An investigation into the ability of South African students at Stellenbosch University to interpret implicatures in their second language English

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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Zaan Bester

F gego dgt 2012

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Summary

Due to increasing concern about the low levels of throughput at university level, and with an ever-growing awareness of the important role that students' academic literacy plays in academic success, Stellenbosch University implemented language support courses in various faculties across the campus. In addition, the massification of higher education means that the demographic profile of the student population in university classrooms has changed, and lecturers are increasingly faced with students from a variety of multicultural contexts. It is within this context that a study was done to determine to what extent linguistic and cultural background affects a speaker's ability to derive meaning from conversational and, by extension, academic implicatures in English. Previous studies have found that native speakers (NSs) and nonnative speakers (NNSs) of English infer different meanings when confronted with particular types of implicature and that NNSs tend to interpret certain types of implicature correctly more often than others. First-year students at Stellenbosch University with a variety of mother tongues were asked to complete a questionnaire containing various types of implicatures. Their responses indicated significant differences in the accuracy with which NSs and NNSs interpreted certain types of implicatures, and in the meanings they arrived at. The thesis considers possible reasons for these differences, and discusses the implications of the study's results for academic literacy/language support courses offered at South African universities.

Opsomming

Te midde van toenemende kommer oor die lae deurvloeikoerse op universiteitsvlak, en 'n al groter bewustheid van die beduidende impak van studente se akademiese geletterdheid op akademiese sukses, het die Universiteit Stellenbosch taalondersteuningskursusse in verskeie fakulteite op kampus geïmplementeer. Daarbenewens het die massifikasie van tersiêre onderwys tot gevolg dat die demografiese profiel van die studentebevolking in universiteitsklaskamers verander het, en dosente kom toenemend in aanraking met studente vanuit diverse kulturele kontekste. Binne hierdie konteks is 'n studie onderneem om vas te stel in watter mate 'n spreker se vermoë om die betekenis van geïmpliseerde taalgebruik (in alledaagse gesprekke en by implikasie ook akademiese taal) te bepaal, deur taal en kulturele agtergrond beïnvloed word. Navorsing het getoon dat moedertaalsprekers en nie-moedertaalsprekers van Engels verskillende betekenisse toeken wanneer hulle met sekere tipes geïmpliseerde taalgebruik in aanraking kom, en dat nie-moedertaalsprekers sekere tipes geïmpliseerde taalgebruik meer dikwels korrek interpreteer as ander. Eerstejaarstudente aan die Universiteit Stellenbosch met 'n verskeidenheid moedertale is gevra om 'n vraelys met verskillende tipes geïmpliseerde taalgebruik te voltooi. Die response het getoon dat daar beduidende verskille is in die akkuraatheid waarmee moedertaalsprekers en nie-moedertaalsprekers sekere tipes geïmpliseerde taal interpreteer, en in die betekenisse wat hulle daaraan toeken. Die tesis bespreek moontlike redes vir hierdie verskille, sowel as die implikasies van die studie se resultate vir akademiese geletterdheids-/taalondersteuningskursusse wat by Suid-Afrikaanse universiteite aangebied word.

TABLE OF CONTENTS

Chapter 1: Introduction	1
1.1 Introduction	1
1.2 Rationale and background	1
1.3 Scope of the study	2
1.4 Research objectives	2
1.5 Research questions and hypotheses	3
1.6 Research procedure	4
1.7 Structure of thesis	4
Chapter 2: Literature review	5
2.1 Introduction	5
2.2 Theoretical foundations of pragmatic competence	5
2.2.1 Communicative competence	5
2.2.2 Pragmatics	6
2.2.3 Pragmatic competence in L1	6
2.3 Grice and implicatures	7
2.3.1 Grice's Cooperative Principle	7
2.3.2 Maxims of conversation	8
2.3.3 Violating the maxims	9
2.3.4 Implicature types	11
2.3.4.1 Conventional implicatures	12
2.3.4.2 Conversational implicatures	13
2.3.4.2.1 Generalised implicatures	13
2.3.4.2.2 Particularised implicatures	13
2.3.5 Non-universality of maxims	17
2.4 Pragmatic competence in L2	18
2.4.1 Assessment of pragmatic competence	18
2.4.2 Prior studies of pragmatic competence in L2	19
2.4.2.1 Bouton (1988, 1992, 1994, 1999)	19
2.4.2.2 Lee (2002)	20

2.4.2.3 Garcia (2004)	21
2.4.2.4 Taguchi (2005, 2007)	21
2.4.2.5 Ekincier (2009)	23
2.4.2.6 Bromberek-Dyzman & Ewert (2010)	23
2.4.3 Difficulty of different types of implicature	24
2.4.4 Factors impacting pragmatic competence in L2	24
2.4.4.1 Target language proficiency	25
2.4.4.2 Exposure to target language and culture	26
2.4.4.3 L1/cultural background	26
2.4.4.3.1 Implicatures in different cultures	28
2.4.4.3.2 L1 transfer	29
2.4.4.3.3 Cultural knowledge of L2 context	31
2.4.4.3.4 Differences within L1/cultural background groups	33
2.4.4.4 Explicit teaching of implicatures	33
2.4.4.5 Socio-economic status	35
2.5 Testing	36
2.5.1 Testing in language	36
2.5.1.1 First principle	36
2.5.1.2 Second principle	37
2.5.2 Test qualities	37
2.5.2.1 Reliability	37
2.5.2.2 Validity	39
2.5.2.2.1 Content validity	39
2.5.2.2.2 Construct validity	40
2.5.2.2.3 Face validity	41
2.5.2.3 Authenticity	41
2.5.2.4 Interactiveness	41
2.5.2.5 Impact	42
2.5.2.6 Practicality	42
2.6 Languages and associated cultures under discussion in this study	43
2.7 Conclusion	46

Chapter 3: Research design and methodology	47
3.1 Introduction	47
3.2 Research questions and hypotheses	47
3.3 Research design	48
3.4 Methodology and data collection	49
3.5 Participants	50
3.6 Instruments	51
3.6.1 Background Questionnaire	51
3.6.2 English Language Profiler	52
3.6.3 Implicature Test	53
3.6.3.1 The instrument	53
3.6.3.2 Pilot testing	55
3.6.3.3 Adjustment of test	57
3.6.3.4 Reliability and validity	58
3.6.3.5 Authenticity and interactiveness	58
3.6.3.6 Impact	59
3.6.3.7 Practicality	59
3.7 Conclusion	60
Chapter 4: Results	61
4.1 Introduction	61
4.2 Effect of L1	61
4.2.1 Overall performance on Implicature Test	61
4.2.2 Performance on different types of implicature	63
4.3 Effect of L2 proficiency	65
4.3.1 Performance of three L1 groups on English Language Profiler	66
4.3.2 Correlation between Implicature Test and English Language Profiler scores	67
4.4 Effect of socio-economic status	69
4.5 Conclusion	72

Chapter 5: Discussion	73
5.1 Introduction	73
5.2 Effect of L1/cultural background	73
5.2.1 Overall performance on Implicature Test	73
5.2.2 Performance on different types of implicature	74
5.2.2.1 Indirect Criticism	75
5.2.2.2 Irony	80
5.2.2.3 Relevance	81
5.3 Effect of English proficiency	85
5.4 Effect of socio-economic status	86
5.5 Distractor analysis: Pope Q	86
5.6 Possible correlation between socio-economic status and L1	88
5.7 Conclusion	89
Chapter 6: Conclusions and recommendations	92
6.1 Introduction	92
6.2 Summary of findings	92
6.3 Implications for L2 teaching and the academic literacy classroom	93
6.4 Strengths and limitations of study	95
6.5 Suggestions for future research	97
6.6 Final remarks	97
Bibliography	98
Appendix A: Background Questionnaire	106
Appendix B: Implicature Test	111

LIST OF TABLES

Table 4.1: Summary of L1 groups' overall performance on the Implicature Test	62
Table 4.2: Summary of groups' performance on the English Language Profiler	66
Table 4.3: Performance of different English Language Profiler proficiency groups on	
Implicature Test	68
Table 4.4: Performance of different socio-economic status groups on Implicature Test	69
Table 4.5: Performance of different socio-economic status groups on English Language	
Profiler	71
Table 5.1: Comparison of L1 groups' performances on Implicature Test items	75
Table 5.2: Comparison of L1 groups' responses on item 9 of the Implicature Test	77
Table 5.3: Comparison of L1 groups' responses on item 3 of the Implicature Test	79
Table 5.4: Comparison of L1 groups' responses on item 4 of the Implicature Test	81
Table 5.5: Comparison of L1 groups' performance on Relevance implicatures	
and comparison with Bouton's (1988) NSs and NNSs (expressed as	
percentages)	82
Table 5.6: Comparison of L1 groups' responses on item 15 of the Implicature Test	83
Table 5.7: Comparison of L1 groups' responses on item 2 of the Implicature Test	84
Table 5.8: Comparison of L1 groups' responses on item 5 of the Implicature Test	87
Table 5.9: Number of participants in each L1 group from the five SES backgrounds	88

LIST OF FIGURES

igure 2.1: Factors that affect language test scores (Bachman, 1990:165)	38
igure 4.1: Between-group differences in performance on the Implicature Test	63
igure 4.2: Between-group differences in performance on the category Irony	64
igure 4.3: Between-group differences in performance on the category Relevance	65
igure 4.4: Between-group differences in performance on the English Language Profiler	66
igure 4.5: Correlation between English Language Profiler and Implicature Test	67
igure 4.6: Performance of different English Language Profiler proficiency groups on	
Implicature Test	68
igure 4.7: Performance of different socio-economic status groups on Implicature Test	70
igure 4.8: Performance of different socio-economic status groups on English	
Language Profiler	71

CHAPTER 1 INTRODUCTION

1.1 Introduction

South African students entering university have been shown to lack proficiency in academic discourse, which *inter alia* puts them at risk of not completing their studies in the designated time (Weideman, 2003b:56) and affects throughput rates at university. Among the academic literacy skills that students find difficult and that are essential for academic success at university is students' ability to engage critically with academic texts, and in particular their ability to identify and understand an author's tone, and to make meaning beyond sentence level (Weideman, 2003a:xi). Several higher education institutions, including Stellenbosch University, have subsequently implemented academic literacy and language support courses to help students become more proficient in the academic discourse they are expected to participate in at university.

In addition, the massification of higher education in South Africa means that the demographic profile of the student population in university classrooms in this country is changing. Lecturers are increasingly faced with students from a variety of multicultural contexts, and more students are receiving instruction through the medium of their second or third language, which can also pose difficulty for their ability to conceptualise academic or scientific concepts and theories (Fourie, 1999:282).

The difficulty that students experience in determining meaning beyond sentence level, coupled with challenges they may experience due to linguistic background, may pose a significant obstacle for students engaging with academic texts. Due to the changing circumstances set out in the previous paragraph, lecturers can also no longer assume that students will necessarily be able to correctly identify and interpret implied meaning that appears in academic texts and articles.

1.2 Rationale and background

A number of studies which were conducted abroad have shown that non-native speakers of English find it difficult to correctly interpret certain types of conversational implicature (i.e. communication in which a speaker implies, but does not overtly express, a particular meaning and that therefore requires a hearer to work out (infer) the meaning intended by the speaker)¹, in English (see, for example, Bouton, 1988, 1999; Lee, 2002, Taguchi, 2005, 2007; Bromberek-Dyzman & Ewert, 2010). Two types of implicature were found to be particularly difficult, namely Indirect Criticism and Irony.²

It was within the context of these studies, as well as the challenges posed to students by academic discourse and the impact of the massification of higher education, that a study was conducted to determine to what extent cultural and linguistic background affects a speaker's ability to correctly interpret conversational and, by extension, academic implicatures.

1.3 Scope of the study

The study reported in this thesis investigates whether there are differences in the accuracy with which native speakers (NSs) and non-native speakers (NNSs) of English interpret implicatures in English, and, if such differences exist, aims to determine what factors influence the ability to interpret implicatures. Although two language tests (a test of English language proficiency and a test determining participants' interpretation of various implicatures) were used to obtain quantitative data, this is not primarily a study on language testing or the tests used in assessing the interpretation of implicatures. Mention of the qualities of language tests will thus be brief and only an overview will be given of the most important issues in language testing. In addition, reference will be made to the implications of the findings of the study for the academic literacy classroom, but the concept of academic literacy will not be discussed in any detail in this thesis. A detailed discussion on academic literacy can be found in Gee (1990).

1.4 Research objectives

The aim of this study was to determine whether South African NNSs of English with different first languages (L1s) interpret implicatures in their second language (L2) English, notably implicatures of Indirect Criticism (IC), Irony and Relevance, differently from NSs. It was therefore necessary to assess English L1 and L2 participants' interpretation of these kinds of

¹ Conversational implicatures are defined and described in greater detail in section 2.3.4.2.

² See section 2.3.4.2.2 for descriptions and examples of the different types of implicature.

implicature. A secondary research objective concerned the possibility of the influence of various factors, such as L1/cultural background, L2 proficiency and socio-economic status on the interpretation of implicatures.

1.5 Research questions and hypotheses

In order to achieve these research objectives, it was necessary to obtain and perform analyses on quantitative data regarding the accuracy of NSs' and NNSs' interpretation of implicatures. The following research questions were subsequently formulated and informed the data collection process and data analyses:

Research question 1

Do South African NNSs of English interpret implicatures, specifically Indirect Criticism, Irony and Relevance, differently from NSs?

Research question 2

What are the factors that affect NNSs' interpretation of implicatures in English?

The following hypotheses were formulated in response to the research questions:

Hypothesis 1

There are significant differences between the accuracy with which South African NSs and NNSs of English interpret implicatures (specifically Indirect Criticism, Irony and Relevance) in English. Specifically, NNSs' performance on an implicature test will be less accurate than NSs' performance.

Hypothesis 2

L1/cultural group, L2 English proficiency and socio-economic status are factors which affect the way in which NNSs interpret implicatures in English.

1.6 Research procedure

In order to obtain the data required to test these hypotheses, first-year students in an academic literacy course at Stellenbosch University were invited to participate in the study. The students who volunteered to participate (107 NSs and 102 NNSs) completed a background questionnaire (see Appendix A), a standardised test of English proficiency, and a test which investigates their interpretation of implicatures in L2 English (see Appendix B).

The test scores and data obtained from these instruments were then analysed in terms of a number of variables, namely L1/cultural background, English proficiency and socio-economic status, in order to determine whether there are statistically significant differences between the groups and, if such differences are found, to identify the loci of these differences (i.e. whether the differences are related to participants' L1/cultural backgrounds, to their level of English proficiency and/or to their socio-economic status).

1.7 Structure of thesis

In this chapter an overview of the background and framework of the study was given. The rationale for and context of the study were described, as well as the research objectives, research questions and hypotheses that informed the study, and the research procedure that was followed.

In chapter 2, the most important theoretical considerations relevant to the assessment of the ability to interpret implicatures will be explored. Chapter 3 will present a discussion of the research design of this study, and the data collection methodology, participants and data collection instruments will be examined. The most significant results of the data analysis will be reported in chapter 4, which will be followed by a discussion and interpretation of the results in chapter 5. The thesis will conclude with a chapter noting the implications of the findings for the academic literacy classroom, strengths and limitations of the study and suggestions for future research.

CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

Chapter 2 provides the theoretical framework for the empirical study conducted, the results of which will be reported in chapter 4 and discussed in chapter 5. Consideration is firstly given to the concept of 'pragmatic competence', followed by a discussion of the different types of implicatures and how they are generated and interpreted. Prior studies on the interpretation of implicatures by NNSs of English are discussed in order to describe the context within which this study is located. The main findings from these studies provide an overview of potential impacting factors on the ability to interpret implicatures, most of which were included for consideration in this study. Since the assessment of the ability to interpret implicatures was an essential component of this study, it was also necessary to consider the theoretical foundations of language testing and the qualities of language tests.

The most significant theoretical considerations pertaining to this study will be revisited in the following chapters, with particular reference to the data collection instruments, data and findings of this study.

2.2 Theoretical foundations of pragmatic competence

2.2.1 Communicative competence

Communicative competence can be defined as possessing both knowledge about language, as well as the ability to apply this knowledge in "appropriate, contextual communicative language use" (Bachman, 1990:84). Bachman argues that communicative competence consists of two main components: organisational competence and pragmatic competence (1990:87ff). Organisational competence refers to the ability that enables a speaker to understand and produce grammatical sentences (grammatical competence) and the ability to understand sentence meaning and to arrange sentences to form texts (textual competence). Pragmatic competence, which is at issue in this thesis, involves the relationship between the language and language users. Bachman divides pragmatic competence into the knowledge of how speech acts are performed through utterances (illocutionary competence) and the knowledge of how context

determines what language use is appropriate (sociolinguistic competence) – we will return to this distinction in later sections.

2.2.2 Pragmatics

The field of pragmatics is concerned with the choices that language users make when they communicate, taking into consideration the context and what they want to achieve with their communication (Blum-Kulka & Hamo, 2011:143). When a speaker produces an utterance, it has a "superficial" meaning that depends on the words used and the structure of the utterance. This is known as the locution. That which the speaker intends to achieve with the utterance is called the illocution (Finegan & Besnier, 1989:329). Consider the utterance "Do you have the time?" as an example. The utterance has the locution of a yes/no question enquiring about the addressee's ability to say what the time is and would thus require only a "yes" or "no" answer in response. The illocution of the utterance is however, rather a request for the addressee to tell the speaker what the time is and would require the addressee to do so. Since it is not always possible to determine the illocution of an utterance merely by decoding the locution, a hearer has to connect the locution with the illocution through a process called inferencing. In terms of this example, pragmatics would be concerned with why the speaker chose to use the particular utterance "Do you have the time?" when other contextually appropriate utterances were perhaps possible.

Pragmatics also considers the fact that an utterance can have different illocutions in different contexts. The utterance "I am hungry", produced on different occasions, can mean very different things. If a mother catches her teenage son eating the dessert that was intended for the family dinner that evening, the son may use the utterance as an explanation or even an apology for his actions. If a man walks into his colleague's office shortly before noon and produces the same utterance, the illocution may be an invitation to go out for a meal over lunchtime. The interpretation of the illocution is dependent on a variety of factors such as the context, non-verbal cues and cultural assumptions.

2.2.3 Pragmatic competence in L1

According to Bachman's model, organisational competence and pragmatic competence are both essential components of communicative competence. A speaker acquiring an L1 will thus

develop both these competencies in order to be proficient in the language. Studies in L1 pragmatic development have shown that there is a difference in the pace at which a child masters the meaning and the form of utterances. A child acquires most of the communicative speech uses by the age of two and a half, and in the next two and a half years, improves in the linguistic means to express the communicative intents already mastered, but does not increase his/her "communicative repertoire" (Blum-Kulka & Hamo, 2011:156). For a comprehensive discussion of pragmatic development in children, see Ninio & Snow (1996).

2.3 Grice and implicatures

The first significant theories about implicatures were proposed by Paul Grice in a series of lectures at Harvard in 1967 (Levinson, 1983:100).

2.3.1 Grice's Cooperative Principle

Grice in 1975 proposed that in all communication, there are guiding principles that direct conversation. He postulated that contributions in an exchange will most likely not be random and disconnected remarks, but that participants will rather offer an utterance that is related to the purpose or direction of the conversation (Grice, 1975:45) These principles "systematize" inferencing and ensure successful communication (Blum-Kulka & Hamo, 2011:144). Speakers adhere to these principles in order to make communication efficient, effective and cooperative (Levinson, 1983:101). There is thus an expectation from both the speaker and the hearer that what is said will promote effective and cooperative communication. Grice formulated this expectation as an overarching assumption of cooperation that participants in a conversation will strive to make a contribution that is appropriate and acceptable in terms of the context of the conversation. The Cooperative Principle (CP) requires participants to "[m]ake [their] contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which [they] are engaged" (Grice, 1975:45). Grice further suggested that the CP can be expressed by four maxims of conversation that are more specific in describing the expectations for cooperation in a conversation, namely the maxim of Quantity, the maxim of Quality, the maxim of Relation and the maxim of Manner.

2.3.2 Maxims of conversation

The first three maxims focus on what is said by the speaker, whereas the last maxim emphasises how that contribution is made. The maxim of Quantity requires that a speaker's contribution is as informative as is possible, without giving too much or too little information. The maxim of Quality stipulates that a speaker's contribution should be truthful, and therefore not be false or based on insufficient information. The maxim of Relation states that a contribution to the exchange should be relevant to the particular discussion. The maxim of Manner contains a supermaxim that states "Be perspicuous", and then elaborates by specifying that a contribution should be clear and unambiguous, brief and orderly. Thus in order to cooperate in a conversational exchange, a speaker should give sufficient information that is truthful, relevant and clear (Grice, 1975:45-6).

It is important to note that Grice is not stating that all communication will always adhere to these principles, and indeed when one considers conversations, it is clear that it does not always do so. What Grice is suggesting is rather that speakers will use these maxims as guidelines on the basis of which they will produce utterances and evaluate and interpret another speaker's utterance (Blum-Kulka & Hamo, 2011:145).

The expectation that speakers will adhere to these maxims means that participants in a conversation will interpret all utterances as being relevant and cooperative, even when they apparently are not (Green, 1989:91). If one considers the following much cited example, this is evident:

(1) A: Where's Bill?

B: There is a yellow VW outside Sue's house.

When decoded on a purely linguistic level, speaker B's contribution does not seem to adhere to the CP, specifically the maxim of Relation (in that what B says is not relevant to the question that A asked – A asked about the whereabouts of a person and is informed about the whereabouts of a car) or the maxim of Quantity (in that B does not tell A where Bill is, and thus does not give

A the information that A requested) (Levinson, 1983:102). Grice suggests that instead of assuming that speaker B is being uncooperative, the hearer will assume that the speaker is being or intends to be cooperative on a different level (Levinson, 1983:102; Green, 1989:90). Thus, if speaker A assumes that speaker B is not purposefully violating the maxims (reasons for the violation of maxims will be discussed in section 2.3.3 below) and is being cooperative and is thus giving relevant, clear and sufficient information, speaker A must assume that speaker B's response intends to give an answer to the question of where Bill is.

It therefore has to be determined in what way this utterance could be cooperative. This requires a hearer to make a link between what is said (locution) and what is meant (illocution). In order to relate the locution to the illocution, speaker A must make an inference (Bromberek-Dyzman & Ewert, 2010:321). In this example, if speaker A assumes that speaker B is being cooperative, speaker A must assume that speaker B is making a link between Bill and the location of the yellow VW. Speaker A would thus be able to infer that Bill has a yellow VW and that since it is parked outside Sue's house, Bill must be at Sue's house (Levinson, 1983:102).

Implicature is the kind of inference that is made when a maxim is overtly violated, when one works on the assumption that speakers are being cooperative (Levinson, 1983:102; Green, 1989:88). Alternatively, an implicature is generated when a particular idea is implied in an utterance, but the idea is not contained in what was in fact said in the utterance (Gazdar, 1979:38). Comprehension of implied meaning is to "recognize a mismatch between the literal utterance and the intention of the utterance and to comprehend the intention of the utterance" (Taguchi, 2005:547).

2.3.3 Violating the maxims

There are various ways in which maxims can be violated and reasons for failing to adhere to the maxims, namely inconspicuously violating a maxim, opting out from adherence to a maxim, choosing one maxim over another due to a clash of maxims, and blatantly flouting a maxim (Grice, 1975:49).

A speaker's violation may be imperceptible and therefore not obvious to the hearer. An example

of such a violation may be to give information that is false (a violation of the maxim of Quality),

such as the following:

(2) Speaker A: Where is your roommate?

Speaker B: He is studying at the library.

By saying that his roommate is studying at the library, while in fact he went out with his friends,

speaker B gives information that is not correct, but speaker A does not know this. Speaker A

expects speaker B to abide by the maxims and expects a cooperative response. In this case

speaker B meant to deceive speaker A.

Another reason for a speaker failing to adhere to a maxim is because he is unable or unwilling to

abide by a maxim. The speaker thus opts out from both the CP and the maxims. Consider the

following example:

(3) Speaker A: Where is your roommate?

Speaker B: My lips are sealed.

By saying "My lips are sealed", speaker B signifies that he does not want to or cannot adhere to

the CP and speaker A does not expect the contribution to adhere to the maxims.

Speakers may experience a clash of maxims and will then have to choose one over the other. For

example, speaker B may not be able to give sufficient information and be as informative as is

required (maxim of Quantity) without giving information that is false or for which he does not

have sufficient evidence (maxim of Quality), as in the following example:

(4) Speaker A: Where is your roommate?

Speaker B: He is either in the library or at the beach.

10

If speaker B does not know in which of the two places his roommate is, he cannot make a contribution that is as informative as speaker A would expect. If speaker B says "He is at the library", which is a more informative contribution, there is a chance that he may be violating the maxim of Quality since he does not have evidence that his roommate is in fact there, and may be giving false information. Speaker B thus has to choose between the two maxims, and in this case chooses to rather adhere to the maxim of Quality, violating the maxim of Quantity.

The fourth manner in which a speaker may violate a maxim, is when it is blatantly flouted. In such an instance, someone is clearly not adhering to maxims, but it is not due to opting out or because of a clash between maxims. Intentional flouting of maxims generates meaning in that the speaker knows the contribution does not adhere to one (or more) of the maxims, and since it is blatant (and not subtle and meant to deceive) the speaker assumes that the hearer also knows the maxim has been flouted. The following example is an instance of blatant flouting:

(5) Speaker A: Where is your roommate?

Speaker B: His tennis racket is gone.

Speaker B is blatantly flouting the CP, and speaker A is aware of this, since the violation was so blatant. However, since speaker A expects speaker B to make a contribution that is cooperative, he has to determine what speaker B implies (that is, what the implicature of B's utterance is) by the process of inferencing (since what is said is not equal to what is meant). Implicature must be capable of being worked out so that speaker A can determine what speaker B implied (Grice, 1975:50). If the hearer infers from the utterance that which the speaker wished to imply and it becomes mutual knowledge, then successful communication has taken place (Blum-Kulka & Hamo, 2011:144).

2.3.4 Implicature types

Grice distinguishes between two types of implicature, namely conventional implicatures and conversational implicatures. In conventional implicatures, the implied proposition is grasped on the basis of the conventions or features that are entrenched in the lexical items or words that occur in an utterance (Gazdar, 1979:38; Levinson, 1983:126). To interpret conversational

implicatures, however, a hearer must take into account the following five factors, according to Grice:

- (i) the conventional meaning of the words used, together with the identity of any references that may be involved;
- (ii) the CP and its maxims;
- (iii) the context, linguistic or otherwise, of the utterance;
- (iv) other items of background knowledge; and
- (v) the fact (or supposed fact) that all relevant items falling under the previous headings are available to both participants and both participants know or assume this to be the case (Grice, 1975:50).

2.3.4.1 Conventional implicatures

Grice illustrates how conventional implicatures work through a comparison of the words *but* with *and*: the truth conditions³ of these two words are the same, but the convention linked to *but* is that there is a contrast present in the proposition or that one of the two conjuncts is unexpected, based on the other (Levinson, 1983:126). Consider the difference between the sentences in (6) and (7).

- (6) She saw him and was happy.
- (7) She saw him but was happy.

The implicature in (7) is that the happiness was unexpected. Speakers do not have to work out that there is a contrast between the conjuncts – it is intuitively understood because the contrast is an entrenched feature of the word *but* and speakers are aware of this. Furthermore, the word *but* could be used in a different sentence and in a different context, and the implicature of an unexpected outcome would be the same.

³ The truth conditions of an utterance are those conditions under which that particular utterance will be true. See Searle (1978) for a discussion of truth conditions.

2.3.4.2 Conversational implicatures

In conversational implicatures, on the other hand, the non-literal utterance meaning is dependent on the factors noted in section 2.3.4 above and not only on the meaning linked to the lexical items. It is thus not possible to determine the meaning solely by decoding the words in the utterance; it is necessary for hearers to infer what was implied by the speaker (Bromberek-Dyzman & Ewert, 2010:321). Implicatures of this type are often generated in relation to the maxims, more specifically, in terms of non-adherence to the maxims (Levinson, 1983:127). Conversational implicatures were further divided into two types by Grice, namely generalised conversational implicatures and particularised conversational implicatures.

2.3.4.2.1 Generalised implicatures

When a certain phrase or "form of words" contained in an utterance usually conveys a particular implicature (cases where there are special circumstances excepted), it is a generalised implicature (Grice, 1975:56). The implicature conveyed is generally not dependent on context, the non-literal meaning is the most likely meaning and the meaning is uniform, regardless of the context (Holtgraves, 1999:520). Figures of speech, metaphors and idioms are good examples of this type of implicature: *there is light at the end of the tunnel* would in most contexts be understood to convey a non-literal implicature that the end of a difficult time is near or relief is imminent. The general meaning is thus relatively uniform irrespective of the specific context. However, it is of course possible to interpret this utterance literally: if two civil engineers were working underground and were making their way to the surface by way of a tunnel, and the one spots sunlight entering the tunnel ahead of them, the literal meaning of *there is light at the end of the tunnel* would be appropriate in the context.

2.3.4.2.2 Particularised implicatures

The aspect in which particularised implicatures differ most significantly from generalised implicatures is that whereas the non-literal meaning implied is largely independent of context in generalised implicatures, it is entirely dependent on context in particularised implicatures (Holtgraves, 1999:321). In the following two exchanges, the meaning of *I went jogging this morning* differs based on the context and, more specifically, the utterance just prior to it:

(8) Jack: It was so nice to sleep late for a change.

Wife: I went jogging this morning.

(9) Jack: What happened to your leg?

Wife: I went jogging this morning.

In (8) the wife's statement can be interpreted as meaning that she did not sleep late, but instead went jogging, while in (9) the same utterance carries the implication that she hurt her leg while jogging. It is thus not possible to attribute a usual or uniform meaning to such an utterance; the same utterance will have different meanings in different contexts.

Violating each of the four maxims gives rise to various types of particularised conversational implicature.⁴ Four types of implicature (based on the violation of three of the maxims) were included in this study and are described below. The most prevalent and apparent instances of particularised conversational implicature are when Grice's maxim of Relation is violated (Green, 1989:97; Holtgraves, 1999:321).

Maxim of Relation: Relevance implicatures

If the maxim of Relation appears to be disregarded, a speaker is ostensibly not adhering to the expectation that the utterance must be relevant to the conversation. Green notes that the meaning of the seemingly irrelevant utterance will only be inferred if an interlocutor assumes that what appears to be irrelevant is in fact relevant (1989:97). When a speaker produces an utterance that seems to be unrelated to the conversation, or it seems that a speaker is attempting to "change the subject", the speaker may be signalling with the unrelated utterance that "this subject is dangerous" (Green, 1989:97) or that a more relevant utterance can put its speaker in an uncomfortable position, for example if it is face-threatening⁵ (Holtgraves, 1999:520). In the

⁴ Since this study is concerned only with (different types of) particularised conversational implicatures, the term "implicature" will be used henceforth to refer to this particular category of implicatures

will be used henceforth to refer to this particular category of implicatures.

5 'Face' is an "identity resource" that is related to issues of identity respect within social interaction and is the positive social esteem that a person has in the eyes of others (Ting-Toomey, 1999:37). It is the self-image and other-image that is portrayed in interaction (Ting-Toomey, 1999:196). A face-threatening act is thus one which has the potential to cause a person to lose 'face' or social respect in an interaction.

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exchange below, Nhlanhla's seemingly irrelevant utterance could imply that a relevant answer

(such as "yes" or "no") may be face-threatening for either himself (if Dave got a raise but he did

not) or for Dave (if he got a raise but Dave did not).

(10)

Dave: So, did you get a raise?

Nhlanhla: Have you seen any good movies lately?

Where a seemingly irrelevant utterance is produced that appears to be an attempt at changing the

subject of the conversation, it is an example of an implicature of Relevance.

Maxim of Relation: Pope Q implicatures

There is another type of implicature that is generated by the violation of the maxim of Relation.

Consider the exchange between two colleagues in (11):

(11)

Angela: Do you think the staff meeting is going to be long?

John: Is the Pope Catholic?

On the surface, John's response appears to be unrelated to Angela's question. He answers with a

question to which the answer is very obviously "yes". If Angela thus infers that the utterance is

in fact meant to be cooperative, she may infer that the answer to her question is also very

obviously "yes". A further implication in John's question may be "as you ought to know", since

the answer is so clear (Green, 1989:97). This type of implicature is called a Pope Q (for the Pope

Question) implicature and works with any rhetorical question to which the answer is obviously

"yes" or "no".

Maxim of Quality: Irony

Speakers sometimes make statements that are not true, and that are very clearly not true. If

someone spills a drink on himself and says "That was smart", he is saying something that he

does not believe to be true. Both the speaker and the audience will know that the utterance

cannot be a truthful statement, that the maxim of Quality was therefore violated, and that the

utterance must imply something else. The inference that could be drawn is that since the

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utterance reflects the opposite of what the evidence shows, the utterance must mean the opposite to what was said (Grice, 1975:53). Implicatures that are generated in this way are examples of Irony. Flouting the maxim of Quality can similarly give rise to cases of metaphor (for example, saying *John is a pig*, while it is obviously impossible that a human can be an animal), hyperbole (for example *This suitcase weighs a ton*, when it does not actually weigh 1000 kilograms), or meiosis (an utterance understating the reality, such as saying *You got a bit wet* to someone who is completely drenched) (Grice, 1975:53). In these three cases, the statement is very obviously false: a hearer will not think that the speaker suggests it is possible for a human to be an animal, for example.

Maxim of Quantity: Indirect Criticism⁶

It was mentioned above that even when an utterance violates one of the maxims, the hearer in all likelihood expects it to be cooperative and interprets what is said on the basis of this assumption. As was illustrated in the section on Relevance implicatures, a seemingly irrelevant utterance can in fact be adhering to the maxim of Relation. If a speaker is truly flouting a maxim, the hearer should determine what the reason for this is. In the case of Indirect Criticism, the maxim of Quantity is violated as a speaker does not make a contribution that is as informative as is required.

(12) Thabo: How was dinner at that new restaurant last night?

Sizwe: The place has nice décor.

In the above exchange, Sizwe's response provides information on only one aspect of the dinner. Notably, she says nothing about the taste or quality of the food. This makes her contribution less informative than is required (particularly if the description is about a restaurant). Green suggests that the implication in an utterance such as this is "What I am not saying is significant" (1989:98) or "There is nothing more positive I can say" (1989:99). By failing to say anything about the food, Sizwe is indicating that she does not want to say anything or cannot say anything else that is positive without violating the maxim of Quality. In doing so, she is in fact criticising

.

⁶ This type of implicature is known by various terms: Bouton (1988) refers to it as "understated negative evaluation", but also terms it "understated criticism" (1994, 1999) as well as "indirect criticism" (1992). Lee (2002) refers to implicatures of this type as "understated negative criticism". The term that shall be used in this paper is "indirect criticism".

the food without saying anything negative about it. For this reason, implicatures of this kind are referred to as Indirect Criticism.

2.3.5 Non-universality of maxims

While Grice considers observing the CP and the four maxims to be "reasonable" or "rational" behaviour (Grice, 1975:49) that reflects the underlying values in human conversations in general, Grice does not suggest that the CP or the maxims themselves are in fact universal (Green, 1989:95). The maxims may cover general expectations that interlocutors have of each other in an exchange, but the particular way in which they are interpreted is very much dependent on culture (Blum-Kulka & Hamo, 2011:147). Keenan notes that "[i]t is improbable, for example, that there is some society in which being informative is categorically inappropriate" (1976:69) and so one could say that being informative in the broadest sense is considered reasonable behaviour in a conversation in most cultures; the difference is more likely to be in the relative importance of the various maxims or in the degree to which members of a particular culture are expected to adhere to a specific maxim (Keenan, 1976:69; Blum-Kulka & Hamo, 2011:147).

In Malagasy exchanges, for example, the maxim of Quantity is applicable, but what constitutes adherence to this maxim differs from what is considered adherence in other cultures. The Malagasy consider new information as something quite valuable, and knowing something that nobody else does puts one person in a position of power over another (Keenan, 1976:70). Secondly, the Malagasy avoid making absolute claims and statements about beliefs and activities, and statements that can assign blame to someone. When they thus give less information than what they have, either because they want to maintain their position of power or because they do not want to commit to a specific statement, and the conversant does not obtain sufficient information from a speaker, it is not considered a violation of the maxim of Quantity because those participating in conversation do not expect speakers to give them all the information they have access to (Keenan, 1976:70; Green, 1989:96). There are thus differences between cultures in terms of what is seen as cooperative behaviour.

Bouton notes that even if all cultures were to understand the CP and the maxims in the same way, the inference that each would draw from a certain utterance would differ. The inference

would most likely differ, based on the values, understanding and customs in each culture (Bouton, 1988:184).

2.4 Pragmatic competence in $L2^7$

Since different cultures and languages have different views on what constitutes cooperative and appropriate behaviour in conversations, a speaker cannot merely transfer the principles that govern conversation in their L1 to their L2. For example, as can be seen from the example from Malagasy in section 2.3.5 above, it cannot be assumed that implicatures are generated in the same way in different languages. The conventions for generating and interpreting implicatures in the L2 must thus be learnt.

Furthermore, a high level of grammatical proficiency in the L2 does not presuppose a high level of pragmatic competence in the L2. Indeed, studies have shown that even advanced learners of an L2 differ from native speaker pragmatic norms in the target language (Bardovi-Harlig, 2001:14).

2.4.1 Assessment of pragmatic competence

Tests of pragmatic competence have generally focused on interlanguage pragmatics and crosscultural pragmatics (most notably in the Cross-Cultural Speech Act Realization Project (CCSARP) – see Blum-Kulka, House & Kasper (1989)), with the vast majority of tests assessing language learners' knowledge of speech acts. In recent years, Carsten Roever has been one of the most prolific contributors to the field of testing of L2 pragmatic competence.⁹

The first significant assessment of the interpretation of implicatures was conducted by Bouton (1988, 1992, 1994, 1999), and similar assessments have since been carried out by Lee (2002), Garcia (2004), Taguchi (2005, 2007), Ekincier (2009) and Bromberek-Dyzman and Ewert (2010).

⁹ For a detailed review of existing instruments used in L2 pragmatic research, see Roever (2011; also 2001).

⁷ The development of pragmatic competence in an L2 is a domain usually referred to as interlanguage pragmatics (an analogy with interlanguage grammar). This is a very broad field, and very much beyond the scope of this study. For further reading on interlanguage pragmatics, see Kasper & Rose (2002).

⁸ For a comprehensive discussion of tests of L2 pragmatic competence, see Roever (2011).

2.4.2 Prior studies of pragmatic competence in L2

2.4.2.1 Bouton (1988, 1992, 1994, 1999)

Most of the studies regarding the L2 acquisition of pragmatic knowledge focus on pragmatic comprehension. Bouton (1988, 1992, 1994, 1999) used the work of Devine (1982) and Keenan (1976) on the universality of conversational principles as point of departure and conducted a longitudinal study that highlighted the importance of implicatures in intercultural communication. His study considered the agreement between NSs and NNSs of English in their interpretation of different types of conversational implicatures, namely implicatures of Relevance, Quantity, Irony, Manner, Indirect Criticism and Pope Q.

Bouton based his assessment on two assumptions: the first assumption was that there would be one interpretation of each implicature that would be dominant among NSs of English (1988:184). If this assumption were true, then it would be possible to have a norm against which NNSs' interpretations could be "measured". The second assumption was that enough contextual information could be included in a description of a situation and dialogue that would allow speakers to interpret the implied meaning (1988:185). He tested these assumptions in a pilot study by sketching scenarios including a brief dialogue containing an instance of implicature and then asking English NSs and NNSs to paraphrase what they thought a particular utterance meant in open-ended questions. He found that it was possible to give enough contextual information to allow for the interpretation of implicatures (1988:185). It was also found that the NSs did indeed agree substantially about the meaning of the various implicatures. The dominant NS response was therefore selected as the correct answer for each item¹⁰ and the three most common NNS responses were selected as distractors (other, incorrect options provided as a possible answer in a multiple choice question) for subsequent research.

Participants in Bouton's study included American¹¹ NSs and several reasonably proficient NNSs of English with different L1s (German, Spanish/Portuguese, Taiwan Chinese, Korean, Japanese and Mainland Chinese), all of whom were students at an American university. The participants were required to select what they considered to be the correct interpretation of an utterance from

For a discussion of the problematicity of native speaker benchmarking, see Roever (2011:12).
 In this thesis, references to America indicate the United States of America only, and do not include South America or Canada.

a list of four possible options (see last sentence of previous paragraph). Bouton found the effect of cultural background to be significant (1988:186), and some types of implicatures (notably Indirect Criticism) were found to be more difficult to interpret than others (such as Relevance) (1988:189).

In his discussion of his findings, Bouton divided implicatures into two types, namely implicatures with a formulaic nature and idiosyncratic implicatures. Formulaic implicatures (including Indirect Criticism, Irony and Pope Q) contain structural or semantic "clues" that point to a particular pattern that is present in each of these types of implicature (Bouton, 1999:66), while in idiosyncratic implicatures (including Relevance) the relationship between the implicature, the utterance and the context within which it occurs is generally unsystematic (Bouton, 1999:64). Bouton found that NNSs derive the same meaning as NSs from implicatures that are idiosyncratic, but struggle to interpret implicatures that are formulaic (Bouton, 1999:66). He also noted that prolonged exposure to the target language and American culture, as well as explicit teaching of implicatures in English as a Second Language (ESL) classes, influence NNSs' ability to interpret certain implicatures more accurately (1994:167).

2.4.2.2 Lee (2002)

Lee (2002) replicated the study by Bouton with graduate students at an American university. Her participants were 15 American NSs of English and 15 Korean NNSs who were ESL learners and had been living in the USA for a period ranging from five months to two years. This study also compared NSs' interpretation of various types of implicatures to NNSs' interpretation, and found a significant difference between NSs' and NNSs' interpretations of implicatures. The difference was particularly marked in instances of implicature where the interpretation was dependent on contextual and non-linguistic clues for interpretation (Lee, 2002:10). Her study did not identify particular types of implicature that were systematically (i.e. consistently) problematic for NNSs, however. This may be due in part to her small sample size. Cultural influences on the interpretation of implicatures were apparent in Lee's study in that NNSs based their interpretations on what the same utterance would mean in their L1 and in terms of Korean cultural conventions (2002:12). While the American NSs interpreted the utterances on the basis of their own personal opinions and experiences (reflecting a strong individualistic culture), the

Korean NNSs based their interpretations on social norms and the hierarchies between the speakers in the conversations (which is characteristic of more collectivistic cultures) (Lee, 2002:13).

Lee also included space below the distractors where participants could fill in an alternative interpretation of the implicature if they did not agree with any of the four options given. In addition, two 5-point Likert scales were included below each item to allow participants to indicate how accurate they thought their response would be, and how difficult they found the item. Participants in Lee's study were also required to explain, orally, why they chose particular answers as they were doing the Implicature Test (IT). These think-aloud responses were recorded and transcribed.

2.4.2.3 Garcia (2004)

A study by Garcia (2004) compared the pragmatic comprehension of NNSs with different levels of English proficiency and different lengths of exposure to English. The 16 NNSs comprising the "high group" were graduate and doctoral students who had been in America for an average of 20 months, while the 19 NNSs comprising the "low group" were undergraduate students in an intensive English course who had been in America for an average of five months. The L1s of the NNSs included Japanese, Korean, Arabic, Spanish, Chinese, Russian, Dutch, Portuguese, Hungarian, Haitian Creole and Turkish. Garcia's study included sections on linguistic competence as well as pragmatic competence (speech acts and implicatures), and found a significant difference in both linguistic comprehension and the interpretation of implicatures by the NNS high group and the NNS low group (2004:11).

2.4.2.4 Taguchi (2005, 2007)

Although previous studies indicate that sufficient contextual information can be provided in a paper-based reading instrument in order to interpret implicatures, Taguchi (2005) reasoned that since implicatures most often occur in spoken conversations and are therefore usually heard and not read, a listening task would be more representative of a task to be performed in the TLU domain. A listening task therefore increases a test instrument's authenticity and thus contributes towards its construct validity. He therefore used a computerised listening test for his study.

Taguchi's longitudinal study (2005, 2007) considered whether the level of conventionality of the implicatures affected NSs' and NNSs' comprehension, and also investigated the relationship between L2 proficiency and the ability to interpret implicatures. In addition to assessing the participants' ability to interpret the implicatures correctly, Taguchi also measured their response time on the computerised test. He regarded the length of time it took participants to select an answer as an indication of their processing speed, and therefore of their pragmatic fluency (2005:545). His participants included 46 NSs of English between the ages of 19 and 31 studying at a university in America, and 164 Japanese learners of English between the ages of 17 and 36 studying at an English-medium university in Japan. The NNSs did not have significant exposure to English outside of the classroom, and more than half were enrolled in an intensive English course at the university. Implicatures were not taught in the course.

In his study, Taguchi distinguished between more conventional implicatures (MCIs) and less conventional implicatures (LCIs), echoing Bouton's distinction between formulaic and idiosyncratic implicatures. MCIs contain particular linguistic patterns or structures that appear in the utterance regardless of the context (2005:547), while in LCIs meaning is not linguistically encoded in the utterance and could not be worked out on the basis of linguistic expressions; the interpretation was heavily dependent on the context of the utterance (2005:548). Taguchi found that there was a significant difference in NNSs' ability to interpret MCIs and LCIs accurately, with greater accuracy on MCIs than on LCIs (2005:552). The influence of the level of conventionality on the correct interpretation of implicatures was confirmed in a subsequent study (Taguchi, 2007:313).

Assessing the relationship between L2 English proficiency and the interpretation of implicatures, Taguchi found that proficiency had a significant effect on the accuracy with which implicatures were interpreted (2005:553). This correlation between proficiency and accuracy was also confirmed in a later study (Taguchi, 2007:315). Since the NNS participants did not have considerable exposure to the target language or to American culture outside of their intensive English class, Taguchi notes that explicit language teaching in a classroom and subsequent

improvement in L2 linguistic ability can contribute toward increased L2 pragmatic ability (Taguchi, 2007:328).¹²

2.4.2.5 Ekincier (2009)

A longitudinal study by Ekincier (2009) examined whether NNSs' ability to comprehend implied meaning improved over time in terms of accuracy and speed of processing. He used the IT designed by Bouton (1988) and refined by Lee (2002). Ekincier did not include a NS group, but conducted a pre-test and post-test with a NNS group only, namely 60 Turkish students attending a university in Turkey. All the participants were enrolled in an intensive English course (that did not include the teaching of implicatures) at the university, and their ages ranged from 17 to 22 years. They had very limited exposure to English outside the classroom. The study found that NNSs' ability to interpret implicatures correctly improved over an eight-week period (as did the processing speed, to a lesser extent), and cites the improvement of English language proficiency as one possible reason (Ekincier, 2009:50).

2.4.2.6 Bromberek-Dyzman & Ewert (2010)

A particularly interesting discussion by Bromberek-Dyzman and Ewert (2010) aimed to determine whether speakers of more than one language interpret implicatures differently from monolinguals, and whether their L2 influences their understanding of implicatures in their L1. Their participants included Polish L2 users of English (bilinguals) studying English at a university in Poland (n=28; average age: 22) and Polish L2 learners of English (monolinguals) studying Economics through Polish as medium of instruction (n=47; average age: 22). The IT (an adapted version of Bouton's (1988) instrument) was available in both Polish and English. The monolingual participants completed the test in Polish, while the bilingual participants completed it in both Polish and English. The authors found that bilinguals tend to derive different meanings from implied utterances than monolinguals (2010:330). What was even more interesting, however, was that half of the bilinguals interpreted the same implicatures differently in their L1 than in their L2 (2010:330). Bromberek-Dyzman and Ewert suggest further studies to determine whether these differences are a result of cultural influences or due to transferability

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 $^{^{12}}$ In a later article, Taguchi (2008) discusses the impact of several cognitive processing skills (such as lexical access skills) and general listening skills on the ability to interpret implicatures.

between languages. They suggest that "[f]igurative competence of L2 users differs from the figurative competence of monolinguals because the L2 user has a qualitatively different experience of communication in general" (2010:331).

2.4.3 Difficulty of different types of implicature

From the above studies there seems to be evidence that there are significant differences in NSs' and NNSs' interpretation of implicatures in English. However, not all types of implicature are equally difficult for NNSs, and it appears as if the studies do not agree on which types tend to pose the greatest difficulty for NNSs.

The findings from Lee's study indicate that NNSs' responses differ significantly from those of NSs in their interpretation of particularised implicatures, which are heavily dependent on context and non-linguistic cues for the interpretation of the implied meaning (Lee, 2002:9-10). Taguchi's results point towards a similar trend: the NNSs in his study also found the implicatures that were very context-dependent (less conventional implicatures, i.e. Bouton's idiosyncratic implicatures) more difficult than more conventional implicatures, or implicatures where the conventionality is linguistically encoded (i.e. Bouton's formulaic implicatures). He therefore suggests that the conventionality of implicatures determines how difficult or easy they are for NNSs (2005:545).

However, data from Bouton's studies seem to indicate the opposite: the items that the NNSs' in his study interpreted correctly more than any others were Relevance implicatures, which are examples of idiosyncratic implicatures. The items that the fewest NNSs interpreted correctly were Pope Q, Indirect Criticism and Irony implicatures, which are examples of formulaic implicatures (Bouton, 1999:65). It is therefore clear that NNSs find certain types of implicatures more difficult than others, although sources differ about which type(s) they find problematic.

2.4.4 Factors impacting pragmatic competence in L2

In the comparative studies mentioned above, it was found that NSs generally interpret implicatures in English in the same way, which sometimes differs from the way in which NNSs interpret them (Bouton, 1988, 1992, 1994, 1999; Lee, 2002; Garcia, 2004; Taguchi, 2005; Bromberek-Dyzman & Ewert, 2010), and that there is some improvement in the correct

interpretation of implicatures among NNSs across time without implicatures being taught (Bouton, 1992, 1994; Taguchi, 2005, 2007; Ekincier, 2009). There are a number of possible reasons for these differences in performance and improvement, and often these factors operate in combination. The possible influences on the interpretation of implicatures that emerged from the studies noted above include: target language proficiency, exposure to target language and culture, L1/cultural background and the explicit teaching of implicatures in an ESL course. An aspect that was not addressed in the studies above, but that will in this study be considered as possibly impacting pragmatic competence in L2 is the influence of socio-economic status.

2.4.4.1 Target language proficiency

In order to interpret implied meaning, in other words to recognise the mismatch between the literal meaning of an utterance and the intention of an utterance, a speaker first needs to be able to understand the literal meaning of, or decode, the utterance. This is true in any language. A speaker who is not sufficiently proficient in a language to be able to assign surface meaning is likely to struggle with pragmatic meaning (Garcia, 2004:4). It is thus not unreasonable to expect proficiency in the target language to be related to the ability to correctly interpret implicature in that language.

It is therefore surprising that there are very few studies that report that English L2 speakers with a high level of linguistic proficiency (as measured by standardised tests like the Test of English as a Foreign Language (TOEFL) or an English proficiency test) perform consistently better on implicature tasks than English L2 speakers with a low level of linguistic proficiency. Of the studies mentioned above, only Taguchi reported a statistically significant moderate to moderately strong correlation between NNSs' performance on TOEFL and their ability to interpret implicatures in English (2007:327). Lee did not determine the correlation between linguistic proficiency and pragmatic proficiency statistically, but speculates that the relatively high scores achieved on the IT by the NNSs in her study are due to their high level of English proficiency (2002:7).

As was noted above in section 2.4.2.3, Garcia's data collection instrument contained sections assessing both linguistic ability and pragmatic ability. Statistical analyses of the data yielded a

low correlation between the two sections indicating that linguistic ability is distinct from pragmatic ability (Garcia, 2004:12). Similarly, statistical analyses of Bouton's data, collected by means of an English proficiency test and an IT, showed that there was only a weak correlation between the scores achieved on the two instruments (Bouton, 1992:56, 1994:160). It therefore seems that linguistic ability in a language is distinct from but related to pragmatic ability in that language.

2.4.4.2 Exposure to target language and culture

An aspect that emerged from the studies noted above (section 2.4.2) as possibly influencing the interpretation of implicatures, was NNSs' length of exposure to the target language and culture. In Bouton's longitudinal study, it was found that NNSs' ability to interpret implicatures improved after 4½ years of living in the United States, but their performance still differed significantly from that of NSs (1992:58). Indeed, length of residency in a target language community has been shown to have a significant effect on pragmatic proficiency (see, for instance, Takahashi (1996) and Matsumura (2003)). However, the influence of length of exposure to a target culture has been countered with claims that overall L2 proficiency is in fact the determining factor (Trosborg, 1995; Rose, 2000). Based on the literature and on their own study, Xu, Case and Wang determined that both length of exposure to the target language and overall L2 proficiency influence pragmatic proficiency, but that overall L2 proficiency has a stronger influence than length of exposure (2009:205). It was therefore decided that, although length of exposure to the target language and culture was identified in the literature as a possible factor influencing the interpretation of implicatures, it would not be included as a variable in the current study.

2.4.4.3 L1/cultural background

Although his investigation is not a very recent one, the insights from Bouton's study conducted in 1986 remain important. He attempted to determine to what extent cultural background influences the interpretation of implicatures. After conducting pair-wise tests on the results of the IT, he found that there were statistically significant differences between the performance of the various cultural groups on the IT. Not only did the NNSs differ from the NSs; among the NNSs the different L1 groups also differed significantly from each other (1988:187; 1999:51). When

Bouton replicated the study conducted in 1986 with additional cultural groups and more participants in 1990, the trends noted in the earlier study were confirmed.

In the later study, Bouton included not only American NSs of English, but also British and Canadian NSs, and found that there was no difference between the performance of NSs of English from America, England and Canada (1992:64). This is not entirely surprising as these three cultures are very similar, indicating the extent to which L1 and culture are intertwined. Ideally, one would have to tease language and culture apart in order to investigate the effect that each would have on the interpretation and production of implicatures in an L2. One way of disentangling the two aspects would be to repeat the study with, for example, European French L1 speakers from France, Canadian French L1 speakers from Quebec, and African French L1 speakers. These three groups share French as L1, but their cultures differ markedly. It would be interesting to see how their language and their culture, respectively, influence their comprehension and production of L2 Eng implicatures.

Most of the time, however, language and culture are inextricably intertwined and although the culture cannot be equated with the language, it is also not entirely clear how to view these two things separately, for example, when one considers the language isiZulu and the culture of the amaZulu. In this thesis, the phrase "language and cultural background" is thus used to refer to a group that is united by the L1 that they speak but is also believed to share some cultural background (*partly* because they belong to the same speech community). This is of course a rather simplistic view of the relationship between language and culture; however, arriving at a more complex, yet accurate, view of this relationship falls outside the scope of this thesis.

Bouton's NS versus NNS findings suggest that people from different cultural groups do not all interpret implicatures in the same way. It is thus possible to say that cultural background plays an important role in predicting relative success on the IT as a whole (Bouton, 1988:192), although it is not always possible to separate L1 and culture. The influence of culture is even more pronounced when one considers responses on individual test items. Based on a *post hoc* distractor analysis (an analysis of the response options chosen by the different participants on the different items in the test), Bouton discovered trends in the way that members from different

cultural groups selected distractors (the answer options given for the IT items) (1988:192-5). In other words, not only did the NNSs not choose the option that the NSs chose, but each NNS group (each L1 group) preferred a particular option. One possible reason for this could be that NNSs are not familiar with a particular type of implicature, possibly because it does not occur in their L1 or because implicature is used differently in their L1 (see section 2.4.4.3.1 below). Another reason may be that NNSs transfer and impose an interpretation based on their own L1 or cultural context (section 2.4.4.3.2.), or possibly they lack certain L2 cultural knowledge (section 2.4.4.3.3) that is necessary to interpret a particular item (Bouton, 1988:195).

2.4.4.3.1 Implicatures in different cultures

Implicatures are sometimes used for different purposes in different cultural contexts and reflect the values that are considered important in a particular culture. Using the think aloud method, Lee (2002:15) asked the 15 American NS participants and 15 Korean NNS participants in her study to supply reasons for interpreting the implicatures in a particular way. The American NSs of English considered implicatures as a means to express sarcasm or to emphasise a particular point or idea, such as criticising something without being "overtly nasty", for example highlighting the lack of any significant positive attributes of the restaurant as in (12) above, repeated as (13) below:

(13) Thabo: How was dinner at that new restaurant last night?

Sizwe: The place has nice décor.

The reasons that the NSs gave for interpreting the implicatures in a particular way were based primarily on personal points of view, opinions and experiences, reflecting Americans' emphasis on autonomy. On Hofstede's Five-Dimensional Cultural Values Model¹³, America has a very high Individualism Index of 91, meaning that in American culture, individual rights, independence, and personal achievement are highly valued (1983:52), and they are thus considered an individualistic culture.

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¹³ Despite the fact that Hofstede's model of cultures has been criticised in the literature (see, for example, McSweeny 2002 and Baskerville 2003) for being too simplistic, as it focuses on national cultures and essentially equates nations with cultures, parts of his model were chosen because his work does make an important contribution to the understanding of culture and some concepts remain useful.

On the other hand, Korean NNSs considered social relationships, saving face (the positive social image of participants in a conversation – see footnote 5) and politeness as the main reasons for their particular interpretations of implicatures. They regard the indirectness in implicatures as a means of expressing politeness or humility (Lee, 2002:16), an indication of Koreans' emphasis on the group and harmony within the group. On Hofstede's model, Korea¹⁴ has a very low Individualism Index of 18, which means that in this culture, loyalty to the group, harmony with others and respect are important factors that govern interpersonal interaction (Hofstede, 1983:52). In a collectivistic culture such as Korean, speakers would use implicature as in (13) above if they did not want to offend by saying something negative about the restaurant. These examples from American and Korean cultures thus illustrate the notion that implicatures are not always used for the same purpose in different cultures.

2.4.4.3.2 L1 transfer

When NNSs are confronted with an unknown expression in a language other than their L1, they can choose between three possible actions: they can ignore the expression, guess its meaning, or attempt to work out what it means (Littlemore & Low, 2006:23). Since many NNSs do not possess the same skills in the L2 as they do in their L1 (e.g. a smaller vocabulary in the L2), they may attempt to decipher the meaning using their L1 skills and knowledge. Taguchi argues that L1-based inferential skills are part of the knowledge that a NNS transfers to their L2. He suggests that it is "part of innate human cognition" to search for the relevance of a message and that it develops naturally (2007:328). In Lee's study, it emerged that the Korean NNSs relied heavily on translating the implicatures into their own L1 and culture when interpreting implicatures in their L2 English (Lee, 2002:12).

This strategy was successful when the NNSs were faced with generalised implicatures (where the meaning is uniform regardless of context), and NNSs arrived at the same interpretations as the NSs. When transfer from the L1 to the L2 leads to correct interpretation, positive transfer is said to have occurred (Kasper, 1992:212). Positive transfer is possible in the interpretation of some implicatures, since some types are expressed with similar linguistic structures in different

¹⁴ Statistics available for South Korea only.

languages. Korean, for example, contains expressions similar to the Pope Q type of implicature

in English, such as the expression Are you sure you are Korean? Using transfer, Korean speakers

found this type of implicature easy to interpret (Lee, 2002:11).

However, in the case of particularised implicatures, interpreting the utterances in terms of their

own L1 and culture caused the NNSs to derive incorrect interpretations, and negative transfer is

thus said to have occurred. There are two reasons why transfer may lead a NNS to an incorrect

interpretation. Firstly, translation focuses merely on linguistic meaning, and particularised

implicatures depend on context and cannot be decoded linguistically only (Lee, 2002:12).

Secondly, where NNSs interpreted particularised implicatures in terms of what it would mean in

their own cultural context, the cultural norms of the L1 were not always transferrable to the L2.

Consider the example from Lee's study in (14) below:

(14)Bill and Peter work together in the same office. They are good friends. They often have

lunch together and Peter has even invited Bill to have dinner with him and his wife at

their home several times. Now Peter's friends have told him that they saw Bill out

dancing with Peter's wife recently while Peter was out of town on a business trip.

Peter: Bill certainly knows how to be a really good friend, doesn't he?

In Lee's study, the NNS did not grasp the irony of Peter's utterance in (14) because in Korean

culture a man has a social responsibility of "fulfilling the role of a friend by attending to a

friend's wife" and it is not necessarily seen as improper when a man is seen with someone else's

wife (Lee, 2002:12).

Another example of negative transfer from Lee's study came from the following item (2002:24):

(15)Two friends are talking about different places to eat.

Robin: Have you tried the chilli at Pedro's?

Rosie: Yeah. Just the other day.

Robin. How did you like it?

Rosie: I don't know. I don't think I'm a very good judge of chilli.

Both the NSs and NNSs in Lee's study identified this as being an instance of Indirect Criticism, and the strategy to express this type of implicature is similar in English and Korean (Lee, 2002:9). However, NNSs interpreted Rosie's last utterance as being a humbling gesture in which she notes that "[her] tastebuds are not sophisticated enough to judge the taste of chilli" to avoid potential disagreement with Robin. The majority of American NSs thought Rosie's utterance meant that she did not like the chilli. In this example, positive transfer occurred from Korean to English to identify the utterance as an instance of Indirect Criticism, but negative transfer

occurred in the interpretation of the reason for this indirect criticism.

2.4.4.3.3 Cultural knowledge of L2 context

From the longitudinal study that Bouton conducted, it became evident that some items on his IT that were initially problematic for NNSs when they first completed the IT in 1986 were less (but still) problematic for the participants when they completed the same task in 1991 (1994:163). The follow-up study indicated that there was not one type of implicature that was more difficult than another type. Rather, it appeared that the problematic items were generally related to some aspect of American culture (Bouton, 1994:163). If knowledge of American culture is what is needed to correctly interpret this implicature, the prediction is that NNSs who have been exposed to American culture for a longer period of time would have benefited from cultural knowledge that would have been required in order to interpret the implicature correctly. This prediction was in fact borne out in Bouton's 1999 study: the longer the NNSs were in America, the fewer the number of implicature types that they found systematically difficult (Bouton, 1999:59).

Improvement by NNSs on two items of the IT in Bouton's follow-up study was deemed to be a result of an increased familiarity with American culture. In the following item, it would have been relevant to know that Americans take exercise and sports-related injuries rather seriously,

and would not be dismissive of an injury.

(16)When Jack got home, he found that his wife was limping.

Jack: What happened to your leg?

Wife: I went jogging today.

The item below assumes it to be acceptable for men to visit women in their homes (1992:60),

which is indeed the case in America.

(17)Two friends talk about a mutual acquaintance.

Frank: Helen, do you know where Rudy is? Have you seen him this morning?

Helen: There's a yellow Honda parked over by Sarah's house.

There are however many cultures in which such a social interaction would be inappropriate or

even illegal, and a NNS from such a culture may therefore perhaps not interpret the implicature

correctly because they lack the knowledge of what is acceptable in American culture. Another

instance where cultural knowledge may influence the way in which an implicature is interpreted

is the following:

(18)A retired couple is sitting in the lounge at home, reading.

Mr Brown: What time is it?

Mrs Brown: The post (mail) has come.

A hearer would only be able to make the inference that the fact that the mail has been delivered

is related to the time in a culture where the mail is always delivered around the same time. A

speaker from a culture where mail delivery is sporadic or unreliable would not be able to make

the correct inference at all. Similarly, the question from which the Pope Q type of implicatures

takes its name ("Is the Pope Catholic?") would not mean anything to a person from a culture that

is not in some way familiar with Catholicism and it would be impossible for such a speaker to

derive the intended implicature (Roever, 2007:183). Insufficient knowledge of the L2 culture can

therefore impede a NNS's ability to interpret implicatures in the L2 correctly.

2.4.4.3.4 Differences within L1/cultural background groups

While cultural background evidently plays a role in interpreting implicatures and speakers from different cultural groups are likely to interpret implicatures differently, it must also be borne in mind that different interpretations are also to be expected within cultures (Bromberek-Dyzman & Ewert, 2010:320). This is due in part to the fact that figurative language can be understood differently by different individuals, and in part to the fact that individuals have idiosyncratic assumptions and interpretations of the world that frame their understanding of communication (Bromberek-Dyzman & Ewert, 2010:322). For example, if someone comes in from outside and says *It feels like Durban outside!*, someone who loves Durban's warm weather might infer that the weather is pleasant, while someone who dislikes Durban's humid weather might infer that the weather is unpleasant.

2.4.4.4 Explicit teaching of implicatures

An overview of the numerous studies investigating the effect of teaching on pragmatic performance suggests substantial support for the explicit instruction of pragmatics. Follow-up studies where the performance of an experimental group (that received instruction in L2 pragmatics) was compared to the performance of a control group (that did not receive instruction) indicated that, without exception, those who received instruction outperform those who did not receive instruction (Kasper & Rose, 2002:256). In a comprehensive discussion of empirical evidence, Bardovi-Harlig (2001:29) also notes that NNSs who received no instruction in L2 pragmatics have noticeably different L2 pragmatic systems than NSs (in terms of both production and comprehension).

Of the studies that have investigated the interpretation of implicatures (see section 2.4.2), those by Bouton (1999), Taguchi (2007) and Ekincier (2009) were longitudinal studies that compared the NNSs' understanding of implicatures in pre-tests and post-tests over a specific period. In all three studies, NNSs attended an ESL course between the two tests: Bouton's participants for six weeks, Taguchi's for seven weeks, and Ekincier's for eight weeks. Only in Bouton's study were implicatures explicitly taught; in the case of Taguchi's and Ekincier's studies, NNSs received only general L2 instruction.

The experimental group of NNSs in Bouton's study received instruction about the interpretation of implicatures in terms of the following: how implicatures function as an indirect communication tool, how specific implicatures work, when different types of implicature are appropriate, and comparable implicatures from NNSs' L1s (1999:59-60). After the six-week period, Bouton's control group, who received only general L2 instruction, and the experimental group completed the post-test (the same test as the one that was used in the pre-test).

The 12 easiest items for the NNSs (the items which most NNSs interpreted correctly) on the pretest were termed the "Easy Dozen" by Bouton. These items were mostly Relevance implicatures. Bouton called the ten most difficult items for the NNSs (the items which the fewest NNSs interpreted correctly) on the pre-test the "Tough Ten". This set contained items of Pope Q, Indirect Criticism and Irony. A comparison of the performance on the pre-tests and post-tests by the control group and experimental group yielded interesting results. On the Easy Dozen, the experimental group did not show any improvement in performance from the pre-test to the post-test. There is thus no evidence that the explicit instruction of implicatures positively affected the NNSs' performance on these items (Bouton, 1999:64). In contrast, on the Tough Ten, the performance of the NNSs in the experimental group increased an average of 27% per item from the pre-test to the post-test. The explicit teaching of implicatures therefore had a definite positive effect on NNSs in the experimental group's performance on these items (Bouton, 1999:64).

It would therefore seem that the implicature types that Bouton identified as being easy for NNSs to acquire quickly (idiosyncratic implicatures, in this instance mostly Relevance implicatures) are difficult to teach, and the item types that are difficult to learn (formulaic implicatures, including Pope Q, Indirect Criticism and Irony) are easy to teach. One reason that idiosyncratic implicatures are difficult to teach is that, since the relationship between utterance, context and implied meaning is unsystematic, it is not possible for NNSs to learn rules or look for cues that will assist them in interpreting the implicature. Because of their idiosyncratic nature, it is furthermore not possible to generalise the relationship between the utterance, context and implied meaning to other instances. It is also not possible to teach a NNS all the potential Relevance implicatures that can possibly occur in a language. Formulaic implicatures, on the

other hand, are easy to teach precisely because they contain linguistic cues that enable a NNS to decode the implied meaning (Bouton, 1999:66).

Taguchi noted a significant improvement in the ability of the NNSs in his longitudinal study to interpret implicatures correctly, despite the fact that they did not receive explicit instruction in this regard. He argues that the intensive English teaching that the NNSs received over seven weeks helped them to develop their general L2 English proficiency, and that the improved English proficiency enabled greater understanding of implicatures (2007:328). Although explicit instruction of implicatures was not included in his study, Taguchi recommends making NNSs aware of the "conventional features" or linguistic patterns that occur in more formulaic indirect speech acts, or MCIs (Taguchi, 2005:558). With regards to idiosyncratic implicatures or LCIs, teachers should show NNSs how to decode linguistic but also contextual features in order to interpret the meaning of implicatures. It could also be useful for NNSs if teachers were to discuss the reasons that speakers choose to use indirect utterances instead of direct utterances, such as the decision that some speakers make to flout the maxim of Relation to avoid direct utterances that could be face threatening MCIs (Taguchi, 2005:558). When teaching implicatures explicitly, Taguchi suggests that MCIs be taught before LCIs, as NNSs find MCIs easier and learn them more quickly.

2.4.4.5 Socio-economic status

Although the effect of socio-economic status (SES) on the ability to interpret implicature was not investigated in any of the studies mentioned above, it was decided to include it as a potential variable in this study because it has been shown that socio-economic status can influence academic performance (Priest, 2009:A72). Several studies from various parts of the world indicate that students from low socio-economic backgrounds often do not do as well academically as students from higher socio-economic backgrounds and are at greater risk of dropping out of university, although this claim is not completely uncontested (Sammons, 1995: 466; Marks & McMillan, 2003:467; Chiu & Khoo, 2005; Robinson, 2005:245; Gorard & See, 2009).

¹⁵ For a historical perspective on access to higher education in terms of social class (with particular emphasis on the UK), see Tonks & Farr (2003).

Hackman and Farah note the influence of SES in terms of neurocognitive performance, and cite SES as being particularly important as a predictor of language performance. Differences have been noted in the L1 vocabulary, phonological awareness and syntax of children from different socio-economic backgrounds, which suggests evidence for differences in the development of language in the brain (Hackman & Farah, 2009:65). It can thus be argued that SES affects the acquisition of general language proficiency, as well as academic literacy.

2.5 Testing

Since this study relied quite heavily on the data obtained from two tests (the IT and the English Language Profiler), it is important to note several important principles and theories regarding language testing. General considerations regarding testing will be discussed briefly in this chapter, and particular aspects regarding the tests used in this study will be considered in chapter 3.¹⁶

2.5.1 Testing in language

If tests are considered to be "a method of measuring a person's ability, knowledge or performance in a given domain" (Brown, 2004:3), then language tests aim to assess a speaker's performance in a particular aspect or feature of language, reflecting their competence in the language and sometimes also knowledge about the language. Language tests must thus strive to indicate only language ability and should avoid being influenced by other factors (Bachman, 1990:226). In order to achieve this, Bachman and Palmer (1996:9) offer two fundamental principles that should inform the approach to all language testing.

2.5.1.1 First principle

The first principle stipulates that the performance of a test taker should reflect his language use in a real-life situation (Bachman & Palmer, 1996:9). The situations constructed in the test and the responses to the test questions should therefore correspond to the situations and responses that would occur in the world outside of the test. When designing a test, it is therefore important to consider what the target language use contexts will be and to determine how a speaker's ability

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¹⁶ As test design is not the primary focus of this study, aspects of test qualities will be discussed only briefly and with reference to the tests used in this study.

in such a context will be assessed in the best possible manner. However, McNamara (2000:8) notes that no matter how authentic and reflective of real life a test aims to be, it remains a replicated version of the target language use (TLU) situation. And since it is a simulated adaptation and not an authentic context, it cannot measure or reflect a speaker's TLU ability with complete certainty. It is therefore necessary to make inferences about test results (McNamara, 2000:8). Determining the extent to which these inferences are relevant, credible and useful is known as test validation (Davies, Brown, Elder, Hill, Lumley & McNamara, 1999:221).

2.5.1.2 Second principle

Bachman and Palmer's second principle addresses the usefulness of a language test. For a test to be useful, it must be developed with a particular purpose in mind, for a particular group of test takers, testing a specific TLU situation (1996:18). Usefulness can be defined in terms of six separate but interrelated domains, each of which refers to a particular quality of the test, namely reliability, validity, authenticity, interactiveness, impact and practicality (Bachman & Palmer, 1996:38). It is not possible to prescribe a precise relationship between these domains, and the relative importance of each will vary for every test. Test designers should thus rather aim for a balance of these qualities based on the test purpose, the specific TLU context, the test takers and the test construct (the theoretical justification for the framework of the test, including the content, task types and difficulty level) of each test (Bachman & Palmer, 1996:38).

2.5.2 Test qualities

2.5.2.1 Reliability

A test is reliable when a consistent or similar result would be obtained if it were to be administered to similar populations at different times, or if two comparable forms of a test were to be given to the same test population at different times. Reliability can thus be described as the "agreement between the results of one test with itself or with another test" (Davies *et al.*, 1999:168) and is concerned with obtaining a consistent measurement.

There are a number of factors that can affect test scores. Since tests are meant to measure and reflect a person's ability in a particular aspect, the ability being tested should be the most important factor. However, there are also other factors that can influence test scores. Bachman

(1990:165) notes three types of factors other than communicative language ability, namely test method facets, personal attributes and random factors (see Fig. 2.1).

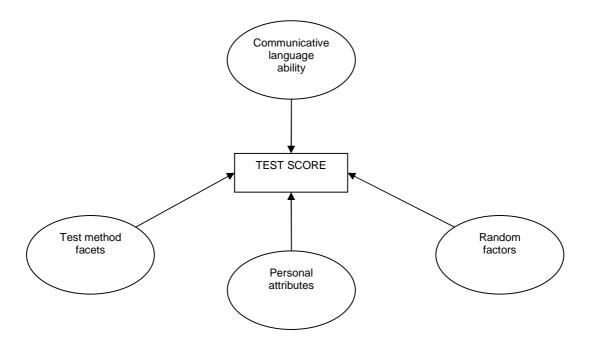


Figure 2.1: Factors that affect language test scores (Bachman, 1990:165)

Test method facets would include considerations such as the format of the test, for example whether the questions are multiple choice or open-ended, how long the test is, or whether the questions are ambiguous or poorly formulated. Personal attributes refer to any features of test takers that are not related to their language ability, and which may influence performance on a test, such as their learning styles, knowledge of a particular subject, ethnicity or gender. Both these categories of factors are likely to influence a test taker's score systematically, since they will consistently affect the way in which he performs on any test (Bachman, 1990:165). The third category of factors refers to unpredictable and often short-term conditions, such as the time of day at which the test is written, the emotional state or health of the test taker or the temperature of the test venue. Since these factors will in all likelihood be different from one test to another, they give rise to unsystematic or random effects on test scores. Brown (2004:21-22) identifies the same categories of factors affecting test score as Bachman, but also includes influences due to test markers (such as human error, subjectivity or bias) as an additional factor.

If these factors have an impact on a test taker's score, the score is not solely an indication of their language ability, and therefore leads to an error in measurement.

It is consequently important to minimise the potential effects of factors that are not related to the language ability being tested, and to consider the possible influences that such factors may have on test scores. Aspects regarding the reliability of the IT will be discussed in chapter 3 (section 3.6.3.4).

2.5.2.2 Validity

Whereas reliability is concerned with how much of an individual's performance on a test is due to errors of measurement and factors other than the ability being measured, test validity is concerned with how much the individual's performance is based on the particular ability being measured (Bachman, 1990:161). Validity thus considers the relationship between a test taker's performance on a test and their performance in other contexts outside of the test (Bachman, 1990:236). It is important to note that a test itself cannot be valid; the inferences that are made from test scores can be valid. The process of validation is, according to Messick, "an overall evaluative judgement of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of interpretations and actions based on test scores" (1996:245). Validity thus lends credibility to any interpretation made about test takers' performance and ability based on their test scores. Validation is not achieved by one absolute measure or criterion. There are several types of evidence that can contribute to a test's validity, but only three types of validity will be mentioned here, namely content validity, construct validity and face validity (discussed below).

2.5.2.2.1 Content validity

A test can claim to have evidence of content-related validity (or content validity) if the content in the test reflects the target domain, or specific subject matter being sampled for testing (Davies *et al.*, 1999:34). A test claiming to measure how well speakers can interpret four types of conversational implicatures, for example, should contain samples of the relevant implicatures, and should not contain other types of implicatures. In addition to containing the relevant subject matter, a test should also contain tasks that reflect the abilities that are being measured (Brown,

2004:22). If a test claims to measure knowledge of English grammar, for example, and then asks test takers to produce examples of figurative language, the test lacks content validity. The tasks that are included in a test also impact the construct validity of a test, and content validity is thus closely linked with construct validity. Content validation is usually done by content-experts, who evaluate the tasks and determine whether they reflect the relevant content and abilities that are being measured.

2.5.2.2 Construct validity

This type of validity pertains to the degree to which the test score can be taken as an indication of the abilities (or constructs) that are being measured. Construct validity is thus concerned with the question of whether the tasks in the test reflect the TLU situations outside the test (Bachman & Palmer, 1996:21). If the tasks correspond with the TLU situations, this increases the test's authenticity (discussed below in section 2.5.2.3). In addition, construct validation determines to what degree the test tasks engage the relevant abilities of a test taker (discussed as "interactiveness" in section 2.5.2.4 below). Construct validation in language testing is thus the process that determines whether the use of test scores to make generalisations about a test taker's language ability in a particular real life situation is in fact justified (Bachman & Palmer, 1996:22). This type of validity is one of the most important in test design as it is in effect the theoretical justification for the tasks in a test.

When assessing the interpretation of implicatures, the test instrument can be either a reading instrument, as in the case of Bouton and Lee, where a short dialogue or situation is described, or it can be a listening instrument, as in the case of Taguchi and Garcia, where participants listen to conversations and then identify the intended meaning. Taguchi (2005:548) points out that a reading instrument reduces the construct validity of the IT, as the tasks need to reflect the manner in which the target language will be used, and in reality, conversations will be heard more often than read. However, in the context of the academic literacy classroom and academic texts, implied meaning may well be encountered in written form. One may ask to what extent implied meaning in academic texts is similar to conversational implicatures, and whether there is enough similarity to be able to justify a reading instrument. I return to this question in section 6.4.

2.5.2.2.3 Face validity

Although it is generally not considered to be as fundamentally important as construct validity or content validity, there are many who nonetheless propose that a test should also display a degree of face validity, a measure of the extent to which stakeholders (test takers, test designers, teachers) consider the test to be relevant or acceptable (McNamara, 2000:133). Put more simply, a test should appear to be suitable and relevant to a lay person (thus, not a test expert). Despite criticism that such an evaluation of a test is simplistic and "bad practice" (see Bachman, 1990:285-289 for a detailed discussion), it is generally agreed that if a test taker has a negative perception of a test's relevance, it could negatively affect their performance. A test's face validity can be improved by including content or material that is related to the TLU, as well as task types that test takers would most likely encounter in the TLU (Bachman & Palmer, 1996:24). Reference to an attempt at increasing the face validity of the IT employed in this study is made in section 3.6.3.3 in the next chapter.

2.5.2.3 Authenticity

If the items in a test are closely related to the kinds of tasks that a speaker will be expected to perform in a TLU, the test is said to have a higher authenticity (Bachman & Palmer, 1996:23). Authenticity is therefore the degree to which characteristics of test items reflect the characteristics of situations in the real life context. When a test is authentic, test results can be generalised to non-test situations in the real world and interpretations and predictions can be made about test takers' ability in similar situations and tasks in real life based on their test performance (Bachman & Palmer, 1996:24). The authenticity of the IT is addressed in section 3.6.3.5 in the next chapter.

2.5.2.4 Interactiveness

The interactiveness of a test is an indication of the extent to which an individual needs to interact with the task and needs to activate certain knowledge or abilities in order to complete a task, and the type of activation that is necessary (Bachman & Palmer, 1996:25). Depending on the subject matter being tested, certain individual characteristics will be engaged. For example, if a test aims to make inferences about language ability, then the skills that should be engaged would include linguistic knowledge and strategic competence. Interactiveness is therefore narrowly linked to

construct validity (Bachman & Palmer, 1996:26) because it is related to the types of tasks that are included in the test.

It is possible for a test to have a high degree of interactiveness but not be a valid instrument of measurement. Tasks that include interpreting graphs or figures or other non-verbal material, for example, might require a great deal of interaction from the test takers, but since linguistic knowledge is not engaged significantly, such tasks cannot be used to make valid generalisations about language knowledge or ability (Bachman & Palmer, 1996:29). In the next chapter, the interactiveness of the IT will be referred to in section 3.6.3.5.

2.5.2.5 Impact

The so-called "impact" of tests refers to the effect that the test results may have on individuals, organisations, systems or societies (Davies *et al.*, 1999:79). Test takers are affected most directly and may experience the impact in several stages as they prepare for and take the test, then as they receive feedback based on their performance, and lastly in the form of any decisions that are made on the basis of the test scores (Bachman & Palmer, 1996:31). In language testing, one aspect related to impact that is particularly significant is washback, the consequences of tests on learning and teaching. This is particularly relevant in academic literacy tests, where test results are often used for placement in academic literacy courses, depending on how much intervention an individual requires. The results from the IT in this study may indicate whether it is necessary to explicitly teach implicature in academic literacy courses. The impact of the data collection instruments is noted in section 3.6.3.6.

2.5.2.6 Practicality

Whereas the previous five test qualities were related to the manner in which test results are used, this quality deals with the practical considerations regarding the manner in which the test is administered and implemented. If the conditions required for implementation exceed what is available and executable, the test will not be administered, regardless of the qualities of usefulness mentioned above (Bachman & Palmer, 1996:35). These may include human resources (including test writers, tests scorers, invigilators and administrative support), material resources (such as physical space, equipment and materials) and time (for development, marking,

processing and analysing scores) (Bachman & Palmer, 1996:37). Practical considerations in the administering of the data collection instruments are covered in section 3.6.3.7.

2.6 Languages and associated cultures under discussion in this study

The languages considered for this study were Afrikaans, English, isiXhosa and isiZulu. In the Western Cape province, 98,3% of the population speak one of the first three languages as a mother tongue (Van der Merwe & Van der Merwe, 2006:67). These three languages are also the home languages of 89,6% of students at Stellenbosch University, and thus represent the home languages of the vast majority of students. At Stellenbosch University in 2010 of all the enrolled students, 50,5% were Afrikaans speaking, 36,9% were English speaking and 2,2% were isiXhosa speaking (Stellenbosch University Division Institutional Research and Planning, 2011).

Afrikaans and English are both Germanic languages of the Indo-European family (Mesthrie, 2002:110). Both have an SVO (i.e. subject-verb-object) structure in main clauses (cf. (19) and (20)).

- (19) He eats bread.
- (20) Hy eet brood. (Afrikaans) he eats bread "He eats bread."

In embedded clauses, English is SVO (cf. (21)), while Afrikaans is SOV (cf. (22)).

- (21) (I know that) he eats bread.
- (22) (Ek weet dat) hy brood eet.(I know that) he breads eat"I know that he eats bread."

Furthermore, when a non-subject (such as an adverb or object) appears in sentence-initial position, the verb follows the subject in English (cf. 23)) and precedes the subject in Afrikaans (cf. (24)).

- (a) This bread John eats. (23)
 - (b) *This bread eats John. 17
- (24)(a) *Hierdie brood John eet. this bread John eats
 - (b) Hierdie brood eet John. this bread eats John "This bread John eats."

Despite these differences between English and Afrikaans, the languages both have quite fixed word orders, in contrast to isiXhosa and isiZulu, which both have quite free word orders (Du Plessis & Visser, 1998:56). For example, in non-subject-initial main clauses, the verb must follow the subject in English (recall (23a)) and must precede the subject in Afrikaans (recall (24b)). In contrast, in isiXhosa non-subject-initial main clauses, the verb can either follow or precede the subject – cf. (25a) and (25b), both of which are grammatical in isiXhosa.

- (a) Esi sonka uyasitya uJohn. (isiXhosa) (25)this bread he.it.eats John
 - (b) Esi sonka uJohn uyasitya. this bread John he.it.eats "This bread John eats." 18

The reason why isiXhosa allows different word orders or has a so-called free word order is because subjects and objects are indicated as such by markers on the verb and not by their position in the sentence. In *uyasitya* in (25), u- is the subject marker (referring to *uJohn*) and -si-

 17 Note that an asterisk (*) indicates ungrammaticality. ¹⁸ This example is taken from Lombard & Conradie (2009:173).

is the object marker (referring to *isonka*). IsiZulu patterns just like isiXhosa and also uses morphemes on the verb to indicate which noun is the subject and which the object.

IsiXhosa and isiZulu both belong to the Nguni cluster of Bantu languages. They are closely related along linguistic lines, share many similarities in terms of lexicon and syntax (Mesthrie, 2002:11) and are mutually intelligible. Wolff suggests that they are rather like different varieties of one language and are considered different languages for purely non-linguistic (namely political and social) reasons (2000:301). The linguistic autonomy of these two languages is very likely a result of socio-political reasons, and not linguistic reasons (Herbert & Bailey, 2002:66).

More important for this study, though, is the fact that Afrikaans and English also differ from isiXhosa and isiZulu in terms of the cultural values that are considered important for their speakers. The Individualism Index (IDV) on Hofstede's model was mentioned briefly in section 2.4.4.3.1, and the differences between a high IDV and low IDV were noted. Afrikaans speakers have a high IDV and English speakers have a moderately high IDV, which indicates that individual autonomy and independence are valued in these two cultures. IsiXhosa and isiZulu speakers have a low IDV, indicating a collectivistic culture where group identity and the value for the group outweigh individual identity and the value for the individual (Mullin & Cooper, 1998:49; De Klerk, 2000:201). Groups can be families, clans, or communities, or can be based on age or social roles. In such a collectivistic culture, there are rather prescriptive guidelines for social interaction and communication within groups and between groups (De Kadt, 1998:182).

Another of the dimensions on Hofstede's model is the Power Difference Index (PDI). A high PDI reflects respect for hierarchy and the inequality between speakers of different status. Afrikaans and English speakers have a PDI that falls in the middle range, while isiXhosa and isiZulu speakers have a moderately high PDI (Mullin & Cooper, 1998:49; De Klerk, 2000:200). It is thus expected and required of isiXhosa and isiZulu speakers to show respect to people that have a higher positional status than them. The hierarchies of status are based on age, social status, gender, education, and leadership positions within the community (De Kadt, 1998:181). In Afrikaans culture, there is also emphasis on respect for speakers of different social status

(although not to the same extent as in the Nguni languages), and Afrikaans uses forms of address (such as the honorific second personal singular pronoun u) to show deference.

2.7 Conclusion

This chapter provided an overview of the most important considerations regarding implicatures and the assessment of the interpretation of implicatures as found in the literature. A review of the literature included a brief mention of pragmatic competence, a description of the different types of implicatures and how they are generated, followed by a discussion of previous comparative studies investigating how implicatures are interpreted by NSs and NNSs. From these studies, a number of factors were identified as possibly impacting the ability to interpret implicatures in an L2. Brief consideration was also given to (i) the theory of language testing (since this study included the assessment of a particular language ability) as well as (ii) the specific languages under consideration.

Chapter 3 will return to some of the aspects of language testing mentioned above when the data collection instruments are described. The possible factors influencing the interpretation of implicatures will be revisited when the results of the study are reported (chapter 4) and discussed (chapter 5).

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

The previous chapter considered the theoretical foundations underlying the notion of pragmatic competence, the comprehension of implicature and language testing, as well as previous studies investigating the interpretation of implicatures by NNSs. This chapter will focus on how these theoretical approaches informed the research design for this study. First, the research questions identified in chapter 1 will be revisited as hypotheses with specific emphasis on the manner in which they informed the research design for this study. Thereafter, the data collection methodology, participants and data collection instruments of this study will be described.

3.2 Research questions and hypotheses

Recall that the aim of this study was to determine whether South African NNSs of English with different L1s interpret implicatures in their L2 English, notably implicatures of Indirect Criticism (IC), Irony and Relevance, differently from NSs. It was therefore necessary to assess English L1 and L2 participants' interpretation of these kinds of implicature. A secondary research question articulated the possibility of the influence of various factors, such as L1, L2 proficiency and socio-economic status on the interpretation of implicatures, and a background questionnaire was designed to obtain this data.

The specific research questions set out in chapter 1 are repeated below:

Research question 1

Do South African NNSs of English interpret implicatures, specifically Indirect Criticism, Irony and Relevance, differently from NSs?

Research question 2

What are the factors that affect NNSs' interpretation of implicatures in English?

Based on the research questions and previous research on the topic (as reported in chapter 2), the following hypotheses were formulated:

Hypothesis 1

There are significant differences between the accuracy with which South African NSs and NNSs of English interpret implicatures (specifically Indirect Criticism, Irony and Relevance) in English. Specifically, NNSs' performance on an Implicature Test will be less accurate than NSs' performance.

Hypothesis 2

L1/cultural group, L2 English proficiency and socio-economic status are factors which affect the way in which NNSs interpret implicatures in English.

3.3 Research design

As should be clear from the overview of previous research on the interpretation of implicatures provided in section 2.4.2, the instruments employed to assess the interpretation of implicatures over the past two and a half decades have been rather similar in terms of content, but have ranged from paper-based to computerised instruments, reading tasks to listening tasks, with some instruments including self-reporting methods and rating scales. Multiple-choice questions also appear to be the most appropriate task type for assessing the interpretation of implicatures (Roever, 2011:6).

Having determined in a pilot study that it was indeed possible to test the interpretation of implicatures in such a manner (see section 2.4.2.1), Bouton (1988, 1994) used a 33-item paper-based multiple-choice instrument in which a scenario was sketched for each item, including a description of a situation and a short dialogue, with one utterance containing an instance of implicature. A question then followed, asking what the speaker meant with the utterance containing the implicature, with four possible options that the participant had to choose one from. The dominant NS response for each item from Bouton's pilot study was considered the correct answer and the most common NNS responses were included as the three distractor options.

In the study reported here, a quantitative, non-experimental, relational and comparative research design was employed for the collection and analysis of the data with the aim of providing generalisable results. An adapted version of Bouton's (1988) IT was used (see section 3.6.3) in order to determine how participants with different L1s would interpret implicatures in English. Participants were also required to complete a background questionnaire (BQ) and the English Language Profiler (ELP). The BQ (see section 3.6.1) was used to obtain information about participants' linguistic background and their linguistic practices. The ELP (see section 3.6.2) is a standardised test of English language proficiency that was used to determine participants' English proficiency.

3.4 Methodology and data collection

After ethical clearance was obtained from Stellenbosch University (SU), the lecturers teaching a first-year course in academic literacy in one of the faculties were approached to ask permission to include their students in the study. All the lecturers gave permission for their students to be invited to participate.

Students were informed of the study by their respective lecturers and those who wanted to participate were asked to sign a consent form and complete the BQ (Appendix A) during class time. It was made clear to them that participation was voluntary and that they could withdraw at any stage during the study. Only students who completed the informed consent form participated in the study. Participants were requested to complete the computerised ELP and IT (Appendix B) on Blackboard, the university's e-learning platform in their own time during February and March of 2010. It was important to conduct the tests early in the year, before any intervention of the academic literacy course or any prolonged exposure to the academic environment could be argued to have had an effect on the results. Selected data from the BQ and the responses on the ELP and IT were entered onto spreadsheets by an assistant for the purpose of statistical analysis. Each participant was given a participant number so that any reference to individuals' responses would be anonymous.

3.5 Participants

Participants were recruited from a pool of students registered for a first-year course in academic literacy as part of their Bachelor's degree in one of the faculties at SU in 2010. Of the 607 students in the course, a total of 420 students volunteered to participate in the study, and 209 of these students met the criteria for inclusion in the study in that (i) they had been born in South Africa and (ii) they had English, Afrikaans, isiXhosa or isiZulu as L1.

At first, the aim was to include students with a number of different African languages; however, of all of the students who had volunteered to participate, only 16 were speakers of an African language: five with L1 isiXhosa, five with L1 isiZulu, two with L1 Xitsonga, two with L1 Sesotho, one with L1 Sesotho sa Leboa (Northern Sotho), and one with L1 Setswana. The composition of the total student population at SU is as follows: 50,54% with L1 Afrikaans, 36,90% with L1 English, 2,19% with L1 isiXhosa. In the information provided by SU, the other SA languages are grouped together (3,32% of the total student population) and data for the separate SA languages represented at SU are not available. In the faculty from which participants were recruited, the representation of isiXhosa L1 speakers is even smaller, with 1,93% L1 isiXhosa students in the faculty (Stellenbosch University Division Institutional Research and Planning, 2011). According to the Linguistic Atlas of South Africa, Xitsonga speakers accounted for 0.1% of the population in the Western Cape in 2001, Sesotho speakers for 0.7%, Northern Sotho speakers for 0.1% and Setswana speakers also for 0.1% (Van der Merwe & Van der Merwe, 2006:67). The percentages of speakers of African languages in this study are thus representative of the percentages of speakers of these languages in the province and in the student population at SU.

Because of these extremely small numbers of speakers of different African languages, it was decided that only the two largest African language groups, namely isiXhosa and isiZulu, would be included in this study and that these two groups would be combined into a Nguni-group because the languages are linguistically so similar (see section 2.6). The larger Nguni-group would then make it possible to compare the different groups (English, Afrikaans, Nguni) with each other. Consequently, volunteers who indicated having a first language other than Afrikaans, English, isiZulu or isiXhosa, or participants who identified themselves as being bilingual were

not included in the study. Some participants did not complete all of the tasks (BQ, ELP and IT) – their data was also not included in the study.

The English NS group consisted of 107 participants, while the NNS group consisted of 102 participants: 92 Afrikaans L1 speakers and 10 Nguni L1 speakers (5 isiXhosa L1 and 5 isiZulu L1). The discrepancy in size between the three groups was kept in mind in interpreting the results of the study – see chapter 4. The participants' ages ranged between 18 and 22 years.

3.6 Instruments

3.6.1 Background Questionnaire

To gather information about the participants' linguistic background and practices, they were asked to complete a BQ. This paper-based instrument contained 21 questions and enquired about various aspects of the participants' exposure to English and other languages, as well as their educational background. As the questionnaire elicited rather extensive information about aspects related to linguistic background and literacy practices (see Appendix A), it was not possible to include all the data in this study (given time constraints and the scope of the thesis), and only responses to certain questions on the questionnaire were included in the data analysis. Other data obtained from the instrument may be used in subsequent or follow-up research.

The factors that were taken into consideration for this study were the participants' country of birth, which language they consider to be their first language, and their parents' or primary caregivers' level of education. The latter was used as an indicator of socio-economic status.

Further questions about linguistic background required participants to indicate which other language(s) they have been exposed to, the language in which they learned to read and write, the language(s) they speak at home and in social contexts, and the language(s) they speak best. In addition, participants were asked to comment on their perception of their ability to communicate in English, the age at which they started learning English and how often they read English books, newspapers, magazines, letters or notes. Questions regarding participants' own educational background were also included, such as the medium of instruction at school, and the length and level of English instruction at school.

Participants' data was included in or excluded from the study on the basis of their responses to two questions, namely country of birth and first language. The question regarding country of birth (question 2) was an open-ended question, as it was unlikely that every possible country would be represented in the questionnaire. However, although non-South Africans were by far in the minority and did not form part of the study, it was decided not to formulate the question as a closed question and in such a way that a participant had to choose between being "South African" or "non-South African", as the questionnaire did not wish to create the sense that only certain participants' data was important. For the same reason, in the questions requiring them to indicate the languages they are exposed to or use, space was provided so that they could specify any language that was not mentioned in the list of possible options.

It is interesting to note that there were a number of participants who listed as their first language (i.e. in response to question 6) a language different from that spoken in the home when they were growing up (question 3). This finding is corroborated by literature, which indicates that there appears to be an increasing shift towards English among L1 African language speakers (De Klerk, 2000; Kamwangamalu, 2007; Singh, 2009). According to a survey conducted among L1 isiZulu speakers, parents seemed to prefer that their children receive their schooling in English as opposed to their mother tongue, due to the perception that this would give them access to quality education (Singh, 2009:134). This language shift possibly contributed to the small number of participants listing an African language as their L1, hence the small sample of L1 Ngunispeakers.

3.6.2 English Language Profiler

The ELP is a multiple choice test that gauges grammatical and idiomatic language use, as well as vocabulary and linking words in English. The test is used to determine general English language proficiency and is not used for gate keeping purposes. Proficiency tests are instruments to measure how much of a language a person has acquired, and are not based on material that has

.

¹⁹ In fact, the Division for Institutional Research and Planning at Stellenbosch University reports that 52,4% of students with an L1 African language at SU in 2010 listed English as their home language (Institutional Research and Planning Factbook p.60). In the same year, in the faculty that the participants were drawn from, 42,8% of undergraduate students with an L1 African language reported English as being their home language (Stellenbosch University Division Institutional Research and Planning, 2011).

been taught. Such tests assess what has been learnt relative to a specific real world purpose (Davies *et al.*, 1999:154). The ELP was judged by content experts to have both face validity and content validity. Its reliability as measured by Cronbach's alpha (α) is 0.730. Since the test is not a high-stakes test, this is an acceptable alpha. The ELP was completed on computer. The ELP was not included in the Appendices in this thesis for security reasons: it is used as an assessment in some language courses at Stellenbosch University.

3.6.3 Implicature Test

3.6.3.1 The instrument

The test instrument for this study took the form of a computerised, multiple choice, reading test where participants read brief conversations and subsequently had to recognise the intended meaning of a specific utterance. Each item consisted of a short description of a situation and a dialogue between two speakers that contained one or two exchanges, with one utterance including an instance of implicature. Participants were asked to indicate what they thought a speaker meant with that particular utterance (printed in bold). Questions requiring the interpretation of the implicature and following each conversation were generally formulated as "Sam most likely means:", "What does Tumi mean with this remark?", "Odwa is probably trying to say that:", "Another way that Frans could say the same thing would be:", "Nhlanhla responds this way because:" and were then followed by four possible interpretations of the utterance. All possible answers were related to the conversation.

Below the list of possible answers, a space labelled "other" was provided where participants could fill in an alternative interpretation that was not covered by the distractor options. In addition, participants also had to rate on a Likert scale how difficult they found each item. Although this data was eventually not included in the data analysis, due to time constraints and the scope of the thesis, it may be discussed in future research.

The items used were largely based on the test that Bouton designed for his investigation (1986, revised in 1990). Twelve of the items in the IT (Appendix B) were taken directly from Bouton's test (items 1, 5, 6, 7, 8, 9, 12, 15, 16, 18, 19, 20) and eight items were created by the researcher (2, 3, 4, 10, 11, 13, 14, 17), based on Bouton's examples. These new items included two items of

IC, four items related to Irony, one item of Relevance and one item of the Pope Q type

implicature. To create an item of IC, the conversation contained an utterance that complimented

a minor aspect of something to indicate that the speaker could not find anything more positive to

say about it, such as the following:

(26) (IT item 3) Two students are discussing Sarah's blind date the previous evening.

Lerato: How was your date?

Sarah: He has a nice car.

In the Irony items, the utterance containing the implicature expressed the opposite of what would

be a truthful statement relating to the situation (violating the maxim of Quality). An example of

an item of Irony that was created in this way was the following:

(27) (IT item 4) After a difficult meeting where clients did not like any of their ideas for a

new advertising campaign, two colleagues leave the boardroom.

John: That went well.

The item relating to Relevance was created by including an utterance that was unrelated to the

conversation between the two speakers:

Two students walk out of the exam room where they just wrote a tough (28) (IT item 2)

Biochemistry exam.

Zimbini: How do you think you did in the exam?

Mmabatho: Strange weather we've been having lately.

Creating the item of Pope Q implicature, one utterance in the conversation expressed a question

to which the answer was very obvious:

(29) (IT item 11) Some university friends are sitting around in the Neelsie [student centre].

A few in the group are considering skipping class on Friday so that they

can have a long weekend.

Jenny: Do you think Prof. Rose is going to give us a surprise test on

Friday?

Odwa: Does the sun come up in the east these days?

This study was focused particularly on the ability of NSs and NNSs of English to interpret three types of implicature, namely Indirect Criticism (IC), Irony and Relevance. The 20-item test

contained five items related to IC (items 3, 6, 9, 13 and 19), five to Irony (items 4, 7, 10, 14 and

17), and eight to Relevance (items 1, 2, 8, 12, 15, 16, 18, 20). Two items relating to the Pope Q

type of implicature (items 5 and 11) were also included as "filler" items, but were not included in

the data analysis.

3.6.3.2 Pilot testing

The IT was piloted with nine NSs of English at the end of 2009. The purpose for piloting the

instrument was similar to Bouton's rationale, which was to determine whether there would be

consensus among NSs regarding a particular interpretation for each utterance containing an

implied meaning. The answer that the NS pilot participants agreed upon was considered the

correct answer in each case.

From their responses, it emerged that the NSs who completed this pilot test agreed on the

meaning of most of the utterances, and that there was a clear dominant interpretation in most

cases (18 out of the 20 items). These interpretations were also the same as the dominant

interpretations chosen by Bouton's English NSs. However, for two items on the IT in this study

there was a dominant response by the NS pilot group which differed from the dominant response

of Bouton's NSs. These were both items of IC. The following item on the IT was identical to that

in Bouton's IT.

(30) (IT item 19 – pilot)

Two friends look at food to buy at a market. They ask a sales assistant standing behind the counter.

Client: Can you recommend some of this food – which one tastes the best?

Sales assistant: That dish is very colourful.

What does the sales assistant mean?

- a) The more colourful the dish, the tastier it is.
- b) I don't know how the food tastes.
- c) I don't like the taste of any of the food here.
- d) The presentation of the food is better than the taste.

The dominant NS response in Bouton's study and thus the expected response for this item in the current study was that the sales assistant does not like any of the food (s)he is selling (response C). Yet, only 25% of the pilot group in the current study preferred this interpretation. The response that most of the NS pilot group (50%) selected was that the sales assistant did not know how the food tastes (response B). (Interestingly, in Bouton's test (1988:190), this item was among seven items of out 33 on which the NS group showed the least degree of consensus.) This item was replaced in the IT used in this study, due to the fact that the consensus response by the NS pilot group in this study did not correspond with the consensus response by Bouton's NS participants. In addition, the degree of consensus among the NS pilot group was quite low (50%), and therefore the item could potentially elicit disparate responses from NNSs.

The second item where the response of the pilot group in this study differed from the response agreed upon by Bouton's NS group is an adaptation of an item in Bouton's IT:

(31) (IT item 13 – pilot)

A woman wears a new dress for the first time and asks her friend's opinion about it.

Clarissa: How do you like my dress?

Katinka: Well, there certainly are a lot of women wearing it this year. When did you get it?

Katinka probably means the following:

- a) She thinks Clarissa has good taste in clothes because she's right in style.
- b) She likes the dress, but too many women are wearing it.
- c) She doesn't like it.
- d) She should get one herself.

e) Other	

The friend's utterance in this item was slightly different from the utterance in Bouton's original test instrument: in his test the friend's comment on the dress is: "Lots of women have one", which is similar to the utterance above in terms of its literal meaning.

The response option chosen by the majority of the NSs in Bouton's research, was that the friend did not like the dress (response C). However, the dominant interpretation (50%) by the NS pilot group in the current study was that the friend liked the dress, but that too many women were wearing it (response B). (This item was also among those on which Bouton's NS group showed least consensus, with only 64% of NSs agreeing on a dominant interpretation (Bouton, 1988:190). In the discussion of the results in chapter 4, this trend – a lesser degree of consensus among NSs on items of IC – will be discussed further.) For the same reasons as in the previous instance, this item was not included in the final version of the IT.

3.6.3.3 Adjustment of test

A few of the items taken from Bouton's (1988) IT were adapted for the South African context for use in this study: in some of the items (items 5, 6, 12, 15, 20), the names of the speakers were changed to reflect the various cultural groups that would be participating in the study, thereby

increasing the test's face validity. In item 20, the month of August in Bouton's instrument was changed to February for this study as the utterance was supposed to refer to a warm season (Bouton's study was conducted in the United States).

3.6.3.4 Reliability and validity

The IT that Bouton created and revised was validated over time.²⁰ Five items from the test designed in 1986 were found to be unreliable and were removed from a revised version created in 1990 (Bouton, 1994:159). The reliability (internal consistency) of Bouton's IT for the NS participants was lower than for NNS participants: for the NSs the reliability coefficient as measured by Cronbach's alpha was 0.321. For the NNSs in 1990 the IT's reliability was 0.655, and after revising and removing some items, the reliability for NNSs in 1992 increased to 0.739 (Bouton, 1994:164).

The reliability for the IT used in this study was also lower for the NSs than for the NNSs: the reliability coefficient of the IT for NSs was 0.460, the reliability for the Afrikaans NNSs was 0.617, and for the Nguni NNSs it was 0.891. Although the alpha for the NS group is quite low, one should be cautious when interpreting reliability coefficients, as they can be influenced by various factors and are not necessarily indicative of poor reliability. Alpha can be influenced by factors such as test length (Schmitt, 1996:352), the size of the sample (Spiliotopoulou, 2009:1), variance in responses and a heterogeneous set of participants (Thompson, 1994:839). Response homogeneity can, for example, lead to a low alpha, which would seem to indicate a poor reliability of a test instrument. In this study, it is likely that the greater variance in responses of the Nguni group (see table 4.1 in chapter 4) contributed to the high alpha, while much more uniform responses among the NS group contributed to a lower alpha. Therefore an alpha that at first glance appears low, may in fact still be useful (Schmitt, 1996:353).

3.6.3.5 Authenticity and interactiveness

Taguchi's (2005:548) criticism of a reading instrument to test the interpretation of implicatures was already noted in chapter 2 (in section 2.5.2.2.2), as well as the counter-argument that in the

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²⁰ As a large number of items from the IT used in this study were taken from Bouton's IT, which was validated over time, there will not be any further discussion about the validation of the IT used in this study.

academic context, implicatures are likely to be read in academic texts and that a reading instrument could thus be justified. However, the implicatures that occur in the IT are examples of implicatures that are likely to be found in conversations, and there are no examples of implied meaning from academic discourse. This may be considered to reduce the authenticity of the IT, since the characteristics of the tasks in the IT differ from the TLU tasks that participants will encounter in the real life context. In terms of interactiveness, the questions on the IT required participants to activate their language knowledge (to determine the sentence meaning of each utterance) and strategic competence (to determine the utterance meaning in each case).

3.6.3.6 Impact

Participants did not have to prepare or study in order to complete the ELP and IT, and the results from these instruments did not form part of their assessment for the academic literacy course. Although the participants did not receive feedback about their responses in class, they could view their overall scores and their responses to the individual questions, as well as the correct answers, on the e-learning platform once the study had been completed. The impact on the participants was therefore reduced to the time that it took them to complete the ELP and IT. Washback was not applicable in this case, as neither English language nor implicatures are taught in the academic literacy course. The results of the IT may however indicate whether or not the explicit teaching of implicatures should be considered in future.

3.6.3.7 Practicality

There were no significant practicality problems evident in this study: since participants could complete the ELP and IT on computer in their own time on an e-learning platform that they were familiar with, many potential factors such as sufficient human resources (invigilators, scorers), material resources (materials, space) and time (marking, processing of scores) were eliminated. Since all students have access to computers in designated areas on campus, participants who did not possess a personal computer also had a means of completing these data collection instruments. Students were told of the study and the BQ was distributed during class time, however, and students who did not attend that particular class were thus not notified of, and could consquently not participate in the study, slightly reducing the possible pool of participants.

3.7 Conclusion

In this chapter, the research design and methodology of the study were set out, and the three data collection instruments were described. Next, the results of the data collection and analysis will be reported in chapter 4. Thereafter, the results will be discussed in chapter 5.

CHAPTER 4 RESULTS

4.1 Introduction

This chapter reports the results of the statistical analyses conducted on the data obtained by means of the background questionnaire (BQ), English Language Profiler (ELP) and Implicature Test (IT) described in chapter 3. In sections 4.2 to 4.4 the research questions and hypotheses set out in chapters 1 and 3 will be revisited. Specifically, in section 4.2 the question of whether there is a significant difference in the accuracy with which different L1/cultural groups interpret implicatures will be addressed. Thereafter, consideration will be given to two other possible influences on the interpretation of implicatures: the influence of English proficiency will be addressed in section 4.3, while the possible impact of socio-economic status will be considered in section 4.4. A discussion of the results will follow in chapter 5.

The primary research question informing this study is whether there are significant differences between the accuracy with which NSs and NNSs interpret implicatures (specifically related to Indirect Criticism, Irony and Relevance) in English. A secondary research question aims to identify the factors which might affect one's interpretation of implicatures in English, including L1/cultural group, level of L2 proficiency and socio-economic status.

4.2. Effect of L1

4.2.1 Overall performance on Implicature Test

ANOVAs (analyses of variance) were used to compare the three groups (English, Afrikaans and Nguni) to each other in terms of their performance on the IT. It should be noted that, according to Levene's test for homogeneity of variance, the difference between the groups in terms of variance is significant, which means, that, strictly speaking, one cannot use an ANOVA to analyse the data and should rather use a more sophisticated statistical technique, such as Bootstrap. However, in order to make use of a technique such as Bootstrap, a larger Nguni group is required – recall that n=107 for the English group, n=92 for the Afrikaans group, and n=10 for the Nguni group – and due to practical considerations, it was not possible to obtain additional data from Nguni-speakers (see section 3.5). In consultation with statisticians at Stellenbosch

University, it was decided that ANOVAs would be used to test for differences between the three groups in terms of their performance on the IT and ELP but that it should be made clear throughout that because of the limitations set out in this paragraph, the results of the ANOVAs must be interpreted as *tendencies* rather than absolute conclusions. This will be kept in mind in the discussion of the results in chapter 5.

Table 4.1: Summary of L1 groups' overall performance on the Implicature Test

	Eng	Afr	Nguni
n	107	92	10
Mean (out of 20)	16.481	15.619	12.600
Percentage of items answered correctly	82	78	63
Std deviation	2.141	2.747	5.142

An ANOVA performed on the data of the IT showed that there was a significant difference between the three groups in terms of their overall performance on this test (p<0.01). Here, Fischer's LSD (least significant difference) tests showed that the English group performed significantly better than the Nguni group (p=0.000) and the Afrikaans group also performed significantly better than the Nguni group (p=0.0003) but that there was no statistically significant difference in performance between the English group and the Afrikaans group (p=0.054). Figure 4.1 below illustrates the performance of the three language groups on the IT.

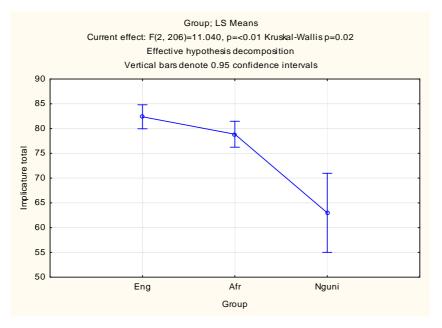


Figure 4.1: Between-group differences in performance on the Implicature Test

4.2.2 Performance on different types of implicature

A subsequent statistical analysis was performed to determine how the three groups fared on the different item types of the IT, namely Indirect Criticism, Irony and Relevance.²¹ For the category Indirect Criticism, an ANOVA showed that there was no significant difference between the three groups (p=0.625). For the category Irony, the ANOVA yields a p-value of 0.0002, which shows that there are significant differences between the groups in terms of their performance on items in this category of the IT. LSD tests yield results similar to those for the IT as a whole, namely that the English group performed significantly better than the Nguni group (p=0.000) and the Afrikaans group performed significantly better than the Nguni group (p=0.000) but there is no statistically significant difference between the performance of the English group and the Afrikaans group (p=0.236) (see figure 4.2 below).

statistical analysis of the types of implicature did not include the Pope Q type.

²¹ Only two items of the Pope Q type were included in the IT, which makes it difficult to obtain reliable results from statistical analyses. For this reason, and since the items of Pope Q were not the focus of this study and, instead, acted as "filler" items,

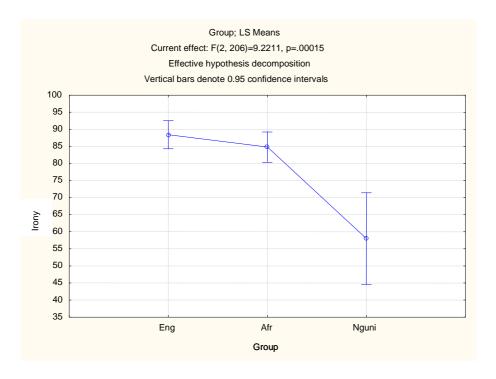


Figure 4.2: Between-group differences in performance on the category Irony

For the category Relevance, the ANOVA yields a p-value of 0.0013, which shows that there are significant differences between the three groups on items in this category of the IT. LSD tests show that all three groups differ significantly from each other on this category of the IT: the English group performed significantly better than the Afrikaans group (p=0.0144) and the Afrikaans group performed significantly better than the Nguni group (p=0.004), which therefore means that the English group also performed significantly better than the Nguni group (p=0.000) (see figure 4.3 below).

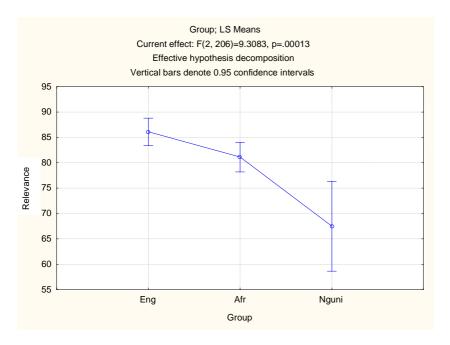


Figure 4.3: Between-group differences in performance on the category Relevance

Having determined that there are indeed significant differences in the accuracy with which participants from different L1/cultural groups interpret implicatures, the question was whether other factors, specifically L2 proficiency and socio-economic status, could potentially have affected the interpretation of implicatures.

4.3 Effect of L2 proficiency

Since previous studies identified L2 proficiency as having a significant effect on the interpretation of implicatures, it was necessary to determine whether there was a significant difference between the three L1 groups' levels of L2 English proficiency.

4.3.1 Performance of three L1 groups on English Language Profiler

The three groups' performance on the ELP is summarised in table 4.2 below:

Table 4.2: Summary of groups' performance on the English Language Profiler

	N	Avg	Std dev.
Eng	107	65.82	8.2
Afr	92	57.67	10.96
Nguni	10	53.84	13.15
TOTAL	209	61.66	10.64

An ANOVA showed that the difference between the three groups' performance on the ELP was statistically significant (p<0.01). LSD tests indicated that, specifically, the English group performed significantly better than both the Nguni group (p=0.0003) and the Afrikaans group (p=0.000) but that the Afrikaans group did not perform significantly better than the Nguni group (p=0.24). Since the test is aimed at testing English proficiency, it is unsurprising that the NSs of English fared significantly better than the NNSs. The fact that there is no significant difference between the two NNS groups shows that these two groups are comparable in terms of their proficiency in L2 English. Figure 4.4 below illustrates the performance of the three language groups on the Language Profiler.

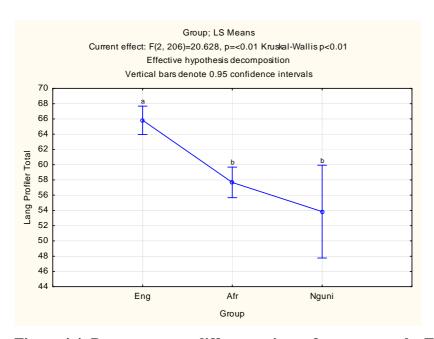


Figure 4.4: Between-group differences in performance on the English Language Profiler

Although the two NNS groups are thus comparable in terms of their L2 English proficiency, the Afrikaans group performed significantly better on the IT than the Nguni group. This indicates that the variables L2 English proficiency and L1 are not confounded: it is not due to a higher level of general L2 English proficiency that the Afrikaans group outperformed the Nguni group on the IT.

4.3.2 Correlation between Implicature Test and English Language Profiler scores

In order to determine to what extent performance on the IT is related to performance on the ELP (and thus English Proficiency) when L1 is not considered (i.e. when participants of all three L1 groups are considered together), a correlation coefficient was established. The correlation coefficient is 0.4977, which indicates a moderate to weak positive correlation between the ELP and IT (see figure 4.5 below). Thus, participants with a higher score on the ELP were likely to do better on the IT. The correlation is weaker in the high percentage groups, indicating that after a speaker has obtained a certain level of proficiency in English, their proficiency no longer has such a strong effect on the accuracy with which they interpret implicatures.

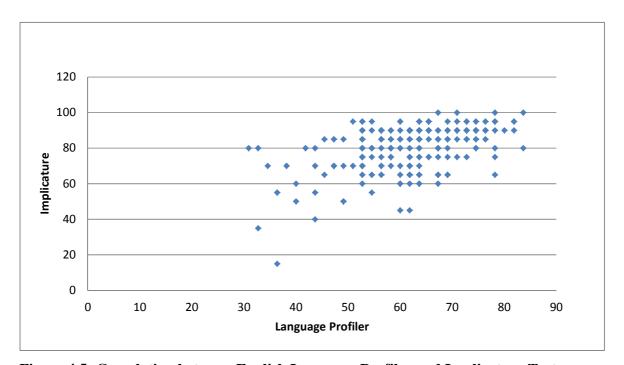


Figure 4.5: Correlation between English Language Profiler and Implicature Test

Additionally, an ANOVA was performed after dividing participants into three groups on the basis of their ELP scores (group 1 = >75%, group 2 = 60-75% and group 3 = <60%) – see table 4.3 and figure 4.6 below.

Table 4.3: Performance of different English Language Profiler proficiency groups on Implicature Test

Level of ELP score	N	Implicature average
3 (<60%)	78	74.551
2(60%-75%)	85	80.059
1(>75%)	46	88.696

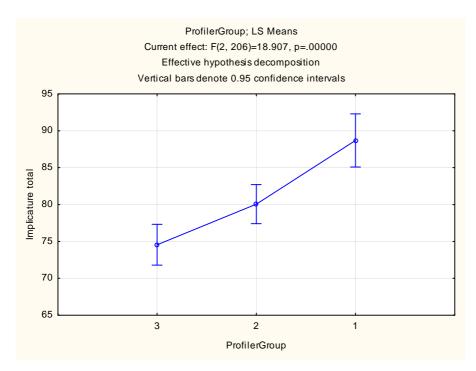


Figure 4.6: Performance of different English Language Profiler proficiency groups on Implicature Test

The results of the ANOVA were in line with those of the correlation coefficient reported at the beginning of this section (4.3.2): the differences between the three ELP groups are significant (p=0.0000), and a regression analysis confirmed a significant weak to moderate positive

correlation between participants' performance on the ELP and their performance on the IT, with a stronger correlation for the lower achieving group.

4.4 Effect of socio-economic status

Although no previous studies have included socio-economic status (SES) as a possible variable affecting the ability to interpret implicatures, it was decided to include it in this study since in South Africa it is a determining factor in access to and success in tertiary education (Fourie, 1999:282).

As an indication of participants' SES, their parents' or primary care-givers' highest level of education (as reported on the BQ) was used. (This is a generally accepted indication of SES.) Participants were divided into five groups on the basis of their responses to the BQ question regarding parents'/caregivers' highest level of education (see table 4.4 below): No formal education; Primary school; High school; College; Technikon/University. These groups' performances on the IT were then compared with each other.

Table 4.4: Performance of different socio-economic status groups on Implicature Test

Level of education	Group	N	Avg	Std dev.
No formal education	A	3	51.67	15.28
Primary school	В	4	78.75	6.29
High school	C	23	72.39	18.21
College	D	31	79.03	14.34
Technikon/University	E	145	81.9	11.38
		206	79.9	13.43

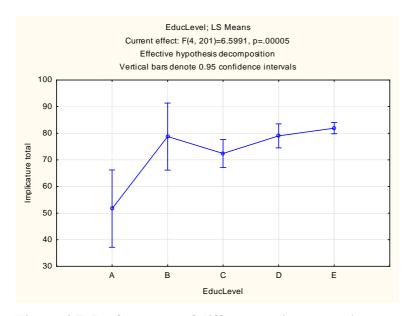


Figure 4.7: Performance of different socio-economic status groups on Implicature Test

An ANOVA was used to compare the average score on the IT of participants from various SES groups and showed that the difference in the groups' performance was significant (p<0.001) (see figure 4.7). The ANOVA indicated that the only significant difference (p=0.03) was between groups A (No formal education) and E (Technikon/University) – there are no significant differences from one SES group to the next along the 5-point scale. Participants from the highest SES group thus performed significantly better on the IT than participants from the lowest SES group.

Recall that it was suggested in section 2.4.4.5 that SES has a significant impact on general language proficiency. For this reason, the various groups' performance on the ELP was also compared with each other (see table 4.5).

Table 4.5: Performance of different socio-economic status groups on English Language Profiler

Level of education	Group	N	Avg	Std dev.
No formal education	A	3	46.08	20.04
Primary school	В	4	55.02	11.54
High school	C	23	58.68	9.08
College	D	31	60.85	9.09
Technikon/University	E	145	62.72	10.72
		206	61.6	10.67

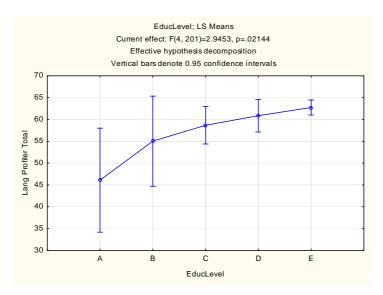


Figure 4.8: Performance of different socio-economic status groups on English Language Profiler

An ANOVA was performed to investigate the relationship between SES and English proficiency. This ANOVA yielded a p-value of 0.0214 (see figure 4.8), indicating that there is indeed a significant difference in English proficiency between the different SES groups. *Post hoc* tests revealed the locus of this significant difference, showing that participants whose parents had had no formal education had a significantly lower English proficiency than those whose parents had a college qualification and than those whose parents had a technikon or university qualification. This shows that there is a relationship between SES and English proficiency, which, in turn,

means that the higher SES group's better performance on the IT might actually be due to this group's higher English proficiency.

4.5 Conclusion

The most important findings based on statistical analyses performed on the data collected for this study were presented in this chapter. Among the most noteworthy findings (which will be discussed in chapter 5) is that there is a significant difference between the way in which NSs and NNSs interpret implicatures. Data supports the premise that L1/cultural group has a significant effect on the ability to interpret implicatures correctly. In addition, the influences of English language proficiency and SES on the ability to interpret implicatures were confirmed by the data.

CHAPTER 5

DISCUSSION

5.1 Introduction

The results from the data analysis presented in chapter 4 indicated significant differences in the way that NSs and NNSs interpreted implicatures in English. Factors affecting NNSs' interpretation of implicatures were identified in the previous chapter; specifically: linguistic and cultural background (L1), English proficiency, and socio-economic status. Possible reasons why these factors impact NNSs' interpretation of implicatures in English will be discussed below in sections 5.2 to 5.4.

5.2 Effect of L1/cultural background

5.2.1 Overall performance on Implicature Test

This study found significant differences in the performance on the IT by different L1/cultural groups. The English NS group's performance differed significantly from the Nguni NNS group's performance, and the Afrikaans NNS group's performance differed significantly from the Nguni NNS group's performance. However, there was no significant difference between the English NS group and the Afrikaans NNS group's performance on the IT.

In cases where the incorrect option was chosen in response to an item on the IT, the responses by the English NS group and the Afrikaans NNS group followed very similar patterns in terms of which option was chosen, and the percentage of the group that chose a particular option. On some items the percentage of participants from the NS group and from the Afrikaans NNS group who selected particular options was identical. In general, there was great similarity in the response options chosen by the English and Afrikaans groups and, in general, this differed from the response options chosen by the Nguni group.

One possible reason for there not being a significant difference between the interpretations by the English and Afrikaans groups is positive transfer effects from the L1 (see section 2.4.4.3.2). Because English and Afrikaans are so similar in terms of their grammatical features (see section 2.6) and in terms of the ways in which implicatures are created and interpreted in the two

languages, it makes sense that Afrikaans speakers will not have much difficulty correctly interpreting implicatures in their L2 English.

The difference in performance between the English and Afrikaans groups, on the one hand, and the Nguni group, on the other, may be explained in part by the differences between the languages. There are much more pronounced differences between English and the Nguni languages and between Afrikaans and the Nguni languages than between English and Afrikaans in terms of grammatical features (see section 2.6). It thus makes sense that speakers of Nguni languages will have more difficulty than Afrikaans-speakers with correctly interpreting implicatures in their L2 English and will therefore misinterpret implicatures more often than Afrikaans-speakers.

5.2.2 Performance on different types of implicature

A *post hoc* distractor analysis performed on the responses by the three groups, as well as a comparison with the responses on Lee's (2002) and Bouton's (1988, 1999) tests yielded interesting results in terms of the groups' performance on the different types of implicatures. Table 5.1 below indicates the different L1 groups' performance in terms of percentage of accurate responses on the individual items in the IT. Note that for each group, the items are arranged from the one that they scored the highest on to the one that they scored the lowest on. The most interesting trends and differences in responses emerging from the data will be discussed per type of implicature in sections 5.2.2.1 to 5.2.2.3.

Table 5.1: Comparison of L1 groups' performances on Implicature Test items

ENGI	ENGLISH NS						
	Ave	Implicature					
Item	Score	Type					
2	99	Relevance					
16	96	Relevance					
1	95	Relevance					
7	94	Irony					
17	94	Irony					
5	93	Pope Q					
8	92	Relevance					
19	90	IC					
10	90	Irony					
20	87	Relevance					
4	85	Irony					
14	81	Irony					
18	78	Relevance					
11	76	Pope Q					
12	75	Relevance					
6	74	IC					
3	68	IC					
13	68	IC					
15	66	Relevance					
9	50	IC					

AFRIKAANS NNS				
	Ave	Implicature		
Item	Score	Type		
1	95	Relevance		
2	95	Relevance		
19	92	IC		
16	92	Relevance		
5	88	Pope Q		
17	88	Irony		
7	87	Irony		
10	83	Irony		
4	81	Irony		
20	81	Relevance		
8	79	Relevance		
14	79	Irony		
6	72	IC		
18	72	Relevance		
3	69	IC		
11	69	Pope Q		
12	68	Relevance		
13	66	IC		
15	56	Relevance		
9	51	IC		

NGUN	NGUNI NNS					
	Ave	Implicature				
Item	Score	Type				
2	100	Relevance				
8	90	Relevance				
6	80	IC				
9	70	IC				
13	70	IC				
19	70	IC				
7	70	Irony				
1	70	Relevance				
12	70	Relevance				
14	60	Irony				
17	60	Irony				
16	60	Relevance				
18	60	Relevance				
20	60	Relevance				
5	60	Pope Q				
11	60	Pope Q				
4	50	Irony				
10	50	Irony				
15	30	Relevance				
3	20	IC				

5.2.2.1 Indirect Criticism

For the implicature type Indirect Criticism (IC), there were no significant differences in performance between the English, Afrikaans and Nguni groups (p=0.625). Differences found in the accuracy with which they interpreted the implicatures were therefore not statistically significant.

The distractor analysis indicated that the NSs did not obtain a high degree of consensus in the interpretation of the IC items, and there is not a single IC item for which all the NSs agreed on a single interpretation. In other words, for every single IC item, there was some variation (sometimes less and sometimes more) in terms of the response options chosen by the NSs. On average, only 70% of the NSs agreed on a particular interpretation for items in this category. Speakers had a high degree of consensus (90%) on one item only, namely item 19 (*If you like the 'big-nose, thin-lips and no-eyebrows-look'*), but the level of agreement for the remaining four items in the category was more varied. For item 9 (*I thought it was well typed*) only 50% of the participants chose the correct option, indicating that this might be a problematic item, and that it

should perhaps have been removed. Yet, Nguni speakers did quite well on the item, choosing the correct option 70% of the time. Bouton found a similar trend among NS responses for IC items on his IT: fewer than 80% of NSs in his study agreed on the interpretation of the IC items (1988:189). Of the five items on which there was least agreement by NSs on the current study's IT overall, four items were IC items (see last five rows of English data in table 5.1). Once again, a similar pattern was noted by Bouton, who found that of the nine items on which there was least agreement by NSs, five items were of the IC type.

The same pattern emerged among the Afrikaans NNSs. In fact, the trend in terms of the percentage of speakers who chose the correct option was exactly the same as for the NSs. The average level of accuracy in the IC category was also 70% and for each item the percentage of Afrikaans NNSs who selected the correct response was either exactly the same as or within 2% of the percentage of correct English NS responses. The Afrikaans NNSs had a high level of accuracy (92%) for the same item as the NS group (item 19 – *If you like the 'big-nose, thin-lips and no-eyebrows-look'*), and of the eight items they scored the lowest on, four were IC items (see last eight rows of Afrikaans data in table 5.1). It should be noted that, although the English NSs and Afrikaans NNSs did not reach a high degree of consensus about the meaning of IC items, there was always a dominant interpretation, i.e. a clear preference for one response option over the others.

What is interesting, however, is that there was a very different response pattern for the IC implicatures among the participants in the Nguni group. This group answered the IC items correctly only 62% of the time. However, of the six items on which Nguni speakers fared the best (see first six rows of Nguni data in table 5.1), four were IC items. Where this type of implicature was the one on which English NSs and Afrikaans NNSs fared the worst, this was the type of implicature on which the Nguni NNSs fared the best.

For example, the item for which English NSs and Afrikaans NNSs had the lowest accuracy rate – of 50% and 51% respectively (item 9) – was an item on which the Nguni speakers fared well, choosing the correct option 70% of the time. This item is provided in (32) below, and

participants' responses are summarised in table 5.2 in terms of the percentage of participants per L1 group who chose each option, respectively.

(32) (IT item 9) Two teachers are talking about a student's term paper.

Mr. Ranger: Have you finished with Mark's term paper yet?

Mr. Smith: Yes, I have. I read it last night.

Mr. Ranger: What did you think of it?

Mr. Smith: I thought it was well typed.

How did Mr. Smith like Mark's term paper?

Table 5.2: Comparison of L1 groups' responses on item 9 of the Implicature Test

	Eng	Afr	Nguni
a. He liked it. He thought it was good.	19%	19%	0%
b. He thought it was important that the paper was well typed.	7%	6%	20%
c. He really did not read it well enough to know.	22%	22%	0%
d. He did not like it. ²²	50%	51%	70%

According to Dlali (a mother tongue speaker of isiXhosa and a researcher with an interest in isiXhosa implicature), IC is an implicature type which is used very frequently in Nguni languages (2011). Its main function is to avoid saying something overtly negative or criticising directly, and is thus an important strategy in this culture that values collectivism and harmony within the group (refer to the discussion of implicatures in collectivistic cultures in section 2.4.4.3.1). By using IC implicatures, a Nguni speaker will be less likely to offend or cause face-threatening situations, since they do not have to overtly express criticism or something that may cause disagreement or conflict (Dlali, 2011). From the high level of consensus on IC items by Nguni speakers, it would therefore seem that the Nguni NNSs generally recognised IC items as being familiar from their own L1/culture and transferred this knowledge to the interpretation of implicatures in English.

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 $^{^{22}}$ Answers that the majority of NSs agreed upon and that were thus taken to be the correct answers are indicated in bold typeface.

The NSs' low score on this item is surprising, since 87% of NS participants in Lee's study (2002:8) and 79% of NS participants in Bouton's study (1988:190) agreed on the dominant interpretation. One possible reason for the apparent discrepancy between the three NS groups' responses may be their level of familiarity with the university context and the criteria for written assignments. Lee's NS participants were graduate students at university and would therefore probably know that "well typed" is not a positive appraisal of a student's assignment. The NS participants in this study were first-year students who had attended university for less than a quarter. It is therefore possible that they consider how well an assignment is typed an important criterion for an academic paper. No information was given on the average age or profile of Bouton's NS group.

In addition, a distractor analysis for this item reveals very different choices made by the different L1 groups. While the majority of English NSs and Afrikaans NNSs realised that Mr Smith's statement was an example of criticism and that he did not like the paper, 19% of participants in both the English and Afrikaans groups interpreted the utterance literally (answer A) and thought that the fact that it was well typed meant the paper was good. None of the Nguni NNSs selected this response. Similarly, 22% of participants in both the English and Afrikaans groups felt that Mr Smith made a truthful comment about the typing (answer C), as he was not in a position to comment on content, since he had not read it well enough. Again, no Nguni NNS opted for this answer. Dlali (2011) suggests that Nguni speakers would most likely not have selected responses A and C because they would have interpreted the statement as indirect criticism: the lecturer is indirectly criticising the paper without explicitly having to say something negative about it and is thus engaging in a face-saving strategy.

Another of the IC items where an interesting response pattern emerged, was item 3 – see (33) below. Table 5.3 indicates the percentage of participants per group who chose each option, respectively.

(33) (IT item 3) Two students are discussing Sarah's blind date the previous evening.

Lerato: How was your date?

Sarah: He has a nice car.

How did Sarah like her date?

Table 5.3: Comparison of L1 groups' responses on item 3 of the Implicature Test

	Eng	Afr	Nguni
a. She is impressed because he has a nice car.	22%	19%	80%
b. She likes him very much.	0%	1%	0%
c. She does not like him very much.	68%	69%	20%
d. She can't tell after only one date.	7%	11%	0%

Although both English NSs and Afrikaans NNSs selected the same dominant interpretation (namely option C for item 3), the percentage of participants who chose this option was not very high (68% and 69% respectively). What is more interesting is that only 20% of the Nguni NNSs answered this item correctly (interpreting the implicature as meaning that Sarah does not like her date very much). Instead, 80% of the Nguni participants considered the answer to be that Sarah was impressed because her date has a nice car. Owning a car is generally considered to be an indication of financial capability, and owning a "nice car" would most likely point to financial and possibly also social status. In Nguni culture, having a nice car would be an indication that a person is "well-placed" in society and of sufficient financial means to be able to provide financially (Dlali, 2011). It is therefore not surprising that so many Nguni speakers (as well as 22% of English NSs and 19% of Afrikaans NNSs) interpreted Sarah's utterance as indicating that she is impressed by his car.

Considering the patterns of responses on this type of implicature, particularly the low level of consensus by NSs and by NNSs, it would appear that this study confirms Bouton's findings (1992:61) that IC items are more difficult for both NSs and NNSs.

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5.2.2.2 Irony

On IT items involving Irony, English NSs performed significantly better than Nguni NNSs, and

Afrikaans NNSs performed significantly better than Nguni NNSs, but there was no significant

difference in the performance of English NSs and Afrikaans NNSs. These results reflect the

same trend as was found for the three groups' overall performance on the IT. The average score

on this type of implicature was the highest of all the types of implicature for both the English

NSs (89%) and Afrikaans NNSs (84%). It was thus not a category that posed a problem for these

two groups. The Nguni NNS group struggled with this category, however, and only 58% of

speakers arrived at the same interpretation as the NSs.

One possible reason for the Nguni group's performance on implicatures of Irony may be related

to culture: while Irony is used in various cultures, its purpose is not the same in all cultures.

Recall from section 2.4.4.3.1 that Lee (2002:15-16) notes that American NSs (as members of a

highly individualistic culture) reported using Irony for sarcasm, to make a point or to criticise.

There is generally consensus among the majority of theorists who have written on Irony that it is

usually negative and critical in nature (Garmendia, 2011:54).

In Lee's study it was reported that Korean NNSs were more likely to use Irony to save face, to

make something less harsh, or for humour (2002:15-16). Just like Korean, Xhosa and Zulu

cultures are examples of collectivistic cultures where in-group harmony is regarded as very

important. Implicatures of Irony do occur in the Nguni languages (Dlali, 2011) and are thus also

likely to be used for similar reasons as in Korean: to make criticism less severe, or for humour.

Consider the following item from the IT:

(34) (IT item 4)

After a difficult meeting where clients did not like any of their ideas for a

new advertising campaign, two colleagues leave the boardroom.

John: That went well.

With this statement, John means that

80

Table 5.4: Comparison of L1 groups' responses on item 4 of the Implicature Test

	Eng	Afr	Nguni
a. the meeting went very well.	3%	0%	0%
b. the meeting did not go well.	85%	81%	50%
c. it could have been worse.	10%	10%	20%
d. he is thankful that at least they didn't get fired.	2%	9%	30%

The majority of English NSs (85%) and Afrikaans NNSs (81%) interpreted John's utterance as meaning that the meeting did not go well. This would be considered an example of saying something negative about the meeting or the presentation. However, only 50% of Nguni NNSs interpreted the utterance in this way (this was one of the items with which the Nguni speakers struggled the most). Interestingly, 20% of Nguni speakers selected option C ("it could have been worse") and 30% selected option D ("he is thankful that at least they didn't get fired"), which are both interpretations that offer a less harsh criticism ("it could have been worse") or even a humorous point of view to lessen the tension of the situation ("he is thankful that at least they didn't get fired").

One could thus argue that, although implicatures of Irony do occur in Nguni languages, they may possibly not be used and (therefore interpreted) in the same way as in English and Afrikaans, and that this was one of the reasons why the Nguni NNSs struggled to interpret implicatures of Irony correctly.

5.2.2.3 Relevance

From the performance on items of Relevance in the IT, it emerged that the English NS group performed significantly better than the Afrikaans NNS group, and that the Afrikaans NNS group in turn performed significantly better than the Nguni group, which means that the English NS group performed significantly better than the Nguni NNSs. For all three groups, the two items that most participants interpreted correctly, were Relevance items (see table 5.1). This finding is consistent with what Bouton found (1988:190), namely that implicatures of Relevance accounted for more than half of the nine items on which NSs had the highest degree of consensus, and also accounted for more than half of the seven items on which NNSs achieved the highest level of

accuracy. The responses on items of Relevance by the NSs and NNSs in this study were similar to the responses by the NSs and NNSs in Bouton's (1988) and Lee's (2002) studies, and percentages of correct responses were also similar. Table 5.5 shows a comparison of the different L1 groups' performances on Relevance implicature items, and also compares their performances to those by Bouton's (1988) NSs and NNSs. The data in the table confirms that, generally speaking, there were similar trends in the responses of the NSs and NNSs in the current study and Bouton's NSs and NNSs.

Table 5.5: Comparison of L1 groups' performance on Relevance implicatures and comparison with Bouton's (1988) NSs and NNSs (expressed as percentages)

		Eng	Afr	Nguni
1	yellow honda	95	95	70
2	strange weather	99	95	100
8	I went jogging	92	79	90
12	glad I never started smoking	75	68	70
15	seen any good movies?	66	56	30
16	boss is retiring	96	92	60
18	mail has come	78	72	60
20	it is February	87	81	60

Bouton NSs (1988)	Bouton NNSs (1988)
100	83
93	56
93	70
100	87
96	72
82	67
93	63

The responses to one Relevance implicature item on the IT, however, did not follow the gerenal trend, and yielded interesting results. See item 15 below:

(35) (IT item 15) Nhlanhla and Dave work in the same department at a company. Some employees have been given a raise, based on their performance during the past year. They walk to their cars together after work.

Dave: So, did you get a raise?

Nhlanhla: Have you seen any good movies lately?

Nhlanhla responds this way because:

Table 5.6: Comparison of L1 groups' responses on item 15 of the Implicature Test

	Eng	Afr	Nguni
a. He didn't hear Dave's question.	18%	30%	10%
b. By hinting that they should go to the movies, he is admitting that he did get a raise.	0%	1%	0%
c. He does not want to answer Dave's question and changes the subject.		56%	30%
d. He is feeling down because he didn't get a raise, and suggests that going to the movies will cheer him up.	15%	12%	40%

Whereas 100% of both Bouton's NS group and Lee's NS group agreed on the interpretation of this implicature, only 66% of the English NSs in this study agreed on the dominant interpretation. Furthermore, 87% of Bouton's NNS group agreed on the dominant interpretation (data for Lee's NNS group was not given). Yet only 56% of the Afrikaans NNSs and 30% of the Nguni NNSs in this study interpreted the implicature correctly. It is also interesting that while 30% of Nguni NNSs interpreted the implicature correctly, the majority (40%) selected option D.

One possible explanation for the differences in the responses of participants in the different studies may involve cultural background. In the USA, where Bouton's and Lee's studies were conducted, going to the movies (or watching them at home) is a very popular pastime and prime form of entertainment (Quart & Auster, 2002:2), especially as movie tickets are relatively inexpensive and DVD rentals and sales are even more so. The phrase "Seen any good movies lately?" is therefore probably a conventionalised way of changing topics, since it would be relevant to the majority of Americans. This may explain why all the American NSs in Bouton's and Lee's studies selected option C.

In South Africa, watching movies is also a very popular hobby, but possibly not to the same extent as in the USA. In addition, in the Nguni culture, going to the movies is not an established and regular activity, and although there are many Nguni speakers who visit cinemas, it cannot be considered as one of the most popular forms of entertainment (Dlali, 2011). The utterance "Seen any good movies lately?" therefore does not function as a conventionalised way of changing the subject as well in South Africa as it does in the USA, particularly among the Nguni NNSs. This may be the reason why relatively few participants selected option C on the IT.

Interpretation of this item could also be linked to lifestyle or SES: if someone considers going to the movies as being relatively expensive and does not do so often, but rather regards it as a luxury, then option B could seem a suitable answer. If someone goes to the movies once in a while for relaxation or to escape from the realities of everyday life, option D might make more sense.

In contrast, consider the following item, which is similar to the previous one, but which yielded a very different set of responses.

(36) (IT item 2) Two students walk out of the exam room where they just wrote a tough Biochemistry exam.

Zimbini: How do you think you did in the exam?

Mmabatho: Strange weather we've been having lately.

What does Mmabatho mean?

Table 5.7: Comparison of L1 groups' responses on item 2 of the Implicature Test

	Eng	Afr	Nguni
a. She forgot to bring her jersey and is not prepared for the weather outside.	0%	0%	0%
b. She wants to change the subject; she doesn't want to talk about the exam.	99%	95%	100%
c. She wrote well, but doesn't want to hurt Zimbini's feelings, as she might not have written so well.	1%	4%	0%
d. She thinks it was a very easy test.	0%	1%	0%

On this item, the vast majority of participants from all three groups agreed on the interpretation. It is the same type of implicature as the previous item (item 15), and the contexts of the two items are very similar: one of the speakers in the conversation is asked a question that he/she does not want to answer, and thus changes the subject to an unrelated topic. In this case, the subject is changed to the weather, a topic often discussed by South Africans engaging in small talk. An utterance such as "Strange weather we've been having lately" is thus a much more conventionalised manner of changing topics in South Africa (than "Have you seen any good

movies lately?") and the participants completing the IT had no problem interpreting the implicature correctly.

The items of Relevance were therefore generally not problematic for either NSs or NNSs. The only notable exception was item 15, which was most likely difficult due to cultural background, and not because the type of implicature posed a problem.

5.3 Effect of English proficiency

The results reported in section 4.3.1 indicate that the English NSs performed significantly better on the ELP than both the Afrikaans NNSs and the Nguni NNSs, but that the two NNS groups did not differ significantly from each other. It can thus be claimed that the NNSs have comparable levels of L2 proficiency. This is important for two reasons: it shows that the ELP is a reliable predictor of NS status (both groups differed significantly from the NS group in their performance on the ELP), and even more importantly, it shows that the Afrikaans NNS group did not outperform the Nguni NNS group on the IT due to a higher level of L2 English proficiency.

The moderate to weak positive correlation between the ELP and the IT in this study (see section 4.3.2) is consistent with most similar studies, which generally report a weak positive correlation between English proficiency levels and the ability to interpret implicatures (see Bardovi-Harlig (2001:26-28) for a discussion of the empirical evidence). This suggests that grammatical competence does not guarantee pragmatic competence, but that a higher level of grammatical competence does make better pragmatic competence possible. Since pragmatic competence in an L2 includes decoding an utterance on a linguistic level, it is understandable that grammatical knowledge of the L2 will contribute towards a NNS' pragmatic comprehension.

A stronger correlation between ELP and IT scores was found for the lower proficiency participants than for the higher proficiency participants in all three L1 groups, probably indicating that once one has reached a certain level of proficiency in English, one's ability to interpret implicatures correctly is no longer increased substantially when one's English proficiency increases. Thus, L2 proficiency only influences the ability to accurately interpret

implicatures up to a certain level of proficiency; thereafter, one's proficiency might increase without being accompanied by an increase in the ability to accurately interpret implicatures.

This makes sense, intuitively, as the type of competence generally tested by proficiency tests is mostly grammatical competence, while the type of competence that is most useful in interpreting implicatures is pragmatic competence (something which does not necessarily keep on developing as one's grammatical competence develops – hence the effect that studies such as those by Bouton (1994) and Taguchi (2007) have shown for pragmatic instruction in L2 classrooms).

5.4 Effect of socio-economic status

Significant differences were found in the interpretation of implicatures by participants (NSs and NNSs combined) whose parents have no formal education (group A) and participants whose parents have a technikon or university qualification (group E) (see table 4.4). The results suggest that participants who come from homes where parents or caregivers have been exposed to higher education, are able to interpret implicatures correctly more often than participants in whose families there is no history of formal education. It is important to note, however, that it is only the lowest SES group that differs significantly from the highest SES group – there are no significant differences from one SES group to the next along the 5-point scale.

As was noted in section 2.4.4.5, SES has an influence on general language proficiency. Furthermore, the data reported in section 4.4 confirms that SES impacted on participants' performance on the ELP: participants whose parents had no formal education demonstrated a significantly lower English proficiency than those whose parents had a college qualification and than those whose parents had a technikon or university qualification. And since English language proficiency influences the ability to interpret implicatures in English (albeit a weak to moderate influence – section 5.3 above), one could say that the higher SES group's better ability to interpret implicatures is due to better English proficiency rather than higher SES *per se*.

5.5 Distractor analysis: Pope Q

Although the two items of the Pope Q type implicature were included in the IT merely as filler items and did not form part of the data for statistical analysis, the responses on one of the items

(item 5) are particularly interesting when one compares the Nguni speakers' responses to those of the English and Afrikaans groups.

(37) (IT item 5) Two roommates are talking about their plans for the summer.

Ziyanda: My mother wants me to stay home for a while, so I can be there

when our relatives come to visit us at the beach.

Joan: Do you have a lot of relatives?

Ziyanda: Does a dog have fleas?

Table 5.8: Comparison of L1 groups' responses on item 5 of the Implicature Test

	Eng	Afr	Nguni
a. Ziyanda has a new dog and is trying to find out about what kind of pest control she should use.	1%	0%	0%
b. Ziyanda is trying to change the subject; she doesn't want to talk about her relatives.	1%	4%	0%
c. Ziyanda has a lot of relatives.	93%	88%	60%
d. Ziyanda hasn't yet met all her relatives and therefore doesn't know how many there will be.		6%	40%

The utterance containing the implicature in Bouton's original version was "Are there flies in summertime?", but it was replaced with the utterance "Does a dog have fleas?" in the IT used in this study because the researcher was not convinced that the answer to the original question would be easily identified as being "obviously yes". The new utterance raised an interesting issue, however. In isiXhosa, if speakers want to indicate a great number of persons or things, they use the expression "like fleas on a dog" (Millie-Qupe, 2011). The expression suggests that there are as many of X as there are fleas on a dog, which is understood by the hearer to be a large number. It is therefore possible that the Nguni speakers understood Ziyanda's utterance in item 5 to mean: "I have as many relatives as there are fleas on a dog." If this were indeed so, they would have still selected the correct answer (option C), but they would not have interpreted the meaning based on the Pope Q type of implicature; rather, they would have interpreted the meaning based on transfer from their L1.

An additional point of interest is the percentage of Nguni NNSs who selected option D, which was selected by only a few English NSs and Afrikaans NNSs. Since there is a tendency within African cultures towards having larger families, and having many relatives and extended relations is not uncommon, it is quite conceivable that Ziyanda has not met all her relatives and that this would be a valid interpretation based on L1/cultural background. In English and Afrikaans cultures, it is more common to have smaller families, and it would be less likely for someone from one of these cultures not to know how many relatives she has.

5.6 Possible correlation between socio-economic status and L1

In sections 4.2.1 and 5.2.1, it was noted that both the Afrikaans speakers and the English speakers fared significantly better than the Nguni speakers on the IT. However, in sections 4.4 and 5.4, it was noted that participants from the highest SES backgrounds also fared significantly better on the IT than participants from the lowest SES backgrounds. Given the fact that South Africa's history led to an uneven distribution of SES across different racial groups, and the fact that all of the Nguni participants in the study are black (as is by far the majority of L1 speakers of these languages), the question arises as to whether L1 might be confounded with SES in this study, i.e. one could ask whether the Afrikaans participants fared significantly better than the Nguni speakers on the IT, not because of linguistic factors – Afrikaans being linguistically more similar to English than the Nguni languages are – but because of social factors, specifically the fact that the Afrikaans participants come from higher SES backgrounds than the Nguni participants. In this regard, consider table 5.9 below.

Table 5.9: Number of participants in each L1 group from the five SES backgrounds

		E	D	C	В	A	
		Technikon/university	College	High school	Primary school	No formal education	Total
Eng	#	69	21	11	2	2	105
Eng	%	65.71%	20%	10.48%	1.90%	1.90%	
Afr	#	72	8	9	0	2	91
AII	%	79.12%	8.79%	9.89%	0%	2.20%	
Nguni	#	4	2	3	1	0	10
	%	40%	20%	30%	10%	0%	

Table 5.9 shows the number and percentage of participants in each group (English, Afrikaans and Nguni) who come from each of the five SES backgrounds, according to their responses to the relevant question on the BQ. As can be seen here, by far the majority of participants in each group come from the highest two SES backgrounds (E plus D): 85.71% of the English participants, 87.91% of the Afrikaans participants and 60% of the Nguni participants. Similarly, by far the minority of participants in each group come from the lowest two SES backgrounds (B plus A): 3.8% of the English participants, 2.2% of the Afrikaans participants and 10% of the Nguni participants (where it should be noted that this 10% constitutes a single participant, given that there were only 10 participants in this group). The most notable difference between the three groups involves the percentage of participants that come from the SES background in the middle, namely C, i.e. participants whose parents' highest qualification was high school: 10.48% of the English participants and 9.89% of the Afrikaans participants fall into this category, compared to 30% of the Nguni participants. The question thus arises whether SES is indeed confounded with L1 in this study. This can be argued to be unlikely, based on the following two observations. Firstly, when the effect of SES on performance on the IT was investigated (cf. sections 4.4 and 5.4), it was found that the only significant difference in performance between the SES groups, was between the lowest SES group (A) and the highest SES group (E). And, secondly, although it sounds noteworthy that 30%, i.e. almost a third, of the Nguni participants come from the SES background labelled "C", it should again be kept in mind that this 30% constitutes only three participants. The argument thus remains that it is L1 and not SES that led the Afrikaans participants to fare significantly better than the Nguni participants on the IT.

5.7 Conclusion

On the IT overall, English NSs and Afrikaans NNSs performed significantly better than Nguni NNSs, but there was no significant difference between the performance of the English NSs and Afrikaans NNSs. The response patterns of the English and Afrikaans groups were also found to be very similar, and in some cases, identical. This may be explained by positive transfer effects from the L1 due to the similarities between English and Afrikaans in terms of grammatical features. Nguni languages differ markedly from English and Afrikaans, among other things in terms of a complex system of noun classification, and this may explain why Nguni speakers experienced more difficulty with the interpretation of implicatures in English.

The different L1/cultural groups did not differ significantly in their performance on the implicatures of Indirect Criticism (IC). An interesting difference was observed in the responses by the groups, however. The English NSs and Afrikaans NNSs displayed low levels of agreement on the correct interpretation of this type of implicature, while the Nguni NNSs displayed a high level of agreement. The English NSs and Afrikaans NNSs therefore found this type of implicature difficult, while the Nguni NNSs did not find it problematic. One reason why the Nguni group did not struggle with this type of implicature may be as a result of L1 transfer: IC is used frequently in the Nguni cultures as a way of avoiding making overtly negative statements or comments.

Participants' interpretation of Irony implicatures reflected the same pattern as for overall performance on the IT: the English NSs performed significantly better than the Nguni NNSs and the Afrikaans NNSs performed significantly better than the Nguni NNSs, but the responses of the English NSs and the Afrikaans NNSs did not differ significantly. This type of implicature did not pose a problem for the English and Afrikaans groups, and they interpreted this type of implicature correctly more often than any other type of implicature. Irony implicatures were difficult for the Nguni group, however, and this was the implicature type to which they responded least accurately. It is possible that Nguni speakers' performance on this type of implicature is a result of negative transfer from their L1: in Nguni languages Irony implicatures are also used, but for a different purpose. Nguni speakers use Irony for purposes that promote ingroup harmony, such as reducing the harshness of criticism, whereas in English and Afrikaans, speakers are more likely to use Irony to express individual opinion, such as sarcasm or criticism.

On implicatures of Relevance, English NSs performed significantly better than Afrikaans NNSs, who in turn performed significantly better than Nguni NNSs. This means that English NSs also performed significantly better than Nguni NNSs. This type of implicature was not problematic for any of the three L1/cultural groups, and occurs as a type of implicature in all three languages. It could thus be that positive transfer from the L1 assisted the NNSs in interpreting this type of implicature.

The results of the three L1/cultural groups' performance on the ELP indicated that the English NS group performed significantly better than both NNS groups, and that there was not a significant difference between the performance of the Afrikaans NNS group and the Nguni NNS group on the ELP. This indicates that the Afrikaans and Nguni groups have comparable English proficiency, and that the Afrikaans group's superior performance on the IT was not due to a higher level of English proficiency.

A moderate to weak positive correlation was found between performance on the ELP and the IT, and points to the fact that while a higher level of English proficiency aids in the ability to interpret implicatures in English correctly (since interpreting implicatures requires an understanding of the utterance on linguistic level), it does not guarantee the ability to do so. It was also found that there was a higher correlation between English proficiency and performance on the IT for lower proficiency participants. This may indicate that English proficiency aids in the ability to interpret implicatures in English up to a certain level; thereafter, the ability to interpret implicatures does not increase as language proficiency increases.

SES was found to influence the ability to interpret implicatures, and participants whose parents have a qualification from a university or technikon performed significantly better on the IT than participants whose parents have no formal education. Since SES was also found to impact English language proficiency, it is possible to argue that the higher SES group's performance on the IT is due to a higher level of English language proficiency.

This chapter offered a discussion of the possible reasons for the impact of L1/cultural group, English language proficiency and level of SES on the ability to interpret implicatures in English. The next chapter will summarise the main findings of this study and highlight the implications that these may have for the academic literacy classroom. In conclusion, some strengths and limitations of the study will be noted and suggestions will be made for future research.

CHAPTER 6 CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This final chapter will briefly recapitulate the main findings of the study reported in this thesis and consider whether the research questions identified in chapter 1 have been addressed. In addition, the implications of these findings for the academic literacy classroom will be considered, with particular emphasis on the question of whether implicatures should be explicitly taught. Mention will be made of the most important strengths and limitations of the study, and in conclusion some possibilities for future research will be highlighted.

6.2 Summary of findings

Based on the results presented in the preceding chapters, the first hypothesis stated in chapter 1 appears to have been confirmed: There is indeed a significant difference between the accuracy with which English NSs, Afrikaans NNSs and Nguni NNSs interpret implicatures in English. On implicatures of Relevance, all three L1/cultural groups differed significantly from each other, while on implicatures of Irony, the English NS group and Afrikaans NNS group did not differ significantly from each other, but both of these groups differed significantly from the Nguni NNS group. There was no significant difference between any of the groups on implicatures of Indirect Criticism.

With respect to the second hypothesis, the influence (to a greater or lesser extent) of L1/cultural group, L2 English proficiency and SES was confirmed. The impact of L1/cultural group appears to be the most significant factor affecting the interpretation of implicatures. L2 English proficiency showed only a moderate to weak positive correlation with the ability to interpret implicatures, and can therefore be considered to be a skill related to and necessary for, but distinct from, the ability to interpret implicatures. The third factor that was considered, namely SES, was also found to influence the ability to interpret implicatures. Yet, since SES also impacted significantly on L2 English proficiency, it can be argued that the higher SES group's performance is related to a higher level of English proficiency.

6.3 Implications for L2 teaching and the academic literacy classroom

The findings above have implications for both language support courses that offer L2 instruction and the academic literacy classroom. A NNS who is unable to identify and interpret implicatures may find intercultural communication difficult: there is the possibility that misunderstandings can arise, or that an utterance may be considered offensive, rude or inappropriate. Such experiences can lead to a NNS feeling excluded from a community and can also reinforce stereotypes of members of different cultures.

In addition, as the ability to make meaning beyond sentence level is considered an integral part of being academically literate at university level (Weideman, 2003a:xi), the findings also have implications for the academic literacy classroom, and in particular the academic literacy classroom in South Africa. In academic discourse, the argument and main points of the text are usually explicitly stated, and in general English speakers expect academic writing to be well structured, logically organised and clear (Hinkel, 1997:361). Several recent studies have however investigated the use of indirectness and politeness strategies (which had thus far only been associated with spoken language) in academic writing in order to reduce the sense of imposing an idea on a reader. Myers (1989:30) suggested that academic texts are structured around stating claims and denying claims, which could be seen as an imposition on readers. Writers therefore employ stylistic features such as the use of pronouns to express solidarity between the writer and the reader; hedging to minimise loss of face; and "personal attribution" when expressing criticism to convey politeness or indirectness (Myers, 1989:30). Indirectness on the part of the writer, and inferencing ability on the part of the reader, are therefore very much integral to academic discourse and a student needs to be aware of the syntactic, lexical and rhetorical strategies that can be employed to convey indirectness (Hinkel 1997:362). A student who struggles to interpret implicatures correctly may not be able to recognise implied meaning in academic texts, or may interpret it incorrectly. Explicit instruction of implicatures would therefore benefit students in both the L2 classroom and the academic literacy classroom.

Before receiving instruction on implicatures, learners should first have an understanding of why speakers choose to use direct or indirect language when communicating. Recall from section 5.2.2.2, for example, that Irony is used differently by English NSs and Nguni NNSs. It is

important for NNSs to gain an understanding of how implicatures work in the target L2 and to not merely provide them with a list of types or features of implicatures.

As was noted in section 5.2.2, different L1/cultural groups were found to struggle more with certain types of implicature than with others. One could therefore argue that NNSs need explicit instruction in only the types of implicature that they find difficult, and that these implicature types can be taught in class like any other aspect of language. It was evident from this study, for example, that Nguni NNSs find Irony more problematic than other types of implicature (section 5.2.2.2).

Learners should furthermore be encouraged to apply their knowledge about language use in their own L1 to the L2. If a NNS is familiar with strategies of indirect communication from their own L1, for example, they may have a better understanding of strategies of indirect communication in the L2, even if the strategies are not linguistically the same in the two languages. (Recall in section 5.2.2.1, for example, the possibility that Nguni NNSs might transfer the use of IC in the L1 to the L2 context.) The principle that a speaker may wish to use particular methods in order to make communication less imposing may be similar in both languages.

Implicatures should ideally be taught using authentic input that the NNSs are likely to encounter outside of the classroom. Initially, lecturers can provide learners with instances of conversational implicatures at utterance level from television/movie clips, cartoons or comic strips, whereafter learners can be encouraged to construct their own examples. Learners may also find it interesting to consider the same utterance in different contexts, and to note the way in which the context determines the meaning of the utterance. Implicatures from more formal and academic texts can then be introduced, in particular examples of implicatures that are developed over several sentences or paragraphs.

In the light of the different purposes and ways of expressing implied language in English, Afrikaans and the Nguni languages, it would therefore seem that explicit instruction of implicatures in the South African L2 classroom and academic literacy classroom could benefit NNSs, particularly those who are studying or reading academic texts through the medium of L2 English.

6.4 Strengths and limitations of study

One of the most significant limitations of this study is the small sample of Nguni NNSs (n=10), particularly when compared to the samples of English NSs (n=107) and Afrikaans NNSs (n=92). This means that the results of the statistical analyses of the data cannot be interpreted as conclusive, but should rather be considered as tendencies. Furthermore, the non-experimental correlational research design adopted in this study can merely indicate the relation between different variables; it cannot point out causality between the variables.

Another important aspect that can be addressed in future research is the question of the relationship between language and culture, and how to determine whether it is a group's culture or their language that leads to a particular (non-target-like) interpretation and production of L2 implicatures.

For a few of the items on the IT, there was not a clear consensus among the NSs about the interpretation of the implicature. A notable example is item 9 (*It was well typed*), where only 50% of the NS group agreed on a particular interpretation. If the NS group on which the test was piloted had been bigger (recall that there were only nine NSs in the pilot group), problematic items such as this may have been identified earlier and may have been discarded in the subsequent version of the IT.

As was mentioned in section 2.5.2.2.2, the IT in the form of a reading instrument was criticised by Taguchi as not corresponding to the real-life context in which implicatures would be encountered. As conversational implicatures are more likely to be heard in conversations than read, Taguchi (2005:548) argued that a listening instrument such as the one he used would be more appropriate. The importance of tone and intonation in the production and comprehension of implicatures is also not considered in a reading instrument. Particularly in implicatures of irony, the intonation or tone of a speaker could influence the hearer's interpretation. The meaning of "He has a nice car", for example, could be interpreted in one way if uttered in a monotone voice

with falling intonation at the end of the sentence (she does not like him very much), and in quite a different way if the speaker's intonation rises at the end of the sentence and the last two words are emphasised (she is impressed because he has a nice car). It is however true that implicatures are not just confined to spoken dialogues. Especially students at a Higher Education institution are likely to encounter implied language in written academic texts and articles, and therefore it can be argued that a reading instrument is not necessarily an unsuitable instrument.

The IT used in this study did not, however, include examples of implicatures from an academic context, and this is another of the limitations that should be noted. The scenarios containing the implicatures were dialogues that would occur in more social settings, and the only instance of implicature that was related to the academic context was item 9 (*It was well typed*). This possibly reduces the generalisability of the findings of this study to the interpretation of implicatures in academic texts.

A further criticism of the IT by Taguchi is that the instrument tests the understanding of implicatures at utterance level only (2005:559). Implied meaning in conversations may often extend over several utterances, and in the case of implied meaning in academic texts, it may be developed over several sentences or even paragraphs.

Despite these limitations, the study does offer valuable insights into the ability of NNSs from various L1/cultural groups to interpret implicatures, particularly since a study such as this has not yet been conducted in South Africa. Furthermore, the study had a clear focus and the results of the data analysis could be used in a meaningful way to address the two research questions. Finally, each of the limitations mentioned in this section could easily be addressed in future research. The study has thus paved the way for future research on the interpretation of implicatures in a target L2 by speakers with different L1s.

6.5 Suggestions for future research

Since the majority of the limitations noted above are related to the IT as instrument, the need for an IT to assess participants' interpretation of implicatures likely to be found in academic texts is evident. A test containing examples of implicatures taken from academic texts, articles and contexts could thus be designed in order to determine whether these types of implicatures pose the same difficulty for NNSs as conversational implicatures, and how NSs fare on these implicatures. For such research to yield meaningful results, however, the sample of Nguni NNSs would have to be larger, and would have to be comparable with the English NS and Afrikaans NNS groups.

6.6 Final remarks

It is hoped that this study has indicated the impact that L1/cultural background clearly has on aspects of pragmatic ability in an L2. The influence of factors such as L2 proficiency and SES must also not be underestimated. Although the study focused on the ability of South African students to interpret implicatures in their L2 English, the implications of the study are significant not only for the academic literacy classroom at SU, but also for interactions between members of different L1/cultural groups in our multilingual, multicultural country: when misunderstandings occur, speakers might be more tolerant towards each other if they realise that different cultures and different languages simply create and interpret implicatures differently. This is particularly relevant in instances where one or more participants are communicating in an L2. An awareness of the factors that can potentially impact intercultural communication should thus hopefully lead to improved communication between cultures.

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Appendix A: Background Questionnaire

QUESTIONNAIRE OF ENGLISH LITERACY

A. PERSONAL		
1. Student number		
2. In which country were y	ou born?	
B. LANGUAGE AND EDU	JCATION	
3. When you were growing	up, what languages were spoken in your home?	
a) Afrikaans	d) Xhosa	
b) English	e) Zulu	
c) Setswana	f) Other (specify below)	
a) Afrikaansb) Englishc) Setswana	d) Xhosae) Zuluf) Other (specify below)	
	u first learn to read and write?	
a) Afrikaans	d) Xhosa	
b) English	e) Zulu	
c) Setswana	f) Other (specify below)	

6. V	What language would you a) Afrikaans	consider your first language? d) Xhosa	
	b) English	e) Zulu	
	c) Setswana	f) Other (specify below)	
7. H	low old were you when yo	ou learned to speak English?	
	a) 1-4 years old	c) 11-15 years old	
	b) 5-10 years old	d) 16-20 years old	
8. V	Vhich language do you us	ually speak now at home?	
	a) Afrikaans	d) Xhosa	
	b) English	e) Zulu	
	c) Tswana	f) Other (specify below)	
9. V	Vhich language do you us	ually speak now socially / with friends?	
	a) Afrikaans	d) Xhosa	
	b) English	e) Zulu	
	c) Setswana	f) Other (specify below)	
10.	What other language(s) d	o you often speak now?	
	a) Afrikaans	f) French	
	b) English	g) German	
	c) Setswana	h) Portuguese	
	d) Xhosa	i) Other (specify below)	
	e) Zulu		

11.	Other than English, wh a) Afrikaans	e) French	
	b) Setswana	f) German	
	c) Xhosa	g) Portuguese	
	d) Zulu	h) Other (specify below)	
	With regards to English	n, how well do you	
12.	1 understand		
	a) very well	c) not well	
	b) well	d) not at all	
12.	2 speak		
	a) very well	c) not well	
	b) well	d) not at all	
12.	3 read		
	a) very well	c) not well	
	b) well	d) not at all	
12.	4 write		
	a) very well	c) not well	
	b) well	d) not at all	
		guage you selected in question 11, how well do you	
13.	1 understand		
	a) very well	c) not well	
	b) well	d) not at all	

13.2 speak	
a) very well	c) not well
b) well	d) not at all
13.3 read	
a) very well	c) not well
b) well	d) not at all
13.4 write	
a) very well	c) not well
b) well	d) not at all
14. Did you have English as	s L1 or L2 at school?
a) L1	b) L2
15. How many years of Eng	dish did you have at school?
a) none	d) 7-9 years
b) 1-3 years	e) 10-12 years
c) 4-6 years	
16. What was the language	in which you went to school or received your schooling?
a) Afrikaans	d) Xhosa
b) English	e) Zulu
c) Setswana	h) Other (specify below)
C. LITERACY PRACTICE	ES
17. How often do you read	the following items in English?
17.1 Newspapers and maga	zines
a) every day	d) less than once a week
b) few times a week	e) never
c) once a week	

17.2 Books	
a) every day	d) less than once a week
b) few times a week	e) never
c) once a week	
17.3 Letters and notes	
a) every day	d) less than once a week
b) few times a week	e) never
c) once a week	
D. DEMOGRAPHIC INFO	DRMATION AND FAMILY LITERACY
18. What is or was your mo	other's/primary female caregiver's first language?
40. 337	
-	other's/primary female caregiver's highest level of education?
a) no formal education	,
b) primary school	e) technikon/university
c) secondary/high sch	1001
20. What is or was your fat	her's/primary male caregiver's first language?
21. What is or was your fat	her's/primary male caregiver's highest level of education?
a) no formal education	on d) college
b) primary school	e) technikon/university
c) secondary/high sch	nool

Appendix B – Implicature Test

ITEM QUESTIONNAIRE

Instructions:

Each item consists of a description of the setting and a dialogue that should be imagined to be taking place in South Africa. After each dialogue there will be a question about what an utterance (sometimes in bold) means. Each question will be followed by four multiple-choice answers. Please choose the answer that seems to best answer the question. If you disagree with all of the multiple choice answers, please write out what you think the answer should be in the blank space labeled "Other". In addition, please rate the degree of difficulty you experienced in interpreting the English expressions on a scale from 1 (not difficult at all) to 5 (very difficult).

Again, simply imagine that you are present when the dialogue occurs and choose the answer that comes the closest to what you think the utterance means.

1. Two friends talk about a mutual acquaintance.

Frank: Helen, do you know where Rudy is? Have you seen him this morning?

Helen: There's a yellow Honda parked over by Sarah's house.

What Helen is saying is that...

- a) she just noticed that Sarah has bought a new yellow Honda.
- b) she doesn't know where Rudy is and changes the subject.
- c) she likes yellow Hondas and wants Frank to see one.
- d) she thinks Rudy may be over at Sarah's house.
- e) Other

Difficulty:						
not difficult at all	1	2	3	4	5	very difficult

2. Two students walk out of the exam room where they just wrote a tough Biochemistry exam.

Zimbini: How do you think you did in the exam?

Mmabatho: Strange weather we've been having lately.

What does Mmabatho mean?

- a) She forgot to bring her jersey and is not prepared for the weather outside.
- b) She wants to change the subject; she doesn't want to talk about the exam.
- c) She wrote well, but doesn't want to hurt Zimbini's feelings, as she might not have written so well.
- d) She thinks it was a very easy test.
- e) Other

Difficulty:						
not difficult at all	1	2	3	4	5	very difficult

3. Two students are discust	ssing Sara	ıh's blir	nd date	the prev	vious evening.				
Lerato: How was your date? Sarah: He has a nice car.									
How did Sarah like her da a) She is impressed becau b) She likes him very muc c) She does not like him v d) She can't tell after only e) Other	se he has ch. ery much one date								
Difficulty: not difficult at all 1	2	3	4	5	very difficult				
4. After a difficult meetin two colleagues leave the b	_		id not l	ike any	•	advertising campaign,			
John: That went well.									
With this statement, John means that a) the meeting went very well. b) the meeting did not go well. c) it could have been worse. d) he is thankful that at least they didn't get fired. e) Other									
Difficulty: not difficult at all 1	2	3	4	5					
			•	3	very difficult				
5. Two roommates are tall		t their p			•				
	king abouts me to so	tay hom	olans fo	or the su	mmer.	our relatives come to			
5. Two roommates are talk Ziyanda: My mother want visit us at the beach. Joan: Do you have a lot of	king about as me to so frelatives e fleas? and is tryinge the so atives. all her re	tay hom? ring to fubject;	olans for a ind out she doe	while, so about wesn't wa	mmer. so I can be there when on the control of the pest control of the the control of the the control of the the control of	l she should use. tives.			
Ziyanda: My mother want visit us at the beach. Joan: Do you have a lot of Ziyanda: Does a dog have a) Ziyanda has a new dog b) Ziyanda is trying to chac) Ziyanda has a lot of rel d) Ziyanda hasn't yet met	king about as me to so frelatives e fleas? and is tryinge the so atives. all her re	tay hom? ring to fubject;	olans for a ind out she doe	while, so about wesn't wa	mmer. so I can be there when on the control of the pest control of the the control of the the control of the the control of	l she should use. tives.			

6. Professor Manzana is a professor of electrical engineering at the University of Cape Town. He has been asked by a local company to write to them about a student of his who applied for a job as an electronics research technician with that company. He agrees to do it and sends the following note:

Dear Mr. Royal,

Michael Ronson has been in two of my courses and has been my advisee for two years. He was present in class almost every day and seemed to pay attention. He turned in his assignments on time, was always quite pleasant, and got along with the other students quite well. I hope this brief description will help you in your consideration of Mr. Ronson's application for the position with you.

If you were Mr. Royal, would you consider this a strong recommendation for Ronson?

- a) Yes, because Professor Manzana says he attends classes regularly, does his assignments and is pleasant.
- b) No, because Professor Manzana did not mention the quality of Ronson's work.
- c) Yes, because if Professor Manzana did not want to help Ronson get the job, he would not have written the letter at all.
- d) No, because Ronson apparently missed class once in a while.
- e) Other _____

Difficulty:						
not difficult at all	1	2	3	4	5	very difficult

7. Bill and Peter work together in the same office. They are good friends. They often have lunch together and Peter has even invited Bill to have dinner with him and his wife at their home several times. Now Peter's friends have told him that they saw Bill out dancing with Peter's wife recently while Peter was out of town on a business trip.

Peter: Bill certainly knows how to be a really good friend, doesn't he?

With this remark, what does Peter probably mean?

- a) Bill is not acting the way a good friend should.
- b) Peter's wife and Bill are becoming really good friends.
- c) Peter and Bill are good friends, so Peter can trust him.
- d) Nothing should be allowed to interfere with the friendship.
- e) Other

Difficulty:						
not difficult at all	1	2	3	4	5	very difficult

Another way the wife could have said the same thing is: a) Today I finally got some exercise jogging. b) I hurt it while jogging. c) It's nothing serious. Don't worry about it. d) I want to change the subject because it is embarrassing. e) Other Difficulty: not difficult at all 1 2 3 4 5 very difficult 9. Two teachers are talking about a student's term paper. Mr. Ranger: Have you finished with Mark's term paper yet? Mr. Smith: Yes, I have. I read it last night. Mr. Ranger: What did you think of it? Mr. Smith: I thought it was well typed. How did Mr. Smith like Mark's term paper? a) He liked it. He thought it was good. b) He thought it was important that the paper was well typed. c) He really did not read it well enough to know. d) He did not like it. e) Other Difficulty:	Jack: What happened to your leg? Wife: I went jogging today.										
9. Two teachers are talking about a student's term paper. Mr. Ranger: Have you finished with Mark's term paper yet? Mr. Smith: Yes, I have. I read it last night. Mr. Ranger: What did you think of it? Mr. Smith: I thought it was well typed. How did Mr. Smith like Mark's term paper? a) He liked it. He thought it was good. b) He thought it was important that the paper was well typed. c) He really did not read it well enough to know. d) He did not like it. e) Other	a) Today I finally gob) I hurt it while jogc) It's nothing serioud) I want to change to	ot some ging. 1s. Don	e exerci n't worr	se joggi y about	ing.		ğ. 				
9. Two teachers are talking about a student's term paper. Mr. Ranger: Have you finished with Mark's term paper yet? Mr. Smith: Yes, I have. I read it last night. Mr. Ranger: What did you think of it? Mr. Smith: I thought it was well typed. How did Mr. Smith like Mark's term paper? a) He liked it. He thought it was good. b) He thought it was important that the paper was well typed. c) He really did not read it well enough to know. d) He did not like it. e) Other	•	1	2	2	4	5	vory difficult				
 a) He liked it. He thought it was good. b) He thought it was important that the paper was well typed. c) He really did not read it well enough to know. d) He did not like it. e) Other	Mr. Smith: Yes, I ha Mr. Ranger: What d	ive. I re id you	ead it la think o	st night f it?		ı paper y	/et?				
Difficulty:	How did Mr. Smith like Mark's term paper? a) He liked it. He thought it was good. b) He thought it was important that the paper was well typed. c) He really did not read it well enough to know. d) He did not like it.										
	Difficulty:										
not difficult at all 1 2 3 4 5 very difficult	not difficult at all	1	2	3	4	5	very difficult				

8. When Jack got home, he found that his wife was limping.

Dadrian and spills his	drink a him aga	all over	Dadria	n's brar	nd new l	eather jacket. Dadria	he is going bumps into an grabs the offender by s friends, turns to one of
Sam most likely mean a) He thinks Dadrian b) He is not sure when c) It is obvious Dadria d) He wants to know e) Other	doesn't ther Da an is ve why Da	drian is ry angr idrian is	as angi y. s so ang	ry as he	looks.	_	
Difficulty: not difficult at all	1	2	3	4	5	very difficult	
11. Some university for skipping class on Frick Jenny: Do you think It Odwa: Does the sun of Odwa is probably trying a) Prof. Rose is definited by Prof. Rose definited by He doesn't know the d) He knows the answer of Other	lay so the Prof. Rocome using to satisfy going ly will a language.	hat they ose is go p in the ay that: ing to g not give er and	y can hat coing to ge east the coing the coing to give the coing the coing to the c	ve a lor give us hese da m a surj a surpria	ng week a surpri ays? prise tes se test o other qu	end. se test on Friday? t on Friday. n Friday. nestion to change the	subject.
Difficulty: not difficult at all	1	2	3	4	5	very difficult	
12. Tumi and Gladys Gladys has only been Gladys: I can't keep Tumi: I'm glad I nev What does Tumi mea a) If Gladys didn't sm b) If Gladys smoked, c) That smoking slow d) She doesn't want to e) Other	doing i up with er star n with t noke, sh she woods s you do	t for a car you. Cated small this remains would be would not be own.	couple of an't you oking. nark? d probate able to	of week u slow o bly go to to run a	down? faster. s fast.	•	day for 3 years, but
Difficulty: not difficult at all	1	2	3	4	5	very difficult	

13. A woman wears a new dress for the first time and asks her friend's opinion about it.

Clarissa: How do you like my Katinka: Well, it certainly is									
Katinka probably means the for a) She thinks Clarissa is brave b) She likes the dress. c) She doesn't like it. d) We can't tell from what she e) Other	because she says.		clothes	that are different.					
Difficulty: not difficult at all 1	2 3	4	5	very difficult					
14. Frans takes his girlfriend Magda out for a sundowner picnic. He goes to great trouble to make sure that everything is perfectly organized. But everything goes wrong: they get attacked by mosquitoes as the sun sets, the wine bottle breaks and spills over everything, and Magda twists her ankle in a hole as they walk to the top of the hill. In the meantime, dark clouds move closer and drops begin to fall.									
Frans: At least it's not raining	g.								
Another way that Frans could say the same thing would be: a) Well, at least it is not raining too hard yet. b) And as if things couldn't possibly get worse, it is raining too. c) The rain is the least of our problems right now. d) The weather forecast said nothing about rain. e) Other									
Difficulty: not difficult at all 1	2 3	4	5	very difficult					
15. Nhlanhla and Dave work in the same department at a company. Some employees have been given a raise, based on their performance during the past year. They walk to their cars together after work. Dave: So, did you get a raise?									
Nhlanhla: Have you seen any good movies lately? Nhlanhla responds this way because: a) He didn't hear Dave's question. b) By hinting that they should go to the movies, he is admitting that he did get a raise. c) He does not want to answer Dave's question and changes the subject. d) He is feeling down because he didn't get a raise, and suggests going to the movies will cheer him up. e) Other									
Difficulty: not difficult at all 1	2 3	4	5	very difficult					
not unificult at all 1	<u>. 3</u>	+	<u>J</u>	very difficult	J				
			116						

16. Jonathan works as a manager for a company. He has been spending long hours at the office – he is

	the mo	_				rdly ever takes his lunch	
Paul: Why work so Jonathan: The boss		ing.					
Jonathan's utterance a) When the boss re b) He needs to comp c) He is the new bos d) He hopes that his e) Other	tires he olete hi ss and n hard w	won't les work leeds to	before to start w Il get no	the boss orking h	leaves. nard so		ob.
Difficulty: not difficult at all	1	2	3	4	5	very difficult	
17. A customer in a arms about. Anothe Gwen: You can tell	er custo	mer loo	king at	_	•	•	nd raving and waving his
Gwen means that: a) You can tell the c b) You can tell the c c) It's not clear how d) The customer has e) Other	ustome upset t	er is ver the cust	y upset omer is	3.			
Difficulty: not difficult at all	1	2	3	4	5	very difficult	
18. A retired couple Mr Brown: What tin Mrs Brown: The po	ne is it' ost (mai	? il) has o	come.	ely			
b) doesn't know wh	at the ti	ime is a	nd cha	nges the	subjec	ght he asked about the r t because she can't ansv	wer it.
	and the	at it mu	st be af	ter 11an	n, becar	can check the time whi use the mail always cor	
Difficulty: not difficult at all	1	2	3	4	5	very difficult	

19. Two friends are looking through photos of models in a women's magazine. Sandra (pointing to one of the models): She's really pretty, don't you think? Natasha: **Yeah, if you like the 'big-nose, thin-lips and no-eyebrows-look'.**

What does Natasha mean?

- a) She thinks the model has interesting facial features.
- b) She thinks that people who like big noses, thin lips and no eyebrows will like her.
- c) She thinks the model is not very pretty.
- d) She thinks the model is pretty, except for her big nose, thin lips and no eyebrows.
- e) Other _____

Difficulty:						
not difficult at all	1	2	3	4	5	very difficult

20. Two Stellenbosch housemates are getting ready to go to class together.

Thabo: Is it very cold outside?

James: It is February.

James is actually saying:

- a) It will be nice and warm today. Don't worry.
- b) Yes, even though it is February, it is very cold outside.
- c) It's so warm this time of year that it seems like February.
- d) Yes, we're sure having crazy weather, aren't we?
- e) Other ____

Difficulty:						
not difficult at all	1	2	3	4	5	very difficult