to miscommunication. The success of references may also be influenced local and global discourse coherence, and by expectations of the types of references that occur in particular contexts (e.g. as they relate to genre conventions).

One of the assumptions arising from this literature review (to be reviewed in Chapter 8) is that there is a clear distinction to be drawn between *referring* to an entity and merely *mentioning* it. The assumption holds that reference is achieved when a speaker indicates to a hearer a specific entity, with the intention of the hearer identifying the entity (by way of a singular thought). To count as reference,

a number of criteria need to be met, such as the speaker and hearer holding singular thoughts about the referent, and the hearer recognizing the speaker's intention to refer.

3 Review of literature: Learner reference and miscommunication

3.0 Introduction

The purpose of this chapter is both to review relevant research relating to second language learner (SLL) reference, and to review issues relating to the miscommunication of reference. Section 3.1 presents a general overview of referential systems in learner language, focusing on learner use of individual RE types, on SLL use of wider referential systems, and the general characteristics of SLL reference.

Section 3.2 focuses on findings relating to pragmatic competence in referring. After initially relating the Accessibility Hierarchy framework to SLL reference, findings from previous studies are discussed. A distinction is drawn between referent introductions and tracking, with the latter discussed in terms of under-explicit and over-explicit reference. These subsections lead to a number of research questions.

Section 3.3 focuses on key issues in relation to exploring miscommunication in SLL speech. An approach to exploring referential miscommunication is developed and previous findings are discussed. Further research questions are established.

3.1 Referential systems in learner language

This section reviews key literature relating to SLL development and competence in morpho-syntactic aspects of REs. Subsection 3.1.1 very briefly reviews the main findings from a large number of studies relating to SLL's use of particular RE subsystems, such as the article or pronominal systems. Subsection 3.1.2 reviews studies that have explored overall SLL systems of reference, while Subsection 3.1.3 discusses findings relating to developmental sequences in the acquisition of such systems. Subsection 3.1.4 narrows the focus to evidence of pragmatic competence in marking for accessibility in SLL reference.

3.1.1 Acquisition of referring expression types

A large number of studies have investigated SLL use of specific NP types from a variety of perspectives, including acquisition, L1 transfer, the influence of universal grammar, and the semantic distinctions made by SLL speakers. The orientation of such studies differs markedly from the present study in that they focus on a small number of NP types rather than a wider system of reference, and seldom distinguish between referential and non-referential uses of NPs. However, such studies do raise important issues. The most important findings are briefly reviewed in this subsection, while a more detailed review is presented in Appendix 3.

Overall, it appears that NP use is a relatively frequent source of errors for advanced SLLs. For example, Lennon's (1991) study of four 'very advanced' learners attributed 11% of their errors to the use of (lexical) noun phrases (mainly article errors), and a further 6% to proforms. As discussed in Appendix 3, a very large number of studies have examined the use of English articles by SLLs from a variety of source language backgrounds (e.g. Butler, 2002; Ionin, Ko, & Wexler, 2004; Jarvis, 2002; Lang, 2010; Master, 1987; Parrish, 1987; Thu, 2005), and a substantial number have examined pronouns (e.g. Fakhri, 1989; Felix & Hahn, 1985; Gundel & Tarone, 1983; Huebner, 1983). However, fewer have specifically examined zeros (e.g. Muñoz, 1995; Williams, 1988, 1989) and demonstrative forms (Niimura & Hayashi, 1994, 1996; Swierzbin, 2010), and no studies were identified as having examined the use of names or stressed pronouns. Overall, the most relevant finding from previous studies is that the use of articles, pronouns, zeros, and demonstratives may remain a frequent source of error even among relatively proficient learners, particularly when little positive L1 transfer is available.

These studies highlight the difficulty for many learners in correctly selecting and forming the appropriate REs, and some studies indicate that speakers may avoid problematic forms. Such errors and avoidance may impact on pragmatic competence in reference, as grammatical development appears to "underpin the realization of many target-like pragmatic forms" (Bardovi-Harlig, 2003, p. 25).

For example, if, in avoiding pronouns or articles a speaker uses a demonstrative form, then, according to Accessibility Theory, the wrong degree of accessibility is signalled. What is not clear is the extent to which incorrect use or avoidance of such forms tends to trigger miscommunication. In relation to articles, for example, many such errors are likely to be easily understood, simply because grammatical rules allow no alternative article use (e.g. **I like speaking the English*) or because contextual factors strongly imply an interpretation that contradicts the choice of article (e.g. [pointing to a watch] **What is time?*). However, there are instances where a range of grammatical forms are structurally permitted and more or less contextually viable. Accordingly, it has been claimed that article errors “can often cause misunderstanding” (Berry, 1993, p. vi), although no research was identified to support this claim.

At this point, it is appropriate to pre-empt some of the issues discussed in Section 3.3 in relation to miscommunication. In particular, it is notable that although a number of studies have identified specific features of learner language that may have triggered miscommunication, it seems that few, if any, studies have presented evidence to indicate which errors tend to trigger miscommunication. In relation to reference, this raises an important (sub)-question:

Which RE errors are most frequently implicated in triggering miscommunication?

Furthermore, a key implication arising from this body of research is that even advanced SLLs may not have sufficient command of some RE types to enable them to consistently use the most felicitous accessibility markers.

3.1.2 SLL referential systems

Some studies have looked beyond the use of individual RE types to examine larger referential systems in L2 speech. Given that the principles of accessibility marking are proposed to be based on cognitive and pragma-linguistic universals, it might be expected that adult speakers readily apply these principles from their L1

competence (Hendriks, 2003). If so, the main challenges for learners may occur in learning the relevant RE types not available in the source language, and adjusting to the different range of accessibility encoded by forms in the target language (M. Ariel, personal communication, July 15, 2009). However, in SLL pragmatics, Kasper and Rose warn that “learners do not always capitalize on the knowledge they already have” and that “this is also true for some aspects of learners’ universal or L1-based pragmatic knowledge” (2001, p. 6).

A review of the literature on SLL reference appears to support Ariel’s position that L1 experience in accessibility marking facilitates acquisition in the target language, with a number of studies indicating a systematicity in SLL reference that conforms to the universal principles that apparently underlie RE selection. For example, Givón (1984) identified striking similarities between topic-marking by relatively low-proficiency speakers and target-like usage. The SLL participants in Givón’s study came from three very different source-language backgrounds (Korean, Spanish, and ‘Philippine’ [presumably Tagalog]), and they participated in different elicitation tasks (narrative and conversation), and, in relation to one another, represented “extreme variation in culture, personality and English-fluency” (p. 126). However, the major patterns in the data closely followed those of the Biblical Hebrew text used for comparison. This supported earlier findings that marking for topic continuity is a language universal (Givón, 1983c), and also the hypothesis that such knowledge is available in second language acquisition.

In perhaps the first such study of its kind, Gundel and Tarone (1983) looked at the use of pronominal anaphora in L2 inter-language in relation to L1 transfer effects. They examined cross-linguistic variation and two apparent language universals in relation to pronominal anaphora. The first universal property was a pragmatic condition to the effect that anaphoric pronouns are only felicitous for the most highly accessible referents (i.e. those that are in focus). The second assumed universal relates to *binding theory* (briefly outlined in Appendix 2.5.2). As Gundel and Tarone had predicted, both universals appear to constrain SLL reference, and no violations of either rule was found. In contrast, they found that L1-L2 transfer is not guaranteed for non-universals, even when both languages share a feature, such as English and French both requiring a pronoun (as opposed to zero) in

object position (Gundel, Stenson, & Tarone, 1984, p. 219).

More recently, Swierzbin (2004) found that the Givenness Hierarchy successfully “predicts the pattern of the number of form types used by both native and non-native speakers” for different cognitive statuses (p. 169). These findings support the idea that L1 competency in signalling accessibility/cognitive status is applied in the target language. Indeed, it seems that many researchers in this field find the evidence sufficiently compelling to have begun focusing on one apparent exception: over-explicitness in reference tracking contexts (e.g. Gullberg, 2006; Hendriks, 2003; Yoshioka, 2008) (discussed in Subsection 3.2.4).

One implication of these findings is further support for the idea (raised in Subsection 3.1.1) that SLL pragmatic competence in referring may be constrained by a lack of accuracy in the morpho-syntactic aspects of RE use. A second implication is that a certain degree of positive transfer can be expected from the source to target language, with certain types of error rather unlikely to occur.

3.1.3 Developmental sequences in acquiring a system of reference

The most substantial research on the development of referential systems is Klein and Perdue’s (1992) report based on a longitudinal study (three data sets collected at approximately ten month intervals) relating to the acquisition of five European languages by Punjabi, Italian, Turkish, Arabic, Spanish, and French learners (Perdue, 1993a). The participants were migrant workers with (at least initially) low language proficiency, residing in the target-language community. Among the findings, the participants’ NP choice was found to be strongly influenced by the pragmatic factors of (1) presumed hearer familiarity with the referent, (2) the distinction between referent introduction and maintenance, and (3) whether the referent relates to the *quaestio* of the discourse (the central question around which an extended text is designed to answer).

At the lowest levels of proficiency, Klein and Perdue report that NP selection basically involves the preferred use of zero for reference maintenance and use of

lexical noun/name/deictic pronoun for referent introduction. A major motivation for development of a more complex referential system are the inherent limitations of this *basic variety* of language, including the challenges posed by REs that are reintroduced, or move from focus to topic (1992, pp. 303-304). Beyond this basic variety, the development of the third-person pronoun system becomes a substantial challenge, and Klein and Perdue identify the following tendencies:

- definitely referring lexical NPs are used before overt pronouns;
- singular anaphoric pronoun reference appears before plural;
- human appears before inanimate;
- nominative appears before oblique. (p. 318)

Subsequently, in a study within the Givenness Hierarchy framework, Kim (2000) distinguished seven stages in a sequence of NP acquisition for Korean learners of English. Like Klein and Perdue (1992), Kim found that learners at the lowest proficiency level basically relied on zeros and bare nouns. However, Kim's findings also include identification of the cognitive statuses that learners distinguish with these forms, with zero associated with the status *In Focus* and bare nouns associated with all other statuses at this level. (Klein and Perdue report on discourse functions for the various forms, e.g. referent introduction, movement from focus to topic, etc.). At each higher level, preferred forms are integrated into this basic system as it becomes progressively more target-like. "Each stage is distinguishable from the others by the way different NP types are employed to encode the six cognitive statuses of referents, or, by the way the three threads of features [+/-salient], [+/- referential], and [+/-inferable] are woven together into usage of different NP forms" (p. 176). As the system develops, new forms are added and increase in frequency, with resulting shifts in how statuses are encoded.

For these Korean learners, Kim reported a full range of pronouns becoming available from the third stage, and that these were acquired before definite determiners. Bare nouns remained frequent until the fourth stage. The highest proficiency learners in Kim's sample were at stage five, although Kim also predicts a sixth stage before target-like competency (stage seven).

Although little can be assumed when relating Kim's findings to the participants in the present study, it appears that Kim's stage five participants are likely to be closest in overall proficiency level to those participants in the present study. Kim identified three main ways in which the referential system was non-target-like at this fifth stage. Firstly, *the* + N was overused in contexts where the indefinite article is required. Secondly, inferable hearer-new entities were inconsistently marked. Thirdly, bare nouns were overused, although mostly in place of indefinite NPs.

An implication of this body of research is that the SLL participants in the present study may over-extend the use of some RE types to compensate for difficulties in the command of a more contextually appropriate RE type.

A number of other studies of SLL reference have also focused on advanced learners and the most relevant aspects of their findings are presented in Section 3.2. At this point, a major research question for the present study can be raised:

Q1 What are the characteristics of the referential systems of advanced SLLs and how do these differ from target-like use?

3.1.4 General characteristics of SLL systems of reference

This subsection reviews some key findings in the literature relating to general principles of SLL reference and some relevant aspects of SLL topic marking. As noted in Appendix 2, some topics involve acts of reference, with topic being "what the discourse is about" (Chaudron & Parker, 1990, p. 44). The notion of topic thus includes entities and ideas that need not be referents, and excludes those referents in non-topic position.

As mentioned in Subsection 3.1.2, an early study by Givón (1984) of three "rather rudimentary users of English" (p. 114), confirmed that, for each of the main types of topic marker (e.g. zero, pronoun; see Appendix 2), the measure of distance between a topic and its previous mention in discourse was generally target-like,

suggesting a degree of pragmatic competence in these limited users of English. It must be noted, however, that these participants had “been using English as a Pidginized vehicle [of communication] for anywhere from 10 to 60 years” (p. 114) and so may have developed pragmatic competence despite retaining numerous ungrammatical and non-target-like aspects of language use.

Chaudron and Parker (1990) examined Japanese learners of English with various levels of proficiency, and analysed narrative data in terms of a range of NP types in the context of current topic, known topic, or new topic. A number of important findings emerged. Firstly, the evidence indicated that even the lowest proficiency learners were sensitive to the distinction between current topic, known topic, and new topic, and chose NP types accordingly. Chaudron and Parker suggest that “this is support for the universality of a distinction between these contexts” (p. 57). This finding is supported by a number of studies (Hendriks, 1998; Jarvis, 2002; Kang, 2004; Muñoz, 1995; Nakahama, 2003). However, although all of these studies agree that learners differentiate such contexts, they all identify substantial ways in which this is often non-target-like. A number of these and other studies (e.g. Nakahama, 2009) also identify source-language influence on the NP selection.

A second important finding from Chaudron and Parker’s (1990) study was that “the frequency of production of structurally more marked forms increases with proficiency” (p. 57). Structural markedness is defined as “surface structure complexity” (p. 47), and the following scale was presented:

Figure 3.1: Structural markedness (Chaudron & Parker, 1990)

∅ < pronoun, or < left-dislocated noun, or < definite noun, or < left-dislocated definite noun,
 bare noun existential noun indefinite noun or existential indefinite noun

Chaudron and Parker found that low-proficiency learners relied heavily on two items to the left of the scale (pronoun and bare noun), and that increasing proficiency correlated with more frequent use of definite and indefinite nouns. Rather infrequent use of some of the other forms was found in both L1 and SLL data.

These studies suggest that learners at very low levels of proficiency adopt a referential system that is largely pragmatically appropriate, and that they grammatically refine this system over time. This conclusion is supported by Swierzbin (2004) and Kim's (2000) studies using Givenness Hierarchy frameworks. In Swierzbin's study, the functional analysis of forms used with different accessibility statuses revealed broadly similar findings in the L1 and SLL narratives. For example, both groups mostly used pronouns for the status In Focus. "Both groups also used *the* N most often for Familiar and Uniquely Identifiable referents, and both groups used *a* N most often for Type Identifiable referents" (p. 56). Swierzbin also detected a number of differences, including greater SLL use of bare nouns, and more frequent use of lexical NP forms. Overall, the SLL speakers were found to use the same range of NP forms as the L1 speakers although some individuals used a relatively restricted range; this appeared to be proficiency-related.

In summary, the results of a number of studies indicate that the apparent universal cognitive/pragmatic bases for accessibility are available to adult SLLs through their first language knowledge. These learners, even at the lowest levels, appear to show awareness of the infelicity of using pronouns and zeros for less accessible referents. The development of a second language reference system appears to be a process of integrating new RE types into the system and, accordingly, making adjustments to the finer distinctions of cognitive status/accessibility associated with each form. However, it is notable that no studies were identified as having used an Accessibility Theory (AT) framework to explore referential systems in SLL English. As discussed in Chapter 2.5.2, AT appears to offer the most inclusive account of RE types and the strongest predictions relating to what is appropriate and, therefore, could potentially reveal greater detail about these referential systems than other frameworks.

3.1.5 Section summary

In short, it appears that aspects of L2 referential systems present a substantial challenge for SLLs. Even at advanced levels of proficiency, RE errors remain

frequent in SLL speech, particularly in areas such as article selection. This may impact on the pragmatic felicity of L2 referential acts although it is unknown to what extent this is communicatively problematic. However, it also appears that SLLs of even very limited proficiency are able to transfer some basic principles underlying their L1 competency in accessibility marking into the target language. In Section 3.2, the focus will be on SLL pragmatic competence in using REs.

3.2 Pragmatic competence in SLL accessibility marking

This section reviews key literature on aspects of SLL pragmatic competence in referring. Subsection 3.2.1 introduces some preliminary issues in SLL reference in relation to Accessibility Theory (AT). Subsection 3.2.2 reviews key findings relating to how SLLs introduce referents. Subsections 3.2.3 and 3.2.4 summarize the more extensive literature relating to referent tracking, reporting separately on findings indicating under-explicit and over-explicit reference.

3.2.1 SLL reference in relation to the AT framework

A feature of AT is the suggestion that there is a universal principle such that RE types share the same hierarchical organization across all languages. For instance, in any language with pronouns, pronouns will conventionally encode a higher range of accessibility than short definite descriptions, which in turn encode higher accessibility than full names, and so on. Of course, languages vary in the types of RE available but the principle applies to all forms that the language does permit. In reference by SLLs, a number of studies have explored how the source language influences RE selection in the target language (e.g. Hendriks, 2003; Jung, 2004; Kang, 2004; Nakahama, 2009). Perhaps unsurprisingly, the overall suggestion is that SLLs favour the forms that correspond to structures in their first language (L1), and that the distribution of a form in the L1 may influence its use in the second language (L2).

The proposal that NP types conventionally encode particular ranges of

accessibility is a further feature of Accessibility Theory. Consequently, the use of a RE can be characterized as either felicitous, or as signalling an inappropriate degree of accessibility. The terms *under-explicit* and *over-explicit* (although widely used in the study of SLL reference and topic) are not usually associated with AT, as they indicate problems with the provision of information rather than problems with accessibility marking. Therefore, they do not adequately describe the problem that occurs when a speaker infelicitously uses a stressed instead of unstressed pronoun, or *this man* instead of *that man* or *the man*. However, due to a lack of accepted alternatives, these terms are adopted in the present study in a broader sense of under-explicitness relating to use of a higher accessibility marker than is warranted, and over-explicitness relating to use of a lower-accessibility marker than is warranted (as discussed in Chapter 2.10). Although not entirely adequate, these terms do reflect the fundamental importance of informativity and attenuation in how the NP hierarchy is structured in AT (discussed in Chapter 2.5.2).

Before continuing, it must be noted that pragmatic factors sometimes “dictate violations of accessibility theory for special effects” (Ariel, 2001, p. 38). Thus, it is possible for a RE to appear infelicitous in terms of accessibility, yet be appropriate in a more general sense according to the discourse purpose of the speaker. For instance, more explicit references may be used to mark “the beginning of a new theme concerning the same discourse referent” (Vonk et al., 1992, p. 304), or to provide additional information not intended to facilitate reference resolution, as in *poor ole Gladys* (Stivers, 2007).

The following subsections focus on previous literature in relation to how entities are introduced and then tracked by SLL speakers. The findings are discussed particularly in relation to what they suggest about felicitous and infelicitous reference from an AT perspective.

3.2.2 Referent introductions

As Yoshioka (2006, p. 181) notes, the majority of studies of SLL reference deal

exclusively with referent tracking and few have explored referent introductions (of any sort). Even among the few studies of SLL introductions, very few appear to have explored introductions of hearer-known discourse-new entities (Level I introductions); under the present framework (and Bach's, 2008 definition of reference), it is only this type of introduction which is considered referential (Chapter 2.2).

Considering, firstly, non-referential introductions, a number of researchers have concluded that these are relatively non-problematic for SLLs. For example, in Kang's (2004, 2009) studies of SLL reference, no separate analyses for such introductions and referent tracking were conducted "as no participant in the American or Korean sample used anything other than full noun phrases for the first mentions of characters" (2004, p. 1980). Among those who have focused more closely on introductions, Hendriks (1998) reports that adult Chinese learners of German used pragmatically appropriate (if not always grammatically correct) REs in their introductions across all four proficiency levels in her study. Hendriks' analysis included consideration both of *local marking* (e.g. use of the definite article) and *global marking* ("position of the new information in relation to the verb", p. 69). She concluded that discourse universals relating to local and global marking are available for transfer to the L2. Similarly, Chaudron and Parker (1990) reported under-use of *a + N* across low, middle, and high proficiency learners in the introduction of new topics, and infelicitous uses of this form for known topics. This supports previous research indicating that the indefinite article is acquired later than the definite article (e.g. Huebner, 1983; Kim, 2000; Master, 1987). Similar findings have been reported for other target languages, where the forms that function as the closest equivalent of the indefinite article (i.e. as a marker of 'newness') are also substantially underused by SLLs, such as the Japanese suffix *-ga* (Nakahama, 2003, 2009; Yoshioka, 2006). Yoshioka (2005, 2006) also reports that Dutch learners of Japanese transfer L1 strategies in speech and gesture to the target-language when introducing hearer-new inanimate objects. In short, then, previous research appears to suggest that SLLs tend to use NP forms that provide sufficient information for a successful introduction of hearer-new entities although there may be errors in the use of articles (or equivalent newness markers).

Very few studies appear to have presented findings relevant to the analysis of hearer-known introductions. In fact, of the studies reviewed, only Chini (2005) presents findings that are directly relevant to the present discussion. Even then, Chini's analysis makes no distinction between hearer-new and hearer-known referents, although both types are present in her data. In her study of German learners of Italian, Chini concludes that introductions are "not too problematic and almost native speaker-like from the beginning" (2005, p. 93). However, it seems possible that non-target-like aspects of referential introductions may have been obscured as the analysis conflates the two types of introduction.

One reason why issues related to hearer-known introductions may have been overlooked is that the SLL studies reviewed have all analysed reference at the level of the RE rather than at the level of the referential act. This may cloud important findings because, as discussed in Chapter 2.6, introductions may involve up to four stages, the use of multiple REs, and involve contributions from the hearer (Clark & Wilkes-Gibbs, 1986; Smith et al., 2005). Indeed, Swierzbina (2004, p. 69) reports that over half of the learners in her study, particularly the more proficient speakers, included additional identifying information when introducing the main female character into the discourse. However, as this was incidental to Swierzbina's research focus, no further analysis was made and no overt comparisons with the L1 data were reported. In short, there could be substantial differences between L1 and SLL introductions above the level of the RE that have gone unnoticed in previous research.

In summary, few studies have explored referential introductions, and, of these, it seems that none have used a framework that considers the entire referential act. Previous claims suggesting that introductions are non-problematic may, therefore, require re-evaluation. This leads to Research Question 1.1:

Q1.1 To what extent do SLL referential introductions tend to be target-like?

3.2.3 Under-explicitness in reference tracking

Most studies of SLL reference have focused on referent tracking (reflecting the internal perspective of reference discussed in Chapter 2.1). In such studies, evidence of over-explicitness is much more widely reported than under-explicitness. Under-explicit reference is generally defined as the use of an RE with low informativity (e.g. zero or pronoun) where a fuller form is expected. However, as noted in the introduction to this section, the term under-explicitness is extended in the present study to include the infelicitous use of any form that marks a higher degree of accessibility than expected (e.g. using *that man* in place of *the man*).

When there is inadequate provision of conceptual detail, under-explicit REs may prompt self-repair and clarification requests in L1 speech (Clark & Wilkes-Gibbs, 1986; Geluykens, 1994; Jucker, Smith, & Lüdge, 2003). Ariel (2008, p. 50) also provides examples of repair (*it to that, it to this*) which, she argues, involve no conceptual distinction, and are entirely matters of repaired accessibility. It also appears obvious that under-explicitness can result in miscommunication, as suggested by Williams (1988, pp. 360-362) in relation to the infelicitous use of zero.

In relation to SLL reference, under-explicitness is widely reported at low levels of competency, but rarely reported at intermediate and advanced levels. At all levels, the evidence mainly relates to the overuse of zeros. As noted in Subsection 3.1.3, Klein and Perdue (1992) and Kim (2000) identify an early stage of acquisition in which zeros are widely used in all high accessibility contexts, including the (grammatically incorrect) object position. With increasing ability, zeros are overused in topic maintenance contexts, as the following extract from a learner narrative illustrates (Klein & Perdue, p. 316):

1. Chaplin think the return in the prison,
Ø go to the restaurant
Ø eat too much
Ø tell the police 'when you pay'

Klein and Perdue report that this pattern appeared to occur irrespective of other factors affecting accessibility, which is a finding supported by a number of further studies (e.g. Ahrenholz, 2005; Lubbers Quesada & Blackwell, 2009). An exception is reported for speakers of source languages with a very restricted distribution of zero (e.g. English) when learning target languages that rely heavily on zero (e.g. Chinese) (Jin, 1994).

Further studies show that learners of English sometimes use zero in the ungrammatical positions of direct and indirect object, although only for entities that are highly accessible (Gundel et al., 1984; Gundel & Tarone, 1983; Hartford, 1995; Williams, 1988, 1989). Williams (1988, 1989) reported advanced SLLs and speakers of Singaporean English using zero in positions substantially further from the antecedent than is found in L1 speech, but noted that these uses were unlikely to result in ambiguity (p. 357).

There is less evidence of under-explicitness with other RE types. Chaudron and Parker (1990) reported low-proficiency learners substantially over-using pronouns and under-using definite descriptions, suggesting under-explicitness may be frequent at low levels of language proficiency. They suggest that pronouns (and other less structurally marked forms) “are easier to acquire and thus are overgeneralized to other contexts” (p. 59). Lang (2010) also reports over-use of pronouns and suggests that this may result from the avoidance of articles, while Hendriks (2003) reports some ambiguous uses of pronouns in her SLL data. These findings contrast with those of Kim (2000) and Swierzbinska (2004) who find that SLL use of pronouns at all levels is almost exclusively restricted to referents with the cognitive status In Focus.

There are reasons to be cautious about Chaudron and Parker’s (1990) and Lang’s (2010) conclusions. In the former study, one explanation for the high use of pronouns (not considered by the researchers) is the nature of the elicitation tasks. In the free production task, participants narrated a booklet of wordless picture sequences. As there was no obvious addressee (remote or otherwise, apart from the tape recorder), it may be that the lower proficiency participants used the

physical presence of the pictures to contextually enrich their references, while the L1 speakers and higher proficiency learners, with their greater mastery of the language, may have been more willing to ‘play the game’ and speak as if to a remote addressee.

Lang’s findings are from a longitudinal case study of one nine-year-old, with data elicited through interviews. Pronouns represent between 47.% and 60.1% of all major NP types across the 13 data sets. Lang concludes that this may have been an avoidance strategy such that “whenever possible, pronouns were used instead of articles or other determiners” (p. 68). However, although Lang considers a substantial number of studies of L1 article *acquisition*, little attention is given to research on how children *refer*. In particular, little attention is given to the possibility that the high number of pronouns relates to the participant’s maturational stage of cognitive development. In studies of referential language, Krauss and Glucksberg (1969, p. 263) report that “at age 10, children do not approach the adult level of skilled performance” and in a later study (1977) report that even 13- and 14-year-olds had not acquired adult-like competency. Further, Anderson, Clark and Mullin (1994, cited by Yule, 1997) report that a substantial proportion of 13-year-olds in their study communicated less effectively than the average seven-year old. In short, although Lang appears to be correct in assuming a 9-year-old L1 speaker will have *linguistic* competence in the use of articles, it should not be presumed that this entails *communicative* competence, a point emphasized by Krauss and Glucksberg (1969). A more appropriate comparison would have been between the participant’s article use and the article use of L1 English speaking children of a similar age.

In summary, the evidence for under-explicit SLL reference is largely confined to the over-use of zeros among low-proficiency SLLs, with some evidence of (less frequent) occurrences at higher levels of proficiency. Evidence for under-explicit use of pronouns and other RE types is rather scarce and sometimes questionable. However, this may be because few studies have attempted to directly assess the accessibility of referents (a point which is developed in Subsection 3.2.4), and have instead made inferences based on discourse function. There is, therefore, some doubt over the frequency of SLL under-explicitness.

For this reason, the following question will be addressed in the present study:

Q1.2 To what extent is advanced SLL referent tracking characterized by under-explicitness?

3.2.4 Over-explicitness in reference tracking

Unlike under-explicitness, the evidence for over-explicitness appears widespread and compelling, and seemingly characterizes SLL reference from intermediate to advanced levels of competence. Over-explicitness is found, for example, in the use of pronouns and lexical phrases where zero is preferred, and lexical phrases and names in place of pronouns. Research suggests that over-explicitness is a general feature of learner language in referent tracking contexts, occurring irrespective of source and target language. For example, Tomlin reports on a mixed group of advanced level learners of English (including Japanese, Arabic, Spanish, Mandarin, and Korean students) who “clearly do not alternate between nominal and pronominal structures” in the narrative elicitation task, and who generally use lexical NPs (1990, p. 170). Over-explicitness has also been reported for German learners of Italian (Chini, 2005), Dutch learners of Japanese (Yoshioka, 2008), Dutch learners of French (Gullberg, 2006, 2008), French learners of Swedish and Swedish learners of French (Gullberg, 2008), Chinese learners of German (Hendriks, 2003), and English learners of Japanese (Lumley, 2010). In a more restricted sense, there is also evidence of over-explicitness in English speakers’ avoidance of zero in Chinese (Jin, 1994), Korean (Jung, 2004) and Spanish (Lubbers Quesada & Blackwell, 2009), and Spanish speakers’ avoidance of zero in English (Muñoz, 1995). Interestingly, it has also been reported that over-explicit REs may be accompanied by over-explicit gestures (Gullberg, 2003, 2006, 2008; Yoshioka, 2008). Nearly all such studies relate to spoken SLL narratives; Kang reports on over-use of lexical NPs and names in both speaking (2004) and writing (2009), with such over-explicitness appearing to be more pronounced in the spoken narratives.

To date, the most prominent arguments against claims of over-explicitness are presented by Hendriks (2003) in her study of Chinese learners of three European languages. Hendriks reports a limited number of over-explicit REs in these speakers' L2 English and none in French, stating that, in her data, "only in German can we really speak of over-explicitation" (2003, p. 321), suggesting that a crucial issue is cross-linguistic differences in referring. However, a possible explanation for this lack of over-explicitness is the nature of Hendriks' elicitation tasks. These involve the narration of sequences of five or six pictures, and (by the description Hendriks provides, p. 323) this involves very frequent reference switch between the characters. As reference switch often requires the use of a lexical RE, it is possible that this task did not provide enough high-accessibility contexts to frequently elicit over-explicitness.

One possible shortcoming of nearly all of the studies reviewed is that they do not directly address the accessibility or memory status of the referents. Rather, they tend to analyse REs based on one or two factors that happen to coincide with low- or high-accessibility, such as the distinction between referent introduction, maintenance and reintroduction (e.g. Chini, 2005; Gullberg, 2006; Muñoz, 1995), or they focus on a single factor that merely contributes to overall accessibility, such as the narrative centrality of a character (Kang, 2004). These individual factors are not particularly reliable predictors of RE selection in L1 speech and, as Ariel (1999) demonstrates, the analysis of multiple factors is a substantially more reliable way of assessing accessibility.

The possibility remains, therefore, that frequent use of lexical NPs by SLLs actually reflects an appropriate response to other non-target-like aspects of SLL narratives, such that speakers create "a less favourable context for the use of pronominal forms" (Hendriks, 2003, p. 310). There is some evidence to support this hypothesis. In particular, Nakahama (2003, 2009) reports that learners may lack the linguistic competency to maintain referents in topical positions (e.g. through alternation between active and passive voice). Further, learners may struggle to adopt consistent L1-like narrative perspective in recounting events (Carroll & von Stutterheim, 2003; Hendriks, 2003; Nakahama & Kurihara, 2007). Such features could lead to frequent reference switch and result in fewer

references to high-accessibility entities.

Although the Givenness Hierarchy (GH) is not a theory of accessibility (as discussed in Appendix 2.4.1), Swierzbins' (2004) study using this framework perhaps comes closest to fully addressing referent accessibility and potentially clarifying the extent to which over-explicitness occurs in SLL English. As will become apparent, this observation is made with a good deal of caution. Nevertheless, among Swierzbins' relevant findings, referents with the highest cognitive status *Activated* were most often encoded with a pronoun by the L1 participants but with *the* + N by the Japanese learners of English. At the highest cognitive status *In Focus*, the L1 speakers used substantially more high-accessibility forms than SLLs (82.7% compared to 69.6% by the SLLs), including substantially more zeros (10.7% compared to 4.5%). However, it must be noted that Swierzbins never uses the term *over-explicit* and indeed, due to its implicational scale, the GH approach is tolerant of this phenomena. Thus, Swierzbins' findings are within the predictions of the GH and so are not particularly problematized in her discussion. Further, as discussed in Appendix 2, because the GH is a theory of pronoun and determiner use rather than a theory of accessibility, important accessibility-related factors, such as competition, are not analysed.

The most appropriate framework with which to investigate over-explicitness appears to be AT, as discussed in Chapter 2.5.3. Firstly, AT makes a greater number of accessibility-related distinctions among RE types, such that over-explicitness could potentially be investigated for any RE form, rather than simply for pronouns and zero. Secondly, compared to other frameworks reviewed, AT considers a much greater number of factors as being relevant to RE selection and relates these to psycholinguistic evidence for accessibility. Thirdly, depending on how it is operationalized, AT makes the strongest predictions about the appropriateness of an RE type in a given context. However, of the studies reviewed, only Lumley's (2010) on-going study of SLL Japanese has adopted an AT framework. Lumley's early intermediate learners are reported to distinguish between several factors relating to accessibility, including the distinction between main and minor characters (using mostly zeros for main characters), and are

sensitive to both distance and competition, but overall show less discrimination than L1 speakers, and err towards being over-explicit (with some under-explicit use of zero).

To sum up, a number of studies of various source/target languages indicate that over-explicitness characterizes SLL speech at intermediate and advanced levels of proficiency. However, few studies have based their analysis on an evaluation of the accessibility of the referent, and it may be that infrequent SLL use of pronouns and zeros is due to other features of SLL discourse, resulting in a failure to create suitable contexts for their use. It is, therefore, suggested that AT is the most appropriate framework to address this issue. However, no studies of SLL English were identified as using this framework, and only Lumley's (2010) on-going study of SLL Japanese has used this framework elsewhere. This raises the following research question:

Q1.3 Is the characterization of SLL over-explicitness in referent tracking supported by an analysis that directly assesses the accessibility of the referent?

3.2.5 Accounting for over-explicitness in SLL reference

As the principles underlying reference appear to be universal (Ariel, 1988a, 1990, 2001; Givón, 1984, 1983c; Gundel, 2010; Gundel et al., 2010; Gundel et al., 1993), researchers have commented that over-explicitness in an L2 appears 'contradictory' (Hendriks, 2003) and 'perplexing' (Gullberg, 2006). Hendriks states:

It would seem that the learner should not need a lot of proof (input) in the L2 to come to the conclusion that similar principles govern discourse organisation in his L1 and in the L2. There is no reason, logically, for the learner to assume that the L2 uses full forms where the L1 licenses a zero anaphor or vice versa. (2003, p. 292)

As such, a number of researchers have sought to account for SLL over-explicitness. The three main arguments are reviewed in the following subsections, with a fourth, AT-based argument, also outlined.

Hyper-clarity

One type of explanation relates to issues balancing the Gricean principles of *clarity* and *economy*. Tomlin (1990, p. 171) has argued that over-explicitness results from the fundamental “communicative principle to make sure, perhaps at all costs, that one is understood”, suggesting that economy is very much a secondary consideration. Lumley (2010), Chini (2005), and Williams (1988) appeal more directly to pragmatic principles, with Lumley arguing that over-explicitness may result from precedence given to the goal of *achieving recognition* (i.e. reference resolution) over the principle of economy. As Hendriks (2003) notes, learners may seek to compensate for the errors and limitations in their language use through using semantically rich REs. Indeed, Williams (1988) uses the term *hyper-clarity* to emphasise that over-explicit RE’s may provide much more information than is communicatively required. There is, however, an anomaly here insofar as over-explicit REs misrepresent the cognitive accessibility of the referent, which suggests a potential for misinterpretation (e.g. the possibility of maintained reference being interpreted as reference switch). This is illustrated in the following extract, which Klein and Perdue (1992, p. 317) note would be problematic for hearers unfamiliar with the narrative:

2. The blonde friend₁ tell other woman₂ about the son of that woman₂ . . .
That woman₂ knock very strong the door for open or break the door . . .
And the blonde friend₁ tell other woman₂ to call the emergency
And other woman₂ call the emergency with the telephone
But she₂ can’t to explain very well the situation . . .
And the blond girl₁ help that woman₂
And Ø₁ explain to the police the situation

Because of the lack of accessibility marking in this extract, it may be unclear to hearers whether referents are maintained or switched in topic (and focus) position

from one clause to the next, or whether one or more entirely new referents are introduced.

However unsatisfactory the use of over-explicit REs can sometimes be, the suggestion that their use represents a strategy for achieving clarity is supported by evidence from Tarone and Yule (1987) of much more general over-explicitness phenomena, at least in SLL-SLL discourse. Aside from over-explicit REs, they identify various ways in which their SLL-SLL data contains redundant information not found in L1 retellings of the same narrative, including more details of events, more description, unnecessary repetition, and lack of ellipsis. In SLL-SLL interactions, the authors suggest that over-explicitness may be a strategy to compensate for the *hearer's* non-target-like command of English. However, returning to Hendriks' suggestion, it may also be that SLLs use over-explicitness to compensate for limitations in their own capacity to create coherent speech.

Avoidance of high-accessibility markers

A further suggestion is that over-explicitness is symptomatic of learners not having mastered the use of high-accessibility markers. Certainly, at low levels of L2 competency, Klein and Perdue (1992) identify stages of acquisition in which the learner's interlanguage provides little option other than to be over-explicit. For example, they identify a stage in which low-level learners have only acquired subject pronouns and have no alternative but to use lexical NPs for other grammatical constituents. At higher levels of competency, it has been suggested that a similar issue arises, with speakers faced with the choice between over-explicit lexical RE's and partially acquired, "error-prone pronominal forms that encode several grammatical distinctions simultaneously" and which involve consideration of cognitive accessibility (Gullberg, 2006, p. 157). This could suggest that over-explicitness represents a strategy for the avoidance of pronouns and zeros. Certainly, the mastery of English zeros and pronouns appears to occur rather late, and they are a frequent source of error (Fakhri, 1989; Felix & Hahn, 1985; Muñoz, 1995; Williams, 1988, 1989). Against this hypothesis are findings

that (at least for some low-proficiency learners), pronouns are acquired before definite lexical NPs (Chaudron & Parker, 1990; Kim, 2000), and the argument that learners use pronouns to avoid *the* + N (Lang, 2010).

Inability to use high-accessibility markers in the flow of discourse

An alternative hypothesis is that infrequent use of pronouns and zeros does not reflect an avoidance strategy, but an inability to use these forms in complex acts of communication (Chini, 2005; Gullberg, 2006, 2008). Specifically, it is suggested that the felicitous use of pronouns and zeros requires complex planning at both the local level (e.g. number, gender, case) and the global discourse level (cohesive or accessibility-related factors), and that this dual processing load may be too great for learners to manage. Gullberg argues that “by opting for lexical NPs throughout, learners can plan at one level only and thus alleviate the processing load” (2006, p. 157). Similarly, Chini (2005, pp. 95-96) argues that learners may focus on “a more local planning strategy which does not or cannot, take into account larger stretches of discourse, because several other (lexical, morphosyntactic) problems are felt to be more urgent.”

Recent research in relation to L1 speakers provides some support for this hypothesis, with Arnold (2008, 2010) reporting that cognitive load, including the presence of multiple competing referents and the planning of longer utterances, can prompt speakers to use fuller expressions than required by the addressee. Therefore, it seems likely that planning load does account for some degree of SLL over-explicitness. As such, the relevant question is perhaps to ask to what extent this is so.

However, there are reasons to be cautious about this hypothesis. Much of the relevant psycholinguistic work is based on very short elicited texts (e.g. Arnold & Griffen, 2007), and it is possible that references in such texts are more highly sensitive to factors that encourage over-explicitness than longer texts would be. Short texts may, for example, give speakers little opportunity to establish topicality and high-accessibility through linguistic co-text. In extended discourse,

where multiple referents presumably hold varying degrees of accessibility, the situation may be different. In particular, for referents that are the current centre of attention, or which otherwise have the highest degrees of accessibility, it seems possible that relatively little processing effort would be required to estimate the most felicitous markers of their accessibility. Furthermore, in local level processing, although the use of pronouns requires marking for gender and number in English, it is not at all clear whether or not this creates greater strain for advanced SLL speakers than, for example, the selection of an appropriate lexical RE which then requires marking for the singular/plural and definiteness/indefiniteness distinctions.

In short, evidence from L1 use of REs appears to provide fairly strong support for the suggestion that cognitive load plays a role in SLL over-explicitness. However, there are also reasons to be cautious in claiming that this fully accounts for the apparently widespread phenomena of SLL over-explicitness. Specifically, it seems likely that the most highly accessible referents (those that are most ‘fresh’ in memory) would pose relatively little difficulty for the estimation of accessibility, and it is not entirely clear that high-accessibility markers pose a greater planning challenge than lexical REs. However, it is these highly accessible entities that the phenomena of over-explicitness most clearly relate to.

Learning form-function relations: RE types and degrees of accessibility

A further possibility arises from the consideration of Ariel’s (1990, 2001) Accessibility Theory (AT). As discussed in Chapter 2, AT relates to a proposed linguistic universal in which RE types specialise for encoding different degrees of cognitive accessibility, and where, for example, if a given language has both pronouns and demonstratives, then pronouns will specialise for higher accessibility than will demonstratives. However, there are two ways in which languages vary in the specifics of how they encode accessibility, and M. Ariel (personal communication, July 15, 2009) suggests that these may present major challenges for SLLs. Firstly, languages vary in terms of the RE types that are available, and there is a great deal of evidence that such differences between the

source and target language can present a considerable challenge for learners. For example, speakers of languages without articles greatly underuse these forms in initial stages of learning English (e.g. Kim, 2000; Master, 1987; Parrish, 1987). Secondly, languages may vary in the range of accessibility a particular form conventionally encodes, and there is some evidence that this also poses a difficulty for learners. For example, Nakahama (2009) reports that the English-speaking learners of Japanese in her study largely restricted their use of zeros to the type of coordinate contexts permitted for English zeros.

In general, then, L1 influence on the use of accessibility markers in a second language appears to be well supported in the literature (e.g. Ahrenholz, 2005; Nakahama, 2009; Yoshioka, 2008), including influence over the distribution of RE types. However, this alone does not account for over-explicitness; it appears only to predict *inaccurate* accessibility marking, with *under-explicitness* being (depending on the source and target language) just as likely. However, as discussed in Section 3.2.3, much of the previous literature only reports over-explicitness as characterising advanced SLL reference.

Summary

It is widely agreed that universal cognitive and pragma-linguistic factors underlie processes of RE selection (e.g. Ariel, 1990; Chafe, 1994; Givón, 1983a; Gundel et al., 2010); consequently, it is puzzling that references by advanced SLLs are widely reported as being characteristically over-explicit. A number of researchers have proposed explanations of why this is so. However, none of these explanations has emerged from an analysis of SLL reference that treats accessibility as a complex concept, or attempts to approximate the cognitive accessibility of the referent. Rather, the analyses tend to be based on a few distinctions that only partially correlate with accessibility (e.g. Chini, 2005; Gullberg, 2006, 2008). This raises the following research question:

Q1.4 What does an analysis of accessibility suggest about the cause of over-explicit SLL references?

3.2.6 Section summary

Previous studies have highlighted a number of issues relevant to SLL pragmatic competence in reference but a number of details remain unexplored. The present study is an attempt to address some of these gaps in the literature. Specifically, two broad issues have been identified. Firstly, no previous studies were identified as having explored SLL competence in referential introductions. Secondly, although over-explicitness has been widely reported in SLL referent tracking, such findings have generally not been based on an adequate analysis of referent accessibility. This leaves open the possibility that, in many cases, infrequent SLL use of pronouns and zeros was, in fact, contextually appropriate. For example, SLL speakers may have failed to create a target-like number of sufficiently high-accessibility contexts in which to use pronouns and zeros. The present study will, therefore, explore SLL reference from within an AT framework that operationalizes the key factors identified in Appendix 2.5 as influencing accessibility.

Important details also remain unclear in relation to the communicative effectiveness of SLL reference. It has been argued that a restricted SLL repertoire of referential forms may suffice in communicating the intended referent in most discourse (Perdue, 1984, p. 139). However, non-standard RE selection can increase communicative strain (e.g. Cloutre & Bever, 1988; Engelhardt et al., 2011; Goodman, 1986; Sanford & Garrod, 1981; Sedivy, 2003). No previous studies were identified as researching the miscommunication of SLL reference, and so it remains unclear to what extent infelicitous reference triggers miscommunication, and which aspects of L2 reference are particularly problematic. These issues are reviewed in Section 3.3.

3.3 Miscommunication

The triggers and consequences of SLL-L1 miscommunication have aroused considerable interest, particularly in high-stakes contexts such as air traffic control (Jones, 2003; Tajima, 2004), medicine (Britten et al., 2000; Kagawa-Singer & Kassim-Lakha, 2003) and the legal system (Gumperz, 1982b; Lane, 1985, 1993). Considerable research has also been focused on miscommunication in the workplace (e.g. Cook-Gumperz & Gumperz, 2002; Gumperz, 1982a), academic settings (e.g. House, 2003; Jenkins, 2000; Tyler, 1995), and service encounters (e.g. Bailey, 2000; Varonis & Gass, 1985), where mistrust can arise and social relations may deteriorate. Occasionally, problems are explored in public discourse where conflicting interpretations of the speakers' intentions can inflame social tensions, as illustrated in Haugh (2008a) and Gumperz's (1978) respective discussions of a controversial sermon and political speech. More frequently, communicative strain is found to discourage further interaction (Gass & Varonis, 1991), represent a face threat to interactants (Tzanne, 2000), and lead to negative stereotyping (Gass & Varonis, 1991; Gumperz & Tannen, 1979).

There is little doubt then that issues relating to miscommunication are critical for those involved in SLL-L1 and SLL-L1 discourse. However, despite the central role of reference in much discourse, very little is known about referential miscommunication in SLL-L1 interactions. It is not known, for example, to what extent infelicitous accessibility marking or errors in RE forms tend to trigger problematic reference. These issues are to be explored in the present study.

The following subsections review previous literature and establish a framework for exploring the miscommunication of reference. Subsection 3.3.1 briefly identifies some key issues in miscommunication research and locates the present study within this field. Subsection 3.3.3 discusses issues relating to the identification of triggers of miscommunication. Subsection 3.3.4 defines referential miscommunication and discusses the extent to which this can be untangled from a more general sense of miscommunication. In Subsection 3.3.5, distinctions are made between types of miscommunicated reference. Also discussed in this subsection is whether reference resolution is always 'all or

nothing' or whether it can be partial. A more fundamental issue, discussed in Subsection 3.3.6, is whether or not the non-resolution of reference necessarily entails miscommunication. Finally, Subsection 3.3.7 reviews the rather fragmentary evidence used to identify triggers of referential miscommunication. Relevant to this discussion are a number of previous studies relating to communicative outcomes and communicative strategies.

Before continuing, it is worth noting that there is a great deal of inconsistency across the literature in relation to miscommunication terminology (Dascal, 1999, pp. 753-754). For the present purposes, the term *miscommunication* is used as an umbrella term encompassing *misunderstanding*, *non-understanding*, and *failure*. The term *misunderstanding* is used broadly in this study for instances in which the hearer misinterprets the speaker's meaning; *misidentification* is a subclass of this, and relates specifically to hearers identifying the wrong referent. The term *non-understanding* is used for cases where the hearer recognizes the speaker's intention to refer but is unable to identify the referent. The term *referential failure* is specific to hearers failing to recognize that a reference has been attempted. The term *referential strain* is also used in this study (and exemplified later in this subsection) in relation to references whose resolution requires undue cognitive effort.

3.3.1 Approaches to miscommunication

Miscommunication has been researched from a wide variety of perspectives. Studies focusing on L1-L1 interactions have revealed much about the nature of miscommunication (Blum-Kulka & Weizman, 1988; Schlesinger & Hurvitz, 2008; Tzanne, 2000; Weigand, 1999), sources of miscommunication (Haugh, 2008a; Schegloff, 1987; Tzanne, 2000), processes of repair (Bazzanella & Damiano, 1999; Hirst, McRoy, Heeman, Edmonds, & Horton, 1994; Schegloff, 1992), and the cognitive processes involved in communication (Keysar, 2007). Often, the underlying perspective is that examining miscommunication can "illuminate processes of understanding" (Bailey, 2004, p. 395).

In miscommunication research involving interactants of different language backgrounds, Sarangi (1994) identifies two main traditions. The first views miscommunication from a cultural-anthropological perspective, and often uses the term *intercultural communication*. The general orientation of such work is largely based on an understanding that, in Bennett's (1998, p. 2) words, "monocultural communication is *similarity-based*" in terms of language, behavior and values, and that, in monocultural contexts, "difference represents the potential for misunderstanding and friction". By extension, intercultural differences are recognized as being highly problematic, and such differences are examined for their potential (or actual) role in miscommunication. Sarangi notes that "although these studies acknowledge the role of language in the manifestation of cultural differences, the underlying assumption is that cultural problems are more significant than linguistic problems" (1994, p. 410).

The second main tradition identified by Sarangi relates to perspectives from sociolinguistics and pragmatics. Of particular interest is the large body of work from an *interactional sociolinguistics* perspective. Interactional sociolinguistics is grounded particularly in the work of Gumperz (1978, 1982a, 1982c), and focuses on how social knowledge interacts with the use and interpretation of language. Sarangi (1994, p. 411) argues that the two key assumptions in this tradition are that "ethnicity and different cultural backgrounds determine speakers' discourse strategies" and that these differences "can lie at the heart of interethnic misunderstandings". Thus Sarangi appears to characterize this approach as highly deterministic; However, this appears to misrepresent Gumperz's position, as he very explicitly acknowledges conscious shifts in discourse strategy in L1-SLL communication (Gumperz, Jupp, & Roberts, 1979) although it may be true of other researchers working within this approach. A central idea in the work of Gumperz is that of *contextualization cues*, in which linguistic and paralinguistic features are used to direct the interlocutor towards a specific interpretation. These are based on conventions that vary widely between cultural groups and which speakers are largely unconscious of. Through an analysis of miscommunication, these contextualization cues and conventions may become apparent.

These two approaches to researching cross-cultural miscommunication appear to

relate most closely to those functions of language that J. Lyons (1977a) calls the *social* and the *expressive*, rather than the *descriptive* function (of which reference is one example). This is reflected in the methodologies used to identify problems (especially self-reporting and the identification of disruptions in the flow of conversation), and in the discussion of findings in terms of misunderstood attitudes and intentions. In contrast, problematic L1-L1 reference has largely been approached experimentally (e.g. through eye-tracking methodology). In general, then, most studies of SLL-L1 miscommunication have a quite different focus to that of the present study. However, across a range of studies (e.g. Gumperz, 1982a; Naylor, 1979; Thomas, 1983), it is also possible to identify a common concern with locating the source or trigger of miscommunication. For this, I use the term *trigger identification*, which is here defined as the attempt to identify a specific instance of miscommunication as being (wholly or partially) caused by a problematic linguistic feature and/or intended meaning (this definition is refined in Chapter 9.4.1).

3.3.2 Issues in miscommunication research

While there is an extensive body of research into miscommunication, much of that which relates to SLL-L1 interactions has been conducted from an intercultural communication perspective, with little concern for language use. Although there is also a substantial body of research into L1-L1 miscommunication, Verdonik (2010, p. 1364) notes that this “has diminished – we find very few studies on misunderstanding after 2000. Nonetheless, there are still many open questions”.

One such issue is the identification of those language forms, communicative acts, and discourse contexts that tend to be communicatively problematic for SLLs. Existing findings are fragmentary, often relating to highly specific discourse contexts (e.g. air traffic control), analysis of a single interaction (Ryan & Barnard, 2009; Varonis & Gass, 1985; Weizman, 1999), the acceptability (rather than miscommunication) of speech acts (e.g. Taguchi, 2006), gaps in sociolinguistic knowledge (Gumperz, 1982a, 1982c) and/or to interlanguage features specific to speakers of certain source languages (Gumperz, 1982a). What appears to be

largely absent from the previous literature is an exploration of competency in a (partially or wholly) grammaticized system of semantic or pragmatic contrasts, and the impact this has on communicative success or failure. For example, while it is known that emerging grammatical competence in expressions of futurity imposes limits on the pragmatic options available to SLLs (Bardovi-Harlig, 2003), it remains unclear when, how often, and in which contexts this results in genuine miscommunication.

It is such questions that the present study intends to explore in relation to infelicitous accessibility marking as a trigger of miscommunication. In this way, the present study will begin to address a substantial research gap in the existing literature. It is hoped that particular features of SLL reference and particular discourse contexts can be identified as problematic or non-problematic.

Of further interest is uncertainty over the frequency of unrepaired miscommunication. In a review of the literature, Dascal (1999, p. 754) states that “current wisdom has it that most misunderstandings are detected immediately after occurrence (second turn), and successfully repaired in the third or fourth turn”, and cites Bazzanella and Damiano (1999) as evidence of this. Similarly, Weigand (1999, p. 770) argues that “misunderstanding will normally be corrected in the course of the ongoing dialogic action game”, and Hirst et al. (1994, p. 214) state that “people are very good at noticing when a conversation has gone awry”, identifying the problem, and repairing it. Although interactants do display their understanding of the unfolding discourse (Schegloff, 1992), it is not clear how these further conclusions were drawn, and few studies acknowledge the difficulty of detecting miscommunications that go unnoticed by the interactants. Varonis and Gass present an opposing viewpoint, arguing that “in many instances, particularly in interactions with NNSs” miscommunications go unnoticed by interactants (1985, p. 331).

A further issue raised by Gass and Varonis (1991, p. 143), is that research has not revealed whether miscommunications in SLL-L1 discourse tend to be qualitatively different from those in L1-L1 discourse. Gass and Varonis speculated that some types of miscommunication were specific to one or other of

these interaction types.

In summary, a broad and highly under-researched area of miscommunication relates to the interrelationship between miscommunication and SLL competency in the use of grammaticized semantic/pragmatic contrasts, including accessibility marking in reference.

3.3.3 Identifying sources of miscommunication

Most studies identify multiple triggers of miscommunication, but among the most frequently implicated are limitations in language competency (e.g. Gumperz, 1982b; Tyler, 1992; Varonis & Gass, 1985), differences in cultural or schematic knowledge (e.g. Chick, 1989; Hinds, 1985; Holmes & Brown, 1987; Tyler, 1995), and/or cross-linguistic or social differences in how speech acts, propositions, and attitudes are conveyed (e.g. Gumperz, 1982a; Gumperz & Tannen, 1979).

Although many of the studies cited so far relate to communication between speakers with different linguistic and/or cultural backgrounds, there is also substantial research suggesting that miscommunication is frequent even among friends and family (e.g. Blum-Kulka & Weizman, 1988; Tzanne, 2000; Verdonik, 2010), and that social differences relating to gender (Holmes, 1985; Tannen, 1990) and regional background (Gumperz & Tannen) are also important triggers of miscommunication.

Consequently, SLL-L1 miscommunication should not be uncritically attributed to limitations in SLL language competency. Rather, it is important to recognize the complexity of any act of communication and the multitude of potential problem sources, many of which involve the hearer or a combination of both interactants. Bazzanella and Damiano (1999), for example, identify structural triggers (e.g. lexical ambiguities, noise), speaker factors (e.g. problems structuring information, use of ambiguous forms), hearer factors (knowledge problems, cognitive processes), and interactional factors (e.g. lack of common ground). This list highlights the caution required in attributing an instance of miscommunication to any particular trigger, and also in attributing it to a single trigger.

In some cases there may be co-responsibility for miscommunication. Bremer, Broeder, Roberts, Simonot, and Vasseur (1993, p. 153) profess to treat “understanding as an essentially interactive process that is negotiated constantly between any two participants” rather than as a hearer internal process. This view stresses the importance of what Clark (1996) calls *joint activity*, in which much language use involves interactants coordinating in multiple ways, and aligns with the view of Clark and Wilkes-Gibbs (1986) that reference resolution is a responsibility shared by interactants.

More fundamentally, caution is also required in identifying whether or not speech is in fact communicatively problematic. Kasper (1997, pp. 355-356) notes that studies in interlanguage pragmatics have tended to treat non-target-like language use “as communicatively disruptive regardless of whether they actually caused trouble or not”, usually failing to distinguish between problems that “were easily repairable, with no further consequences for the interaction, or caused major disruption at the interpersonal or transactional level” (pp. 355-356). Arguably, it is inadequate for researchers of miscommunication to merely infer that problems would be likely to result from a particular utterance, particularly in light of Schober and Clark’s (1989) finding that addressees often understand more than over-hearers. Rather, problematic communication is best identified as an actual outcome between the speaker and intended addressee, rather than an intuition of the analyst. What is required, then, is confirmation from interactants or direct evidence in the data that communicative problems have occurred.

3.3.4 Miscommunicating reference

The main purpose of the rather lengthy discussion in Chapter 2.1 was to establish a definition of reference which enables a satisfying account of what constitutes miscommunication. In the four-place view of reference, an act of reference is successful if the hearer recognizes the speaker’s intention to refer, and cognitively identifies the intended referent *as being* the intended referent (Bach, 2010, p. 20). This contrasts with the definition of success that might arise from the view of

reference as a three-place relation (e.g. Abbott, 2010), whereby reference is successful if a speaker uses a RE with a referent in mind and is in a position to clarify the referent (irrespective of whether the addressee can identify the referent). This is the position taken by Searle (1969), who uses the term *fully consummated reference* for references that are resolved by the hearer.

An important issue is whether it is valid to untangle referential miscommunication from miscommunication in general (Goodman, 1986). In the context of referent introductions, this issue often appears straightforward and non-problematic. For example, as discussed in Chapter 2, one can understand aspects of the utterance *I saw Antonia in town* while misunderstanding the reference. The opposite is also true: due to noise or low language competency, one could hear and interpret the RE *Antonia* without understanding the rest of the utterance. Of course, a great deal of additional utterance meaning depends on identifying the referent (e.g. if Antonia is an escaped prisoner, then understanding the reference may be critical to understanding the implicature *Call the police*). Nevertheless, as such meanings arise subsequent to reference resolution, it appears that miscommunicated referential introductions can indeed often be usefully untangled from other problems.

In referent tracking contexts, the issue is more complicated. As discussed in Chapter 2.10, coherence-based factors play an important role in the resolution of some REs, particularly pronouns (Hobbs, 1979; Kehler, 2002). It seems that this is more so in the context of referent tracking than referent introductions. This presents additional problems in identifying the source of referential miscommunication beyond those specified by Bazzanella and Damiano (1999). A relevant example is Tyler's (1992) analysis of coherence problems in the speech of an advanced Chinese L2 speaker of English, where the speaker's nonstandard discourse structuring meant that hearers were unable to identify which synonyms were co-referential.

In summary, while it seems that referential problems can often be usefully untangled from wider miscommunication, this is not always the case, particularly in reference tracking. An important implication for this study is recognition that

miscommunicated reference is not always due to an inherent problem with the act of reference (at least when the reference is considered in isolation). Rather, problematic reference may be symptomatic of coherence problems at a more global level. Consequently, while this study will focus primarily on the role of REs as triggers of miscommunication, it is recognized that wider issues of discourse coherence may be implicated.

3.3.5 Types of unsuccessful reference

An interesting question is whether successful reference is ‘all or nothing’. A number of researchers (e.g. Bazzanella & Damiano, 1999; Gass & Varonis, 1991; Weigand, 1999) have pointed out that miscommunication (in general) can be either complete or partial. Dascal (1999, p. 756) further argues that “misunderstanding and understanding are contraries, rather than contradictory”, such that a speaker may be said to both understand and misunderstand the same utterance at different levels. In relation to reference, it has been argued that vague interpretations of some references can be considered successful (Jucker & Smith, 2004; Jucker et al., 2003), and that the notion of correct interpretation should be substituted with the “weaker notion of adequate interpretation” (G. Brown, 1995, p. 22). However, these views appear to be based on three-place definitions of reference; the four-place view holds that reference is indeed a matter of ‘all or nothing’. To illustrate this point, it is important (once again) to observe the distinction between referring and mentioning.

The central element of meaning that is expressed when mentioning an entity is denotation; it seems clear that one can be more or less successful when interpreting denotation. For example, when encountering the utterance *I stood beneath a kahikatea*, some addressees may be able to picture exactly what sort of tree the speaker meant, while others will know only that *kahikatea* is an indigenous New Zealand tree but not be able to picture its particular characteristics. Still others, perhaps encountering the word *kahikatea* for the first time, will interpret the utterance only so far as being able to infer that *kahikatea* denotes a type of tree. Even if the speaker intended the hearer to identify the type

of tree involved, in each of these cases it seems that at least some degree of communicative success has occurred. A complete communicative breakdown (in respect of denotation), it seems, occurs only when the hearer is unable to interpret (or misinterprets) what *kahikatea* means.

However, unlike interpreting denotation, interpreting reference requires the hearer to identify precisely the individual intended by the speaker. If the speaker intends to refer by uttering *I stood beneath the tall kahikatea*, then it does not appear communicatively sufficient for the hearer merely to understand that the speaker means one individual from within the *kahikatea* species. That constitutes successful denotation but not successful reference. In an act of reference, the speaker indicates a particular individual, and the hearer's identification of that individual constitutes successful reference. It seems then, that reference cannot be partially resolved: it is either resolved or it is not. Of course, where reference fails, denotation (and, therefore, communication) may still be more or less successful (i.e. a set of entities denoted by the RE is identified) but this is not successful reference and such issues will not be explored further in this study.

An important distinction also exists between successful references that are easily resolved and those that require undue cognitive effort or result in undue disruption to the flow of discourse. Here, *undue* is used to distinguish those references that are problematic due to speaker factors, from those in which referent identification is inherently difficult (e.g. due to being dimly recalled). Undue difficulty may result in a clarification request or the creation of a 'garden-path effect' (in which the hearer must abandon an initial interpretation) that would be avoidable through more appropriate RE selection (or episodic design). These are what Sanford and Garrod (1981) call *inconsiderate discourse*, although in the context of SLL speech a more apt description is *communicative strain*. Nevertheless, it is surprisingly difficult to arrive at a satisfying way of defining and identifying strained reference. This is particularly so when taking the present view that reference is collaborative and may involve clarification requests.

To explore this further, it is useful to follow Auer (1984) in distinguishing between references that are marked by the speaker as being potentially

problematic and those that are not (*en passant* reference). In making an *en passant* reference, the speaker “obviously believes that his or her referential selection is fully adequate” (p. 629) and proceeds in the belief that this is the case. Any delay or failure by the hearer to identify the referent may be considered problematic as there is a mismatch between the speaker’s appraisal of the expected outcome and the realization of that outcome. In such contexts, clarification requests bring attention to the speaker’s misjudgement and interrupt the flow of the discourse, sometimes resulting in problematic backtracking (Auer, p. 642).

Auer (1984) also notes ways in which speakers can signal that a reference is potentially problematic. For example, as discussed in Chapter 2.6, speakers may use try-markers, in which a pause and rising tone is used to elicit a response from the hearer as to whether to proceed or clarify the reference (Sacks & Schegloff, 2007). More powerfully indicative of a problematic reference is “for the speaker to treat it as a matter that has to be settled *before* more ‘substantive’ things can be approached” (Auer, p. 632). Auer identifies this as involving *prefatory sequences* in which speakers use expressions such as *do you remember x* or *do you know x* to signal potential problems. In such cases, repair and collaboration are to be expected and, although indicative of strain, it will here be assumed that this is due to the nature of the communicative act rather than speaker-induced. It should also be noted that some references may be inappropriately marked as being problematic, or done so in an over-elaborate manner. These represent a type of over-explicitness and are considered by Auer (p. 634) to be relatively rare and mainly an issue of politeness. However, if persistent, these violations of Gricean economy principles may be irritating and a hindrance to effective communication.

It should also be noted that between *en passant* and problematized reference, Auer identifies a further range of “intermediate reference organizing techniques” that enable conversation to flow smoothly while allowing space for repair and clarification. These techniques include “short pauses, repeated onsets, lengthening of sonorants, repetition of articles or other techniques for displaying ‘hesitancy’” (p. 638) and, in German, uses of demonstratives. In the present study these are grouped together with *en passant* reference.

In short, then, in the analysis of clarification requests, only problematic *en passant* references will be considered here to represent strained reference. *En passant* references will be identified as those involving no overt marking for problematicity (e.g. try-markers).

3.3.6 Unresolved reference and unresolved anaphora

A critical issue is whether non-resolution of reference should necessarily be judged communicative failure. Bearing in mind that reference is defined here (following Bach, 2008) as involving the speaker's intention for the hearer to identify the referent, reference resolution does appear to be 'all or nothing' (Subsection 3.3.5). This subsection reviews literature relevant to this issue, and to a second issue of whether or not pronouns require resolution through a linguistic antecedent.

It appears to be a widely held assumption that successful discourse comprehension involves the resolution of all references. Indeed, a number of works include statements to this effect in their opening sentence, suggesting that much of what follows is predicated on this assumption. For example, Yoshioka begins by stating that "in order to construct intelligible discourse, it is essential that the identities of referents are made clear *at all times*" (2008, p. 236, emphasis added); Gullberg opens with "for discourse to be comprehensible, referents have to be uniquely identifiable" (2003, p. 311); and Peterson (1993) similarly begins by stating that "in order to be comprehensible to a listener, narratives must have their referents specified unambiguously". The idea seems to be that REs only fulfil their communicative purpose when they are successfully resolved.

Although this assumption may hold true for genuine references (an assumption that will be reviewed in Chapter 8), Yule (1982) argues that this is not the case for all anaphors, and presents a series of examples involving pronouns that do not appear to demand reference resolution through identification of a textual antecedent (or entity in the physical context). One of these is the vague use of *they*, which Yule likens to the oral equivalent of the agentless passive construction

in writing. This is illustrated in the following example from Yule's data (p. 319) in which the exact identity of *they* appears irrelevant to the speaker's communicative meaning.

3. oh everything they do in Edinburgh – they do it far too slowly

It may be that such uses of *they/them* serve mainly as grammatical placeholders, creating syntactically complete clauses. An equivalent form is also reported in other languages, for example Czech (Gabl'asova, 2009) and Norwegian (Borthen, 2010). Jucker, Smith, and Lüdge (2003) argue that use of 'vague *they*' spares the hearer the unnecessary processing effort of identifying an unimportant referent. Recent psycholinguistic studies also provide evidence to support this interpretation. For example, Sanford, Filik, Emmott, and Morrow (2008) argue for what they call an *institutional they*, "where some agent is entailed, but where it is not really necessary to specify the details of that agent" (p. 378). They argue that this use relates only to plural third-person pronouns and that it contrasts with the processing strain caused by non-resolution of singular REs. They further argue that although all pronouns initiate a search for a referent, hearers are comfortable with accepting an implied referent for plural pronouns (but not for singular pronouns). Similarly, Borthen (2010) argues that, unlike singular pronouns, the felicitous use of plural pronouns does not require prior knowledge of the referent. Gundel et al. also note a class of *vague inferrables*, where reference resolution of a 'non-specific they' "is not only difficult, but typically unnecessary" (2005, p. 355). In short, then, current thinking appears to support Yule's (1982) argument only in so far as it relates to plural third-person pronouns.

However, Yule's argument extends to some uses of singular pronouns and it is this claim which, to current thinking, appears far more contentious. Specifically, Yule's linguistic data does not fit any established model of reference or anaphora and is counter to the evidence reported in much of the relevant psycholinguistic research. Yule (p. 320) presents the following example, in which the pronoun *she* occurs without any antecedent, yet no communicative strain appears to be triggered:

4. I used to go about with a chap – I don't know – whether he's still alive now or not – but – there was nine ten eleven in the family altogether – two girls – and nine boys – and *she* lost eight sons one after the other (italics in original)

Similar examples of antecedent-less singular pronouns and are also reported elsewhere in spoken data (e.g. Fox, 1987b, p. 150; Gundel et al., 2005; Swierzbis, 2004, p. 80). Yule (1982) argues that in using an antecedent-less pronoun, the speaker's purpose is not to clarify a referent; rather, such pronouns may serve to divert attention away from reference resolution by focusing attention on what is predicated on the individual (e.g. *losing eight sons*). It should be noted that, with the exception of some plural pronouns, the examples discussed in the literature are all non-referential, as the relevant entities were hearer-new. It remains to be seen whether antecedent-less (non-prominent) pronouns are found for entities that are hearer-known.

Gundel et al. (2005) present an alternative account, arguing that most cases can be interpreted through a bridging inference. For instance, *she* in Example 4 could be interpreted as the mother of the family through inferences relating to *family* and *sons* (although it could also be argued that, in some contexts, 'man + family' enables bridging inferences to his wife and, perhaps, sisters). In their overall sample of 2006 pronouns, Gundel et al. identify 88 inferable pronouns (including uses of *they*) as well as other pronouns they were unable to identify. They interpret these inferable pronouns as "minor violations" of felicitous RE selection, which "are easily accommodated by way of a bridging inference (Clark & Haviland, 1977) that links the referent to a recently activated referent" (p. 354).

Returning to Yule's (1982) argument, if the identity of the referent in Example 4 were important to the speaker's communicative purpose, then the speaker would appear to have violated the Gricean (1989) conversational maxim of being perspicuous (Yule, p. 320) and, if so, a self-repair or clarification request would be in order. However, in none of the examples cited, is there any indication from either interactant that the reference was problematic. Of course, hearers will not necessarily interrupt the flow of a conversation in order to clarify a reference, as

they balance the need for interpretation with “the smooth running of the conversation” (Auer, 1984, p. 645), and, as Yule has speculated elsewhere (1979, p. 131), this may be particularly so for pronominalized referents. Nevertheless, in the examples discussed by Yule (1982), Fox (1987b), and Swierzbina (2004), the researchers all agree that the antecedent-less pronouns likely presented little comprehension difficulty (as distinct from referential clarity) for the hearer.

In short, although unresolved uses of *they* may be the most frequent antecedent-less pronouns, there is linguistic evidence to suggest that other pronouns can also be both felicitous and non-resolvable in speech, and that these occur where the identity of the referent is incidental to the speaker’s communicative intentions.

In response to Yule (1982), Sanford, Garrod, Lucas, and Henderson (1983) present arguments and psycholinguistic counter-evidence in support of the standard analysis of anaphors, restating their earlier position (Garrod & Sanford, 1982) that anaphoric pronouns (antecedent-less or not) always prompt the hearer to “seek representations in current explicit focus” (1983, p. 313). The evidence Sanford et al. (1983) present is from studies of reading time and acceptability judgments through ‘rephrase invitations’. The results indicate that readers prefer pronouns to link to an explicit antecedent within the current focus of attention, and that the absence of such an antecedent either slows reading time or prompts an inappropriate interpretation. Sanford et al. acknowledge the limitations in generalizing findings from studies of reading to the processes involved in speaking and listening, but essentially dismiss the linguistic evidence.

Sanford et al.’s main explanations for Yule’s data are, firstly, that the apparently antecedent-less pronouns may in fact have referents that were clear to the hearer through the physical context or through shared knowledge. Similarly, Cornish (1996) argues that unstressed third-person pronouns are “always accompanied by their user’s presupposition that their referent is highly salient (i.e. accessible to the addressee) at the point where they are used” (p. 38). Other psycholinguistic researchers such as Greene, Gerrig, McKoon, and Ratcliff, (1994) also suggest that antecedentless pronouns are felicitous only when known to the hearer through shared knowledge. Adopting a similar position to Gundel et al. (2005), Cornish,

Garnham, Cowles, Fossard, and André (2005) have argued that such pronouns can be used only where an implicit antecedent is evoked which “is a *nuclear* argument” (p. 366), in the sense that the word *pregnant* implies *baby* in a way that is central to the meaning of *pregnant*. There is, however, a set of studies by Klin and her associates (Klin, Guzmán, Weingartner, & Ralano, 2006; Klin, Weingartner, Guzmán, & Levine, 2004; Levine, Guzman, & Klin, 2000) which, although they do not relate directly to pronouns, may provide some support for Yule’s arguments. Specifically, these studies suggest that, in reading time experiments involving ambiguous lexical REs, “readers are sometimes satisfied with an underspecified representation” (Klin et al., 2006, p. 142), where the antecedent is difficult to retrieve and its identity has little relevance to interpreting the overall meaning of the text. By extension, it could also be that readers and hearers are sometimes satisfied with unresolvable pronouns if they appear irrelevant to discourse comprehension.

Sanford et al.’s (1983) second, and main argument appears to be that Yule’s examples are merely examples of infelicitous and inconsiderate language use. That is, they are to be considered deviant (a position also taken by Gundel et al., 2005, despite such references accounting for nearly 5% of their data). Sanford et al. argue that the data could be explained by supposing that “the things referred to by pronouns in such ways are prominent in the mind of the producer (in his explicit focus system), but that he is not evaluating the structure of his productions from the receiver’s point of view” (p. 316). They point out that infelicitous reference is frequent in the speech of young children (citing Karmiloff-Smith, 1980), children from low socio-economic backgrounds (citing Bernstein, 1962), and the elderly (citing Sanford, unpublished data). Other studies which report older adults using ambiguous and antecedent-less pronouns include those by Kemper, Rash, Kynette, and Norman (1990), and Light, Capps, Singh, & Albertson Owens (1994). However, in interpreting such findings, many researchers (e.g. Light et al., 1994) appear to merely assume that such pronouns are infelicitous (as, admittedly, some other aspects of speech are in this demographic), based on a comparison of speech with younger adults. However, it must be noted that in some studies (Kemper, Kynette, Rash, O’Brien, & Spratt, 1989; Kemper et al., 1990) “the elderly adults’ expository statements were judged

to be more interesting and clearer than the young adults' statements" (1989, p. 64). It seems interesting, then, that little attention has been given to the possibility that references deemed infelicitous in relation to current theories of RE selection (e.g. Ariel, 2001; Gundel et al., 1993), may actually reflect older adults' greater sensitivity of the audience's needs, and perhaps mastery of certain forms of speech (in this case, anecdotes and narratives).

Furthermore, despite acknowledging that reading time does not necessarily reflect comprehension processes in speech, it may be that Sanford et al. (1983) have, nevertheless, over-extended findings relevant to written texts to conclusions about spoken texts. Fox (1986, 1987a, 1987b) reviewed conversational data and a wide variety of written texts and concluded that antecedent-less pronouns were a feature only of speech:

I found no instances of this pattern in the written material, and I expect that there are no instances to be found . . . in all my experience with expository prose I have no recollection of initial pronominal use which is not followed by fuller explication of the participant's identity (1987b, p. 150).

As such, it hardly seems surprising that the presence of antecedent-less pronouns in written text (that are otherwise consistent with the features of written discourse) should seem incongruous to readers.

To summarize this subsection, three widespread yet questionable assumptions have been identified which have important implications for the present study, and which will be reviewed in Chapter 8 in light of the present findings. All relate to use of antecedent-less pronouns and other unresolvable referents found in naturalistic data (e.g. Fox, 1987b; Gundel et al., 2005; Yule, 1982), but are considered infelicitous by a number of researchers (Gundel et al., 2005; Light et al., 1994; Sanford et al., 1983). Firstly, if they are felicitous, then the use of such pronouns challenges the widely held assumption that all references need to be resolved in order to establish coherent discourse (e.g. Gullberg, 2003; Light et al., 1994; Yoshioka, 2008). An implication for the present study would be that non-

resolution of certain REs is not necessarily problematic (unless, perhaps, the addressee identifies them as such). Secondly, and implicit in the first assumption, is the assumption that cooperative speakers at least intend to be unambiguous, and that cooperative hearers at least attempt to resolve all references. A third assumption, questioned by Borthen (2010), is the assumption of AT and the Givenness Hierarchy that pronouns are only felicitous when used for very high-accessibility referents (those that are cognitively In Focus). In particular, evidence is mounting that third-person plural pronouns may be used for low-accessibility referents, and AT and the Givenness Hierarchy may need an adjustment to accommodate these uses of pronouns. As such, in this study, caution will be taken before labelling pronouns under-explicit or otherwise problematic. These assumptions will be revisited in Chapter 8 in light of the findings of the present study.

3.3.7 Triggers of referential miscommunication

A review of the literature reveals some findings relating to the miscommunication of reference in L1-L1 interactions but very few in SLL-L1 or SLL-SLL interactions. In L1-L1 interactions, Goodman (1986) reports on triggers of miscommunication in a task involving the assembly of an object. These include under-specified and over-specified semantic information and what Goodman calls *improper focus*, which involves referent switches that are either not communicated or wrongly inferred. In a major study of speaker- and hearer-initiated repairs of discourse anaphora prompted by under-explicitness, Geluykens (1994) identified inferability as the most frequent problem, with speaker misjudgements of distance and competition also being important. Koschmann, LeBaron, Goodwin, and Feltovich (2001) report on problems establishing common ground for the identification of a referent in the medical context of endoscopic surgery where different visual perspectives and differences in the interlocutor's experience create challenges in reference repair. Similarly, G. Brown (1995, pp. 150-151) discusses two cases of referential problems in dialogues involving four interactants, in which the main problems appear to be related to issues of aligning common ground and speaker contributions. Jucker

and Smith (2004) provide a number of examples in which miscommunication is related to under-explicitness and competition in a narrative retelling. In addition, they identify issues of narrative coherence leading to incorrect referent identification. The repairs discussed by Schiffrin (2006) tend to result from a type of under-explicitness resulting from a misjudgement of common ground. Similarly, Cheshire (2005, p. 484) reports that her teenage participants sometimes wrongly “assumed an entity would be discourse-new but hearer-old”, suggesting that they may have had difficulties in assessing their common ground with the interlocutor, an issue which is found even more strongly in the speech of younger children (Krauss & Glucksberg, 1969). It is notable that none of these L1 studies used a framework (such as AT) which accounts for RE selection, and also that, in many cases, the problems (particularly those discussed by Geluykens, 1994, and Schiffrin, 2006) relate to what is here defined as mentioning rather than referring.

No studies were identified as specifically focusing on the miscommunication of reference in SLL-L1 interactions. However, referential problems have been reported in studies with a wider miscommunication focus (Gumperz, 1982b; Gumperz, Aulakh, & Kaltman, 1982; Gumperz et al., 1979), and other researchers have speculated that examples in their data would be likely to cause problems for naïve hearers (e.g. Klein & Perdue, 1992, p. 317). Others, such as Connor-Linton (1995), have focused on the role of pronominal reference in miscommunication, but the issues that arose were not related to the identity of the referent. No studies were reviewed that specifically relate miscommunication to issues of competency in the marking of accessibility, givenness, or topic. Much, therefore, remains to be explored in relation to which features of SLL reference are most problematic.

Whereas under-explicitness appears to be a factor in many problematic L1-L1 references (e.g. Geluykens, 1994; Jucker & Smith, 2004), there are reasons to believe that over-explicitness may be an important trigger of miscommunication in SLL speech. As discussed in Chapter 2.10, there is evidence that over-explicitness can be problematic in L1-L1 communication, and, as discussed in Subsection 3.2.4, over-explicitness characterizes much reference by intermediate and advanced SLLs. One might, therefore, presume that over-explicitness is a major trigger of difficulties in SLL-L1 discourse. However, this assumption

requires exploration, particularly as hearers may become accustomed to idiosyncratic speech patterns (Gass & Varonis, 1984; Grodner & Sedivy, 2011; James, 1998). It may even be that SLL over-explicitness is generally successful through the provision of clear semantic information at the expense of accurate accessibility marking. Therefore, a key research question for the present study is posed in Q2:

Q2 What linguistic factors are implicated in referential miscommunication in L1-L1 and SLL-L1 narrative discourse?

A number of sub-questions are presented in Section 3.4.

3.3.8 Communicative outcomes

While not specifically reporting on miscommunication, there is a relevant body of research on communicative outcomes in interactions involving information transfer. The studies reviewed all relate to interactions between pairs of advanced SLLs, and identify a number of ineffective communicative features, particularly those adopted by more proficient SLLs when in the role of information provider (Yule, 1990, 1991; Yule & MacDonald, 1990). For example, Yule (1991) reports instances in which referential problems occurred but speakers “simply acted as if no referential problem existed at all” (p. 36), even to the extent of consistently overriding “the receiver’s attempts to express his difficulties, using raised pitch and increased amplitude . . . to mark a continuation of the sender’s turn, thus preventing the receiver from contributing” (p. 37). Similarly, speakers were frequently found to abandon attempts at referential clarity and appeared relatively unwilling “to negotiate a solution . . . , preferring instead to make fairly arbitrary decisions about the receiver’s world of reference” (p. 39). When the lower-proficiency interactant was in the position of information provider, far more negotiation was evident.

Also of interest is Yule, Powers, and MacDonald’s (1992) finding that participants who were prompted to be conscious of linguistic accuracy tended to

take “a more egocentric perspective, with a resulting neglect of the receiver’s perspective” (p. 273). It was found that a better way of eliciting communicatively effective speech was to make learners aware of inherent task difficulties in referential communication.

For the purposes of the present study, the most relevant aspect of these findings is the need to ensure that the data elicitation task is treated by participants as a genuine communicative task in which the speaker must prioritize successful communication, rather than simply display their language competency.

3.3.9 Communicative strategies

A large body of literature of further relevance to this discussion relates to the *communicative strategies* that speakers use to overcome problems. Although also discussed in terms of L1 speech, the focus of relevant studies is generally on how SLL speakers consciously utilize their linguistic resources to overcome a problem at the intersection between their language limitations and the complexity of what they wish to communicate. In using communicative strategies, the speaker wishes “to handle difficulties or breakdowns in communication” (Dornyei & Scott, 1997, p. 174). Important reviews in this area are those by Yule and Tarone (1997), Poullisse (1990), Bialystok (1990), and the collection edited by Færch and Kasper (1983c).

To begin with, an important distinction is to be drawn between *communication (or achievement) strategies* and *avoidance (or reduction) strategies*. In the former, the speaker attempts to solve a communicative problem, while in the latter the speaker “reduces’ his communicative goal in order to avoid the problem” (Færch & Kasper, 1983b, p. 43). In the context of retelling a narrative, avoidance strategies relating to reference could include reducing the number of referents in the discourse (thus reducing competition), avoiding introductions of minor characters with low-accessibility (reported by Swierzbin, 2004, p. 171), omitting sequences of events that involve frequent switches between referents, omitting problematic RE types (e.g. pronouns, articles, phonologically difficult names),

and generally reducing the length of narratives. Use of avoidance strategies has obvious implications for studies relating to miscommunication, as they can be expected to reduce the potential for referential problems.

Much of the existing research into communicative (achievement) strategies is less immediately relevant to the present study. Many relate to how speakers clarify a referent for which there is no precise lexical expression available, either because the referent has no widely-known name or because the hearer does not know it (e.g. Bongaerts, Kellerman, & Bentlage, 1987; Kellerman, Ammerlaan, Bongaerts, & Poulisse, 1990; G. Russell, 1997). However, the problems of interest to the present study are those that relate to accessibility marking. These may arise, for example, when prompting the hearer to identify a dimly recalled referent, or where there is potential ambiguity (e.g. through lexical elements).

Consequently, frameworks from previous studies are unlikely to be useful in the present study. Where appropriate, the present study will, therefore, seek to identify relevant communicative strategies that emerge from the data. One perspective that will be adopted from previous studies relate to avoidance strategies, which may reduce the frequency of referential miscommunication in interactions. Indications of avoidance strategies will relate to the number of different referents introduced and maintained, references to particularly low-accessibility entities, and the relative detail in retellings.

3.3.10 Summary and implications for the present study

Miscommunication can have serious consequences and may be particularly prevalent in some SLL-L1 discourse. However, issues of miscommunication have received little attention in recent years, except within intercultural frameworks that give little attention to linguistic issues. The present discussion has identified a number of unresolved issues relating to the miscommunication of reference and described aspects of an approach to investigating these, based on the four-place definition of reference (Bach, 2008). A number of research questions have been proposed (summarized in Section 3.4).

It is acknowledged here that researching miscommunication is inherently problematic and caution is advised in the identification of any particular trigger of miscommunication. The present study distinguishes a number of types of miscommunication (misidentification, non-resolution, failure, and strain) and acknowledges that avoidance strategies may reduce the frequency of miscommunication by reducing the speaker's communicative goals.

Three common assumptions are also identified which are relevant to, and will be challenged in, the discussion of findings in Chapter 8. First is the widespread assumption that coherent discourse involves the resolution of all references. Also widespread is the assumption that speakers invariably attempt to clarify references and that hearers invariably attempt to resolve them. The third relevant assumption, questioned by Borthen (2010), is that all pronouns relating to specific entities indicate high accessibility.

3.4 Conclusion

A large number of previous studies have shown that the target-like use of definite noun phrases (many of which act as REs) is difficult to master in a second language. This has been shown in relation to particular RE types, such as the article system (e.g. Master, 1987), and to the system of REs as a whole (Kim, 2000; Swierzbinska, 2004). There is substantial evidence that SLLs tend to be over-explicit in accessibility marking (using a marker of lower accessibility than would be felicitous) although such findings appear to be largely circumstantial rather than based on an analysis of referent accessibility. Interestingly, analysis of referent introductions remains largely unexplored in the literature. No studies of SLL English were identified as having adopted an AT framework, or of viewing reference as an act that may take place over more than one turn.

In addition, as discussed in Chapter 2, reference can be viewed within a pragmatic framework that takes account of the speaker's intention for the hearer to identify a referent. Such a view suggests that there is also a need to consider SLL reference

as a matter of communicative success or failure, rather than simply as a matter of morpho-syntactic accuracy. However, little is known about communicative success or failure in SLL reference and a number of key questions remain unresolved. A restatement of the research questions arising from this chapter is presented below:

Q1 What are the characteristics of the referential systems of advanced SLLs and how do these differ from target-like use?

Q1.1 To what extent do SLL referential introductions tend to be target-like?

Q1.2 To what extent is advanced SLL referent tracking characterized by under-explicitness?

Q1.3 Is the characterization of SLL over-explicitness in referent tracking supported by an analysis that directly assesses the accessibility of the referent?

Q1.4 What does an analysis of accessibility suggest about the cause of over-explicit SLL references?

Q2 What linguistic factors are implicated in referential miscommunication in L1-L1 and SLL-L1 narrative discourse?

In addition, considering the features of SLL reference, as presented in Sections 3.1 and 3.2, the following sub-questions arise:

Q2.1 To what extent does over-explicitness in reference tracking trigger miscommunication in L1-L1 and SLL-L1 narrative discourse?

Q2.2 To what extent does under-explicitness in reference tracking trigger miscommunication in L1-L1 and SLL-L1 narrative discourse?

Q2.3 To what extent can over-explicitness be characterized as a successful

or unsuccessful SLL communication strategy?

Q2.4 What linguistic factors are implicated in miscommunicated introductions?

4 Methodology

4.0 Introduction

This chapter introduces and discusses the methodological approach designed to address the research questions proposed in Chapter 3 in relation to the framework of reference outlined in Chapter 2. A film-retelling task was used to elicit referential communication, and stimulated recall interviews were used to identify evidence of miscommunication.

Details of the participants and recruitment processes are outlined in Section 4.1. Ethical issues and procedures are outlined in Section 4.2. Issues and procedures relating to the film retelling task are discussed in Section 4.3. The most salient issues and procedures relating to the use of stimulated recall (SR) are discussed in Section 4.4. Issues that were raised during piloting are presented in Section 4.5, and transcription conventions discussed in Section 4.6. In Sections 4.7 and 4.8, details of the data management practices and the activity of coding data are described. Key issues and procedures relating to the analysis of the linguistic data are presented in Sections 4.9 and 4.10, and in relation to the analysis of miscommunication in Sections 4.11 and 4.12.

4.1 Participants

Data was collected from 30 dyads, with a distinction drawn between those in the primary *speaker* and *hearer* roles. Those in the speaker role were ten L1 and twenty SLL speakers. The ten L1 speakers were seven female and three male undergraduates from New Zealand, recruited from first and second year linguistics courses. The twenty SLL speakers were undergraduate students (or, in two cases, graduate students) enrolled in degree programs at a New Zealand University. All of these students had met the minimum university entry requirements of IELTS 6.0, and, in the terms of the present study, are considered relatively advanced users of English. These students came from a variety of L1 backgrounds, with nine Chinese speakers (from China, Taiwan, Malaysia), and

the remainder being speakers of Japanese, Korean, German, Tetum (East Timor), Arabic (Saudi Arabia), Macedonian, and Malay. There were for 14 female and six male SLL participants. Recruitment is discussed in Section 4.2.

The hearers were 30 L1 English speakers (or, in one case, a long-term New Zealand citizen with native-like English proficiency). Those hearers in the L1-L1 dyads were, like the speakers, first and second year linguistics undergraduates. The hearers in the SLL-L1 dyads were ten linguistics undergraduate students and ten experienced English language teachers. The latter were included as one of the original research questions related to whether experienced teachers brought additional skills to the interpretation of SLL reference. Ultimately, however, as the scope of the study narrowed, this question was not pursued.

One important issue in the selection of participants was that the interlocutors should have no detailed prior knowledge of the narrative that the speaker was to describe. Prior knowledge of the film may have enabled the hearer to successfully accommodate otherwise problematic utterances. Although two hearers reported knowing of the film, none were familiar with the events described.

Following the initial analysis of the data, five additional L1 speakers offered interpretations of certain utterances that triggered miscommunications in the retellings. These interpretations provided evidence as to whether miscommunications were most likely triggered by speaker factors or hearer factors.

4.2 Ethical procedures

The present research was conducted in accordance the University of Waikato's Ethical Conduct in Human Research and Related Activities Regulations 2008. Prior to data collection, the research proposal received ethical clearance from the Human Ethics Committee of Waikato's Faculty of Arts and Social Sciences.

Recruitment of undergraduate participants involved, firstly, a short presentation to

students enrolled in their classes. These presentations briefly described the task. Potential volunteers registered their interest by leaving their name and contact details and were given a consent form to read at home (Appendix 4). This form assures participants of their anonymity and provides relevant contact information. These forms were designed to be both clear and comprehensive.

Teacher participants were recruited through approaching school administration. Interested volunteers made contact with the researcher and were given consent forms to consider.

On the day of the data collection, participants signed consent forms and were given a signed copy to keep. All participants were assured that their details were to be kept confidential and that they could withdraw from the study at any time in the following two weeks.

4.3 Eliciting the linguistic data

To explore the research questions, it was decided that an appropriate task would elicit a substantial number of third-person references, relating both to people and inanimate objects, with distinctions between male and female referents, new and given entities, more and less topical referents, and acts of referent introduction and reference tracking. Furthermore, the referents should be involved in a variety of stereotypical and novel events in a variety of locations. Finally, the interactions needed to be sufficiently complex as to provide scope for miscommunication.

Of the approximately 30 studies of SLL reference that were found to be closest in emphasis to the present study (discussed in Chapter 3 and Appendix 3) all except those by Williams (1988, 1989) used narrative tasks to elicit data, with very few (Ahrenholz, 2005; Jin, 1994; Lumley, 2010) supplementing narrative data with an additional task type. In contrast, studies of referential strategies and outcomes relied heavily on tasks such as identifying shapes, following a map route, or constructing an object. There was, then, initially a desire to explore reference in other types of discourse, and an extensive period of piloting was conducted.

In particular, a number of interviews modelled on the IELTS speaking test and anecdote tasks were trialled. However, these were found to generate long sequences of first-person reference and relatively few third-person REs, with very few references to entities that represented shared knowledge. In addition, identifying referential miscommunication in these data was problematic (as discussed in Section 4.4). Narrative recounts, in general, proved to elicit more relevant data. Of these, film retelling tasks were ultimately selected for the main study, as they elicited more complex sequences of reference than tasks involving picture sequences.

4.3.1 Film retelling

Film re-telling tasks involve participants watching a film and subsequently relating the narrative to an audience. It thus attempts to replicate an authentic activity while remaining fairly controlled (cf. on-line film descriptions, e.g. Tomlin, 1984, 1987; Dollaghan, Campbell, & Tomlin, 1990). A large number of L1 studies have used *The Pear Story* film (Chafe, 1980), which was created specifically for linguistic research, while a large number of SLL studies have used an edited version of the Charlie Chaplin film *Modern Times*. These include a number of key studies of SLL reference (e.g. Chini, 2005; Jung, 2004; Kim, 2000; Klein & Perdue, 1992; Nakahama, 2003; Swierzbis, 2004). A number of further studies use the *Alone and Hungry* episode from the *Modern Times* film (e.g. Bardovi-Harlig, 1998; Jarvis, 2002; Salaberry, 1999).

Film re-telling methodology

The film retelling task used here was adapted from procedures pioneered in a European Science Foundation (ESF) project (Perdue, 1984, 1993a). In the original study, researchers used a number of elicitation tasks, but the film re-telling was found to generate the most valuable data, becoming the basis of much of the published ESF findings (e.g. Broeder, 1995; Dietrich, 1989; Klein & Perdue, 1992; Lambert, 1998; Perdue, 1993b). Two volumes detailing the ESF field

methods were published: an initial field manual compiled after the pilot year (published in an edited version as Perdue, 1984), and a post-project description and reflections on the field methods (Perdue, 1993b).

In the ESF study, the *Modern Times* film was edited into a condensed 24-minute, two-part version for the re-telling task. The first part introduces the two main characters (a male and female) and their initially parallel storylines. The researcher and the participant watched this first part together. The researcher then answered a knock on the door and left the room on the pretext of answering a telephone call (R. Dietrich, personal communication, September 18, 2008). The participant then watched the second part of the film alone, having already been asked to tell the researcher what happened (Dietrich, 1989, p. 240). In this second part of the film, the two storylines converge (Perdue, 1984, pp. 285-286). After the researcher returned to the room, the learner recounted the events of the film. The crucial procedural difference between this and earlier studies, such as *The Pear Stories* project (Chafe, 1980), related to the creation of shared knowledge of characters and events during Part 1 and the 'information gap' when the researcher left the room prior to Part 2.

A number of features of this method are credited with eliciting what has been regarded as particularly rich data. Perdue (1993a, p. 105) singles out the complexity of the narrative task and the privileged position of the researcher in knowing the narrative, which enables strong grounds from which to infer the speaker's intended meaning. As Salaberry (1999, p. 158) argues, the task also provides some measure of control over avoidance strategies and, perhaps, rehearsed sequences of language. For studies of reference, the methodology has proved valuable in providing multiple referents and contexts in which referents ought to be marked as hearer-known and discourse-new by virtue of shared experience rather than by schematic or encyclopedic knowledge.

Modern Times is also largely silent, which eliminates the variable of listening comprehension and the problem of film dialogue simply being reproduced by participants. Further, the nature of silent film also means that the entities and events are visual, which perhaps leads to easier and more uniform interpretation.

Consequently, where SLL studies have used other films, these too have typically been silent (e.g. Derwing, 1989; Jucker & Smith, 2004; McLellan, 1996).

A limitation of the methodology in the original ESF project relates to the longitudinal nature of the study, as the same task, with the same film, was repeated with participants at nine or ten monthly intervals, sometimes with the same researcher in the role of the hearer. As a consequence of this, “the learner knows that his listener knows the story, and the motivation . . . to retell so that the listener can understand plummets . . . and in those circumstances, the richness of the data suffered” (Perdue, 1993a, p. 106). However, one may suspect that a similar effect, though more subtle, occurred even in the first session as the L2 speaker is required to suspend disbelief that the researcher is unfamiliar with the film. Kim (2000), Nakahama (2003), and Swierzbin (2004) addressed this issue by using a ‘fresh’ non-researcher as the interlocutor in each interaction. This is particularly important in the present study where problematic communication is explored.

4.3.2 The *Modern Times* film

For the present study, aside from meeting the requirements outlined at the beginning of Section 4.2, a further attraction of the *Modern Times* narrative is the scene at the beginning of the *Alone and Hungry* episode which provides a particularly complex interplay between five characters (three male and two female), in a series of closely linked events that is crucial to the narrative. It has been argued that such ‘incongruent’ narratives – in which minor characters participate in central events, while major characters are temporarily pushed into the background – are more difficult to communicate successfully (Morrow, 1985), and thus are likely to increase the possibility for strained reference (involving undue cognitive effort). In contrast, it seems likely that predictable and stereotypical events may be successfully communicated even when there are substantial problems with how they are linguistically encoded.

The ESF version of *Modern Times* is over twenty minutes in length, which was

considered too time-consuming for participants in the present study, as the retelling is here followed by a two-part SR interview. Therefore, two shorter edited clips were compiled. The first of these is approximately 4 ½ minutes in length, and the second approximately 7 ½ minutes. These involve a few key episodes edited into two coherent parts, rather than a condensed version of the entire narrative. An extended episode involving the use of a feeding machine was incorporated to include more references to inanimate objects, and the complex ‘theft scene’ from the *Alone and Hungry* episode is included. A description of the narrative is presented in Appendix 4. Interestingly, the shorter film narrative does not appear to have elicited shorter retellings than reported elsewhere (e.g. Kim, 2000; Swierzbis, 2004).

4.3.3 Retelling procedures

Prior to watching the film, the researcher checked that both participants could identify Charlie Chaplin. After watching Part 1, the hearer left the room and the speaker watched Part 2. Before re-entering the room, the hearer was instructed to ‘find out from Y what happened’. When the hearer (X) re-entered, the speaker (Y) was instructed to ‘tell X what happened’. The main reason for this was to encourage genuine communication, with both interactants attending to meaning. Reading from a script, the researcher then informed the participants that:

- “there are no right or wrong answers”
- “the conversation is just between the two of you, I won’t be involved”
- the hearer could ask questions
- conversations normally take “around three to five minutes”

The script for these procedures is included in Appendix 4.

Although both participants were aware, prior to starting, that the task involved talking about a film, the actual focus of the discussion (i.e. a re-tell) was not revealed until the film viewing had finished. This was in response to signs in the piloting stage that some L2 English speakers were rehearsing their speech, which contributed to an ‘unbroken monologue’ effect.

4.4 Eliciting evidence of miscommunication

In this section, previous approaches to identifying miscommunication are discussed. It is argued that the limitations of these approaches make them unsuitable for the purposes of the present study. An innovation developed for the present study, involving stimulated recall procedures, is then outlined.

4.4.1 Methods used in previous studies

The four main methods used in previous studies to identify miscommunication are self-reporting, analysis of the success with which (often physical) tasks are completed, analysis of recordings and transcripts, and a mixed-methods approach. Self-reporting was used by Tzanne (2000), Humphreys-Jones (1986, 1987), and Milroy (1986), who kept diaries to record details of misunderstandings, including reconstructions of what was said, and relevant contextual details. More commonly, self-reported miscommunications are reported anecdotally (e.g. some of those reported by Varonis & Gass, 1985). An obvious problem with self-reporting is that many miscommunications may go unnoticed by interactants. A perhaps greater limitation is the limited ability of interactants to reconstruct discourse accurately; as Sidnell (2010, p. 21) notes, informants are unreliable at reporting exactly what was said and are poor at recollecting phonological details. This is problematic for researching the linguistic triggers of miscommunication.

A second method for identifying miscommunication involves bridging an information gap to complete a task with a tangible outcome. For example, Goodman (1983, 1986, 1987) used a task in which speakers instructed (unseen) addressees on how to assemble a toy water pump, while Anderson and Garrod (1987) used a collaborative computer game. In such studies, evidence of miscommunication relates to the participants' missteps in completing the task, such as Goodman's participants misidentifying components, or attaching them to the wrong part of the main pump tube. Such tasks appear to be an effective way of identifying miscommunication. However, all tasks impose restrictions on the

types of reference expected to be elicited, and in the case of these task types, the most serious limitation relevant to the present study is that reference is nearly always made to entities that are physically present. Few references, therefore, are to entities with very low accessibility.

A third major approach involves the close analysis of recordings and transcripts to identify miscommunication. Underlying such approaches is the idea that, in dialogic speech, an utterance displays the speaker's understanding of the previous turn (Hutchby & Wooffitt, 2008; Schegloff, 1992). Obvious evidence of communicative problems include clarification requests (*who?*), rejected interpretations (*no, no; that's not what I mean*), and reformulated messages (Schegloff, 1987). More subtle indications include utterances suggesting divergent interpretations of meaning, and even interactions where there is a lack of fluid turn-taking, shared rhythm, and an "inability to establish coherent thematic progression" (Gumperz & Tannen, 1979, p. 307). Further, "signs of discomfort or annoyance" may be seen as "empirical evidence that a misunderstanding has occurred" (Gumperz & Tannen, p. 307) as illustrated most clearly in later studies by Gumperz (1982a). In practice, many researchers (including Gumperz) have supplemented such analysis with other data, including the interpretations of a panel of informants, although some approaches, such as *conversation analysis* (Schegloff, 1987), rely almost exclusively on the original recordings and transcripts, with no additional perspectives from participants. It seems likely that the latter approach will fail to detect those miscommunications that remain unnoticed by the participants, and those that interlocutors choose not to comment on (Tzanne, 2000, argues that interactants frequently avoid repairs and clarification requests out of concern for face).

A fourth approach was pioneered by Gumperz and his associates (e.g. Gumperz & Tannen, 1979) and uses mixed methods. The communicative context is first described in rich detail, and linguistic and para-linguistic indicators of possible problems are noted. Possible problems may then be confirmed by participants, and then triangulated with perspectives sought from a further group of language informants (Gumperz, 1982a, 1982c; Gumperz & Tannen, 1979; Tyler, 1992, 1995; Tyler & Davies, 1990). This method is designed for case studies rather than

large datasets, and so may be unsuitable for the present research questions relating to patterns of miscommunication. In Gumperz's approach, it appears that the perspectives of interactants are sought quite some time after the interaction and, therefore, usually relate to impressions of overall communicative goals, attitudes, and emotive reactions, which are then related to "shared sociocultural knowledge used in conversation" (Gumperz & Tannen, p. 322). Although findings relating to reference are sometimes identified (e.g. Gumperz et al., 1982), it seems unlikely that this approach would enable reliable access to moment-by-moment interpretations of referential strain and garden-path effects, as memory required in the processing of language (e.g. anaphors) is not typically transferred to long-term memory (Ericsson & Simon, 1984). Further, memories of the semantic details of an interaction may also be unreliable, particularly where the addressee considers them unimportant (Harley, 1995).

For the present study then, a methodological innovation is required in which attested speaker intentions and addressee interpretations can be reliably compared. An adequate investigation of referential miscommunication would ideally access the mental models that the hearer develops as the discourse unfolds. Such mental models are not directly observable, but they could be approached indirectly (and cautiously) through various types of verbal account from the hearer. One such data collection method is stimulated recall (SR), and is described in Subsections 4.4.2, 4.4.3, and 4.4.4.

4.4.2 Identification of miscommunication in the present study

To overcome the limitations of other approaches to identifying miscommunication, the present study combined the relatively controlled elicitation task (the *Modern Times* narrative) with a two-part stimulated recall (SR) interview to access the hearer's interpretation. The retelling task enabled strong grounds on which to infer the speaker's meaning, while the SR assisted the addressee's recall of the discourse. Together, these exposed instances of miscommunication, which could then be analysed in relation to an analysis of language.

The present use of stimulated recall, and a number of issues arising from it, are reported in depth elsewhere (Ryan & Gass, in press) and so the following discussion only briefly reviews the relevant literature (Section 4.4.3) and outlines the procedures used (Section 4.4.4).

4.4.3 Review of stimulated recall methods and related issues

Stimulated recall methods are designed to study the cognitive processes involved in performing tasks or activities (Gass & Mackey, 2000, p. 1). They involve prompting the participant to recall their thought processes at the time of the original event. This is achieved through the use of a stimulus, such as video or audio recordings, or a written transcription of the event, and is guided by the researcher who tries to ensure that the memory is uncontaminated by current reflections or other stimulus. Although stimulated recall is typically used to reveal the cognitive processes behind behaviour, it appears readily adaptable to studies involving comprehension. Certainly, other introspective methods, such as think-aloud reports and verbal reports, have been used to reveal L2 comprehension in listening (Buck, 1991) and reading (Kern, 1994). However, such introspective methods, and stimulated recall in particular, seem to have been under-utilized as a research tool into the communicative success of L2 speech, especially as a tool to probe the hearer's interpretation of L2 speech.

Stimulated recall procedures are complex and there are numerous pitfalls in their implementation, with the critical assumption being recall accuracy (Gass & Mackey, 2000; Lyle, 2003; Yinger, 1986). Lyle (2003) presents a number of principles of best practice, while Gass and Mackey (2000) present a detailed discussion of issues in the use of SR in applied linguistics research. Applying this methodology to the exploration of referential miscommunication thereby raises a number of important issues. The most important of these are identified in Ryan and Gass (in press) as being timing of the recall, timing of the recall prompts, ensuring that participants report on recollections rather than reconstructions, the direction of the video camera, implications of using video as a stimulus, focus of

recall questions, reducing anxiety, managing face issues, and avoiding leading questions. The steps taken to manage these issues are discussed in Ryan and Gass (in press), as is the critical issue of whether the outcome of reference resolution can be available for recall. In relation to the latter, it seems that resolved references represent *declarative knowledge* (memory of facts and events), which may, therefore, be available for recall; this contrasts with the many aspects of communication involving *procedural knowledge*, which can be approached “only through performance, by engaging in the skills or operations in which the knowledge is embedded” (Squire, 1986, p. 1614).

Before continuing, it may be useful to distinguish SR from the methodology used by Gumperz (1982a, 1982c) and Tyler (e.g. 1992, 1995). The crucial difference relates to what participants are asked to comment on. In SR, the focus is very firmly on recalling thoughts from the time of the original activity and the key procedures are designed to ensure that participants are not reinterpreting the (video/audio/transcript or other) stimulus. In contrast, the procedures used by Gumperz and by Tyler do not emphasize the distinction between past and present interpretation, as the focus is usually on aspects of language use relating to aspects of language competency and sociocultural knowledge, which may involve a relatively stable relationship between social context and interpretation. However, this is not suitable for the present research questions, as felicitous reference is very closely associated with moment-by-moment cognition relating to referent accessibility and mental models of discourse, such that the most appropriate RE in one clause might be entirely inadequate for the same referent in an adjacent clause.

4.4.4 Stimulated recall procedures employed in the study

This subsection describes the main procedures used in the two-part SR interviews. Immediately following a film retelling, the speaker left the room and the researcher conducted the SR interview with the hearer. The hearer was first invited to make any global comments regarding the interaction. The researcher then followed a written script (presented in Appendix 4), explaining to the

participant the interview procedures and emphasizing that the objective was to report on what the hearer was thinking *at the time of the original interaction*. The researcher then played a video recording of the retelling. The researcher then paused the video periodically, and asked questions probing the hearer's original understanding of the recount. Pauses occurred after each significant episode, and at other moments that seemed relevant. Hearers were also encouraged to pause the video and make comments, particularly around moments that they had found interesting or confusing. General recall prompts were of the type illustrated in Example 1 and 2, while more specific questions, such as Example 3, were also used where appropriate:

1. What was your mental picture of the film at this point?
2. What was your understanding at this point?
3. Who stole the bread?

Through this part of the interview, the emphasis was on identifying how the hearer had interpreted references and key events in the narrative, and identifying which references were misunderstood, unresolved, or strained. This part of the interview alone was sufficient to identify many, but not all, miscommunications, and some further possible problems could be inferred but not confirmed.

In the second part of the SR, the hearer watched Part 2 of *Modern Times* (i.e. the part of the film previously recounted by the speaker), and was invited to comment on anything in the narrative that was different to what they had understood from the speaker's recount. The researcher also paused the film to check inferences made during the first part of the stimulated recall. The main purpose of this stage, then, was to confirm or disconfirm that an act of reference was either successful or unsuccessful. A number of previously un-noted miscommunications were also reported by participants at this stage. At the conclusion of the SR, hearers were asked for any additional comments.

4.5 Issues raised during piloting

Elicitation tasks and stimulated recall procedures were piloted over a period of six months before data collection proceeded, and some procedures continued to be refined after this. A number of lessons were learned during piloting, and these guided the subsequent development of tasks and protocols for data collection. The most important lessons relate to the use of stimulated recall (SR) but, as these issues are reported elsewhere (Ryan & Gass, in press), they are only briefly discussed here. A further issue relating to direct questions is discussed in Chapter 8.5.6, and the piloting of language elicitation tasks is discussed in Section 4.2.

Firstly, it was very useful to have ‘critical friends’ observe and/or participate in SR interviews. In particular, feedback from one (Joanna Kingsbury, a community counsellor) greatly influenced the procedures that were used to win the confidence of interviewees through the scripted instructions, seating arrangements, and the general sense of control projected by the researcher. These discussions also raised issues of validity relating to design of recall questions. In particular, it seems that, to ensure recall (rather than reflection), time adverbials may be more effective when placed at the beginning of a question rather than the end (discussed in Ryan & Gass).

Secondly, during piloting, the initial analytical approach to identifying triggers of miscommunication relied heavily on examination of the retelling transcripts. This was appropriate in relation to identifying cases where infelicitous REs were implicated in the miscommunication. However, it became apparent that this may be inadequate for identifying other relevant factors, as transcripts provide only an abstract, partial interpretation of what may be observed in an interaction, and potentially relevant factors such as gesture, pronunciation, prosody may be overlooked. This emphasized the importance of returning to the original recordings during analysis.

Thirdly, an important issue which arose was the timing of my questions during the stimulated recall (also discussed in Ryan & Gass). During piloting, the video was often paused immediately after the use of a potentially problematic RE, and then the interviewee was asked to recall which referent s/he had initially identified.

However, it soon became apparent that some references are not, in fact, resolved immediately following the use of an RE, but at the end of the clause or tone unit in which they occur. This effect is also illustrated in Example 28 (Page 60), where RE resolution is heavily influenced by the information predicated on the RE. In such cases, pausing the video before the predicate could, therefore, lead to invalid identifications of miscommunication. Thereafter, such questions were usually timed to occur during natural discourse boundaries; a related issue is raised in Chapter 8.5.6.

A further issue that arose was the influence of the researcher's interpretive orientation. This is illustrated with an anecdote presented in Appendix 4. For the present study, the issues relate especially to the identification of triggers of miscommunication. In particular, as the present study focuses particularly on infelicitous accessibility marking, there is a risk of over-emphasizing the role this has in miscommunication at the exclusion of other plausible interpretations. Similarly, in relation to Example 6.1 (discussed on p. 194), the researcher's initial interpretation was that Raquel (a teacher) had made a clarification request because of ambiguity, whereas a researcher whose primary interests include classroom discourse may have interpreted it as a pedagogical move to prompt self-repair of an error (which, in fact, is precisely how Raquel accounted for it). These realizations lead to more cautious interpretations of the data and recognition of alternative interpretations.

4.6 Transcription

Transcriptions were made of the retellings and SR interviews from digital voice recordings supported by video recordings. All transcriptions were made by the researcher. For the retelling data, multiple drafts of the transcripts were made, with at least two weeks between the penultimate and final drafts; for the SR data, transcriptions were largely completed in two drafts, partly because these were generally easier to interpret (fewer errors and disfluencies), but largely because this data was deemed not to require the same degree of fine-grained linguistic analysis as the narrative retelling data.

The transcription conventions used in this study are a simplified version of a system presented by Du Bois (2006, Appendix A.2a), and are presented in full in the front matter (page xiii). As a number of scholars (e.g. Edwards, 1993; Hutchby & Wooffitt, 2008) have emphasized, the type of transcription most suitable to a study is one that reflects the focus of that study. An important issue is reaching a balance between readability and sufficient detail. Readability is enhanced by adopting, as far as appropriate, conventions from ordinary written material (Edwards, 1993), and focusing on the most salient details. For the present study, particularly relevant details include, for example, accuracy in distinguishing *a* from *uh*, and indications of try-markers (rising intonation and a pause). For readability, minimal prosodic details were transcribed and gestures were recorded only where they appeared particularly notable (e.g. when *this* referred to a gesture), and the conventional spelling of words was preferred to accurate phonemic transcription (except for particularly problematic words). Unlike many studies, tone units are not offset with a new line, but are nearly always indicated by a terminative or continuative tone (level tones are not indicated in the present system).

The presentation of the data was largely determined by the structure of the stimulated recall (SR) interviews. As described in Subsection 4.4.4, during the first part of the SR, a video recording of the retelling interaction was played to the hearer, and paused periodically to probe the hearer's interpretation of the discourse at the time of the original interaction. The transcriptions have been formatted to make clear which part of the video preceded each question. The following extract demonstrates the formatting conventions used in the presentation of the SR data:

Example 4.1: *Anne and Tom*

T = 9:39 3	A – um so they um, they ask the the small guy, ahh to sit here, and	R – the small guy was? T – Charlie Chaplin
---------------	---	---

The first column presents the timestamp on the original recording, cued to the beginning of the hearer's comments. The section number below the timestamp corresponds to the numbering on the retelling transcripts (the division into

sections is based on the researcher-hearer interactions during the SR). The second column presents the extract from the film retelling that was used as a recall prompt (these are usually much longer than the example presented here). The SR comments made by the researcher (R) and hearer (in this case, T) are presented in the third column.

4.7 Data management

The first 18 retelling and stimulated recall transcripts were analysed first by hand and then coded using QSR International's *NVivo 8* software. However, *NVivo 8* was not designed for linguistic analysis and, perhaps unsurprisingly, proved rather inefficient and somewhat problematic for coding at the level of the utterance constituent. Specific issues relating to this are discussed in Appendix 4.

Upon recognizing these problems, further coding with *NVivo 8* was abandoned and all data was re-entered into documents and spreadsheets within the Microsoft Office package.

4.8 The activity of coding

Initial trials of analytical methods began in late 2009 and continued for several months until the commencement of proper analysis in January 2010. The majority of data was analysed between January and June 2010, with some further analysis thereafter. In this section, I discuss issues and procedures relating to the reliability of the coding practices.

It is important that coding protocols be sufficiently explicit and comprehensive to ensure that there would be coding consistency if the data were to be re-coded (a) by the same rater on different occasions, and (b) by different raters. While the latter issue is rather obvious, the former issue may become problematic when analysis is conducted over an extended period of time, due to subtle shifts in the rater's perspective. To guard against this, three steps were taken.

Firstly, coding protocols were developed for each type of analysis. Detailed notes were taken of the types of coding decisions that were made, and these were regularly checked and reviewed, sometimes leading to revisions of previously coded material.

Secondly, as far as possible, a particular feature would be coded in all transcripts, before addressing the next feature. So, for example, over a certain time period, all available transcripts were analysed for the level of reference and identity of referent. When this was completed, the transcripts were then all analysed for RE type, and then for accessibility, and so on.

4.9 Analysis of referential acts, NPs and referents

This subsection discusses the procedures and issues in identifying reference and conducting a functional analysis of the (film retelling) data.

In the first stage of analysis, acts of reference were identified. This process involved three separate levels of coding: (a) the three levels of reference were distinguished from non-reference, (b) the onset and termination of individual acts of reference were identified, and (c) the identities of individual referents were identified. Later, acts of reference were analysed according to their REs.

Issues of varying complexity arose in relation to these coding procedures, and the following discussions draw from the detailed coding protocols that were developed during piloting.

4.9.1 Distinguishing reference from non-reference

In Chapter 2.1, considerable emphasis was placed on defining reference in such a way that referential success and failure can be usefully distinguished, and miscommunicated reference can be distinguished from other problems. Therefore,

the first analysis of the data involved distinguishing acts of reference according to the levels of reference distinguished in Chapter 2, and distinguishing these from non-referential NPs. Only uses of language relating to Level I, II, and III references were subject to further analysis.

The criteria for distinguishing levels of reference and non-reference are discussed and exemplified in detail in Chapter 2, with the main principles briefly outlined here (Section 4.9.3 discusses issues in distinguishing levels of reference):

Introductions of hearer-new characters and physical objects: *non-reference*

Subsequent mentions of hearer-new characters and physical objects: *Level II*

Introductions and all subsequent mentions of hearer-known characters and objects: *Level I*

Mentions of generic or hypothetical entities, and acts of attributive reference: *Level III*

Mentions of places, times, events: *non-reference*

Use of pro-forms relating to propositions: *non-reference*

Grammatically motivated pronouns and nouns (e.g. pleonastic pronouns): *non-reference*

4.9.2 Identifying referential acts

In Chapter 2, the referential act was identified as the basic unit of analysis. These acts were coded concurrently with the identification of levels of reference. In the definition used in this study, the onset of a referential act is usually the first element of a referring expression (RE), which is typically a determiner. However, some referential acts include a stage of pre-introduction (Smith et al., 2005). In the present study, referential acts may include:

- Prefatory elements, such as direct appeals to common ground, for example *Do you remember, and you know the: director guy?* (as illustrated in Example 4.2),
- multiple REs over a number of clauses which contribute to a single act of identifying a referent (Examples 4.2 and 4.3),

- existential constructions (for hearer-known entities) (Example 4.3),
- repaired REs (Example 4.4)

Example 4.2: *Fiona and Geoff*

T = 00.45 4-5a	and – and then <u>you know the: director guy?, and he had the contraption?, that he was about to show him and we were like ‘oh, there's lunch’, well it WAS actually lunch,</u>
-------------------	---

Example 4.3: *Jake and Sonny*

T = 0.43 2-3	J – and then um so <u>there's the big industrial worker, the guy who was working next to him?,</u>
-----------------	--

Example 4.4: *Jake and Sonny*

T = 0.43 2-3	J – and then <u>Chaplin – Charlie</u> comes along and then \emptyset goes to sit down and like <u>\emptyset is going to be on the soup</u>
-----------------	---

The termination of an act of reference is generally the last element in the relevant NP, although this is not always so. Two further principles are illustrated in these examples. Firstly, acts of reference may also be expressed in a clause with zero anaphora (Example 4.4). Secondly, some acts of reference also involve an embedded reference, such as that to Charlie (*next to him*) in Example 4.3 which serves to clarify the identity of the worker (the referent of the larger act).

4.9.3 Identifying referents

All referring expressions in completed clauses were coded for the identity of the referent. An example of an abandoned clause (for which referents were not identified) is the underlined pronoun in Example 4.5.

Example 4.5: *Fiona and Geoff*

T = 00.45 4-5a	and <u>it</u> just – and then of course it wouldn't work
-------------------	--

It was anticipated that the referents of some REs would be unidentifiable, either due to ambiguity between two or more competing entities, or because there was no obvious candidate. However, because of the semi-controlled nature of the task and the researcher's detailed knowledge of the narrative, only 17 referents (in

completed clauses) could not be confidently identified. Nearly all of these occurred in the SLL data.

Issues surrounding groupings of referents (plurality), the distinction between object and location, and referents in possessive constructions proved to be problematic and are discussed below.

Plural referents

Plural referring expressions present a substantial problem for coding. One option is to code each plural expression for each referent that it relates to. So, for example, in an appropriate context, the pronoun *they* could be individually coded for Charlie, his colleague, and the boss. However, this raises at least three concerns. Firstly, on a practical level, this could mean coding a single RE an unfeasible number of times when it relates to all members of a large group. Secondly, in terms of meaning, in some cases coding REs for each individual that it appears to refer to obscures the fact that referring to the *group* is not necessarily the same as referring to *each member* of the group. For example, the following utterance is felicitous irrespective of the likelihood that the proposition does not apply (and is presumably not intended to apply) to each individual spectator:

The spectators cheered on the home side.

The second coding option is to create a code for each plural category. This seems to avoid the problems noted above: each plural expression need only be coded once and certain referentially loose groupings can be created (e.g. the workers). However, the major drawback is that the number of groupings quickly multiplies to unmanageable levels.

To avoid such complications, the present study distinguishes codes for only two plural groupings. The first plural category is for Charlie and the girl, and excludes all other characters except (in relation to the car accident scene) the policeman who falls out of the van with them. The second plural category is for all other

plural references. Future studies may wish to conduct a closer analysis of issues in coding plural reference, accessibility marking for plural referents, and miscommunicating reference to groups.

Distinguishing objects and locations

As argued in Chapter 2, in this study locations are not considered genuine referents. A distinction was, therefore, drawn between entities presented as objects and entities presented as locations. In piloting these procedures, an initial heuristic for specifying locations involved identifying prepositional phrases functioning as adverbials of place (e.g. *in the factory*, *on the bench*) and coding the embedded NP as a location. This was extended to certain verb + adverb + noun (e.g. *goes inside the shop*) and other constructions (e.g. *take my seat*). It was noted that adverbials could be used to (non-referentially) introduce an entity that was subsequently spoken of as an object (a Level II referent). Two frequently occurring examples in the data included the police vehicle (e.g. *in the car* vs. *the car*) and the soup bowl (e.g. *in the bowl* vs. *the bowl*).

In cases where there existed some ambiguity between an entity reading and a location reading, the location reading was opted for. Two commonly mentioned entities, the bakery and the factory, were always coded as a location, despite some instances in the data in which they appeared to be more object-like.

Possessive constructions

Issues also arose in relation to possessive noun phrases in so far as they relate to possessions and part-whole relations.

In expressions such as *his handkerchief* or *Charlie's handkerchief*, one may be inclined to feel that the speaker's intention is to refer to the object, not to the person, and so only one act of reference has occurred. However, it also seems clear that in order to interpret such an expression, then the hearer must ordinarily

resolve who the possessive determiner (*his*) or noun in genitive case (*Charlie's*) relates to. After all, one could sometimes be correct in identifying the handkerchief but mistaken in identifying the owner (and *vice versa*). For this reason, a protocol was observed in which such NPs were coded as referring to two entities.

However, this distinction between understanding the reference of a genitive and the reference of the head noun does not hold for expressions relating to some part-whole relations. For example, under most circumstances, it makes little practical sense to draw a distinction between knowing what is referred to by *Charlie* and what is referred to by *Charlie's nose*. This is not, of course, to equate one with the other, but merely to point out that knowing who Charlie is ordinarily entails knowing (or at the least assuming) that he has a nose and knowing how to identify it. Interestingly, it is not clear whether hearers would necessarily hold a singular thought about Charlie's nose and it seems that, in most circumstances, his nose could not be identified independently of identifying Charlie. Possessive constructions involving body parts were, therefore, coded as a single reference to the person.

In contrast, references to the feeding machine as a whole were coded separately from references to its parts. This is not inconsistent with the present approach to body parts as it reflects the *possessed noun hierarchy* (Siewierska, 2004, pp. 138-145), in which a distinction is drawn between inalienable and alienable possessions, where the former involves “a fairly stable relation over which possessors have little or no control” (p. 138). This approach to coding the feeding machine also reflects the way in which interactants can elect to view entities in terms of the whole or the parts (Pinker, 2007) and also acknowledges that the linguistic concept of inalienable possessions mainly relates to humans (Siewierska, 2004).

Finally, references to parts of the film were not distinguished from those to the film as a whole. This reflects no particular claim about the nature of film and narrative episodes as referents, but was rather a matter of convenience and consistency.

4.9.4 Analysis of NP types

Following identification of acts of reference, relevant NPs were coded. Noun phrases were coded as either REs, introductions of hearer-new entities, or other non-REs. The categorizations are based on the NP hierarchies presented by Ariel (1990, 2001), with the most notable difference being the addition of four categories that arose in the data. The first involves drawing a distinction between long definite descriptions with *this/that* and those with *the* as the determiner. Following Ariel's approach to demonstratives, the form demonstrative + long description was identified as indicating a higher degree of accessibility than *the* + long description. In addition, three types of non-conventional RE were found to be frequent in the data and were coded separately: *the* + name, bare noun, and indefinite NP. Used referentially, these are considered errors.

The use of Ariel's terminology is mostly straightforward, although a few points are worth clarifying.

- Zeros (\emptyset) were identified in contexts where a personal pronoun could have been used but had been omitted (e.g. *she like gets up and \emptyset looks real mad*). Exceptions are those contexts in which a coordinator links two adjacent verbs with no intervening constituent (e.g. *he ate and [] drank*) or where there is verbal repetition and other elided elements (e.g. *it starts hitting him and [] hitting him*). Issues in coding zeros are discussed in Appendix 4.3.
- As this study relates only to third-person reference, where the term *pronoun* is used, it relates only to third-person pronouns (first and second-person forms are not considered) and includes possessive pronouns (e.g. *hers*) and possessive determiners (e.g. *his soup*).
- Categories involving *this* and *that* are inclusive of *these* and *those* respectively.
- Short descriptions are forms such as *the* + N and *his* + N (where they do not qualify as long descriptions).
- Long descriptions are here defined as:
 - any RE with post-modification (e.g., *the girl with the bananas, the*

- man standing next to him*) other than a genitive *of* construction (e.g. not *the owner of the shop*)
- any RE with two or more lexical pre-modifiers (e.g. *the tall fat man*)
 - any combination involving three or more lexical expressions

Problems in identifying reported speech are discussed in Appendix 4. These are relevant to the discussion of miscommunication.

Finally, it is important to note that, because a referential act may involve more than one RE, there are more REs than acts of reference in the present data.

4.10 Analysis of accessibility

As discussed in Appendix 4, systems of analysis based on Accessibility Theory (AT) have been used in previous studies by Toole (1996), Ariel (1999), and Demol (2007). Toole and Ariel emphasise that these analytical tools were not intended to place definitive values on accessibility, but merely to be sufficient for the purposes of the study in question. Toole's focus was to demonstrate that accessibility is a single cognitive principle that accounts for the use of referring expressions irrespective of genre, while Ariel's focus was to demonstrate that a weighting system based on multiple factors would better account for referring expression choice than a coding system based on any single factor. Similarly, in the present study, the goal is to approximate accessibility as closely as possible, without claiming that every factor affecting accessibility has been accounted nor that the "the weightings assigned to the various contributing factors . . . have cognitive reality" (Toole, p. 275).

In the development of the present system of analysis, three goals were set. Firstly, the system should provide a consistent analysis of the main factors known to influence accessibility. Secondly, these factors should be weighted in such a way that the system plausibly accounts for how L1 speakers use accessibility marking to refer, and (in conjunction with the semantic content of REs and their

predicates) account for how addressees interpret REs (presumably in line with the predictions of AT). This enables grounds on which to establish the degree of SLL competence in accessibility marking, and to make claims relating to under-explicit and over-explicit REs. Thirdly, the development of this system should minimize the risk of circular reasoning. Such a risk is argued by Tomlin (1990) to be a particular problem for functional analyses of language, as preconceptions of the proposed function of a particular form can influence how researchers code data. More specifically, B. Swierzbina (personal communication, October 2, 2008) and Kim (2000) argue that this presents coding problems for those using a Givenness Hierarchy framework; to address this issue of reliability, componential coding systems can be used (Kim, 2000, p. 58). To meet these three goals, a coding system was adapted from Toole (1996), and this is discussed in Subsections 4.10.1 and 4.10.2.

Subsection 4.10.1 discusses Toole's coding system and briefly describes the key issues in adapting this for the present study. The actual coding protocol is presented in Appendix 4 and its validity is discussed in Subsection 4.10.2. The approach to analysing accessibility marking in referent introductions is discussed in Subsection 4.10.3.

4.10.1 Development of the coding system for referent tracking

Toole (1996) operationalizes the four key factors identified by Ariel (1990) as being key influences on accessibility: distance, competition, saliency, and unity. Toole's rating scale begins by scoring a referent between zero and four based on distance and unity (in relation to episode boundary). This initial score is then either reduced by one or two, or no change is made, depending on the presence of competing referents. This score may then either remain the same or increase by one or two based on the degree of saliency (or topicality) of the referent, as measured by the number of times it has been referred to in the previous four propositions. These scores are associated with a general range of accessibility (Toole, p. 276):

Low Accessibility: Ratings -2 to 0

Mid Accessibility: Ratings 1 to 3

High Accessibility: Ratings 4 to 6

Alternative systems of analysis include those used in studies involving the Givenness Hierarchy (Gundel, et al., 2006; Swierzbin, 2004), topic marking (e.g. C. Brown, 1983; Givón, 1983b), or other studies of AT (Ariel, 1999; Demol, 2007; Toole, 1996). Most notably, Gundel et al. have developed, and continue to revise, a coding protocol in which referents are analysed in relation to statements such as “a referent is In Focus . . . if it is part of the interpretation of a previous part of the same sentence” (2006, pp. 1-2).

For the present study, a number of systems were reviewed and, in some cases, trialled before settling on an adaption of Toole’s system. Two initial points require clarification. Firstly, the present system only applies to references to persons. One reason for this is evidence that inanimate objects retain accessibility for shorter time spans than animate objects, and it was unclear how best to modify the coding system to account for this. A further reason is that, because English has just one pronoun (*it*) for all singular inanimate objects, and because this form is used in pleonastic constructions (e.g. *it’s late*), it was unclear what constituted a semantically matching entity (discussed in Appendix 4) for the purposes of determining competition for this pronoun. These complexities are left to future studies.

Secondly, the coding system is based entirely on the analysis of linguistic co-text and so only applies to referent tracking contexts (i.e. no calculation is made of the accessibility of referents at the time of introduction). Such reliance on co-text is also found in all of the coding systems reviewed and assumes that the interactants’ mental model of the preceding discourse is the major determiner of accessibility (as argued by Ariel, 1990).

The adaptations of Toole’s analytical system were based on a review of the relevant psycholinguistic literature (Appendix 2), some of Toole’s own recommendations (p. 286), and a lengthy process of trialling the instrument. These

adaptations relate to:

- the distinction between main characters (global topics) and minor characters
- the distinction between animate and inanimate entities
- parallel structures
- local topicality (relating to syntactic subjects or the grammatical focus of an utterance)

These four features were integrated into Toole's analytical system in different ways. The rationales for these are presented in Appendix 2, with the full coding protocol presented in Appendix 4. However, two additional points require clarification.

Firstly, piloting suggested that where the features of grammatical parallelism and topicality co-occur (i.e. when a referent is maintained in topic position in consecutive clauses), the two features appear not to *both* noticeably increase accessibility in a straightforward, additive manner (i.e. where the two features overlap, the two scores combined appears to be excessively weighted). This may suggest that there is a single cognitive principle underlying the accessibility weighting that relates to these two features. Therefore, a separate score for grammatical parallelism is only applied in the case of grammatical objects.

Secondly, despite the present system applying only to references to persons, animacy was identified as playing a substantial role in determining accessibility through competition effects. In particular, it appears that the distance between an anaphor and its antecedent can be very large if the anaphor relates to a person, and the only other referents in the immediate context are inanimate. The relevant evidence from the present data is found in multiple retellings involving the scene where Charlie is strapped into the feeding machine.

4.10.2 Validity of the referent tracking coding system

This subsection reviews the extent to which the present system meets the requirements outlined in the introduction to this section.

Firstly, the risk of circular reasoning is addressed through the componential nature of the coding system, in which individual factors were individually scored, and accessibility calculated as the combined score. This seems less problematic than coding systems that involve linking an RE to a single descriptor (e.g. Gundel et al., 2006).

Secondly, the present coding protocol takes as its starting point the system successfully used in Toole's study, and operationalizes three of Toole's (p. 286) suggested areas of modification (ambiguity, topicality, and animacy). These and other modifications relate to findings from a large body of linguistic and psycholinguistic research (see Appendix 2), and were extensively trialled in the present study.

The key issue for validity, however, is the extent to which the system can account for the distribution of RE types in L1 discourse. Because not all naturally occurring L1 discourse can be presumed to be felicitous, particular attention is given here to how the system accounts for well-known examples discussed elsewhere in the literature, in particular from Kehler (2002, pp. 143-155). It is emphasized that the success (or otherwise) of the system in relation to these examples is not the result of developing the system *for* them. Rather, as noted, the system was refined during extensive trialling on piloted film retelling data; it was only towards the end of the study that the system was applied to examples from the literature.

Beginning, firstly, with a very short text, the coding system should be able to account for the preferred pronoun interpretation in Example 1 (from Akmajian & Jackendoff, 1970).

1. John hit Bill and then George hit him. [=Bill]

John: distance/unity = 3; competition = -1; recurrence = 1; parallelism = 0.

Total = 4

Bill: distance/unity = 3; competition = 0; recurrence = 1; parallelism = 1. Total = 5

The system successfully predicts that Bill has higher accessibility (Degree 5) than John (Degree 4) and is, therefore, the preferred interpretation of the pronoun.

Focusing now on a slightly longer text, the coding system should also be able to explain the infelicity of Example 2 (from Kehler, 2002):

2. Terry really goofs sometimes.

Yesterday was a beautiful day and he was excited about trying out his new sailboat.

He wanted Tony to join him on a sailing expedition.

He called him at 6 AM.

He was sick and furious at being worked up so early.

Terry: distance/unity = 3; competition = -1; recurrence = 2; parallelism = 1; main character = 1. Total = 6

Tony: distance/unity = 3; competition = 0; recurrence = 2; parallelism = 0; main character = 0. Total = 5

The system predicts that Terry has higher accessibility than Tony, and, therefore, that the pronoun is infelicitous (initially appearing to indicate Terry).

The system should also be able to predict when a RE is infelicitous by virtue of being over-explicit. The analysis of Example 3 demonstrates that this is so, with the referent having high accessibility (Degree 6 on a scale from Degrees 1 to 7), but the RE being a low-accessibility marker:

3. He has been acting quite odd. [He = John]

He called up Mike yesterday.

John wanted to meet him quite urgently.

John: distance/unity = 3; competition = -1; recurrence = 2; parallelism = 1;
main character = 1. Total = 6

In addition, Gundel (2010) has presented Example 4 and questioned whether AT can account for the infelicity of *it*, arguing that the dog appears to be most salient:

4. A dog and a cat were running in the park. *It/the dog was black

However, it seems that the present system can indeed account for this. Seemingly counter to Gundel's intuition, the analysis predicts that the dog is *not* more salient (at least not sufficiently to warrant pronominalization). Both referents, in fact, are coded as Degree 4 (although the equation for each is different):

Dog: distance/unity = 3; competition = -1; recurrence = 1; parallelism = 1

Cat: distance/unity = 3; competition = 0; recurrence = 1; parallelism = 0

As such, the present coding system correctly predicts that the pronoun is infelicitous because it fails to distinguish between either referent on the grounds of accessibility (or semantic factors) and is, therefore, ambiguous.

In short, in relation to a number of key examples in the literature, the present system successfully predicts RE resolution, infelicitous pronoun use, and over-explicitness. Interestingly, it appears to account for at least some examples (e.g. Example 4) that have been proposed as being problematic for Accessibility Theory. Further examples are presented in Appendix 4.

4.10.3 Accessibility in referent introductions

As discussed, the system of accessibility analysis presented in Subsections 4.10.1 and 4.10.2 relies on a consideration of discourse context and so cannot be applied to referent introductions. Such a restriction is also found in other systems (e.g.

Toole, 1996).

Therefore, in this study, analysis compares how each speaker introduces each hearer-known entity. Underlying this is the reasonable assumption that, prior to introduction, referents have comparable accessibility across each interaction. Each dyad is considered to be in a largely similar position in relation to common ground and the accessibility of referents, due to the consistency in the procedures for the retelling task. One possible limitation is that this assumption does not take into account discourse context (e.g. the number of competing referents already introduced), or that the length of the interaction may affect the accessibility of referents that have not been introduced (although no research was identified as directly supporting the idea that these factors may be relevant).

The present approach, then, is to compare the linguistic forms used to introduce a particular individual (e.g. Charlie Chaplin) into each retelling, including both an analysis of REs and (if relevant) any stages of pre-introduction, try-markers, or other interactional strategies.

4.11 Identifying miscommunication

As indicated in Section 4.4, the main approach to identifying communicative problems was, firstly, through comparing the hearer's reported mental model of the discourse with what could be strongly inferred (on the basis of familiarity with the narrative) about the speaker's meaning. Secondly, after the retelling, hearers watched the film and were invited to comment on ways in which the narrative was similar to and different from the mental model they had developed. The emphasis, then, was on hearers identifying instances in which they were involved in miscommunication. This was deemed important because, as demonstrated in a study by Schober and Clark (1989), the discourse interpretation of addressees (the 'hearers' in this study) is often richer and more accurate than that of over-hearers.

A third type of evidence was used to help distinguish between references that resulted in what might be regarded as *expected strain* and *unexpected strain*. The

former relates to very low-accessibility or ambiguous referents which the speaker recognized as being potentially problematic. This is marked with the use of a strategy to manage the problem (e.g. try-markers) which may elicit clarification requests and collaboration. As discussed in Chapter 3, in the present study these were not considered to be evidence of infelicitous language use. Unexpected strain relates to references presented *en passant*, and so, presumably, these were considered non-problematic by the speaker. These require additional effort from the hearer and perhaps intervention by the speaker, which may have been avoided if a more felicitous RE or strategy had been used (see Chapter 3).

Examples of referential miscommunication are distinguished from successful reference and classified as either *misidentification*, *non-understanding*, *referential failure*, or *referential strain*, as defined in Chapter 3. In short, these types of miscommunication are identified in the following ways:

- Misidentification: the hearer reported having identified the wrong referent.
- Non-understanding: the hearer reported being unable to resolve the reference.
- Failure: the hearer reported not recognizing that a reference had been made (e.g. a RE interpreted as a non-referential NP).
- Strain:
 - The hearer reported an initial difficulty in resolving a reference.
 - Analysis of the recording revealed clarification requests for an *en passant* reference.

4.12 Analysing miscommunication

Examples of miscommunication were analysed for potential triggers of the problem, including the extent to which the RE was felicitous (e.g. in terms of accessibility marking). It is recognized that a single miscommunication may be the result of a combination of multiple triggers. As discussed in Chapter 2, individual triggers may have an origin in structural factors, speaker factors, hearer factors, or interactional factors (Bazzanella & Damiano, 1999). However, not all

of these factors were able to be systematically investigated in the present study, and, for this reason, due caution was taken in identifying any particular trigger. Particular attention was given to the appropriateness of REs in relation to the accessibility of the referent, in order to explore the relationships between under-explicitness and over-explicitness in miscommunicated reference. Other aspects of the referential acts were also considered, including the appropriateness of semantic aspects of REs, syntactic and lexical error, and mispronunciation.

4.13 The roles of Levels of Reference and Degrees of Accessibility

In the preceding discussion, considerable attention has been focused on the concepts of levels of reference and degrees of accessibility. At this point, it may be helpful to review the roles that these concepts play in the analysis.

In the present study, the levels of reference framework defines (a) what counts as reference, (b) in what sense it counts as reference, and (c) what counts as referential miscommunication. Reference at Level I relates to the narrow definition of reference proposed by Bach (2008). Levels II and III represent two stages of relaxation of Bach's definition. The framework enables discussion of a wider range of NPs than would be appropriate under Bach's definition, but excludes many of the NP types permitted in many linguistic approaches to reference (e.g. Du Bois, 1980; Gundel et al., 1993, 2005; Swierzbis, 2004). In adopting this framework in the analysis of the retellings, NPs were first identified as either being referential (i.e. relating to either Level I, II or III) or being non-referential. Non-referential NPs were essentially excluded from further analysis. Beyond identifying acts of reference, the levels of reference framework played little further role in this study.

Entirely distinct from the concept of levels of reference is the concept of degrees of accessibility. Accessibility relates to how easily recoverable in memory a referent is, and Accessibility Theory (Ariel, 1990, 2001) proposes that there are conventional form-function relations holding between NP types and particular ranges of accessibility. The specific degrees of accessibility discussed in this

study (e.g. D4, D5) are those that arise from the accessibility coding system; these are not claimed to represent distinctions made by language users, but provide a way of making approximate divisions in the overall range of accessibility.

Levels of reference and degrees of accessibility are also to be distinguished from a concept introduced in Chapter 7 in discussed in the end Chapter 8 involving distinctions in referentiality.

4.14 Summary

In summary, following Perdue (1984, 1993a) film retelling tasks were identified as eliciting the most appropriate data for the study of reference. An edited version of the film *Modern Times* was made so that some of the distinctions relevant to RE selection were present, including a range of male and female characters with varying degrees of narrative importance and accessibility, inanimate objects, and episode boundaries. Also following Perdue, the retelling task was constructed so that interactants shared common ground in relation to the identity of some referents.

Noun phrases were analysed within the levels of reference framework proposed in Chapter 2; references falling outside this framework (e.g. introductions of hearer-new entities, and NPs relating to times and locations) were excluded from further analysis. References to persons and objects were identified at the level of the referential act. In the analysis of accessibility, references involving single NPs were coded using a system adapted from Toole (1996), and more complex referential acts were analysed in terms of the use of episodic elements and try-markers.

To identify miscommunication, a two-part stimulated recall interview was used to elicit the hearer's understanding of the retelling. The first part involved using the retelling as a stimulus for recall, and the second part involved the hearers watching Part 2 of *Modern Times*. The identification of triggers of miscommunication involved the consideration of multiple factors, starting with the extent to which the RE was felicitous.

In the following three chapters, findings from the analysis are presented. Chapter 5 presents an analysis of the retellings in terms of the referents, acts of reference, and REs selected. Chapter 6 provides an analysis of accessibility marking in the retellings, and Chapter 7 presents findings relating to the miscommunication of reference.

5 Referents, referring expressions, and acts of reference: Presentation and analysis of findings

5.0 Introduction

This chapter presents a largely quantitative analysis of aspects of the elicited L1 and SLL narratives, providing contextual details that are relevant to the presentation of findings in Chapters 6 and 7.

Section 5.1 presents a comparison of the entities and acts of reference in L1 and SLL narratives, including the range of referents and number of acts of reference in each retelling. Section 5.2 presents findings relating to the range of RE types used by the L1 and SLL participants, and the use of non-conventional REs. From these initial analyses, some limitations were identified in relation to the framework for analysing RE types as accessibility markers, and these are discussed in Section 5.3. In particular, these limitations relate to applying an AT framework to acts of reference that involve more than one referring expression. Section 5.4 presents data relating to three types of RE error that are particularly relevant to the discussion of miscommunication in Chapter 7. These involve errors in the use of pronouns, in the signalling of generic entities, and the use of zeros.

5.1 Referents and acts of reference

This section presents data relating to some general referential characteristics of the narrative retellings. This provides contextual detail relevant to the presentation of findings relating to REs (Section 5.2), accessibility marking (Chapter 6), and miscommunication (Chapter 7).

Findings are presented in Subsections 5.1.1 and 5.1.2 in relation to the range of entities and the number of acts of reference in each narrative retelling. Section 5.1.3 presents what appears to be a type of referential avoidance strategy, in which hearer-known entities are either omitted from the retelling, or are introduced as if they were hearer-new. The implication drawn in Section 5.1.4 is that the L1

retellings are substantially more referentially complex than the SLL retellings, perhaps suggesting greater potential for referential miscommunications.

5.1.1 Range of referents in the retellings

The L1 participants tended to refer to a considerably wider range of referents than the SLL participants, including more introductions of both hearer-known and hearer-new entities, and more subsequent references (referent tracking). Specific findings for each participant and each referent are presented in Appendix 5. These include, for example, the finding that a number of relatively minor characters were usually omitted from the SLL narratives. For example, 80% of the L1 participants referred to Chaplin's colleague from the production line, compared to only 30% of the SLL participants. Similarly, 50% of the L1 speakers introduced the female prisoner, compared to just one (5%) of the SLL speakers. This is relevant to the study because, as discussed in Chapter 2, a greater number of referents increases competition and thereby (a) affects accessibility (Ariel, 1990, 2001), and (b) is likely to impose greater cognitive demands on both the speaker and the hearer (Arnold & Griffen, 2007), perhaps raising the likelihood of miscommunication. The findings suggest that, in these ways, the information conveyed in the L1 retellings presents a greater communicative challenge than what is presented in the SLL retellings.

5.1.2 Number of acts of reference by each speaker

A further indicator of referential complexity may be the total number of acts of reference in a narrative retelling. Overall, the L1 narratives included an average of 158 referential acts each, compared to just 104 in the SLL narratives (see Appendix 5). Therefore, there were approximately 50% more 'places' in the L1-L1 interactions where referential miscommunication could potentially occur.

In general, it may be presumed that a greater number of acts of reference increases the likelihood of miscommunicated reference. However, it may also be true that

some briefer retellings impose greater inferential demands on the hearer through the lack of explicit narrative details, perhaps creating (non-referential) problems in achieving global understanding of the narrative.

5.1.3 Avoidance of Level I introductions

In the framework proposed in Chapter 2, distinctions were drawn between references at Levels I, II and III, and various types of non-reference. It was proposed that the most cognitively demanding of these acts is Level I reference, particularly in relation to referent introductions, as the hearer is prompted to resolve the RE in relation to a pre-existing mental representation of an entity that exists independently of the present discourse. Furthermore, such referents often have low accessibility.

An unexpected finding was that most of the SLL participants appeared to avoid some of this complexity by introducing one or more hearer-known referents as if they were hearer-new. As such, they appear to violate the preference for *achieving recognition* (e.g. Stivers, Enfield, & Levinson, 2007). This is illustrated in how the girl was introduced (as hearer-new) by Anne (a SLL) in Example 5.1, and referentially by Jeff (an L1 speaker) in Example 5.2:

Example 5.1: *Anne and Tim*

T = 3.05 6-8	the second part is um, . about um a- also the small guy and er, and er <u>a girl</u> , um first, er the girl is . alo- alone
-----------------	--

Example 5.2: *Jeff and Patrick*

T = 1.51 6	J – that part finishes, and then Ø reverts . . over to . <u>the woman [yeh] that we saw initially?</u> P – at the start, yeah J – yep, she is in town
---------------	---

Typically of the non-referential introductions in these data, Example 5.1 essentially consists simply of *a* + N. In contrast, the referential introduction in Example 5.2 is substantially more complex, involving a long definite description (including a relative clause), a try-marker, the prompting of hearer collaboration, and response to the hearer’s contribution (all of which are typical for referential

introductions of this character by L1 speakers, as discussed in Chapter 6.2.2). Also of note in both of these examples are performance features relating to *temporal variables* (e.g. pauses, repeats, drawls) which are widely considered to be indicators of communicative difficulties (e.g. Færch & Kasper, 1983a; Poullisse, 1990). In Example 5.2, the two pauses preceding the L1 speaker's formal introduction appear to have allowed planning time for the complex act of reference that follows; in Example 5.1, the repeats and *filled pauses* (*and er, and er*) also suggest planning time, but no complex reference follows, and it may be that the SLL considered the complexities of producing a referential introduction, before electing to avoid it. A further feature that may facilitate reference resolution in Example 5.2 is the signalling of a return to previous entities or events through the expression *reverts over to*.

Such non-referential introductions, in which hearer-known entities are presented as if they were hearer-new, were largely confined to the SLL retellings (these data are presented in Appendix 5.2.2). Two instances occurred in the L1 data, and both relate to introductions of the feeding machine. In the SLL retellings, these were also most frequently used in relation to the feeding machine (eight speakers), but are also found in relation to the girl (three speakers), the colleague (two speakers), and the boss (one speaker). It could be argued that some of what appear to be hearer-new introductions (e.g. *a girl* in Example 5.1) could actually represent article errors. However, there is evidence that this is not the case. Firstly, for all referents, article errors involving the use of *a* for *the* were identified in just 16 NPs in these data (0.7% of all NPs), suggesting that the high proportion used for certain referents with very low-accessibility was strategic, and reserved for those referents most at risk of misidentification. This appears to explain why most such introductions involve the feeding machine, as this seemed to be the least accessible entity (discussed in Chapter 6.2.4), and the one most frequently misidentified (see Chapter 7.5.3). Furthermore, as will be discussed in Chapter 6.2, L1 and SLL referential introductions of low-accessibility entities in these data were nearly always far more complex than simply the use of *article + noun*.

To summarize, speakers face a substantial challenge in ensuring that hearers can resolve initial references to entities with low accessibility. To meet this challenge,

L1 introductions are often highly complex; the SLLs in this study appeared to recognize this challenge, but, in many cases, chose to avoid it through mentioning the relevant entity as if it were unknown to the hearer. In this way, their interlocutors did not need to identify the referent from among existing mental representations of competing entities. Specifically, non-referential introductions prompt hearers to create a new mental ‘file’ for the referent, rather than to begin a ‘memory search’ among matching entities, thus largely avoiding the risk of misidentification.

5.1.4 Summary and implications

The results in this section suggest that key referential aspects of the L1 retellings were substantially more complex than those in the SLL retellings. This is apparent in terms of the range of referents, the number of acts of reference, and evidence of SLL avoidance of some Level I referential introductions. In the latter, speakers were found to simplify the referential complexity of their retelling by introducing hearer-known referents as if they were hearer-new. For these reasons, it appears that, in relation to reference, the L1 speakers attempted to communicate substantially more than the SLL speakers. For the purposes of the present study, this needs to be acknowledged when discussing miscommunication (Chapter 7), as the greater the referential complexity, then, presumably, the greater potential for miscommunicated reference.

5.2 Range and frequency of referring expressions

The focus in this section is the referring expressions (REs) used in the narrative retellings. Findings relating to the range of REs used by the L1 and SLL participants are presented in Subsections 5.2.1 and 5.2.2 respectively, with discussion in the latter of how these findings converge and diverge. Subsection 5.2.3 compares the frequency of RE types in these data. Subsection 5.2.4 focuses on the use of non-conventional expressions by L1 and SLL participants. Subsection 5.2.5 presents a summary and implications of these findings. For many

of the points discussed, substantially greater detail is presented in Appendix 5.3.

5.2.1 RE types in the L1 narratives

This subsection presents findings relating to a possible minimal set of RE types used in target-like retellings of the *Modern Times* narrative task. Table 5.1 presents the range of RE types used by the L1 participants. A division is made in the table between noun phrase types that can conventionally be used to refer, and those which cannot. The latter categories arose from the data, and their use was largely confined to SLL retellings. As discussed in Chapter 4.9.4, the other 16 categories are derived from, and organized according to, Ariel's (2001) classification of referential expressions.

The greatest range of conventional RE types in any retelling was 13 (found in the retellings of Shelley and Jake), while the most restrictive range was seven (Shaun). The mean range used by speakers was 9.7, and the median was 10.

Table 5.1: L1 speakers' range of referring expression types

	High accessibility markers			Intermediate accessibility markers						Low-accessibility markers						Non-conventional forms			
	∅	3rd person pronoun	Stressed pronoun	This	That	This + NP	That + NP	This + modifier	That + modifier	First name	Last name	Short description	This + long description	The + long description	Full name	Name + modifier	The + name	Indefinite NPs	Bare nouns
Adele																			
Fiona																			
Jake																			
Jeff																			
Kate																			
Kath																			
Lillian																			
Shaun																			
Sam																			
Vicky																			

Legend: RE form

	Used
	Unused

All ten speakers used *zero*, *pronoun*, *short definite description*, and at least one type of *long definite description* (i.e. with either *the* or a demonstrative determiner). Eight speakers used full names, while seven speakers used bare *that*, *this* + NP, *that* + NP, and *stressed pronouns*.

All speakers used at least one type of name, although *last name* was the least used of all the conventional RE types. This was almost certainly due to the nature of the elicitation task, where only Charlie was known by name (Ariel, 2004, p. 93).

In these data, all speakers used (typically two or three) intermediate-accessibility markers. Only one speaker (Kate) used all six types. The length of the retelling appears relevant to the range of such forms used, with only the three longest retellings involving the use of four or more such forms, while two of the three shortest involved just one type. Just two speakers used bare *this* as an RE, although this form frequently occurred in non-referential contexts (used to indicate time, events, or stretches of discourse).

From these data, it appears that a ‘core’ set of RE types for the retelling task may be identified. This includes, firstly, the RE types that occurred in every L1 narrative: *zero*, *pronoun*, and *short definite description*. This core set may be further extended to include larger groupings of formally and functionally similar REs that appear to be alternates in these data. Three guiding principles adopted for identifying these alternates are:

1. The forms encode adjacent degrees of accessibility.
2. The degrees of accessibility are marked by syntactically similar REs.
3. Each group forms a minimal set of alternatives to account for the L1 data.

The initial core set of RE types can, therefore, be further extended to include *the* + *long description* and/or *demonstrative* + *long description*, which together account for a range of very low accessibility; the alternates *this*, *that*, *this* + NP, and *that* + NP, which account for the intermediate range of accessibility; and the alternates *first name*, *last name*, and *full name*. Although this latter set does not fully adhere to the principle of encoding adjacent degrees of accessibility

(discussed in Chapter 2.5.2), the forms do relate to a readily identifiable word class (proper nouns), and at least one form occurs in all narratives. Thus the proposed core set of REs for the film retelling narrative task is:

Table 5.2: Core referring expressions for the *Modern Times* retelling task

High-accessibility markers:	(1) <i>zero</i>
	(2) <i>pronoun</i>
Intermediate-accessibility markers:	(3) either <i>bare demonstrative</i> , or <i>demonstrative + NP</i>
Low-accessibility markers:	(4) <i>short definite description</i>
	(5) either ' <i>the</i> ' + <i>long description</i> , or <i>demonstrative + long description</i>
	(6) either <i>first name</i> , or <i>last name</i> , or <i>full name</i>

Those forms which are presented in Table 5.1 but omitted from the core set of RE types, are *stressed pronoun*, *this + modifier*, *that + modifier*, *name + modifier*, and all non-conventional REs.

In summary, on the basis of the data from the L1 speakers, it can be cautiously suggested that a target-like retelling of the *Modern Times* narrative will minimally include two types of high-accessibility marker (*zero* and *pronoun*), one or more intermediate-accessibility markers, and three types of low-accessibility marker (*short definite description*, at least one type of name, and one type of long description).

5.2.2 RE types in the L2 narratives

In this subsection, findings are presented for the range of RE types used in the SLL retellings. The purpose of this is, firstly, to begin profiling the system of REs used by the SLL participants, and secondly to establish the extent to which this is target-like in relation to the findings for the L1 participants. The relevant data are presented in Table 5.3.

As indicated by Table 5.3, the SLL speakers generally used a restricted range of conventional RE types, with only Kane reaching the L1 speaker mean of 10. Five SLLs used five or fewer RE types, with one speaker using just three. Overall, the average number of RE types used was approximately seven, and the median was eight. Thus, although most of the SLL participants used a range of REs within the scope established for L1 speakers, some used a highly restricted range.

In relation to the core repertoire of RE types identified in Section 5.2.1, five SLL participants failed to use the full range of core forms proposed for this task.

Pronoun and *short definite description* were the only core RE types used by all SLL speakers, although nearly all (19 of the 20 speakers) used *zero*. Two speakers did not use any form of name, perhaps because of unfamiliarity with pronouncing Chaplin's name (although, prior to the interaction, all participants identified Chaplin in a picture).

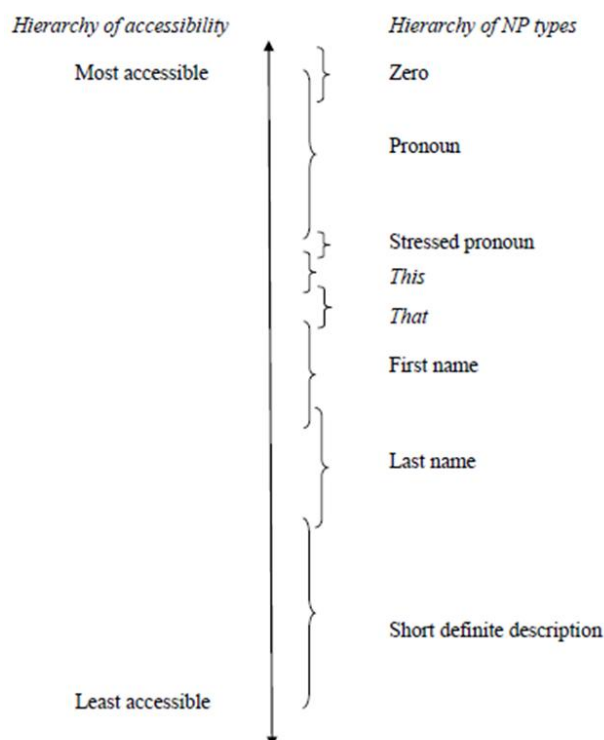
The core RE forms that were most noticeably under-represented in the SLL data are the intermediate-accessibility markers. Interestingly, every speaker who used at least one intermediate-accessibility marker also used each of the other core RE types. Only three SLL participants (15%) used three or more types of intermediate-accessibility marker, compared to 50% of the L1 speakers. Furthermore, only one participant used the form *this + modifier* (with three using *that + modifier*). These findings could suggest that learners functionally acquire intermediate-accessibility markers later than other RE types.

Two SLL speakers did not use either type of *long description*. These forms were widely used in other SLL and L1 retellings to introduce minor characters and to manage some contexts where competition created potential ambiguity. These forms are generally the most syntactically complex type of RE and so may have been avoided.

In addition, whereas L1 speakers tended to use *first name* or *full name* for Charlie, the SLL speakers tended to use *surname* (compared to just one L1 speaker). Ten SLLs used the nonconventional form of *the + name*.

When interpreting these findings within an AT (Ariel, 1990, 2001) framework, it appears that the SLL participants marked substantially fewer distinctions in accessibility than the L1 speakers. For example, one speaker used two forms that specialize as high-accessibility markers (zeros; unstressed pronouns), and distinguished these only from one marker of low accessibility (short definite descriptions), making no use of intermediate-accessibility markers nor markers of very low accessibility. An implication is that even competent SLL speakers may tend not to encode the finer distinctions in accessibility found in L1 speech. However, this interpretation is based entirely on an analysis of morpho-syntactic aspects of REs, and, as discussed in Section 5.3, there may be additional means of encoding distinctions in accessibility that are not represented in the RE hierarchy. In addition, because there are likely to be overlaps between the ranges of accessibility encoded by different forms (as illustrated in Figure 2.2, p. 48, reproduced here as Figure 5.1), it may be that these participants were, in most cases, able to encode accessibility felicitously with a restricted range of accessibility markers through exploiting the maximum range of accessibility associated with each form in their linguistic repertoire.

Figure 5.1: Interaction of the accessibility and NP hierarchies



However, the possibility remains that, in some cases, there may have been

infelicitous form-function relations between accessibility and RE type, which could suggest a potential for communicative problems in distinguishing some referents. Miscommunication is explored in Chapter 6.

5.2.3 Frequency of conventional RE types in the narratives

This subsection presents the most relevant findings in relation to the frequency with which various RE types were used in the narratives. The bases for these comparisons are found in Appendix 5.3.

Findings for the proportions of different RE types used by the L1 and SLL speakers are presented in Figure 5.2 and in Table 5.4.

Figure 5.2: Proportions of RE types used

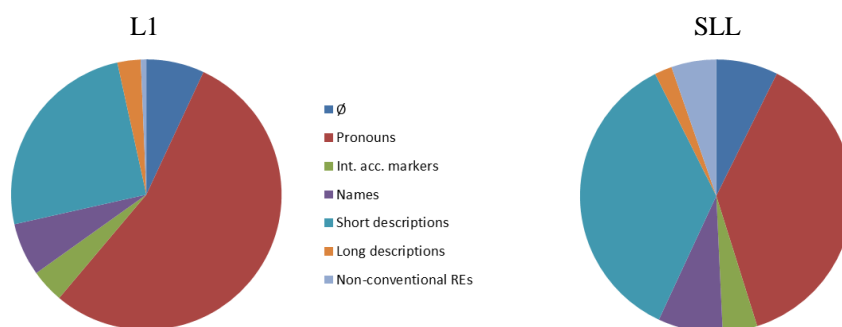


Table 5.4: Percentage of REs used

	L1	SLL
∅	6.9%	7.3%
Pronouns	54.2%	37.8%
Intermediate accessibility markers	4.0%	4.1%
Names	6.3%	7.7%
Short descriptions	25.1%	35.7%
Long descriptions	2.8%	2.1%
Non-conventional REs	0.7%	5.3%
	100.0%	100.0%

Both the L1 and SLL participants mostly used pronouns and short definite descriptions to refer. Names and zeros were the next most frequently used RE types. Intermediate accessibility markers and long definite descriptions were used rather infrequently.

However, there are also a number of salient differences. For each L1 speaker, pronouns were the most frequently used RE type, and, for most individuals, the frequency of pronoun use was approximately double that of short definite descriptions. In contrast, for ten of the twenty SLL speakers, short definite descriptions were the most commonly used RE type; overall, in the SLL narratives, short definite descriptions occurred with similar frequency to pronouns (35.7% to 37.8%). There was, however, substantial individual variation in the SLL data, with three speakers (Kyra, Michael, Sabrina) approaching target-like proportions of these two forms, while three speakers (Becky, Toby, Anne) used far more short definite descriptions.

Markers of high and low accessibility

Grouping the expressions into low, intermediate, and high-accessibility markers (Table 5.5) reveals that the L1 participants used substantially more high-accessibility markers than the SLL speakers:

Table 5.5: Frequency of high, intermediate, and low-accessibility marker use

	L1	SLL
High	61.1%	45.1%
Intermediate	4.0%	4.1%
Low	34.2%	46.6%
Other	0.7%	4.1%

‘Low’ includes *the + name*; ‘Other’ includes all other non-conventional forms

Individually, nine of the ten L1 participants used considerably more high than low-accessibility markers, while twelve of the twenty SLL speakers actually used more low than high-accessibility markers (with one further speaker using an equal percentage of both). These data are presented in Appendix 5.

Intermediate-accessibility markers

Overall, intermediate-accessibility markers accounted for approximately the same

percentage of references in both the L1 (4.0%) and SLL (4.1%) narratives. However, there was a substantial degree of individual variation, particularly in the SLL data. In particular, four SLL speakers used no markers of intermediate accessibility (Section 5.2.2), while three speakers used these forms more frequently than the L1 participants (14%-16% of all references). The remaining SLL speakers used target-like percentages of between 1% and 6% of all references; whereas Jake was the only L1 speaker to use any particular intermediate-accessibility marker on more than three occasions, seven of the SLL speakers did so, with five of these involving six or more uses. This raises the possibility of a developmental progression in which some speakers may move from an initial avoidance phase for intermediate markers, to a stage of overuse, before developing target-like frequency. Such stages have been suggested for other areas of language use, such as the acquisition of articles (Huebner, 1983; Master, 1987). In fact, the two speakers who appeared the most competent (Michael and Julia) did use target-like percentages (2% and 4%), while one of the two speakers who appeared to struggle most with the task (Becky) avoided all intermediate expressions (although it should be noted that her retelling was particularly brief), and the three participants who overused these forms appeared to be between these two proficiency levels.

5.2.4 Use of nonconventional expressions

The term *nonconventional expression* is used here as a general term for those noun phrases not generally used to refer. As discussed in Chapter 2, these do not necessarily indicate that an error has been made, although in the SLL data this usually appears to have been the case. In acts of communication, such expressions may prove problematic as, firstly, they may not be recognized by the hearer as genuine REs (e.g. interpreted as predicative or generic) or, secondly, because they are not conventionally associated with accessibility marking.

In the L1 data, there were 11 NPs that were coded as nonconventional from a total of 1647 REs, at a frequency of approximately one per 150 REs. However, nearly all of these were syntactically correct and pragmatically appropriate NPs such as

part one and *part two*. In the SLL data, there were 121 nonconventional expressions from a total of 2266 REs, at a rate of nearly one per 19 REs. The vast majority of these appeared to be language errors, with the most frequent type being bare nouns (77 uses). Some may have been communicatively problematic as bare nouns provide no marking for the definite/indefinite distinction and do not indicate a degree of accessibility.

After bare nouns, the next most common non-conventional RE type in the SLL data was *the + name* (28 uses). Although non-target-like, these are likely to have posed few communicative problems as the addition of the article does not generally indicate a plausible semantic or pragmatic distinction when referring to persons, at least in the *Modern Times* task. Indefinite expressions used referentially were relatively uncommon in the SLL data, with just 16 likely examples. There were also two examples identified in the L1 data, although it is possible that these were examples of previously introduced (Level II) referents being re-introduced as hearer-new (perhaps as an avoidance strategy parallel to that discussed in Section 5.1.3), or perhaps even an inaudible initial consonant.

5.2.5 Summary and implications

As expected, the SLL participants tended to use a more restricted range of RE types than the L1 participants, but most used each of the proposed ‘core’ forms for retelling *Modern Times*, as identified in Section 5.2.1. The major exception was the absence in five SLL narratives of any of the demonstrative forms that conventionally encode an intermediate level of accessibility (Ariel, 1990, 2001), suggesting that these may be the last of the major RE types to be functionally acquired by many advanced learners. It may also suggest that these learners encoded fewer distinctions in referent accessibility, which could indicate potential for communicative problems.

While most of the SLL participants otherwise used each of the core RE types, the frequencies of use were often non-target-like. In particular, there was a strong overall tendency for SLL speakers to use a much higher proportion of short

definite descriptions than the L1 speakers, and far fewer pronouns. Similar findings in previous studies (e.g. Chini, 2005; Gullberg, 2006) have been interpreted as suggesting over-explicitness. However, as argued in Chapter 3, it is possible that the L1 narratives simply contained more references to highly accessible referents than the SLL narratives. This could result, for example, from less topic continuity in the SLL narratives. The issue of over-explicitness is, therefore, addressed in Chapter 6, where the cognitive accessibility of referents is assessed.

Intermediate REs were relatively uncommon in both the L1 (4.0%) and SLL data (4.1%). This perhaps reflects the narrow ranges of accessibility these forms encode, and perhaps the nature of the elicitation task (substantially more are reported by, for example, Ariel, 1988a, and Toole, 1996). Nevertheless, despite their relatively low frequency, intermediate-accessibility markers occurred in every L1 narrative, suggesting that they are an important referential feature of target-like narratives, and that the most successful language users will have functionally acquired at least one such form. However, the findings suggest that many of these advanced SLL participants under-used or avoided these forms, while others were found to over-use them by L1 standards.

In short, the findings suggest that the SLL speakers may use REs in pragmatically inappropriate ways. Within the framework of AT, it seems possible that this could cause communicative strain in some interactions. However, this needs to be examined more carefully with consideration given to not just the linguistic form of the expression, but also an evaluation of the accessibility of referents in SLL discourse, and the hearer's interpretation of the discourse. These issues will be addressed in Chapters 6 and 7.

5.3 Issues in coding RE types as accessibility markers

The hierarchy of REs that Ariel proposes in Accessibility Theory is not claimed to be exhaustive (1990, p. 73), and Ariel shows that further forms are possible by recombining elements into new phrase types (p. 75). Due to its frequency in the

present data, it was, therefore, appropriate to distinguish the additional RE type *that + long description*.

Consequently, it was expected that some REs would not be easily categorised under Ariel's framework. However, a number of further issues arose during analysis in relation to how accessibility was marked. These issues are presented in this section and further discussed in Chapter 8.

5.3.1 Effects of embedded referring expressions

An issue that does not appear to have been previously discussed in relation to accessibility marking is the effect of *embedded references*. This is illustrated in Example 5.3, in a reference to the boss:

Example 5.3: *Alice and Donna*

T = 00.34 1	other co-workers had a lunch, [yes] and <u>the principal of that company</u> , came to – came down to the co-workers?,
----------------	--

The issue of embedded referents is not new, and they occur frequently in genitive constructions. However, there is an interesting and under-explored issue regarding *accessibility* and embedded referents. In Example 5.3, following the coding protocol, the RE for the boss was coded as a short definite description, and embedded within this was a further reference to the company, coded as *that + company*. However, what this analysis appears to overlook is that the overall reference to the boss is likely to be facilitated by the degree of accessibility signalled for the embedded reference to the company. For example, it is likely that the degrees of accessibility signalled for the boss in the following illustrative examples differ depending on the accessibility of the entity ('the company') in the embedded reference:

- the boss of it
- the boss of this
- the company boss
- the boss of this company

the boss of that distillery

However, no distinction can be made among these within the theoretical framework employed in the present study (or elsewhere, e.g. Ariel, 2001; Toole 1996), as all such expressions would be coded as short definite descriptions. In future studies, assuming that such fine distinctions are desirable, it may be that the level of accessibility signalled for an embedded reference could be incorporated into the analysis of the head referent.

5.3.2 Simple and compound acts of reference

There also appears to be a relevant distinction to be drawn between acts of reference that may be termed *simple* and those that may be analysed as involving *compound* references. It seems that these have not previously been discussed or operationalized in relation to accessibility marking.

Specifically, an accessibility distinction appears to exist between acts of reference comprising, for example, a single short definite description, and those comprising two or more short descriptions. For instance, the act of reference in Example 5.4 was coded as involving two uses of short definite descriptions, and consequently would be considered two separate indications of moderate-low accessibility. However, the referential act as a whole appears to indicate a substantially lower degree of accessibility than the individual REs would suggest.

Example 5.4: *Becky and Yvonne*

T = 0.52 2	B – And, um . ah: but er: she met the <u>the man</u> , you know?, <u>the funny man</u> ? Y – Yeah, . in the factory?
---------------	---

A similar, yet more complex, phenomenon is found in the reference to the girl in Example 5.5.

Example 5.5: *Martha and Paul*

T = 2.18 4	M – and after that the: s- the first story started back?, P – mhm M – with the girl?, er and the bananas?,
---------------	--

	P – yes M – and the ship P – the gamin, yeah M – yep the first part,
--	---

In this example, the referential act, as a whole, again appears to indicate much lower accessibility than do any of the individual REs. Here, Martha singles out the girl through a strategy of evoking the physical context in which she had previously appeared. This involves description of two other referents (the bananas and the ship) that were present in the original scene involving the girl, but which are otherwise irrelevant to the retelling. Martha thus uses three short definite descriptions to clarify the identity of the girl. The level of description encoded in the referential act as a whole suggests very low accessibility.

These issues are not within the scope of AT, which, instead, focuses on the partially grammaticized relationship between RE types and cognitive accessibility. Rather, these issues relate to the way that accessibility is signalled through the selection and organization of multiple elements within the speaker's turn, and, indeed, within a sequence of turns. An implication is that the concept of accessibility marking could be applied to an analysis of discourse above the NP level. Useful distinctions may include those between referential acts that are *simple* (comprising one RE), *compound* (comprising two or more REs), *complex* (comprising reference to a main referent and one or more subsidiary referents whose resolution is intended to support resolution of the main referent) or *jointly-constructed* (involving addressee responses). Perhaps combined with an analysis of relevant aspects of prosody, this discursal approach could be usefully incorporated in future studies of reference and accessibility marking.

5.3.3 Stress

Many theories of RE selection (including AT) distinguish between stressed and unstressed pronouns, with the former taken to indicate lower accessibility. In fact, although not illustrated in Ariel's hierarchy of RE types, Ariel (1990, p. 75) acknowledges that a more general distinction can be made between an unstressed

RE and its stressed equivalent.

This is supported by analysis of the present data, which suggests that stress can be used to indicate the less accessible of two competing referents. This is illustrated in Example 5.6:

Example 5.6: *Jake and Sonny*

T = 5.46	J – AND um <u>the girl on the street</u> ₁ comes back to the bakery – the ba- baker guy
8d	and Ø goes ‘look look look no it wasn’t, it wasn’t Charlie, it was’ you know, ‘it was <u>the girl, the GIRL</u> ₂ ’.

Here, Jake made individual references to both the witness and the girl using expressions with the head noun *girl*. Perhaps recognising the potential ambiguity of this, John then repeated the expression with stress. At this stage in the discourse, the witness had higher accessibility (Degree 5) than the girl (Degree 3), and John may have believed an unstressed RE could be interpreted as reference continuity rather than the intended reference switch. A further example is presented in Appendix 5.5, in which an infelicitously stressed RE resulted in miscommunication.

In short, stressed full REs occurred very infrequently in these data, and appeared only to be felicitous when reference was made to the less accessible of two locally available referents which match the semantic content of the RE. As such, it may be that stress is best accounted for by earlier notions of contrastiveness (discussed in Chapters 2.5.1 and 2.6) rather than as a feature within AT. Future studies may wish to explore this issue.

5.3.4 Lexical constraints on accessibility marking

An issue which is particularly relevant to the analysis of SLL references is that, in a few cases, RE selection appeared to be partially determined by the SLL speaker’s lexical resources. For example, Kane used the RE *the worker of the bread shop*, which is classified as a long definite expression (having three content words); however, it is possible that Kane did not have online access to the lexical items ‘baker’ or ‘bakery’ which may have enabled him to say *the baker* or *the*

man from the bakery (both short definite expressions). Certainly, this would account for his rather awkward RE selection. Thus, Kane may have intended to signal somewhat greater accessibility than he was able to; if so, this should be distinguished as an issue of lexical competency rather than competency in accessibility marking.

5.3.5 Summary and implications

In determining the role of infelicitous accessibility marking in triggering miscommunication, it may be necessary to consider not only RE selection (i.e. through an AT framework) but also prosody (discussed in Chapter 2.6) and, I have argued, the construction and sequence of utterances. Although RE selection appears to be the main locus of accessibility marking (and in the case of en passant references, perhaps the sole locus), it appears that such marking can also be distributed to other linguistic elements. Where they do so, the RE (when considered in isolation) may appear to signal higher accessibility than is encoded in the overall act of reference. As such, care must be taken in concluding that a RE is under-explicit; similarly, REs that appear felicitous may occur in acts that are actually over-explicit. In the present data, these factors tended to occur in referent introductions rather than tracking. Future studies may wish to explore this broader view of accessibility marking.

It was noted that the AT coding system was unable to analyse effectively those accessibility distinctions arising from embedded references. This issue appears to have been overlooked in previous literature. It was further suggested that, on the basis of these rather limited data, the feature of stress (accent) may be usefully removed from the NP hierarchy proposed by Accessibility Theory, and be treated as signalling contrastiveness (as proposed in earlier studies, e.g. Chafe, 1976).

5.4 Linguistic Errors

In Section 5.2.4, findings were presented in relation to the use of *nonconventional*

REs, most uses of which can be considered erroneous. In this section, further types of RE error are discussed, focusing on those which are particularly relevant to miscommunication (to be reported in Chapter 7). These are pronoun errors (Section 5.4.1), errors relating to generic entities (Section 5.4.2), and syntactic errors in the use of the *zero* (Section 5.4.3).

5.4.1 Pronoun errors

The findings to be presented in Chapter 7 reveal that the most frequent type of linguistic error resulting in miscommunication were pronoun errors. As with the frequency counts of other REs, the findings presented in this subsection relate to the number of referential acts encoded by a pronoun (as the central RE) rather than the token. Thus, for example, the underlined pronouns referring to the girl in Example 5.7 were recorded as one error rather than two.

Example 5.7: *Kane and Raquel*

T = 6.00 10-12	K – a bread shop, bread shop [yeh], <u>h- he see a – he</u> saw a bread shop
-------------------	--

With prior knowledge of the *Modern Times* narrative, the identification of such errors was usually straightforward. Errors relating simply to case (e.g. *she* for *her*) were not recorded.

Among the L1 English speakers, two pronoun errors (presumably slips of the tongue; both uncorrected) were detected (0.2% of all pronouns used), and these are presented in Appendix 5. In the SLL data, pronoun errors were relatively common, with 14 of the twenty SLL participants making one or more such errors, and 45 occurring in total, of which 19 were self-corrected. In total, nine SLL speakers made 26 uncorrected pronoun errors.

Of the 45 pronoun errors made by SLLs, 37 involved the erroneous use of a masculine pronoun (usually *he*; occasionally *him*) in place of a feminine pronoun, or, in two cases, *it*. Of the remaining eight, two involved the use of the plural *they* for *he*. The preponderance of ‘*he* for *she*’ errors among advanced SLLs could suggest that some speakers may acquire *he* as an unmarked pronoun. The number

of pronoun errors for each speaker is presented in Appendix 5.

As a proportion of overall pronoun use, these 45 errors represented 5.3% of the 857 uses of (stressed and unstressed) third-person pronouns, with the 26 uncorrected errors representing 3.0% of all pronouns. There was a great deal of individual variation among SLL speakers, with Kane making errors with 22% of the pronouns he used, while Julia used 100 pronouns with no errors.

In summary, although the overall number of SLL pronoun errors appears relatively low, they were a common feature in some interactions and (as discussed in Chapter 7) a major trigger of miscommunication.

5.4.2 Generic entities

This subsection presents findings in relation to how speakers signalled generic entities (i.e. hypothetical individuals proposed to represent a typical member of a class). In a small number of cases, these caused communicative strain.

Although reported elsewhere to be infrequent in narratives (von Stutterheim & Klein, 1989), many participants illustrated details of the narrative with generic characters. In particular, many did so to illustrate the function of the feeding machine prior to describing how it actually performed. This is illustrated in the following example, in which Lillian (an L1 participant) used the generic second-person pronoun:

Example 5.8: *Lillian and Astrid*

4	L – and it was like a machine that, I guess <u>you</u> don't have to stop for a lunch break, it feeds <u>you</u> ?
---	--

Apart from one SLL participant, all speakers mentioned how the machine functioned, and it was particularly common for the SLLs to do so using generic entities (78.9%, compared to 50% of L1s). An alternative strategy was to describe the machine entirely in relation to how it performed on Charlie, as illustrated by Jeff (and L1 participant) in Example 5.9:

Example 5.9: *Jeff and Patrick*

T = 1.22 4-6	and what it does is it automatically feeds feeds him, so it locks him in, and Ø starts feeding him . . ah soup,
-----------------	---

In the L1 retellings, the use of generic entities to describe how the machine functioned was achieved almost exclusively with second-person pronouns, with the forms *they* and *them* also occurring once each. This preference for generic *you* is also found in clarification requests made by L1 interlocutors (e.g. four instances by Raquel), and the stimulated recall interviews to describe their understanding (e.g. six instances by Renee). The findings for the SLLs were very different, with only four participants using generic *you*, and the others relying on a wide variety of (inappropriate) linguistic forms. Furthermore, individual SLL speakers tended to be inconsistent in the forms used, with nine of these 11 speakers using two or more forms, and one of these using five different forms. Among the forms used by SLLs, definite expressions ('the man', 'the person') and bare plurals ('people') were particularly frequent. These data are presented in Table 5.6 (and further detailed in Appendix 5).

Table 5.6: Number of uses of generic characters to describe the function of the feeding machine

	L1	SLL
<i>You/your</i>	10	15
<i>The</i> + noun [singular]		5
<i>The</i> + noun [plural]		4
<i>They/them</i>	2	4
Bare plural e.g. <i>people</i>		8
Complex definite		2
<i>a</i> + noun		3
Ø		2
<i>Nobody</i>		1
<i>His</i> + n		1

In summary, the L1 speakers used a very narrow range of forms (almost exclusively second-person pronouns) to mention generic characters in this task. Consequently, the generic forms used by the L1 speakers appear not only standardized, but also unambiguous in the context of the narrative. In contrast, few SLL speakers used second-person pronouns, relying instead on a wide range of non-conventional forms. The inconsistency shown by individual SLL speakers (particularly those using three or more forms) appears potentially confusing for

hearers, who could misinterpret such NPs as connecting to other anaphoric chains.

5.4.3 Zero

Target-like use of the zero form in English is not only constrained by the accessibility of its referent, but also by syntactic rules (Muñoz, 1995; Williams, 1988). In many contexts, therefore, English requires the use of a pronoun (or lexical RE) regardless of the accessibility of its referent. The use of a zero in such a context is often regarded as a grammatical error, irrespective of whether it results in ambiguity (Williams, 1988).

In the present study, the SLL participants generally appeared to use zeros in syntactically appropriate contexts (pragmatic appropriateness is discussed in Chapter 6). Nevertheless, eleven used one or more zeros in such ways that they represented syntactic errors, mainly in the position of syntactic object. Some of these may have resulted from verb frame errors, such as confusion between semantically similar transitive-intransitive pairs (e.g. say/tell). The overall frequency of zeros in object position was low (12 tokens), and appears to be an entirely SLL phenomena in these data. A further class of error that was largely confined to the SLL cohort was zero for non-reference, such as to indicate events, propositions, or for pleonastic uses (e.g. *and Ø [it] comes to lunchtime*). Although these forms constitute syntactic error in English, it is unclear whether they are communicatively problematic.

However, there were other erroneous zeros which do appear to result in problematic communication. For example, many of Rachel's uses of zero occurred in tandem with an omitted reporting verb, such as *say*. These appeared potentially confusing, as illustrated in Example 5.10:

Example 5.10: *Rachel and Renee*

T = 3.56 11	Charlie wants to protect her and Ø [<i>says</i>] 'she's not takes – is not stolen the bread, but I was the one . stolen the bread'
----------------	--

5.4.4 Summary and implications

Other than accessibility marking, three types of NP error have been identified as being particularly relevant to the discussion of miscommunication in Chapter 7. These are pronoun errors, errors in signalling generic entities, and the syntactically inappropriate use of zeros. Findings were presented illustrating the frequency of these errors in the narratives, and this will provide important contextual information for the examples of miscommunication discussed in Chapter 7.

5.5 Chapter summary and implications for the present study

In Section 5.1, findings were presented relating to the range of referents and number of referential acts in the narratives. It was argued that, overall, the L1 retellings were substantially more complex than the SLL retellings, with a greater range of referents, more acts of reference, and more introductions of Level I referents. An apparent avoidance strategy was identified in which a number of SLL participants introduced the least accessible hearer-known (Level I) referents as being hearer-new (i.e. non-referential introductions). It was argued that this represents a likely reduction and simplification of the speakers' overall communicative task of retelling the narrative, and that, overall, it reduces the processing effort required of the interlocutor. For these reasons, the L1 retellings appear to have greater potential for referent misidentification and ambiguity than the SLL narratives.

In Section 5.2, it was reported that the SLL participants, overall, used a substantially more restricted range of RE types than the L1 speakers, with some SLLs using a highly restricted range (as few as three, compared to an L1 median of ten types). This suggests that fine distinctions in accessibility were not signalled through RE selection in these retellings. From analysis of the L1 data, it was further suggested that a core set of REs could be identified for retelling the *Modern Times* narrative. Of the five SLL speakers who did not use each of the core forms, none used demonstrative pronouns or determiners. This and other

findings suggest that intermediate-accessibility markers may be the last of the major RE types to be functionally acquired for narrative recounts.

In Section 5.3 it was argued that, in some respects, the present framework for analysing accessibility marking (based on AT) may not account for a number of ways in which speakers signal accessibility above the level of the NP. In particular, it was suggested that accessibility marking may be distributed to other linguistic elements in the construction of referential speech acts (particularly in referent introductions). Consequently, care must be taken in labelling an RE under-explicit before considering the referential act in its entirety. Issues were also raised in relation to coding for embedded reference, and the status within AT of stressed REs.

Section 5.4 presented details of three types of RE error that are particularly relevant for the discussion of miscommunication in Chapter 7. These are errors relating to pronouns, generic entities, and zeros.

6 Accessibility marking: Presentation and analysis of findings

6.0 Introduction

As discussed in Chapter 2.5.2, Accessibility Theory (AT) proposes that, in order to refer felicitously, a speaker must select a RE which not only highlights relevant semantic details appropriate to the referent, but also appropriately signals the accessibility of its referent. This chapter reports findings relating to how the L1 and SLL participants encoded degrees of accessibility. This reveals aspects of the participants' pragmatic competence in referring, and is relevant to the analysis of triggers of miscommunication (Chapter 7).

As discussed in Chapter 4.10, largely due to methodological considerations, a distinction is maintained in this study between referent introductions and subsequent referent tracking. Specifically, in the absence of referents being physically present, it seems reasonable to conclude that an analysis of co-text provides grounds on which to estimate the speaker's judgment of accessibility (at least in structured tasks such the present one). This enables quantitative data to be presented in relation to the RE types that speakers used for different degrees of accessibility in referent tracking contexts. These data are presented in Section 6.1, where the focus is on establishing the extent to which the SLL participants felicitously used REs to encode degrees of cognitive accessibility. It should be noted that, for methodological reasons, the analysis in this section relates only to references to singular persons.

In Section 6.2, findings are presented relating to how speakers introduced Level I referents (both persons and objects). As discussed in Chapter 4.10, no numerical estimate of referent accessibility in these introductions is attempted, but the introductions of specific referents are compared across retellings (e.g. introductions of Charlie in all narratives). Selected examples are presented to illustrate apparent trends in the data.

6.1 Referent tracking

As discussed in Chapter 3, a large number of studies have reported that reference by intermediate and advanced SLLs tends to be characterized by over-explicitness. However, none of the studies that were reviewed had based their conclusions on a close examination of referent accessibility. Rather, conclusions were based on correlations between REs and *referential functions* (e.g. the distinction between referent introduction, referent maintenance, and referent re-introduction). The (reasonable) assumption is that these functions correspond to patterns in RE selection. However, as discussed in Chapter 2, much more accurate predictions of RE selection are available when considering the sum total of multiple factors (Ariel, 1999), and substantially greater detail can be identified when distinguishing multiple gradations in accessibility.

For this reason, this section seeks to explore, within an AT framework, form-function relations between referent accessibility and RE selection in the SLL data, and how this differs from that in the L1 data. As detailed in Chapter 4.10, accessibility is analysed through a system adapted from Toole (1996). While there are limitations in this system, the accessibility ratings do appear to largely account for the L1 data in line with the general predictions of AT (e.g. that pronouns are reserved for referents with the highest accessibility). As such, the accessibility ratings appear to provide an appropriate benchmark for the SLL data, and thus represent a set of objective criteria under which RE use may be judged felicitous, over-explicit, or under-explicit.

6.1.1 Data and issues of analysis

As discussed in Chapter 4.10, the development of the coding system posed a number of challenges, and to address these, the analysis was restricted to singular human referents in tracking contexts. When there was doubt over how to analyse a reference (e.g. doubt over the identity of the referent or the NP type), it was excluded from the analysis. The following analyses relate to 1078 instances of referent tracking by the SLL participants, and 803 by the L1 speakers. There were

no bare demonstratives (*this; that; these; those*) or demonstrative + modifier combinations (e.g. *that other guy*) in either the relevant L1 or SLL data.

6.1.2 Referent accessibility in tracking contexts

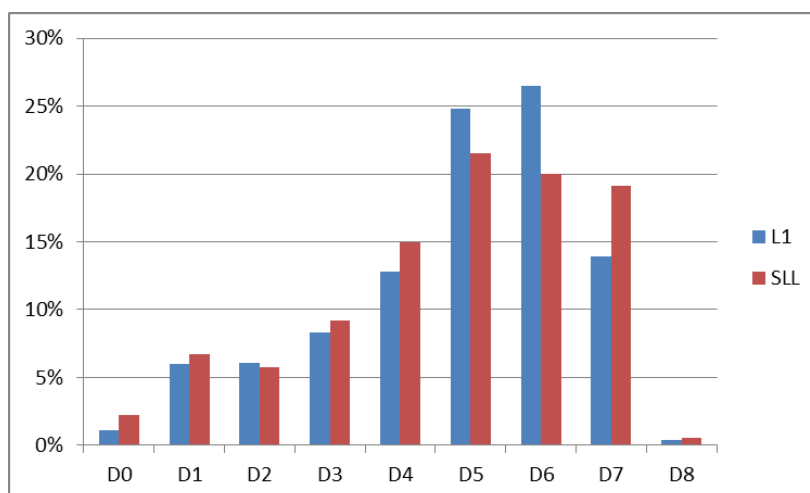
This subsection presents findings for the overall accessibility of entities in acts of reference. As discussed in Chapter 4, nine degrees of accessibility were distinguished, with D8 being the highest and D0 being the lowest. Very few references were coded D8, with this degree requiring an already highly accessible entity to be referred to twice in one clause. Similarly, few references were coded as D0 and D1, with the former requiring the immediate antecedent to occur in a previous episode, with at least four intervening clauses, and with competition provided by at least one other character of the same gender. In the context of this narrative, such a rating could only occur in a very small number of references per retelling, and mostly in relation to Charlie. The number of references at each accessibility degree is presented in Table 6.1:

Table 6.1: Number of references at each accessibility degree

	D0	D1	D2	D3	D4	D5	D6	D7	D8	Total
L1	9	48	49	67	103	199	213	112	3	803
SLL	24	72	62	99	161	232	216	206	6	1078

In both the L1 and SLL narratives, the majority of references were to entities coded between accessibility D4 and D7. Figure 6.1 following displays the distribution of L1 and SLL references by accessibility degree.

Figure 6.1: Percentage of references at each accessibility degree



Legend

Horizontal axis: Accessibility Degree

Vertical axis: Percentage of references overall

The main differences between these data are at D7 and D6. Compared to the L1 narratives, the SLL narratives included more references to entities with the highest degrees of accessibility (D7 and D8). Because D7 nearly always requires both a high degree of saliency (recent mentions), retention of the previous syntactic subject, and a lack of competition, this could suggest that the SLL speakers tended to focus on the two main characters more than the L1 speakers. Indeed, this appears to be the case, as reported in Appendix 5.2.2.

The L1 narratives included a higher proportion of references to entities with accessibility D6 than did the SLL narratives, and also a higher proportion of references at D5. This was presumably related to the prevalence of SLL references at D7, and may result from the general tendency for the L1 narratives to contain a greater range of referents (and, therefore, competition).

Figure 6.2 presents the same data but highlights a contrast in how references were distributed in relation to the range of accessibility. References by the L1s were more concentrated at Degrees 6 and 5 than the SLL references. Also notable is that the number of references were highest at Degree 6 in the L1 data and at Degree 5 in the SLL data.

Figure 6.2: Accessibility of entities in L1 and SLL data



Figure 6.3 highlights the overall proportions of the most frequent accessibility degrees in acts of reference.

Figure 6.3: Proportions of referents by accessibility degree

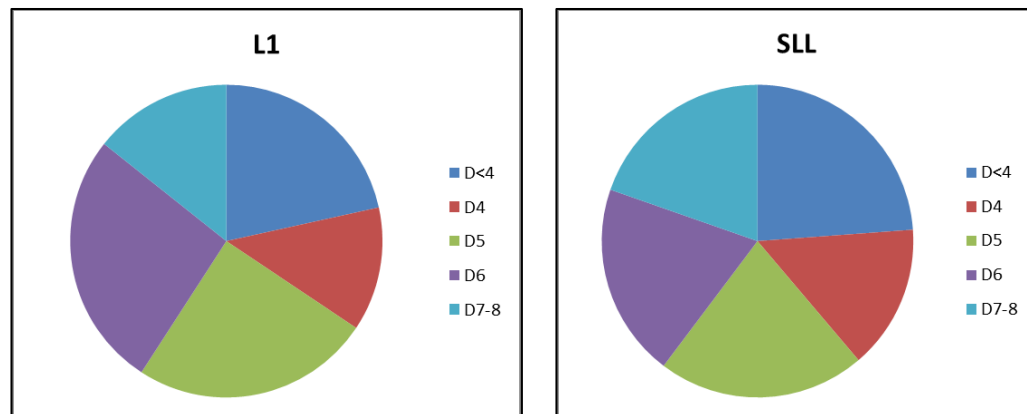


Figure 6.3 suggests that the L1 and SLL retellings were broadly similar in terms of the accessibility of the entities referred to. The most notable difference is that substantially more L1 (51.3%) than SLL references (41.6%) were made to referents with accessibility Degrees 5 and 6. The SLL participants made more references than the L1 speakers to entities with accessibility Degrees 0 to 3 (38.8% compared to 34.4%).

In summary, the findings in this subsection indicate that there were some differences between the L1 and SLL retellings in terms of the accessibility of the entities

referred to. These differences could result from, for example, differences in narrative perspective and/or topic continuity, the length of narratives, or the number of competing referents. These findings offer a partial explanation for the less frequent SLL use of pronouns (reported in Chapter 5.2.3), and provides some support for the caution advised in Chapter 3 in relation to equating infrequent SLL pronoun use with over-explicitness. Nevertheless, these differences in referent accessibility in the L1 and SLL retellings appears relatively slight in comparison to the rather striking differences in RE selection reported in Chapter 5.2.3, in which the L1 participants used a much higher proportion of high-accessibility markers (61.6%) than the SLLs (47.1%). In the following subsections, form-function relations between accessibility degrees and RE types are compared in the L1 and SLL retellings.

6.1.3 General patterns in L1 and SLL accessibility marking

This subsection provides a broad overview of general patterns of accessibility marking in the data. Specific details of each degree of accessibility are then presented in the following subsection. As such, these subsections address Research Questions 1.3 and 1.4:

Q1.2 To what extent is advanced SLL referent tracking characterized by under-explicitness?

Q1.3 Is the characterization of SLL over-explicitness in referent tracking supported by an analysis that directly assesses the accessibility of the referent?

This section also provides evidence for judging the felicity of accessibility marking in individual acts of reference, relevant to the analysis of miscommunication in Chapter 7.

Figure 6.4 presents a comparison of how L1 and SLL participants used markers of high accessibility (\emptyset , pronouns, stressed pronouns); Figure 6.5 compares the use

of low-accessibility markers (names, definite descriptions, and non-conventional forms). These data do not include bare nouns, as these are ambiguous in relation to the marking of accessibility.

Figure 6.4: High-accessibility markers as a percentage of all REs

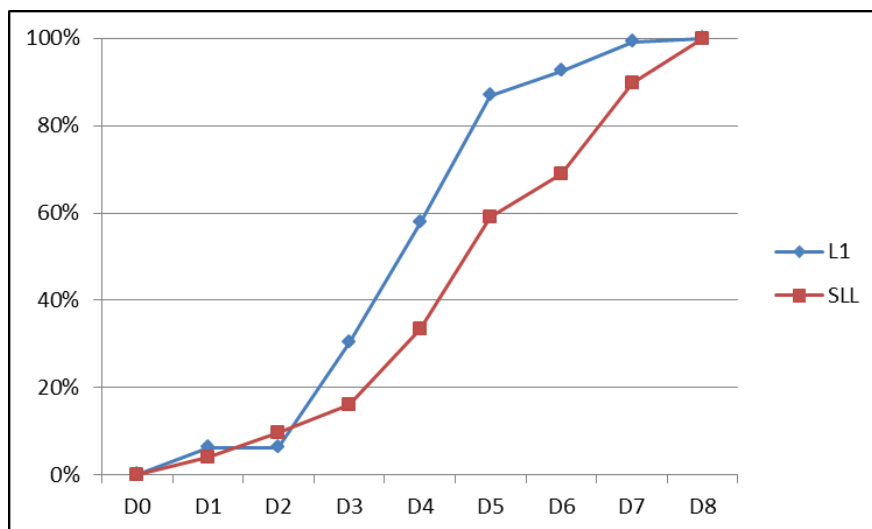
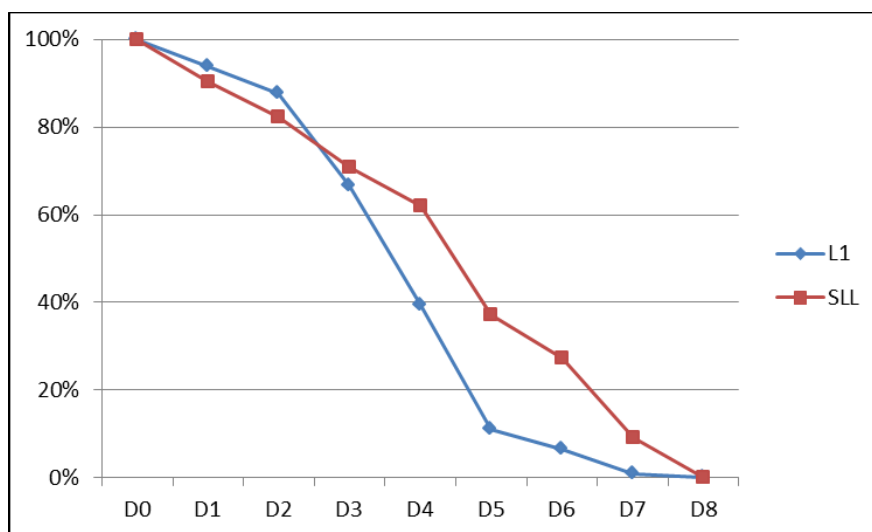


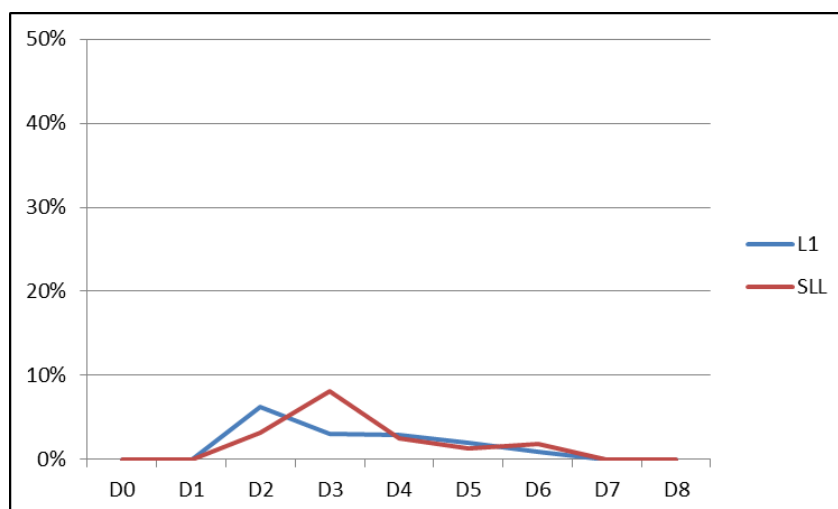
Figure 6.5: Low-accessibility markers as a percentage of all REs



Overall, these data appear to support the claim that SLL reference tends to be over-explicit. Figure 6.4 shows that the L1 speakers used more high-accessibility markers for referents at accessibility Degrees 3 to 7; Figure 6.5 reveals that the SLL participants used more low-accessibility markers for accessibility Degrees 4 to 7. As so few intermediate-accessibility markers were used in these data, Figure 6.4 is practically the inverse of Figure 6.5. The use of intermediate-accessibility markers is presented in Figure 6.6, revealing that these forms were most common

at Degree 3 in the SLL data and Degree 2 in the L1 data.

Figure 6.6: Intermediate-accessibility markers as a percentage of all REs



Of most interest in these findings are the details that emerge from analysing acts of reference in terms of nine degrees of accessibility. The present analysis appears to reveal details of SLL reference not previously reported in the literature. In particular, the evidence suggests that these SLLs were more target-like when referring to the most accessible referents (Degrees 8 and 7) and the least accessible referents (Degrees 2, 1 and 0); where they most diverged from target-like accessibility marking was at Degrees 6, 5, and 4, where they used substantially more low-accessibility markers than the L1 speakers. In short, it appears that a) SLL over-explicitness was frequent in these data, and b) such over-explicitness was more frequent in some accessibility contexts than others. This finding will be reviewed in Subsection 6.1.4 following. The relevance of these findings to theories of SLL pragmatic development in reference will be discussed in Chapter 9.

6.1.4 Encoding degrees of accessibility

In this subsection, specific details are provided about the RE types used to encode degrees of referent accessibility in these data. In order to clearly present the most salient findings, a number of infrequently used RE types have been subsumed into larger groupings in this subsection (greater detail is presented in the tables in

Appendix 6.1). In particular, in this subsection *first name, surname, full name, full-name + modifier*, and *the + name* are presented as a single category of names. Due to the infrequent use of long definite descriptions in referent tracking contexts, these are here combined with short definite descriptions to form the single category *definite descriptions*. Similarly, stressed pronouns are combined with unstressed pronouns, while demonstrative forms (except those with long descriptions) and nonconventional forms are presented as two single categories.

Accessibility Degree 8

Accessibility Degree 8 (D8) is the highest range of accessibility distinguished in the present coding system. As reported in Section 6.1.2, very few references at D8 were identified in these data, and all cases (both L1 and SLL) were encoded with a possessive determiner or reflexive pronoun. This may seem somewhat counter to the basic principles of Accessibility Theory (Ariel, 1990), which holds that zero is a marker of higher accessibility than pronouns. However, the nature of the scoring system means that, to be coded as accessibility D8, the reference must be the second of two references to that character within a single clause (the local binding domain). One explanation of these findings is that the principles of AT are overridden by the demands of English syntax, which always requires the surface realization of grammatical objects (certainly, this appears to reflect the literature reviewed by Williams, 1988, 1989). A similar rule could account for possessive determiners in such accessibility contexts. Alternatively, the results could reveal a flaw in the coding system. For example, as Ariel (2001, p. 36) suggests in relation to reflexives, it may be that because entities tend *not* to be referred to in both the subject and object position of a clause, the apparent accessibility advantage bestowed by distance does not increase accessibility. It may, in fact, serve to *suppress* the accessibility of the referent in the position of grammatical subject (Gernsbacher's, 1990, concepts of suppression and *enhancement* are presented in Appendix 2). This is illustrated in the following illustrative example:

1. Russell saw Steve coming and Ø glanced at his feet.

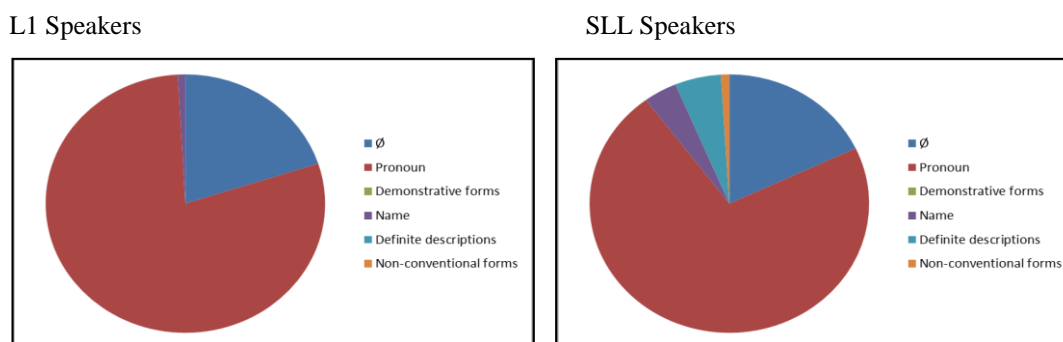
In this case, although Russell could plausibly have glanced at either Steve's feet or his own, there may be a tendency to interpret *his feet* as *Steve's feet*, and this may happen partly because Russell has already been referred to in the subject position (in this case a zero) of this clause.

There must be some doubt, therefore, as to whether referents coded as D8 are actually more accessible than those coded as D7. One possibility is that a subset of those referents coded D7 were actually the most accessible entities (and perhaps most felicitously encoded with zero), and that the D8 and remaining D7 referents fell within a slightly lower range of high-accessibility.

Accessibility Degree 7

For referents with accessibility D7, both L1 and SLL speakers mainly used pronouns in these data (79.1% and 69.9%), with the remaining REs mostly being zeros. The SLLs used some low-accessibility markers and bare nouns (9.2% and 1.0% respectively), which were almost entirely absent from the L1 retellings (0.9% and 0% respectively).

Figure 6.7: REs for Accessibility Degree 7

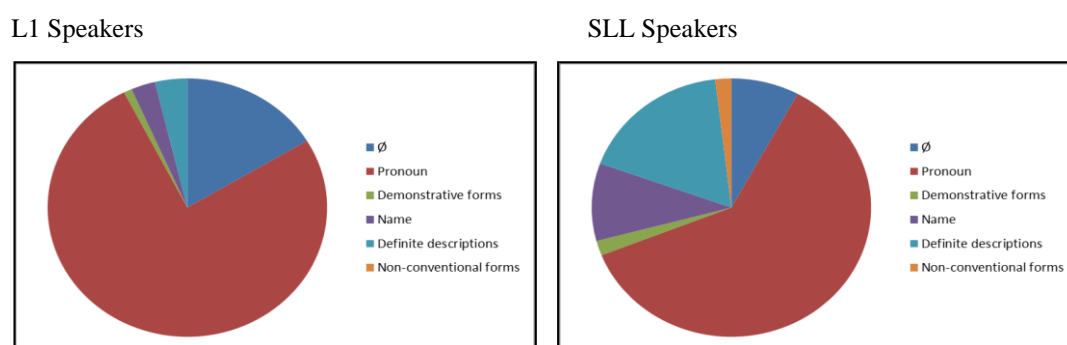


The SLL use of zeros (18.0%) appears target-like at this accessibility degree (20.1% in the L1 data).

Accessibility Degree 6

At D6, substantial divergences become apparent in the L1 and SLL data. For the L1 participants, as at D7, RE selection mainly involved pronouns (76%) and zeros (16%), with only a slight decrease in the use of these forms from D7; for the SLLs, a substantial decrease occurred, with zeros falling from 18.0% at Degree 7 to 7.9% at Degree 6, and pronouns from 69.9% to 60.2%. Consequently, at D6, the SLLs used far more lexical REs (31.0%) than did the L1s (7.5%).

Figure 6.8: REs for Accessibility Degree 6

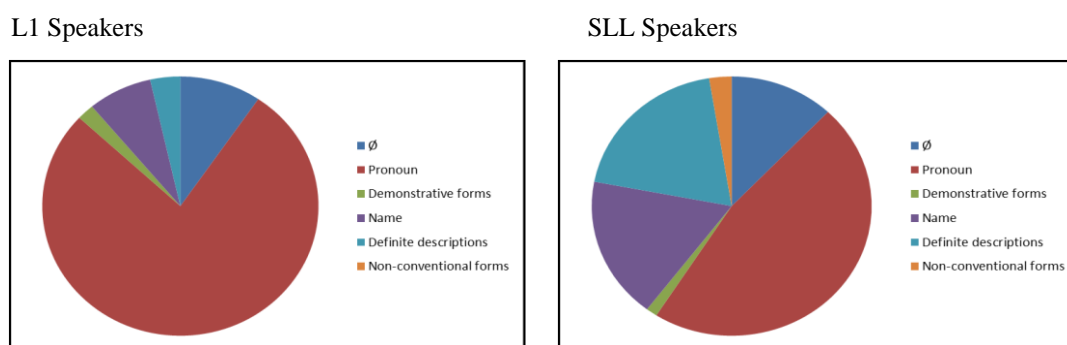


In short, at D6 there appears to be evidence of over-explicitness in the SLL data and possible avoidance of zeros.

Accessibility Degree 5

At D5, although most referring expressions were high-accessibility markers, the SLL data diverged greatly from the L1 data.

Figure 6.9: REs for Accessibility Degree 5



Pronouns accounted for 75.6% of L1 references, but fewer than half the SLL references (44.8%). Unexpectedly, the SLLs used more zeros at D5 (12.1%) than at D6 (7.9%), and this was greater than L1 use (9.5%). A much greater proportion of SLL references (19.4%) than L1 references (3.5%) involved definite descriptions, suggesting that, in these data, SLL over-explicitness was frequent at D5.

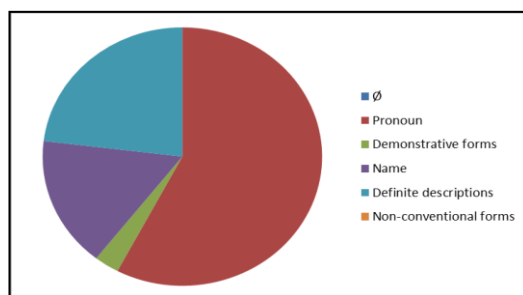
Accessibility Degree 4

The junction between codes D4 and D5 appears to correspond loosely to an important shift in the L1 speakers' referring behaviour. Firstly, they used far fewer pronouns at D4 (55.3%, compared to between 75.6% and 79.1% of references at all higher degrees). Secondly, they were not found to use zeros at D4 (zeros account for 9.5% of references at D5).

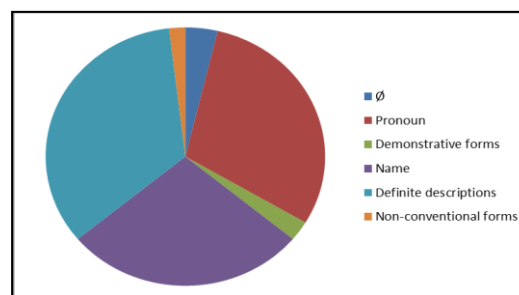
In the SLL retellings, pronoun use also dropped considerably from D5 to D4, and, at 28.6%, pronoun use was approximately half that of the L1 speakers, which again suggests over-explicitness. Zeros accounted for 3.7% of these data, suggesting occasional under-explicitness.

Figure 6.10: REs for Accessibility Degree 4

L1 Speakers



SLL Speakers



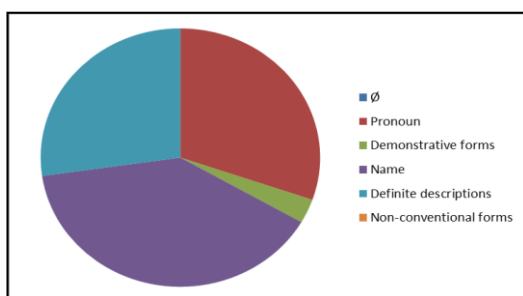
Accessibility Degree 3

At D3, low-accessibility markers (definite descriptions and names) dominated both the L1 and SLL data; nevertheless, pronouns remained relatively frequent in

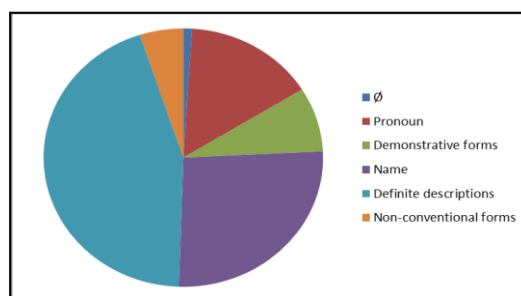
the L1 retellings (31.3%) but substantially less so (14.1%) in the SLL retellings.

Figure 6.11: REs for Accessibility Degree 3

L1 Speakers



SLL Speakers

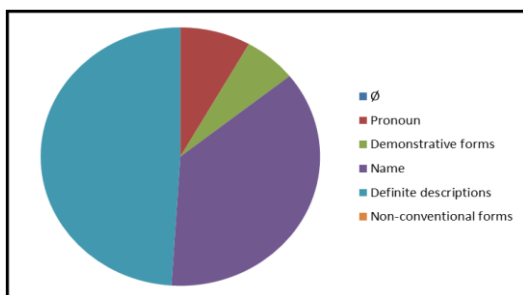


Accessibility Degrees 2, 1, and 0

At D2 and below, there were relatively few tokens, so greater caution must be taken in interpreting the data. At each of these accessibility contexts, the proportion of RE types in the SLL data appears remarkably target-like. Like the L1 retellings, there were no zeros and few pronouns; demonstrative forms were confined to accessibility context D2.

Figure 6.12: REs for Accessibility Degree 2

L1 Speakers



SLL Speakers

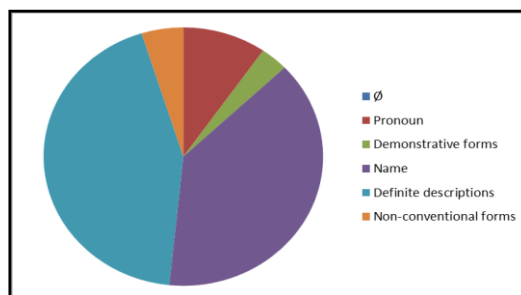
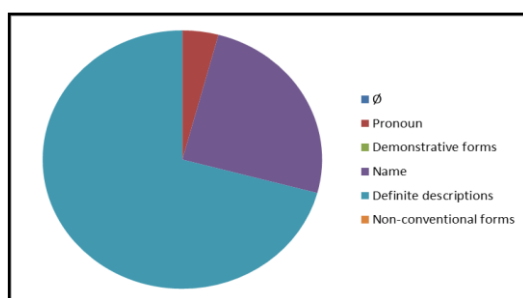


Figure 6.13: REs for Accessibility Degree 1

L1 Speakers



SLL Speakers

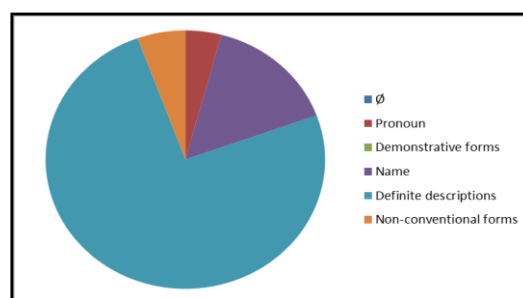
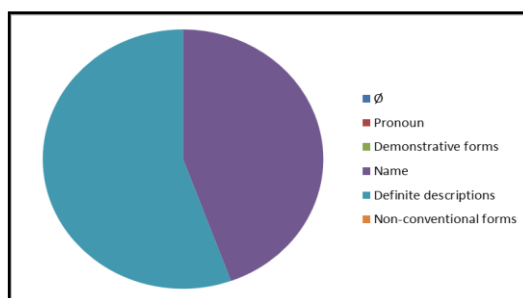
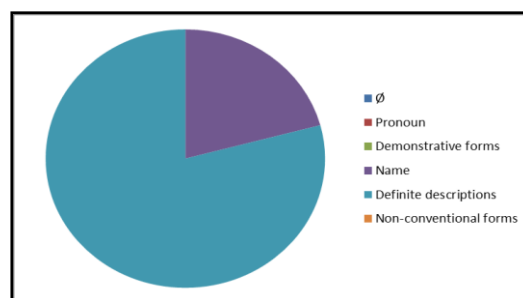


Figure 6.14: REs for Accessibility Degree 0

L1 Speakers



SLL Speakers



Although the presence in these data of pronouns at D2 and D1 may seem anomalous, the actual number of tokens was very low (in the L1 data three at D2 and two at D1), raising the possibility that some may be infelicitous. This suggestion is supported by the analysis in Chapter 7 in which at least two of these were identified as resulting in miscommunication.

Summary

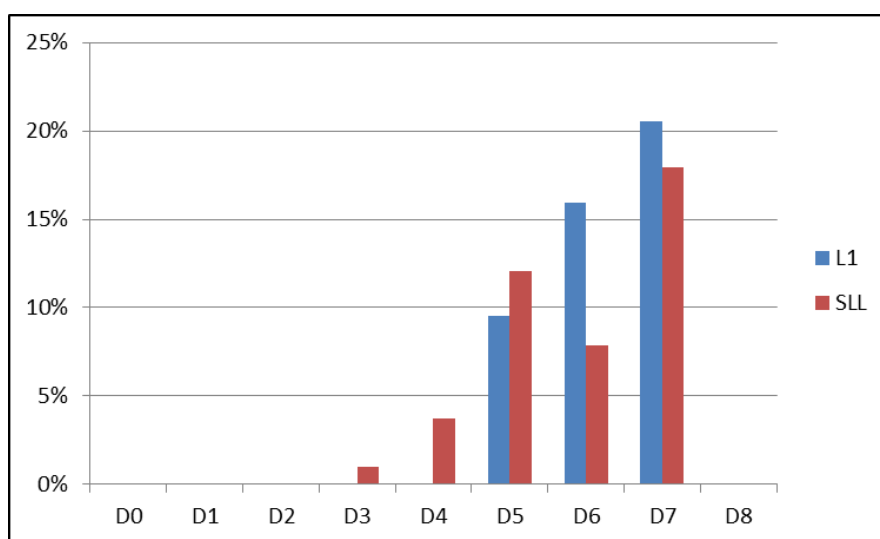
In summary, SLL accessibility marking appeared most target-like at either end of the accessibility spectrum, and least target-like around accessibility Degrees 6, 5, 4, and 3. This finding may indicate that over-explicit SLL references are most prevalent within a particular range of accessibility, and are less evident for referents with very high accessibility (D7 and D8) and for those with lower degrees of accessibility (D2 and below). The implications of this will be discussed in Chapter 9. There also appears to be some evidence in these data of both L1 and SLL participants occasionally using REs that appear under-explicit. This will be discussed in Subsection 6.1.5.

6.1.5 Under-explicit references

In this subsection, evidence is reviewed in relation to Research Question 1.2, which asked to what extent the SLL narratives could be characterized as being systematically under-explicit.

In relation to the use of zeros, there does appear to be evidence of SLL under-explicitness. The distribution of zeros is presented in Figure 6.15, with a small number of apparently infelicitous zeros found at D4 and D3:

Figure 6.15: Zeros as a proportion of all REs



The seven SLL uses of zeros at Degree 4 and 3 were made by six different speakers. However, the SR interviews and a qualitative analysis of these references suggest that none of these under-explicit zeros were likely to have been communicatively problematic (except where other elements were also omitted, as discussed in 5.4.3). So although these SLL speakers were occasionally found to use zeros in non-target-like contexts, these tended not to occur when ambiguity was likely to arise.

In the use of pronouns, a small number of references in both the L1 and SLL retellings appeared to be under-explicit. In the L1 data, five pronouns were used at D1 or D2, representing 6.1% of all references in this accessibility context (1.0% of all pronouns used). In the SLL data, there were nine pronouns at D2 and D1, representing 6.7% of all references in these contexts (and 2.0% of all pronouns

used). Aside from the clear preference for lexical REs in these contexts, the conclusion that such pronoun use is infelicitous is supported by the analysis of miscommunication reported in Chapter 7.6.1, with at least two of the three L1 uses of pronouns at D2 resulting in miscommunication. No L1 or SLL speakers used pronouns to refer to entities with the least accessibility (D0).

To summarize this subsection, firstly, under-explicit zeros occurred in some SLL retellings but were relatively infrequent. Secondly, under-explicit pronouns occurred with similar frequency in the SLL and L1 retellings. Their use likely represents isolated performance variables rather than a feature of SLL reference. In short, there is limited evidence to suggest that these SLL speakers were systematically under-explicit.

6.1.6 Over-explicit references

Research Question 1.4 asked whether or not widespread claims of SLL over-explicitness in the use of REs can be supported by an analysis of referent accessibility. The evidence presented in Subsection 6.1.4 appears to support those claims, although it was also noted that references to the most accessible referents (Degree 7 or 8) were seldom over-explicit. Specifically, the SLLs were found to use substantially fewer pronouns at accessibility D7 to D3 and substantially fewer zeros at D6.

These findings are also relevant to Research Question 1.5, which relates to possible explanations for why over-explicitness appears to characterize much SLL reference. Four theories were discussed in Chapter 3: hyper-clarity, pronoun and zero avoidance, difficulties in the on-line planning of reference, and AT-based accounts of learning form-function relations in the target language. Much of the discussion of this question (Chapter 9.1) will relate to the analysis of accessibility in SLL references; this is supported by further relevant findings reported in the remainder of this subsection.

Evidence of pronoun avoidance is found particularly in the retelling by Kane. Of all the retellings, Kane made the greatest number of pronoun errors (11 instances,

22% of all pronouns used). Some were self-corrected, some remained uncorrected, and two corrections and one clarification were initiated by the hearer. As the retelling progressed, Kane more frequently used names and descriptions in the types of accessibility contexts where he had previously used pronouns. Analysis suggests that this change in Kane's referring behaviour followed the hearer-initiated correction in Example 6.1:

Example 6.1: *Kane and Raquel*

T = 5.23	R – so where is Chapman?, he's just . walking [on the street?]
7-9	K – Ø [w- w- walking] on the street, ah when when the beautiful lady . mm, . oh, he – she is very . ah hangry, .
	R – hungry?
	K – uh uh HUNGry, [oh] hungry, he wa- he was very hungry, and er .
	R – SHE, or HE?
	K – she sh- sh- she, er . mm . he he he just walking .

By bringing attention to the pronoun error, Raquel (an experienced ESL teacher) both interrupted the flow of discourse and explicitly prompted Kane to clarify his meaning. Both of these outcomes are dis-preferred in L1-L1 conversation (Auer, 1984; Schegloff, Jefferson, & Sacks, 1977), and represent a face threat to Kane (Tzanne, 2000). Prior to this exchange, Kane had felicitously used pronouns and zeros for all six references to persons with accessibility D5 or more; after the repair, 40% (14 of 35) of such references were over-explicit (encoded with lexical REs and names). Similar results are found for references with accessibility D4. Some examples of pronoun avoidance from this retelling are presented in Example 6.2:

Example 6.2: *Kane and Raquel*

T = 8.43	the old lady ah didn't tell the worker about . er . who- . er stolen the bread [yeh] and after this time, [yeh] <u>old lady</u> told the worker about this [yeh] uh, and . and
15b	<u>the worker</u> just run away,

Further evidence for SLL over-explicitness as an avoidance strategy is also found in the use of some short definite descriptions in place of names. Although, prior to the task, the researcher checked that participants could identify Chaplin, there was no check as to whether participants could pronounce *Charlie* or *Chaplin*, and it appears that uncertainty about pronunciation sometimes prompted this form of over-explicitness. For example, in one interaction (Aanna and Maddy), the SLL

speaker prompted the hearer to supply Chaplin's name on three occasions before attempting the name herself; the first of these is presented in Example 6.3.

Example 6.3: *Aanna and Maddy*

T = 0.45 1-4	A – Ah at first it works very well . and . – ah actually the- that guy? M – Charlie Chapman
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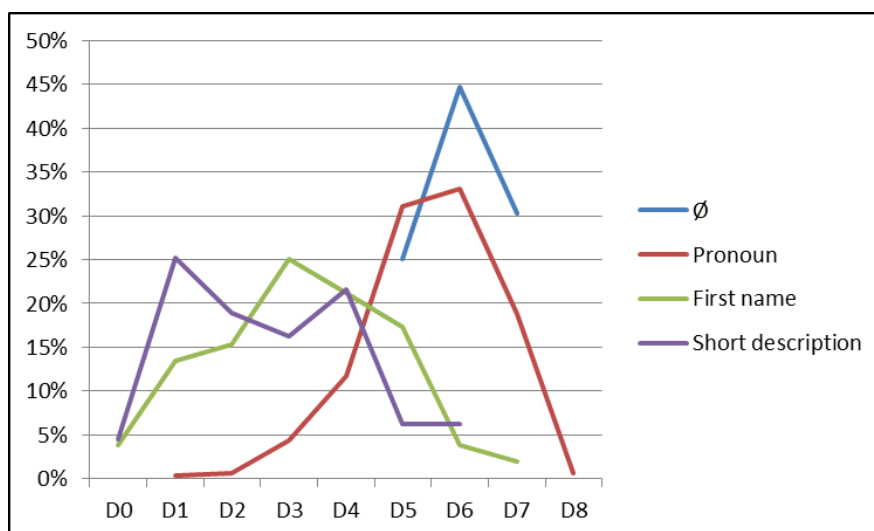
In summary, the analysis confirms that the SLL speakers tended to use over-explicit REs much more frequently than the L1 speakers, but also finds that such REs were seldom used for referents with the highest degrees of accessibility. In some cases, there is evidence that over-explicitness was a strategy to avoid linguistic errors. The implications for theories of emerging referential competence are discussed in Chapter 9.

6.1.7 Testing the predictions of AT

In this section, the basic claims of AT (Ariel, 1990, 2001) are reviewed in relation to the L1 data. As discussed in Chapter 2.5.2, AT holds that each NP type specializes for marking a different (non-mutually exclusive) range of accessibility. The present findings appear to offer some support for this.

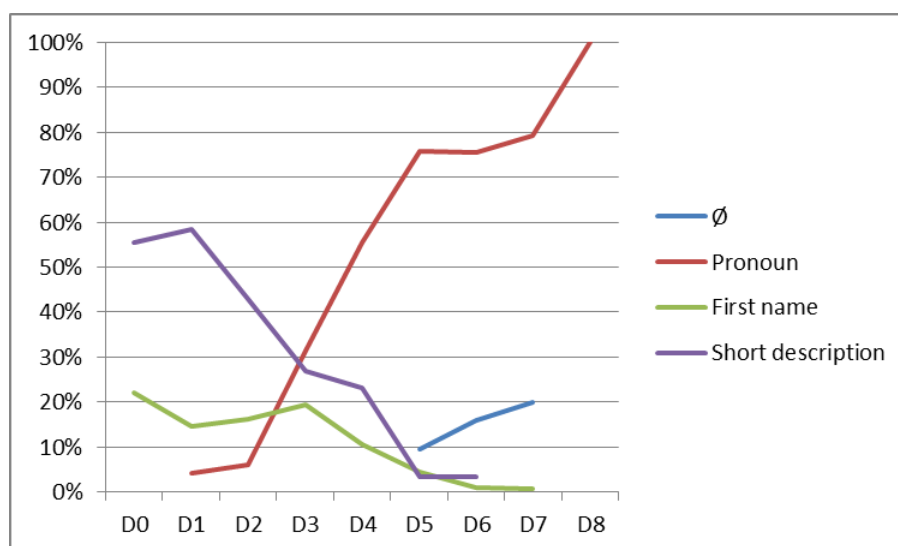
Figure 6.16 presents findings for the distribution of the four most frequently used RE types (those used more than 50 times) in the L1 retellings.

Figure 6.16: Distribution of the four RE types most frequently used by the L1 participants



Because there were substantially more references at D4 and above than at the lower degrees, Figure 6.16 may give the impression that, for example, short descriptions are more felicitous at D4 than at D0. However, this is not the case, as Figure 6.17 illustrates by presenting the findings for how each accessibility degree was encoded in terms of these RE types.

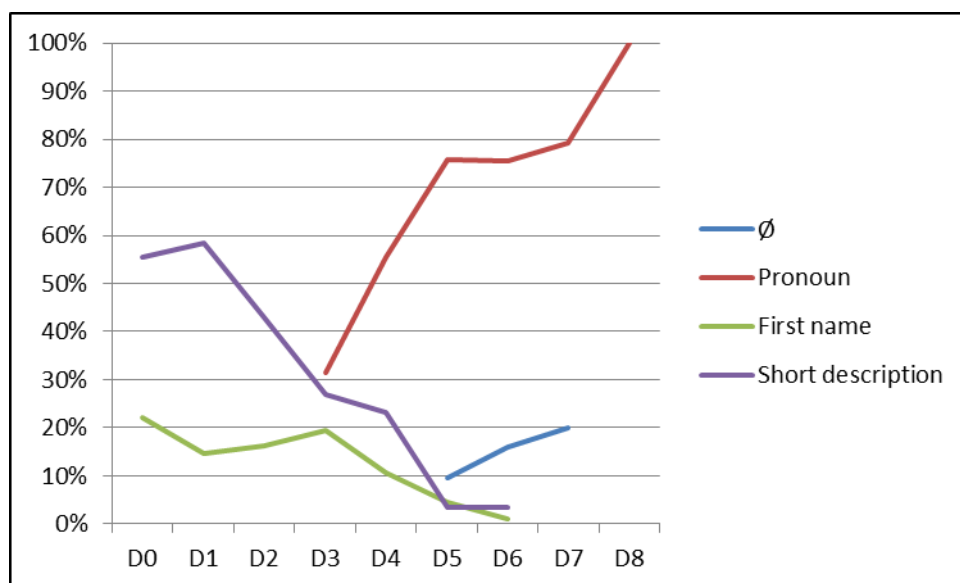
Figure 6.17: Encoding of the accessibility degrees in references by the L1 participants



Although the data presented in Figure 6.16 and Figure 6.17 appear to support the idea of a preferred accessibility range for some REs (most notably for zeros), there was substantial (perhaps greater than expected) overlap between ranges. There are a number of plausible explanations for this (besides, of course, the limitations of the dataset and the accessibility coding system). Most notably, because RE selection is based on speakers' best estimates of accessibility, infelicitous REs are to be expected. Although a great deal of caution must be taken when omitting data from an analysis, one can aim for a reasonable balance between a) eliminating 'uncomfortable' examples which challenge the method of analysis, and b) excluding deviant/infelicitous uses of language that arise in performance data, which may distort the overall picture relating to issues of competence. The most obvious candidates for omission are the one first name used at D7, and the five pronouns used at D1 and D2 which I have argued are infelicitous (Section 6.1.5). These six omissions account for just 0.7% of all the references, and it seems not unreasonable to argue that these (and perhaps other

REs) could be omitted for this purpose. Figure 6.18 re-presents the findings with these six REs omitted:

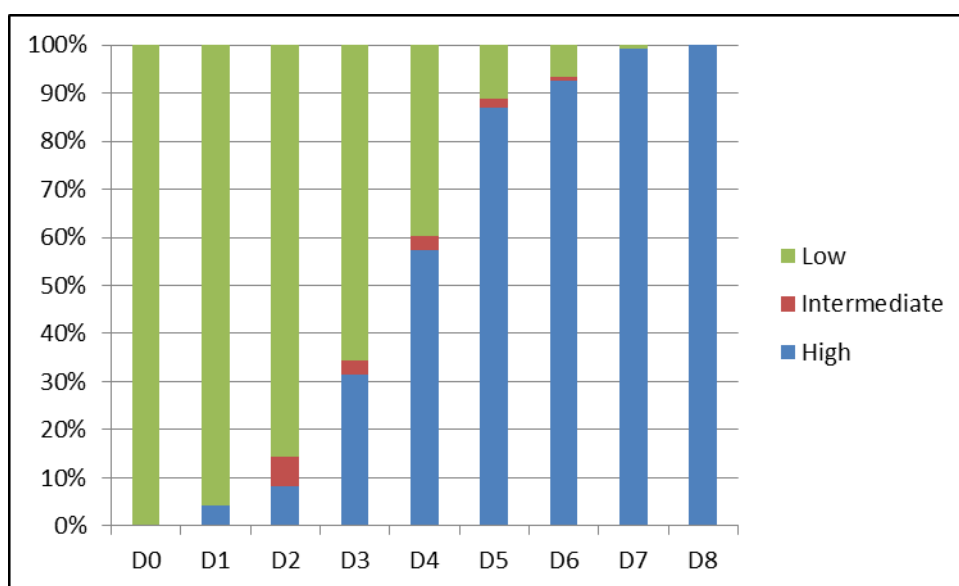
Figure 6.18: Percentage of felicitous REs at each accessibility degree in the L1 retellings



The findings presented in Figure 6.18 do appear to suggest that different RE types specialize for specific, partially overlapping ranges of accessibility in these data. Overall, therefore, the results appear to provide some support for the general predictions of AT. However, the results fall short of confirming the more specific prediction that each RE type is associated with a different range of accessibility, as the ranges encoded by first names and short descriptions appear very similar. This is perhaps inevitable considering that (a) a comprehensive list of factors influencing accessibility is very far from settled; (b) of the factors identified, the weighting given in the present coding system is only an approximation; (c) as discussed in Appendix 2.5.8, as well as audience-directed accessibility marking, there appear to be speaker-internal factors affecting RE selection (Arnold, 2008, 2010); and (d) the analyst's assessments of accessibility are likely to differ sometimes from the speakers' online and addressee-directed assessments.

Considering the limitations of the coding system, it may be useful to identify broader distribution patterns in the data. For this purpose, Figure 6.19 presents the distribution of the broader categories of high-, intermediate- and low-accessibility markers:

Figure 6.19: Distribution of accessibility markers in the L1 retellings



Some clear patterns emerge in these data in terms of the form-function relationship between these groupings of accessibility markers and accessibility degrees. Clearly, increasing accessibility corresponds to more frequent use of high-accessibility markers and less frequent use of low-accessibility markers, while intermediate-accessibility markers were only used between D2 and D6.

Furthermore, three clear divisions can be identified in Figure 6.19, with high-accessibility markers appearing to be very strongly preferred by the L1 participants from D5 to D8, and low-accessibility markers strongly preferred from D0 to D2. In the mid-range from D3 to D4, both high- and low-accessibility markers were frequently used. As such, D3 and D4 appear to represent the predicted locus of overlap between accessibility markers. The following correspondences can be identified as strong tendencies in these data:

Degrees 8-5:	Pronouns and zeros (no \emptyset at D8)
Degrees 4 and 3:	Pronouns, names, or definite descriptions
Degrees 2-0:	Names and definite descriptions

Although both high- and low-accessibility markers were felicitously used at D3 and D4, further analysis suggests that the L1 speakers did not treat these RE options as being functionally equivalent. Such evidence is available through the analysis of repaired accessibility-marking (Ariel, 2008; Ziv, 1991). For instance,

the highlighted reference in Example 6.4 related to accessibility context D3, which the speaker originally encoded with a pronoun before repairing it with a short definite description:

Example 6.4: *Shelley and Jacky*

T = 6.53	S – as she ₁ was walking away from the truck another lady ₂ saw her ₁ , [mhm] but she ₂ wa- she ₂ didn't say anything, like she ₂ wasn't too sure, but as <u>she was run-</u> as the <u>banana lady</u> ₁ , was running away from the truck she ₁ um ran into Charlie Chaplin
20	

Further refinement of the analytical tool may enable clearer patterns to emerge in form-function relations at Degrees 4 and 3.

6.1.8 Summary and implications

The findings presented in this section support the findings of previous studies that references by advanced SLLs are frequently over-explicit in referent tracking. The role of over-explicitness in triggering miscommunication will be explored in Chapter 7.

Of interest is that frequent over-explicitness appears to be characteristic only of some accessibility contexts in these data. Similar findings have not been reported in the literature reviewed, and may have implications for theories of developmental pragmatics in relation to reference. This issue will be discussed further in Chapter 9.

In contrast to the findings for over-explicitness, the data appear to confirm that systematic under-explicitness is not characteristic of reference by advanced SLL speakers, except occasionally in the use of zeros. This has implications for understanding SLL pragmatic development, suggesting that a principal such as ‘avoid ambiguity’ may guide learners when developing the form-function relationships proposed by Accessibility Theory.

6.2 Introducing Level I referents

This section presents an analysis of how L1 and SLL speakers introduced Level I (i.e. hearer-known) referents into the narrative, and relates particularly to Research Question 1.1:

Q1.1 To what extent do SLL referential introductions tend to be target-like?

Findings are reported for introductions of Charlie, the girl, the feeding machine, the boss, and the colleague. Of particular interest is the extent to which introductions were target-like in terms of accessibility marking.

As discussed in Chapter 4.10.3, a different method of analysis was required to assess referent accessibility in Level I introductions than in referent tracking. This involved a comparative analysis of how speakers introduced particular individuals. The key assumption underlying this was that, at least at the beginning of each retelling, each speaker could make very similar assumptions about referent accessibility from the perspective of their addressees. Similarly, it could be assumed that the common ground shared between interactants in relation to referents would be very similar in each dyad. The bases of these assumptions are:

- a. Before watching Part 1 of the film, all participants were able to identify Charlie Chaplin (as evidenced in the pre-film procedures) and were unable to identify any of the other actors or characters.
- b. All pairs of interactants had seen the same sections of the film, under similar circumstances, with an approximately eight-minute delay between the conclusion of Part 1 and the commencement of the retelling.

Nevertheless, analysis of referent introductions also requires some attention to the discourse context, as the description of locations and events may activate recall of referents. For example, because Charlie was working in a factory in Part 1, it seems likely that speakers who began their retelling by describing the factory may have been able to use higher accessibility markers to subsequently introduce Charlie

than those speakers who introduced him immediately. A discussion of issues in analysis, as well as tables of figures and examples, is presented in Appendix 6.

6.2.1 Introducing Charlie

As Charlie is the central character in the film, he was almost certainly the most accessible referent. Therefore, it could be predicted that higher accessibility markers would usually be used to introduce Charlie than other Level I characters. This was generally true in both the L1 and SLL narratives, with all L1 speakers and most SLL speakers using a higher accessibility marker to introduce Charlie than to introduce the girl (details are presented in Table 6.5, Appendix 6.3.2).

As with referent tracking, there is evidence to suggest that the SLL speakers tended to be over-explicit when introducing Charlie. For economy of space, these data are presented in Appendix 6, with three salient aspects of the findings discussed in the subsections that follow.

Use of pronouns

Four of the ten L1 speakers introduced Charlie with a pronoun, compared to one of the twenty SLL speakers (with the one SLL case actually resulting in miscommunication, as discussed in Chapter 7.5.1). Although it may seem counter-intuitive to introduce referents with pronouns, similar findings are reported elsewhere (e.g. Clancy, 1980; Smith, Jucker, & Müller, 2001; Smith et al., 2005) in relation to main characters or other discourse topics. In retelling *Modern Times*, such pronoun-introductions are argued to be felicitous because the narrative is structured in order to answer the implicit *quaestio* ‘what happened to Charlie?’ (Klein & Perdue, 1992; von Stutterheim & Klein, 1989), and so the high accessibility of Charlie is mutually assumed (Clancy, 1980, p. 178). It should be noted that, for the five speakers who used pronouns this way, this was unlikely to be an avoidance strategy, as each subsequently referred to Charlie by name.

Smith et al (2005) have argued that pronominal introductions may be facilitated by the speaker preparing the listener's expectations through a *pre-introduction* phase that establishes common ground (see Chapter 2). Similar stages of pre-introduction are found in the five examples in the present data, and an example is presented and discussed in Appendix 6.

The lack of SLL pronominal introductions is not necessarily indicative of SLL over-explicitness. In fact, such introductions may only be felicitous following a pre-introduction phase, and it is debateable whether *pre-introduction + pronoun* is necessarily less explicit than an introductory act consisting simply of *first name*. Indeed, analysis reveals that the L1 speakers tended to present substantially more explicit contextual details prior to introducing Charlie than did the SLL speakers. For instance, eight of the ten L1 speakers but just seven of the 20 SLLs explicitly introduced the location associated with Charlie and/or introduced 'the workers'. Therefore, it seems likely that most SLL narratives were structured in such a way that the formal introduction of Charlie required greater provision of semantic content in the RE.

Use of low-accessibility markers

Six of the L1 speakers and eighteen of the SLL speakers introduced Charlie with a name or definite description. When analysed within an AT framework, the SLLs used lower overall markers of accessibility than the L1s. Such evidence rests largely on the type of name used, with the L1 speakers tending to use *first name* and the SLLs more frequently using *last name* or *full name*, which are proposed to conventionally signal lower degrees of accessibility (Ariel, 1990, 2001; also Mulkern, 1996). However, the use of names is heavily culture-dependent (Enfield, 2007; Ervin-Tripp, 1972), and so these data may have relatively little to do with the participants' respective assessments of referent accessibility, and more to do with cultural norms surrounding the use of names, and the social relationships holding between the interactants and the referent (Murphy, 1988).

Use of other types of accessibility marking

In Chapter 5, it was argued that the hierarchy of RE types does not capture all of the distinctions in accessibility marked by speakers. For example, it was suggested that the use of a try-marker may apply a further layer of accessibility marking in oral discourse, indicating lower accessibility than is conventionally encoded by the RE alone. In these data, the SLL speakers more frequently used such accessibility-lowering features to introduce Charlie, in particular, by using try-markers and by overtly appealing to common ground. These techniques were identified in seven SLL introductions of Charlie but no L1 introductions.

Summary and implications

In introducing Charlie (the most accessible referent), overall, the SLL participants used markers of lower accessibility than did the L1 speakers. However, pre-introduction phases were found to be much more frequent in the L1 data. As such, rather than necessarily indicating over-explicitness, some SLL uses of low-accessibility markers may have been contextually appropriate within a non-target-like retelling.

6.2.2 Introducing the girl

All of the L1 participants and 17 of the SLL participants introduced the girl referentially (i.e. as hearer-known, discourse-new). Unless otherwise indicated, the following discussion relates only to the referential introductions of this character.

While Chaplin is a highly prominent character throughout the film, the girl is only briefly introduced at the beginning of Part 1, and is not sighted again until Part 2. So although she is central to Part 2, the initial act of introducing the girl may require the use of substantially lower accessibility markers than introductions of Charlie. Indeed, analysis reveals that all L1 speakers and 13 of the SLL speakers

did use lower accessibility markers for the girl. Some hearers also reported varying degrees of difficulty in initially recalling her (discussed in Appendix 6.3.2).

Unlike references to Charlie, references to the girl must rely on descriptive content, as her character name is unknown, and none of the participants appeared familiar with the actress Paulette Goddard who played this role. This restricts the range of available REs, so while only three participants (all SLL speakers) introduced Charlie by description, such descriptions appear to be the only option available for introducing the girl. The only relevant description used in the film was an intertitle in Part 1 referring to her as *the gamin*, but this expression was not used by any participant in the speaker role. Effectively then, speakers had to propose their own definite description for this character.

Perhaps predictably, the range of REs used to introduce the girl was far greater than those used to introduce Charlie. These data are presented in Appendix 6.3.2. Two types of referential act involving more than a single RE were prominent in these data. Firstly, staged (or *episodic*) reference (discussed in Chapter 2.7), which appears to signal the lowest degrees of accessibility, was used by one L1 speaker and six of the SLLs. Secondly, the category *RE + event* emerged from the data as an important type of introduction, and was used by three L1 speakers and six SLLs. In such cases, a verb (and its arguments) helps to identify the referent. An example is illustrated in the following extract:

Example 6.5: *Lillian and Astrid*

7-11	L – and then we went to a, back to <u>the FIRST lady?</u> , . . you know <u>the lady in the first part?</u> , how she stole the bananas?.
------	---

As with introductions of Charlie, the SLLs tended to signal lower accessibility than the L1 speakers when introducing the girl.

Use of high and intermediate-accessibility markers

Only two introductions were attempted with high- or intermediate-accessibility

markers. One L1 speaker (Shaun) used the intermediate-accessibility marker ‘*that girl*’, while one SLL participant introduced the girl with a pronoun and try-marker, but subsequently repaired the RE; this is presented in Example 6.6:

Example 6.6: *Joel and Sebastian*

T = 3.04 7-10	The second story . was the – about <u>her?</u> , <u>about about about . woman.</u> . she was hungry, at the time, so she . decided to steal the bread,
------------------	--

Use of low-accessibility markers

All other L1 and SLL participants, then, used low-accessibility markers. Within this classification, overall, the analysis suggests that the SLLs tended to be more explicit than the L1s. For instance, six SLLs and just one L1 speaker used staged reference (the lowest form of accessibility marker identified in this study); twelve SLLs used one of the two lowest accessibility markers (staged reference; RE + event), compared to four of the L1 participants. Similarly, descriptions with post-modification were more frequently used by the SLLs (15 of the 17 referential introductions) than the L1s (six of the ten introductions). This latter finding is interesting as such modification may present a substantial linguistic challenge for second language learners (e.g. the use of defining relative clauses), and so might be presumed to be a candidate for avoidance rather than over-use in other contexts.

In extending the analysis to other proposed aspects of accessibility marking (as proposed in Chapter 5.3), there is further evidence that the SLLs were more explicit than the L1 speakers. Nearly all L1 and SLL speakers used appeals to common ground and/or try-markers, but more SLLs than L1 speakers used *both* of these strategies (87.5% compared to 60%).

Summary and implications

Overall, the findings suggest that the SLLs tended to use lower accessibility markers than the L1 participants to introduce the girl. They tended to (a) select

REs that were semantically ‘fuller’ and more syntactically complex, (b) make more episodic references, and (c) more frequently use both try-markers and explicit appeals to common ground in a single act of reference. In short, overall, the SLL introductions of the girl tended to appear over-explicit by L1 standards.

6.2.3 Introducing minor hearer-known characters

A number of minor hearer-known characters appear in Part 1 of *Modern Times*, including the boss, the scientist, the colleague, the relief man, and the secretary. Analysis reveals some salient differences between which minor Level I characters were introduced in the L1 and SLL retellings, and how these were achieved. These are exemplified in this subsection by focusing on introductions of Chaplin’s colleague and boss.

Chaplin’s colleague

As indicated in Chapter 5, SLL retellings tended to omit more minor characters, and over half of the SLLs introduced one or more minor characters as hearer-new. This is particularly true of Chaplin’s colleague, who was introduced by eight of the ten L1 speakers but only four of the twenty SLLs, with a further two SLLs introducing him as hearer-new.

In contrast to findings for the two central characters, the L1 speakers were substantially more explicit than the SLLs when introducing this character. Six of the eight L1s used long definite descriptions with post-modification, a try-marker, and either a direct appeal to common ground or description of a previous event. Such features are illustrated in the following examples:

Example 6.7: *Kath and Nikita*

T = 00.00 1-4	you know the other guy in the first scene, who – the kind of bigger guy [mmm] who was just . down the convey belt from him?,
------------------	--

Example 6.8: *Jeff and Patrick*

T = 0.39	J – they stop for lunch and the guy – the bigger guy that Charlie Chapman was [having problems with]
2	P – [yeah, # # #]
	J – yeah
	P – oh, or, the manager, was it?
	J – nah, the worker
	P – okay, yeah
	J – yeh, he . gets his soup,

In contrast, the five SLL introductions of this character were relatively vague. Two of these were rather simple descriptions (*his workmate* and *the other man*), and even the most explicit SLL introductions (e.g. *the man next him . the . tall and fat man?*) were substantially shorter and less informative than most of the L1 references.

In short, unlike in introductions of the major characters, the SLLs tended to use higher accessibility markers to introduce the colleague than did the L1 speakers. This suggests the SLLs tended to be under-explicit in these introductions.

Chaplin's boss

In some respects, there is an interesting contrast between the introductions of the colleague and the boss: sixteen SLLs overtly introduced the boss with a singular RE, compared to just four of the L1 participants. Five further L1 participants referred to the boss as part of a specific plural set (e.g. *all the flash boss people*) or through use of vague *they*.

As with introductions of the colleague, the four L1 participants who did use singular terms tended to use markers of lower accessibility than the SLLs. Two used long definite descriptions, and three of the four used try-markers and other strategies indicating low accessibility. In contrast, all of the SLLs used short definite descriptions, with the terms *the boss*, *the owner*, and *the factory owner* being used multiple times. These were substantially less explicit than the REs used by the L1 speakers, which included expressions such as “his boss, that manager dude” and the episodic reference in Example 6.9:

Example 6.9: *Kate and Nina*

T = 1.30	K – the . . . [[<i>clicking fingers as if trying to recall</i>]] the boss, . from the office?, the [guy in the grey suit?]
3 – 5	N – [yeh . yeh] K – he comes down

The remaining L1 speakers' use of antecedentless *they* (or other vague plural expressions) perhaps suggests that these participants did not prioritize identification of the referent. In addition, a number of the boss's actions in the narrative were (depending on interpretation) either attributed to the group through plural-*they*, or attributed to a vague individual with 'singular-*they*'. For example, in the retelling by Adele, events such as the boss selecting Charlie and the statement "it doesn't work" were attributed to *they*, as were actions and statements by the scientist and technician. It may be that such vagueness indicated that the identity of the referent was considered to be of minor relevance to comprehending the narrative.

It appears, therefore, that the L1 speakers tended to either prioritize successful reference resolution (and accordingly used markers of very low accessibility), or de-emphasize the importance of resolution (typically by using vague *they* or other plural term). In contrast, only one SLL speaker used a plural or collective term, with all others using singular short definite descriptions.

6.2.4 Introducing the machine

Due to its low accessibility, the feeding machine appeared to be the most challenging referent to introduce into a retelling. These introductions were typically the most linguistically complex act of reference in any retelling, and the one that was most frequently miscommunicated (as discussed in Chapter 7).

The machine appears only very briefly in Part 1, when the scientist and his assistants bring it to the office of the factory manager. At this stage, it is unclear to viewers what purpose the machine serves. As revealed during the stimulated recall interviews, references to the machine are further complicated by the presence in Part 1 of other, more prominent, items of factory machinery: the conveyor belt,

the surveillance and communication system, and a set of controls used to operate the production line. Consequently, successful, target-like introductions signalled particularly low accessibility and contained sufficient semantic detail to disambiguate this machine from other (hitherto more prominent) machinery.

Despite the prominent role of the feeding machine in Part 2, one SLL speaker (Becky) entirely omitted it, perhaps to avoid the associated linguistic complexities. Furthermore, as reported in Chapter 5.1.3, eight SLLs and two L1 participants introduced the machine as hearer-new, which substantially reduced the speakers' communicative challenge, as hearer-new introductions are typically achieved with rather simple indefinite NPs, (e.g. *a feeding machine* or *this new machine*).

To introduce the machine successfully as hearer-known, the L1 speakers used far more complex referential acts, in all cases disambiguating the machine from others through a description of its visual appearance, and/or evoking the context in which it initially appeared. This is illustrated in Example 6.10:

Example 6.10: *Shelley and Jacky*

T = 2.49	S – then um . do you remember how there was that shot of his boss . in . . an OFFice?, or something
6	J – yeah yeah [and then they brought that thing?] S – [and they had that machine?], well they brought that machine back out,

As this extract reveals, the formal introduction of the referent (*that machine*) was preceded by stages of pre-introduction which clarified the context in which it had previously been seen. This included an appeal to common ground (*do you remember how there was that shot*), identification of the machine's previous physical location (*in an office*), and references to one of the characters associated with it (*the boss*). These were presented with try-markers allowing space for confirmation or repair.

The features displayed in Example 6.10 were common to many of the L1 introductions of the machine. In Example 6.11, for instance, Vicky used some of the same strategies, including mention of where the machine had previously been seen (*the metal office*) and associated characters (*these guys up in the metal*

office). Unlike Example 6.10, Vicky also used particularly descriptive nouns and adjectives to describe the machine (*big; spaceship-looking, convexed, thing*).

Example 6.11: *Vicky and Francesca*

T = 0.07 1	well you know how they left it, where the urchin girl, like yoh street homeless girl, and then Charlie was at work and there's these guys up in the metal office and there's that big like spaceship-looking, convexed, thing – it's actually like a big dinner plate
---------------	---

In short then, the L1 speakers introduced the feeding machine in these data through a combination of several concurrent strategies. Overt appeals to common ground were particularly common (e.g. *that big machine we saw at the end of the first one?*).

In general, the SLLs' referential introductions of the machine typically involved similar strategies to those by the L1 speakers. However, some participants, rather than use several concurrent strategies as the L1 speakers did, relied instead on evoking just one or two entities associated with the feeding machine. For example, in Example 6.12, Albert appeals to common ground, but mentions only the boss in support of the machine, while in Example 6.13, Steffi appeals to common ground but provides no additional prompt to assist the hearer.

Example 6.12: *Albert and Marg*

T = 0.11 1	A – <u>yo- n- you remember thee: investor?, with the machine?</u> , [mhm] yeah, and he brought Ø with . um, brought that to thee workers?
---------------	---

Example 6.13: *Steffi and Otis*

T = 1.19	and <u>then before you leave, there is a big machine?, did you notice that?</u>
3-4	O – yep S – yeah that is the machine for um . . ah feeding people

Overall, then, the SLL introductions of the feeding machine appeared to involve fewer concurrent strategies for clarifying the identity of the referent. These appear under-explicit by L1 standards and tended to result in miscommunication.

Summary

The introduction of the feeding machine appears to present a substantial communicative challenge as the machine has particularly low accessibility, including competition from three more prominent machines in Part 1. It appears that ten SLLs and two L1 participants avoided this difficulty by introducing the machine as hearer-new (enabling use of a simple indefinite NP).

Introductions by the L1 participants were typically the most complex references in the data, usually involving overt appeals to common ground, and details of the context in which the machine had previously been seen (e.g. physical location, associated characters, temporal location within the film). In general, although the SLL speakers, as a whole, appeared to use similar strategies, individuals tended to use fewer strategies and often relied on providing just one contextual detail.

6.2.5 Summary and implications

Three key findings emerge from this section. Firstly, while much of the previous literature has assumed that over-explicit SLL reference is specific to referent tracking contexts, there is evidence in the present data to suggest that it also characterizes referent introductions, at least for referents of central narrative importance (i.e. the girl and Charlie). However, evidence was also presented showing that, compared to the SLLs, the L1 speakers more frequently began their narratives by detailing relevant contextual information, and it was argued that (through activating memory) this may have established conditions under which high-accessibility markers were more felicitous in the L1 retellings (at least in relation to introducing Charlie).

Secondly, an unexpected finding was that, overall, the SLL introductions of the feeding machine and minor characters appeared under-explicit. For minor characters, it may be that the SLLs placed less emphasis than the L1 speakers on identifying the referent. In relation to the feeding machine, it appears that the SLLs may have lacked the requisite skills to clarify the identity of this low-

accessibility referent. Such SLL problems appear to occur above the level of the RE, in acts where L1 speakers combine multiple referential strategies.

Thirdly, of further interest was the way L1 speakers introduced some minor characters, such as the boss. Two distinct strategies were identified in the data. The first of these was expected and involved the use of complex referential acts, reflecting the characters' low accessibility (due, for example, to competition). The second strategy was unexpected, and involved the use of a vague expression, such as singular-*they* or the introduction of the character as part of a plural set. This could represent a strategy in which speakers overtly indicate that reference resolution is unnecessary. This idea is further considered in Chapters 7 and 8.

6.3 Chapter summary and implications

In this chapter, findings have been presented relating to the extent to which participants made references that were felicitously marked for accessibility. Analysis involved a coding system for referent tracking based largely on an analysis of co-text, and a comparative analysis of referent introductions relating to specific individuals. These analyses enabled judgements of the extent to which individual REs were felicitous, over-explicit, or under-explicit.

Some of the research questions can, therefore, be addressed:

Q1.1 To what extent do SLL referential introductions tend to be target-like?

Firstly, the SLLs tended to use more explicit REs than the L1s when introducing the central characters (Charlie and the girl). In relation to Charlie, this may actually represent a pragmatically appropriate response to other non-target-like aspects of the SLL narratives. However, the SLL introductions of the girl tended to appear over-explicit. Secondly, introductions of minor characters were frequently *under*-explicit in the SLL data. A possible explanation for this may be that the SLLs attached less priority to the resolution of these references than the L1 speakers. Substantial under-explicitness was also found in introductions of the

feeding machine, where it appears that the SLL speakers may have lacked the communicative competence to use the type of complex referential act that is most felicitous for referents with particularly low accessibility.

Of further interest were findings reported in relation to how the L1 participants introduced minor characters with low-accessibility. In particular, introductions tended to either involve highly explicit acts of reference or else rather vague REs, including antecedent-less *they* or REs and other contextually ambiguous forms (e.g. *the other guy*). A possible explanation for vague introductions may be that some L1 speakers did not prioritize reference resolution in these cases. This finding is in conflict with the assumption reported in Chapter 3 that coherent discourse requires that all references be unambiguously interpretable (Yoshioka, 2008). This issue is reviewed again in Chapter 8.

A number of further findings are relevant to Research Questions Q1.2 and Q1.3:

Q1.2 To what extent is advanced SLL referent tracking characterized by under-explicitness?

Q1.3. Is the characterization of SLL over-explicitness in referent tracking supported by an analysis that directly assesses the accessibility of the referent?

In relation to Q1.2, the findings suggest that under-explicitness occurred with similar frequency in the SLL and L1 retellings. Under-explicit zeros were slightly more frequent in the SLL data but were seldom ambiguous. Overall, instances of SLL under-explicitness in these data may be best viewed as isolated performance errors.

In relation to Q1.3, the findings suggest a tendency for SLL over-explicitness, but (in a finding not reported elsewhere) this appears to be largely restricted to certain accessibility contexts, with these SLL participants rarely being over-explicit when referring to the most accessible entities. This may have implications for theories explaining SLL over-explicitness and will be discussed in Chapter 9.

7 Miscommunication: Presentation and analysis of findings

7.0 Introduction

In this chapter, findings are presented relating to the miscommunication of references in the *Modern Times* retellings. For many examples of miscommunication, discussion requires an analysis of an extended extract of the retelling and comments from the stimulated recall interviews. Due to space constraints, many of the extracts discussed in this chapter are presented in greater co-textual detail in Appendix 7. Readers may also wish to refer to the narrative summary presented in Appendix 4.1. In this Chapter, key linguistic features are highlighted with underlining.

As discussed in Chapter 2, despite the frequency with which miscommunication occurs in L1-L1 speech, there appears to be a tendency for laypeople to uncritically attribute SLL-L1 miscommunication to issues of SLL competence. In fact, just as successful communication is an outcome of multiple speaker and hearer factors, so miscommunication can be triggered by factors relating to either or both participants, and can occur at a range of linguistic, semantic, and pragmatic levels (Bazzanella & Damiano, 1999). Thus, although the focus in this study is on speaker factors in miscommunication, some cases may be best attributed to the hearer or to both interactants.

After identifying instances of miscommunication, the starting point for analysis involved use of the accessibility coding system (discussed in Chapter 4.10) to establish the extent to which the RE was felicitous. It must be acknowledged that this tends to emphasize problematic RE selections as triggers of problematic reference, rather than, for example, issues of discourse coherence, pronunciation, or hearer factors.

Thus the following analysis is not a complete account of the referential miscommunications in these data, but an exploration of some relevant pragma-linguistic factors, particularly as they relate to the form of REs and their

interpretation. The analyses presented here are intended as persuasive interpretations of the data, but not as final and definitive conclusions. As should always be the case in qualitative research, the possibility for multiple reinterpretations is acknowledged.

This chapter begins with four relatively brief sections detailing important findings relating to the research framework and context of miscommunication. Sections 7.1 and 7.2 briefly summarize some of the methodological issues relevant to interpreting the data. Section 7.3 discusses findings relating to a proposed concept of referentiality, which is relevant to defining miscommunicated reference. Section 7.4 provides a broad overview of identified instances of referential miscommunication in the data.

Section 7.5 presents a detailed discussion of miscommunicated introductions of entities into the narrative discourse. Findings are presented in subsections relating to the introduction of main characters, minor hearer-known characters, and the feeding machine. Section 7.6 presents findings relating to miscommunication in referent tracking contexts. The subsections present findings relating to specific triggers of miscommunication, including under-explicitness, over-explicitness, pronoun errors, structural factors, reported speech, and the issue of lexical differentiation. Minor factors in miscommunication are briefly summarized in Section 7.6.6, while Section 7.7 presents findings relating to generic reference. Section 7.8 identifies acts of repair and clarification as a potential discourse trouble spot.

7.1 Identifying problematic reference

Miscommunicated references were identified using the stimulated recall techniques outlined in Chapter 4, and then analysed in relation to the linguistic and accessibility related findings reported in Chapters 5 and 6. As reported in Chapter 4, the use of stimulated recall enables the identification of miscommunications which may go unnoticed when using conventional methods. Indeed, until viewing Part 2 of *Modern Times* during the stimulated recall, the

hearers were frequently unaware that miscommunication had occurred. As such, there were sometimes no grounds for self-reporting a problem, and no textual record of it having occurred. As such, stimulated recall appears to be substantially more reliable at detecting misunderstandings than the conventional approaches discussed in Chapter 4.4.1.

Nevertheless, it is possible that some further instances of miscommunication remain unidentified. For example, interlocutors may chose not to bring attention to problems during the interview, perhaps because miscommunication presents a face threat (Tzanne, 2000), with hearers “at risk of appearing slow-witted” (Smith et al., 2005, p. 1871), inattentive or uncooperative. Hearers may also wish to protect the speaker’s image as a competent, coherent language user. Tzanne demonstrates that these factors can discourage miscommunication repair, and, by extension, it seems possible that they could discourage reporting problems to a researcher.

Interestingly, the methodology employed here also enables the exclusion of data which observers may wrongly identify as indicating miscommunication. For example, in relation to Example 7.1, my initial interpretation was that the hearer-initiated repair was prompted by referential strain. However, the subsequent interview revealed a quite different motivation: Raquel, an experienced ESL teacher, reported that this was simply a pedagogical move (*R* is Raquel; *Res* is the researcher).

Example 7.1: *Kane and Raquel*

T = 25.25 8	R – he – she is very . ah hangry, . R – hungry? K – uh uh HUNGry, [oh] hungry, he wa- he was very hungry, and er . R – SHE, or HE? K – she	Res – so you were – was that a little bit confusing there? [@] With that pronoun thing? R – I knew@ Res – @ okay@ you were just correcting him? R – yeah@ Res – @ R – @ # my job
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In short, unless the hearer’s perspectives are sought, and relevant details are recalled, researchers may overlook some miscommunications and misidentify others. This may particularly be the case when ESL teachers are participants, as

clarification requests are, at least according to Lyster and Ranter (1997), an effective and frequently used form of feedback regarding linguistic error, but are a dis-preferred strategy in other naturally occurring speech (Schegloff et al., 1977).

7.2 Analytical framework

The starting point for the analysis of an instance of miscommunication was to examine (a) the accessibility status of an intended referent (Chapter 4.10), (b) the RE(s) used to indicate that referent, and (c) the accessibility of any wrongly identified entity. A number of additional factors in the resolution of reference also emerged from the data. In this section, evidence supporting an accessibility-based approach is presented, but it is also argued that discourse coherence plays an important role.

Although AT primarily accounts for how speakers select NP types, it suggests much about reference resolution, as accessibility marking is treated as audience-directed behaviour that facilitates referent identification. In Example 7.2, the hearer, having wrongly assumed that the baker was female, was unable to resolve the underlined RE, finding it ambiguous between the baker and the witness.

Example 7.2: *Alice and Donna*

T = 12.16 8	A – <u>the ladies</u> just told police, that ‘it’s not HIM, it’s the LADY – the poor girl – stole that bread’	D – police got Chaplin, [okay] and the lady – I’m not sure if it’s the lady that saw or the lady that owned the bakery, one of those ladies said ‘hey, it wasn’t Chaplin’
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Three factors appear relevant to this miscommunication. Firstly, these characters had approximately the same accessibility status (both analysed as D1). Secondly, the term *lady* was equally applicable to both referents in the hearer’s mental model; for this reason, non-resolution is precisely the outcome that would be predicted by a model of RE resolution based on accessibility marking. Crucially, however, a third factor was the lack of a preferred coherence-based interpretation arising from schematic knowledge evoked by the preceding utterances.

The role of coherence becomes apparent in the analysis of the successfully resolved possessive determiner in Example 7.3, for which there were two competing referents – Charlie and the policeman – both of whom were analysed as having accessibility D6. However, in the stimulated recall, Reuben appeared to indicate that he readily resolved this reference; he provided a coherence-based explanation for this interpretation, presumably based on schematic knowledge that policeman (not civilians) tend to carry batons. The word ‘own’ may be relevant here but if the object had been *his own walking stick*, then it seems likely that the possessive determiner would be interpreted as relating to Charlie.

Example 7.3: *Michael and Reuben*

<p>T = 17.58 12</p>	<p>M – Chaplin tells her: ‘go on, go on, escape’, um the copper wakes up, he hits the copper over the head with <u>his</u> own baton</p>	<p>R – so Chaplin had hit the copper over the head, [yep] that’s pretty much where it ended Res – right. Chaplin hit him with a baton R – mm, he said with HIS baton, so I’m guessing it’s the policeman’s baton because Charlie didn’t have a baton [yeah, okay okay] – at least not that I know of</p>
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Thus, although the present study takes AT as the starting point for the analysis of miscommunication, coherence-based factors must also be considered. Although it may be possible to adapt a framework (such as that proposed by Kehler, 2002) which systematically accounts for these coherence-based factors, this would be a major undertaking, and is not pursued here. Rather, systematic analysis is restricted to accessibility status and accessibility marking, with additional qualitative analysis of coherence factors that emerged from the data.

7.3 Referentiality and resolution

A central principle in the present definition of reference is the speaker’s intention to make clear to the hearer which entity is being indicated. Thus, unlike many linguistic accounts, here reference is not synonymous with merely mentioning specific entities (discussed in Chapter 2.1).

As discussed in Chapter 3.3.6, an apparently widespread assumption in the linguistics literature is that, in coherent discourse, hearers can resolve all

references (Gullberg, 2003; Peterson, 1993; Yoshioka, 2008). Therefore, it was initially assumed that any unresolved reference represented a communicative failure, and that, in successful communication, the hearer would be able to explicate all singular REs with a fuller RE identifying the referent (e.g. *she = the lady who witnessed the theft*). However, it became apparent during data collection that this is not always the case. For instance, in Example 7.4, Kate introduced a minor Level I referent into the narrative, and Nina indicated during the stimulated recall that she considered resolution of the referent to be relatively trivial for comprehension of the narrative:

Example 7.4: *Kate and Nina*

T = 14.27 1b	K – and in the next part it shows Charlie and that other guy still doing . . whatever’s [@] happening on the conveyor belt,	R – when she said Charlie and that other guy, did you know who she meant? N – aw nah yeah, I was thinking it was this guy, or that guy, but I didn’t really care, I was like ‘anyway, next part of the story’
-----------------	---	--

There may have been specific, local reasons for Nina’s tolerance of ambiguity for this reference. For example, Kate appeared to be signalling, through the use of progressive aspect, that background events were being described (Hopper, 1979), and intonation cues may also have contributed to this. As a result, Nina may have decided that the cognitive effort involved in potential resolution was unwarranted considering the trivial nature of the events described. A further issue may be that Kate introduced the character with a relatively vague description (*that other guy*), which appears not to provide enough information to disambiguate the referent from other matching referents (as discussed in Chapter 6.2.3, clear introductions of this character require much fuller REs). Importantly, the lack of informativity in the RE in Example 7.4 was not due to the use of a pronominal; if it were pronominal, then Kate’s message would have been (according to AT) that:

- 1) the referent is highly accessible,
- 2) *thus* further information is not required.

However, with the expression *that other guy*, Kate used an RE with two content words, neither of which contained sufficient information for disambiguation.

Therefore, it is suggested that Kate signalled that:

- 1) the referent has low-intermediate accessibility,
- 2) *however* further information is not required.

While Example 7.4 involved the introduction of a character, the findings similarly suggest that speakers used REs to indicate that referent resolution was not required in some tracking contexts. This particularly appears to be true of vague uses of *they*, for which examples are presented in Appendix 7. In Extract 7.1 (Appendix 7), the hearer (Maddy) revealed that she was unconcerned with identifying the referent of *they*. In Extract 7.2, Tina introduced a referent with a particularly informative RE and then used a try-marker to invite Arlene to accept or reject the RE; Arlene signalled that she had identified the referent, but later stated during the stimulated recall interview that she “had no idea” which machine was being referred to, and considered the identity of the machine to be unimportant (Extract 7.3).

Such findings suggest that, in contrast to views from the literature reported in Chapter 3, successful communication does not necessarily require resolution of all references. Rather, it appears that hearers may choose whether to resolve a reference. The basis for the hearer’s decision appears to be the perceived communicative importance of the reference to overall discourse coherence; this is likely to be influenced by signals from the speaker. It is suggested that there may be *gradations in referentiality*, in which a speaker’s intention to refer and the hearer’s intention to resolve a reference may be only partial. This idea will be explored further in Chapter 8.

For the purposes of this chapter, the recognition of distinctions in communicative referentiality has two implications. Firstly, it explains a possible reason why, despite largely comparable contexts, the introduction of some minor referents involved substantially lower accessibility markers in some narratives than others (as reported in Chapter 6.2.3). That is, it may be that some speakers signalled that the reference ought to be resolved, while others indicated that ambiguity was non-problematic. Secondly, it substantially altered the present understanding of what constitutes successful reference. During data collection, it influenced the way in

which the SR interviews were conducted, with an expectation that the non-resolution of some REs would be unproblematic for communication. In the initial data collection trials, the video prompt was frequently paused to enquire about the resolution of REs, but this seemed to prompt hearers to reconstruct probable interpretations rather than to recall them. To avoid this problem of reconstructive interpretations, greater emphasis was placed on hearers describing the development of their mental model of the narrative, rather than a sole focus on explicating the resolution of REs. Consequently, I continued to enquire about the resolution of certain referents, yet did so far more cautiously and less frequently.

7.4 Miscommunication in the data

In this section, some initial observations are made in relation to communicative success in the retellings, issues in identifying referential miscommunication, and the frequency of miscommunication types in the data.

Miscommunication in the data

It appears that the *Modern Times* retelling task presented a substantial communicative challenge, and provides a relatively fruitful source of referential and non-referential miscommunications.

In general, the L1 retellings appeared to result in rich mental models of the narrative, with miscommunication being infrequent and largely restricted to the misidentification of referents. In some cases, the hearers also reported picturing different locations for some of the events, and some differences in descriptive details. In contrast, miscommunications in the SLL narratives were often unrelated to reference, often pertaining to the nature and sequence of events, referent attributes, locations, scene transitions, and cause and effect relations.

Overall, most of the SLL retellings appeared to be relatively successful in terms of communicating the main events and the most important details of the film.

However, this was not always the case, with some hearers developing a mental model of the narrative that appeared to be radically different from what was intended. One such retelling from these data is discussed by Ryan and Barnard (2009). In a further example (Josie and Rochelle), the hearer failed to recognize that the speaker retold the narrative non-chronologically, and also that some major events were restated (Rochelle interpreted these as new or recurring events). In one further case (Rachel and Renee), the hearer quickly ‘lost the thread of the narrative’, developing only a vague overall understanding.

It should be noted that the relative lack of communicative success in some of these SLL retellings was not necessarily reflected in the frequency of miscommunicated reference. For example, one of the least successful retellings (Becky and Yvonne) contained no referential miscommunications, but Yvonne reported a great deal of uncertainty in relation to the events Becky had described.

Issues in identifying referential miscommunication

In most instances of miscommunication, there appeared to be clear indicators of the onset of the problem and, therefore, likely triggers. However, in the retelling by Rachel, there appeared to be multiple reference problems occurring in close proximity, such that it is unclear exactly how many occur. For this retelling, a conservative count was made identifying seven passages where reference problems occurred.

In some cases, referential chains were miscommunicated. For example, some characters were misidentified upon their initial introduction, so that even when subsequent references were successfully resolved from an internal (anaphor-antecedent) perspective, the reference was misidentified in relation to the external referent. These were counted as a single miscommunication. In these analyses, introductions of hearer-new entities were considered to have been miscommunicated only when they were mistaken for referent tracking or for introductions of hearer-known entities.

Of the types of miscommunication distinguished in Chapter 3, the identification of failed reference (i.e. failure to notice that a reference has been made) proved difficult. No cases of failed references were noted (failed introductions of hearer-new entities are discussed in Section 7.5.4).

Frequency of referential miscommunication

Overall, 53 referential acts were identified as involving miscommunication or substantial strain. Of these, 11 occur in the L1 narratives and 42 in the SLL narratives. In the L1 data, this equates to one miscommunication for every 162 entities mentioned (i.e. Level I, II, and III references and non-referential introductions), and one in every 55 in the SLL data.

Table 7.1 reports the number of referential miscommunications according to the terminology established in Chapter 3 (no examples of failed reference). Acts of reference identified as having partial-referentiality were not considered to constitute miscommunication.

Table 7.1: Frequency of referential miscommunication types

		Mis- understanding	Non- understanding	Strain	Total
L1	Introduction	4		2	6
	Tracking	4	1		5
	Other				0
SLL	Introduction	11	6	2	19
	Tracking	8	8	5	21
	Other	1		1	2

The main point of interest to emerge from these data is the number of miscommunications relating to referent introductions compared to referent tracking. In both the L1 and SLL data, introductions accounted for approximately half of all referential miscommunications (54.5% in the L1 data and 45.2% in the SLL data), and mostly related to Level I referents. This is striking considering that

there were far fewer referential introductions than subsequent references. For example, there were 54 introductions of Level I referents in the L1 data, with one in eleven found to result in miscommunication or strain, and 84 such introductions in the SLL data with one in six being problematic (details are presented in Section 7.5). This appears to be due to the complexity of the retelling task, where factors such as low-accessibility and competition may provide a substantial communicative challenge when introducing some referents (as discussed in Subsections 7.5.2 and 7.5.3)

In the SLL data, two referential problems were identified that were coded as ‘other’. The first of these (Sabrina and April) involved NPs used for generic entities apparently being interpreted as relating to specific entities. The second appears to involve a failure to successfully signal a character’s trivial narrative status (in the sense introduced by Chafe, 1996), leading to some confusion (discussed in Appendix 7.4.2).

7.5 Problematic referent introductions

This section presents findings relating to miscommunicated referent introductions. As noted in Section 7.4, these were relatively frequent in both the L1 and SLL data.

In the levels of reference framework discussed in Chapter 2, three types of referent can be introduced into discourse: hearer-known entities (Level I), hearer-new entities (which may be subsequently tracked as Level II referents), and generic/attributive/hypothetical entities (subsequently tracked as Level III referents). Of these, only introductions of hearer-new entities are here considered referential. The three types of introduction each entail a different requirement as to what constitutes success. In particular, successful Level I references require the hearer to identify the intended individual in long-term memory, while hearer-new entities require the establishment of a new mental ‘file’ for an individual.

Overall, miscommunications were substantially more frequent in the SLL data

than in the L1 data, and were found in a greater range of contexts. Details and the likely triggers of these miscommunications are explored in this section. Findings in relation to Level I introductions are presented in Subsections 7.5.1, 7.5.2, and 7.5.3 in relation to the main characters, minor characters, and the feeding machine respectively. Subsection 7.5.4 focuses on failed introductions of hearer-new characters. Due to space restrictions, many of the relevant extracts are presented in Appendix 7.2.

7.5.1 Problematic introductions of main characters

Introductions of Charlie and the girl are facilitated by these characters' central roles (topicality) in the film narrative, and the girl having little competition from other female characters. It is thus unsurprising that all L1 introductions of these characters were successful, including those in which Charlie was introduced with a pronoun. Similarly, nearly all of the SLL introductions were successful, with the major exception being Example 7.5, which was also the only (unrepaired) SLL pronominal introduction:

Example 7.5: *Kyra and Jim*

T = 2.29	K – so you know where the film stop?, when um, . . . the head of the company was in his office
2	J – yep, [that's right]
	K – [and the] people came in and [introduce]
	J – [they were] going to show him . something
	K – yes, . a machine:?, so: actually to him , and he had to try it

In this case, the hearer wrongly interpreted the pronoun as being co-referential with the boss. As discussed in Chapter 5, pronominal introductions of Charlie are not inherently problematic (Clancy, 1980; Smith et al., 2001; Smith et al., 2005), with four successful L1 examples in these data. Rather, the problem appears to be two non-target-like aspects of Example 7.5.

Firstly, unlike Example 7.5, all of the successful pronominal introductions followed pre-introductory stages establishing common ground (discussed in Chapter 6.2) relating to Charlie's job on the production line. This presumably activated recall of the characters associated with that context, of whom Charlie is

the most prominent. Secondly, unlike the successful introductions, the failed introduction in Example 7.5 occurred subsequent to the introduction of other characters, and thus the pronoun occurred in a context where there were other accessible referents to which it could plausibly be linked. Indeed, at the point in this retelling where Charlie was introduced, the boss was coded as the most locally prominent character, with D5 accessibility. As reported in Chapter 6, this is a status L1 speakers typically encoded with a pronoun or zero in these data (86.9% of cases). It appears then, that Charlie's initial high-accessibility had been reduced, and surpassed, by referents that had gone *on-record* (to use Clark's, 1996, term), and that the pronoun was, therefore, under-explicit.

It should be noted that subsequent references indicate that this speaker was able to use a variety of RE types (including the name *Charlie*) and there was no evidence of her using under-explicit REs in referent tracking.

In summary, the miscommunication in Example 7.5 appears to have occurred because the conditions under which pronominal introductions are felicitous were not met, and because a competing referent became more highly accessible than Charlie. Although this miscommunication represents an isolated type, it is notable in the extent to which this SLL appears to have erred in her judgement of accessibility and competition. It may have been the case that the speaker was attending to other speech factors at the expense of monitoring accessibility.

7.5.2 Problematic introductions of minor hearer-known characters

This subsection presents findings in relation to the miscommunicated introductions of minor characters. The discussion focuses on introductions of the boss, with a brief discussion of the colleague presented in Appendix 7.2.

There were 17 referential (i.e. Level I) introductions of minor characters in the L1 narratives, and 31 in the SLL narratives. The relative proportion of those that were miscommunicated is similar, with three in the ten L1 retellings and seven in the twenty SLL retellings. Interestingly, eight of these ten miscommunications

involved misidentifying either the boss or the colleague as the relief man. In most cases, this appears to result from a combination of two factors:

1. the speaker misjudging, in relation to the hearer, the relative accessibility status of the intended referent in comparison to a competing referent
2. descriptive content encoded in the RE being ambiguous between the intended referent and competing referents

The first factor appears to arise because the relief man had different accessibility statuses for speakers than for hearers: he is relatively prominent among minor characters in Part 1, but does not appear in Part 2. Thus, for hearers, the relief man presumably had a similar memory status to the boss and the colleague, but for the speaker, this character may have been far less accessible, and perhaps even forgotten. The second factor was the selection of inadequately descriptive REs, which appears to have arisen from a failure by speakers to recognize referent competition.

In relation to introducing the boss, there were four miscommunications in the SLL data, compared to one in the L1 data; as discussed in Chapter 6.2.3, relatively few L1 speakers introduced the boss. In each of these problematic SLL introductions, an important factor appears to have been the use of an RE with ambiguous semantic content. In most cases, these signalled this character's managerial or supervisory role in the factory (e.g. *the manager*), but difficulty arose because, relative to Charlie, the relief man also has managerial status, and probably higher accessibility than the boss. Successful L1 and SLL introductions tended to use more specific terms such as *boss*, or *owner*.

A further lexical problem occurred in the SLL Example 7.6, where the term *principal* appears semantically over-extended, and was unresolved by the hearer.

Example 7.6: *Alice and Donna*

T = 1.50 1	A – <u>the principal of that company</u> , came to – came down to the co-workers?,
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Example 7.7, from an L1 narrative, involved communicative strain, with the hearer reporting potential ambiguity over the term *director*, and later seeking clarification:

Example 7.7: *Fiona and Geoff*

T = 13.15 4	and then you know the: director guy?, and he had the contraption?, that he was about to show him
----------------	--

Interestingly, unlike the failed SLL introductions, this reference appears relatively informative, with an appeal to common ground, try-markers, mention of the machine, and related events (*he was about to show him*). The problem appeared to occur in the speaker's inaccurate description of the events while appealing to common ground: the extended referential act included two pronouns (*he*) which appeared to be co-referential with *director*, yet the hearer would have known that it was the scientist, not the boss, who had a machine that he was about to demonstrate. It seems the speaker had either confused these events or had used a very vague and infelicitous pronoun to introduce the scientist in the midst of introducing the boss.

To summarize, some miscommunicated introductions of minor characters may have been caused, to some extent, by task difficulty. Specifically, speakers and hearers probably held different views on the accessibility of the relief man, and some speakers may have failed to accurately assess accessibility from the hearer's perspective. Interrelated with this are ambiguities in the descriptive content of some of REs used.

7.5.3 Problematic introductions of the feeding machine

In these data, the most problematic referent to introduce was the feeding machine, and this was particularly the case in the SLL narratives. As discussed in Chapter 6.2.4, the major difficulties in introducing this entity likely relate to its very low accessibility and the presence of other, more salient, machines in Part 1.

Apparently recognizing this, nine SLL speakers and two L1 speakers used the avoidance strategy of introducing the machine as hearer-new (discussed in

Chapter 5.1.3). Of the referential (Level I) introductions, five of the eleven SLL introductions resulted in misidentification or non-resolution, compared to one misidentification and one strained resolution among the nine L1 introductions. Interestingly, across the narratives, the feeding machine was misidentified as four different machines.

As discussed in Chapter 6, rather than avoid a referential introduction, the L1 speakers typically used extended referential acts involving a low-accessibility marker, and sometimes a particularly informative description (e.g. *that big like spaceship-looking, convexed, thing*). In addition, the L1 speakers typically evoked the context in which the machine had been previously sighted, by mentioning, for example, the location it had appeared in, and the characters associated with it. In comparison, the SLL introductions were generally much simpler referential acts, evoking much less contextual detail.

The extent to which speakers evoked the appropriate context appears to be the most important factor in the resolution of these introductions. This is apparent in both the L1 and the SLL data. An example of a successful SLL introduction is Example 7.8, in which the speaker clarifies the identity of the machine through establishing common ground over its previous temporal and physical locations, its initial arrival, and a key character with which it is associated. In these regards, the introduction is target-like.

Example 7.8: *Kyra and Jim*

T = 0.28	K – so you know where the film stop?, when um, . . . the head of the company was in his office
1	J – yep, [that’s right] K – [and the] people came in and [introduce] J – [they were] going to show him . something K – yes, . a machine:?,

Example 7.9 presents an unsuccessful SLL introduction, which was interpreted by the hearer as referring to the factory operating machine; relevant comments from the SR interview are presented in Appendix 7.3.

Example 7.9: *Steffi and Otis*

T = 12.22	and er um, and then before you leave, there is a big machine?, did you notice that?
	O – yep
3	S – yeah that is the machine for um . . ah feeding people

Unlike Kyra in Example 7.8, Steffi here provided very little contextual information, (only the vague temporal context *before you leave*). In these regards, this is representative of a number of SLL introductions. The potential for success in Steffi’s introduction of the feeding machine rests largely on the adjective *big*, which Otis reported as being more apt to describe the conveyor belt. Steffi’s question *did you notice that?* was only likely to be helpful if Otis had failed to find any plausible referent.

Like Example 7.9, all miscommunicated introductions of the machine appeared to fail because, by not evoking the context in which the hearer had seen the machine, more prominent machines were available as competition.

Presumably, such use of contextual details in introductions is not specific to English, and presumably similar strategies are used in the first language of some (perhaps all) of the participants. If this is the case, it is unclear why SLL speakers do not transfer this strategy into English. It does not appear that evoking a relevant context provides a substantial linguistic challenge for speakers at these advanced levels of English. As Example 7.8 illustrates, Kyra was able to evoke a relevant context through language that was not particularly complex in terms of syntax or lexis. It may be that some speakers had failed to recognize the appropriateness in English of evoking a context in which to facilitate identification of the machine.

Interestingly, four of the five SLL-L1 miscommunications remained unnoticed by the hearer until viewing Part 2 of *Modern Times*, while both of the L1-L1 problems were eventually repaired by the hearer (the relevant extracts are presented in Appendix 7.4). From comments made during the interviews, it appears that the subsequent L1-L1 repairs were prompted by coherence-based factors, in which the hearer felt unable to associate the feeding function of machine with the characteristics of whichever machine they had wrongly

identified. Hearers in the SLL-L1 interactions also reported confusion, but only one responded by re-interpreting the intended machine, while one further hearer assumed that (despite the use of a definite RE) a new machine had been introduced. It is curious that the remaining three hearers all reported confusion but did not re-evaluate their initial interpretation. One possible reason may be that the frequency of non-target-like linguistic factors, such as phonological, grammatical, and lexical errors, required that more of the hearer's attention be focused at these levels rather than the higher levels of resolving anomalies in the narrative.

To summarize, successful introductions of the feeding machine in these data usually involved very explicit referential acts that evoked the context in which the machine had appeared in Part 1. It appears that such strategies presented a substantial communicative challenge to the SLL participants, with many SLL introductions being non-target-like, and frequently resulting in miscommunication. In some cases, it may be that the SLL speakers underestimated either the accessibility of the referent or the potential competition from other entities. An alternative explanation could be that they were too preoccupied with monitoring other aspects of their performance to plan effective referential strategies, or to attend to the interlocutor's cognitive state in relation to the referent.

7.5.4 Failed introductions of hearer-new characters

The retellings of *Modern Times* usually included introductions of several hearer-new characters. Such introductions failed five times in the SLL retellings (9.3%) and once in a L1 retelling, and all related to introductions of the female witness. In such cases, hearers appeared to interpret these as anaphors. Therefore, subsequent references to the newly introduced referent were unable to be interpreted correctly as the intended referent did not exist in the hearer's mental model.

L1-L1 miscommunication

The only failed introduction in the L1 narratives is presented in Example 7.10, where Astrid failed to recognize the introduction of the witness:

Example 7.10: *Lillian & Astrid*

T = 6.34 10	L – the guy that owns the bread came running up, and <u>this lady</u> said like ‘the chick stole it’ but Charlie Chapman said he stole it
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Having no mental file for the witness, Astrid consequently misinterpreted this passage as meaning ‘the girl admitted to the theft’ rather than ‘the witness identified the girl as the thief’ (direct reported speech interpreted as indirect). Interestingly, this miscommunication occurred despite Lillian maintaining a clear lexical distinction between the witness (*lady*) and the girl (*chick*) at this point in the narrative (an issue discussed in Appendix 7.6.5).

This failed introduction of the witness appears to partly result from the ambiguity between the indefinite use of *this* (identified by Perlman, 1969), used to introduce hearer-new characters into discourse, and the more frequent demonstrative use, which marks intermediate accessibility (Ariel, 2001; also Gundel et al., 1993). This suggestion is supported by an analysis of accessibility, with the girl analysed as having accessibility D3 at this point in the narrative, which is within the typical distribution range of demonstrative forms found in the L1 data (as identified in Chapter 6.1).

A further factor appears to be the negligible phonological prominence given to the RE that introduces the witness. As discussed in Chapter 2.6, such prominence appears to typically mark hearer-new introductions (G. Brown & Yule, 1983), and is used elsewhere by this speaker for this function.

SLL-L1 miscommunication

The four failed SLL introductions of the witness, each of which was apparently interpreted as referent tracking, are reproduced Appendix 7.4. These suggest that

there may be context-specific or task-specific factors that pose a substantial challenge when introducing this character. One such factor may be the complexity of the relevant scene, in which the girl, the baker, the witness, and the policeman are introduced to the discourse in quick succession. None of these characters can be referred to by name, and speakers generally referred to both the girl and the witness with lexical items that largely encode gender (e.g. *the girl*, *the woman*, *the lady*) rather than other defining characteristics (e.g. *the gamin*) or narrative role (e.g. *the witness*). The semantic overlap in these gender terms appears to be a major source of ambiguity.

The second interesting aspect of these failed introductions is that there appeared to be few non-standard features of the relevant NPs to suggest that miscommunication was likely. The four REs that failed to introduce the witness were *one woman*, *a old lady*, *a woman*, and *lady*, and one might expect that at least the three indefinite expressions would be sufficient to introduce this character. Furthermore, in two of these cases, analysis of the verb frame (*lady points at her*, and *a woman saw her*) also suggests little potential for confusion; co-referential interpretations appear to assume that the speaker was violating binding principles. In short, it appears surprising that introducing the witness was so problematic. As with the failed L1 introduction, it seems that a relative lack of phonological prominence may contribute to these failures.

It may also be relevant that the SLL narratives, overall, had relatively frequent errors in the marking of definiteness and indefiniteness. Although a detailed analysis of article errors was not performed on the present data, a large number of studies report such errors as being frequent even among relatively advanced learners, with the indefinite article usually being acquired later than the definite article (Master, 1987; Thu, 2005). It may be that the hearers in the present study became accustomed to such errors and viewed the speakers as unreliable in portraying the semantic features associated with this distinction. This could lead hearers to be cautious when interpreting marking for definiteness and indefiniteness. Thus it may be that failures to introduce and establish characters in the SLL narratives were not triggered by specific local errors, but by more general non-target-like NP marking throughout the discourse.

Of particular relevance to the present research questions is evidence that the SLL tendency for over-explicitness may have contributed to these failed introductions. The first point to note is that, in target-like speech, there is a phonologically obvious contrast between marking for high-accessibility referents and marking for hearer-new entities (*she* or \emptyset vs. *a woman*). As most references in these data do relate to moderately and highly accessible referents, the distinction between such references and hearer-new entities should have been relatively clear. However, as many SLL references were over-explicit, the success of many introductions relied on the much less prominent distinction between definiteness and indefiniteness (*the woman* vs. *a woman*). It seems that the greater the number of over-explicit references, the more potential there is for a hearer-new introduction to fail.

There is evidence to support this interpretation. As noted, the four failed NPs used by SLLs to introduce the witness were interpreted as anaphoric references to the girl. Analysis of all four cases reveals that, at the moment the witness was introduced, the girl had an accessibility status that is usually encoded by a zero or pronoun by the L1 speakers. Indeed, in three cases, the girl had accessibility D7, which is a status that was encoded with zero or pronoun in 99.1% of L1 references (111 out of 112 references). This suggests that, in misinterpreting expressions such as *a woman* as referring to the girl, hearers not only ignored (or misheard) the marking for indefiniteness, but also assumed that the use of the short description was infelicitous. Elsewhere, this may have been a reasonable assumption, as over-explicitness accounts for 10.2% of REs (including bare nouns) at Degree 7.

In short, failed introductions in these SLL data appear to arise from a combination of factors, including task complexity. Of particular interest is the finding that these miscommunications were not triggered by local errors (although a lack of phonological prominence appears relevant), and the suggestion that hearers may have interpreted indefinite expressions such as *a woman* differently to how they would interpret the same expression when used by an L1 speaker. It appears that hearers may have assumed these NPs were over-explicit and that they contained problems in the marking of indefiniteness.

Relating this to Research Question 2.1, it appears that frequent over-explicitness in the SLL-L1 narratives may be implicated in the failure to recognise explicit introductions of new characters.

7.5.5 Summary

In this section, findings have been presented which indicate that referent introductions in the retelling task were a substantial source of referential miscommunication. Despite there being far fewer introductions than subsequent references, introductions account for 54.5% of referential miscommunications in the L1 data, and 45.2% in the SLL data. Most miscommunicated introductions related either to Chaplin's colleague, the feeding machine, or the witness.

Although there were often multiple factors involved in miscommunicated reference, analysis reveals a number of recurring discourse contexts in which problems tended to occur, and a number of recurring linguistic triggers of miscommunication. Three main findings have emerged in relation to these. Firstly, problematic introductions of Chaplin's colleague and the boss largely appeared to result from task difficulty. For both characters, the crucial factor appears to be that a competing character – the relief man – was more accessible to hearers than to speakers.

Secondly, the most problematic referent to introduce was the feeding machine. In terms of discourse context, the two most salient features of this referent were its very low accessibility and the competition provided by several more accessible machines. As discussed in Chapter 6, most L1 speakers addressed these issues through the use of linguistically complex acts of reference, including stages of pre-introduction, formal introduction, try-markers, and appeals to common ground. It was also reported in Chapter 6 that the SLL speakers used fewer of these strategies and tended to appear under-explicit in comparison to the L1 speakers. Analysis in the present chapter implicates this as the main trigger of miscommunication.

Thirdly, a number of factors were identified as contributing to a failure to

introduce the witness. One issue appeared to be the referential complexity of the immediately surrounding discourse, where several new characters were introduced in quick succession. Interestingly, these failed introductions appeared largely target-like. Therefore, it was suggested that these miscommunications were triggered indirectly through article errors and over-explicitness *elsewhere* in the discourse, and that this occurred partly because the hearers may have expected learner errors and infelicities.

7.6 Problematic referent tracking

This section presents findings in relation to the five L1-L1 and 21 SLL-L1 miscommunications in referent tracking contexts. As referent tracking involves entities that were previously introduced into the discourse, these have a special status in the mental models of participants, being “considered on record, as having advanced the joint activity” (Clark, 1996, p. 54). A key task for interactants, then, becomes the maintenance of complex chains of reference to those entities represented in the discourse.

In Chapter 6, findings were presented for the extent to which participants appear to use accessibility marking felicitously. It was reported that both L1 and SLL participants occasionally appeared to make under-explicit references, with the SLL participants also frequently being over-explicit. The roles that these factors play in the triggering of miscommunication are explored in Subsections 7.6.1 and 7.6.2. The remaining subsections focus on the errors, strategies, and discourse troublespots most frequently implicated in miscommunication.

7.6.1 Under-explicit acts of reference

Analysis suggests that under-explicitness was the most important factor in L1-L1 miscommunications in referent tracking contexts, accounting for three of the five problems. Interestingly, however, analysis of the SLL data implicates under-explicitness in just one of the 21 miscommunications (a further possible example

is discussed in Subsection 7.6.4). In both the L1 and SLL data, all such miscommunications involved misidentification of the referent rather than non-resolution. Thus competition from matching referents is a factor in all these miscommunications.

The method of analysis adopted here is to compare (a) the cognitive accessibility of the speaker-intended referent, (b) the type of RE used, and (c) the cognitive accessibility of the misinterpreted referent. In Example 7.11, for instance, the L1 speaker's use of an under-explicit pronoun to refer to the girl was misinterpreted as referring to another female prisoner:

Example 7.11: *Adele and Laine*

T = 20.39 19	A – and the girl was like ‘oh’, so she takes a seat. And then she’s just there and then the bus – oh the wagon thing’s like shaking round and then Charlie falls on the fat woman, like two times and she’s all like like this (GESTURE) [@ @ @] L – [@ @ @] A – @and @then @um <u>she</u> like gets up and Ø looks real mad?, [yeah] like her face?,	R – ok, so who got up and looked mad? L – the fat woman
---------------------	---	--

In the underlined reference, the girl had accessibility D2, while the relevant competing referent (‘the fat woman’) had accessibility D5. Two problems appear to co-occur here. Firstly, the pronoun appears under-explicit for the intended referent (45 of the 48 references to entities with D2 were encoded with a name or lexical RE in the L1 data). Secondly, a pronoun would have been the most felicitous way of referring to the competing referent (for entities with accessibility D5, pronouns and zeros were used in 173 of 199 occurrences). Consequently, this miscommunication appears to be predicted by Accessibility Theory.

The other two cases of L1 under-explicitness apparently triggering miscommunication are presented in Appendix 7.6.1. In the first example, a pronoun was used to encode a referent with accessibility D2; this was misinterpreted as relating to a referent with D6 accessibility. In the second example, a pronoun was used to refer to a character with accessibility D4, this was interpreted as relating to a referent with accessibility D5.

Substantial under-explicitness did not always trigger miscommunication. For

example, there were three pronouns used for referents with accessibility D2; two triggered miscommunication, and one was successfully interpreted; there were also two successfully resolved pronominal references to characters with accessibility D1. It appears that the crucial factor distinguishing problematic from non-problematic references was competition. More precisely, miscommunication occurred in these data when a matching referent with suitably high accessibility was available to link to an under-explicit pronoun.

Therefore, I suggest that the following prediction can be made: under-explicit pronouns tend to trigger miscommunication when there is a highly accessible competing referent which matches the pronoun in gender and number.

In Chapter 6, it was reported that under-explicit REs in the SLL retellings occurred with similar frequency to those in the L1 retellings. Interestingly, however, only one under-explicit SLL reference appeared problematic:

Example 7.12: *Aanna and Maddy*

T = 22.31 16	A – she jump off the car, with the policeman and the . . th- . the guy? yeah M – Charlie Chapman? A – Chapl- yeah, M – yeah A – and the three fall dow- falling down, and – yeah, and@ first the < . . >, yeah, the police is . . . ah . yeah, the police is awake up, [yeah] but but ah <u>he use the</u> <u>stick to . hit the police</u> , and they two run away, M – <u>so Charlie Chapman hits the policeman?</u> A – yeah	M – I wasn't quite sure who did the hitting, R – yep M – and I could've assumed it was Chapman, but at this point . the story started getting a little bit . . muddly,
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The first thing to note about Example 7.12 is that, unlike the three L1-L1 miscommunications, this one was repaired (coded as referential strain). The under-explicit pronoun appears, in this case, to be one contributing factor, with the hearer suggesting that the overall clarity of the events was a further factor.

One possible reason for the lack of other SLL-L1 miscommunications triggered by under-explicitness may be the generally lower number of competing referents in the SLL retellings. As the data in Chapter 5 revealed, the SLL retellings tended to be more closely centred around the two main characters, with fewer minor characters (and fewer references to each minor character) overall. In addition, the

two main characters, around whom most references are made, were non-matching referents (i.e. male and female), and thus unlikely to be confused except in cases of pronoun or lexical error.

7.6.2 Over-explicit acts of reference

As discussed in Chapter 2.10, the use of over-explicit REs is a potential trigger of miscommunication in anaphoric contexts, and it was also argued in Subsection 7.5.4 that persistent over-explicitness may contribute to failed introductions of new characters. Findings presented in Chapter 6 show that, compared to the L1 participants, the SLL speakers tended to be over-explicit in these data, particularly within the range of Accessibility Degrees 4, 5 and 6. One might, therefore, presume that over-explicitness is an important trigger of referential miscommunication in the present data. Interestingly, however, analysis reveals little evidence to support this assumption.

It appears that only one over-explicit RE, from an L1 narrative, directly triggered miscommunication. In this case, the hearer interpreted a reference to the colleague (the third reference to this character) as being an introduction of the relief man:

Example 7.13: *Kate and Nina*

T = 0.53 2	K – anyway, and then <u>the OTHER guy that he’s working with</u> , he go – oh no, Charlie goes away, [mm] and then the other guy pulls out his flask,
---------------	---

At this point in the narrative, the colleague had accessibility D1. Three aspects appear to make this RE infelicitous. Firstly, the RE appears unnecessarily informative for this character and appeared to signal a lower degree of accessibility than was appropriate. Secondly, at this stage of the narrative, there was little competition, with Charlie, who was highly accessible, being the only other character to have been introduced. As such, it seems that a relatively light description would have been sufficient to identify the colleague. Thirdly, there was emphasis on the word ‘other’, which can have a contrastive function (Chafe, 1976). This example is presented in greater context in Appendix 7.6.2.

A further possible example is also presented in Appendix 7.6.2. In this case, Reuben interpreted Michael's use of a pronoun as indicating reference switch (apparently assuming the zero would be felicitous for reference maintenance). Of particular interest is that the pronoun appears felicitous by typical L1 standards but over-explicit in the context of Michael's idiolect. That is, Michael nearly always used zero in similar contexts. There is a suggestion, therefore, that Reuben had adjusted his perception of over-explicitness to Michael's speech patterns; when Michael shifted his style (towards L1 norms), miscommunication occurred.

To summarise, it appears that over-explicitness in anaphoric reference is perhaps less problematic than suggested in the literature review presented in Chapters 2 and 3. It is also suggested that hearers may adjust their interpretation of what constitutes over-explicitness and under-explicitness according to the speech patterns of the speaker. One problematic outcome of over-explicitness appears to be occasional failures to recognise referent introductions (as discussed in Subsection 7.5.4).

7.6.3 Pronoun errors

In these data, pronoun errors (usually *he* for a female referent) were identified as triggering 47.6% of the SLL-L1 miscommunications in referent tracking, and were by far the most frequently implicated trigger.

As discussed in Chapter 5, there were 26 uncorrected pronoun errors detected in the SLL data. Of these, 11 appeared to be successfully resolved by the hearer, four appeared to be the source of some degree of communicative strain, and six resulted in misidentification or non-understanding. The communicative outcome of the remaining six errors was unclear. In total, then, at least ten of the 26 uncorrected errors were communicatively problematic. In this subsection, analysis is presented of the miscommunications resulting from these errors, and of how such errors were resolved successfully. Pronoun errors in the relevant data extracts are highlighted through bold font.

Pronoun errors successfully resolved

Successful resolution of a pronoun error appears to correlate with a combination of four factors. Firstly, discourse level coherence appears to be an important factor. In the examples examined, this often involved the apparent likelihood of a possible referent being the agent of an action. Such likelihood may, for example, be related to an attribute of the referent (e.g. ‘the hungry girl’ plausibly being ‘the bread thief’), or a connection to previous events (e.g. ‘the girl who stole the bananas’ plausibly being ‘the bread thief’). The second factor was the absence of a competing referent in the immediately previous utterances. The third factor appeared to be possible syntactic constraints on anaphor-antecedent relations, and the fourth factor appeared to be the felicitousness of the accessibility marking.

Example 7.14 contains a pronoun error that was successfully resolved by the hearer (a very similar example is presented in Appendix 7.6.3). Both examples illustrate the role of coherence factors (in these cases the lexical relations in *hungry-steal* and *stolen-steal*) and, because they occur soon after an episode boundary, a lack of accessible referents to compete for the pronoun.

Example 7.14: *Toby and Whitney*

T = 23.33 10	T – the girl was . was hungry, and then he stole steal stolen ah . . stoled, . stole a bread, a piece of bread,	W – the the girl steals some bread, in the bread store, . .
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Similarly, in the successfully resolved error in Example 7.15, the lexical relation between ‘to cry’ and ‘to comfort’ appears to facilitate resolution:

Example 7.15: *Bruce and Stephen*

T = 4.14 13-14	So, mm, Charlie was . arrested and so they, I think they got a van an- on the way to: . probably jail or something, [mhm] and halfway they . they pick up the the lady, from halfway. And they meet again, . and . the lady start cry, . and Charlie try comfort him ?
-------------------	---

Example 7.16 further illustrates the importance of overall coherence to pronoun resolution.

Example 7.16: *Kyra and Jim*

T = 15.31 9	K – Charlie tells her to escape and he will stay there with the policeman?, but she convinces Charlie to come with her – him , . and yeah, Ø both escape,	J – what I did note, as something interesting, was . that she had . . . in saying that . um . . . she convinced Charlie to go . with her, and then she mistakenly corrects herself to say ‘she convinces Charlie . to go with ‘her I mean him’
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Here, three characters were prominent – the girl, Charlie, and a policeman – but Jim successfully identified the intended referent of the pronoun, despite Kyra’s misguided pronoun correction. Significantly, all three characters were sufficiently accessible to be encoded with a pronoun (D6 for both the girl and Charlie, and D4 for the policeman). Presumably, Jim was able to exclude Charlie as a likely referent because the argument structure of the verb *come* precludes a co-referential reading of its subject and the complement of *with*. This does not explain why Jim did not interpret *he* as indicating the policeman, particularly as such repairs strongly influenced the hearer’s interpretation elsewhere (discussed in Subsection 7.8). However, it seems that to accept Kyra’s ‘correction’ would have created coherence problems in the interpretation of surrounding verbs such as *come* and *escape*. As a result, Jim appears to have immediately assumed that a pronoun error had been made, as indicated in the stimulated recall.

Finally, it appears that in some cases, the hearers in these interactions may have paid more attention to the accessibility marking than to the semantic distinction between male and female. This is illustrated in Example 7.17:

Example 7.17: *Leonie and Meg*

T = 10.56 24-25	L – Charlie give he- her, gives her . his hankerchief, . . then the woman, um . decide to run away, ah and Charlie helped him , and ah, er . er they, . they pushed ah ah policeman
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There were three characters present in this episode: Charlie, the girl, and the policeman. The pronoun error could be plausibly interpreted as referring to the unconscious policeman (who was also in need of help). However, the hearer reported no strain in successfully interpreting this error. The most important factor appears to be that the girl had accessibility D6 at this point in the discourse, while the policeman had accessibility D1. Thus, it appears that the hearer responded primarily to the accessibility status of the referent rather than to the marking for gender. A second factor could be schematic knowledge of how such film

narratives unfold, with the hero often helping the heroine. However, this would not, it seems, generally be enough to override the implicit assumption that a speaker uses pronouns correctly, particularly as this speaker made just one uncorrected and one corrected error among 53 uses of pronouns.

Pronoun errors resulting in miscommunication

Ten pronoun errors led to communicative strain, misidentification, or non-understanding. Perhaps the most interesting finding was that none of the miscommunications involved inappropriately identifying low-accessibility referents. Rather, all the miscommunications involved misidentifying characters who also had a degree of accessibility that is associated with the use of pronouns. This suggests that the hearers were more willing to assume that the semantic content of the pronoun was wrong than to assume that the RE was under-explicit. One possible reason for this may be that the L1 hearers (half of whom were ESL teachers) were accustomed to SLL speakers making pronominal errors. However, it is also noted that one of the two L1 pronoun errors was also resolved without apparent strain. This could suggest that, when interpreting pronouns, hearers respond more strongly to marking for high accessibility than marking for gender. Gender marking becomes most important, it seems, when disambiguating between two highly accessible referents.

A second interesting finding was that at least four of the six errors resulting in misidentification or non-understanding nevertheless resulted in a coherent and plausible chain of events. This may discourage re-interpretation, as the speaker's initial understanding did not have to be revised in order to arrive at a coherent model of the discourse. This is illustrated in Example 7.18, where, in terms of the overall narrative, it seems equally plausible that either character could utter "come with me" at this point.

Example 7.18: *Sabrina and April*

T = 22.55 18	she look at him and he say 'come, come with me'
-----------------	--

In this example, it seems April had to rely almost exclusively on the pronoun to identify the referent. The fact that Sabrina made no other uncorrected pronoun error presumably also lent confidence to April’s initial interpretation.

In contrast to Example 7.18, Example 7.19 (presented in greater detail in Appendix 7) illustrates how pronoun errors both contributed to an increasing lack of coherence, and were also symptomatic of it. Aside from the pronoun error, a major contributing factor in this miscommunication appears to be the presence of a highly accessible character (the baker) in competition with the speaker-intended referent (the girl):

Example 7.19: *Rachel and Renee*

T = 20.51	T – she’s looking at the bread, and she want R – looking at the?
10	T – the the window?, out- outside the windows, and then [okay] suddenly a man carry a lot of . ah a lot of ah bread, and then he stolen the bread and then finally someone watch her, and she said ‘oh she st- stolen the . um the bread’, but then when she wants to run away with the bread

What is interesting here is that, unlike many of the previous examples, the hearer (Renee, an experienced ESL teacher) was unable to repair the miscommunication, despite subsequent recounted events clearly implicating the girl as the thief. In the SR interview, Renee revealed:

- an uncertain but largely accurate understanding of the events that Rachel described;
- an uncertain but accurate interpretation of who was involved in these events; but
- very little understanding (or at least confidence in her understanding) of exactly who played which role in these events.

It appears that the pronoun error in Example 7.19 occurred at a stage in the narrative that was critical to overall coherence, in that it appeared to switch focus from the girl to a new character (the baker). It appears that Renee consequently expected clarification of the narrative significance of the baker. She then seemed to become confused when this ‘went nowhere,’ with Rachel introducing the witness and then shifting focus back to the girl. Unlike most of the other narratives, then, there was a lower degree of overall coherence with which to

modify the original pronoun interpretation.

To summarize this subsection, pronoun errors (almost exclusively *he* for *she*) appeared to be the most frequent trigger of problematic reference in the SLL retellings. However, hearers typically did not assume a literal interpretation of the gender marking in pronouns unless such an interpretation was also supported by other factors, such as narrative coherence, accessibility, syntax, and an absence of competition for the pronoun.

7.6.4 Structural factors

At least two examples of problematic reference appear to be related to syntax, or other structural features. The first is presented in Example 7.20:

Example 7.20: *Bruce and Seth*

T = 23.09	B – the police take take him away, but lady. you know <u>the lady saw HE, – saw HER, stole bread</u> tell the guy ‘no, it not HE, it’s SHE, th-’ .
12	S – So the lady from the shop? B – yeah, from the [shop, yeah]. S – [right, okay]

The underlined portion in this extract was intended as the subject of the verb *tell*, and, to be fully-formed, would require a relative pronoun (i.e. *the lady who saw her steal the bread*). Apart from omitting the relative pronoun, Bruce also corrected a pronoun error in the middle of the relative clause. This disrupted the tone unit, which appears to have made it more difficult for Seth to recognize the structural error. Consequently, an ambiguity appeared to arise in which Seth was perhaps uncertain whether another event was being reported, or whether a reference was being made.

Although, elsewhere, Bruce occasionally used well-formed relative clauses, the data suggests that he had not fully acquired this structure. As reported in Chapter 5, long definite descriptions were much less frequent in the SLL data, and it is likely that this was due to the syntactic complexities of structures such as relative clauses and modifying prepositional phrases.

7.6.5 Direct and Indirect speech

A small number of referential problems involved the hearer misunderstanding whether the speaker was reporting speech directly (e.g. *she₁ said "she₂ did it"*) or indirectly (e.g. *she₁ said she₁ did it*). As these contrived examples suggest, the distinction between direct and indirect speech is conventionally made clear in writing through the use of speech marks. In spoken English, however, there is an inherent ambiguity in some of the linguistic resources used to signal direct and indirect speech (Bhat, 2004). Therefore, identifying triggers of miscommunicated reference in reported speech requires an exploration of how direct and indirect speech were distinguished.

In L1 speech, it appears that indirect speech is unmarked, with direct speech often distinguished through a change in phonological quality (i.e. adopting ‘a quotation voice’). Syntactically, certain reporting verbs and other structures were also used to clarify the direct/indirect distinction, with the most frequent in these data being *said that* rather than simply *said*. For the present task (a third-person narration), use of first and second pronouns in the surrounding discourse also clarified the distinction (e.g. ‘*she’s like "I did it"*’).

The L1 speakers averaged 5.5 uses of direct speech per retelling compared to 3.2 for the SLL speakers (details are reported in Appendix 5). An unclear distinction between direct and indirect speech was implicated in two L1-L1 referential miscommunications. Although this may seem rather few, it was, nevertheless, the second most frequent linguistic factor (after under-explicitness) implicated in problematic L1-L1 referent tracking. In the SLL data, just one such miscommunication was clearly identified, although in one further retelling, it appeared to contribute substantially to the overall lack of coherence (perhaps including issues of reference). In all cases, the problems related to one central event in the narrative, in which the witness identified the girl as being the thief.

One factor clearly identifying direct speech was the maintenance of clear lexical distinctions between characters (also discussed in Appendix 7.6.5). This is illustrated below in an extract from an SLL narrative:

Example 7.21: *Anne and Tim*

T = 4.04 11-12	and <u>the woman</u> told the owner and the police ah ‘ <u>it was the girl</u> not the guy’, so they took the girl
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Here, Anne used contrasting full REs to distinguish *the character who speaks* (the woman) from *the character spoken of* (the girl). Such a strategy was not apparent in either of the L1-L1 miscommunications. For instance, in Example 7.22 (presented in greater detail in Appendix 7.6.4), Francesca misinterpreted *the lady* and *her* as being co-referential.

Example 7.22: *Vivienne and Francesca*

T = 1.29 6	V – and then <u>the lady’s</u> like ‘no no no it’s her it’s her’, so they took her away, as well.
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Francesca’s interpretation of Example 7.22 was that the girl claimed responsibility for the theft to prevent Charlie’s wrongful arrest. Similar examples of reported speech involving pronouns were found in other interactions, yet did not result in miscommunication (facilitating factors included referent accessibility and world knowledge, such the probability of witnesses identifying thieves). It appears, then, that although lexical ambiguity contributed to the misinterpretation in Example 7.22, other factors were involved. A key factor (discussed in Appendix 7.4.1) appears to have been the use of an indefinite pronoun to introduce the witness, followed by a substantial distance before the subsequent reference.

The second L1 miscommunication of this type relates to two successive instances of reported speech (forming a chain of miscommunication, which, in this study, count as a single miscommunication). This is reproduced in full in Appendix 7.6.4, and more briefly in Example 7.23:

Example 7.23: *Lillian and Astrid*

T = 6.34 10-11	L – the guy that owns the bread came running up, and this lady said like ‘ <u>the chick</u> stole it’ but Charlie Chapman said he stole it, so the police took Charlie, and then the chick said to the police ‘no: it was <u>the chick</u> ’
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As discussed in Section 7.5.4, one problem here was the failure of the hearer (Astrid) to recognize the introduction of the witness with the expression *this lady*. This appears further complicated, in the second miscommunication, by Lillian’s

use of the same RE (*the chick*) to refer to two different characters in immediate succession (apparently marked for youth, this expression also appears somewhat infelicitous in relation to the witness). However, to support the hearer’s co-referential interpretation, the misinterpreted REs would normally require prominalization (as stated in binding theory, a full NP [an *R-expression*] must be free [i.e. not bound]). Therefore, it appears that Astrid must have assumed Lillian’s reference was over-explicit.

To summarize the discussion of Example 7.23, there appears to be discord between the co-referential interpretation suggested by some of the lexical items, and the non-co-referential reading suggested by the syntactic structure and accessibility marking. For Astrid, it seems, the lexical signals and earlier failed introduction appeared decisive in her interpretation.

The main SLL-L1 miscommunication involving reference in reported speech was one that followed a failed introduction, and is reported in Appendix 7. A related series of examples involved the SLL speaker Rachel, whose use of reported speech was frequently characterized by a general lack of clear speech attribution. Because the SR interview revealed a great deal of non-understanding in the interaction, including non-resolution of references, it is unclear to what extent this was a trigger of miscommunication, but it appears to have been a contributing factor. A typical example is presented below:

Example 7.24: *Rachel and Renee*

T = 3.56 11	Charlie wants to protect her and Ø ‘she’s not takes – is not stolen the bread, but I was the one . stolen the bread’
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In such examples, Rachel not only used a zero but omitted any reporting verb (e.g. *say*).

To summarize, the inherent ambiguity present in some of the conventional means of signalling direct and indirect speech in English can be a contributing factor to the miscommunication of reference, with many L1 speakers electing to use syntactically ambiguous reporting verbs (e.g. *she says*; *she’s like*; *she goes*) over alternatives which specialize for indirect speech (e.g. *she said that*). While other

contextual variables often make the distinction clear, it appears that reported speech presents a relatively frequent discourse trouble spot. In these retellings, the SLL speakers generally appeared successful in negotiating these difficulties, despite their far less frequent use of the helpful L1 strategy of adopting a ‘quotation voice’ to signal direct speech. One helpful SLL strategy appears to have been lexical differentiation between characters (discussed in Appendix 7.6.5).

7.6.6 Other factors implicated in triggering miscommunication

As discussed in Chapter 3, just as successful referential communication involves a great many factors, so too can the triggers of miscommunication be many and varied. The purpose of this subsection is to briefly summarise the two most important among a number of further factors that were implicated in triggering miscommunication. These are non-standard pronunciation and the signalling of episode boundaries. In addition, a discussion of lexical differentiation is presented in Appendix 7.6.5.

Pronunciation errors were implicated in a number of miscommunications. This occurred most obviously in an example presented in Appendix 7.5.6 where the speaker’s pronunciation of *machine* was interpreted as *masher*. Although the hearer interpreted *masher* to mean some type of machine, she was unable to identify the feeding machine. In a further example, the verb *stole* was misheard, and also contributed to a referential miscommunication. Two further cases are presented in Appendix 7.5.6. Although, overall, the interlocutors reported few such problems, mispronunciation may also have contributed to other problematic references.

A contributing factor in at least one L1-L1 miscommunication appeared to be the lack of clear signalling of episode boundaries. As discussed in Chapter 2, episode boundaries influence referent accessibility, with only central characters tending to maintain high accessibility after a boundary. The relevant miscommunication was presented as Example 7.11 (p. 237), and discussed as a prototypical example of an under-explicit RE triggering L1-L1 miscommunication. However, an alternative

interpretation could be that the speaker (Adele) intended, but poorly signalled a minor episode boundary which went unnoticed by the hearer (Laine). In this interpretation, the episode boundary occurred when both interactants laughed. In this analysis, the boundary represents the termination of a short series of events that were incidental to the main thread of the retelling. When these events concluded, Laine returned to the main narrative thread using the widely reported strategy of using a pronoun for a main character (e.g. Clancy, 1980; Smith et al., 2005). The miscommunication may have arisen due to Laine not recognising the termination of the minor narrative thread, presumably interpreting the laughter as an interruption rather than a boundary marker.

A number of other factors also appeared to be implicated in one or more SLL miscommunications. Due to space constraints, the main ones are listed here without discussion, with relevant excerpts presented in Appendix 7.7. These were dis-fluency (Extracts 36 and 37), event sequencing (Extract 38), morphological error (Extract 39), and the structure *the + name* (Extract 34).

7.7 Generic reference

While the previous sections in this chapter have focused on Level I and II references, this section presents findings relating to generic reference (Level III; discussed in Chapter 2.2.3). Although NPs relating to generic entities occurred infrequently in these data, there is potential to mistake these for references to specific individuals.

Findings were presented in Chapter 5.4.2 indicating that the SLL speakers, overall, had not acquired target-like use of signallers of generic reference, and that they used a wide variety of non-standard forms for this function, and avoided generic *you*. Analysis of the SR interviews suggests that such SLL errors were generally successfully accommodated by the hearers. However, two likely cases of miscommunication and one possible case were identified in these SLL data. The two clearer cases both involved misinterpreting a generic NP as referring to the group of workers (i.e. specific plural). The trigger for one of these is presented

as Example 7.25:

Example 7.25: *Sabrina and April*

T = 12.18	S – ah, so they – this machine to just ah . to to give <u>peoples – how to feed sometime people, you know when # # # # sometimes it bring like machine and .</u>
3	<u>er give food for the people,</u> like sometime there's . /pla:ts/? A – mmmhmm S – and then this machine like . give the food, and j- just <u>they</u> can move

This miscommunication appeared to be triggered by the non-standard NPs used for this function, and perhaps also because generic referents are not generally associated with narratives (von Stutterheim & Klein, 1989).

In Appendix 7.8, a possible case of misinterpreted generic reference is presented, although the communicative outcome is not entirely clear. In contrast to Example 7.25, in this case, a specific reference appears to have been interpreted as generic reference.

It is possible that further misinterpretations of generic entities did occur in these data but were not detected in the stimulated recall. There are two reasons why this could be so. Firstly, at the time of the interviews, I was not alert to the possibility of such miscommunication, and so did not use questions to prompt such details from the hearers' comprehension. Secondly, some such miscommunications could go unnoticed by the interlocutor, even when viewing *Modern Times*. This is because what is described as the function of the machine (in relation to a generic character) is replicated with events involving Charlie (before the machine malfunctions). For this reason, misunderstanding, of a sort, could occur in the *Modern Times* task without affecting overall narrative comprehension; in other discourse contexts, however, such 'singular specific for generic' miscommunication may prove problematic.

It is also of interest that, despite the relatively low number of 'specific for generic' miscommunications identified, the L2 speakers' linguistic errors in signalling generic reference coincided with a great deal of strained communication. This appears to be partly due to the complexity of the 'feeding machine' episode. However, it is also possible that an accumulation of linguistic errors (including the signalling of generic reference) may have contributed to an increase in 'noise',

and, therefore, strain.

In summary, although generic reference appears to be a frequent source of SLL errors, it appears to be a relatively modest source of referential miscommunication in these data. However, it is suggested that this is partly due to the nature of the *Modern Times* narrative task, and that the procedures used to elicit miscommunication may have resulted in some miscommunications being overlooked.

7.8 Repair and clarification as a discourse troublespot

Analysis revealed an unexpected discourse troublespot to be actual acts of repair and clarification. Specifically, it appears that the hearers interpreted clarifications and repairs as being particularly salient, and as a likely indicator of contrast with their present interpretation. Consequently, hearers were found to sometimes ill-advisedly adjust their interpretations of reference following a speaker-initiated repair. Furthermore, it appears that after initiating a clarification, hearers often interpreted the clarified reference with a degree of confidence that proved problematic.

In Example 7.26, for instance, Julia modified a description (*the manager*) that she had successfully used on several previous occasions to refer to the boss. Abby interpreted this not as a modified description of the boss, but as the abandonment of that reference and the introduction of a new, unknown character. It may also be relevant that the two REs appear to signal slightly different degrees of accessibility (as proposed in Chapter 5.3.1).

Example 7.26: *Julia and Abby*

T = 18.59 10	J – due to this, ah events and circumstances, the <u>ah the manager or the owner of the company</u> did not want to accept the invention	A – she said the manager at first but then the sort of like a factory owner?, so I imagine that was someone we hadn't seen before,
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Hearer-initiated clarification also appears to be a potential referential troublespot,

as illustrated in Example 7.27.

Example 7.27: *Kane and Racquel*

T = 26.10 10	K – uh uh HUNGrY, [oh] hungry, he wa- he was very hungry, and er . R – SHE, or HE? K – she sh- sh- she, er . mm . <u>he he he</u> just walking . . < . . . > a bread shop, bread shop [yeh], <u>h- he see a – he</u> saw a bread shop, um,
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In this example (presented in greater detail in Appendix 7.9), Raquel sought clarification over whether Kane had made a pronoun error. Kane then corrected the error, but immediately made another one. Importantly, whereas in other parts of the discourse Raquel appeared cautious in interpreting pronouns (presumably due to the frequency of such errors in Kane’s retelling), in this case she interpreted the gender marking literally, and did so in spite of the rather abrupt shift of focus that this required (Charlie had not yet been re-introduced to the narrative after the major episode boundary). A similar L1-L1 example is found in Appendix 7.9, where the interactants engaged in an extended negotiation over the identity of the character, resulting in miscommunication.

To summarize then, it appears that conversational moves involving clarifications and repairs may represent a communicative trouble spot. In the case of speaker-initiated repairs, modified descriptions may be interpreted contrastively, while hearer-initiated repairs may lead to undue confidence in their interpretations.

7.9 Hearer factors

The miscommunication presented in Example 7.28 appears largely to be the result of hearer factors. In this case, the SLL speaker (Steffi) was describing the incident when the girl collides with Charlie, but Otis interpreted this to mean that the witness collides with Charlie.

Example 7.28: *Steffi and Otis*

T = 20.13 9	S – and <u>the thi old lady</u> saw that and Ø tell the . chef [mmhm] and when <u>the young lady</u> run out the – ran out of them, <u>she</u> ah came across with Charlie, and er: um: and then she um: . <UNSURE TONE> bump him down	O – I was very confused. The first thing that I thought was that the OLD lady had bumped into Charlie.
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When analysed for referent accessibility, the girl was coded as D5, and the witness as D4; this suggested that Steffi's use of a pronoun was felicitous. This interpretation was supported by the five independent L1 'judges' (discussed in Chapter 4.1), who each interpreted the pronoun as relating to the girl. The results appear to suggest that Otis' interpretation was peculiar to him at that moment.

7.10 Summary and implications

The interactions in the present study involved a complex narrative, which generally elicited detailed retellings and a number of miscommunications, even between L1 interactants. Although, as discussed in Chapter 5, the SLL-L1 interactions generally involved fewer referents and acts of reference than the L1-L1 interactions, they involved substantially more referential miscommunications overall.

In both the L1-L1 and SLL-L1 data, the miscommunications that occurred were fairly evenly divided between contexts of referent introductions and subsequent tracking. This is despite acts of referent tracking being far more frequent in these data than introductions. As a percentage of all introductions, SLL-L1 miscommunications were approximately 50% more frequent than those in L1-L1 interactions. Miscommunicated introductions of the feeding machine were particularly problematic, with nearly half of all such (referential) SLL introductions being misunderstood or unresolved.

In referent tracking, factors involved in triggering L1-L1 miscommunication included under-explicitness, over-explicitness, lexical ambiguity, and unclear shifts between direct and indirect speech. In the SLL-L1 interactions, a much wider range of factors were implicated, but few miscommunications were attributed to infelicitous accessibility marking; the most frequent trigger was pronoun errors (e.g. *he* for *she*). Other SLL-L1 problems related to failed introductions of hearer-new entities and problems relating to generic reference. In both the L1-L1 and SLL-L1 interactions, the use of repair moves was identified as occasionally problematic.

Among the implications of these findings to be discussed in Chapter 9 and Chapter 10, it seems that an explanation is required for the apparent success of over-explicit references in SLL speech. In addition, it appears that particular types of referring act (such as to entities with very low accessibility) may represent a substantial communicative challenge, and certain errors may be more likely to trigger miscommunication. Also to be discussed in Chapter 9 is the suggestion that there may be certain discourse troublespots (such as the use of clarification moves and reported speech). Awareness of these issues may be useful for communication in high-stakes contexts.

In the context of this discussion, it is important to note, as emphasised in Section 7.0, that miscommunication very often involves multiple speaker and hearer factors. Although this chapter has focused mainly on identifying specific speaker-related factors, it must be acknowledged that the same utterances may have proved unproblematic to a different hearer, or have been triggered by momentary hearer distraction. Furthermore, although this chapter has focused largely on issues of felicitous use of REs, it is possible that plausible alternative explanations could be offered in some cases.

8 Discussion of the findings: Some implications for theories of reference

8.0 Introduction

The focus of this chapter is a discussion of several key issues relating to the nature of reference and frameworks for exploring reference. The issues presented here arise from an exploration of the L1-L1 interactions, and a consideration of the adequacy of the framework developed in Chapter 2. Interactions involving SLL speakers will be discussed in Chapter 9.

This chapter discusses a number of theoretical issues in reference that arise from considering the findings from the L1-L1 interactions in relation to the existing literature. The main linguistic framework of the present study is Accessibility Theory (AT), and I discuss in Section 8.1 some implications for this theory, including a proposal that there are actually two types of competition relevant to accessibility marking.

Section 8.2 discusses aspects of the narrow definition of reference adopted in the present study, arguing that broader linguistic definitions are deficient philosophically and as a means of explaining communication/miscommunication. Furthermore, there appears to be some linguistic evidence in the present data to support this position.

Section 8.3 briefly outlines and discusses the proposed levels of reference outlined in Chapter 2, and restates the argument that such a concept may preserve the important distinctions identified in the philosophical literature, while preserving the explanatory power of broader linguistic theories.

Section 8.4 discusses findings which challenge four key assumptions about reference arising from the literature reviews in Chapters 2 and 3. In response, a more nuanced view of reference resolution is proposed in Section 8.5, where a proposed concept of gradations in referentiality is presented.

8.1 Accessibility Theory

This section presents some implications for AT arising from issues which emerged in the present study. The discussion is divided into two subsections. Subsection 8.1.1 briefly summarizes the key issues that arose in Chapters 5 and 6. Subsection 8.1.2 proposes a condition under which speakers felicitously select an RE signalling a lower degree of accessibility than the memory status of the referent.

8.1.1 The AT framework

This section briefly summarizes some of the findings reported in Chapters 5 and 6 relevant to discussions of Accessibility Theory (AT).

Evidence for the AT account of noun phrase selection

Accessibility Theory (Ariel, 1990, 2001) seeks to account for the distribution of NP types in discourse, and it may be worthwhile to briefly recall the extent to which the present findings support the AT account. As noted in Chapter 4.10, however, the coding system only generates an approximation of accessibility, and this limits the relevance of the findings to this issue. Nevertheless, it was argued in Chapter 6.1.7 that the findings provide support for the general claims of AT. Firstly, RE types only appear felicitous within a certain range of accessibility. Secondly, the division into high- and low-accessibility markers appears to indicate clear ranges where each is exclusively felicitous. There is also a mid-range of accessibility (an overlap) where both high- and low-accessibility markers are felicitous. The accessibility coding system used in this study does not enable the more specific claims of AT to be confirmed or disconfirmed. In Appendix 8, I very tentatively raise some possible problems for the AT account of proper names as accessibility markers.

In Chapter 5.3, some issues were raised in relation to how REs are to be coded in relation to Ariel's (1990, 2001) the hierarchy of NP types. I suggested that accessibility marking in embedded references is relevant to the interpretation of overall accessibility marking in the head NP. I further suggested that the analysis of accessibility marking in overall acts of reference take into account the distinctions between simple, compound, complex and jointly-constructed reference. Such issues are partially addressed in the present study in the approach to referent introductions, where I have also approached try-marking, RE + event, and episodic reference as markers of accessibility (in each case functioning to lower the accessibility marked in the NP). Future studies may wish to extend this by exploring reference from a perspective that considers the multiple levels at which accessibility appears to be marked, also taking into account relevant syntactic constructions (e.g. Givón, 1983b) and intonation (e.g. Baumann & Grice, 2006).

8.1.2 Competition and mismatches in RE form and memory status

In this subsection, I argue that previous accounts of RE selection (e.g. Ariel, 1990, 2001; Arnold, 2010; Givón, 1983a) may have overlooked an important distinction between two types of competition. These relate to two separate ways in which competition plays a role in accessibility marking, and has implications for theoretical perspectives on the repair of accessibility marking.

As discussed in Appendix 2, a number of studies (e.g. Arnold & Griffen, 2007; C. Brown, 1983; Clancy, 1980) have shown that the accessibility of a referent is lowered by the presence of competing referents. That is, the number of intervening referents between an anaphor and its antecedent is an important factor in determining overall referent accessibility. There appear to be three main arguments explaining the competition effect: an argument relating to referent ambiguity (Givón, 1983a), an argument relating to attentional resources (Arnold & Griffen, 2007), and a similar argument relating to the suppression and enhancement of activation (Gernsbacher, 1990).

The general suggestion that competition affects accessibility is supported by the present study, where it was identified in piloting as an important part of an accurate coding system. However, as with other studies (e.g. Swierzbin, 2004; Toole, 1996), the present results also include a number of references that initially appear over-explicit in terms of the basic predictions arising from the theoretical framework (in this case AT), but which intuitively seem felicitous given other contextual variables. This is unsurprising as all the major theories relevant to RE selection “agree that additional, pragmatic factors can override the principles they propose” (Ariel, 2001, p. 60). Nevertheless, much remains unexplored in relation to identifying these factors and how they operate within AT.

Following my analysis, I suggest that the major condition under which marking is ‘lowered’ in the present data involves a second type of competition. This argument is a development of an idea which I raised in Chapter 4.10.2 to account for an example that Gundel (2010) has suggested may be problematic for AT. Specifically, I argue that competition not only lowers the accessibility of a referent, but in some contexts can also motivate a ‘lowering’ of the RE used (i.e. over and above the lowering required to reflect referent accessibility). In this sense, there appear to be two distinct types of competition relevant to accessibility marking rather than the unified notion of competition discussed in other studies.

To distinguish these two types of competition, I use the terms *referent competition* and *equivalent-accessibility competition*. Referent competition (RC) has an effect on accessibility in the sense outlined by Arnold and Griffen (2007). That is, the presence of multiple competing referents in the current discourse model reduces the accessibility of referents. Conversely, in the absence of competing referents, accessibility may remain high even after a large number of intervening clauses. A key issue in competition appears to be animacy. This was found during the piloting stage when analysing retellings of the episode involving Charlie and the feeding machine. As discussed in Chapter 4.10.1, the accessibility coding system had to be modified to account for the fact that speakers could continue to refer to Charlie with a pronoun despite substantial distances (up to 17 propositions) between the RE and the antecedent, provided that no other characters were mentioned or referred to. This confirms Ariel’s (1990, 2001) contention that

competition, in the sense of RC, is one of the key determiners of cognitive accessibility.

The new type of competition that I am proposing, *equivalent-accessibility competition* (EAC), has an effect independent of influencing accessibility. That is, it influences RE selection, without further influencing the actual cognitive accessibility of the referent. This type of competition is related to the ambiguity principle identified by Givón (1983a), but my claim is a more specific one. That is, the use of a marker of lower accessibility may be motivated by the need to clarify which of two or more referents is being referred to if those competing referents have approximately equivalent accessibility. This is achieved by providing additional semantic information in the RE. Equivalent-accessibility competition occurs very specifically when the following two conditions are met, and results in the use of a lower accessibility marker than would conventionally be used:

1. the intended referent has a (more or less) equivalent degree of accessibility to another referent, and
2. the most appropriate accessibility marker does not provide enough information to distinguish the referents (e.g. *he* and *the man* are not sufficient to distinguish two adult male characters with the same degree of accessibility).

This is illustrated in Example 8.1, where, despite the high accessibility of Charlie (D5), Kate's use of a low-accessibility marker seems the only felicitous option in distinguish Charlie from the similarly accessible policeman.

Example 8.1: *Kate and Nina*

T = 5.50	the wagon sways, Charlie follows her, and they ALL fall out, [oh yeah] so the girl, Charlie, and the cop, they fall out, . and then they're lying on the ground,
10b	and then <u>Charlie</u> 's like 'this is your time to get away'?

Similarly, in Example 8.2, a referent with D5 accessibility is encoded with a short definite description:

Example 8.2: *Jake and Sonny*

T = 6.29	Charlie like starts patting the policeman?, cause he starts waking up?, and Ø sitting up?, and he's like patting on his head like that?, [GESTURE] and then
21	like Ø grabs his hand with the baton and Ø goes like that?, to his head?, [@@@] so <u>the policeman</u> falls back down,

Jake's use of the definite description appears felicitous and perhaps necessary to disambiguate the policeman from Charlie, who had accessibility D6 at this stage in the discourse.

To summarize the argument so far, the unitary concept of competition presented in other studies obscures an important distinction between (a) competition that lowers accessibility, and (b) competition that arises from matching referents sharing similar degrees of accessibility. Evidence for the latter is also evidence for the basic claim of AT that accessibility marking guides the hearer to retrieve the intended referent. That is, if the predictions of Accessibility Theory are correct, then EAC (*equivalent-accessibility marking*) contexts are precisely those in which speakers would need to use a more informative expression than what conventionally encodes that degree of accessibility. Further analysis of the data would be required to confirm how reliably speakers lower the RE choice in these cases (at least where coherence factors do not clarify the referent), but there is a further type of evidence suggesting that the hypothesis is correct. That is, in some cases where the L1 speakers repaired accessibility marking, this appears to have been motivated by EAC rather than under-explicitness. This is illustrated in Example 8.3:

Example 8.3: *Fiona and Geoff*

T = 3.24	F – she ₁ takes off down the road, and this lady – middle aged lady ₂ – sees her ₁ , run off, so <u>she₁ runs round the corner</u> , the um . . . the lady th- the homeless girl, runs
9	<u>round the corner</u>

Here, the referent had accessibility D6, which is a status that is most felicitously encoded with pronouns, yet Fiona repaired this reference. I argue that this was because of the high accessibility of the witness. Example 8.4 may be similar, with Jake repairing a pronoun with a long definite description (nowhere else used for D6 accessibility in these data):

Example 8.4: *Jake and Sonny*

T = 4.23 8b	J – and she grabs like one of those french sticks?, [yeh, yeh] one of those rolls from the truck?, and this 1- lady walking past like this – you know, sees this girl um, stealing this bread, and <u>she – the girl who stole it</u> run down – was running down the street
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The finding that EAC motivates some accessibility marking repairs is also interesting from the perspective of investigating the cognitive operations that speakers perform. Such repairs have previously been considered from a number of perspectives in the literature, including managing the tension between economy and clarity (Geluykens, 1994), providing interactional advantages such as buying time for the speaker and alerting the hearer to a possible change in focus (Schiffrin, 2006), as well as evidence of the conventional use of NP types to signal specific degrees of accessibility (Ariel, 2008). My proposal is that, in the examples provided, the speakers may have first encoded the referent's degree of accessibility, but then modified the referring expression upon realizing that EAC resulted in ambiguity. This suggests that speakers may often only become aware of EAC subsequent to encoding their initial judgment of accessibility. As such, accessibility marking may be largely procedural; the recognition of EAC may be a calculation that occurs after an initial estimate of the memory status of the referent. Further exploration of this possibility is beyond the scope of the present study, but could be tested in future psycholinguistic studies.

To summarize, what I have proposed is a specification of exactly when competition prompts the use of a more explicit RE than what conventionally encodes the referent's degree of accessibility. This occurs when:

- two referents are competing for a RE that links semantically to both; and
- the two competing referents have the same, or very similar accessibility

In such cases, because accessibility marking cannot distinguish between the competing referents, a more semantically informative RE is required to distinguish between those referents.

8.2 A pragma-linguistic approach to reference

As reference is an area of interest in a broad range of disciplines, it is perhaps unsurprising that there is a great deal of debate over what counts as a referent and as an act of reference. Underlying much of the debate are the differences between what Kronfeld (1990) identifies as the external and internal perspectives on reference (discussed in Chapter 2.1). From the external perspective, an act of reference involves indicating referents in the real world; from the internal perspective, an act of reference involves a co-textual link between an anaphor and its antecedent. As argued in Chapter 2, in the linguistics literature, the internal perspective dominates discussion of reference. Consequently, it seems, the result is a view of reference that is largely indistinguishable from *using a definite noun phrase*, or even *using a noun phrase*, and the valuable external perspective of reference is often lost. That is, for example, one could correctly identify the chain of anaphors in Example 8.5 but still be entirely mistaken about *which* girl was being referred to.

Example 8.5: *Shaun and Deb*

T = 1.23	it went back to <u>that girl</u> , and <u>she</u> got – <u>she</u> stole a loaf of bread, [oh yeah] and then . <u>she</u> ran, and Charlie Chaplin was leaving work, and <u>she</u> ran into Charlie Chaplin
4	

As discussed in Chapter 2, the definition of reference adopted in this study takes a primarily external perspective, involving a four-place relation in which “a *speaker* uses an *expression* to refer to his *audience* to an *individual*” (Bach, 2008, p. 17). This requires a number of important distinctions to be maintained, including those between *reference* and *denotation* (the class of entities that a word can apply to), and between (proper) reference and *attributive reference* (Donnellan, 1966).

The definition developed in Chapter 2 was based around a question that had not been directly raised in the literature reviewed: *what does it mean to miscommunicate reference?* From this starting point, I argued that the linguistic concepts of *time reference* and *location reference* do not constitute reference at all. That is, to miscommunicate time or location is not a matter of reference but a matter of, for example, denotation, mishearing, deixis, or implicature.

I further argued that it appears that while some abstract entities can be referred to, many cannot, but it remains unclear where to draw this distinction. Such complexities have been largely avoided in the present study, as very few of these types of entity occurred in the data, and these were coded separately in the analysis. Future studies may wish to consider these issues in greater depth, and determine exactly where to restrict the concept of reference for abstract entities.

There is, however, a linguistic argument against this position. Hedberg (2008, March 26), in responding to Bach (2008), concedes that attributive references “may be a ‘very weak sense’ of ‘reference’, philosophically,” but argues that Gundel et al.’s (1993) broad conception of reference “is the one at work in the grammars of natural languages” (p. 5). Hedberg’s argument is that the linguistic rules that govern the use of referring expressions, particularly marking for cognitive status, apply to NPs that are being used to refer, as well as those being used attributively.

Within a purely linguistic framework, Hedberg’s argument appears reasonable; linguistic theory needs to account for linguistic data. However, from a broader pragmatic view, the internal perspective of reference found in linguistics does not capture fundamental issues relevant to communication and miscommunication. For the issues of interest to the present study, both the linguistic view of language and the philosophy-based view of communication are relevant. This is the motivation for distinguishing *levels of reference* in this study (Chapter 2.2): in order to identify a sound, core definition of miscommunicated reference, and build a framework around this which integrates some of the uses of definite NPs that are of interest in linguistic analyses.

Nevertheless, there appear to be two forms of *linguistic* counter-evidence to Hedberg’s position that arise from an analysis of these and other data, and these are discussed in Subsections 8.2.1 and 8.2.2, where I suggest that theories of accessibility marking may benefit from adopting the approach to reference used in the present study. The first type of evidence relates to an analysis of NP types that appear to be associated with non-reference in target-like speech (bare nouns, demonstratives, and indefinites). The second relates to data suggesting that

accessibility marking for non-referents may, in fact, be subject to a different set of rules than accessibility marking for true referents. I argue that patterning in RE use becomes clearer when true referents are distinguished from such non-referents as events, locations, time, and pronouns in equative (*it was her*) and pleonastic constructions (*it's raining*). Although these non-references account for just 5.9% of the NPs in the data, by distinguishing these from true referents in the data, there remain relatively few exceptions to the predictions of Accessibility Theory.

8.2.1 Reference and noun phrase types

The distinction between reference and non-reference appears to be partially supported by analysis of the types of NP that function as REs in the L1 data, with some differing distribution patterns relating to referents and non-referents. This relates, in particular, to the use of bare nouns, and to the use of some demonstrative forms (particularly bare *this/that*), as well as the obvious distinction between definite and indefinite NPs. The associations between definiteness and reference, and indefiniteness and mentioning, are rather well-established in the literature and so are discussed in Appendix 8, while the findings relating to bare nouns and demonstratives are presented in the following subsections.

Bare nouns

Bare nouns are those NPs that have no article or other determiner preceding the noun. In many languages, these are found to signal generic referents and/or are associated with indefiniteness rather than definiteness (C. Lyons, 1999).

Presumably this is because they do not signal whether or not a referent can be retrieved, whether a new 'file card' needs to be created (in the sense of Heim, 2002), nor any degree of accessibility. Thus in the view of reference adopted in the present study, it may be predicted that bare nouns are likely to be used only infrequently to refer in L1 speech. Indeed, this is a finding reported in Chapter 5, with just nine referential bare nouns in the data, representing just 0.5% of all references. In comparison, 85 bare nouns (90%) were used non-referentially.

Furthermore, three of the nine referential bare nouns involved the fixed expression *part one* or *part two*, leaving just six other cases of referential bare nouns. One of these is illustrated in Example 8.6.

Example 8.6: *Kate and Nina*

T = 2.51 5c	it goes back to the butter and then like Ø forces itself at his face, and . . . that happens and then <u>machine</u> starts play- well it's obviously playing up, and then . so the scientists are trying to fix the machine and
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Considering the scarcity of referential bare nouns in the L1 data, it is likely that these represent either a performance error or an inaudible determiner, or perhaps the occasional deliberate omission of a determiner in colloquial speech.

Among the 85 uses of bare nouns considered non-referential in this study were expressions of time (e.g. *lunch time*), location (e.g. *in town*), events (e.g. *bumpy ride*), mass nouns (e.g. *corn*), and vague expressions (e.g. *stuff, things*). A further use of bare nouns was to describe attributes of other referents, as illustrated in the example presented in Example 8.7:

Example 8.7: *Jake and Sonny*

T = 0.10 1	this girl comes along, and she's got like, kind of these buttons, that kind of look like <u>bolts</u>
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The most common non-referential use of bare nouns was to introduce hearer-new entities for the first time (36%). In most cases these entities were inanimate objects encoded with non-count nouns (e.g. *butter; hot soup*).

Example 8.8: *Vicky and Francesca*

T = 0.44 3	V – it just went haywire and it had <u>sweetcorn</u> that was going up and across
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Other than the vague non-count expression *people*, the policeman was the only character encoded with a bare noun (this occurred twice), as illustrated in Example 8.9. In both cases these introduce the policeman, and it appears that this was done in such a way that the speaker was not referring to the policeman as an individual, but as someone occupying a role. This interpretation appears to be supported by the subsequent reference in Example 8.9 in which the speaker used the term *the police*, which appears to have either a generic or institutional

interpretation, rather than referring to an individual.

Example 8.9: *Jeff and Patrick*

T = 2.34 8	so SHE gets caught, um <u>policeman</u> comes, Charlie Chapman . um says that he does it – he he’s the one that did it?, [yeh] so he gets taken away by <u>the police</u>
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Because the use of bare nouns appears contrary to theories of accessibility or cognitive status marking, they appear to present a theoretical problem for studies that take a broader approach to defining reference. For example, Swierzbin (2004) found that bare nouns accounted for a relatively substantial 3.7% of her overall data, and 2.8% of the statuses *uniquely identifiable* or higher, compared to just 0.5% in the present data. The Givenness Hierarchy framework that Swierzbin adopted offers no explanation for why this should be so, other than the claim that bare nouns can be either definite or indefinite (p. 33). An additional problem is that bare nouns appear to be the least uniform accessibility markers in Swierzbin’s data, being used “for every cognitive status except Uniquely Identifiable” (p. 95). Therefore, it appears that the distribution of bare nouns cannot be accounted for within present approaches to the Givenness Hierarchy (or, perhaps, to AT).

Kim (2000) largely avoids the problems posed by bare nouns by discounting examples that can be considered idiomatic in the sense of Soja’s (1994) *NP-type nouns*, such as *go to prison* (p. 169). With this approach, in Kim’s L1 data 0.9% of those entities classified as *uniquely identifiable* or higher were encoded with bare nouns (compared to 0.5% in the present study). While this figure is much closer than Swierzbin’s to the predictions of accessibility (and similar) theories, it should be noted that Soja’s definition of these noun types is a syntactic one, and that closer examination reveals that all of those that she identifies are, in fact, used to mention events or locations (relevant examples can be found in Soja, p. 269).

Consequently, it appears that in distinguishing true referents from non-referents, the narrow approach of the present study (which draws on Bach, 2008) results in findings that better match the predictions of theories of NP selection, at least in relation to bare nouns. For this reason, I suggest that theories of accessibility or cognitive status may be substantially better at accounting for genuinely referential NPs than for the broader class of NPs to which Gundel et al. (1993) apply the

Givenness Hierarchy.

To summarize, although bare nouns are theoretically excluded from the major accounts of reference (e.g. Ariel, 1990; Gundel et al., 1993), it appears that the data best support this exclusion using the philosophy-based definition of a true referent that I have argued for in this study. Of course, theories of accessibility and cognitive status appear to have a great deal more explanatory power than simply accounting for truly referential NPs, but it appears that they may have to be modified to take these uses into account. This is not inherently problematic. Ariel, for example, has outlined ways in which accessibility is marked in verb phrases, clauses, and utterances (1985, 1988b); for instance, verb phrases marking high accessibility can “refer back only to the immediately preceding clause” (1985, p. 105), compared to multiple clauses back for pronouns. Thus, although the concept of accessibility can be seen as relating to non-referents (such as events and propositions), I argue that the exact rules of linguistic marking appear specific to the referent type. I argue that relevant distinctions may also apply to the accessibility marking of true referents (entities) and to accessibility marking in relation to time and location.

Demonstratives

Turning now to bare demonstratives (i.e. demonstrative pronouns), analysis of the present data casts some doubt over the extent to which these NP types are used referentially. Bare demonstratives are regarded as important referential forms in both Accessibility Theory and the Givenness Hierarchy, in the latter representing the archetypal expression for the cognitive status *activated* (Gundel et al., 1993). However, in the present study there were just three L1 references encoded with bare *this* (0.2%) and ten with bare *that* (0.6%) from 1647 references in total. Indeed, all referential demonstrative forms were relatively rare in these data. The most frequently used such form was *this* + NP, which was used for just 1.5% of all L1 references, while the six remaining demonstrative forms were each used for less than 1% of all references. In total, the seven forms of demonstrative RE accounted for just 4.8% of all references.

However, for some demonstrative types, it is not the case that the *linguistic forms* were not used, but rather that the majority of uses of these forms were non-referential. Of particular note is that bare *that* was mostly used to mention events, time and place (80.4% of uses) but seldom used to refer to people and objects (19.6%), and, even then, this appears restricted to deictic uses in reported speech contexts, as in Example 8.10.

Example 8.10: *Kate and Nina*

T = 0.53 2	K – and then the guy . kind of warns him, ‘ <u>that</u> ’s my lunch, don’t sit on it’,
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This analysis reveals an important finding: while the present definition of reference excludes only a very low proportion of most definite NP types in the present data, it excludes a high proportion of demonstrative NP types (47.6%). By comparison, there was only one arguably non-referential use of a proper name in the present data, and *the* + NP is the only other NP type with a substantial proportion of non-referential uses (20.6%). Data for non-referential uses of the pronoun *it* were not collected across the sample, but across a sample of four retellings these accounted for 15.4% of all uses. Therefore, it appears that there are substantial variations in the distributions of various NP types across the referential/non-referential dichotomy. This suggests that the choice of RE type may be influenced by the nature of the referent, rather than just the accessibility of the referent.

Although the infrequent use of demonstratives has been noted in a number of other studies (e.g. Gundel et al., 1993; Swierzbin, 2004), my analysis suggests that truly referential uses of demonstrative forms may be substantially rarer than previously thought. This could suggest that the prominent role of demonstrative forms in both AT and the Givenness Hierarchy might have been over-emphasized. It remains to be seen whether, or to what extent, these findings reflect constraints found in the elicitation task. As the principles of AT are proposed to hold over all modes and genres, and the range of referents and accessibility contexts in the *Modern Times* retellings appear to include many fine distinctions, my prediction is that similar findings will hold elsewhere.

In short, then, the referential/non-referential distinction appears relevant to the frequency and distribution of demonstrative NPs.

Summary

In this subsection I have argued that the distinction between referential and non-referential acts is supported by some clear differences in the distribution of NP types in the present data. This is especially true of bare nouns, demonstrative forms, and (as discussed in Appendix 8) indefinite articles, but less true of the definite article. While the findings relating to definite and indefinite articles merely confirm well-established arguments (dating at least to Christophersen, 1939), the findings relating to demonstrative forms were unexpected. Perhaps most importantly, the approach I have taken appears to solve a problem relating to bare nouns in studies of referring expressions. That is, a narrow definition of reference appears to result in findings that much more accurately match the predictions of theories of NP selection than do the broad approaches to reference that are typically adopted by linguists.

8.2.2 Accessibility marking in reference and non-reference

Further evidence of the linguistic relevance of the distinction between reference and non-reference is found in the present findings relating to accessibility marking. Specifically, the principles governing accessibility marking may be slightly different depending on the nature of the referent.

Although accessibility theory is usually discussed in relation to NPs, it actually applies to other constituents with the discourse status Given, including predicates and propositions (Ariel, 1985, 1988b). The systems of accessibility marking may be specific to a particular constituent type. However, there has been little analysis (in either the AT or similar theories, such as the Givenness Hierarchy) of possible differences in accessibility marking between those specific uses of NPs that relate to true referents, and those that do not (although Gundel, et al., 2005, discuss the

related issue of non-NP antecedents). In this subsection, I argue that the present findings suggest substantial differences in accessibility marking between true referents and non-referents.

Example 8.11 illustrates what appears to be a greater constraint on the ability to pronominalize NPs relating to locations than to people and objects. In this example, the bakery is introduced rather conventionally (*this bakery*) and then subsequently mentioned a further four times:

Example 8.11: *Jake and Sonny*

T = 4.23	J – she’s walking past like <u>this bakery</u> ?, and this man the baker, is like dropping off . y’know bread and . um . bread and bakery stuff, into – it goes into <u>this store</u> , and he’s in hi- – and there’s the truck there and the girl walks past and sees <u>the bakery</u> and Ø looks in the window and she’s real hungry and then Ø sees the guy loading . the bread into <u>the store</u> ¹ , and he goes into <u>the store</u> ²
8b	

Of most interest is the relationship between the final two mentions. If the bakery is treated as an object, then the second of these two mentions scores an accessibility rating of D5 (based on previous mention in the immediately preceding clause; no matching competition; two mentions in the previous four clauses; and grammatical parallelism). As presented in Appendix 6, only 3.5% of referents with accessibility D5 were encoded with definite descriptions, and the vast majority are encoded with pronouns or zeros (86.9%). However, in this example not only does the speaker use a short definite description, but the use of a third-person pronoun (*it*) would be grammatically ill-formed (**the guy [is] loading the bread into the store, and he goes into it*). The most grammatically acceptable alternative is perhaps *goes inside* or use of deictic *there* in *goes in there*. (This rule is not specific to NPs embedded in prepositional phrases, as the following invented example illustrates: *he sat on the guitar, poured juice on it, and then spat on it*). In short, Example 8.11 appears to suggest that locations are subject to different rules of accessibility marking than true referents (issues in distinguishing objects from locations were discussed in Chapter 4.9.3).

This interpretation is further supported by Example 8.12, where the first mention of *the ground* does not enable the speaker to pronominalize it in the second mention, despite the references occurring in adjacent and grammatically parallel clauses.

Example 8.12: *Jake and Sonny*

T = 5.07 8c	J – Charlie’s on <u>the ground</u> and she’s on <u>the ground</u> , and this police officer comes
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Again, to formulate this with a pronoun appears infelicitous (*Charlie’s on the ground and she’s on it*) and such a construction seems to indicate reference switch (i.e. the girl being on something else). Use of *there* also seems infelicitous (*Charlie’s on the ground and she’s there*).

These examples appear to provide some support for my position that the referential/non-referential distinction is relevant to NP selection, at least in relation to the nature of the referent, and specifically in relation to locations. Although the coding protocol of the present study was developed specifically for true referents, it appears unlikely that the adoption of minor changes to the protocol could provide satisfying explanations for the above examples. Rather, it appears that locations are subject to different rules of accessibility marking than are true referents. Because the present study focuses on true referents, no quantitative analysis is available of locations in the present data. However, relevant figures are available from Swierzbin’s data, which used a coding protocol intended to apply to such NPs, and some points will be made here about these data.

Although Swierzbin’s data fits rather well into the four categories of pronoun and determiner that the Givenness Hierarchy addresses, Swierzbin identifies a number of examples which do not match the cognitive status predictions of the framework. Many of these are precisely the type of uses of NPs that I argued in Chapter 2 are non-referential.

Perhaps most strikingly, Swierzbin (2004, pp. 81-84) states that eight of the 77 examples (10.4%) of demonstrative forms that occurred in her data indicated a cognitive status that was higher than predicted by the Givenness Hierarchy (i.e. under-explicit, in the terms of the present study). All of these related to mentioning either time or events. It is not clear what proportion this represents of all demonstratives used for time and events, but, if the data in the present study provides a reasonable comparison (both studies focus on narrative retellings of

Modern Times), then it could be that these eight under-explicit NPs represent a quarter of all demonstrative NPs used for time and events.

Similarly, Swierzbina (2004, pp. 85-89) identifies 19 under-explicit uses of *the* + N as non-erroneous (6 additional cases are considered ‘slips of the tongue’). Of these, Swierzbina notes that seven relate to locations (e.g. *around the corner*), and a further two relate to time (both *in the morning*). However, from further examples that Swierzbina provides (*to the shipyard*; *in the chicken coop*), it is clear that a number of other apparently under-explicit NPs also relate to locations (as they are defined in the present study). From a re-evaluation of Swierzbina’s data, it appears that at least 57.9% (11 out of 19) of those uses of *the* + N that she identifies as not matching the predictions of the Givenness Hierarchy (by way of being under-explicit) relate to what I have argued are non-referential NPs (which in the present data represent less than 20% of all *the* + N used).

To summarize, findings from the present study suggest that the narrow definition of reference that I have adopted is relevant to NP selection and, therefore, to linguistic studies of reference. In particular, it appears that cognitive representations of locations and (it seems) times and events require a different analysis for accessibility. This evidence, supported by a re-evaluation of Swierzbina’s data, suggests that the predictions made under both AT and the Givenness Hierarchy are substantially more accurate when a distinction is maintained between true referents and non-referents.

8.2.3 Summary and implications of a pragma-linguistic approach to reference

In this study, reference is defined as a communicative act in which speakers direct hearers to identify referents, and this is not merely a matter of anaphor resolution, but an identification of entities that exist (at least in some sense) independently of discourse. This external perspective is in no way new, but is drawn from the philosophy literature (specifically, Bach, 2008) rather than the linguistics literature. As I argued in Chapter 2, the value of this view of reference is in enabling clarification as to what is entailed in terms such as *successful reference*

and *miscommunicated reference*. It clarifies, for example, that a hearer may successfully resolve anaphors in relation to co-text while nevertheless misidentifying which real-world referent is intended. This is, therefore, a crucial distinction in studies of communicative success.

Consequently, I suggest, firstly, that a principled distinction between referential and non-referential NPs could be usefully adopted in future studies of communicative outcomes, in particular, those concerned with miscommunication. Previous calls for a more principled approach to reference (e.g. Bach, 1998, 2008) have not, it seems, been welcomed by linguists. The main argument appears to be that the linguistic definitions of reference are answerable to facts about language, rather than theories of meaning (e.g. Hedberg, 2008, March 26). However, I have presented two main arguments suggesting that there are linguistic grounds for distinguishing reference from non-reference. Firstly, evidence suggests that this distinction enables better accounts of the range of NPs used to refer, as bare nouns are largely eliminated from the dataset, and the selection of some other NP types (e.g. demonstratives; indefinite NPs) appears closely related to the referential/non-referential distinction.

Secondly, I have further argued that there may be differences in accessibility marking between true REs and non-referential NPs. That is, RE types (accessibility markers) appear to distribute differently according to whether they relate to a true referent or to a location or event. Therefore, it seems that linguistic studies of reference, particularly those concerned with accessibility marking, could also usefully adopt the definition of reference presented here.

Nevertheless, it may be reasonably argued that Bach's (2008) definition of reference may be too restricted to explain features of NP selection that are common to both referential and non-referential language use. For this reason, it was proposed in Chapter 2 that *levels of reference* may be identified, and that these may preserve the explanatory power of both the linguistic and philosophical traditions of reference. This is further discussed in the following section.

8.3 Levels of reference

To preserve the explanatory powers of both the philosophical and the linguistic conceptions of reference, I proposed in Chapter 2 that distinctions be made in levels of reference. In using this framework, the present study excludes certain uses of NPs (defined here as non-referential) that are included in most linguistic studies of reference. The levels of reference were initially distinguished in response to the process of analysing the preliminary data, and in relation to the various arguments in the literature over which phenomena count as reference; these distinctions clarify what constitutes successful and unsuccessful communication of reference.

In this section, I illustrate the levels with examples from the L1 data. As discussed in Chapter 2, although the taxonomy is labelled *levels of reference*, in Bach's (2008) view of reference only Level I constitutes proper reference; under the view of reference adopted in the present study, this is extended to Level II reference. Level III is not considered in this study to constitute genuine reference but relates to what have been called *discourse referents* (Karttunen, 1976), and includes the type of attributive reference included in many linguistic studies.

The taxonomy of levels of reference is briefly summarized below:

Level I reference indicates a referent for which the hearer has an existing mental representation that was formed prior to the present discourse (i.e. the hearer's singular thought in relation to the referent is not dependent on co-text).

Level II reference indicates a referent in the hearer's mental model of the present discourse; this referent is known to the hearer only through the present co-text. There is potential for the referent to become a singular thought held beyond closure of the discourse.

Level III reference involves identifying a discourse referent relating to a generic or attributive entity previously introduced into the discourse. It is not a true reference as no individual outside the text is to be identified by

the hearer, and no singular thought can be formed about the entity.

However, Level III referents can be become linked in anaphoric chains.

As discussed in Chapter 2, there are also a number of types of non-reference, including introductions of hearer-new referents into discourse. Subsequent references to some such entities occur at Level II. Such introductions may be thought of as a processing instruction rather than as reference.

Examples of reference at Levels I, II and III are illustrated below with extracts from the L1-L1 interactions (data from Adele and Laine; Shelley and Jacky):

Level I *and there's that other fat guy who's the one @.saw?, [yep, uh-huh] he like, gets out a thermos in the cupboard?*

and then um Charlie comes along all shakey and he's like about to sit down in it

Level II *he like, gets a bowl, and there's like . a bench?, [mhm] and he like puts the bowl down*

and then some woman₁ saw her the girl₂ take the bread, so she₁'s like 'baker, that woman₂ took your bread'

Level III *you know how black and white pictures have those words that come up*

they took it down, and they picked Charlie Chaplin as the person to try it out on

the woman goes to the baker 'no, it was the girl, it was the girl'

For the purposes of analysing data in the present study, these three categories are also distinguished from other uses of NPs, including anaphors whose antecedents

are propositions or larger stretches of discourse, and NPs indicating time, location, events, pleonastic constructions (*it's raining*), attributes (*he is a doctor*), and larger stretches of discourse.

Overall, very few references were difficult to accommodate within this framework; only 17 of 4326 NPs were coded as *unknown*, and only two of these were in the L1 data. However, as discussed in Chapter 4, a number of issues arose. For example, it was not always clear whether a reference to plural characters should be coded at Level I or Level II, as it is sometimes unclear how inclusive or exclusive a speaker intends the reference. In such cases I coded the referents as Level II. Another difficulty arises when assigning a level of reference to an addressee in reported speech. In these data it was unclear whether the referent was judged to be hearer-new in relation to the addressee within the film, or to the addressee of the retelling. It may be that both interpretations apply at different times, but it is unclear how to differentiate these cases; for consistency, I always coded for the perspective of the addressee in the retelling. Despite these issues, the use of the levels of reference approach generally appears to be relatively non-problematic.

In short, the levels of reference approach developed in this study provides a framework that is relevant both to the present definition of reference, and to studies of referential miscommunication in general. It may also offer potential for greater inter-disciplinary collaboration. Currently, inter-disciplinary work on reference appears to be hindered by fundamental disagreement over basic conceptual frameworks, and the fact that relatively few linguistic studies clearly define key terms such as *reference* and *referent*. As work within philosophy typically relates only to Level I, and linguistic research to all three levels (and more), this proposal to distinguish levels of reference may help to clarify convergences and divergences in cross-disciplinary work.

8.4 Assumptions about reference

In this section, I turn attention to the nature of the communicative act of referring. I argue that the present data contradicts the three widespread assumptions about reference that were identified in Chapters 2 and 3:

1. Coherent discourse involves the resolution of all references.
2. Speakers invariably attempt to ensure that all references are resolved, and cooperative hearers invariably apply additional effort to the resolution of difficult references.
3. All pronouns that relate to specific entities (e.g. not pleonastics) indicate high accessibility.

I argue that while these assumptions may be true of many, and perhaps most, references, they are not true of *all* acts of reference. I also argue that a fourth assumption (implicit in the definition of reference developed in Chapter 2) cannot be maintained in light of the findings relating to the first three assumptions:

4. There is (always) a clear distinction between *reference* and *mention*.

In light of these points, I argue for a position in which there are gradations between true reference and mere mentioning. These arguments prepare the way for the theory of referentiality briefly raised in Chapter 7 and which will be developed in Section 8.5.

8.4.1 Assumption 1

As discussed in Chapter 3.3.6, a widely held view of reference holds that the creation of coherent discourse requires that all references be sufficiently precise to enable identification of the referent. In this subsection, I argue against this assumption, firstly drawing from findings in the interview data and then from the linguistic analysis. I then address the issue of whether my examples merely represent infelicitous language use, and then present an argument specifically

against some of the counter-evidence presented elsewhere in the literature.

Evidence from the hearers

Findings from the stimulated recall data indicate that in some cases hearers happily tolerated ambiguity over the identity of a referent, as demonstrated in Example 8.13:

Example 8.13: *Kate and Nina*

T = 14.27 1b	K – in the next part it shows Charlie and <u>that other guy</u> still doing . . whatever’s [<i>@</i>] happening on the conveyor belt,	R – when she said Charlie and that other guy, did you know who she meant?*
		N – oh nah yeah, I was thinking it was this guy, or that guy, but I didn’t really care, I was like ‘anyway, next part of the story’

*Some intervening comments have been omitted

Nina’s willingness to tolerate this ambiguity contrasts with her obvious cooperation in interpreting the overall narrative, as evidenced by a number of explicit requests for clarification (10 occurrences), frequent feedback and back-channelling, and the development of a rich mental model of the narrative, as revealed during the stimulated recall. It contrasts noticeably, for example, with her request for clarification over the girl in Example 8.14 and the corn in Example 8.15.

Example 8.14: *Kate and Nina*

T = 4.02 7-8	K – that finishes and then it goes – switches scenes to the . GIRL? N – oh, [with the bananas?, yeah] K – [the homeless girl?, yeah]
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Example 8.15: *Kate and Nina*

T = 2.51 5c	K – Then the next thing is corn. Yeah. N – a cob of corn? [Yeah] Or corn pieces? K – nah, a [corn cob] N – [corn cob] yep
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These examples suggest that, under some circumstances, hearers may tolerate some referential ambiguity, while in others, speakers display a wish for clarity. A key question, then, is whether tolerance of ambiguity is (a) the result of the hearer

momentarily disengaging or independently deciding not to interpret the reference, or (b) a cooperative response from the hearer to a signal from the speaker indicating that resolution is a low priority. Although the former may occur, there appear to be strong linguistic grounds to support the latter interpretation as being typical of discourse.

Linguistic evidence: Under-specified REs

Two features of the reference in Example 8.13 are particularly notable for the present discussion. Firstly, the RE *that other guy* contains insufficient semantic content to differentiate the intended referent (the colleague) from other hearer-known characters (particularly the relief man). Secondly, this introduction occurred largely *en passant*, with no pause (cf. Example 8.14), try-marker (cf. Example 8.15), or other indication of being problematic, and no space to allow for confirmation or clarification. Therefore, it seems that Kate both provided too little information to disambiguate the referent and indicated that further clarification was unnecessary.

Elsewhere in these data, there is substantial evidence of speakers using REs with semantic content that appears to under-specify referents, and of hearers appearing to accept such REs without seeking clarification. One such example is presented in Example 8.16:

Example 8.16: *Adele and Laine*

T = 3.17 8-11	A – and <u>the people</u> are like trying to fix the machine and it’s like – <u>they</u> have like levers?, [yep, mm] and <u>they open they</u> open <u>a thing</u> and <u>they</u> ’re like levering it and it’s just all sparking and then: . [then] it keeps spazzing out on him, and it comes down and then it goes back up again, and it like – to his face? @, [@@] I dunno, @ and then, @ and then <u>they</u> ’re like aw ‘can it, it doesn’t work’, something, . and <u>they</u> ’re like ‘oh okay’, and then, and then, <u>they</u> kinda sorta fix it,
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Here, the RE *the people* may relate to an earlier use of the expression *all the flash boss people*; however, this is doubtful as a number of other characters are present, and the actual events in *Modern Times* suggest that Adele intended to refer to the scientist and a technician. Following Adele’s use of *the people* in this extract, she used *they* multiple times to refer to a set of characters that alternates between

those who are trying to sell the machine and those who are potential buyers of the machine. There is no explicit antecedent to distinguish the sales team from the management team, and sometimes no obvious coherence-based factors to clarify the referents. However, during the SR interview, Laine made no comments to suggest that pronoun resolution was problematic. When explicitly prompted to clarify her referential interpretation of *the people*, Laine reported that she had “no idea who they were”, yet appeared comfortable with, and confident of, her interpretation of the overall narrative. This suggests that Laine judged Adele to be explicitly focusing on the events involved in the narrative, and that some references were incidental to this (further examples, including vague uses of *it*, are presented and discussed in Appendix 8).

As the examples in this section suggest, it appears that a range of RE types in these data were felicitous yet lacked sufficient semantic specification for the hearer to disambiguate between two or more possible referents. Furthermore, the interactants did not treat these REs as being problematic. Such RE types included uses of *they*, *it*, and lexical REs, including *that other guy* (Example 8.13), *the people* (Example 8.16), and *his workmate* (Appendix 8).

As discussed in Chapter 3.3.6, vague uses of *they* have been widely reported (e.g. Borthen, 2010; Gundel et al., 2005; Sanford et al., 2008), and, more controversially, vague uses of other (antecedent-less) pronouns may also occur (Fox, 1987b; Gundel et al., 2005; Swierzbis, 2004; Yule, 1982). Yule (1982) argued that such pronouns can be used in communicatively successful ways without the referent being identified. Yule’s (1982) argument was not merely that one use of *they* is to conventionally encode vague referents (e.g. the active equivalent of an agentless passive), but that “some pronominals may not receive referential assignments at all, if the interpretation of the discourse does not depend on such assignments” (p. 321). The present data supports Yule’s general claims and extends these to references involving other RE types.

Linguistic evidence: referent introductions

Also relevant is the contrast between how speakers introduced main characters and minor characters. If the resolution of all references was crucial to discourse comprehension, then it may be predicted that the introduction of minor hearer-known characters (who are typically of lower accessibility) would require more informative REs and greater negotiation than the introduction of major characters. However, in these data the opposite appears true. That is, despite the high accessibility which enables Charlie to be successfully introduced with a pronoun, of all character introductions, the most collaborative and negotiated references (in the sense of Clark & Wilkes-Gibbs, 1986; as discussed in Chapter 2) are precisely those made to Charlie and the girl, with introductions of the girl, overall, being the most explicit of all character introductions. In short, then, (and counter to what might be expected if all references required resolution) in this study speakers were more explicit when introducing major characters and tended to be less explicit when introducing minor characters. The main reason, I suggest, is that speakers prioritized successful introductions of the main characters, perhaps considering these to be central to comprehension of the narrative; this interpretation has some parallel in Morrow's (1985) finding that readers prioritize the resolution of such key references. Furthermore, in a number of cases, speakers appeared substantially less concerned with clarifying the identity of minor characters.

Felicitous and infelicitous reference

One issue that must be addressed is an argument made by Sanford, et al. (1983) in relation to Yule's (1982) data concerning antecedentless anaphors. As reported in Chapter 3, Sanford et al. argued that Yule's analysis was based on examples of infelicitous language use, where speakers were not "evaluating the structure of his productions from the receiver's point of view" (1983, p. 316). Sanford et al. report that such pronoun use is relatively frequent in the speech of young children, the elderly, children from lower socio-economic backgrounds, and may also be found "in the uncorrected writing of literate adults" (p. 316). Whether or not this

adequately explains away Yule's examples (few participants details were provided), it seems not to account for the present findings, as such references were reasonably frequent, and the participants were young, educated adults; this suggests that such references are neither rare nor deviant. Similarly, it appears that the findings reported by Fox (1987b) cannot be explained away in terms of demographic issues relating to the participants. Furthermore, unlike previous studies, the present study sought to reveal hearer interpretations of the retelling; the hearers reported no discourse-level comprehension problems or garden-path effects for these references, and there is no other evidence to suggest that misunderstandings occurred or would be likely to occur. This supports my suggestion that such references are not necessarily infelicitous.

Responding to the psycholinguistic evidence

It must be acknowledged that there is psycholinguistic evidence (reported in Chapter 3.3.6) against the position taken here (and by Yule, 1982). Much of this relates to evidence from reading time experiments suggesting that, under most conditions, pronouns prompt readers to search for an antecedent (Cornish et al., 2005; Greene et al., 1994; Sanford et al., 1983). However, as discussed in Chapter 3, one problem with generalizing such findings from reading experiments to spoken language relates to Fox's (1987b) suggestion that antecedentless anaphors may only be a feature only of spoken registers. If so, then it is unsurprising that their presence in a written text could prompt readers to search for an antecedent.

A further issue may be that the comprehension tasks in these experimental studies have involved only very short texts. For instance, in the examples Sanford et al. provide, the longer texts comprised three sentences of between four to eight words each, followed by a six to eight-word question; the re-phrase task involved just two short sentences. Other relevant studies are based on texts of just two sentences (Filik, Sanford, & Leuthold, 2008; Sanford et al., 2008). Furthermore, it appears that these short texts do not occur within any larger narrative context where the writer's overall purpose becomes clear. It seems reasonable to conclude that such isolated and disconnected texts, with limited contextual detail, are

interpreted very differently to the uses of language discussed here and by Yule (1982) and Fox (1987b). In particular, it may be that in the tasks Sanford et al. (2008) and others use, readers were prompted to identify every anaphoric referent precisely because of the difficulty in making greater sense of a text without any clear context or obvious communicative purpose. This criticism applies to each of the relevant experimental studies reviewed here (Cornish et al., 2005; Filik et al., 2008; Greene et al., 1994; e.g. Sanford et al., 2008; Sanford et al., 1983).

Similarly, the brevity and simplicity of the texts in those studies appear unsuitable as a basis for challenging Yule's contention that unstressed pronouns direct the hearer's focus to other more salient information in an utterance. It appears that the dialogues in Yule's study, like the narrative task in the present study, involve a great deal of complexity, with multiple referents and events over a number of extended turns. Presumably, this means that there is a wide range of gradations in saliency, and multiple shifts in focus, which may result in differences in the narrative importance of specific REs. Such complexity is absent in the simple narratives in Sanford et al.'s tasks, which contain as few as three referents and three verbs. In such brief texts, therefore, it is perhaps unsurprising that readers should wish to interpret each RE.

Summary and implications

The widespread assumption that all references require resolution for the comprehension of narratives is not supported by the present data. This point was first raised by Yule (1982) in relation to antecedentless (non-deictic) pronouns, but appears to have found support in other studies only in relation to *they*. However, the present findings appear to support Yule's broader claim and also suggest that such non-resolution can also apply to other, fuller REs. It seems, then, that hearers comfortably tolerate referential ambiguity in certain circumstances that involve the processing of spoken language in real time. Furthermore, while Yule's examples are non-referential in the sense that the hearer is not in a position to identify the referent, relevant examples in this study include those where the hearer would be able to identify the referent if the speaker

had presented the reference more clearly. It seems, then, that an act of reference is sometimes ‘half-hearted’ in terms of the extent to which the interactants prioritize identification of the referent. Consequently, it appears that we must view the requirement for reference resolution in less categorical terms than claims such as Peterson’s that “to be comprehensible to a listener, narratives must have their referents specified unambiguously” (1993, p. 507).

A further consequence of these findings relates to the discussion of references by older speakers. As discussed in Chapter 3.3.6, previous research has noted that ambiguous references (Kemper et al., 1990; Light et al., 1994) are a feature of discourse by older speakers; this has generally been discussed in terms of declining cognitive abilities, such as working memory, and decreased recall of names. However, Kemper et al. also reported that “the elderly adults’ expository statements were judged to be more interesting and clearer than the young adults’ statements” (1989, p. 64). I therefore raised the suggestion in Chapter 3.3.6 that, in many cases, older speakers may use vague references as a deliberate, hearer-accommodating strategy, and that this may be more indicative of these speaker’s greater control of interactional speech rather than the declining cognitive abilities proposed by Light et al. The present findings appear to support this view by indicating that not all references require resolution.

Overall, analysis of the data suggests that most, but not all, vague or unresolvable pronouns were third-person plural forms. I suggest that *they* may be a partial grammaticalization of a more general discourse feature (a non-requirement for reference resolution) that can relate to any RE type under certain conditions. The suitability of *they* for this function is likely related to its other uses, including (a) the often vague inclusivity of plural pronouns (discussed in Chapter 4.9.3), (b) the closely related *institutional* use of *they* (e.g. *they give you a pension at 65*) (Sanford et al., 2008), and (c) the often higher degree of competition for singular pronouns in discourse, which very frequently relate to local and global topics.

8.4.2 Assumption 2

In this subsection, evidence is reviewed for the assumptions that: (a) speakers invariably *intend* to use REs which enable the hearer to identify the referent, and (b) cooperative hearers invariably attempt to resolve references.

Some evidence against these assumptions has already been presented in the discussion of Assumption 1 (Subsection 8.4.1). For example, it appears that speakers and hearers are more concerned with resolving introductory references to main characters than to minor characters. Furthermore, there is evidence (for instance Example 8.16, p. 280) to support Yule's (1982) suggestion that the resolution of some references is of little relevance to the communicative purpose of interactants. Importantly, analysis of the present data suggests that speakers and hearers intuitively recognize this. Specifically, speakers sometimes use a RE despite apparently knowing that reference resolution is unlikely. Sometimes this involves a *try marker*, which invites the hearer to negotiate the identity of the referents. However, at other times, speakers appear to shift attention away from the identity of the referent and towards what is predicated on the RE, particularly through uttering the RE with low pitch and stress. A relevant example is presented in Appendix 8, where Kate introduced a particular colleague of Chaplin's as *his workmate*; this appears insufficient to distinguish him from another prominent colleague. In this extract, it appears that Kate's main purpose was to focus attention on what was predicated on this individual (i.e. that he had a bowl of soup). The bowl of soup was important to the retelling, as Kate proceeded to explain in substantial detail the soup-spilling episode. As indicated by Nina's comments in Example 8.13 (p. 279), it was of little concern to her *which* colleague was involved, as the focus was firmly on Chaplin.

It also appears that, independently of what speakers appear to signal, hearers make their own judgments over whether an RE is worth resolving. This is illustrated in the stimulated recall interview extracts presented in Example 8.13 (p. 279) and Example 8.17 following:

Example 8.17: *Tina and Arlene*

T = 1.10 2	T –and then, um, . the boss guy, you know that big machine, that was in the boss’s office? A – oh yeah, yeah
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In this example, Toni attempted to clarify the identity of the machine, and Arlene ostensibly indicated that she knew which machine was meant. However, during the stimulated recall interview that followed, Arlene reported having “had no idea” which machine Tina meant. As presented in Example 8.18, during the SR session Arlene explained that she considered the identity of the machine to be of low importance, and that if it had become problematic for overall comprehension of the narrative, then she would have sought clarification:

Example 8.18: *Tina and Arlene*

Recording 3 T = 0.03	R – yeah, and can you remember wh- why you let it go? A – um, ‘cause I understood kind of the rest of the gist of the story, so <u>I didn’t think it was . that much of a vital part?, of the understanding of the story</u> [yeh] so I thought it would just be less complicated to let her explain, and she was obviously going to explain what it was, . ‘cause she brought it back up again, [oh yeah] so I kind of thought well if I just don’t say anything I’ll probably find out what it is anyway R – oh yeah A – <u>and if I’m still not sure, then – if I think it’s important, then um, then I’ll ask afterwards</u>
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In short, it seems that speakers do not always attempt to provide sufficient information to identify referents, and hearers do not always consider references to be important enough to attempt the repair of unresolved REs.

8.4.3 Assumption 3

The third assumption is that felicitous pronouns always relate to entities that have high accessibility (Ariel, 1990, 2001) or are “current center of attention” (Gundel et al., 1993, p. 279). While this appears generally true in these data (as reported in Chapter 6.1.4), there may be exceptions to this rule in relation to *they*. These exceptions are not under-explicit in the sense of being infelicitous, but appear to be pronominalized for a particular purpose. Similar findings are also presented by Cornish et al. (2005), Borthen (2010). Gundel et al. also report such pronouns, and argue that these “constitute minor violations of the restriction that the referent of a

pronoun must be in the addressee’s focus of attention” (2005, p. 354).

For instance, in Example 8.1 there is a substantial distance between the two references to the plural referent (the salespeople and factory managers) encoded with *they*:

Example 8.19: *Jake and Sonny*

T = 3.25 5d-8	<p>J – <u>they</u> finally get that to stop, and then the big thing comes along, and ya know, @ Ø wipes his mouth, and then that overloads so it starts hitting him and hitting him and hitting him and hitting him and then y’know Ø kind of falls off the machine, [yeah] and um, and . after that it goes back to: . . . yeah, after that it goes back to, <ASIDE TONE> I think it goes back to </ASIDE TONE> the the GIRL, you know there was [that]</p> <p>S – [the] one with the with the bananas?</p> <p>J – yeah the w- – I THINK it’s the same girl anyway, but she was like . OH, beFORE THAT, before that, there was like the, I think <u>they</u> were trying to . um</p>
------------------	---

Aside from the distance between the references, there are other factors suggesting low accessibility, including two switches between episodes, and competing referents. According to the coding protocol for singular referents, the referents of second *they* would, therefore, have accessibility D0, and so require a definite description (no singular personal pronoun was used in accessibility context D0 in the present data).

However, not only was the use of the pronoun in this extract non-problematic for the hearer, it appears to be felicitous. A large number of similar examples of under-explicit *they* can be found in these data. This suggests that, contrary to the claims of Ariel (1990, 2001) and Gundel et al. (1993), the pronoun *they* is not restricted to contexts where referents are in focus or otherwise highly accessible.

In relating similar findings to the Givenness Hierarchy, Borthen (2010) argues that plural pronouns conventionally encode the status *Uniquely Identifiable* or higher (see Appendix 2). That is, of the six cognitive statuses, the third lowest cognitive status is sufficient for the use of plural pronouns, but only the highest cognitive status is sufficient for singular pronouns. Consequently, Borthen argues that theories of accessibility marking may require modification to account for third-person pronouns.

In contrast to Borthen, however, I argue that this use of *they* applies not only to plural referents, but also to singular referents where the identity of the referent is unimportant. This is illustrated in Example 8.20, where knowledge of the film suggests that the antecedentless *they* relates to the boss:

Example 8.20: *Lillian and Astrid*

2-4	L – he: um, HE . is having his lunch break, and then the machine comes in, and <u>they</u> tell HIM to come to the machine
-----	--

Such uses of *they* to refer to singular referents are well-established in the literature (e.g. Jucker et al., 2003; Yule, 1982), and are thought to be used when the exact identity of the referent is either unimportant (as in Example 8.20) or unknown.

The present findings in relation to Assumption 3 have implications for AT and also for models of reference resolution. As Borthen (2010) suggests in relation to the Givenness Hierarchy, it appears that plural third-person pronouns can be conventionally used for less cognitively activated referents than singular third-person pronouns. In relation to reference resolution, it seems that some pronouns, particular *they*, can be used to signal a relatively wide range of accessibility degrees, with referents ranging in status from highly-accessible to hearer-new. Importantly, unlike any other low-accessibility marker, referential pronouns contain virtually no semantic information, being gender neutral, and not always being marked for number (as the third-person singular use of *they* suggests). Consequently, a reference with *they* could (hypothetically) felicitously match a large number of possible sets of referents in the discourse, regardless of their degree of accessibility. Although in such cases the hearer can consider coherence factors in resolving references (such as those proposed by Hobbs, 1979; Kehler, 2002), it seems that non-resolution of such pronouns would be frequent. Rather than process each configuration of the possible referential sets, it seems very likely (as suggested in Subsection 8.4.1) that hearers tolerate ambiguity.

8.4.4 Assumption 4

The data and arguments presented in relation to the first three assumptions together raise doubt over whether a fourth assumption (implicit in the definition of reference developed in Chapter 2) can be maintained. Specifically, doubt is cast over whether a strict dichotomy can be maintained between referring to an entity and simply mentioning it.

It may be worthwhile to firstly review the distinction between referring and mentioning. As discussed in Chapter 2, an act of reference requires very specific conditions to be met. It is defined as a four-place relation, in which *a speaker* uses a *RE* to indicate *a referent* to *a hearer* (Bach, 2008, p. 17), with a key element being that the speaker intends the hearer to identify the referent. A number of further conditions must be met in order for this to happen, including both interactants being in a position to hold a singular thought about the referent. Examples of reference are given in Example 8.21, where the underlined REs relate to entities for which the speaker and hearer had shared knowledge. It seems clear from these examples that the speaker was prompting the hearer to identify the referent.

Example 8.21: *Fiona and Geoff*

T = 00.45 4-5a	you know <u>the: director guy₁</u> ?, and <u>he₁</u> had <u>the contraption₂</u> ?
-------------------	---

These contrast with uses of NPs that do not require the hearer to identify a particular individual, and are, therefore, non-referential. As discussed in Chapter 2, it is not sufficient for the speaker to have a specific entity in mind; the hearer must be directly prompted to identify the intended individual. Consequently, examples such as that in Example 8.22 are non-referential:

Example 8.22: *Jeff and Patrick*

T = 1.22 4-6	it's a contraption that <u>someone</u> 's trying to sell
-----------------	--

In this case, Patrick's knowledge of Part 1 meant that he could potentially have identified who was trying to sell the machine, but Jeff did not prompt him to do so. Even if Patrick had in fact identified the referent, this would not constitute an

act of communicating reference (Bach, 2008, p. 20).

Of interest is that many of the examples discussed in Subsections 8.4.1 to 8.4.3 appear to meet the preconditions for reference, but the speaker's referential intentions appear to have been only *conditionally* concerned with reference resolution. This suggests a middle ground between referring and mentioning, where speakers signal that although the hearer *could* resolve the reference, it is more important that processing resources be focused elsewhere. For example, in Example 8.13, (p. 279) Kate used the RE *that other guy* to refer Nina to the colleague (a hearer-known character that Nina held as a singular thought). However, Nina abandoned any attempt to resolve the reference precisely because she interpreted the identity of the referent to be incidental to Kate's overall communicative purpose. As I have argued, this appears to have been signalled by Kate, who provided too little information to distinguish this character unambiguously from the relief man, and did not signal that the reference was worthy of negotiation (although there is a very brief pause, no try-marker is used). In this respect, Kate's message seems to have been 'you could interpret this reference, but it is not important'. It appears communicatively sufficient for Nina to have merely recognized that Kate was referring to one of Charlie's colleagues.

In a sense, such unresolved references could be said to be referentially unsuccessful. However, this would ignore the fact that non-resolution of the reference appears to be in line with the speakers' communicative intentions, and considered communicatively non-problematic by both interactants.

8.4.5 Summary and implications

In this section, I have argued that the data challenge three widespread assumptions underpinning current views on reference. To summarize, I have argued that, in some circumstances:

1. successful communication and discourse coherence are not dependent on the resolution of every reference;

2. speakers and hearers do not always attempt to clarify all references; and,
3. referents with low-accessibility can be pronominalized (particularly with *they*), leaving little chance for the hearer to identify the referent.

These findings, particularly finding (2), suggest that a speaker's *referential intention* (Bach, 1992b, 2008) may be partial, or may be conditional (i.e. conditional on the ease with which the hearer can resolve the reference). This challenges a fourth assumption that was implicit in the original framework for this study, and leads to the following conclusion:

4. a clear distinction cannot always be drawn between referring and mentioning.

My suggestion, therefore, is that there may be gradations between referring and mentioning. One example of a mid-point between reference and mentioning would be:

1. the speaker indicates that the hearer is in a position to identify the referent, but
2. provides insufficient information and interactional opportunities to *ensure* that the hearer can do so; and,
3. the hearer accepts that this referential ambiguity is incidental to the speaker's communicative purpose

The motivation for such acts of semi-reference may be related to the communicative 'bottle-neck' (Levinson, 2000), in which the organs of speech work far more slowly than the mind's capacity to generate ideas and interpret speech. Therefore, it may be more appropriate to a speaker's overall purpose to make a 'half-hearted' attempt to clarify reference, rather than to spend time and energy being precise and unambiguous. Sometimes, as G. Brown (1995) argues, adequate (rather than precisely correct) interpretation is sufficient. For this reason, it may be appropriate for speakers to signal that non-resolution should be tolerated rather than repaired. Indeed, where referential clarity is unimportant, hearer-

initiated repairs may substantially hinder the flow of discourse.

This suggestion is perhaps reinforced by the main claim of Relevance Theory, in which it is claimed that what is uttered “carries a guarantee of relevance” (Sperber & Wilson, 1986, p. 50). If the speaker is obligated to omit unnecessary speech and to be maximally relevant (i.e. causing no unnecessary processing effort for the hearer), then it seems reasonable to signal that if certain references are not immediately resolved, then they should be left ambiguous rather than attract additional processing effort (although Relevance Theory primarily relates to the interpretation of language, such speaker corollaries seem reasonable).

To summarize, it appears that there is not always a clear division to be drawn between referring and mentioning entities. Rather, there appears to be a middle ground in which some acts are more or less referential. The following section accounts for this through proposing a theory of referentiality.

8.5 Referentiality: A theoretical proposal

In the previous section, I argued that the present findings suggest that a clear distinction cannot always be drawn between reference and mention. I argued that a middle position is required, and that gradations in *referentiality* (first raised in Chapter 7) may be usefully recognized. This becomes critical to determining which unresolved references count as miscommunication. The purpose of this section is to present a theory of referentiality and explain how it accounts for the data. In short, the idea of gradations in referentiality suggests that speakers signal to hearers the extent to which REs require resolution. Of most interest is that speakers appear to sometimes indicate that reference resolution is unnecessary (though possible), and that in such cases hearers appear to accept non-resolution. Hearers may also independently decide not to attend to the resolution of some REs.

Acceptance of this concept of referentiality may require an adjustment to the definition of reference adopted from Bach (2008), in which the speaker’s intention

for the hearer to identify the referent is fundamental. Furthermore, of critical importance to the present study is the implication that non-resolution of some references does not constitute communication breakdown.

In the following discussion, I firstly outline the basic theoretical proposal in Subsection 8.5.1 and present some initial distinctions in Subsection 8.5.2. In Subsection 8.5.3, I discuss how gradations of referentiality are to be linguistically identified. In Subsection 8.5.4, the discussion focuses on more complex cases, in which the speaker and hearer are not coordinated in their assessment of referentiality. In Subsection 8.5.5, I discuss how this concept relates to miscommunication. Additionally, I discuss in Appendix 8.4 how referentiality relates to vagueness.

8.5.1 Outline of the basic proposal

As discussed in Chapter 2, reference involves a speaker using a RE to refer a hearer to an entity (Bach, 2008). Bach argues that reference is always intentional and so simply alluding to an individual (e.g. *a lady saw her steal the bread*) is not a matter of reference, regardless of whether the hearer correctly identifies who the speaker has in mind (2008, p. 28). While I agree with this, my proposal is for a more nuanced view of the speaker's referential intention, such that the objective of clarifying a referent is not 'all or nothing' but may involve stronger or weaker intentions. I argue that evidence of gradations in such intentions is found in many of the extracts discussed in Section 8.4, for example. In particular, as argued in Section 8.4.2, it seems clear that speakers sometimes use REs knowing that ambiguity is likely, while also presenting such references *en passant*, such that clarification requests are discouraged.

Further, in many of the extracts presented in Section 8.4, it seems clear that the *hearer* also attaches little importance to identification of the intended referent. This appears to be supported by the stimulated recall comments reported in Example 8.13 (Page 279) and Example 8.18 (Page 287). Although hearers may have their own motivations for not attending to reference resolution, I argue that interactants often coordinate in identifying which references require resolution.

This was illustrated in the discussion of examples in Section 8.4 (where resolution appears to have been de-prioritized), which contrast with examples discussed in Chapter 7 (where resolution appears to have been prioritized, as suggested by clarification requests and reports of misunderstanding).

In terms of problematic communication, my initial argument is that non-resolution of reference represents genuine miscommunication only when three provisions are present:

1. the speaker intends a reference to be resolved;
2. the hearer recognizes this intention; and,
3. the hearer wishes to resolve the reference

Meeting these preconditions constitutes an act of reference that has *complete-referentiality*. It appears that most acts of reference do have complete-referentiality. However, the non-fulfilment of any of these provisions relegates a reference to *partial referentiality* or even *minimal referentiality* (defined in subsection 8.5.2 below). As long as the hearer recognizes that an act of reference has less than complete-referentiality, then non-resolution appears not to be a matter of miscommunication.

An example of partial or minimal referentiality is when the speaker signals that provision (1) is conditional on the hearer not requiring further clarification (as Auer, 1984 notes, clarification requests interrupt the flow of discourse). For instance, Example 8.13 (p. 241) and Example 8.16 (p. 280) contain ambiguous references made *en passant*, and clarification would require back-tracking and probably an interruption of the speaker's turn. Where such clarification requests are frequent, they can become a source of irritation (as illustrated in Appendix 8).

In other cases, although a speaker may intend a reference to be resolved, the hearer may choose not to attempt resolution. This may be because the hearer is uninterested, acting uncooperatively, or focused on another aspect of the speaker's message. In the present view of reference, in which achieving reference is a collaborative activity, the hearer cannot be said to have *failed* to identify the

referent if there was little attempt to do so. Although, in a sense, the speaker may have failed to fulfil his or her referential goal, this is not considered here to be a miscommunication (i.e. communication, in this sense, is viewed as the outcome of a joint activity).

In light of the finding that coherent discourse does not necessarily require all references to be resolved (Section 8.4.1), it seems likely that a major motivation for acts of partial- and minimal-referentiality may be the principles formalized in Grice's Quantity Maxim (1989, p. 26):

- (1) Make your contribution as informative as required (for the current purposes of the exchange).
- (2) Do not make your contribution more informative than is required.

These maxims constrain the use of those very informative REs (or episodic references) that may be required to specify some entities unambiguously (e.g. those with low-accessibility). As such, conversational maxims work to facilitate the flow of discourse (avoiding negotiation exchanges, such as that in Example 8.14, p. 279), and maintain focus on the speaker's communicative goal. This suggests that, on occasion, speakers may prefer minimal- or partial-referentiality in order to achieve their main communicative intentions.

The observations made so far lead to a view in which referentiality is seen as a quality relating to acts of reference. Complete-referentiality relates to mutual agreement between a speaker and fully (locally) cooperative hearer that a reference requires resolution in order for the interactants' major communicative intentions to be fulfilled; non-resolution represents communicative failure. This is distinguished from partial- and minimal-referentiality, where non-resolution is not considered essential by either or both interactants. These distinctions are described in greater detail in the subsections that follow. At this stage, it is perhaps useful to relate the concept of referentiality to Kronfeld's (1990) argument that references are resolved by way of a two-part process. Kronfeld argued that there is an initial *literal goal* in which the speaker intends the hearer to recognise that a NP is being used referentially. There is also a further *discourse*

purpose in which the speaker intends the hearer to recognise which referent is intended. In distinguishing degrees of referentiality, it is assumed that the literal goal is achieved, and the relevant distinctions relate to the discourse purpose, specifically to the mutually-perceived importance of identifying the referent.

Before continuing, one point that should be clarified is that the concept of referentiality relates only to the communicatively-oriented, four-place definition of reference (and variations of it) outlined in Chapter 2 (adopted from Bach, 2008). It does not appear relevant to the speaker-focused conception of reference outlined by Abbott (2010).

8.5.2 Distinguishing degrees of referentiality

As argued in the preceding sections, referentiality appears to be a matter of gradations, with interactants attaching greater or lesser importance to the resolution of a particular reference. It seems likely that this referentiality is most accurately conceived of as a scale, with the possibility for multiple fine distinctions. However, for the sake of simplicity, just three distinctions are drawn from the present study:

complete-referentiality

partial-referentiality

minimal-referentiality

Complete-referentiality involves interactants coordinating in their beliefs that an act of reference requires resolution. I suggest that complete-referentiality is the unmarked type, applying to the majority of references. This is exemplified in Example 8.21 (p. 290) and in how Charlie and the girl are introduced in virtually all of the L1 data.

I suggest that markers of partial- and minimal-referentiality signal that reference resolution is possible but is not essential for the hearer's understanding of the discourse, and, therefore, ambiguity is acceptable. In such cases, the essential

conditions for successful reference resolution are met (e.g. the hearer has a singular thought about the referent), apart from the speaker not providing a sufficiently explicit RE. This is motivated not by a wish to suppress information or a misjudgment of the hearer's perception of the referent, but because referent identification is deemed unnecessary.

The difference between partial- and minimal-referentiality is a matter of degree. Colloquially, the processing signal made by partial-referentiality could be expressed as *try to resolve the reference but if the referent is not readily identified, abandon the search*. The processing signal for minimal-referentiality could be colloquially expressed as *the resolution of this reference is possible but not worthwhile*. Markers of partial- and minimal-referentiality (discussed in Subsection 8.5.3) discourage processing effort in identifying the referent. The motivation for using such markers is the same as Yule's (1982) explanation for antecedent-less pronouns: it indicates that the hearer's attention should be focused elsewhere.

8.5.3 Signalling degrees of referentiality

In this subsection, some ideas are presented relating to how speakers signal a degree of referentiality, and on what bases hearers might judge referentiality. This is a first attempt at linguistically describing these phenomena and it is hoped that this description can be developed in more detail in the future.

Part of the problem in identifying exactly how referentiality is signalled is that a far more fundamental question also remains under-explained: how hearers recognize that a NP is being used referentially rather than non-referentially (e.g. generically or non-specifically). In the literature reviewed, only Jørgensen (1998, 2000) directly addresses this question. Jørgensen argues that REs cannot be recognized on morpho-syntactic or semantic bases alone but rely on recognizing *identification constraints*. For example, the RE in the utterance *The chest you see in the corner is a valuable antique* contains cues to indicate that the referent can be identified through visual perception. Similarly, *that chest*, particularly when

accompanied with a gesture, also clearly relates to visual perception (2000, p. 92). Other identification constraints are more difficult to illustrate. These issues will not be pursued further here, but suffice to say that it is not entirely clear how hearers recognize that a NP is being used to refer. The remainder of this discussion will assume that hearers can recognize an RE, and some initial observations will be made about how speakers signal degrees of referentiality.

Complete-referentiality is unmarked. That is, it is characterised by exactly those form-accessibility correlations that are proposed by Accessibility Theory, such as pronouns for full-accessibility referents, and names or descriptions for low-accessibility referents. The archetypal indicator of complete-referentiality appears to be the use of a name. Complete-referentiality in relation to entities with very low accessibility often involves staged reference, appeals to common ground (e.g. Example 8.14, p. 279) and the use of try-markers.

It appears that partial-referentiality is typically signalled by REs that are appropriate to the accessibility of the referent, but which are insufficiently informative to single out the referent from others in the discourse. From examples in the data (such as those in Section 8.4), it appears that acts of reference involving partial- (and minimal-) referentiality appear to seldom involve more than one RE (i.e. no use of extended referential episodes), and are typically not associated with the use of try-markers.

In most respects, minimal-referentiality is similar to partial-referentiality. The key difference is that the RE that is used is one that conventionally signals a higher degree of accessibility than the referent warrants. For example, minimal-referentiality is often signalled by pronouns which are ambiguous in the context, making successful resolution unlikely (examples are presented in Appendix 8). As suggested in Section 8.4, it may be that minimal-referentiality is conventionally signalled by *they*. This seems particularly true of ‘singular *they*’, which appears particularly useful in cases where *he* or *she* could prompt the hearer to misperceive the pronoun as being co-referential with highly accessible referents.

8.5.4 Non-coordination in referentiality

So far, the discussion has centred around referential acts in which speakers and hearers are *coordinated* (Clark, 1996) in their view of the referentiality of a particular use of a RE. That is, in using a RE, speakers intend to convey a degree of referentiality, and hearers both recognise this intention and act *cooperatively* (in the sense of Grice, 1989) by interpreting the RE as the speaker intended. However, of course, coordination is a “central problem” of communication, and is by no means guaranteed (Clark, p. 73); speakers and hearers will not always be in agreement over referentiality.

In non-coordinated acts of reference, I suggest that the overall referentiality of the act can be determined from the following principles:

- the speaker sets the initial degree of referentiality
- the hearer can maintain this degree of referentiality or lower it

For example (i),

If the speaker intends a reference to have complete-referentiality,
and the hearer recognizes this intention,
but the hearer considers the identity of the referent to be of little
importance,
then there is partial-referentiality overall (i.e. in accordance with the
hearer).

This relates, for example to Example 8.17 (p. 287) in which Tina’s attempt to clarify the reference to the machine was overridden by Arlene’s belief that non-resolution was unproblematic.

However (ii),

If the speaker intends a reference to have partial- (or minimal-)
referentiality,
and the hearer recognizes this intention,

but the hearer considers the identity of the referent to be of interest or importance,
then there is partial (or minimal) referentiality overall (i.e. in accordance with the speaker)

That is, the hearer's curiosity about the identity of a referent does not increase the overall referentiality of that act.

A further complexity appears to be the possibility of the hearer misinterpreting the speaker's referential intention. For example, if a speaker intends minimal-referentiality, but the hearer interprets the intention to be complete-referentiality and is unable to resolve the reference, then the hearer is likely to interpret such cases as failed communication. No clear cases of this were identified in these data. The opposite scenario (in which the speaker intends complete-referentiality but the hearer misinterprets the intention to be minimal-referentiality) appears, qualitatively, to be largely indistinguishable from Scenario (i) above; indeed, the methodology used in the present study does not enable the two scenarios to be distinguished.

8.5.5 Referentiality, non-resolution and misidentification

In this subsection, implications of the concept of referentiality are discussed in relation to referent non-resolution and misidentification. The purpose is to identify what qualifies as miscommunication. In this subsection, partial- and minimal-referentiality are grouped together.

Firstly, it seems clear that, in any act of reference, identification of the wrong referent always qualifies as miscommunication (as discussed in Chapter 2, if an entity is merely mentioned, a hearer may incorrectly *guess* the identity of the referent but this is not a matter of miscommunication). The issue then, is to identify under which circumstances non-resolution is communicatively problematic.

In short, I have argued in previous sections that not all unresolved references affect discourse coherence or are considered problematic by interactants, and it follows that such cases are not to be considered miscommunication. In Figure 8.1 following, the three distinctions in referentiality identified in this study are used to explicate various scenarios and how they relate to the terms *successful communication*, *miscommunication*, *misunderstanding*, *communication failure*, and *communicative strain* (these terms were defined in Chapter 3.3).

Figure 8.1: Classification of referentiality and reference resolution

Where the hearer does not recognize that the speaker has referred: *failure*

Where the speaker and hearer are coordinated in treating the reference as having complete-referentiality, and the hearer:

- identifies the referent correctly: *successful communication*
- identifies the referent incorrectly: *misunderstanding*
- does not resolve the reference: *non-understanding*
- identifies a set of possible referents (i.e. *it could/must be one of . . .*): *misunderstanding*

Where partial- or minimal-referentiality is signalled by the speaker and the hearer recognizes this intention, and

- identifies the referent correctly: *successful communication*
- identifies the referent incorrectly: *misunderstanding*
- does not resolve the reference: *no miscommunication, no strain*
- Identifies a set of possible referents
 - including the intended referent: *no miscommunication*
 - not including the intended referent: *misunderstanding*

Where complete-referentiality is signalled by the speaker, and the hearer recognizes this intention, but treats the reference as having partial- or minimal-referentiality (e.g. Example 8.17):

- identifies the referent correctly: *successful communication*
- identifies the referent incorrectly: *misunderstanding*
- does not resolve the reference: *no miscommunication*
- identifies a set of possible referents (with or without the intended referent): *no miscommunication*

Partial- or minimal-referentiality is signalled by the speaker but the hearer *misinterprets* this intention, and treats the reference as having complete-referentiality:

- identifies the referent correctly: *successful communication*
- identifies the referent incorrectly: *misunderstanding*
- does not resolve the reference: *non-understanding*
- identifies a set of possible referents
 - including the intended referent: *no miscommunication*
 - not including the intended referent: *misunderstanding*

8.5.6 Summary and implications

Analysis of the L1 speakers' referring behaviour and their interlocutors' responses to vague references has revealed a far more complex and nuanced picture of referential miscommunication than what may otherwise be presumed. The standard view of referential miscommunication appears to be that it is a straightforward matter of the hearer not identifying the referent intended by the speaker. Furthermore, it is usually presumed that speakers and hearers intend all references to be resolved, and that reference resolution is essential to successful communication. However, I have argued that such assumptions are not borne out in the data. I argue that there are various scenarios under which speakers may refer, while simultaneously indicating that non-resolution is non-problematic. That is, speakers signal the extent to which processing resources ought to be directed towards resolving the reference. References with complete-referentiality are treated by interactants as being central to discourse comprehension, and if they are unable to be resolved, hearers are expected to seek clarification. References with partial- or minimal referentiality are treated as being peripheral to the interactants' communicative goals, and if they cannot be readily resolved on the basis of available information, are treated as being unworthy of additional processing effort or requests for clarification.

The precursor to these arguments is found in Yule (1982), who demonstrated that pronominal anaphors can be felicitously used to refer to entities that are neither hearer-known nor have any identifiable antecedent. The proposed concept of referentiality expands on Yule's argument that speakers may focus attention away from reference resolution in order to highlight salient information that is predicated on the referent.

This is important for studies concerned with defining successful and unsuccessful reference. For example, it is argued here that when hearers and speakers coordinate in regarding an RE as signalling low-referentiality, then non-resolution of that reference cannot count as failed communication. A number of other scenarios were presented in Subsection 8.5.5, and defined as either successful communication, communicative strain, failed communication, or misidentification.

As yet, however, there appears to be no obvious way of fully incorporating a comprehensive model of referentiality into a study of miscommunication. The problem is largely methodological: in many cases we can only presume to know the hearer's perception of referentiality and their volition in relation to resolving a reference. In addition, further research is required to develop the heuristics for signalling degrees of referentiality which were discussed in Section 8.4 and Subsection 8.5.3.

In the present study, the issue of referentiality was recognized relatively early in the data collection process, and it greatly influenced the stimulated recall procedures that I subsequently used (as discussed in Ryan & Gass, in press). In particular, I recognized that it was problematic to directly ask a hearer to recall which referent they had originally identified in relation to a particular RE, as such questions may actually prompt the hearer to resolve references (at the time of speaking) that were unresolved during the original interaction, thereby affecting the validity of the data. In response to this risk, I modified the interview procedures so that direct questions were used more sparingly and only when I judged the act as having complete-referentiality.

8.6 Conclusion

From the literature reviewed in Chapter 2, a theoretical framework was developed for exploring the communication of reference, based particularly on Bach's (2008) definition of speaker reference, Ariel's (1988, 1990, 2001) theory of RE selection (Accessibility Theory), and perspectives that view reference as a potentially episodic act (e.g. Clark & Wilkes-Gibbs, 1986; Smith et al., 2005). In this Chapter, I have revised some elements of this framework in light of the present findings, and also discussed some widespread assumptions about the nature of reference in L1-L1 interactions.

In Section 8.1, I discussed issues relating to Accessibility Theory (AT) (Ariel, 1990, 2001), suggesting possible ways in which this theory could be refined or

developed. I firstly discussed issues of accessibility marking at levels above the RE and issues relating to embedded references. I then distinguished two types of referent competition and argued that one of these (*equivalent-accessibility competition*) creates a context in which speakers appear obligated to use a marker of lower accessibility than that which conventionally encodes the accessibility of the referent in question.

In Section 8.2, I discussed the relevance of the present definition of reference to linguistic studies. Specifically, I presented linguistic evidence suggesting that there are some substantial differences in the distribution of certain NP types which relate to the present distinction between referring and mentioning. In Section 8.3, I discussed the *levels of reference* framework developed for the present study. In light of the discussion in Sections 8.2 and 8.3, I argued that the levels of reference framework would be usefully adopted by future linguistic studies of reference.

In Section 8.4, I argued that the present data conflicts with three widely held assumptions about reference, and a fourth assumption that was implicit in the design of the present study. Specifically, (a) it appears that not all references demand resolution in order to achieve successful communication or discourse coherence, (b) speakers do not always attempt to clarify all references and hearers do not always attempt to resolve them, and (c) some low-accessibility referents are pronominalized (particularly with *they*). Consequently, it seems that a clear distinction cannot always be maintained between referring and mentioning.

In light of the discussion in Section 8.4, I presented a theory of *referentiality* in Section 8.5, arguing that there are gradations between referring and mentioning. In particular, I argued that speakers sometimes signal that their referential intentions are only *partial* or *minimal*, and that in such cases, hearers typically leave references unresolved if they cannot readily identify the intended referent. In these (and some other) cases, I argued that unresolved references do not constitute miscommunication.

9 Discussion: Learner reference and miscommunication

9.0 Introduction

While Chapter 8 focused on a number of conceptual issues relating to reference, in this chapter I discuss the findings in relation to second language learner (SLL) reference and the analysis of referential miscommunication.

Sections 9.1 and 9.2 focus specifically on issues of SLL pragmatic competence in reference and seeks to address research question Q1 (as posed in Chapter 3):

Q1 What are the characteristics of the referential systems of advanced SLLs and how do these differ from target-like use?

In responding to this question, the discussion will focus on the extent to which the SLL participants were target-like in referent introductions and subsequent tracking, and the implications of this for understanding the development of pragmatic competence in referring. Because of the particular arguments I will be presenting, I will discuss referent tracking first, in Sections 9.1, and then referent introductions in Section 9.2. I argue that over-explicitness in referent tracking and some referent introductions may result from a deliberate communicative strategy. Under-explicit introductions may result from a lack of pragmatic competence in referring to entities with very low accessibility.

In Section 9.3, I review findings relating to the miscommunication of reference, addressing the second general research question posed in Chapter 3:

Q2 What linguistic factors are implicated in referential miscommunication in L1-L1 and SLL-L1 narrative discourse?

I argue that while under-explicitness in some introductions is problematic, over-explicitness may represent a successful communicative strategy. I further argue that there are a number of referential troublespots where miscommunication is

more likely to occur, and that awareness of these may facilitate successful communication.

In Section 9.4, I discuss the approach taken in this study to the analysis of miscommunication. This approach involves identifying those uses of language and discourse troublespots that are implicated in the triggering of miscommunication. In this section, I argue that miscommunication analysis complements error analysis. More specifically, I argue that existing approaches to error gravity may be flawed unless supported by analysis of miscommunication. I further argue that the main methodological innovation in this study – the use of stimulated recall to identify miscommunication – reveals insights not revealed through other research methods.

In Appendix 9, I discuss the RE types used by the SLL participants, relating these to possible developmental sequences of available RE types in SLL interlanguage.

9.1 SLL pragmatic competence in referent tracking

In this section, I discuss the SLL participants' pragmatic competence in felicitously marking accessibility in referent tracking contexts when retelling the *Modern Times* narrative. The aim is to contribute to recent discussion (e.g. Chini, 2005; Gullberg, 2006; Hendriks, 2003; Yoshioka, 2008) of how and why SLL referent tracking diverges from target-like reference. In the Accessibility Theory (AT) framework (Ariel, 1990, 2001), an RE type is used felicitously if it accurately reflects the conventional form-function relationship that holds between that RE type and a particular range of cognitive accessibility (although other pragmatic factors may also come into play). For infelicitous RE use, I distinguish between the use of REs that are under-explicit (signalling a higher accessibility status than would be felicitous) and those that are over-explicit (signalling a lower accessibility status than would be felicitous). The terms under-explicit and over-explicit are not usually used in relation to Accessibility Theory, but they do reflect one of the key organizing principles in Ariel's scale of accessibility markers (informativity) and are also widely used in discussions of SLL reference.

I begin by presenting overviews of the key findings in relation to over-explicit and under-explicit referent tracking in Subsection 9.1.1. In Subsection 9.1.2, I discuss the implications of these findings for hypotheses explaining SLL over-explicitness. Although I suggested in Chapter 5 that the concept of accessibility marking could be applied to the overall act of reference (e.g. try-markers and episodic reference), this is largely relevant to referents with very low accessibility, which, in these data, are mainly referent introductions; in acts of referent tracking, accessibility marking was usually encoded through the type of NP selected. The discussion in this section is, therefore, restricted to analysis of NPs.

9.1.1 Key findings

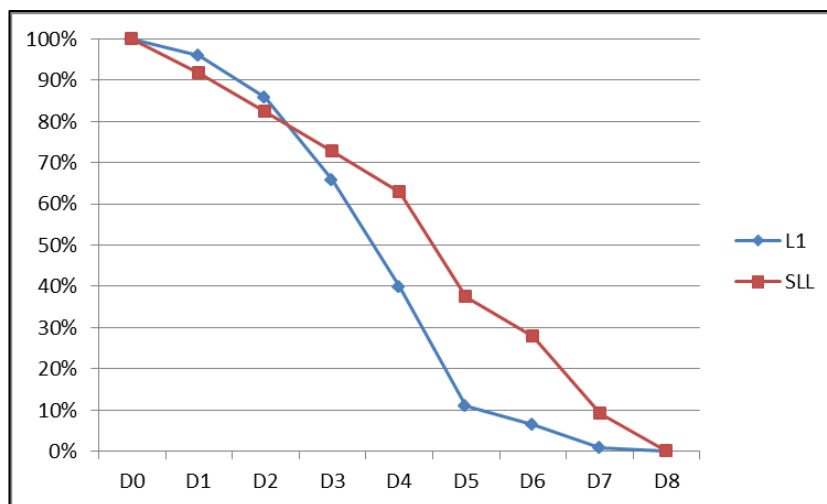
Over-explicitness

As discussed in Chapter 3, a number of previous studies have reported that intermediate and advanced SLLs tend to be over-explicit in referent tracking, apparently irrespective of target and source language. However, very few studies have explored over-explicitness in learner English, and, of these, Hendriks' (2003) reported very limited evidence in the oral narratives of her Chinese participants. Furthermore, in Chapter 3, I questioned the evidence presented in some previous studies that have equated infrequent SLL use of pronouns and zeros as evidence of over-explicitness. As Hendriks' (2003) has noted, infrequent SLL use of pronouns and zeros could reflect a lack of felicitous contexts in learner speech for the use of these forms. For example, it may reflect non-target-like aspects of SLL narratives relating to perspective-taking, frequency of topic switch, and the command of forms that allow greater topic continuity (e.g. passive voice).

To address these issues, I analysed RE selection within an Accessibility Theory framework (Ariel, 1990, 2001), coding the referent of each act of reference tracking as the sum of a number of factors identified in the literature as influencing cognitive accessibility. The findings presented in Chapter 6 and partially summarized in Figure 9.1 below appear to confirm that the SLL speakers

did tend towards over-explicitness in these data. That is, in all accessibility degrees from D3 to D7, SLL speakers used a higher proportion of low-accessibility markers (i.e. names and definite descriptions) than did the L1 speakers; in some accessibility contexts the difference appears striking.

Figure 9.1: Low-accessibility markers as a percentage of all REs at each accessibility degree



y axis: percentage of all references at each accessibility degree

This analysis reveals some interesting details that have not been reported in previous studies. Of particular interest is the finding that the SLLs only occasionally used lexical REs in the highest accessibility contexts (D7 and D8), while using them quite frequently in the intermediate and moderately-high accessibility contexts of D4 and D6.

A second point of interest relates to the range in which high-accessibility markers were used. In the L1 retellings, D3 was the lowest accessibility context in which unstressed pronouns represented a substantial proportion (31.3%) of REs; below D3, pronoun use appears infelicitous (and was frequently implicated in miscommunication). In the SLL retellings, only at D4 (28.6%) and thereafter did SLL use of unstressed pronouns become frequent. Overall, pronouns appear to be conventionally used for lower degrees of accessibility by the L1s than how they were used by the SLL participants.

Under-explicitness

As discussed in Chapter 3, reference by intermediate and advanced SLLs is seldom reported as being characterized by *under-explicitness*, except in relation to the infelicitous use of zeros (e.g. Muñoz, 1995; Williams, 1988). However, I argued that the design of some previous studies may have allowed the frequency of over-explicitness to obscure evidence of a less frequent, parallel tendency for under-explicitness. Findings relating to under-explicitness were expected not only to enable greater description of the features of advanced SLL reference, but also to provide evidence relevant to the discussion of why learners tend to be over-explicit.

As discussed in Chapter 6.1.4 and 6.1.5, pronouns appear to be infelicitous at D2 and below. Although the SLLs occasionally used pronouns at D2 and D1, the frequency was very similar to that of the L1 speakers, suggesting that these were isolated errors.

However, in the use of zeros, there were a small number of under-explicit SLL references that have no parallel in the L1 data. While the L1 speakers used zero exclusively for Degree 5 and higher, the SLL speakers occasionally used zero at D4, and (in one instance) at D3. This finding is similar to that reported by Williams (1988). Two SLL speakers (Michael and Bruce) used substantially more zeros than any L1 speaker and together contributed half of the over-explicit references at Degree 4.

Overall, the low number of under-explicit SLL references suggests that, at advanced levels, under-explicitness is largely a matter of occasional misjudgement, as it is in L1 speech, rather than a matter of linguistic competency. It is interesting to note that although *over-explicitness* was a general feature of the SLL references in these data, this did not eliminate under-explicitness entirely. Again, this could be because under-explicitness results from performance factors rather than competency issues. These findings have implications for explanations of over-explicitness (discussed in Subsection 9.1.2). In particular, they further support the idea that SLL speech is systematically over-explicit, as there is virtually no evidence of the type of inconsistency in RE selection that would be

anticipated in learners who were struggling to apply a system of accessibility marking without some further guiding principle, such as a strategy of hyper-clarity.

9.1.2 Accounting for over-explicit SLL accessibility marking

The present study confirms that a feature of referent tracking by advanced SLLs is over-explicitness. A number of theories have been proposed in the literature to account for this phenomenon, including error avoidance, developmental stages in accessibility-marking, and strategic accounts (see Chapter 3). A specifically AT-based explanation was also raised in Chapter 3. The purpose of this subsection is to discuss these theories in relation to the present findings. I argue that the findings most strongly support the hyper-clarity hypothesis.

Cognitive load

It was suggested in Chapter 3.2.5 that the cognitive load hypothesis (e.g. Chini, 2005; Gullberg, 2006, 2008) almost certainly plays some role in SLL over-explicitness, as it appears to for L1 over-explicitness (Arnold, 2008, 2010). I also suggested in that chapter that the cognitive load hypothesis might predict that the most highly accessible referents should not pose a substantial challenge for the estimation of felicitous accessibility marking. Indeed, the present findings appear to provide some support for this, with over-explicitness not occurring at D8 and being relatively infrequent at D7.

It does, however, remain unclear whether cognitive load provides a full explanation for over-explicitness. Overall, the present findings appear to offer relatively little further evidence bearing directly on this issue. The hypothesis will be reviewed again in Section 9.2, where I argue that it appears not to explain over-explicit referent introductions.

Over-explicitness as error avoidance

One suggestion is that over-explicitness results from advanced learners avoiding errors in the use of pronouns and zeros. It is clear that SLLs acquire a full pronoun system later than some types of lexical RE (Klein & Perdue, 1992), and it may be that even some advanced learners seek to avoid English pronouns, where distinctions are made for gender, number, and case. Similarly, English zeros may present difficulties, as their use is highly constrained by syntactic factors (Muñoz, 1995). This could explain the predominance of lexical RE types at intermediate and advanced levels.

As discussed in Chapter 6.1.6, there is evidence for such avoidance in the retelling by Kane, where there was a high error rate in marking for gender (11 errors). Specifically, evidence suggests that Kane began avoiding pronouns midway through his retelling following a hearer-initiated repair that appeared to suggest that the interlocutor was confused. Aside from the apparent miscommunication (and possible loss of face to Kane that this may entail), hearer-initiated repairs are disruptive to the flow of discourse and are strongly dis-preferred in L1-L1 speech compared to self-initiated repairs (Schegloff et al., 1977). For Kane, then, over-explicitness did appear to be partly motivated by a desire to avoid errors and communicative breakdowns. For other speakers too, the avoidance of pronoun errors might be a valid concern, as they were a major trigger of miscommunications in the retelling task (see Chapter 7).

Overall, however, the avoidance hypothesis does not appear to adequately account for the present data. In particular, it must be acknowledged that the participants in the study did very frequently use pronouns and zeros, and in some contexts used them extensively. Specifically, in reference maintenance to persons, the SLLs used pronouns more frequently than any other RE type (41.8% of all forms used), with zeros being the third most frequent RE type. Secondly, at accessibility D7, pronouns (69.8%) and zeros (18.0%) accounted for the overwhelming majority of the 206 references (at D8 they accounted for all REs used). This high frequency of pronoun and zero use in some contexts appears counter to what would be predicted by the avoidance argument. Thirdly, twelve of the twenty SLL

participants made no more than one pronoun error each, and 11 speakers made no *uncorrected* error at all, yet many of these same speakers also tended to be over-explicit. Furthermore, pronoun avoidance also creates its own challenges that are similarly likely to result in errors (but perhaps not as likely to result in miscommunication). For example, lexical NPs require the selection of an article, which is also a frequent source of error. Indeed, Lang (2010) has speculated that speakers actually use pronouns to avoid articles (although I question this interpretation, as discussed in Chapter 3.2.3).

In short, it seems that pronoun avoidance is, overall, a relatively minor factor in the over-explicit references in these data although it may play a more substantial role for some individual speakers.

Acquiring accessibility marking

A further proposal arises directly from a consideration of cross-linguistic variation in accessibility marking. As discussed in Chapter 3, inaccurate SLL accessibility marking is not surprising from an Accessibility Theory (Ariel, 1990, 2001) perspective, and indeed M. Ariel (personal communication, July 15, 2009) predicts that difficulties may arise from differences in the range of forms available in the source and target languages, and from differences in how the two languages divide the range of cognitive accessibility (and, consequently, the precise form-function relations in the target language). However, as I suggested in Chapter 3, the issue of structural differences among languages only predicts that accessibility marking may be *inaccurate* in the target language, not that this inaccuracy will be almost entirely identified as over-explicitness. This still allows for the possibility that learners from some source language backgrounds would tend towards systematic over-explicitness in some target languages, but not that this would be a feature irrespective of the source and target language. However, in these data there are learners of eight different source-language backgrounds, with little evidence of under-explicitness at all (apart from some use of zeros). In contrast, over-explicitness is reported here and by Tomlin (1990) for English learners from diverse source-language backgrounds, and, as discussed in Chapter 3.2.4) for a

wide range of source- and target-language pairs (e.g. Chini, 2005; Gullberg, 2006; Hendriks, 2003; Yoshioka, 2008). At best, then, L1 influence on SLL accessibility marking is only a partial explanation for over-explicitness.

Nevertheless, there were findings that provide tentative, partial support for the AT-based hypothesis. Specifically, the findings indicate that felicitous SLL selection between pronouns and lexical REs was most target-like for referents with the highest and lowest accessibility, and least target-like for referents with accessibility degrees D4, D5, and D6. This is what might be predicted if these speakers were still acquiring finer distinctions in the form-function relations that hold between RE types and the precise ranges of accessibility they conventionally encode. That is, it might have been predicted that the greatest difficulties would occur near the limits of the range of accessibility for which a RE type specializes. However, this explanation still leaves unresolved the question of why speakers tend to be over-explicit rather than under-explicit. One possibility, which is the focus of the following subsection, is that, when in doubt over a precise range of accessibility, learners err on the side of providing additional semantic information for clarity.

Strategic over-explicitness: the hyper-clarity hypothesis

Researchers in a number of areas have noted the conflicting demands of being both economical and clear in language use (Geluykens, 1994; Grice, 1989; Williams, 1988). For example, Geluykens (1994) argues that L1 speakers prioritize clarity but try to avoid being verbose or ponderous. In reference, a closely related issue is the conflict between *achieving recognition* (i.e. enabling reference resolution through recipient design) and *economy/minimization* (using a single term if possible) (Levinson, 2007; Sacks & Schegloff, 2007). Lumley (2010) argues that SLL over-explicitness arises when learners have difficulties balancing these opposing demands; in such cases, Lumley argues, learners err towards achieving recognition. This may simply be because, as Gelyukens (1994) suggests, clarity is the 'bottom-line' for speakers. As Hendriks (2003) argues, SLL speakers may also be much less confident of achieving successful

communication, knowing that there are likely to be errors and other limitations in their speech; they may, therefore, be less willing to eliminate redundancy in acts of reference. For this reason, learners may also wish to pack REs with very explicit conceptual information (e.g. *the baker* vs. *he*), thereby sacrificing felicitous accessibility marking.

It is this hyper-clarity argument which appears best supported by the present findings, particularly in relation to the distribution of lexical REs (illustrated in Figure 9.1, p. 310). Despite strong evidence of over-explicitness overall, the use of lexical REs to present redundant conceptual information was substantially less frequent when the SLL speakers referred to entities that were the obvious centre of the hearer's attention (D7 and D8). As such, these SLLs tended to restrict the use of pronouns and zeros to only those referents that were the most easily recoverable within memory. While the L1s were careful to be clear in their use of pronouns and zeros, the SLLs appeared to be even more cautious, erring towards hyper-clarity (in the terminology of Williams, 1988). This is seen when comparing trends in L1 and SLL referring behaviour in the shifts from accessibility contexts D7 to D6, and from D6 to D5; each is associated with a modest decrease in L1 use of high-accessibility markers but a substantial decrease in the SLL data (Figure 6.4, p. 184). In the previous SLL studies reviewed, such evidence has not been available, as the analyses have focused on single factors (particularly 'topic continuity') rather than viewing accessibility as being determined by the sum of multiple, weighted factors (as it is conceived of in AT; Ariel, 1990, 1998, 2001).

It may also be relevant that, in these data, SLL over-explicitness did not appear to trigger miscommunication directly, whereas under-explicitness is known to carry a high risk of communicative breakdown. The apparent success of referential over-explicitness could thereby motivate its use as a communicative strategy (although some caveats apply on this apparent success; discussed in Subsection 9.3.2). Advanced SLLs will have almost certainly experienced frequent communication breakdowns (clarification requests, misunderstandings etc.) at lower levels of competency, and there are reasons to believe that they will have come to associate some of these with under-explicitness. In particular, this is

because problematic under-explicit zeros are found to heavily characterize the early stages of second language acquisition (Kim, 2000; Klein & Perdue, 1992). Under the reasonable assumption that communication breakdowns alert learners to problematic language use (Long, 1996), it therefore seems likely that advanced learners will have become conditioned to recognize under-explicitness as a trigger of miscommunication.

Summary and implications

Analysis of referent accessibility in the present study confirms previous claims that over-explicit references are a feature of advanced interlanguage. The approach to analysis that I have adopted provides additional detail relating to the accessibility contexts where over-explicitness occurs. In particular, the findings suggest that over-explicitness is substantially more frequent for referents with intermediate and moderate-high accessibility. I have argued that these findings appear most strongly to support the hypothesis that over-explicitness represents a strategy of hyper-clarity, perhaps to compensate for other non-target-like features of their interlanguage, or as a cautious approach when learning the accessibility range of REs, or perhaps simply because learners find it successful. An example was also discussed in which one speaker appeared to adopt over-explicitness as an avoidance strategy in response to pronoun errors, but this appears to be a minor factor in these data. These arguments will be further reviewed in light of the findings presented in Section 9.2.4 relating to referent introductions.

If the avoidance of communicative breakdowns is a primary motivation for over-explicitness, then this also suggests an alternative account of how SLLs will eventually progress to a stage of consistent, target-like RE use. Rather than being mostly a matter of learning the form-function relations between an RE type and a degree of accessibility, it could be that more general pragmatic principles underlie this transition. Specifically, as general language competency increases and breakdowns decrease, the tension between Gricean principles of economy and clarity may force a decrease in over-explicit REs and other redundant forms of communication. As Levinson (2000) argues, there is a 'bottleneck' in oral

communication, in which the production of speech is much slower than the ability to comprehend language, prompting speakers to be economical. Undoubtedly, this bottleneck means that unnecessarily slow and redundant speech (i.e. when there is little risk of communicative breakdown) can be tedious for both the listener and hearer.

9.1.3 Summary and implications

In this section, I have discussed findings relating to three key questions posed in Chapter 3. These are briefly summarized below.

Q1.3 Is the characterization of SLL over-explicitness in referent tracking supported by an analysis that directly assesses the accessibility of the referent?

The analysis confirms that the SLL participants were frequently over-explicit in these data. This contrasts with findings for SLL English reported by Hendriks (2003) but supports evidence presented by Tomlin (1990) and aligns with findings for multiple other source/target language pairs (e.g. Chini, 2005; Gullberg, 2006; Yoshioka, 2008). However, it appears that SLL speakers tend to be more frequently over-explicit in certain accessibility contexts than in others.

Q1.2 To what extent is advanced SLL referent tracking characterized by under-explicitness?

A very small number of under-explicit SLL references were identified in these data, and these occurred with a very similar frequency to the occasional infelicitous examples found in the L1 data. Thus, in these data, the SLLs tended to be systematically over-explicit rather than generally inaccurate in accessibility marking.

Q1.4 What does an analysis of accessibility suggest about the cause of over-explicit SLL references?

I have argued that the present findings appear to most clearly support the view that over-explicitness results from a strategy of hyper-clarity.

9.2 SLL pragmatic competence in referent introductions

As discussed in Chapter 3, few previous studies have specifically reported findings in relation to how SLL speakers introduce referents into discourse. Of the few studies identified as addressing this issue, all report on target languages other than English and either relate to (non-referential) hearer-new entities (e.g. in German, Hendriks, 1998) or make no distinction between these and introductions of hearer-known entities (e.g. in Italian, Chini, 2005). As such, I questioned the apparent consensus that SLLs are generally pragmatically target-like in introducing referents (Chini, 2005; Hendriks, 1998), particularly as such studies had not acknowledged that introductions are very frequently expressed as complex referential acts rather than as single REs (as demonstrated by Smith et al., 2005). Therefore, a key research question of the present study is:

Q1.1 To what extent do SLL referential introductions tend to be target-like?

9.2.1 Key findings

In relation to hearer-known referents, the findings revealed both target-like and non-target-like aspects of SLL introductions. Like the L1 speakers, it appears that these SLLs generally applied basic principles of accessibility marking to introductions. For example, 80% of the SLL speakers used markers of lower accessibility to introduce the girl than to introduce Charlie (compared to 100% of the L1 speakers). However, the SLL introductions tended to be substantially non-target-like in other ways, and in the remainder of this subsection I summarize the most salient of these findings.

Firstly, the SLL speakers tended to be substantially more explicit than the L1 speakers in introducing the two central characters (Charlie and the girl). This particularly relates to the use of those linguistic features that I have argued function as accessibility-lowering devices, including try-markers, direct appeals to common ground, and episodic reference. In relation to introducing Charlie, this may be explained by the general lack, in the SLL retellings, of background details that establish a context in which Charlie becomes more accessible (allowing, for example, the use of pronominal introductions of Charlie in the L1 retellings). However, this does not appear to explain introductions of the girl, as these occurred in an entirely new physical context and followed an episode boundary. Overall, then, the SLL tendency to be over-explicit appears not to be confined to referent tracking contexts in these data, but also applies to introductions of the two main characters.

Interestingly, however, the findings reveal that the SLL speakers were, overall, less explicit than the L1 speakers when introducing minor (hearer-known discourse-new) referents. For example, of those participants who introduced the colleague, the L1 speakers tended to use long definite descriptions, often with a try-marker, while the SLL speakers tended to use a short definite description (e.g. *his workmate*) with no try-marker. This relative under-use of try-markers by SLLs is particularly anomalous considering the extent to which they over-used them in introductions of Charlie. If over-explicitness is motivated by a wish for referential clarity, then one might have predicted that it would be these minor, less accessible referents that would be most over-explicit in SLL introductions, rather than those relating to Charlie.

More striking are the differences in how the L1 and SLL participants introduced the feeding machine. As discussed in Chapter 6, the feeding machine had particularly low accessibility prior to being introduced into the retelling and was much less prominent than other, competing, factory machinery. To manage this, the L1 speakers typically introduced the feeding machine with a combination of strategies, including physical description, appeals to common ground, inviting hearer contributions, and evoking the context in which the machine had

previously appeared (which itself often involved two or more pieces of information). The SLL speakers typically used substantially fewer such strategies in any single act of reference. In addition, substantially more SLLs (50%) than L1 speakers (20%) introduced the machine as hearer-new, and thereby completely avoided the complexities involved in clarifying its identity (see Chapter 5).

9.2.2 The key findings contrasted with previous findings

The findings summarized in Subsection 9.2.1 indicate that referential introductions in these data were frequently non-target-like in terms of accessibility marking. This contrasts with, for example, the conclusions of Chini (2005, p. 93) who, in relation to advanced German learners of Italian, argued that “(adult) acquisition of means for referent introduction (mainly indefinite NPs) is not too problematic and almost native speaker-like from the beginning”.

Although the discrepancy between the present findings and those of Chini (and others) could be related to the participants’ source- and target-languages, it seems very likely that the key differences lie in the respective analyses. Firstly, other studies have typically conflated the distinction between introducing hearer-known and hearer-new entities. Secondly, the present study sees the *referential act* as the primary unit of analysis, whereas the SLL studies reviewed in Chapter 3 have been focused almost entirely on NP selection. In practice, therefore, previous studies of referent introductions have been effectively limited to a comparative analysis of the use of lexical NPs and names. Perhaps unsurprisingly, then, the findings in such studies are generally limited to errors in the use of determiners, and few pragmatic issues are identified. Such approaches overlook evidence that referent introductions can take place over a series of conversational moves (Smith et al., 2005) and turns (Clark & Wilkes-Gibbs, 1986). I argue that previous studies of SLL referent introductions have, therefore, had a limited focus at the level of the RE; the most revealing unit of analysis is actually the referential act.

In short, I argue that previous studies have failed to recognise the extent to which SLL introductions of hearer-known referents are non-target-like. This is because

such studies have focused on the RE rather than the overall referential act. In this study, the major ways in which such SLL introductions were non-target-like involved over- and under-explicitness at levels *above* the RE, including:

- unnecessary use of try-markers and appeals to common ground (when introducing Charlie);
- over-use of episodic reference (when introducing the girl);
- under-use of try-markers (when introducing minor characters),
- failure to clearly establish context (when introducing the machine).

9.2.3 Accounting for non-target-like introductions

An interesting issue is how to account for the ways in which L1 and SLL referential introductions diverge in relation to major characters, minor characters, and the machine. In introducing Charlie, I have already suggested that the fuller forms used by many SLLs may actually have been felicitous, as he was often introduced in the SLL retellings before the establishment of common ground and background narrative details. For over-explicit introductions of girl, the most relevant issue may be that narratives revolve around major characters (Morrow, 1985; Sanford & Garrod, 1981). Speakers may, therefore, consider it a communicative priority that initial references to these characters are unambiguously resolved, and this may be expressed through the hyper-clarity strategy discussed in Subsection 9.1.2.

A possible explanation for under-explicit introductions of minor characters is suggested by the concept of *referentiality* developed in Chapter 8. That is, the SLL speakers may be relatively unconcerned whether the introductions of minor characters are resolved. There are a number of possible reasons for this, including the secondary narrative importance of minor characters. It may also be that ambiguity in relation to minor characters results from a ‘trade off’ when balancing (a) overall narrative economy, with (b) clarity in introducing major characters. As such, these SLL speakers may be tolerant of the possibility of some unresolved references to minor characters.

Under-explicit SLL introductions of the feeding machine are of further interest. In the L1 data, introductions of this entity were typically the single most complex act of reference in any retelling, and relied heavily on the use of multiple moves, evoking contextual details, and frequent collaborative actions. Due to this complexity, it seems likely that the development of target-like use of such referential strategies and moves occurs late in SLL acquisition, and such under-explicitness would, therefore, be indicative of a developmental stage in pragmatic competence, in which SLL speakers are less likely to combine multiple strategies in evoking a context for referent recognition. This could also explain the frequency with which the SLL speakers introduced the machine non-referentially (i.e. as hearer-new), as they may have sensed the inadequacy of their pragmatic competency in clarifying this referent, and so opted for an avoidance strategy.

9.2.4 Relating SLL competence in referent introductions and tracking

In contrast to what is often assumed, I have argued in this section that SLL over-explicitness is not confined to referent tracking contexts, but is also a feature of some referent introductions, where it is often expressed at levels above the NP. This raises a question as to whether over-explicitness in both contexts stems from a single principle. The framework for the present study draws heavily on the perspectives of Bach (2008) and Ariel (1990, 2001), neither of whom emphasize any distinction of fundamental importance between referent introductions and referent tracking. As discussed in Chapters 2.1 and 4.10, my adoption of the distinction was partially to facilitate comparison with previous studies of SLL reference, and partially motivated by methodological issues of estimating referent accessibility. In this subsection, I will, therefore, presume that over-explicitness in both contexts share a common trigger (at least partially), and consider how the findings in this section may illuminate the explanations for SLL over-explicitness explored in Section 9.1.2. Future studies may wish to explore this assumption further.

Firstly, I argued in Section 9.1.2 that my findings in relation to referent tracking most strongly support the hypothesis that learners use over-explicitness as a

communication strategy, perhaps to compensate for potential ambiguities and problems in other aspects of their speech. This appears to be supported by the analysis of over-explicit introductions, as it appears that the SLL speakers were largely *strategically* over-explicit, reserving such over-explicitness for referents that were central to the retelling, and were under-explicit typically only when introducing minor characters (or, in the case of the feeding machine, due to insufficient linguistic or pragmatic competence).

The hypotheses that over-explicitness arises from the avoidance of pronouns and zeros is not supported, as the SLL introductions did not involve these RE types. Similarly, the argument relating to the strain of a dual processing load (Chini, 2005; Gullberg, 2006, 2008) holds that over-explicitness arises from difficulties in planning the use of pronouns at both the local and global discourse levels. Again, although this is likely to account for some over-explicitness in referent tracking, it cannot account for the range of over-explicit introductions identified in these data.

The argument relating to cross-linguistic influence in accessibility marking relates specifically to the conventional encoding of degrees of accessibility, but it seems that a similar argument could be raised in relation to the use of, for example, try-markers, appeals to common ground, and extended referential episodes. However, there appears to be very little previous research on episodic reference in languages other than English, so it is unclear to what extent the SLL participants would construct referential episodes differently in their L1. This could be an interesting area to investigate in future research.

9.2.5 Summary and implications

In this section, I have discussed issues relating to Research Question 1.1:

Q1.1 To what extent do SLL referential introductions tend to be target-like?

As Yoshioka (2006) notes, few previous studies have explored questions relating to referent introductions. In fact, as discussed in Chapter 3, even those that have

researched introductions have either focused on non-referential introductions (i.e. of hearer-new entities) or have made no distinction between these and genuinely referential introductions. Such studies have typically concluded that intermediate and advanced SLL speakers are essentially pragmatically target-like when introducing referents (although, for example, article errors may persist).

In this study, a broader approach to examining referent introductions and the marking of accessibility was adopted, where the overall referential episode was taken as an indicator of accessibility. In the L1 data, referents with higher accessibility tended to be introduced with short definite descriptions or (for the central character) a pronoun; referents with lower accessibility were frequently introduced with appeals to common ground, try-markers, evocation of context, and speaker-hearer collaboration. However, in the SLL data, markers of very low accessibility were used substantially more frequently for the introductions of main characters than for minor characters. As main characters typically have high accessibility, these introductions tended to be over-explicit; as minor characters tend to have lower accessibility, these introductions tended to be under-explicit. I argued that the findings most strongly support the hypothesis that over-explicitness is a communicative strategy.

A further implication is that SLL speakers may be late in acquiring the strategies and moves that L1 speakers use to introduce referents with very low accessibility referents into discourse. Evidence for this is found largely in relation to the feeding machine, which was typically introduced by the SLLs either with substantially under-explicit acts of reference, or with a non-referential introduction in which the machine is marked as hearer-new.

9.3 The miscommunication of reference

The findings confirm the central role of reference resolution to the successful communication of narratives. In the least successful retelling (Rachel and Renee), the fundamental problem appeared to be frequently unresolved references, as the hearer reported a basic understanding of the events but not of who was involved.

In other retellings of the theft scene, misinterpreted references meant that some hearers deeply misunderstood the central event in the narrative, and in relation to the feeding machine episode, some hearers reported a great deal of confusion due to misidentifying the machine.

Referential miscommunications were relatively frequent in the L1-L1 retellings (approximately one per retelling), but substantially more frequent in the SLL-L1 retellings (approximately two per retelling). In fact, these figures probably underplay the issues of problematic reference in the SLL retellings, as the SLL narratives tended to be substantially shorter, involving far fewer referents and acts of reference, and greater use of avoidance strategies for the least accessible entities. In addition, some lengthy chains of miscommunication (particularly between Rachel and Renee) were counted as a single miscommunication, despite the apparent opportunities for repair. Overall, then, the findings indicate that these advanced SLLs had not acquired target-like communicative competence in referring. A number of specific findings provide further insights into the triggers of referential miscommunication, and in this section, I discuss these in relation to Research Question 2:

Q2 What linguistic factors are implicated in referential miscommunication in L1-L1 and SLL-L1 narrative discourse?

Overall, the data collection methods I used (involving a film retelling task and stimulated recall) appear to have provided rich data, and the analytical framework (based on Accessibility Theory) provides a number of relevant insights. In Subsection 9.3.1, I discuss some general issues relating to the identification of miscommunication. In Subsections 9.3.2 and 9.3.3, I discuss evidence for the role of over-explicitness and under-explicitness in miscommunication, arguing that while such pragmatic ‘errors’ trigger miscommunication in the L1-L1 interactions, it is another range of factors (presented in Subsection 9.3.4) that account for the majority of problems in the SLL-L1 interactions. Miscommunicated referent introductions are discussed in Subsection 9.3.5. I conclude this Section with a discussion of referential *troublespots* (Subsection 9.3.6).

Before continuing, it is worth noting that if a RE encodes conceptual content which is contextually specific to the intended referent, then it seems rather unlikely that the RE would cause misunderstanding, even if the accessibility marking was highly infelicitous. For example, in retelling *Modern Times*, it seems unlikely that even the most over-explicit use of *the baker* would ever be interpreted as a reference switch away from ‘the baker’. Perhaps, to an extent, this is also true of under-explicit references; for example, in episodes where the girl is clearly the only one female referent, it may be that the RE *she* would be successfully interpreted even if the girl is no longer cognitively in focus (although some processing strain may occur; as reported in 7.6.3, hearers appear to respond more to the accessibility marking of pronouns than to gender marking). In this way, the general trends I identify and discuss in relation to triggers of miscommunication may be quite specific to the *Modern Times* narrative task. In many cases, substantial further research would be required before generalizing to other tasks and other types of discourse.

9.3.1 Issues in identifying miscommunicated reference

As discussed in Chapter 3, “current wisdom has it that most misunderstandings are detected immediately after occurrence (second turn), and successfully repaired in the third or fourth turn” (Dascal, p. 754). However, evidence from the present study suggests that this may not be the case, at least in the recounting of narratives. In fact, a number of hearers in my study expressed surprise at the extent to which their mental model of the narrative diverged from the actual events relayed by the speaker. One contributing factor is likely to be that the elicitation task prompted participants in the speaker role to convey a large amount of detail, with the subsequent interactions involving relatively lengthy extended turns. As Schegloff (1992) argues, dialogic speech enables hearers to display their understanding of the preceding utterances in such ways that the speaker can detect misunderstandings and initiate repair. Fewer such opportunities may occur in more monologic narrative tasks. A more salient issue may be a methodological limitation in previous studies. Specifically, most previous studies of

miscommunication have relied on the close analysis of recordings and transcripts to identify problems. However, this assumes that the hearer does indeed express their understanding during a turn following the miscommunication, and that this involves an aspect of their understanding that is relevant to the miscommunication. Neither of these assumed conditions is guaranteed, and it is, therefore, likely (as suggested by the present findings) that many misunderstandings will leave no textual trace to analyse.

There is a further problem with the position that interactants immediately notice miscommunications. Presumably, this position is based on the observation that researchers identify relatively few problems other than those that are noticed by the interactants themselves. However, I argue that this is to be expected, with researchers typically being in a much weaker position to identify problems than the interactants. Without the types of stimulated recall I have used, miscommunication research is reliant on the advantage afforded by repeated viewings of recordings and close analyses of transcripts, but overall, these provide weaker grounds to identify problems than the interactants' own experience of the discourse. Even at the fundamental level of researchers understanding participants' utterances, it seems that researchers (as over-hearers) will usually be in a weaker position than addressees. In particular, this is because interactants construct discourse according to *recipient design*, displaying "an orientation and sensitivity" to co-participants (rather than over-hearers) in terms of "word selection, topic selection, admissibility and ordering of sequences, options and obligations for starting and terminating conversations, etc." (Sacks, Schegloff, & Jefferson, 1974, p. 727). There are also other important systems available to addressees and not to overhearers. For instance, as G. Brown (1995) and Clark and Krych (2004) emphasize, speakers orient to the constant feedback that addressees provide (e.g. utterances, *uh-huh*, *mmm*, facial expressions), and, as Schegloff (1992) argues, the interactional organization of repair is a central factor in achieving intersubjectivity. Indeed, as discussed in Chapter 2.3.2, Schober and Clark (1989) reported over-hearers struggling to interpret what addressees found unproblematic, as they are excluded from those collaborative processes of conversation that are vital to communication. In short, then, on occasions when miscommunications do leave a textual trace, it should come as no surprise that

interactants are generally at least as effective at noticing the problem as researchers working from recordings. As such, the use of stimulated recall, or similar procedures, appears to be a very effective approach in achieving a deeper and more insightful understanding of miscommunication in relatively controlled settings.

9.3.2 Over-explicitness and miscommunication in referent tracking

As discussed in Chapter 3, it is well-established that over-explicit reference may be communicatively problematic in L1-L1 speech, with Goodman (1986) providing evidence of misidentifications, and Cloitre and Bever (1988) demonstrating that undue processing strain may occur for the hearer. Similarly, principles of binding theory suggest that, in some inter-sentential contexts, the infelicitous use of lexical REs will result in non-coreferential interpretations, irrespective of the speaker's intention. Such predictions are also in line with those of Accessibility Theory (Ariel, 1990, 2001), which holds that REs provide procedural information that facilitates identification of the speaker-intended referent and enables clarification between semantically-matching referents. For example, the use of a lexical RE may prompt the hearer to bypass referents that are cognitively in focus, and search among those that are less accessible.

Considering that advanced SLLs tend to be frequently over-explicit, it therefore seemed plausible that this would be a major trigger of referential miscommunication in SLL-L1 interactions. This issue had not been specifically explored in previous studies, and evidence was restricted to a small number of examples that seemed *likely* to be problematic (e.g. Klein & Perdue, 1992, p. 317). I therefore posed Research Question 2.1:

Q2.1 To what extent does over-explicitness in reference tracking trigger miscommunication in L1-L1 and SLL-L1 narrative discourse?

Key findings

The findings confirm that over-explicitness can indeed be problematic in L1-L1 interactions, with one case identified in Chapter 7.6.2. Surprisingly, however, there was no clear evidence of SLL over-explicitness being misinterpreted (as reference switch), even in contexts where the L1 speakers overwhelmingly preferred pronouns and zeros. For example, the L1 speakers nearly always used pronouns and zeros at accessibility Degree 7 (111 out of 112 instances), yet none of the 21 lexical REs used by the SLLs in this context proved problematic. In the following subsections, I discuss possible reasons and implications of this unexpected finding. I then discuss the extent to which over-explicitness can be considered a successful communicative strategy.

Accounting for the lack of miscommunications triggered by over-explicitness

A partial explanation for the apparent success of these infelicitous REs may be that there are one or more sub-classes of over-explicitness which prove particularly problematic in speech, but which were under-represented in these data, perhaps due to the nature of the elicitation task. One such subclass may be the use of over-explicit REs that violate principles of binding theory. Binding principles provide structural constraints on the use of reflexives, pronouns, and lexical REs (Chomsky, 1982), and the violation of these would appear to lead almost inevitably to miscommunication. In the present data, no cases were identified in which, for example, the SLL speakers used pronouns in a context where a reflexive pronoun was required. This appears to have been at least partially dictated by the elicitation task (only two reflexive pronouns occurred in the L1-L1 retellings), but it may also be that learners simply do not use lexical REs in ways that violate binding principles (as suggested by the findings of Gundel & Tarone, 1983). Nevertheless, there is no suggestion in the previous literature that over-explicitness is problematic only when binding principles are violated.

A second possible explanation is that although over-explicit REs lack accurate

accessibility marking, this may be compensated for by the additional semantic information they typically provide. For example, in some cases over-explicit pronouns (in a context where zeros are expected in L1 speech) may clarify the referent through specifying gender and number, while over-explicit lexical NPs can provide greater semantic specification than pronouns. As a result, although there may be additional processing costs for the hearer, many over-explicit REs could succeed through a ‘trade off’ between reduced accuracy in accessibility marking and increased provision of semantic detail. On the surface, this explanation appears plausible, and perhaps rather obvious. However, this explanation overlooks the fact that a number of over-explicit REs in the data effectively provide little or no additional semantic information beyond what would be provided by pronouns. For example, in the context of recounting *Modern Times*, expressions such as *the man* may provide no more conceptual information than *he*. In such cases, AT predicts that hearers will resolve the RE by responding to the accessibility marking that it encodes. Where accurate accessibility marking is lacking, additional strain may result as hearers struggle to construct a plausible interpretation of the discourse from which, as Kehler (2002) argues, the referent may be clarified.

More interesting is the possibility that interlocutors quickly become attuned to a speaker’s systematic over-explicitness, and adjust their RE interpretations accordingly. It seems likely that this would be a natural response to the regularity of over-explicitness in learner speech, with James (1998) noting that interlocutors must adapt to accommodate frequent types of errors (p. 211). If so, highly frequent over-explicitness could actually decrease the risk of any individual RE triggering miscommunication. This is supported by Grodner and Sedivy’s (2011) recent finding that hearers in L1-L1 interactions soon become accustomed to the frequent provision of unnecessary semantic details (one form of over-explicitness) and cease to interpret these as signalling contrastiveness. Presumably, if hearers judge there to be a likelihood of over-explicitness, then they will largely discount the procedural information encoded by low-accessibility markers and rely instead on interpreting the conceptual information the RE encodes about the identity of the referent. This could result in additional cognitive processing but (unless there is a relevant competing referent) may otherwise be communicatively effective.

Interestingly, the idea that hearers adjust their interpretation in relation to the speaker is further supported by the analysis of the SLL-L1 miscommunication in Example 9.1 below, where Michael used a pronoun to signal reference maintenance but (contrary to predictions) Reuben misinterpreted this as signalling reference switch:

Example 9.1: *Michael and Reuben*

T = 0.48 1-2	M – Chaplin came in, Ø started . um winding his nuts again?, and as the machine left off, he obviously got up and had #the twitchy motions going on and Ø couldn't control himself properly, um his workmate . poured a plate of soup, um Chaplin nearly sits in it, <u>he</u> gets up again
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It appears relevant to this miscommunication that Michael frequently used zeros in such reference maintenance contexts and, overall, used a substantially greater proportion of zeros (15.2%) than any individual L1 speaker (the highest being 10.8%), and more than double the L1 average (7.0%). In addition, it may also be relevant that the few prior uses of zero in this retelling all related to Charlie (the most topical referent in the narrative). In short, as discussed in Chapter 7.6.2, it appears that the miscommunication in Example 9.1 was triggered by a RE that was over-explicit not in terms of L1 conventions, but in terms of the speaker's *idiolect*. As such, it seems that problems may be triggered not only by deviations in standard usage, but also by deviations from patterns in individual use, as established through co-text.

Over-explicitness as a successful strategy

As over-explicitness has been widely reported in the literature (Ahrenholz, 2005; Chini, 2005; Gullberg, 2006), I raised the following question in Chapter 3:

Q2.3 To what extent can over-explicitness be characterized as a successful or unsuccessful SLL communication strategy?

I argued in Subsection 9.1.2 that over-explicitness in these data appears to result largely from the hyper-clarity strategy and from the cognitive processing demands

of referring in a second language. In relation to the former, because over-explicitness seldom appeared to trigger SLL-L1 miscommunication directly, it could be seen as a low-risk SLL strategy. Furthermore, it may actually facilitate referential communication. Specifically, over-explicitness involves a shift in the balance that holds between procedural and conceptual information in target-like speech (i.e. there is a shift away from accurate accessibility marking towards the provision of greater lexical-semantic detail). For this reason, it may be that over-explicitness is an appropriate learner strategy to compensate for their imperfect command of the target language. I have already suggested that erring towards over-explicitness guards against the greater problems associated with under-explicitness, and often involves the provision of additional semantic information. In addition, I suggest that over-explicitness in reference tracking may be communicatively effective for more indirect reasons. As argued by a number of researchers (e.g. Hobbs, 1979; Kehler, 2002; Sanford & Garrod, 1981), discourse coherence plays an important role in the resolution of pronominal reference. This is illustrated in Example 9.2, from an L1-L1 interaction:

Example 9.2: *Shelley and Jacky*

T = 10.16	the policeman looks like he's going to wake up?, [yep] so Charlie Chaplin @# @#
28	going like @this [[GESTURE]] to his @head, [@@]and then Ø picks up <u>his baton</u> , and Ø knocks him out again,

The hearer (Jacky) had no difficulty in identifying *his* as relating to the policeman. Jacky's interpretation appears to rely on schematic knowledge associating police officers with batons, but also relies on accurate and specific lexis (cf. *his baton* with *his stick*), accurate pronunciation of *baton*, and a generally accurate sense of the events being described. With this in mind, an obvious problem for pronoun (and other RE) resolution in some SLL speech is that such accuracy and clarity may not be present; there may be lexical, syntactic, and phonological errors, as well as pragmatic infelicities and ambiguities in discourse organization affecting the coherence of the discourse. In short, coherence-based factors may be less reliable in much SLL speech. The semantic details provided in over-explicit REs may, therefore, serve to support reference resolution when coherence is strained.

However, although in these data SLL over-explicitness was not problematic in the ways that were anticipated, the findings also indicate that persistent over-

explicitness can trigger problems indirectly. Most notably, as I argued in Chapter 7, persistent over-explicitness in referent tracking contexts was implicated in a failure of hearers to recognize the introduction of hearer-new characters, with some such introductions being interpreted as over-explicit anaphors (discussed in Chapter 7.5.4). Furthermore, while over-explicitness may assist reference resolution, it may be that it negatively affects other aspects of comprehensibility. As others have argued, the form of the RE provides important information not only for the identification of referents, but also for the structuring of discourse through highlighting the distinction between topic and comment (Givón, 1983c) and (where the topic remains the same) signalling a continuation or shift in theme (Vonk et al., 1992). Over-explicitness appears to reduce the extent to which these textual nuances are clearly differentiated. Further research may reveal a parallel between the effects of over-explicitness at the level of discourse coherence and other findings related to a lack of differentiation in SLL speech, such as Tyler, Jefferies, and Davies' finding that a lack of alternation between coordinate and subordinate clauses in SLL speech created "a flat, undifferentiated structure" (1988, p. 106) that failed to signal highlight important ideas and connections.

In short, although over-explicitness is inefficient and may cause communicative strain, it seems likely that it also serves a useful communicative purpose when interactants otherwise struggle to create coherent discourse. Nevertheless, it also appears to create conditions under which introductions of hearer-new entities may fail.

Summary

It is, perhaps, somewhat anomalous that frequent SLL over-explicitness is not found to directly trigger miscommunication in the present data. Initially, I considered two partial explanations for this finding, including the possibility that the SLL speakers avoided over-explicitness in the types of context that are most problematic, and the possibility that the additional semantic information typically contained in over-explicit REs compensated for the lack of accurate accessibility marking. However, neither explanation appears entirely convincing. Another

possibility is that the hearers adjusted their interpretation of accessibility marking according to the speaker. This could explain why over-explicitness appears to remain problematic in L1-L1 discourse (being generally associated with the reintroduction of low-accessibility entities). I then discussed the extent to which over-explicitness can be characterised as a useful SLL communicative strategy, concluding that it may facilitate the resolution of some references; however, it is also inefficient and may indirectly trigger communicative problems at a larger discursal level. Unsurprisingly, then, it seems likely that SLLs will ultimately abandon the strategy of over-explicitness once a higher level of competency has been achieved in relation to the control of referential systems.

9.3.3 Under-explicitness and miscommunication in referent tracking

In this subsection, I discuss issues arising from findings relating to Question 2.2:

Q2.2 To what extent does under-explicitness in reference tracking tend to trigger miscommunication in L1-L1 and SLL-L1 narrative discourse?

For the purposes of the following discussion, I restrict my focus to cases of under-explicitness in which a zero or pronoun was used to refer to an entity that would have been more felicitously referred to with a name or lexical RE.

Key findings

As reported in Chapter 7, under-explicitness appeared to be the most frequent trigger of miscommunication in the L1-L1 interactions, accounting for three of the five problems in referent tracking contexts. However, there was little evidence of under-explicitness triggering miscommunication in the SLL-L1 interactions, where it accounted for just one of the 21 problems in referent tracking. This is true despite there being a greater number of under-explicit SLL than L1 references (although as a percentage of all references, the findings were very similar), and despite the SLLs using under-explicit zeros in contexts where they were not used

by L1 speakers (a finding also reported elsewhere, e.g. Williams, 1988, 1989).

Accounting for the lack of miscommunications triggered by under-explicitness

Generally, it seems likely that under-explicit references frequently create processing strain, but only under certain conditions are they likely to trigger misunderstanding. I presented the following analysis in Chapter 7, arguing that under-explicitness is likely to trigger misunderstanding only when three conditions are met:

1. the under-explicit RE occurs in a context where a referent that semantically matches the RE is available to compete for its resolution,
2. the competing referent has higher accessibility than the intended referent,
3. coherence factors do not preclude the unintended resolution

In fact, it seems to be within the spirit of Accessibility Theory (Ariel, 1990, 2001) to predict that miscommunication would be almost inevitable under these conditions. Specifically, if there are two matching referents in an otherwise ambiguous context, the procedural information encoded in accessibility marking is assumed to be the key to disambiguating them. Therefore, in such cases, a high-accessibility marker, for example, will be interpreted as referring to the more accessible referent. Detailed analysis would be required to confirm the inevitability of such miscommunications, but if true, then the present findings may suggest that contexts where all three conditions coincide were slightly more frequent in the L1 retellings than the SLL retellings. Of course, this explanation raises the problem of explaining why these three conditions less frequently coincide in the SLL retellings. Assuming that it is not simply a matter of chance, one relevant factor may be that the SLL retellings generally included a substantially lower number of competing referents than the L1 retellings (discussed in Chapter 5). Such reduced competition may substantially reduce the likelihood of the first and second conditions listed above.

A second explanation is that hearers may be more alert to possible errors and

ambiguities in SLL speech than L1 speech, and thus use different interpretation strategies (particularly as ten of the hearers in the SLL-L1 interactions were ESL teachers). To support this hypothesis, there would need to be evidence suggesting that L1-L1 miscommunication could have been avoided through greater caution by the hearer. However, I found no clear evidence to support this suggestion and, indeed, many of the L1-L1 miscommunications appeared inevitable. For example, the hearer in Example 9.3 below wrongly believed that the police officer had hit Charlie with a baton, and this interpretation is predicted by an analysis of referent accessibility and RE selection (this extract is further discussed in Appendix 9.2.1):

Example 9.3: *Lillian and Astrid*

14-15	L – Charlie ₁ wakes her up because she’s unconscious, and then the police officer ₂ that’s lying next to them wakes up, and then <u>he</u> ₁ hits <u>him</u> ₂ in the head with his ₂ banger
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A third possibility is that the SLL speakers were more alert to potential ambiguity, and avoided being under-explicit (or used repair strategies) when they detected a potential for misunderstanding. For example, they may have avoided under-explicitness when competing referents were present, or where they detected an ambiguity or other difficulty in their utterance. As I suggested in Subsection 9.2.2, it may be that awareness of potential ambiguity is heightened in SLLs due to previous experience of miscommunication in their second language. This explanation presumes, perhaps, a high degree of self-monitoring.

Summary

As predicted, under-explicitness was an important source of miscommunication in the L1-L1 interactions. It is surprising, then, that under-explicitness was seldom implicated in these SLL-L1 miscommunications, despite SLL-L1 miscommunications being relatively frequent and under-explicitness occurring no less frequently in the SLL narratives than the L1 narratives. I have discussed three possible explanations for this, with the most likely explanation being either that the conditions that lead to misunderstanding (especially in relation to competition) happen to occur less frequently in the SLL narratives, or that the SLLs were more cautious in their language use, such that they were seldom under-explicit in

relation to referents that were likely to be misidentified.

9.3.4 Other triggers of miscommunication in referent tracking

In this subsection I discuss other factors that were frequently implicated in miscommunications related to referent tracking. It is probable that some miscommunications in referent tracking involved multiple contributing factors, and these may include such factors as those identified in Chapter 3, including failure to accurately assess common ground, auditory disturbances, distractions, and slips of the tongue (Bazzanella & Damiano, 1999). However, for the five L1-L1 miscommunications, it appears that just three factors are required to plausibly account for the linguistic triggers involved. These are under-explicitness, over-explicitness, and the ambiguous signalling of reported speech. For miscommunicated referent tracking in the SLL-L1 retellings, it is unsurprising that a much wider range of linguistic triggers were implicated, as these speakers typically displayed multiple non-target-like language features. Examples in the data clearly illustrate, for instance, the roles of inappropriate lexical choice and phonological features, and in some cases there were clearly two or more language features involved in triggering a single miscommunication. It is important to note that linguistic errors not only affected RE resolution directly (e.g. through inappropriate lexical choice in the RE), but may also have contributed to a failure to establish a sufficiently coherent narrative from which reference resolution can occur (partly or wholly) “as a byproduct of deeper discourse-level comprehension processes” (Rhode, Kehler, & Elman, 2007, p. 617). In short, target-like RE selection is not, it seems, sufficient for L1-like competence in referring.

Of the linguistic triggers of SLL-L1 miscommunication, by far the most important were pronoun errors (e.g. *he* for *she*), which accounted for 47.6% of the problems in referent tracking. This is true despite some SLL participants making no pronoun errors at all, and over half making no uncorrected error. Of course, pronoun errors do not inevitably trigger miscommunication, and the conditions under which they become problematic appear clear: there must be competition from a highly accessible referent whose gender matches the pronoun, and no

coherence-based factors (e.g. relevant schematic knowledge) to preclude misinterpretation.

Considering the frequency with which pronoun errors appeared to trigger miscommunication, it may seem surprising that such a ‘simple’ error persists in the speech of advanced learners. After all, the *interaction hypothesis* (Long, 1996) holds that communicative problems tend to prompt clarification requests and self- or other-initiated repair. However, the problematic pronoun errors in these data almost always resulted in *misidentification* rather than *non-understanding*.

Whereas non-understanding may prompt a clarification request, the misidentifications in these data nearly always remained either entirely unnoticed by the interactants or were later reinterpreted by the hearer without assistance from the speaker. Crucially, then, the problematic nature of pronoun errors was seldom brought to the attention of the speaker. In fact, the only clarification requests relating to pronoun errors were made by Raquel, who reported these as pedagogical moves rather than genuine clarification requests.

9.3.5 Referent introductions and miscommunication

In this subsection, I discuss Research Question 2.4:

Q2.4 What linguistic factors are implicated in miscommunicated introductions?

Key findings

Approximately half of all referential miscommunications in both the L1 and SLL data involved referent introductions. This is striking, as acts of referent tracking far exceeded introductions. Specifically, for every referential introduction of a character in the L1 retellings, there were 28.3 instances of referent tracking, and one for every 19.8 in the SLL retellings. This suggests that referential introductions in general represent a substantial trouble spot. It also seems clear that successful introductions are often crucial in communication, as a misidentified introduction may result in an entire referential chain being misinterpreted. This

finding does not accord with the orientation of much of the previous research into SLL reference, which has focused largely on referent tracking.

As discussed in Section 9.2, previous studies have tended to agree that SLL referent introductions are largely target-like, and this may imply that they are usually successful. However, as I argued in Section 9.2, such conclusions have been based on analyses that were restricted to the NP used in introductions, not on the overall referential act, which may involve larger discursual units. In analysing the act as a whole, the SLL introductions in the present data were often over-explicit for central characters and under-explicit for minor characters and the least accessible entities. Furthermore, introductions resulting in miscommunication were substantially more frequent in the SLL data than in the L1 data, despite many SLLs avoiding referential introductions of the most troublesome referents. In this section, I focus particularly on miscommunicated introductions of the feeding machine, as this was clearly the most troublesome individual to introduce, being avoided in 45% of all SLL narratives, and being miscommunicated in 45.5% of the remaining narratives.

Triggers of miscommunicated SLL introductions of the feeding machine

For some referents, one possible reason for miscommunication is SLL difficulties with the types of syntactically complex REs required to indicate very low accessibility, such as relative clauses. However, as I argued in Chapter 7.5.3, even target-like competence in the use of complex NPs appears insufficient to successfully introduce the feeding machine. Rather, it seems clear that the most important factor distinguishing successful from unsuccessful introductions of this entity was the extent to which the speaker was able to evoke a suitable context within which to recall and disambiguate the intended machine. This was successfully achieved through episodic reference, and I discussed in Chapter 6.2.4 how the L1 speakers tended to employ several referential moves to introduce the machine (appeals to common ground, evoking context, collaboration, etc.), and that these were substantially less frequent and less complex in the SLL data (as discussed in Section 9.2). Although some of these techniques were used

(unnecessarily) by the SLL speakers to introduce the girl, they were not of the complexity found in L1 introductions of the feeding machine, which typically combined a greater number of these moves in a single referential act.

An interesting question, therefore, is why these advanced SLLs did not use these episodic moves in target-like ways. One possibility is that such moves are substantially different in their source languages. Although it seems that little research has been conducted in this area, S.W. Smith (personal communication, October 11, 2011) has speculated that topic-comment languages may have different and more conventionalized means of alerting hearers to new information. If so, it would be unsurprising that some of these SLLs had failed to acquire these skills in English, since there is generally low awareness among second language teachers and learners of issues arising from cross-linguistic differences in the organisation of speech (Wong & Waring, 2010). However, it is also possible that much the same stages of episodic reference are found widely across languages. Even if this is so, Kasper and Rose (2002) review a number of studies demonstrating that learners often fail to transfer L1 pragmatic knowledge into their second language, at least until they have sufficiently mastered the associated linguistic resources for that language. Nevertheless, as I suggested in Chapter 6, these advanced learners generally *did* appear to have the relevant linguistic resources for episodic reference, yet tended to combine fewer episodic stages in any one act of reference. Either way, I suggest that the issue may be a lack of awareness of how such references are achieved in English, and perhaps a lack of self-reflection by the SLLs on how they would have achieved such references in their L1.

Non-referential introductions

As reported in Chapter 7, some misunderstandings occurred when SLLs introduced hearer-new characters into the retellings. In many cases, hearers failed to recognize that a new entity was being introduced, and interpreted the NP as indicating referent tracking. As discussed in Chapter 7, it seems likely that frequent, over-explicit REs in reference tracking, and perhaps frequent errors in

the use of the indefinite article, may be an indirect source of these misunderstandings. As Prince (1981) suggests, there may also be a tendency for hearers to be conservative in accepting new referents into their mental models of discourse. Specifically, there may be a “general Conservation Principle that says that hearers do not like to make new entities when old ones will do and that speakers, if they are cooperative, form their utterances so as to enable the hearer to make maximal use of old entities” (pp. 245-246).

Summary

In summary, while referential introductions were a frequent locus of miscommunication in the L1 retellings, they were miscommunicated approximately 50% more frequently in the SLL retellings. This occurred despite the SLLs tending to avoid introductions of the more problematic (low-accessibility) referents. In both the SLL and L1 retellings, the most important linguistic triggers of such miscommunications tended to be those aspects of reference that occur above the level of the NP. These were precisely the aspects of referential introductions that were least target-like in the SLL retellings. It seems, then, that introducing entities with very low accessibility may be particularly problematic for SLLs. In addition, as discussed in Chapter 9.3.2, there was some evidence in these data of failed SLL introductions of hearer-new referents, and these appeared to be triggered by persistent over-explicitness in reference tracking, with such over-explicitness perhaps obscuring distinctions between given and new information.

9.3.6 Reference and recurrent communicative troublespots

Unlike the studies reviewed in Chapter 3, the research design of the present study enables analysis of the communicative success of multiple retellings of the same narrative. This provides stronger bases for the identification of *recurrent communicative troublespots* (hereafter *troublespots*). I use the term *troublespot* to refer to contexts and intended meanings that frequently result in

miscommunication (cf. Dörnyei & Thurrell, 1994, who focus on single instances of problematic communication), and I identify these as specific conversational moves (e.g. introducing hearer-new characters, repair moves), narrative-specific moves (e.g. introducing Charlie), and features of the broader discourse context (e.g. the role of competition). While previous literature has frequently focused on individual acts of miscommunication and *why* they occurred, in this section, I argue that important insights may be gained from investigating general patterns in *where* miscommunication tends to occur. There are, I believe, a number of troublespots that are discernible in the present data, including the presence of repair and clarification moves, the introduction of low-accessibility referents, high competition, and reported speech. I have discussed aspects of some of these at various stages in this chapter (and repair and clarification moves in Chapter 7), and for the sake of brevity, the following discussion will be limited to the latter two.

High competition

Perhaps unsurprisingly, the discourse feature which was most frequently implicated in problematic reference tracking was competition (i.e. when both the intended referent and one or more other contextually relevant referents semantically match the RE). Specifically, the SLL participants appeared to have more frequent problems managing the clear specification of individuals in scenes where the focus shifted between several competing characters. While the L1-L1 miscommunications were quite evenly distributed over the five narrative episodes, almost half of the SLL-L1 miscommunications occurred in the theft episode where such competition was greatest. As discussed in Chapter 4.3.2, most retellings of the theft episode involved a complex interplay between five characters, involving frequent shifts in topic and focus. In such contexts, highly proficient speakers were able to effectively and unambiguously introduce and track multiple referents, with REs that appropriately indicated factors such as descriptive content, accessibility, and definiteness. In contrast, although the SLL participants usually succeeded in describing the key events, a number miscommunicated the identity of individuals involved. Overall, it appears that

linguistic errors and pragmatic infelicities can be easily accommodated in some contexts, but can become highly problematic in narrative episodes where there is competition from multiple salient referents.

In a more general sense, it appears that competition was often the factor that distinguished communicatively problematic and non-problematic errors. For example, I argued in Subsection 9.3.4 that pronoun errors were problematic only when three conditions, including competition, were met. In fact, in nearly all instances of misidentified reference, there was a competing referent that more appropriately matched the RE either conceptually or in terms of accessibility marking. A rare exception is presented in Example 9.4, where a reference to Charlie was interpreted as the introduction of a hearer-new character:

Example 9.4: *Steffi and Otis*

T = 13.35 4	S – Charlie ₁ was the man, ah selected from his ₁ colleagues to . um um to test the machine, whether it [uh-huh] the machines ah works well or not, and the:, the machine starts very well, um feed <u>the Charl</u> ₁ with um: . cakes?	O – yeah, she jumped from Charlie to the child
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Several factors appear to combine in the triggering of this miscommunication, particularly a pronunciation error (‘Charl’) and the non-target-like *the + noun*, while over-explicitness may also have played a small role. The hearer’s response was to construct a new discourse entity (‘the child’). However, this was a rare case of misidentification occurring without competition, illustrating, perhaps, that in the absence of competition, multiple problems may have to align before miscommunication is triggered. In nearly all other cases of miscommunication in these data, competition appeared to be a central factor, particularly where the outcome was misidentification.

Reported speech

Although there is a growing body of research relating to reported speech, there has been very little commentary on problems of miscommunication resulting from unclear shifts between direct and indirect reported speech. However, the present data suggests that this represents a discourse troublespot, implicated in two of the

eleven miscommunications in the L1-L1 retellings (40% of those in referent tracking contexts). There was also at least one miscommunication in the SLL-L1 retellings.

In the previous literature, Bhat (2004) has noted an ambiguity in the reference of third-person pronouns in reported speech. This can be illustrated in the following problematic reference from the L1 speaker Vicky, in which her intended meaning is represented in (1) and the hearer's interpretation in (2):

1. the lady₁'s like 'no no no it's her₂'
2. the lady₁'s like no no no it's her₁

As these examples illustrate, *the lady* and *her* cannot be co-referential in direct reported speech (cf. *the lady's like it's me*), but can be in indirect speech. It seems clear, then, that a critical factor in the misinterpretation of the pronoun was the hearer's failure to recognize that Vicky was reporting speech directly. The same issue occurred in the interaction between Lillian and Astrid, with Lillian's intended meaning presented in (3) and Astrid's interpretation presented in (4). However, here the issue was not a misunderstood pronoun, but a misunderstood lexical RE:

3. and then the chick₁ said to the police 'no: it was the chick₂'
4. and then the chick₁ said to the police no: it was the chick₁

It must be acknowledged that in both of these miscommunications there are other sources of ambiguity, involving Vicky's prior introduction of the witness with an indefinite pronoun (see Appendix 7.4.1) and Lillian's use of *the chick* for competing referents. However, it appears critical that the hearer failed to recognize that speech was being reported directly.

While quotation marks usually signal direct speech in written texts, Goffman (1981) argues that the same outcome is minimally achieved in oral communication by changes in "pitch, volume, rhythm, stress, [and] tonal quality", as it is for other changes in *footing* (p. 128). Other signallers of direct speech

include changes in tense, dialect, syntax, register, first and second-person pronouns, adjacency pair structure, and choice of reporting verb (Barbieri & Eckhardt, 2007; Mathis & Yule, 1994; Yule, 1993a, 1995). However, these other markers are frequently absent or ambiguous in speech. For example, although there are a number of reporting verbs that relate specifically either to indirect speech (e.g. *said that*) or direct speech (e.g. the colloquial *go* in *she goes 'he did it'*), others such as *say* are used for both. In fact, according to Barbieri and Eckhardt's corpus-based work, the ambiguous form *say* is easily the most frequent reporting verb in both speech and writing. Sometimes no reporting verb is used at all (*zero quotatives*) (Mathis & Yule, 1994), even when speakers (and occasionally writers) shift between direct and indirect speech (Yule, 1993b). Such features have been noted as potentially creating difficulties in distinguishing direct from indirect speech (Yule, 1993a). Most researchers, therefore, agree that phonological cues play a crucial role (Goffman, 1981; Holt, 2007; Mathis & Yule, 1994; Yule, 1995), and it is the failure of these features that appears of most interest in the miscommunications in the present examples.

In these data, many of the successful uses of L1 direct speech involved the speaker using a very distinct, perhaps theatrical, 'quotation voice'. This was marked by a substantial change in voice quality (e.g. nasality) and pitch. Quotation voice phenomena appear highly effective in marking direct speech, and seem less clearly present in the two relevant L1-L1 examples of miscommunication. What is not clear, then, is why some speakers failed to clearly use these, or other, phonological cues, which are widely considered to be minimally required (e.g. Goffman, 1981) or at least most salient (e.g. Yule, 1995). This question will not be explored further here, but it does highlight reported speech as a referential trouble spot.

Summary and implications

In this subsection, I have suggested that there are recurring referential trouble spots. I have illustrated this issue in relation to the communicative difficulty posed by competition (particularly where there are frequent shifts in

topic and focus), in relation to an inherent ambiguity in the use of some REs in reported speech, and, in Chapter 7, in relation to repair and clarification moves. The idea of recurring troublespots suggests that precautions may be required in high-stakes communicative contexts. However, despite the potential importance of such troublespots, it appears that little or no previous research has been conducted in this area. For example, direct reported speech holds a privileged position in courtroom testimony, where it is associated with particularly salient evidence (Galatolo, 2007; Philips, 1986). The suggestion that, in such contexts, miscommunication may go undetected and have serious consequences is not merely speculation as Naylor (1979) and Gumperz (1982b) have demonstrated. Consequently, in high-stakes contexts, interactants may be advised to recognize the difficulties posed by referential troublespots and to adopt cautious communicative strategies. For example, in the case of the reported speech in courtroom contexts, it may sometimes be advisable to insist on unambiguous reporting verbs (such as *said that* and *uttered*).

9.3.7 Summary and implications

This section has focused on addressing the second key research question:

Q2 What linguistic factors are implicated in referential miscommunication in L1-L1 and SLL-L1 narrative discourse?

To summarize, miscommunications in the L1-L1 interactions were closely associated with infelicitous accessibility marking, with under-explicitness and over-explicitness apparently triggering most problems in referent tracking. Overall, this suggests that the L1 interactants were highly sensitive to the procedural information encoded by RE types, as would perhaps be expected if RE types conventionally encode degrees of accessibility (Ariel, 1990, 2001), or if they create implicatures based on a fine balance between clarity and economy (e.g. Geluykens, 1994). I also identified certain conditions (relating to competition and coherence factors) in which infelicitous accessibility marking seems almost assured of triggering miscommunication. Other triggers in referent tracking

included the unclear signalling of direct reported speech and problems in repair moves and interactional clarification moves (Chapter 7.8). A key factor in successfully introducing referents with very low accessibility was the evocation of a context from which the referent could be singled out.

Miscommunications in the SLL-L1 interactions were triggered by a much wider range of factors. For referential introductions, the greatest problems involved a failure to use sufficient target-like referential moves to establish a clear context for the identification of the least accessible referents. In referent tracking, the most important trigger was pronoun errors, and I have suggested precise conditions under which such errors are likely to be problematic. Other important triggers included lexical errors, pronunciation errors, and the inability to establish and maintain a coherent narrative. Interestingly, under-explicitness and over-explicitness appeared to be a less frequent trigger of SLL-L1 than L1-L1 miscommunications. One likely reason for this may be that interlocutors did not as closely attend to the procedural information encoded by referring expressions in SLL speech as in L1 speech, presumably due to the frequency of over-explicitness in the SLL retellings. Instead, the interlocutors perhaps relied more heavily on using the semantic content of REs to disambiguate referents, and perhaps also relied on the types of schematic knowledge and inference that Kehler (2002) identifies as influencing RE resolution.

Although the sub-questions relating to referent tracking have been addressed through the body of this section, it is worthwhile to review the following question, as relevant issues arose in separate subsections:

Q2.3 To what extent can over-explicitness be characterized as a successful or unsuccessful SLL communication strategy?

If, as I argued in Section 9.1.2, SLL over-explicitness is, to some extent, strategically motivated, then it does generally appear to be a successful strategy. As discussed, it appears that over-explicitness was seldom directly implicated in SLL-L1 miscommunication, and I have argued that the semantic content of over-explicit REs may also compensate for the role that coherence plays in L1-L1

reference resolution (i.e. RE resolution as a by-product of establishing coherence, as discussed by Rhode, et al., 2007). It must also be noted, however, that over-explicitness is likely to come with a processing cost for interlocutors (Cloitre & Bever, 1988; Sanford & Garrod, 1981). Interestingly, evidence in the present data suggests that one of the greatest problems triggered by over-explicitness occurs indirectly through the failure of interlocutors to recognise the introduction of hearer-new entities, as persistent over-explicitness appears to cloud the distinction between given and new information, which has implications for the overall discursual model being created by the hearer.

9.4 Miscommunication analysis

As discussed in Chapter 3, studies of miscommunication offer potential insights that are relevant to multiple areas of language study, many of which are under-researched. In that chapter, I introduced the term *trigger identification* to describe research that attempts to identify uses of language and intended meanings that can be identified as the source of miscommunication. Typically, miscommunication research examines a range of problem types (e.g. attitudinal, semantic, referential), and the triggers are reconstructed from an examination of the transcripts. In my approach to miscommunication analysis, trigger identification is one of three main features:

1. *problem identification*: the speaker's intended meaning is compared (retrospectively) to the on-going development of the hearer's mental model of discourse
2. *trigger identification*: extracts associated with miscommunication are examined for evidence of the linguistic and functional triggers of the problem
3. *trigger analysis*: where relevant, communicatively successful and unsuccessful uses of language are analysed within one or more theoretical frameworks (e.g. Accessibility Theory)

The main methodological innovation here is the use of stimulated recall to reveal

aspects of the hearer's mental model of discourse (see Chapter 4). In addition, none of the previous studies that I reviewed had systematically analysed triggers of miscommunication through a cognitive-linguistic framework accounting for language choice at the phrase level (e.g. Accessibility Theory). In this study, use of an Accessibility Theory-based framework enabled analysis of how correct and incorrect language forms prompt developments in the hearer's discourse model, leading to specific predictions and explanations in relation to which references were likely to be misinterpreted.

In the following subsections, I discuss aspects of this approach to miscommunication analysis (MA). Subsection 9.4.1 relates MA to error analysis, and I argue that an analysis of error is strengthened through analysing its role in problematic communication. In Subsection 9.4.2, I argue that my approach to MA can provide a range of insights that are not available to approaches that rely on the analysis of recordings or transcripts. I illustrate these points with findings beyond those related to reference.

9.4.1 Miscommunication and error analysis

In this subsection, I argue that miscommunication analysis (MA), particularly that element involved in the identification of triggers, can strongly complement some approaches to *error analysis* by providing a sound basis for establishing principles relating to error gravity. I further argue that MA may be a useful exploratory tool in researching learner language. I illustrate this discussion with examples from the data relating to the use of articles, pronouns, and the signalling of generic entities.

Miscommunication and error gravity

Due to the high frequency and wide range of errors found in much learner language, researchers have argued that errors should be prioritized through an organizing principle that determines *error gravity*, such as comprehensibility or frequency (James, 1998; Johansson, 1978). The comprehensibility principle gives

priority to those errors most closely implicated in comprehension problems; I argue that my approach to miscommunication complements this principle. In fact, I argue that there are several reasons why the grading of errors based on comprehensibility may be problematic without insights from miscommunication analysis.

Firstly, a general problem with the comprehensibility principle is that it overlooks an important distinction between errors that result in misunderstanding and non-understanding. As a grading principle, comprehensibility appears to give greatest weight to those utterances that are ambiguous or unintelligible, as they are most readily identifiable as being problematic. However, in speech, such utterances are precisely those that hearers are most alert to; consequently, they seem the most likely to be clarified through repair exchanges. As such, it is actually misunderstood utterances which will tend to have the gravest communicative consequences, as interactants may remain oblivious to the problem. Ideally, then, judgments of error gravity ought to be supported by an analysis of miscommunication.

Secondly, miscommunication analysis enables the detection of indirect communicative problems arising from non-target-like speech. As reported in Chapter 7, the introduction of hearer-new characters in the retellings resulted in some SLL-L1 miscommunications. However, analysis of the relevant NPs (and the clauses they appeared in) typically revealed no local error (with the possible exception of less phonological prominence). Rather, the key trigger appears to have been the pervasive over-explicitness characterising much of the SLL data, such that hearers had no choice but to treat the signalling of new information with scepticism. It seems unlikely that error analysis alone could alert researchers to such indirect consequences of general patterns in language use. Consequently, in conventional approaches to error analysis, this type of error seems likely to be de-prioritized in estimations of error gravity.

A third point that emerges from the data is that even experienced teachers may be unreliable at judging the intended meaning of SLL utterances, and, therefore, unreliable at assessing the gravity of errors. On many occasions in the present data, although substantial miscommunications had occurred, hearers (half of

whom were teachers) expressed confidence that they had correctly understood the retelling (also discussed in Ryan & Barnard, 2009). For instance, Example 9.5 is taken from the beginning of a stimulated recall interview in which the speaker indicates that, despite the errors, he judged the retelling to be quite communicatively successful.

Example 9.5: *Seth SR*

S – I noticed he was um, . like . his English definitely wasn't perfect, but . . like . he he did make quite a few mistakes, I noticed one that I can sort of just remember off the top of my head [okay] he said 'him' instead of 'her' . um, a couple of times I think

R – Oh, okay, . and was that confusing?

S – Well it wasn't confusing because I knew what he was talking about, and that's the other thing I was going to get to, I mean, even though he made quite a few mistakes, . I still figured out what he was on about, [*intervening comments omitted*] yeah, I mean . . I picked up on it straight away, pretty much [yep, okay] and knew exactly who who he was talking about

However, despite the interviewee's confidence that he interpreted the retelling successfully, the stimulated recall subsequently revealed that a great deal of miscommunication had in fact occurred (as discussed in Subsection 9.4.2). This suggests that hearers may be poorly placed to assess the gravity of key errors. This is supported by Hamid's study in which teachers' interpretations of some idiosyncratic learner sentences were reported to "largely vary from learner intentions in those sentences" (2007, p. 115), with over half of the selected sentences being misinterpreted.

Fourthly, and somewhat counter-intuitively, there is also evidence in the present data that some seemingly trivial linguistic errors can result in substantial misunderstandings, while some of the more jarring errors can be communicatively successful. For example, Example 9.6 appears to contain multiple errors, yet the stimulated recall reveals that these were not communicatively problematic.

Example 9.6: *Sabrina and April*

T = 1.36 3-6	S – they . start – um, there's a manager and some peoples they look for this machine it's good or not?
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In contrast, Example 9.7 resulted in a misinterpreted reference, despite containing

just one overt error (omission of the indefinite article or existential *there*) over a wider stretch of discourse.

Example 9.7: *Michael and Reuben*

T = 13.57	M – looks into the baker's shop, Ø sees um a baker carrying bread into #his shop, as the baker's inside, she runs over to the truck, Ø takes one of the breads, Ø runs off, but bumps into Chaplin at the corner?, <u>lady</u> points at her and Ø says ‘look! she stole your bread’ to the baker
8	

Closer analysis of this extract suggests that the failed introduction of the witness resulted from the bare noun interacting with a dis-preferred structure immediately following (cf. ‘and says to the baker ‘look! she stole your bread’).

Despite Example 9.7 proving to be more communicatively problematic than Example 9.6, it is likely that the jarring errors in the former would attract more attention from an error analyst (and presumably more pedagogical intervention from a teacher) than the single error in the latter. However, there is a case for arguing that a pedagogical intervention relating to Example 9.7 would be more worthwhile as it resulted in a substantial miscommunication. Furthermore, this speaker (Michael) had very accurate language use overall, and such article omissions are the exception in his retelling (three omissions in obligatory contexts), and are ones he could, perhaps, easily address. In short, then, the prioritization of errors based on miscommunication analysis (MA) seems to highlight important issues that may be overlooked when errors are prioritized according to the comprehensibility principle.

A fifth way in which MA may complement error analysis is in opportunities to provide non-expert interpretations of learner speech. As Gass and Varonis (1984) demonstrate, general familiarity with learner language assists in making sense of learner discourse. James (1998) notes that if a speaker frequently makes the same error (e.g. overuse of the definite article), then, as a hearer or reader, “one has to learn to accommodate it, and to make adjustments in one’s readings” (p. 211). A likely consequence of this may be that researchers (or teachers) who are accustomed to dealing with recurring patterns in learner errors may become oblivious to certain problems that may, nevertheless, prove problematic with other (non-expert) addressees. Miscommunication analysis may, therefore, prove

particularly useful when applied to interactions involving learners and non-experts, through highlighting problematic errors that may be easily accommodated by applied linguistics researchers. This is supported by a number of comments in the present stimulated recall data in which experienced teachers claimed familiarity with certain phonological, lexical, and morpho-syntactic features of learner speech which they reported as facilitating communication.

Article errors and miscommunication

The findings in relation to article errors illustrate how MA can provide evidence to counter previous assumptions about error gravity. Articles are regularly cited as being a particularly persistent type of error for advanced learners of English whose first languages have no articles (e.g. Master, 1997; Standwell, 1997). Less frequently, they are also claimed to be an important source of communication problems (e.g. Berry, 1991, 1993). In the present data, article errors were implicated in two of the 42 miscommunications in the SLL-L1 interactions. The first of these (Example 9.7 above) involved the infelicitous omission of the indefinite article, perhaps combined with a dis-preferred predicate structure. In the second case (Example 9.4, p. 344), the article error became problematic when combined with the mispronunciation of *Charlie*.

Isolated examples such as these may serve to reinforce the impression that article errors pose a substantial threat to successful communicative. However, this may be misleading, at least in this type of communicative task. Although no tally was made of article errors, they appear to be relatively frequent (as reported in previous studies, e.g. Kim, 2000; Master, 1987, 1997; Thu, 2005), suggesting a fairly low percentage actually resulted in miscommunication. This could suggest that the communicative risks associated with article errors may have been overstated in some of the literature, where it has been claimed that articles “are often vital for successful communication” (Berry, 1993, p. vi). Berry’s claim may, however, be true for other types of rhetorical purpose and in other types of discourse.

Few other studies have explored the role of article errors in miscommunication. The most notable findings in the literature are perhaps those of Pica (1983), who, in a study of L1 article use, reported occasional problems with the interpretation of some uses of *the* in the context of giving and requesting directions. However, these problems appear to have related very specifically to speakers misjudging common ground with their hearers, rather than to genuine linguistic errors. For example, Pica notes (pp. 226-227) that “when the visible item was sighted by only one of the participants, confusion resulted”. Similarly, “much confusion resulted when one participant perceived the scope of setting differently from the other participant”, such as when the speaker said ‘the library’, wrongly assuming that there was only one library on campus (p. 227). Although Pica’s findings suggest a potential for article errors to trigger miscommunication, there remains a lack of evidence to support the idea that this frequent source of error is tends to be communicatively problematic. Although this is in agreement with the intuitions of a number of previous researchers (e.g. Bataineh, 2005; Master, 1997), the present study may be one of the first to address this question empirically rather than intuitively (albeit within the limited context of a single narrative task). Future studies may wish to investigate the extent to which article errors are communicatively problematic in discourse involving other rhetorical purposes.

Pronouns

In contrast to the findings relating to articles, the present study demonstrates the risk posed by pronoun errors in narrative discourse. In these data, at least 23.1% of SLL pronoun errors lead the addressee to misidentify the referent, and, more broadly, at least 38.5% were communicatively problematic (i.e. creating communicative strain). Such findings may prove surprising to learners whose L1s seldom, if ever, use pronouns (relying heavily on zero), or use pronouns without gender marking. There are other reasons to suspect that some learners perceive pronoun errors to be trivial. In particular, the present findings revealed very few clarification requests relating to pronouns, and only one relating to a pronoun error. Tellingly, this clarification request related to a pronoun error that was *not* problematic in terms of comprehensibility, and the hearer reported that she was

just ‘doing her job’ as a teacher. Indeed, logically, it seems that in most cases hearers are only consciously able to bring pronoun errors to the attention of the speaker if they recognize that the gender of the pronoun does not match the speaker-intended referent; in which case, communication has almost certainly already succeeded. This is quite unlike some other error types (particularly syntactic errors), which can result in incomprehensibility. The exception would be if the pronoun error resulted in a genuine ambiguity between two or more highly accessible referents, but this, it seems, would require some special (and rather infrequently occurring) contextual circumstances. Overall, then, these factors could contribute to a perception among SLLs that teacher-initiated clarification requests in relation to pronoun errors are prompted by attention to rather trivial errors of form that have little bearing on communicative success.

Generic reference

So far in this section, I have argued that miscommunication analysis has illuminated issues relating to well-known error types. In this subsection, I argue that it may also be a useful exploratory tool, which I illustrate in relation to issues that were raised in relation to the use of generic *you* in the retellings.

Miscommunication analysis reveals two clear cases (and one possible case) of generic reference being misinterpreted as specific reference. As noted in Chapter 7, the actual figure may have been higher, but I did not pursue such issues during the stimulated recall interviews as I was initially unaware of its potential for miscommunication. Identification of one such miscommunication during analysis prompted an examination of the NP types used by learners to signal generic reference and revealed that few of the SLL participants used the preferred target-like *you*. Furthermore, a number of SLL speakers appeared very inconsistent in how they signalled generic reference, with some speakers using up to four different non-target-like forms (the L1 speakers only ever used generic pronouns). Overall, just 33% of generic references by the SLLs were target-like, and 10% of the SLL errors appeared to result in miscommunication. Considering that narratives generally contain few generic references (von Stutterheim & Klein,

1989, go as far as claiming that “generic reference is not allowed” in spoken narrative, p. 51), it is possible that miscommunication resulting from non-acquisition of generic *you* is relatively widespread in some other text types.

These findings highlight issues that have received very little attention in applied linguistics research, with none of the studies reviewed presenting findings that identify generic reference as a genuine source of miscommunication (although Berry, 2009, presents an example of second-person reference being misinterpreted generically). Further, none of the studies I reviewed reported on the frequency with which generic *you* is used by SLLs. This general lack of awareness relating to generic *you* is highlighted by Berry, who includes a review of published textbooks and reference materials, and reports finding no EFL coursebooks that included generic *you*, and that coverage in student and teacher reference materials was often absent or inadequate.

In short, miscommunication analysis revealed that errors relating to generic reference triggered misunderstandings in these data. This prompted an analysis of the RE types used by the L1 and SLL participants, revealing that the SLL participants had not functionally acquired generic *you*.

Summary

I have argued that the use of MA in conjunction with error analysis enables objective assessments of error gravity to be made. This is because, firstly, in many contexts, L1 hearers may be unreliable in reconstructing learners’ intended meanings (Hamid, 2007), and, secondly, because error analysis alone is likely to highlight only unintelligible language, while language that is ostensibly correct but misunderstood is likely to be overlooked. Similarly, MA may resolve questions as to whether particular types of errors are likely to result in miscommunication. Finally, I have argued that MA may prove to be a useful exploratory research tool, revealing aspects of language use for which the communicative importance or potential for miscommunication has previously been overlooked.

9.4.2 From isolated miscommunications to utter misunderstanding

In this subsection, I shift the focus away from isolated instances of referential miscommunication to discuss chains of miscommunication, and the cumulative effect of multiple errors on interlocutors' discourse models. In so doing, the focus is broadened to include non-referential miscommunications. It appears that many previous studies have simply assumed that high error density increases problems of incomprehensibility (e.g. James, 1998, p. 211). Certainly, there is some evidence for this in the present study, with the hearer in one interaction (Renee) reporting that she lost confidence in her ability to interpret the retelling and that she subsequently disengaged from it. However there is also evidence of a more dynamic, creative response, with hearers finding ways to incorporate multiple problematic utterances into their mental model of the discourse. In the most striking cases, hearers interpreted the *Modern Times* narrative in ways that were radically different from what the speaker had intended. In this subsection, I illustrate and discuss aspects of these more profound misunderstandings.

In terms of misunderstanding (rather than non-understanding), the two most problematic interactions were those between Bruce and Seth, and Josie and Rochelle. The former is discussed at length in Ryan and Barnard (2009) and illustrates how a small number of mispronounced words and other errors can prompt a profoundly different interpretation of the speaker's meaning, and how Seth's creativity in interpreting further errors served to reinforce misunderstandings rather than to correct them. In particular, two key sequences in *Modern Times* show (a) Charlie twitching from the repetitive work on the production line and, as a result, spilling his colleague's soup, and (b) the arrival of the feeding machine which places food in Charlie's mouth and then malfunctions in such a way that (in the words of one participant) it "starts attacking him". In Bruce's retelling, however, a number of problems occurred. Firstly, in describing Charlie spilling the soup, Bruce used the word *shake* to describe Charlie's twitching, but mispronounced it as *choke*, which the hearer (Seth) accepted. This misunderstanding was subsequently reinforced when Seth misinterpreted *spilt* (the soup) to mean *spit* (out the soup), with Seth then believing that Charlie has become covered in soup as a result of choking and spitting (rather than spilling soup on his colleague). In the following episode, when Bruce mentioned a *lunch*

machine (feeding machine), Seth assumed that this had been introduced to clean the soup off Charlie, rather than to feed him (erroneously inferring a relationship between the soup spilling and the machine). A further series of errors served to reinforce this misunderstanding. For example, a mispronunciation of *corn* was interpreted as meaning *comb*, which fits with what the hearer assumed was the cleaning and grooming function of the machine. Further, Bruce described the rotating motion of the corn with the simile *like brushing his mouth*, which Seth interpreted literally as performing the action of a toothbrush. In short, a series of miscommunications occurred here involving a number of events (e.g. choke/spill), referents (who the soup was spilt on), attributes (e.g. the nature of the feeding machine), and coherence relations (e.g. why the feeding machine was introduced), which ultimately resulted in the interactants holding highly divergent interpretations of what was communicated.

Of particular interest in this interaction is evidence of how Seth strained to find relevant interpretations of language errors, and how the misunderstood elements were subsequently incorporated into his discourse model. This is illustrated in Example 9.8 in relation to the mispronunciation of *corn* as /kɒn/ and /kɔ/. After some initial uncertainty, in which Seth entertained two (erroneous) interpretations, he settled on *comb*, as this appeared to be most relevant to his (erroneous) model of the discourse.

Example 9.8: *Bruce and Seth*

<p>T = 15.09 4</p>	<p>B – got ah something like can . wipe his mouth? And later – an- . and Ø got a: /kon/, /kɔ/ [CORN] and he can eat Ø, and ah got-, corn #turning?</p>	<p>S – Yep. That point, I wasn't sure if he meant 'comb' or 'cone'. R – Okay S – Um . I mean later on he said it 'brushed his face, brushed his teeth' so it might've been a comb or a brush or something like that R – Okay S – But I thought because he said 'cake', and then it might've been 'cone', like . ice cream cone sort of, R – Right, yep S – So until he said something about it brushing him up, um . then . yeah, I wasn't really . too sure</p>
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As this example suggests, hearers may actively consider various plausible interpretations of an error before settling on the one they consider most relevant to their discourse model. In this case, it occurs despite a substantial difference between the phonological form produced by the speaker and a target-like

pronunciation of *comb*. Certainly, both *corn* and *comb* share an initial /k/ and final nasal sound (/n/ and /m/ respectively) and perhaps some similarities in the vowel sound, yet it seems that Bruce’s pronunciation was much less like *comb* than the intended *corn*, or indeed *cone* or *core*.

Such examples suggest that hearers may go to great lengths to accommodate erroneous learner language within a coherent model of discourse. Furthermore, in these data, hearers often appeared willing to attribute coherence to learner narratives as long as they could make *some* sense of it. The problem was that this sense was not always the same sense intended by the speaker. An implication of this is that, in high-stakes or pedagogical contexts, it may be advisable for interlocutors to be more discerning when attributing communicative success to strained SLL speech, a point supported by Hamid (2007). In particular, it is notable that Seth made relatively few clarification requests during the retelling, and later reported in the stimulated recall that he considered Bruce to be relatively clear and easy-to-understand (as suggested in Example 9.5 above).

Such examples also show that errors may reinforce erroneous interpretations through chance semantic connections (e.g. *shake/choke* with *spilt/spit*). Further, once an erroneous model of discourse has been established, hearers may attempt to maintain this model by ‘shoe-horning’ correct (or relatively correct) uses of language into the erroneous model. An example of this was in Bruce’s use of the expression *automatic lunch machine* in Example 9.9. The stimulated recall revealed Seth to have initially (accurately) interpreted this as a food dispensing device, but later to have re-interpreted it (inaccurately) as a cleaning or grooming machine to fit with his wider understanding of the narrative.

Example 9.9: *Bruce and Seth*

T = 13.56 3	B – then the boss er . . . come to have look and they bring like er like, a m- machine, like, erm . . . ah . . . automatic lunch machine some[thing like that]	S – I wasn’t a hundred per cent sure what he meant by automatic lunch machine, [yeah] until: later on he explained that it cleaned him up, [right] but when he said automatic lunch machine, I mean: did it dispense sandwiches, did it – you know
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This unexpected finding demonstrates how apparently minor linguistic errors can sometimes trigger wider discursual problems by actually undermining how

accurate language is interpreted. This contrasts with the more predictable finding that in some instances hearers were able to re-evaluate misunderstood utterances and alter their mental model of the discourse.

One final example of the cumulative effects of language errors occurs in the retelling by Josie, and relates to pragmatic errors in signalling episode boundaries. In other retellings, a number of SLL speakers were found to be unsuccessful in communicating such boundaries, typically failing to include the multiple direct and indirect signals of episode closure and opening (Ryan, 2009). However, although this sometimes caused strain (such as a clarification request), misunderstandings were usually avoided. However, in Josie's retelling, a profound misunderstanding occurred. Crucially, this is also the one interaction in which the speaker chose to retell the narrative non-chronologically, beginning with the main event in the third episode (the theft), followed by the second, fourth, and fifth episodes, followed by a brief summary of the third, fourth and fifth episodes. As the episode boundaries (in particular, their relation to time) were not made clear, the hearer's understanding of the narrative was profoundly different to what Josie had intended, such as a mistaken belief that there was a number of recurring thefts. Being the only non-chronological retelling, this suggests that when such pragma-linguistic errors coincide with deviations from genre conventions, there may be greater risk of miscommunication. This is a very tentative finding based on just one oral narrative, but it may be worthwhile to investigate the interaction of pragma-linguistic error with marked and unmarked genre conventions, as well as violations of genre conventions, in SLL-L1 miscommunications.

In summary, although the presence of multiple errors can result in incomprehensibility (as argued by James, 1998), they may also lead to discourse that appears successful to the interactants, yet is deeply misunderstood. Although some aspects of successive miscommunications have previously been discussed in relation to fiction (Tzanne, 2000, pp. 177-184), it appears that the cumulative effect of errors on comprehension in SLL-L1 discourse has been under-researched and could prove to be a fruitful area of further study. It is worth noting that these insights were enabled by the present approach to miscommunication analysis, in

which stimulated recall was used to compare the hearer's interpretation with the speaker's intended message. As noted in Chapter 4, this is the main methodological innovation in the present study, and appears to provide insights into miscommunication that may prove elusive through other approaches.

9.4.3 Summary and implications

The findings I have discussed in this section relate to 'blind spots' in current approaches to error analysis concerning error gravity, the communicative importance (or otherwise) of articles, pronouns and generic *you*, and insights into the cumulative effects of multiple errors and the development of chains of miscommunication. Importantly, the use of stimulated recall for the identification of miscommunication has been central to such findings, as many may have gone unnoticed under conventional approaches that involve self-report or the close analysis of recordings and transcripts. This is because many miscommunications leave no obvious textual trace, particularly if both interactants remain unaware that a problem has occurred. While this is particularly true of these rather monologic narratives, it may also prove to be true of speech in which turn-taking is more evenly distributed among interactants.

In short, the present study represents, I believe, a first exploration of SLL-L1 and L1-L1 miscommunication through this methodology. It may be that important insights into problematic communication can be gained through further use of this methodology, or a refinement of it.

10 Conclusion

In this concluding chapter, I begin by briefly re-stating the aims of the study, discussing the framework developed for this study, and then summarizing the main findings. I briefly evaluate these findings in terms of the limitations of the study, and the contributions made to theory and research.

The primary objectives of this study were, firstly, to explore issues of pragmatic competence in referring by relatively advanced second language learners of English (SLLs), and secondly, to explore the extent to which non-target-like aspects of learner reference triggered miscommunication in the retelling of a complex narrative. In particular, I was interested in the extent to which learners felicitously used REs in line with the predictions of Accessibility Theory (AT) (Ariel, 1988a, 1990, 2001), and the extent to which infelicitous RE selection and linguistic errors triggered miscommunication. The exploration of these issues required the development of a theoretical framework that was substantially different from those found in other studies of SLL reference.

The framework of the study

Reference is a topic of enquiry in a range of disciplines, and as Gundel and Hedberg (2008, p. 4) note, “it is impossible to discuss reference without bringing into play perspectives from more than one discipline.” However, the definitions of reference underlying work in, for example, linguistics (e.g. Chini, 2005; Du Bois, 1980; Gundel et al., 1993, 2005), are typically very different from those in, for example, the philosophy of language (e.g. Bach, 1987, 2008; Donnellan, 1966; Searle, 1969). Consequently, despite the frequency with which linguists discuss the work of philosophers, and vice versa (e.g. Ariel, 1990; Bach, 1998; Gundel et al., 1993), it is not always clear that researchers are discussing the same phenomena. For example, the linguistic views of reference reviewed in Chapters 2 and 3 were much broader than Bach’s (2008) position from philosophy. For this reason, it seems, Bach has outlined what he sees “as default hypotheses about speaker reference and linguistic reference”, and challenged researchers in other

fields to either “find a way to accommodate or explain away the data and observations” (2008, p. 49).

For the purposes of the research questions in this study it was, in fact, Bach’s (2008) approach that appeared to provide the most rigorous and persuasive definition of reference for the purposes of distinguishing referential success from referential miscommunication. However, it was also noted that Bach’s approach seemed limiting from a linguistic perspective, as the language forms used to refer are also used for a wider range of communicative purposes; furthermore, Bach’s approach excluded certain chains of co-referential NPs that may be miscommunicated in ways that are of interest in applied linguistics and, more generally, to miscommunication research. Therefore, I proposed a compromise position (a *levels of reference* approach) which attempts to preserve the precision and coherence of Bach’s definition with some of the wider explanatory power of linguistic approaches (Chapter 2.2). In this approach, a core definition of reference (adopted from Bach, 2008) is identified as Level I reference, and then relaxed in two stages (Levels II and III). The result is a framework encompassing a broader notion of reference than proposed by Bach but substantially narrower than those of many linguists (e.g. Chafe, 1994; Du Bois, 1980; Gundel et al., 1993, 2005). I argued against extending the framework to certain domains found in other linguistic studies, such as those relating to time, location, events, hearer-new entities, and attributive reference (Chapter 2.1).

Within this levels of reference framework, two linguistic approaches to analysing reference were adopted, neither of which appear to have been used in previous studies of SLL reference or studies of referential miscommunication. The first of these involves the perspective that the referential act is the primary unit of analysis. As such, some references were seen to occur within discourse units above the NP level, in some cases being interactionally achieved through speaker and hearer collaboration (Clark & Wilkes-Gibbs, 1986) or involving episodic stages (Smith et al., 2005). The second was the use of an Accessibility Theory (Ariel, 1988a, 1990, 2001, 2004) framework. I analysed referent accessibility (in tracking contexts) according to a coding system adapted from Toole (1996), which I refined to take into account the effects of animacy, grammatical

parallelism, and character centrality. In adopting both of these perspectives, I considered accessibility marking to occur not just in terms of conventional form-function relations between RE types and degrees of accessibility, but also in terms of (non-grammaticized) marking through the construction of complex referential acts involving, for example, the use of try-markers, episodic reference, and interlocutor collaboration.

Findings in relation to the framework and the nature of reference

Although I proposed the levels of reference framework specifically to define types of successful and unsuccessful reference, an unexpected finding suggests that the distinctions between reference and mention appeared to correspond to differing distribution patterns for some RE types (Chapter 8.2). Specifically, in these data, bare nouns and demonstrative forms were found to distribute rather differently in acts of reference compared to acts of mentioning. In relation to bare nouns, the findings were found to be substantially closer to the predictions of AT and the Givenness Hierarchy than is found in a broader linguistic definition (e.g. those adopted by Gundel et al, 1993, 2005 and Swierzbin, 2004). However, it must be acknowledged that although AT is proposed to apply equally to all genres and modes of communication, the possibility cannot yet be dismissed that these distribution patterns result from the nature of the elicitation task and the types of communicative purpose that it involves. This issue would be worthy of investigation in future studies. Nevertheless, an implication from the present findings is that further studies of NP use may benefit from an analysis of referent types.

In perhaps the main theoretical contribution of this study, I argued that three widespread assumptions about reference were not supported by the analysis (Chapter 8.4), and proposed a hypothesis which accounts for this (Chapter 8.5). Specifically, (a) not all references appear to require resolution, (b) speakers and hearers do not always prioritize resolution, and (c) some low-accessibility referents are felicitously encoded with pronouns. I therefore argued that a strict distinction between referring (in the sense that Bach, 2008, proposes) and

mentioning cannot always be maintained, particularly in relation to the speaker's intentions (which may be conditional). To address these issues, I presented a theory of referentiality, in which I proposed that speakers sometimes signal that references do not require resolution, and that in these (and some other) situations hearers typically tolerate referential ambiguity. I suggested ways in which speakers signal complete, partial, and minimal referentiality; I further argued that this concept has implications for defining what constitutes referential miscommunication.

In relation to accessibility marking in the L1 retellings, the findings suggest evidence of a specific context (which I label *equivalent-accessibility competition*) in which speakers appear obliged to use an accessibility marker which is lower than the accessibility of the intended referent (Chapter 8.1.2); this previously unreported finding presents evidence of a pragmatic principle which overrides conventions in accessibility marking. The concept of equivalent-accessibility competition supports Ariel's (1990, 2001) AT account of RE use, and also addresses an issue that Gundel (2010) had suggested was problematic for AT (the relevant example is presented on p. 144).

SLL reference

By adopting the referential act as the primary unit of analysis, aspects of non-target-like SLL reference were revealed which occur above the level of the RE, including patterns of over-explicitness in the introduction of main characters and under-explicitness in the introduction of minor characters (Chapter 6.2).

Furthermore, these non-target-like factors in SLL speech were identified as an important trigger of referential miscommunication. Such findings contrast with those of previous studies which focus on NP selection, and which have reported that SLL introductions are largely non-problematic. I suggested that the (relatively advanced) SLLs in the present study may have lacked awareness of how to construct complex REs in English across discourse units larger than the NP (Chapter 9.2).

Similarly, of the studies of SLL English reviewed in Chapter 3, none had adopted an AT framework. The use of an accessibility coding system offered a consistent measurement of certain factors known to influence referent accessibility, combining these into a particular score (between accessibility degree D0 and D8). When used to analyse the SLL data, the accessibility system revealed interesting and previously unreported aspects of SLL reference. In particular, it revealed that the participants tended to be more frequently over-explicit for referents with some degrees of accessibility than for others (Chapter 6.1.4). I argued that this supports the hypothesis that much SLL over-explicitness results from a (deliberate) communicative strategy rather than explanations based on error avoidance or cross-linguistic differences in accessibility marking (Chapter 9.1.2). More generally, the findings also confirmed the overall phenomenon of over-explicitness among advanced SLLs which had been reported elsewhere (although partially refuted by Hendriks, 2003), but which I had argued were open to a counter explanation due to methodological limitations in those studies.

In terms of limitations in estimating accessibility, it is expected that (a) there may be more accurate ways to operationalize the relevant factors, (b) there may be other factors that the system does not account for, and (c) the weightings given to each factor may be imbalanced to some extent. As such, the relevant findings require some caution in interpretation. Nevertheless, the system does appear to account adequately for L1 reference in accordance with the general predictions of AT (though not some of the detail); this applies both to the present data and to the illustrative examples presented in previous literature. This system may, therefore, be of use to further studies.

A further limitation in terms of assessing the SLL participants' competence in accessibility marking was the reliance in this study on one semi-structured elicitation task. Furthermore, although the film retelling was presented as a communicative task, it remains unknown to what extent SLL participants may have oriented to the task as a display of their linguistic accuracy rather than a display of pragmatic and communicative competency. As Yule, Powers, and MacDonald (1992, p. 273) have observed, a focus on accuracy may lead to "a

more egocentric perspective”; this could lead to infelicitous accessibility marking and miscommunication.

Miscommunicating reference

I argued in Chapter 4 that standard approaches to identifying miscommunication were inadequate for the present purposes. Therefore, a methodological innovation was made involving a two-part stimulated recall interview with the hearer. This revealed problems that are likely to have gone unnoticed in either self-reporting methods or the analysis of recordings alone. I suggest that this methodology may be usefully used in further studies of miscommunication. As stimulated recall data is easily compromised, I suggested some best practice procedures (also discussed in Ryan & Gass, in press).

Among the findings relating to miscommunication, I argued that there were substantial qualitative differences between the triggers of miscommunication in the L1-L1 and SLL-L1 interactions. In particular, the major trigger of L1-L1 miscommunication was under-explicitness; the triggers of SLL-L1 miscommunication were more diverse, with pronoun errors being the most frequent trigger, but with under-explicitness and over-explicitness seldom implicated (Chapter 7). For introductions of the least accessible entity (the feeding machine), the failure of many SLL participants to use a sufficiently explicit episodic reference was particularly problematic in terms of miscommunication; apparently in recognition of this, an unexpected finding was that many SLLs appeared to adopt an avoidance strategy by introducing this referent (and others) as hearer-new. In both the L1-L1 and SLL-L1 retellings, referent introductions were more problematic than subsequent references.

Further findings related to the identification of potential discourse troublespots, where miscommunications most frequently occurred. Substantial further research would be required to catalogue such factors, and I suggested that this may be worthwhile for certain high-stakes contexts.

In discussing the findings, I argued that the analysis of miscommunication provides important findings that supplement those of error analysis (Chapter 9.4.1). In particular, I argued that error analysis tends to give most weight to utterances which are confusing rather than to those that are misunderstood; however, the former are more likely to attract an immediate clarification request than the latter. Similarly, I argued that error analysts are likely to focus on particularly jarring errors at the expense of more subtle errors, but that jarring errors are precisely those that are most noticeable to hearers and so are most likely to be treated with caution. I suggest that further studies involving miscommunication analysis should be conducted, and that the results be used in conjunction with findings from error analysis.

In relation to limitations, I have emphasized a number of times (though perhaps not often enough) the importance of recognizing that any act of communication relies on a very large number of speaker, hearer, and contextual variables, and the same utterance on the same occasion may be clearly understood by one addressee and misunderstood by another. As such, although this study has largely focused on REs as potential triggers of miscommunication, it is also likely that some miscommunications resulted from multiple contributing factors; where I have singled out infelicitous REs as plausible triggers, I have done so in full acknowledgement that this may be only one among several contributing factors. One such issue is whether the SLL-L1 (or indeed the L1-L1) pairs were adequately coordinating on ensuring mutual understanding. As Brown (1995, p. 30) notes, speech is full of feedback signals indicating how well interactants understand each other, and some SLL-L1 miscommunications may be indicative of problems in this area. Similarly, as discussed in relation to accessibility marking, it is unclear to what extent participants oriented to the task as an act of communication and, therefore, attended to the hearer's perspective. Miscommunications may be more likely if the speaker was particularly concerned with displaying grammatical accuracy rather than pragmatic competency. Future studies may wish to explore these and other issues relating to SLL-L1 miscommunication.

A further, rather obvious limitation of this study also arises from the limited number of miscommunications in these data (11 in the L1-L1 interactions and 42 in the SLL-L1 interactions). With this in mind, a great deal of caution is required in making assumptions about whether the findings are indicative of trends that may occur outside of the present data. Nevertheless, the present findings do, I believe, raise some interesting issues and point to some areas for further research.

Finally, I wish to emphasize that, as with all studies involving qualitative analysis, the present study aims not to assert a series of facts and definitive answers to the research questions, but to present what I see as the most plausible interpretation of the data. Inevitably, however, such interpretations are heavily influenced by the theoretical perspectives that the researcher brings to the study. Therefore, others are encouraged to apply their own theoretical perspectives to the present findings and to the proposals I have made.

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