The Effects of Second Language Status on the Comprehension and Perception of Direct and Indirect Speech in Written Teacher Feedback

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The Effects of Second Language Status on the Comprehension and the Perception of Direct and Indirect Speech in Written Teacher Feedback

by

Rachel Elizabeth Hansen

A thesis submitted to the faculty of

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GRADUATE COMMITTEE APPROVAL

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This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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As chair of the candidate’s graduate committee, I have read the thesis of Rachel Elizabeth Hansen in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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ABSTRACT

The Effects of Second Language Status on the Comprehension and the Perception of Direct and Indirect Speech in Written Teacher Feedback

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Master of Linguistics

This study explores how native and nonnative English speakers understand and perceive directness types in written teacher feedback (WTF). Currently research suggests that indirect speech in WTF will encourage students to think and maintain politeness between teacher and student (Benkendorf, 2001; Riley, 2003; Thonus, 1999; Vassileva, 2000). However, research also indicates that indirect speech may be more difficult to interpret than direct speech (Champagne, 2001; Holtgraves, 1999), which suggests that indirect speech used in WTF may be difficult for students to interpret and use to improve their compositions (Ferris, 2007; Hyland & Hyland, 2001). This difficulty may be even more acute for second language (NNS) learners (Ferris, 2002; Mackiewicz & Riley, 2002, 2003). This thesis will test and propose refinements to this study. In this study, native (NS) and nonnative (NNS) English speaking university students, were given two essays
directness of the WTF. These participants had three main tasks: 1. to identify whether or not WTF requests a correction, 2. to make the correction if requested, 3. to identify perceptions of the teacher and paper based on the WTF. For the first two tasks, accuracy and response times were calculated. Results showed that directness type affects the speed and accuracy of both NS and NNS learners. Direct speech in WTF was more quickly identified than indirect speech (indirect speech acts and hedging). Indirect speech was the slowest and least accurate for both NS and NNS learners in relation to positive WTF. Surprisingly, both NS and NNS were slowest for making corrections on direct WTF. In addition, directness type also affected the perception on the teacher and paper. For example, NS were likely to perceive indirect speech as being from a female teacher. NNS were more likely to give papers with hedged WTF an A and those with indirect WTF a C grade. This study suggests that the directness type of WTF affects how quickly and how well it is understood by both NS and NNS learners. It also suggests that the pragmatic theory may explain why direct speech is processed more quickly than indirect speech (indirect speech acts and hedging).
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CHAPTER ONE
INTRODUCTION

Is how something is said as important as what is said? Research examining written teacher feedback (WTF) seems to suggest that it is (Ferris, 2007; Brinkley, 1993; Warwick, 1994). One method of examining how something is said is to look at its directness. Specifically when addressing WTF, research has looked at the effectiveness of direct and indirect feedback. Direct feedback refers to when a teacher gives the correct linguistic form in the WTF (change “was” to “were”). In contrast, indirect feedback involves the student solving the error that was identified (subject verb agreement error), and requires the student to revise what they have written (Ferris, 2002). Indirect feedback is encouraged because it allows the student to learn how to problem solve which has shown to improve subsequent drafts of his/her writing (Ferris, 2007).

However, despite its suggested use, indirect speech might be detrimental for student comprehension (Hyland & Hyland, 2001). Research suggests that indirect speech is more difficult to interpret than direct speech (Riley, 2002; Riley, 2003; and Ferris, 2007), and students may have difficulty determining the meaning of indirect speech (Shannon, Twale, & Hancock, 1996).

This difficulty may be compounded for second language (NNS) writers (Ferris, 2007). NNS writers often do not have the same pragmatic knowledge as native English speakers (NS) (Ferris, 2007; Riley, 2002). NS may be more able to identify the meaning of WTF than NNS writers due to their understanding of English pragmatics. In order to
ensure that non-native English speakers (NNS) understand, those critiquing student compositions may use more direct speech than indirect speech (Thonus, 2001).

Current research in NNS writing suggests that feedback using direct speech may be more clear and indirect speech may be more polite (Mackiewicz & Riley, 2002; Mackiewicz & Riley, 2003). In order to better understand what makes feedback more clear and polite, these studies have evaluated different forms of indirect speech. Their results suggest that hedging is easier to understand and more clear than indirect speech acts.

Directness type can also affect how people perceive the speaker. For example, users of indirect speech are more likely to be identified as female than male. Hansen & Baker (2006) asked participants to look at WTF on student compositions. They found that directness type in WTF affected how NS viewed the teacher gender as well as experience level. Also, when WTF was direct, the paper was more likely to be viewed as earning an A grade.

However, little research has been done regarding the comprehension and perception of both NS and NNS. Will they follow the same patterns of speed and accuracy? Will NS and NNS be able to accurately make the corrections requested for all directness types? Will positive and negative comments pattern differently for speed and accuracy? Will their perceptions follow the same stereotypes of direct and indirect speech? Does the type of indirect speech (hedging/indirect speech acts) affect comprehension and perception?

This study will modify the methodology of Hansen & Baker (2006) which found that NS were better able to identify an essay’s strengths and weaknesses and be more
likely to understand WTF when the WTF was direct. Also, indirect speech was found to be perceived as coming from a female than a male teacher as well as more likely to be perceived as a new as as an experienced teacher. Directness type also affected how students perceived the writing; direct WTF was more likely to be given an A grade. In order to better understand the findings of Baker & Hansen, the current study made three main modifications of the methodology: subdividing indirect speech into hedging and indirect speech acts, including NNS participants, and recording response times.

**THE PRESENT STUDY**

The present study seeks to determine whether second language status affects the comprehension and perception of direct and indirect speech within the context of written teacher feedback (WTF). The research questions will be:

How does directness affect both Native (NS) and Nonnative (NNS) speakers’

1. speed and accuracy in
   a. identification of teacher positive comments?
   b. identification of negative comments?
   c. the correction process?

2. perception of
   a. the teacher (gender/experience)?
   b. the paper (grade)?

In order to discover the answers to these questions, the current study was designed to test the effects of directness type on processing of WTF. Speed and accuracy and teacher gender, experience level and grade of the paper were analyzed.
The answers to these questions may be applicable to both understanding how
direct and indirect speech are processed and also how direct and indirect speech is
perceived in relation to gender, experience level, and grade. For example, if indirect
speech has the longest response times and lowest accuracy, then we can assert that direct
speech is easier to understand. In addition, if indirect speech acts and hedging vary in
their speed and accuracy, then we can determine that the form indirect speech takes
affects its clarity. Such findings can also explain how students perceive their teachers and
their own papers. These answers will help to inform teachers about the most effective
directness types for WTF. If teachers are better able to clearly and politely give
feedback, students, both NS and NNS writers, will be better able to make improvements
in their writing.

Chapter Two of this thesis is a review of some of the relevant literature in relation
to direct and indirect speech, written teacher feedback (WTF) and second language
learning. The following chapters will focus the present study’s methodology and results.
Chapter Three describes the research methodology, including information on the
participants, stimuli, and data analysis. Chapter Four describes the results of the
experiments. The final chapter, Chapter Five, summarizes the results and discusses the
findings previously described in Chapter Four.
CHAPTER TWO
REVIEW OF LITERATURE

INTRODUCTION

The purpose of this study was to examine how second language status affects the comprehension and perception of direct and indirect speech as used in written teacher feedback (WTF). This study is an expansion of an earlier study, Hansen & Baker (2006), in which native English speaking (NS) participants were asked to make corrections and identify strengths and weaknesses of a college composition based on WTF. It also looked at participants’ perceptions of the teacher’s gender and experience level and the paper’s grade based on the WTF.

Written feedback is used as a method of critique across the international academic world (Riley & Mackiewicz, 2003). Written teacher feedback (WTF) is given to help students improve their writing, which means that students need to be able to understand the meaning of WTF. This comprehension can be affected by the manner or style in which the feedback is given (Thonus, 2002; Ferris, 2003). One of the ways that the manner of WTF can vary is in relation to directness of speech. Teachers may use both direct and indirect speech when commenting on a composition. Currently, educators often use indirect speech to be more polite (Thonus, 1999; Riley & Mackiewicz, 2003; Clark, 1979) and it is generally encouraged in the critiquing process among various disciplines (Benkendorf & Prince, 2001; Vassileva, 2000).

Due to the fact that indirect speech is encouraged, it is important to examine the effects of direct and indirect speech in written teacher feedback (WTF) on student
compositions. Research has shown that indirect speech may be more difficult to understand and take more time to process than direct speech (Champagne, 2001). If indirect speech is more difficult to understand, then it may affect students’ abilities to comprehend and implement corrections from WTF. Comprehension can be further complicated if the WTF is in the student’s second language (NNS) (Ferris, 2002). This study will investigate how university students understand and make corrections suggested in WTF. In addition, this study will also endeavor to determine how the directness of the WTF affects the participants’ perceptions of the teacher and the paper.

This literature review will begin with an explanation of direct and indirect speech. This will be followed by a discussion of how directness is employed when providing WTF, how this application can be complicated for second language (NNS) learners, and finally how directness type influences perception of both the speaker (here the teacher) and the message (here the paper). The final section will discuss the present study, and provide the specific research questions of this study.

**DIRECT AND INDIRECT SPEECH**

When a speaker wants someone to believe something (as with assertions) or to do something (as with requests), the speaker uses different directness types (Clark, 1979). Those being addressed then need to determine the intentions of the speaker.

Direct speech is “intended to have just one meaning, or illocutionary force” (Clark, 1979). For example, a teacher might state “choose a different word.” In this instance, there is only one intended meaning, which is a request. In the example “this is a
great example of onomatopoeia,” there is only one meaning intended by the speaker, which is to make an assertion.

In contrast, indirect speech is defined as speech “implying more or other than what is explicitly said” (Eckert & McConnell-Ginet, 2003). An indirect speech act is one that has a multiplicity of meanings or more than one illocutionary force (Clark, 1979; Searle, 1975). This can be seen as putting disagreements or refusals in a question as in “Would that really be a good idea?” instead of “That is not a very good idea” or using a different form than is expected as in “Is it cold in here?” to request someone to shut the window (Kyratzis & Guo, 2001). To consider a specific example, if one says, “it is chilly in here” as an indirect request, then the two meanings are the literal meaning (a statement of temperature) and also the nonliteral meaning (a request to close a window or make the room warmer). Within the context of WTF, a teacher might use a question for a directive as in “Can you make your verbs agree?” The two meanings include the literal question relating to the capacity of the student and also the nonliteral request to change the verb tenses. Another example could be to use an assertion instead of a request as in “you have a lot of detail here.” This statement also has two potential meanings. The literal meaning is an assertion regarding the quantity of detail while the nonliteral meaning might be a request to change the amount of detail. Within context, indirect speech doesn't have two intended meanings; rather the surface form has a different typical interpretation than the contextually understood actual interpretation. Thus, students must determine the two meanings of these statements and how they need to respond.

A third type of directness is hedging which was introduced by G. Lakoff in 1972 as speech that “makes meanings fuzzier like in the use of ‘sort of’” (Schroder & Zimmer,
Another way to explain hedging is that it “uses terms that soften the message such as *maybe, might, kind of, could possibly* ” (Coates, 1997; Luchjenbroers, 2002). In other words, hedging is the insertion of words or phrases to decrease the intensity of the utterance. In the context of WTF, a teacher might say, “You *might want to* change this to past tense ‘remembered’” or “This is *sort of* a lot of detail.” Both ‘might want to’ and ‘sort of’ decrease the intensity of those phrases and make the meaning of the WTF less clear. The student must determine the intended intensity of the speaker.

Within the context of WTF, research has explained and examined the types of directness differently. Mackiewicz & Riley (2002) for example, have considered hedging a modifier for both direct speech acts and indirect speech acts. This resulted in four types: direct and unhedged comments, direct and hedged comments, indirect and unhedged comments, and indirect and hedged comments. Overall research suggests that both indirect speech acts and hedging make WTF less direct (Ferris, 2007; Hyland & Hyland 2001). For the purposes of this study, indirect speech acts and hedging will be considered two types of indirect speech. Thus only three types of WTF will be possible: unhedged direct speech acts (direct speech), unhedged indirect speech acts (indirect speech acts), and hedged direct speech acts (hedged speech). This will examine particularly how hedging and indirect speech acts affect comprehension and perception in isolation. The next section examines how these three types of directness (direct speech acts, indirect speech acts and hedging) are used in WTF.
TRENDS IN WRITTEN TEACHER FEEDBACK

Written teacher feedback (WTF) is one of the most critical parts of composition teaching because it is used to help students improve their writing (Lee & Schallert, 2007; Ferris, 2007), and yet its effectiveness depends in part on the form which it takes (Hyland & Hyland, 2001; Conrad & Goldstein, 1999).

Due to the importance of WTF, research has studied how teachers can effectively help students improve writing. Based on that research, suggested methods of teacher feedback for NS and NNS have undergone many changes in the past 20 years. A relatively recent change occurred with the movement for “focus on process,” which emphasized the need for teachers to encourage revision without grammatical error correction. This movement began with work by Zamel (1982) and Krashen (1984) and changed the paradigm of NS composition teaching and then second language (NNS) writing (Ferris, 2002). This meant that students provided multiple drafts of essays and were asked to revise them based on more global issues, such as the essay’s organization, content, and flow. The final stage of revision dealt with grammatical error. In an effort to help teachers better develop NNS students’ writing, Gibbons (1991) explains that NNS writing should be critiqued last for “surface” aspects such as spelling, punctuation, and grammar. This suggestion is made so that writers can improve the more universal areas of writing such as form, organization, and cohesion before specific grammatical errors. It is also suggested that during oral conferences with students, that teachers should help students to “express meaning, rather than focusing narrowly on large numbers of surface errors” (Gibbons, 1991).
Though it seems to not be the focus of some research, error correction has also been studied extensively, particularly in relation to the effectiveness of direct and indirect feedback (Ferris, 2002). Direct feedback refers to when a teacher, noting a grammatical mistake of the student, gives the correct linguistic form in the WTF. Thus, the student needs only to repeat what is in the WTF. An example of direct feedback might be “replace remember with remembered” because it gives the student the correct form and does not require the student to problem solve. Indirect feedback involves, for example, the teacher merely underlining the error, and asking the student to determine (1) what the error is and (2) how to correct the error. This involves the student revising what they have written (Ferris, 2002; Ferris 2003). Indirect feedback is encouraged because it allows the student to learn how to problem solve which has shown to improve long term learning in longitudinal studies (Ferris, 2002; Lalande, 1982; Frantzen, 1995; Ferris et al, 2000). Evidence of this approach appears in *Writing Tutorial Services Guide to Tutoring*, a guide for the tutoring services at Indiana University. The guide describes the role of tutoring as: “It is important that you coach and not fix” (Thonus, 1999). This encourages teachers to allow their students to think.

In a longitudinal study that examined both short term and long term affects of WTF, direct feedback seemed to help students more than indirect feedback make correct revisions from one draft to the next (direct = 88%, indirect = 77%) (Ferris et al, 2000). However, as the semester continued, indirect feedback helped students reduce error-frequency more than direct feedback. This would suggest that due to the immediate comprehensibility direct feedback is more easily applied to make revisions. This study
would also suggest that in relation to long term learning, indirect feedback facilitates more student improvement.

Another reason, why indirect feedback is encouraged is that it allows the student to maintain control of their writing (Thonus, 1999; Thonus, 2003; Ferris, 2003; Ferris, 2007; Hyland & Hyland, 2001). When students are able to make decisions about their papers it avoids appropriation by the teacher. Appropriation is viewed as taking over the student’s writing and may be detrimental to his/her learning. Thus the current view of WTF encourages student thought and discourages teacher over-involvement. Teachers, and also tutors (Thonus, 2004), must “balance intervention (helpful) and appropriation (harmful)” (Ferris, 2007; Gibbons, 1991). Within the context of indirect feedback, indirect speech is seen as a means of achieving a balance between intervention and appropriation. For this reason, Ferris suggests “making hedged suggestions” and indirect speech acts, particularly questions (2007).

An additional reason that indirect speech is encouraged is that it is perceived as more polite than direct speech (Clark, 1979; Thonus, 1999; Riley & Mackiewicz, 2003; Mackiewicz & Riley, 2002). Teachers may use politeness strategies, such as indirect speech, to soften a face-threatening situation (Mills, 2003). In general, females may use indirect speech to be “considerate” (showing solidarity) (Eckert & McConnel-Ginet, 2003). One of the ways that women are “considerate” with indirectness is to maintain a collaborative, equal partnership in conversations (Coates, 1997). Also, female managers also use indirect speech such as hedges and off record comments to give criticism and suggestions instead of using direct and more aggressive speech (Holmes, 2006).
Teachers often need to soften face-threatening acts when critiquing student compositions (Hyland & Hyland, 2001; Ferris, 2007; Lee & Schallert, 2008).

In summary, the current trend in WTF encourages teachers to use indirect speech as a part of the indirect feedback. This allows the student to rethink what they have written and learn how to avoid future error. In addition, the use of indirect speech can allow the teacher to avoid appropriation and to be more polite.

**INDIRECT SPEECH COMPREHENSION DIFFICULTY**

Despite its suggested use, indirect speech might be detrimental for student comprehension. Research suggests that indirect speech is more difficult to interpret than direct speech (Mackiewicz & Riley, 2002; Riley & Mackiewicz, 2003; and Ferris, 2007), takes longer to process than literal speech as shown in the longer response times (Champagne, 2001) and is believed to take more mental processes to interpret (Holtgraves, 1999). Studies have also shown that students may have difficulty determining the meaning of indirect speech. In the context of WTF, NNS writers expect correction (Ferris, 2007; Hyland & Hyland, 2001; Lee & Schallert, 2008; Ferris, 2002; Ferris, 2003) and thus may not expect indirect or polite forms. This may inhibit their ability to understand the intent of the WTF because feedback has positive and negative comments (Ferris, 2007) and therefore students may be unsure whether an indirect speech act is meant as a compliment or a requested change (Hyland & Hyland, 2001). A student may find it difficult, for example, to know whether a statement such as “you have a lot of ideas here” is a compliment or if it is an indirect request to delete material. A recent study by Shannon, Twale, & Hancock (1996) found that most Humanities students were unaware that “too much detail; not enough analysis” was a criticism and that the teacher
was requesting to revise the paper. Due to comprehension difficulties in WTF, researchers in higher education are beginning to advocate new methods for improving WTF that involve making feedback more understandable and therefore useful to students (i.e., Higgins, Hartley, & Skelton, 2002).

The idea that indirect speech is more easily misunderstood and harder to process is supported by pragmatic theory (Searle, 1975) which postulates that when multiple meanings (literal and non-literal) are possible, the hearer must first consider the literal meaning before considering the non-literal meaning. More recently, it has been suggested that understanding non-literal language constitutes a kind of problem solving (Honeck, 1997; Honeck & Temple, 1994) in which the literal meaning must be identified, then rejected, and then used with inferences to understand the non-literal meaning. An example of this process can be shown with the question, “Can you pass me the potatoes?” According standard interpretations of pragmatic theory, the hearer must first identify the literal meaning, in this case it questions the ability of the hearer to give the potatoes to the speaker. This question of ability would be considered by the hearer and probably rejected as the intention of the speaker. Then the hearer must use the literal meaning and context to determine the meaning. Hopefully this would eventually result in the hearer deciding that the speaker wanted the potatoes and was indirectly requesting them. This would assume that processing time for non-literal language (such as indirect speech acts) would take longer than literal language (direct speech).

However, other research has not supported this assumption (Gibbs, 1979, 1984, 1989). Gibbs (1984) demonstrated that indirect sarcastic requests such as “I sure love a messy room” which means “clean up your room”, were actually processed more quickly
than literal uses of the same sentence and nonsarcastic indirect requests ‘would you clean up your room?’. This study suggests that indirect requests (sarcastic or nonsarcastic) are not more difficult to process than literal ones. If the standard interpretations of pragmatic theory were accurate, then the processing of the sarcastic comments should have taken longer than direct speech.

The assumption that literal meaning is processed before non-literal meaning was also questioned by Glucksberg, Gildea, and Bookin (1982). They calculated response times for participants to determine if a sentence was literally true or not. The sentences used were comprised of statements that were literally and metaphorically true, only literally true, or only metaphorically true. If the literal meaning was always processed first, then the existence of metaphorical information would not affect response times. However, the study found that participants took more time to identify that a sentence was literally false if it was metaphorically true. This would suggest that literal and non-literal meanings are processed simultaneously. If this is true, then indirect speech (non-literal) should not be processed more slowly than direct (literal) speech. This would explain why Gibbs did not find longer response times for indirect speech acts than direct speech.

In order to explain why non-literal meanings can be processed quickly, the conceptual metaphor theory argues that non-literal expressions are not “creative expressions but rather instantiations of underlying conceptual metaphors” (Carroll, 2004). Thus, non-literal utterances are accessed quickly because they are linked to conceptual metaphors (Gibbs, 1994). It is suggested that the standard direct-before-indirect or literal-before-nonliteral interpretation of pragmatic theory might be utilized for non-literal utterances that we have not heard before (Carroll, 2004) which has implications for WTF
and the expectation of the students. If students are familiar with WTF that uses indirect speech, they may be more likely to process the non-literal meaning instead of the literal meaning.

Thus, from earlier research it is still unclear whether direct or indirect speech acts are easier and faster to understand. Research suggests that indirect speech is more likely to be misunderstood than direct speech particularly in the use of indirect speech acts. The multiplicity of meanings (literal and non-literal) may complicate the comprehension process of WTF. This might be explained by the standard interpretation of pragmatic theory which assumes that the literal meaning must be processed before the non-literal meaning. However, some earlier research has not shown a longer processing time for non-literal utterances. This might suggest that indirect speech in WTF may not be more difficult than direct speech for students to understand. In order for the comprehension of WTF to be better understood, this study will examine accuracy and response time.

**Indirect Speech and Second Language**

One factor that may influence how quickly and accurately indirect speech is processed is second language (NNS) status. NNS writers need error correction because they have issues not only with L1 transfer but also incomplete understanding of their NNS (Ferris, 2002; Hyland & Hyland, 2001; Thonus, 1999; Matsuda, Cox, Jordan & Ortmeier-Hooper, 2006). Thus for NNS writers, comprehension of WTF is crucial for improvement. However, the comprehension issues of indirect speech can be further complicated when the student is writing in their NNS (Ferris, 2007).

Because directness types may be used differently in their L1, a L1 can affect how directness types are used in an L2. One study that has looked at the interaction of L1 and
L2 in relation to requesting behavior divided the participants into three groups: Chinese speakers, Chinese ESL speakers, and English speakers (Yu, 1999). The results of this study determined that Chinese speakers displayed the most direct forms of requests, followed by Chinese ESL speakers, and that English speakers displayed the fewest. The existence of more direct requests among Chinese ESL speakers would suggest L1 transfer of pragmatic use.

In contrast, Vassileva (2000) found that L1 pragmatic use was not directly transferred into NNS. She divided the participants into three groups, Bulgarian speakers, Bulgarian ESL speakers, and English speakers. This study looked at writing style, particularly hedging, in academic writing. The Bulgarian ESL was the most distinct among the three groups. It seems that Bulgarian ESL speakers use more hedging at the beginning of their writing and less at the end. This is the opposite pattern of English speakers. In contrast, Bulgarian speakers had a constant amount of hedging throughout their writing and did not flexuate like the English speakers. This would suggest that the pragmatic use of hedging from their L1 did not transfer directly into their NNS for Bulgarian ESL speakers. These patterns of production might infer that one’s comprehension of directness types in L1 can affect how they are perceived in NNS. Research needs to be done to not only clarify pragmatic transfer in production but also to understand how it affects perception.

In addition, NNS writers often do not have the same pragmatic knowledge as NS (Ferris, 2007; Mackiewicz & Riley, 2002). This may be due to the fact that often NNS learners have less exposure to English politeness strategies. Further complicating this issue of comprehension, indirect speech acts that have multiple meanings can be
interpreted for both meanings. For example, in the WTF “this paragraph would be clearer in the active voice” can be interpreted as an assertion or as a directive to change to active voice (Mackiewicz & Riley, 2002). Due to increased exposure, NS may be more apt to identify this as a directive due to their understanding of English pragmatics, as shown by the pragmatic theory (Carroll, 2004).

An especially difficult form of indirect speech acts for L2 writers may be the use of questions for WTF (Ferris, 2007). In the example of “Can you give an example here?” students might not realize that the question is an indirect speech act and not make the correction. Another concern with questions is that though students are more likely to read and try to incorporate WTF than ignore it, they might not know how to incorporate the suggestion into his/her text (Ferris, 2007; Hyland & Hyland, 2001; Ferris, 2002).

Indirect speech may be less clear for NNS writers than for NS (Thonus, 2004). In fact, Thonus (2004) observed the interactions of tutors with NS and NNS writers for a decade, looking at various factors in the interaction, one of which being the use of hedging. Tutors were less likely to use hedging with NNS than NS. In fact, the lowest use of hedging in a NS tutorial was still higher than the highest incidence in an NNS tutorial. In addition, tutors were also found to intensify directives by using phrases such as “you have to” when speaking to NNS. It may be that the need for clarity discourages the use of indirect speech by these tutors. When looking at student response to tutor indirect speech, Thonus suggests that it is the comprehensibility of direct speech that makes it a preferred method of feedback for NNS writers (Thonus, 2003).

In contrast, other researchers suggest that indirect speech is preferred when working with NNS writers due to its politeness (Mackiewicz & Riley, 2002). For
example, Mackiewicz & Riley (2002) discuss the notion of speech act in the specific situation of critiquing NNS writing. In order to discuss the clarity and politeness of feedback, they examined different forms of indirect speech and contrasted them in relation to clarity and politeness with direct speech, with the assumption that direct speech is more clear than indirect speech acts. In their evaluations, hedging however was considered high-clarity speech and thus more clear than indirect speech acts. These authors made a few recommendations based on their analysis. One of these recommendations was that if clarity was the most important goal of feedback, one should use direct speech. If needed, hedging is a way to make a direct speech act more polite. It also stated that hedging such as “you could…” can be misinterpreted as being an optional choice. Thus hedging should be avoided if the teacher, or in this case editor, is requesting a change. In addition, interrogatives should be avoided if the intent is to convey a directive.

An additional paper looked at different groups of NNS and the relationship of clarity and politeness. Riley & Mackiewicz (2003) examined a clarity continuum of three levels: high clarity, medium clarity and low clarity. Each of these levels was subdivided according to degree of directness. This continuum used direct speech [Use a synonym for this word], indirect speech acts [Should you use a synonym for this word] and hedging [A synonym for this word could be used]. The examples used often were hedged indirect speech acts. Their research suggests that NNS may use more direct speech than NS. A review of previous research shows that NNS English speakers from Malaysia and China used more impolite forms than NS such as “your hair is quite messy. Why don’t you comb it?” (Banerjee & Carrell, 1987). In addition, German speakers used more direct
complaints in German than English speakers who were more likely to use indirect speech acts (House & Kasper, 1981). The results of this study suggest that teachers or editors must moderate their uses of directness to remain clear and polite. It is also suggested that erring on the side of directness will provide more clarity. Both this study, Riley & Mackiewicz, 2003 and the previous study Mackiewicz & Riley, 2002, looked primarily at clarity and politeness in relation to criticism given to NNS writers.

One of the weaknesses of the Riley & Mackiewicz papers is that they do not examine positive feedback. Teachers are encouraged to give positive feedback as well as negative feedback (Hyland & Hyland, 2001; Scott & Coate, 2003). The issues of clarity therefore are not important only for negative feedback. If a teacher makes a positive comment and the student does not understand the meaning of the WTF, he/she might make unnecessary changes to their papers.

Positive feedback in WTF can boost student confidence and make the feedback process less uncomfortable (Scott & Coate, 2003). In the initial stages of a research project looking at WTF in stages of a research project and on written drafts, teachers have been found to frequently use feedback “sandwiches” in the UK. This is explained as beginning with something positive, followed by something the needs to be changed or overcome and ends with further encouragement (Scott & Coate, 2003). It is suggested that when criticism is situated between positive feedback, it lessons the power of the teacher and thus the asymmetry of the relationship between teacher and student. This reinforces that positive and negative comments are not only encouraged, but used by teachers.
Examining both WTF and also students’ use of WTF, Hyland & Hyland (2001) researched the use of and the comprehension of different directness types with positive and negative WTF. Both teachers used positive and negative comments, though the majority of the positive comments were reserved for the final drafts. Both teachers used hedging, indirect speech acts (interrogatives) or other tactics to mitigate their WTF. Some of the feedback involved multiple forms of hedging as in “[s]ome of the material seemed a little long-winded and I wonder if it could have been compressed a little” (Hyland & Hyland, 2001). In this comment, “some” “seemed” “little” “wonder” “could” and “a little” all seem to lessen the impact of the teacher’s request. Hedging also occurred in praise, as in “fairly clear and accurate” or “you show a reasonable understanding of this.” Such findings suggest that this hedging is actually used to point out a weakness. Interrogatives were also used as in “do you want to add more ideas?”

In summary, Hyland & Hyland concluded that teachers were motivated to mitigate their WTF to allow student ownership, to avoid face-threatening situations, and also to develop good relationships with their students. Despite the positive motivation, students expressed that they frequently misunderstood WTF that was mitigated. The results for student misunderstanding for this study were not quantifiable. If the misunderstandings of the students can be quantifiable, then it will enable researchers to understand specifically what is and is not clear about direct and indirect speech in WTF. This will allow teachers to pinpoint and improve the flaws of their WTF.

In summary, research shows that NNS learners may have difficulty understanding WTF. This could be due to L1 transfer or a lack of pragmatic understanding. Recently research has looked at not only theoretical suggestions for WTF but also looked at the
specific issues of clarity and politeness. It is suggested that like NS, NNS writers may perceive indirect speech as being more polite than direct but have more difficulty in understanding it.

**PERCEPTION OF TEACHER**

The above research demonstrated the importance of examining directness in WTF in terms of its effectiveness. However, directness may also affect how the teacher and the paper are perceived. Research has shown that speakers using indirect speech may be perceived differently than those who use direct speech, such as more polite (Mills, 2002; Eckert & McConnell-Ginet, 2003). Thus, speakers who are more indirect may be seen more favorably than those who use direct speech (at least in appropriate situations). However, using indirect speech can also be perceived as a negative personality trait. For example, Leaper (2004) found that speakers who used indirect speech were rated as less likable than those who used more direct speech. What this suggests is that students may perceive teachers who use indirect speech as being polite or as being less confident and even less likable.

Also, indirect speech may be more likely to be identified as female than male. Females are more prone to produce indirect speech and males direct (Mulac, Bradac, & Gibbons, 2001; McKelvie, 2000; Macaulay, 2001). Other studies in contrast have also shown that females do not use more indirect speech than males (Brumark, 2006; Anderson & Leaper, 1998). However, there is a greater consensus that gender does influence how and how often indirect forms of language are used (Holmes, 1995; Holmes, 2005; Macaulay, 2001; McKelvie, 2000).
Hansen & Baker (2006) found that directness type affected NS perception of teacher gender and experience level. Participants were more likely to label indirect WTF as being written by a female teacher. In fact, female NS were 3 times more likely to identify indirect speech as female than male.

As an additional question, participants were asked if they thought the teacher was new or experienced in order to determine whether indirect WTF was perceived to be written by a less experienced teacher. Hansen & Baker (2006) suggest that indirect speech was also more likely to be labeled as coming from a new teacher which may affect the students’ confidence in their teacher’s abilities or knowledge. Student confidence in the knowledge of the teacher can affect their application of WTF, as Lee & Schallert (2008) concluded when they examined how the relationship of the teacher and student affect the overall progress of the student and also how they applied WTF. The particular context for this study was an EFL college class in Korea. One student’s trust in the teacher increased after “precise oral and written comments on mistakes he made.” This student’s reaction would suggest that direct speech in WTF might have influenced this student’s perception of her knowledge and ability as a teacher. Later on in the course, this student did not continue to use the teacher’s feedback. One specific comment “not that relevant or interesting” gave him the impression that it give him permission to keep the sentence unchanged, which he chose after deciding that it “sounded ok”. Overall this study showed that the students’ response to WTF was based upon the student trust in the accuracy of the WTF. This would suggest that the perception of experience or ability of a teacher can directly affect how much students apply WTF.
Due to the effects of student perception of the teacher, the current study will attempt to determine the influence of direct and indirect speech on perceptions of the gender and experience level of the teacher. This might affect how effective the WTF is perceived by the student. If a student perceives the WTF as coming from a less experienced teacher, he/she might be more likely to ignore the feedback. In contrast, if a student perceives that the WTF is from an experienced teacher, he/she might be more determined to apply the feedback in their writing. Students might also be affected by the perceived gender of the teacher. If students expect female teachers to use indirect speech in WTF and receive direct speech, the student may perceive this WTF as less polite. In contrast, if a student expects a male teacher to use direct speech in WTF and receives indirect speech, he/she may be more prone to view the WTF as an optional suggestion.

**PERCEPTION OF PAPER**

WTF on compositions contain both positive and negative comments (Ferris, 2007). How the directness type of WTF affects perception of the paper quality has not yet been researched. However, it is possible that directness type not only affects how accurately and quickly students are able to understand WTF, but it may also influence their perceptions of their own writing ability. If students are unable to understand, for example, if a comment is positive or negative, they may not make the requested corrections, and may be surprised and confused that their paper did not receive a higher grade.

While looking at NSs’ reaction to directness types in WTF, Hansen & Baker (2006) asked participants to identify what grade the paper earned, according to the WTF. NS were more likely to label the paper as an A when WTF was direct. This may have
interesting implications. If direct speech is more likely to be labeled as an A than indirect speech, one of three things might be going on: (1) direct positive comments are seen as more complimentary than indirect positive comments, (2) direct negative comments are seen as less critical than indirect negative comments, or (3) students are better able to understand the feedback from the teacher. These findings may also suggest that students may feel unduly confident or discouraged about their own abilities as a writer because they are unable to gauge how well they are doing based on the feedback of the teacher.

**THIS STUDY: THE EFFECTS OF SECOND LANGUAGE STATUS ON THE COMPREHENSION AND PERCEPTION OF DIRECT AND INDIRECT SPEECH AS IN WRITTEN TEACHER FEEDBACK**

As discussed in the previous sections, research has shown that directness type (direct vs. indirect speech) are employed by speakers for differing reasons. Direct speech is often used because it is clear to the hearer, while indirect speech often allows for more politeness (Riley & Mackiewicz, 2003). Research also suggests that indirect speech is more difficult for hearers to understand and is more likely to be misunderstood (Holtgraves, 1999). This can be particularly problematic in WTF because it is supposed to guide and instruct writers how to improve their writing (Ferris, 2007; Hyland & Hyland, 2001). Understanding this feedback is important in actual improvement of writers (Ferris, 1997). An inability to understand can be further complicated when the WTF is in the NNS of the writer (Ferris, 2007). Research has shown that NNS learners need clear feedback in order to understand the meaning of the WTF (Lee & Schallert, 2008). In addition to comprehension, WTF may affect how students perceive their
teachers and their papers. This may affect their relationship with their teacher and also their motivation to improve their writing. Thus understanding the effects of directness type on WTF can aid teachers not only in making WTF more understandable but also more appropriate (polite). In addition, it will allow teachers to write WTF which will situate themselves as experienced teachers and encourage progress in student writing.

In order to better understand the effects of directness type in WTF on NS and NNS, this study is loosely based on Hansen and Baker (2008). Hansen and Baker (2008) focused their study on the comprehensibility of WTF and also how it affected student perceptions of the teacher and the paper. They found Native English speakers (NS) were better able to identify an essay’s strengths and weaknesses and be more likely to understand WTF when the WTF was direct. Also, indirect speech was found to be perceived as coming from a female than a male teacher as well as more likely to be perceived as a new than as an experienced teacher. Directness type also affected how students perceived the writing; direct WTF was more likely to be given an A grade. Some parts of Baker & Hansen left unanswered questions and made interpretation of these findings difficult. In order to better understand the findings of Baker & Hansen, the current study made three main modifications of the methodology: subdividing indirect speech into hedging and indirect speech acts, including NNS participants, and recording response times.

In Hansen & Baker (2006), WTF was divided into only two categories: direct and indirect speech. There was no attempt to distinguish between indirect speech acts such as “this is hard to understand”, hedging “you could be a little clearer here”, or vagueness “who?”. Research suggests that types of indirectness may differ in how easily
participants are able to understand them (Mackiewicz & Riley, 2002; Riley & Mackiewicz, 2003; Hyland & Hyland, 2001; Ferris 2007). It is possible that indirect speech acts in WTF are more easily processed than hedged WTF. In addition, the perceptions of the teacher and paper may be affected by the type of indirect speech. For example, hedging may be seen as being a new teacher while indirect speech acts may be perceived as coming from an experienced teacher. In addition, students might have perceived direct WTF as being attached to an A paper because the positive comments were more clear when direct speech was used than when indirect speech acts were used. Thus the comprehension and perception of WTF may be greatly affected by the type of indirect speech utilized. In order to determine the effects of types of indirect speech, the present study has three categories of WTF: direct speech, indirect speech acts and hedging.

A second change from Hansen and Baker (2008) was the inclusion of both NS and NNS. Though current research for L1 and NNS writing is quite often isolated (Ferris, 2003) due to the differences found between NS and NNS writers, much can be gained by looking simultaneously at both NS and NNS. Looking at the results of both NS and NNS will enable a view of trends among NS and NNS students. It may be found that both follow the same patterns of comprehension. In contrast, NS and NNS might follow similar patterns of speed but different patterns of accuracy. This can help to better explain NNS and L1 processing and similarities between those systems. The need to understand how both NS and NNS understand and perceive WTF is increasingly more practical due to the fact that most classrooms have a combination of both NS and NNS students (Matsuda, Cox, Jordan & Ortmeier-Hooper, 2006). Not only are NNS moving to
English speaking countries for schooling, but also prior to schooling and must negotiate the meanings of WTF as a bilingual (Matsuda, Cox, Jordan & Ortmeier-Hooper, 2006). This growing number of students is sitting side by side with NS in the classroom. NS and NNS might view teachers quite differently as a result of WTF. It may be that though NS view indirect WTF as female and inexperienced, that NNS view indirect WTF as male or experienced due to L1 transfer or its inherent politeness. This can also affect the students’ perceptions of their writing. NNS might view indirect WTF as more likely to receive an A due to its hedged negative comments. This may affect how they make corrections. Due to the differences among NS and NNS, a study that compares both can help to see differences and similarities between the two groups. Because the comprehension and perception of WTF can affect students’ progress, teachers must understand how NS and NNS compare in comprehension and perception of WTF.

Another change that will help to clarify the results of Hansen & Baker (2006) is the use of recorded response times. Baker & Hansen examined only the accuracy of student responses which was determined by their identification of requested corrections and making corrections. They found that students were more likely to accurately identify requested corrections and also the strengths and weaknesses of the essay when the WTF was direct. This finding would suggest that direct speech is more easily understood than indirect speech. However, processing time can also help to explain the actual processing difficulty of directness types. As demonstrated by Gibbs (1986) and Champagne (2001), response times frequently demonstrate processing difficulty. Comprehension of directness type might be more complex than just student accuracy. An example of this complexity may be if participants are just as accurate on identification and correcting
WTF but are slower for indirect speech than direct speech. In this situation, indirect speech may still be more difficult to understand than direct speech. If response times show greater processing time for indirect speech, it may show that indirect WTF may not be as effective as direct WTF. This can also help teachers identify which directness type to choose. If a teacher is concerned about immediate understanding, he/she might chose to use the directness type with the fastest response time. However, if the teacher is concerned most with the student’s ability to accurately make a correction, he/she might chose the directness type with the highest accuracy rate.

The current study hopes to add more understanding to research on directness type, WTF, and also the processing of NS and NNS. The changes outlined above will help to answer the following research question:

How does directness affect both Native (NS) and Nonnative (NNS) speakers’

1. speed and accuracy in
   a. identification of teacher positive comments?
   b. identification of negative comments?
   c. the correction process?

2. perception of
   a. the teacher (gender/experience)?
   b. the paper (grade)?
CHAPTER THREE

METHODOLOGY

INTRODUCTION

The purpose of this study was to examine how second language status affects the perception and comprehension of direct and indirect speech as used in written teacher feedback (WTF). The methodology for the research of the present study was based on Hansen & Baker (2006) in which native English speaking (NS) participants were asked to make corrections and identify strengths and weaknesses of a college composition based on WTF. It also looked at participants’ perceptions of the teacher based on the WTF. The current study differs from Hansen & Baker (2006) in that it also examined how directness affects NNS’ perceptions of WTF.

This chapter will begin with a description of the participants involved. The next section will examine the stimuli used for the study, as well as explain why it was chosen. The third section will describe the different instruments used to record the data for the study, including the program designed specifically for this project. The final section will describe how the data were analyzed.

PARTICIPANTS

The participants for this study were 71 university students at Brigham Young University. Of these participants 36 were male and 44 female and their ages ranged from 18 to 38. Only 8 were graduate students and 63 were undergraduate students. All 37 NS were from the United States. The first language (L1) of the 47 NNS were divided into the following language family groups: Romance (Italian, Portuguese, and Spanish),
Eastern European (Slavic and Albanian), Asian (Korean, Sino-Tibetan and Japanese), and Other (Indo-Aryan, Semitic and Mon-Khmer).

In order to ensure that the previous amount of exposure to written teacher feedback (WTF) didn’t affect responses, participants came from various disciplines. The variety of disciplines ensured that participants had varying degrees of exposure to WTF. The largest discipline was Humanities (16 participants), followed by Business (10 participants), Social Sciences (9 participants), Math/Science (8 participants) and various other disciplines.

The majority of NNS were recruited from English Language 105 classes at Brigham Young University. This class is a university level beginning writing class for NNS (similar to a freshman composition course). NS and also some NNS were recruited from Linguistics 330 (Introduction to Modern Linguistics) and English Language 223 (Introduction to the English language from a linguistic perspective). Since all of the participants were enrolled in an English-speaking university, it was assumed that they were fluent in English, having scored at least a 630 on the TOEFL exam in order to be accepted to the university. All participants were offered extra credit for participation. All participants agreed to the Informed Consent form approved by the Internal Review Board for the Use of Human subjects (see Appendix A for consent form).

QUESTIONNAIRE

The questionnaire consisted of two sample essays which were each approximately 250 words in length. The essays were taken from actual undergraduate writing assignments and were used with the permission of the author. Each of the essays was written for a different class and could be categorized as one personal narrative and one scientific proposal. Each essay contained “teacher comments” which were indexed in the
text and appeared on the bottom of the screen as shown in Figure 1. Most of the content for these teacher comments was taken from actual teacher comments given on the compositions and were modified for the various forms of the survey. However, these comments were modified so that each had an indirect, direct, and hedging version (explained in more detail below). In addition, to ensure consistency across the essays, each essay contained 6 comments, half of which were positive (e.g., Good use of truck simile) and half negative (e.g., Stick to a singular or plural subject). Negative comments required correction, while positive comments did not. Participants were asked if the teacher was requesting a correction. In order to answer, participants had to understand the intention and meaning of the comment in order to know whether a correction was requested. See Figures 3.1 and 3.2 for examples of teacher indexed comments.

**Figure 3.1 Questionnaire Computer Screenshot with positive feedback comment**

One of the crucial lessons learned in nutrition is that breakfast is the most important meal of the day. The importance of this meal is exponentially increased for those with hypoglycemia. Hypoglycemia is a condition resulting in low blood sugars. [8] Both reactive and fasting hypoglycemia have the same symptoms of hunger, nervousness, perspiration, shakiness, dizziness, light-headedness, sleepiness, confusion, difficulty speaking, and feeling anxious or weak [9]. Though the causes of hypoglycemia are still undetermined, the way to relieve the symptoms is clear.

[9]Good use of a list to detail the symptoms

Is a correction requested?
Press y or n for (yes/no):

If the participant answered that yes a correction was requested, they were prompted to make the change requested by the teacher, as shown in Figure 3.2.
Figure 3.2 Questionnaire Computer Screenshot with negative feedback and correction requested

Little droplets of sweat trickled down my spine as I wiped the sweat off my face before it dripped down my nose. Luckily my nose was congested so I could not smell the awful stench coming from the middle-aged man whose arm was reaching for the bar that ran the length of the bus [1]. I would have moved, but I could not; stinky, wet bodies were crammed into the bright orange bus, leaving no place to turn or direct my eyes. The doors opened and the dance began. Fifteen people squeezed in between and past other passengers to the exit doors. Another twenty simultaneously climbed on and all tried to resituate. I smirked as I remember [2] my first time on the bus.

[2] I would like to suggest that you make your verbs agree

Is a correction requested?
Press y or n for (yes/no): y

Make the correction suggested by the teacher. When finished, press enter:

Participants were given one of three versions of each of the essays. One version contained all direct comments such as “Choose another word to describe the evil one to decrease redundancy.” Direct speech in WTF tells the participant exactly what they need to change or what the teacher likes and was written in imperatives. The second version contained all indirect comments such as “Is there a different word that you could use?” Indirect speech acts change the speech act from a request to a question or comment. The third version contained all hedged comments such as “You might want to choose a different word.” Hedging made the degree of intensity vague, often by using words like “seems” “suggest” or “pretty”. See Table 2 for examples of each version of comments. As shown, all three directness types referred to the same sentence in all three versions. Within each survey, direct and indirect texts were distributed randomly, so that each participant could have received any combination of essay types.
<table>
<thead>
<tr>
<th>Sample Essay Portion</th>
<th>Teacher comments</th>
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</table>
| I felt myself invert as I, the sheltered little girl from suburbia, faced the harsh realities of 3rd world life. | **Direct:** Use the past progressive tense to explain your three instances at the bus stop  
**Indirect:** Can you make the three bus experiences more distinct?  
**Hedging:** It might be better to use the past progressive tense to distinguish your different experiences at the bus stop. |
| Then we will add the points together; the meal with the highest amount of points will be judged as the best. | **Direct:** Stick to a singular or plural subject.  
**Indirect:** Do you want a singular or plural subject? Can you make this a sentence?  
**Hedging:** You might want to stick to a singular or plural subject |
| As the doors creaked open I saw the exchange of people and wondered how I would find a way to get into the middle of the mess. My companion pushed forward, and I said excuse me as soon as I bumped someone. | **Direct:** Good use of onomatopoeia to involve the senses.  
**Indirect:** Doesn’t this onomatopoeia involve the senses?  
**Hedging:** This use of onomatopoeia kind of involves the senses. |
| Then further asks if she would like to be burning there forever. | **Direct:** Provocative example emphasizes well the characterization.  
**Indirect:** Isn’t that a powerful example?  
**Hedging:** That is a pretty powerful example |

**Program**

One of the goals of the study was to measure response times to each type of teacher comment type. In order to test for response times, a program needed to be able to record time and also allow for free response. No known current program allowed for both measures simultaneously. Thus, a program was written specifically for this study in August 2007. It is a console-based application written exclusively in C++. The majority of the code is original save for a few methods from the Win32 API: the
'queryperformancecounter' class and the 'random' class. Use of the win32 API was necessary to measure time to the degree of accuracy found in the program. This application will run on any machine running windows which allowed for more flexibility for participant use. The program was downloaded to designated computers in a Humanities resource computer lab.

**Procedure**

Participants were seated at a computer and were given a brief oral overview about the purpose of the study. They were informed that the study looked at how participants perceived teacher feedback and that they would be exposed to teacher feedback and were asked to identify if the teacher requested a correction and also to make requested corrections. They were then asked to read the instructions, which explained again the process of the study. Then they were allowed to go through a sample essay with the research assistant. After completing the practice section, the test began. Each essay appeared in sections (approximately 3-4 sentences). After a section appeared, participants were asked to read that section and then hit the enter key. Then a teacher comment appeared below the essay and they were asked to determine if a correction was requested in the teacher comment. If they answered yes, they were prompted to make the requested correction. If they answered no, then the next section of the essay appeared.

In order to determine how difficult it was to respond to each section, response times were calculated for the recognition task (identifying if a correction is requested) and the correction task (making the requested correction).
After identifying or making the requested correction, a new essay section appeared and the process repeated until the essay was finished. Upon completion of an essay, the following questions were asked:

1. What grade do you think that the student earned?

2. Is the teacher male or female? Explain your reasoning.

3. Is the teacher new or experienced? Explain your reasoning.

Participants were asked to answer the questions according to the WTF. After completing three essays, participants were prompted to enter demographic information, such as the person’s age, gender, year in school, major, place of origin and native language. See Appendix 2 for a complete list of demographic information.

**Pilot Experiment**

A brief pilot experiment was conducted using the program to test the effectiveness of the instructions, and to ascertain the amount of time that would be needed for a participant to complete the online portion of the test. Two participants volunteered to take the pilot test. One was NS and one was NNS. The NS was a 21-year-old female current university student. The NNS was a 25-year-old female whose native language is Albanian and had graduated with a bachelor degree in English language. They were encouraged to provide any suggestions or problems that may have had with the study. Neither of the pilot study volunteers participated in the actual study. After the pilot study, the anticipated completion time for NNS changed from 35 min to 50 min. The instructional wording was also changed. Initially the instructions asked if “a correction was needed”. This allowed
the participant to determine if they considered if a correction was needed. In order to more clearly ask if the teacher comment required a correction, the phrase “Is a correction requested?” was used.

**DATA ANALYSIS**

This study asks how directness affects both native (NS) and nonnative (NNS) English speakers. It looks at two specific areas: 1. How it affects speed and accuracy of response to WTF and 2. How it affects the participant perceptions relating to the teacher and the essay.

The first research question examined how quickly and accurately participants’ identified positive comments, negative comments, and performed the actual correction process. The second research question examined participants’ perceptions of the teacher (gender/experience), and perception of the paper (grade).

In order to answer the first question, two tasks were performed: recognition and correction tasks. Two types of scores were generated for the recognition and correction sections of the study: speed and accuracy. Accuracy was scored on a 0 to 1 scale. If the participant was correct, they were given a 1. If they were incorrect, they were given a 0. In the recognition task, participants were asked if a correction was requested. If the teacher comment asked for a correction and the participant answered “yes” that a correction was requested, then they scored a 1 for accuracy. If they answered that “no” a correction was not requested, they scored a 0 for accuracy. For the identification task, accuracy scores were easy to determine because each WTF was either a positive or negative comment. For example, the first WTF on essay one was always a negative comment that requested a correction. When scoring that answer, the directness type does
not affect the accuracy of the response. If the participant identified that it needed a correction, it was scored as 1. If not, it was scored as 0.

In the correction task, the accuracy scores were given according to the corrections that the participants entered. If the participant entered a correction that directly correlated with the teacher comment, they scored a 1 for accuracy. If they entered a correction that was unrelated to the teacher comment, if the correction was never made, or if their response indicated that they didn’t know how to make the correction, they scored a 0 for accuracy on the correction task. For example, a participant might answer correctly if the correction is requested and then when prompted to make the correction, they type “I don’t know what I am supposed to change.” In this situation, the participant would score a 1 on the recognition task and a 0 on the correction task. See Table 2 for the breakdown of the two tasks and their possible scores. For positive teacher comments, only the recognition task was analyzed.

**Table 3.2: Explanation of speed and accuracy scores for recognition and correction tasks**

<table>
<thead>
<tr>
<th></th>
<th>Recognition Task</th>
<th>Correction Task</th>
</tr>
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<tbody>
<tr>
<td><strong>Speed</strong></td>
<td>Time required to identify if a correction was requested</td>
<td>Time required to make corrections</td>
</tr>
<tr>
<td><strong>Accuracy</strong></td>
<td>How accurate participants identified corrections requested (0-1)</td>
<td>How accurate participants made corrections (0-1)</td>
</tr>
</tbody>
</table>

Response times were averaged then submitted to a two way (group (NS vs. NNS) x essay type (direct, indirect, hedging) ANOVA to determine whether or not these two factors (directness and group) affected how quickly WTF is processed. In order to determine what affected the accuracy of participants, all of the accurately identified
comments were added up and then also submitted to a two way (group (NS vs. NNS) x essay type (direct, indirect, hedging) ANOVA to determine whether or not these two factors (directness and group) affect how accurately WTF is processed.

In order to answer the second question regarding the participants’ perception of the teacher, participants were asked (1) to state whether they thought the teacher was male or female and whether the teacher was experience/inexperienced and (2) to give a free response answer to explain why they labeled the teacher of the essay as male/female and experienced/inexperienced. These explanations were then categorized. There were 3 options: style of teacher comment, content of teacher comment, and other reasoning. Style might contain elements such as length or directness. An example of style would be “he cuts to the problem instead of beating around the bush” or “the teacher gave very direct comments about what to fix…”. Content might contain word choice or the topic of the comment. An example of a content based reasoning would be “maybe the grammar meant more than the meaning of the writing.” The other reasoning section contained infrequent reasoning or comments that explained that the participant was unsure as to their reasoning. An example of this other section could be “this teacher knows the rules” as to explain why they thought it was an experienced teacher. In order to answer regarding participants’ perception of the paper, participants were asked to give the essay a grade. Grades were given a numerical value in order to determine patterns. An A was given 1 point, Bs were given 2, Cs were given 3, etc. The percentage of A’s, B’s, C’s and D’s for each essay type were calculated. These percentages for teacher gender, teacher experience, and grade perception were then submitted to a series of chi-square
analyses to determine how native language affected the perceptions of the teacher and the paper.
CHAPTER FOUR
RESULTS

The purpose of this study was to examine how second language status affects the perception and comprehension of direct and indirect speech as used in written teacher feedback (WTF). The next 5 sections will review the results for the experiment described in Chapter Three in relation to the following research questions:

How does directness affect both Native (NS) and Nonnative (NNS) speakers’

1. speed and accuracy in
   a. identification of teacher positive comments?
   b. identification of negative comments?
   c. the correction process?

2. perception of
   a. the teacher (gender/experience)?
   b. the paper (grade)?

The statistical analyses used to compute the results found in this chapter included the following: response time scores and accuracy scores were submitted to a two way (group (NS vs. NNS) x essay type (direct, indirect, hedging) ANOVA to determine whether or not these two factors (directness and group) affected how quickly and accurately WTF is processed.

For the first question, response times and accuracy were calculated for two tasks (recognition and correction). For the recognition task, participants needed to determine if the teacher comment was positive (and therefore was not requesting a correction) or
negative (and therefore was requesting a correction). For the negative comments, participants were also asked to make the corrections requested by the WTF.

For question 2, participants needed to determine what they thought the gender and experience level of the teacher was. Then they were asked to give a free response explanation for their perceptions of the teacher. Then participants were asked to identify what grade they thought the essay earned.

**Question 1:** How does directness affect both Native (NS) and Nonnative (NNS) speakers’ speed and accuracy in

**a. Identification of teacher positive comments**

Figure 1 depicts the summed response times for positive comments (WTF which did not require a correction) which are measured in seconds. The more quickly participants processed and identified the WTF would result in a smaller response time. As displayed in Figure 1, the NS are faster than NNS at each directness type (indirect, hedging, and direct). However, both groups followed the same pattern: they both identified direct WTF quickest followed by hedged WTF, and were slowest at processing indirect WTF. The overall slowest average response time was NNS identifying indirect positive comments (54.66 sec).

Though the overall pattern is similar for NS and NNs, NNS seemed to be proportionally much slower on indirect (54.66 sec) than direct (33.78 sec) and hedged (39.94 sec) comments. For NS, direct speech (15.07 sec) seemed to be much faster than both forms of indirect speech: (indirect: 24.08; hedging 21.91 sec).
To determine whether these differences in response times for the three types of directness reached statistical significance, a two way (group x directness type) was run of the responses times for the NS and NNS. The results of this analysis revealed no significant effect of second language status ($F = 1.26, p > .05$), but a significant effect of directness type ($F(1,43)=26.49, p < .001$). Further post-hoc Tukey tests revealed that for both NS and NNS directness type was significant. In other words, both the NS and NNS participants were fastest at identifying direct positive comments and slowest at identifying indirect positive comments.

Accuracy for identification of positive comments follows a different pattern than speed. Figure 2 shows the cumulative accuracy percentages for positive comments broken into the two groups, NS and NNS. For this task, participants needed to identify that a correction was not needed. If they correctly identified that a correction was not needed, they were given 1 point. If they were not correctly identified, responses were given 0 points. The accuracy points for Essays 1 and 2 were added and then the average
accuracies were calculated for both NS and NNS groups. Figure 2 shows the accuracy percentages.

**Figure 4.2: Accuracy for positive comments**

![Accuracy Bar Chart](chart.png)

Surprisingly, hedging was the most accurate for both NS (99.31%) and NNS (92.90%). This means that participants, particularly NNS, were more accurate in determining that positive hedged comments were positive than indirect or direct positive comments. NS seemed to have the most difficulty accurately identifying indirect positive comments. In addition, NNS seemed to have almost the same difficulty for identifying positive comments for both indirect (88.33%) and direct (88.0%) positive comments.

To determine whether these differences were significant, the accuracy scores for the two groups (NS and NNS) for the three directness types were submitted to a two way (group x directness type) ANOVA. This analysis revealed a significant effect of native language status (F (1,34) = 17.81, p < .001) and directness type (F (2,1) = 12.54, p < .0001). This first analysis therefore demonstrated that the native speakers were more
accurate than the non-native speakers. Further post-hoc Tukey tests also revealed that that hedging was most accurate and indirect was least accurate for both groups, with direct accuracy falling in between.

In other words, the type of directness affected NS and NNS similarly in relation to speed of identification. Both groups more quickly identified direct as positive, followed by hedging and lastly indirect. The type of directness also significantly affected accuracy of identification of positive teacher comments with hedging being the most accurate and indirect being the least. Overall, indirect seemed to be the most difficult for NS and NNS to process due to the fact that it was the slowest to be identified and the least accurate for both groups.

b. identification of negative comments

The second analysis examined both the speech and accuracy of participants in examining negative comments (or requested corrections). Surprisingly, the pattern of participant response times and accuracy differed for negative comments than positive comments. To examine the pattern for speed, NS and NNS are grouped in Figure 3. Similarly to what was found when examining the positive comments, NS and NNS follow the same pattern of speed. They were fastest on direct, followed by indirect and slowest on hedged negative comments.
To determine whether these differences in response times for the three types of directness reached statistical significance, a two way (group x directness type) was run of the responses times for the NS and NNS. The results of this analysis revealed a significant effect of second language status ($F(1,43) = 24.54$, $p < .001$) but no significant effect of directness type ($F(2,1) = 1.90$, $p > .05$). In other words, while the NS were faster than the NNS, directness type did not significantly affect either group.

Accuracy for negative comments is shown in Figure 4. For this task, participants needed to identify that a correction was needed. If they correctly identified that a correction was needed, they were given 1 point. If they did not correctly identify the need for correction, responses were given 0 points. The accuracy points for Essays 1 and 2 were added and averaged. Then they were divided by the possible accuracy. Figure 4 shows the accuracy percentages for NS and NNS. Unlike positive comment identification, NS and NNS do not follow the same accuracy pattern.
Figure 4.4: Accuracy for negative comments

NS were most accurate on hedging while NNS were least accurate on hedging. Overall, NNS seem more affected by directness type because the differences (indirect 59%, hedging%, 55.65, direct 75%) between their percentages are much larger than for the NS (indirect 84.52%, hedging 92.24%, direct 91.67%).

To determine whether these differences were significant, the accuracy scores for the two groups (NS and NNS) for the three directness types were submitted to a two way (group x directness type) ANOVA. This analysis revealed a significant effect of second language status (F(1,35) = 33.06, p < .0001) and a significant effect of directness type (F(2,35) = 4.38, p < .01) as well as a significant second language status x directness type interaction (F(2,1) = 3.02, p < .01). These findings suggested that directness type was significant for one group but not for another. Further post hoc analyses revealed that that type of directness was significant for NNS who were most accurate on direct, followed by indirect and least accurate on hedging (p < .05), but directness type was not significant for the NS.
In other words, the type of directness affected NS and NNS similarly in relation to speed of identification but the effect was not statistically significant. Both groups more quickly identified direct, followed by indirect and lastly hedging. In relation to accuracy, the type of directness only affected NNS. It seems that hedging was overall the most difficult for NNS to process due to the fact that it was the slowest to be identified and the least accurate.

c. in the correction process

For making requested corrections, speed and accuracy was also calculated. In particular, the time used to make the correction was calculated in seconds. In Figure 5, NS and NNS are grouped and both groups demonstrated the same tendencies of speed in relation to directness type: fastest at indirect, followed by hedging, and slowest at direct.

To determine whether these differences in response times for the three types of directness reached statistical significance, a two way (group x directness type) was run of the responses times for the NS and NNS. The results of this analysis revealed no significant second language status effect ($F(1,33) = 3.02, p > .05$), but a significant effect of directness type ($F(2,33) = 8.63, p < .0001$). Further post hoc analyses revealed both NS and NNS were fastest at correcting indirect WTF and slowest at correcting direct WTF. Unlike the identification task, NNS were faster than NS on correcting indirect and hedged WTF.
Accuracy scores for corrections look quite similar to their response times as shown in Figure 6. For this task, participants were asked to make the corrections requested by the WTF. If the participant made a change that was relevant to the WTF, they were given 1 point. If they made a change not relevant to the WTF, made no change, or identified that they did not know how to make the change, they were given 0 points. The accuracy points for Essays 1 and 2 were added and then averaged. Then they were divided by the possible accuracy to calculate the percentage correct. Figure 6 shows the accuracy percentages. Unlike the identification tasks, NS and NNS did not follow the same pattern.

NS accuracy minimally varied among directness types (indirect: 77.63%, hedging: 82.69%, direct: 81.52%). However NNS appeared more likely to accurately correct direct requests than both forms of indirect speech (direct: 54.17%; indirect: 36.46%; hedging: 28.79%).
To determine whether these differences were significant, the accuracy scores for
the two groups (NS and NNS) for the three directness types were submitted to a two way
(group x directness type) ANOVA. This analysis revealed a significant effect of second
language status (F(1,41) = 12.08, p < .001), directness type (F(2,41) = 11.78, p < .0001)
and a significant second language x directness type interaction (F(2,1) = 11.92, p <
.0001). These analyses suggest that the NS were more accurate than the NNS and that
one group was affected by directness type more than the other. Further post hoc analyses
revealed that type of directness was significant for NNS, but not for the NS. In
particular, the participants were most likely to be accurate for direct feedback and least
likely to be accurate for indirect feedback.

In other words, the type of directness affected NS and NNS similarly in relation to
speed of correction. Both groups more quickly corrected indirect, followed by hedging
and lastly direct. In relation to accuracy, the type of directness was only significant for
NNS.
Summary

Research Question 1: How does directness affect both Native (NS) and Nonnative (NNS) speakers’ speed and accuracy?

Similar patterns developed for all three measurements: positive comments, negative comments, and corrections. In particular, it seemed that direct comments seemed to be the easiest for both NS and NNS for each correction type since they seemed to be the fastest to identify and the most accurate for each type of response. In addition, for positive comments, indirect WTF seemed to be the most difficult for NS and NNS to process due to the fact that they were the slowest to be identified and the least accurate for both groups. By contrast, for negative WTF, hedging seemed to be the most difficult NNS to process due to the fact that it was the slowest to be identified and the least accurate. For corrections, participants were fastest at correcting direct and slowest at indirect. NNS were significantly most accurate at direct and least accurate at indirect.

The comprehensive results for this research question are shown in Table 1. Abbreviations are used (S=slowest, F=fastest, MA=most accurate, LA=least accurate). In addition, results that were statistically significant are underlined.
Table 4.1: Result Summary for Research Question 1

<table>
<thead>
<tr>
<th></th>
<th>Positive Comments</th>
<th>Negative Comments</th>
<th>Corrections</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hedging</td>
<td>Indirect</td>
<td>Direct</td>
</tr>
<tr>
<td>NS</td>
<td>RT</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>Accuracy</td>
<td>MA</td>
<td>LA</td>
<td>MA</td>
</tr>
<tr>
<td>NNS</td>
<td>RT</td>
<td>S</td>
<td>F</td>
</tr>
<tr>
<td>Accuracy</td>
<td>MA</td>
<td>LA</td>
<td>LA</td>
</tr>
</tbody>
</table>

**Question 2:** How does directness affect both Native (NS) and Nonnative (NNS) speakers’ perception of

a. the teacher (gender/experience level)?

b. the paper (grade)?

**The teacher (gender/experience level)**

To determine whether directness type also affected the perception of the speaker (in this case the teacher), participants were asked to identify both the gender and the experience level of the teacher. This was done to determine whether both NS and NNS perceive indirect speech (i.e., indirect speech acts and hedging) as being written by a female and direct speech as being written by a male. Responses on this question were divided into three types: male, female and unsure. The latter category was added because several students responded that they “didn’t know” the gender of the teacher. The results were calculated in percentages for all participants and are shown in Table 2. From the table, it appears that direct speech is most likely to be seen as male and both
forms of indirect speech are seen as more female. Indirect speech acts overall are perceived to be used the least by males and the most by females. In addition, fewer participants were unclear about the gender of the teacher for that directness type.

Table 4.2: Teacher Gender Perception task, answering the question, “what is the gender of the teacher?”

<table>
<thead>
<tr>
<th>Directness</th>
<th>Male</th>
<th>Female</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>indirect</td>
<td>28.26%</td>
<td>65.22%</td>
<td>6.52%</td>
</tr>
<tr>
<td>hedging</td>
<td>37.29%</td>
<td>52.54%</td>
<td>10.17%</td>
</tr>
<tr>
<td>direct</td>
<td>52.83%</td>
<td>37.74%</td>
<td>9.43%</td>
</tr>
</tbody>
</table>

When the results are divided according to NS and NNS, we can see that gender speech stereotypes are affected by L2 status as shown in Table 3. Surprisingly the pattern of unidentified gender shows that NS were twice as frequent to not identify the gender of indirect speech acts and direct speech as were the NNS. In contrast, NNS were twice as likely to not identify the gender of hedged WTF as NS.

Table 4.3: Teacher Gender Perception task

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNS</td>
<td>32.00%</td>
<td>64.00%</td>
<td>4.00%</td>
</tr>
<tr>
<td>NS</td>
<td>23.81%</td>
<td>66.67%</td>
<td>9.52%</td>
</tr>
<tr>
<td>Hedging</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNS</td>
<td>33.33%</td>
<td>53.33%</td>
<td>13.33%</td>
</tr>
<tr>
<td>NS</td>
<td>41.38%</td>
<td>51.72%</td>
<td>6.90%</td>
</tr>
<tr>
<td>Direct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NNS</td>
<td>51.72%</td>
<td>41.38%</td>
<td>6.90%</td>
</tr>
<tr>
<td>NS</td>
<td>54.17%</td>
<td>33.33%</td>
<td>12.50%</td>
</tr>
</tbody>
</table>

In addition, NS seem to clearly favor a gender for indirect (23.81% male versus 66.67% female) and direct (54.17% male versus 33.33% female) WTF. NNS, however, seem to clearly identify a gender for both forms of indirect speech with indirect (32%
male versus 64% female) and hedging (33.33% male versus 53.33% female). Thus for NS, the least gender specific directness type was hedging and for NNS it was direct. These percentages were submitted to a series of chi square analyses meant to determine whether male and female were chosen more often for one directness type than another. These results indicated that there was no difference between the NNS’s choice of gender for the teacher for any of the directness types ($\chi^2 = 4.81, p = .08$). By contrast, there was a difference for the NS’s ($\chi^2 = 15.8, p < .0001$). The NS were twice as likely to perceive indirect speech acts as female than male. In addition, hedged WTF was more frequently identified as female than male by NS. Direct WTF was more frequently identified as male than female by both NS and NNS.

After identifying the gender of the teacher, participants were asked to give a free response reason for why they chose that gender. These responses were categorized as: style, content, or other. These responses are shown in Figure 7 which is divided into NS and NNS.

**Figure 4.7: Teacher Gender Perception Reasoning**
For NS, style seemed to be more of a decision in their identification of teacher gender than content (indirect=52.38, hedging= 57.14, direct=29.17). In contrast, for NNS content seemed to be much more of a factor in teacher gender identification (indirect: 28%, hedging: 48.28%, direct: 44.83%).

These percentages were submitted to a series of chi square analyses meant to determine whether male and female were chose more often for one reasoning type than another. This analysis revealed that hedging was significant for both NNS ($\chi^2=11.7$, p=.003) and NS ($\chi^2=18.7$, p=.0001). In other words, when NS and NNS gave reasoning for the chosen teacher gender, hedging significantly affected whether their reasoning related to style, content, or other. The following free responses shown in Table 4 were taken from NS and NNS identified teacher gender reasoning. These examples show the NS focus on style and the NNS focus on content when identifying the teacher gender for hedging comments.

**Table 4.4: Teacher Gender Reasoning Examples for Hedging**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Gender</th>
<th>Reason type</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS</td>
<td>Female</td>
<td>Style</td>
<td>All of her answers were not as direct and more sensitive. All of her corrections seemed like more suggestions.</td>
</tr>
<tr>
<td>NS</td>
<td>Male</td>
<td>Style</td>
<td>Comments… are stated as things that should be changed rather than things the author might consider changing.</td>
</tr>
<tr>
<td>NS</td>
<td>Female</td>
<td>Style</td>
<td>The teacher’s comments sounded motherly, they weren’t very clear either. The motherly feeling reminded me of a woman. The unclear comments, don’t mean that I see women as unclear, but rather less direct.</td>
</tr>
<tr>
<td>NS</td>
<td>Female</td>
<td>Style</td>
<td>Instead of using direct, explicit questions like men often do the questions were phrased in a way that resembled a choice, when in reality the teacher is telling the student what to do…</td>
</tr>
</tbody>
</table>
Participants were also asked to identify whether the teacher was new or experienced. This was done to determine whether both NS and NNS perceive indirect speech (i.e., indirect speech acts and hedging) as being written by an inexperienced teacher and direct speech as being written by an experienced teacher. Responses on this question were divided into three types: new, experienced and unsure. The latter category was added because several students responded that they “didn’t know” the experience level of the teacher. The results were calculated in percentages for all participants and are shown in Table 5. From the table it appears that participants did not seem to have teacher experience level stereotypes based on comment directness type.

**Table 4.5: Teacher Experience Perception**

<table>
<thead>
<tr>
<th></th>
<th>Indirect</th>
<th>Hedging</th>
<th>Direct</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td>40.00%</td>
<td>50.00%</td>
<td>44.83%</td>
</tr>
<tr>
<td>Experienced</td>
<td>52.00%</td>
<td>46.67%</td>
<td>51.72%</td>
</tr>
<tr>
<td>Other</td>
<td>8.00%</td>
<td>3.33%</td>
<td>3.45%</td>
</tr>
<tr>
<td>NS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New</td>
<td>52.38%</td>
<td>55.17%</td>
<td>43.48%</td>
</tr>
<tr>
<td>Experienced</td>
<td>47.62%</td>
<td>44.83%</td>
<td>39.13%</td>
</tr>
<tr>
<td>Other</td>
<td>0.00%</td>
<td>0.00%</td>
<td>17.39%</td>
</tr>
</tbody>
</table>

NS were more likely to identify a teacher as new as experienced for all directness types. Both indirect and direct were more likely to be seen as experienced by NNS while hedging was most likely to be identified as being a new teacher. NNS were most likely to identify indirect as being unsure while NS were most likely to identify direct as being “unsure” of the teacher’s experience level. These percentages were submitted to a series
of chi square analyses meant to determine whether new and experienced were chosen more often for one directness type than another. This analysis revealed that type of directness did not significantly affect the labeling of teacher experience ($X^2 (6) = 1.9$, $p > .05$) for either NS or NNS.

As with the question on teacher gender, after identifying if the teacher was new or experienced, participants were asked to explain their reasoning. These responses were categorized as style, content, or other. NS and NNS were most likely to credit the choice to the content of the WTF as shown in Figure 8 (NS indirect: 19.05%, hedging: 62.07%, direct: 69.57%; NNS indirect: 44%, hedging: 46.67%, direct: 65.52%). The only exception to this was for NS who 52.38% use style as their explanation for explaining experience choice for indirect WTF.

**Figure 4.8: Teacher Experience Perception Reasoning**

These percentages were submitted to a series of chi square analyses meant to determine if style, content, or other were chosen more often for one directness type than
another. This analysis revealed that direct comments were significant for both NS \( (X^2=30.6, p=.0001) \) and NNS \( (X^2=24.2, p=.0001) \). Also hedging significantly affected NS in determining what reasoning they chose. Indirect was not significant for either NS or NNS.

As demonstrated in the statistics, Table 6 lists some of the responses of NS and NNS to why they chose the level of teacher experience that they did. These examples show the NS focus on style for hedging comments. In addition, it shows that both NS and NNS focused on content to choose teacher experience for direct WTF.

**Table 4.6: Teacher Experience Reasoning Examples**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Directness</th>
<th>Experience</th>
<th>Reason type</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>NS</td>
<td>Hedging</td>
<td>New</td>
<td>Style</td>
<td>Seems unsure of comments and uses lots of qualifiers “maybe you should” “if” etc. Also, the comments seem directed at the writer but rather a general, wishy-washy statement about the piece.</td>
</tr>
<tr>
<td>NS</td>
<td>Hedging</td>
<td>New</td>
<td>Style</td>
<td>To be a good teacher, you need to explain to the students exactly what was wrong in clear unambiguous ways. This teacher did not, and I think that knowledge comes with time and experience.</td>
</tr>
<tr>
<td>NS</td>
<td>Direct</td>
<td>New</td>
<td>Content</td>
<td>I felt like the teacher didn’t notice some inconsistencies and didn’t give a lot of helpful feedback to the student.</td>
</tr>
<tr>
<td>NS</td>
<td>Direct</td>
<td>Experienced</td>
<td>Content</td>
<td>The teacher seems to appreciate the topic and style of the author’s work…</td>
</tr>
<tr>
<td>NNS</td>
<td>Direct</td>
<td>New</td>
<td>Content</td>
<td>Not able to come up with more interesting ideas.</td>
</tr>
<tr>
<td>NNS</td>
<td>Direct</td>
<td>New</td>
<td>Content</td>
<td>He missed the typo in the second paragraph.</td>
</tr>
<tr>
<td>NNS</td>
<td>Direct</td>
<td>Experienced</td>
<td>Content</td>
<td>He looks really good at the details.</td>
</tr>
</tbody>
</table>
a. The paper (grade)

The above analyses revealed that directness type does influence how students perceive the gender and experience level of the teacher. To understand whether directness type also affected how participants viewed the merits of the paper, participants were asked what grade they thought that the student earned based on the WTF. This was done to see if participants viewed one type of directness as more positive or critical.

Participants gave the essays an A, B, C or D. Each of these scores was averaged and their percentages are shown in Table 7. Interestingly, NS and NNS responded quite distinct from each other. NS seem to be completely unaffected by the directness type. NS grade pattern is consistent for all three types: most likely to give a B, then an A, and then a C. NS never identified an essay as receiving a D grade. NNS, however, are least likely to give an A for indirect and most likely for hedged comments.

Table 4.7: Grade Perception

<table>
<thead>
<tr>
<th></th>
<th>NNS Indirect</th>
<th>NNS Hedging</th>
<th>NNS Direct</th>
<th>NS Indirect</th>
<th>NS Hedging</th>
<th>NS Direct</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>24.00%</td>
<td>48.28%</td>
<td>37.93%</td>
<td>23.81%</td>
<td>20.69%</td>
<td>20.83%</td>
</tr>
<tr>
<td>B</td>
<td>56.00%</td>
<td>44.83%</td>
<td>55.17%</td>
<td>57.14%</td>
<td>68.97%</td>
<td>66.67%</td>
</tr>
<tr>
<td>C</td>
<td>16.00%</td>
<td>3.45%</td>
<td>3.45%</td>
<td>19.05%</td>
<td>10.34%</td>
<td>12.50%</td>
</tr>
<tr>
<td>D</td>
<td>4.00%</td>
<td>3.45%</td>
<td>3.45%</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

These percentages were submitted to a series of chi square analyses meant to determine if particular grades were chosen more often for one directness type than another. This analysis revealed that NNS were affected by directness type. NNS were more likely to give papers with hedged WTF an A and least likely to give papers with
indirect WTF an A ($\chi^2=7.77, p<.02$). In addition, NNS were more likely to give papers with indirect WTF a C ($\chi^2=6.72, p=.03$). NS were left unaffected with scoring As ($\chi^2=.117, p=.943$) or Cs ($\chi^2=1.63, p=.442$).

In other words, the type of directness affected only NNS in their identification of A and C papers. NS seemed to determine grades regardless of directness type. This might suggest that NNS are trying to determine the attitude of the teacher from the WTF. NS might be less likely to equate the WTF directness type with a teacher’s attitude about the paper.

**Summary**

**Research Question 2:** How does directness affect both Native (NS) and Nonnative (NNS) speakers’ perception of the teacher and the paper?

NS were more affected than NNS in perception of the teacher gender. Neither NS nor NNS were affected by directness type in determining the experience level of the teacher. Directness type affected both NS and NNS in their reasoning for teacher perception. In relation to paper perception, only NNS was affected by directness type.

**Conclusion**

The results of the current study demonstrate that both NS and NNS are affected by the directness type of WTF. NNS are affected by directness type in relation to speed and accuracy and also grade perception. NS are affected by directness in relation to speed of identification and teacher gender perception. Both NS and NNS are affected in
reasoning for teacher perception (gender and experience). Neither NNS nor Ns are affected with experience perception. Further discussion of the implication of these findings will continue in Chapter 5.
CHAPTER FIVE

CONCLUSION

The implications of the results shown in Chapter Four will be discussed in this chapter to answer the following research questions:

How does directness affect both Native (NS) and Nonnative speakers (NNS) speakers?

This question was broken into two main parts:

1. participant speed and accuracy
2. participant perception of written teacher feedback (WTF).

The first research question was answered by testing speed and accuracy on identification and correction of WTF. The second research question was answered by asking participants to label the gender and experience level of the teacher and also the grade of the paper. The three principal findings of this study are that (1) the task (identification of positive and negative comments and correction), (2) second language status, and (3) directness type affected the comprehension and perception of participants.

This chapter will proceed with a discussion of the particular results for each finding in turn. Pedagogical and theoretical implications will then be addressed, followed by limitations of the study and conclude with suggestions for further research.

**DISCUSSION OF RESULTS**

*Finding #1*: The task affected the comprehension (speed/accuracy) of WTF.

When analyzing the results, the test was divided into three tasks: (1) identification of positive comments, (2) identification of negative comments, and (3) correction of
negative comments. The influence of directness type on speed and accuracy varied for each of these tasks.

a. identification of positive comments

In relation to positive comments, NS and NNS had identical accuracy and response time patterns. Overall, participants were most accurate in identification of hedged comments and least accurate on indirect comments. In addition, indirect comments were the slowest to be processed and direct comments were the fastest. This finding suggested that indirect was the most difficult to process because it was the slowest and the least accurate. Positive comment identification was the only one of the three tasks where directness type was significant for both NS and NNS on both speed and accuracy.

These findings seem to support research suggesting the use of hedging but not the use of indirect speech acts to soften directives (Hyland & Hyland, 2001; Riley & Mackiewicz, 2003; Riley & Mackiewicz, 2002), since hedged comments were actually more accurately identified than even direct speech, let alone indirect speech. The accuracy with which hedged positive comments were interpreted does call into question the idea that Hyland & Hyland (2001) assert that hedging praise may actually be suggesting to the student that the WTF refers to a weakness and not a strength in the paper. If this is true, then participants would have been more likely to see hedged comments as negative feedback, and thus would have scored less accurately on this task.

The reason that indirect speech acts may be the most difficult to understand in positive comments may be as a result of their usual structure as questions. Ferris (2002) suggests that using questions can increase the miscommunication between teacher and
student. In addition, questions as forms of positive comments might be unusual for participants in WTF. For example, “isn’t this great imagery?” might be difficult for the student to process if they are actually processing the literal meaning because they are not used to seeing the non-literal meaning within the context of WTF. In this instance, it would take longer to process, and if students stopped at only processing the literal meaning, they would not identify it accurately.

These findings may also be explained in the fact that teachers may be more likely to give hedged or direct than indirect speech acts as positive comments. This might explain why differences in speed and accuracy for directness type was significant for both NS and NNS. Participants may be expecting hedged and direct comments and thus process them more readily. An alternative idea is that praise is difficult to process when it is in an indirect speech act, including question form.

b. identification of negative comments

When identifying negative comments, NS and NNS were fastest when given direct WTF and slowest when given hedged WTF. The effect of directness type was not found to be statistically significant for speed. However, while NS follow the same accuracy pattern for all three directness types, NNS were significantly most accurate on direct and least accurate on hedging.

Hedging was the slowest to be processed for both NS and NNS and the least accurate for NNS for negative comments. This contradicts suggestions by Mackiewicz & Riley (2002) and Riley & Mackiewicz (2003) that hedging was a high-clarity directness type. This might support the belief proposed by Hyland and Hyland (2001) that hedging
and other forms of mitigation create confusion. It may be that the softening of requests makes negative comments to appear as optional suggestions for change (Hyland & Hyland, 2001; Riley & Mackiewicz, 2002; Riley & Mackiewicz, 2003). This would explain why NNS were significantly least accurate on hedging. In contrast, NS were most accurate on hedged WTF. Thus once again, NS seem to prefer hedged comments to indirect speech acts. This might suggest that NS hesitated to identify hedged comments but did actually understand what they meant.

c. correction of negative comments

NS and NNS once again follow the same significant response time pattern with indirect being the fastest and direct, surprisingly, being the slowest. Both NS and NNSs’ accuracy on corrections followed the same pattern as accuracy on identifying negative comments. Interestingly, accuracy and speed do not seem to find an overall best method of WTF among directness type. For example, NS were fastest and least correct at making corrections when given indirect WTF, while NNS were slowest but most accurate at making corrections with direct WTF.

The surprising results regarding speed pattern may be due to understanding level. If students really did understand what the teacher was requesting in direct WTF, they might have spent more time to make sure that they accurately made corrections, as suggested by the NNS pattern (slowest but most accurate). In contrast, if students did not understand what the teacher was requesting in indirect WTF, they might have spent less time making corrections because they did not know how to proceed. This would explain why NS were least accurate on indirect WTF. An alternative idea is that NS may think
that they understand the indirect and hastily make corrections, but actually haven’t understood the indirect WTF.

d. What was not affected?

NS accuracy for all three tasks was the same which suggests that NS were not as affected by the task as were NNS. Another consistency across tasks is that direct was the fastest for NS and NNS on both identification tasks which suggests that the intention of direct WTF is the most easily accessible (Riley & Mackiewicz, 2002; Mackiewicz & Riley, 2003; Hyland & Hyland, 2001, Ferris, 2007). Also, the accuracy patterns for NS and NNS were consistent for negative comments and corrections. This would suggest that students who identified negative comments accurately, also understood what was being requested.

It has been suggested in the research that students may not know how to make the changes requested though they knew that a change was requested (Hyland & Hyland, 2001). This finding questions that idea. If WTF was indirect, NS students were less likely to identify that a correction was needed and less likely to make an accurate correction for NS. The same is true for NNS who were least likely to identify hedged comments and make accurate corrections. In contrast, accurate identification led to more accurate correction for both NS and NNS. This would suggest that students were likely to identify a requested correction but lack the ability to make a correction. Either the students did not understand the intention of the WTF and misidentified it, or students did understand the intention but did not know how to make the correction.

*Finding #2:* Second language status affects the comprehension and perception of WTF.
a. *Speed & accuracy*

Overall, NS are faster and more accurate than NNS at each task with the exception of speed of correction. Though NS and NNS followed the same response time patterns: positive comments (direct < hedging < indirect), negative comments (direct < indirect < hedging), and the correction process (indirect < hedging < direct), the accuracy patterns were different for both identification and correction of negative comments. Also interesting is the trend that suggests that NS are less affected by directness type than NNS.

The significance of second language status affecting comprehension of WTF supports all research thus far concerning NNS writing (Ferris, 2002; Ferris, 2003; Ferris, 2007; Hyland & Hyland, 2001; Riley & Mackiewicz, 2002; Mackiewicz & Riley, 2003). It makes sense that NS could more quickly and more accurately process English than NNS. Surprisingly NS were not faster at making corrections than NNS. This may be due to the fact that NS do understand the intention of the WTF better and thus spend more time to accurately make the corrections which would explain their higher accuracy than NNS. It is also possible that NNS instinctively make faster corrections without totally examining the WTF, which would explain their lower accuracy on corrections than NS. A preliminary perusal of the corrections suggest that NS wrote more than NNS when making corrections which may explain why they spent more time correcting than NNS.

NS and NNS also were more accurate on different directness types for negative comments and corrections. This has not previously been discussed in the research. This finding may be a result of a lack of pragmatic understanding in NNS or an incident of L1 transfer. In order to better understand what is going on with NS and NNS accuracy,
future research should address contrasting accuracy in the L1 of NNS. Also, NS seemed more stable in their accuracy since it was the same for all three tasks. This might suggest that hedged comments are always more clear to NS and that indirect speech acts are always the least clear. Because NNS accuracy changes depending on task, it might suggest that they do not understand the pragmatics of English tasks particularly for WTF.

b. Perception of teacher

In addition to comprehension, second language status affected perception of the teacher and the grade. NS were significantly affected by directness type in the identification of teacher gender, while NNS were not. This finding shows that NS really do believe that gender affects directness type (Holmes, 1995; Holmes, 2005; Macaulay, 2001; McKelvie, 2000) and supports the findings of Hansen & Baker (2006). Though only hedging was found to be significant in predicting gender labeling, NS tended to label both forms of indirect as female and direct as male. For example, NS were almost 3 times more likely to identify indirect WTF as being written by a female than a male teacher. Also, direct speech seemed to be more gender neutral than both forms of indirect speech. This is shown in the fact that NS were more likely to not identify the gender of the teacher when WTF was direct. Also, the gap between male and female labeling was closest when WTF was direct. The reason these findings were not statistically significant may be that more participants were needed to show statistical significance for differences in gender labeling for direct and indirect WTF.

The fact that NNS did not significantly label a gender according to directness type could be a result of L1 transfer or a lack of pragmatic understanding of gender roles in English. If gender is not associated with directness type in an L1, they would not likely
associate it in their NNS. Also, if different L1s stereotype gender with different
directness types, then the results would cancel each other out when analyzed as a lump of
NNS. An additional option is that NNS do not understand the English gender roles of
directness type and thus do not consistently identify them. This idea is based on research
that suggests that different cultures have varying degrees of gender-role stereotypes
(Yamawaki & Hansen, in progress). This may make it more difficult for gender labeling
in an NNS.

Despite the fact that NS and NNS did not agree on gender labeling, they were
both significantly affected by hedging in giving reasoning for identifying the gender of
the teacher. NS were more likely to attribute the gender labeling to style while NNS
attributed it to content. This contrast may be due to a lack of pragmatic understanding.
NNS might find it easier to identify what is being said than how it is being said. Thus
NNS may be less conscious of what affects their labeling because they are less familiar
with identifying speech acts in their NNS. Also, due to the fact that directness type did
not significantly affect NNS, this may suggest that NNS were using the content of the
feedback to determine the gender.

c. Perception of paper

NNS were significantly affected by directness type in the identification of the
paper grade, while NS were not. This confirms that directness type can affect grade
perception (Baker & Hansen, in preparation). However, unlike in Baker & Hansen (in
preparation) only NNS were affected by directness type, not NS. This may suggest that
NNS were more likely to equate the WTF as reflecting the quality of the paper. This also
may suggest that NNS may be more affected by WTF in relation to their confidence and motivation about their writing.

**Finding #3**: Directness type affected the comprehension and perception of WTF.

- **Speed**

  Directness type significantly affected response times for positive comments and corrections. In the setting of positive comments, hedging was processed faster than indirect speech acts. In the context of negative comments and the correction process, however, indirect speech acts are processed faster than hedging. Overall, direct was identified the fastest for both NS and NNS, but took the longest to correct.

  These findings support previous research that directness type can affect difficulty of comprehension for NS (Champagne, 2001, Holtgraves, 1999) and NNS (Ferris, 2007, Ferris 2004, Mackiewicz & Riley, 2002, Riley & Mackiewicz 2003). This does question the study done by Gibbs (1984) who showed that indirect speech might not take more time to process than direct speech for NS. One reason for the differences between Gibbs (1984) and the current study may be that Gibbs (1984) looked primarily at identification of speech acts in isolation. The current study, however, examined speech acts in context (i.e., the essay). In addition, the current study also examined not only requests (as the Gibbs (1984) study did), but also positive comments and corrections. Thus, this study examined several aspects of directness and several ways of measuring its influence on processing. One conclusion this study’s findings suggests, therefore, is that the issue of non-literal understanding may be more complex than just response times and may show
why there are differences in conclusions about the influence of directness type on processing in earlier research.

b. Accuracy

Accuracy scores were significantly different for NNS on each task and for NS on positive comments. While hedging was the most accurate for NS on each task and indirect was the least accurate, NNS did not have a consistent accuracy pattern among tasks. This would show that directness type can affect each task differently. Not surprisingly, NS were more accurate than NNS on each task and did not follow the same accuracy patterns for negative comments and the correction process. NS consistently were the most accurate on hedging and the least accurate on indirect speech acts for all three tasks. NNS followed that pattern for positive comments, but were most accurate on direct and least accurate on hedging for both the negative comments and the correction process.

Such findings suggest that NNS are affected by directness type in relation to clarity as previous research has shown (Ferris, 2007, Ferris 2004, Mackiewicz & Riley, 2002, Riley & Mackiewicz 2003; Hyland & Hyland, 2001). NNS were significantly affected by directness type for all three tasks. Also, the accuracy scores for negative comments and correcting were the same. This suggests that NNS did understand what was requested to change when they identified that it was a direct negative comment, but may have not understood the WTF accurately for hedging because hedging was least accurate. However, the inconsistency of accuracy questions the use of a consistent clarity continuum as suggested by Mackiewicz & Riley (2002; 2003).
b. perception of the teacher

As previously discussed, directness type did affect NS in their labeling of teacher gender. Though it did not affect the labeling of experience level of teachers, directness type did affect the reasoning given by NS and NNS for the labels given.

The findings that NS label gender according to directness type supports findings that show that directness can affect perceptions of the speaker (Mills, 2002; Eckert & McConnell-Ginet, 2003, Leaper, 2004). However, the lack of significance for directness type on experience level may suggest that participants did not view politeness as being a specific characteristic of new or experienced teachers. In addition, participants might be less likely to correlate indirectness as being new or experienced.

This finding also contradicts Hansen & Baker (2006) which showed that indirect comments were more likely to be considered written by an inexperienced teacher. The lack of significance among NNS might be due to a lack of pragmatic understanding of what sounds “experienced” or “inexperienced”. It may also be the case that such concepts are created differently in their L1. Though they might have correlated directness type and experience level in their L1, they might not be fluent enough to make that correlation in English. Another possibility is that their L1 attitudes about directness type are carried into their perception of English. If this were true, the different L1s might cancel each other out when the languages are lumped together as “NNS”.

Both NS and NNS were affected by directness type for their reasoning of gender and experience. Hedging was a significant predictor for both NS and NNS for gender. Direct was a significant predictor for both NS and NNS for experience. Also, hedging was a predictor for NS on teacher experience. Overall, NNS were more likely to attribute
content to labeling of gender and experience level. NS however, were more likely to use style to support their position than were the NNS. Though research has not yet studied the relationship between reasoning and directness type, it may be that NS are more comfortable identifying characteristics of the speaker based on directness type. This may be a result of more stereotypes relating to directness type in English or that NNS are less able to identify directness types than NS. Either possibility would explain why NNS relied upon the content of the comments to label teacher characteristics. More research should be done to better understand how directness type and reasoning are correlated.

c. perception of the paper

While NS were not significantly affected by directness type in labeling the grade received, NNS were. In particular, NNS participants were more likely to give papers containing hedging WTF an A, while they were more likely to give papers with indirect WTF a C. These findings may suggest that participants perceived hedging comments as more positive (and therefore the paper more positively) and indirect comments as more negative (and therefore perceived the paper more negatively). This might suggest that students receiving hedged WTF will be more confident in their writing and those receiving indirect WTF may be less confident in their writing ability.

One reason that participants thought that papers with hedging comments deserved better grades may be that hedging seems to make negative comments appear more neutral. For example, “It might be better to use the past progressive tense to distinguish your different experiences at the bus stop” or “you might want to stick to a singular or plural subject” might be seen by NNS as assertions instead of actually negative
comments meant to encourage revision. This might inflate the perception of the paper. Also, indirect speech acts often put positive comments into questions as in “Doesn’t this onomatopoeia involve the senses?” or “Isn’t that a powerful example?” NNS might be more likely to see these positive comments as negative, thus giving the overall essay a negative perception and possibly a lower grade.

Interestingly this finding might support the idea that NS better understand English pragmatics. Overall, NS were more likely to use style as a reason to identify gender and experience than NNS. This might be due to the fact that NS are more familiar with style in English. NNS were more likely overall to use content as a reason for both gender and experience. This might be a result of the fact that NNS are less perceptive of style or less able to understand directness style.

**Pedagogical Implications**

The findings discussed above have several implications for writing teachers. Teachers should be aware that the form that their explicit written feedback takes may affect NS and NNS abilities to process comments (Ferris, 2002; Ferris, 2003, Ferris, 2007; Hyland & Hyland, 2001; Riley & Mackiewicz, 2002; Mackiewicz & Riley, 2003). Teachers may need to choose a different indirect speech type if their comment is negative or positive and also if the hearer is NS or an NNS writer. For example, NS consistently process hedging most accurately and indirect speech acts least accurately. This would suggest that indirect WTF required more thinking than hedging. If the teacher has a possibility to guide student correction, indirect may a good choice to allow students to problem solve. However, if the student must problem solve on their own, it may
detrimental to their ability to make requested corrections. An inability to make accurate
corrections or understand what is expected can be discouraging for students (Hyland &

NNS however were significantly more accurate on negative comment
identification and correction when direct WTF was given. This suggests that NNS need
more direct forms from teachers in order to make accurate corrections (Ferris, 2002;
Ferris, 2003; Hyland & Hyland, 2001; Riley & Mackiewicz, 2003). NNS writers may
expect directness from feedback (Ferris, 2002; Ferris, 2003; Hyland & Hyland, 2001;
Riley & Mackiewicz, 2003) and thus prefer direct WTF to indirect speech in WTF due to
clarity. When students are unable to understand what is requested, they may become less
confident in their writing and less motivated. This could explain why NNS have more
difficulty in school. This may be helped by more direct forms of WTF when working
with NNS writers.

**Theoretical Implications**

These findings demonstrate a difference in the processing of direct and indirect
speech. This processing affects speed, accuracy and even perceptions of the speaker and
the message. NS and NNS followed the same speed patterns. This would suggest that it
is processed in the brain more quickly in relation to identification of positive and negative
comments which supports the pragmatic theory (Carroll, 2004), suggesting that the literal
meaning is initially process in the identification of teacher intention. Then if the literal
meaning does not make sense it is used to understand the non-literal meaning, as in
indirect speech acts. This would suggest that the pragmatic theory applies not only to NS
but also NNS processing of WTF. This is also demonstrated by both forms of indirect speech. Both forms of indirect speech were slower in the identification task but both faster than direct in relation to correction making.

However, participants took the longest to correct direct comments. This might suggest that identification and correction are two different mental processes for both NS and NNS. While the pragmatic theory may apply to identification tasks, a different theory is needed to understand why direct WTF took longer to make corrections. This would suggest that it is an issue in the universal nature of language and not L1 transfer or interlanguage processing because both NS and NNS were similarly affected.

Unlike comprehension, NS and NNS perceived directness type differently. While directness type affected NS perception of gender, it also affected NNS perception of paper grade. The extent and area to which directness type can affect perception may be due to L1 transfer. As seen in studies that directness type in L1 might affect production in NNS (Vassileva, 2000; Yu, 1997), this might be also true for the perception of directness type. While research has not yet studied this correlation with perception, it is possible that attitudes about directness type from L1 may affect perceptions in NNS. Extended research will help to explain how the comprehension and perception of directness type by NS and NNS are specifically being processed.

**Limitations**

There were three main limitations of this study. The first is that sentence length of 3 directness types was not controlled. Hedging was found to be longer than direct and indirect WTF which would suggest that it would naturally have a longer response time.
However, it seemed to have little effect on the results for response time on the identification of positive comments and the correction process. However, it may have had an effect on the speed of identification of negative comments as shown in the fact that it was slowest to process for both NS and NNS.

Also, not all participants received all of the directness types. This might have an affect on the results if participants were contrasting the directness type of WTF as they read and identified multiple essays. However, due to a large sample size and randomization of directness type, it reasonable suggests that the overall results will be accurate.

In addition, there were initially problems with program randomization. Hedged WTF did not appear as frequently on essay two. In order to overcome this complication, the program was modified and an additional round of data was collected. This was done to ensure approximately equal numbers of participants receiving each directness type.

**SUGGESTIONS FOR FURTHER RESEARCH**

These findings suggest many different directions of future research. One of these is looking in depth at the influence of NNS learner’s L1 on the processing of directness type. This could help to explain a few aspects of NNS processing. First such research may identify if the participant is transferring attitudes and comprehension skills directly from the L1 into the NNS. Also, such an analysis could determine whether L1 transfer affects the differences between NS and NNS or if it an actual difference in how L1 and NNS are processed. It may be found that the differences between NS and NNS are both issues of transfer and also processing differences for L1 and NNS.
Further research should identify other predicting variables. For example, initial analysis suggests that one’s L1 may affect speed, accuracy, and perception of WTF (Hansen, 2008). An initial perusal also suggests that both a NNS’ L1 and gender may predict how WTF is understood and perceived. In addition, NS males and NNS females may pattern similarly and NS females and NNS males may pattern similarly in relation to teacher perception and identification of negative comments. A larger sample size would allow these complex relations to be more accurately analyzed.

Further research should also qualitatively analyze the reasoning for teacher perception provided by the NS and NNS in order to explain how directness type is consciously and unconsciously affecting labeling and the reasoning for that labeling. It may also help to understand if NS and NNS differ in the directness types they use to give reasoning. For example, participants may be consciously or unconsciously using the directness types, such as hedging, in their own language use. It might show a correlation between directness type used in an assertion and teacher perception.

This study explores how these differences occur. After understanding what is currently happening with directness type, more research needs to determine how to make feedback more universally clear for students from diverse L1 and gender backgrounds. Interviews would help to identify specifically what makes feedback more or less clear to a particular student. This type of analysis could enable teachers to give clearer feedback and hopefully lead to more student progress and learning.
CONCLUSION

In conclusion, results for this study show that directness type does affect the understanding and processing of WTF. Directness type can affect not only how quickly participants identify and make corrections but also how accurately they identify errors and make corrections. NNS language status also affected speed and accuracy of processing WTF. While NS were more accurate for all three tasks, NNS were actually not slower than NS on the correction task. These results suggest that WTF can be very complex. There is not a directness type that is universally clearer across all three tasks. This would suggest that teachers need to choose directness type based on the task and also the language status of the hearer.

The perceptions of WTF can also be affected by directness type. NS and NNS however, differed in what significantly affected this perception. While directness type affected what grade NNS gave a paper, NS were affected by directness type in labeling teacher gender. This suggests that L1 transfer or differences in processing in L1 and NNS may be the cause of these differences. More research needs to be done to better understand the similarities and differences among the processing of NS and NNS in English.
References


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Pragmatics. 18, 431–449


Appendix A

Informed Consent Form

Consent to be a Research Subject

Introduction
The study in which you are about to participate is being conducted by Dr. Wendy Baker, a faculty member in the Linguistics Department at Brigham Young University, to evaluate how bilingualism affects language perception. You are being invited to take part in this research study because you are currently taking a linguistics class or studying English as a second language. Please take time to read the following information carefully. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you volunteer to take part in this research study.

Procedures
For the study, you will be asked to watch different movie clips. Then you will be asked to answer questions in relation to these clips, and explain the events in the clips. In addition, you will be asked demographic information including age, gender, and year in school and information about your language experience. You may choose not to answer any question that you find objectionable. Your expected time in this study will be approximately 40 minutes and there is no follow-up study.

Risks/Discomforts
Your participation in this study is voluntary and you can discontinue it at any time, for any reason, with no negative consequences to your grade or extra credit.

Benefits
There are no direct benefits to you from your taking part in this study. However, your participation may benefit our ability to understand how bilingualism affects language perception in the classroom.

Confidentiality
Participation in this research is confidential. You will be required to sign a consent form, but the consent form will not be attached to the questionnaires. The only people with access to these essays are Dr. Baker and Rachel Hansen.

Compensation
As compensation for your participation, you will receive extra-credit that will go towards your grade in classes offered by your instructor. If you do not want to participate in this research, please inform your instructor to provide alternative way to get extra credit.

Participation
Your participation in this study is voluntary. It is up to you to decide whether or not to participate. If you do decide to participate in this research, you will be asked to sign this
consent form and return it to the investigator. Again, your participation in this research study is voluntary. You have the right to withdraw at anytime or refuse to participate entirely without jeopardy to your class status, grade or standing with the university.

**Questions about the Research**
If you have questions regarding this study or concerns about any aspect of your participation in this study, you may contact Dr. Wendy Baker, at 422-4714, email wendy_baker@byu.edu, or visit her office at 4057 JFSB Provo, Utah.

**Questions about your Rights as Research Participants**
If you have any questions regarding your rights as a participant in a research project that you do not feel comfortable asking the researcher, you may contact Dr. Renea Beckstrand, IRB Chair, 422-3873, 422 SWKT, renea_beckstrand@byu.edu.

I have read and understood the information and have had the opportunity to ask questions. I understand that my participation in this study is voluntary and I feel free to withdraw at any time, without giving a reason. I have received a copy of the above consent and desire of my own free will and volition to participate in this study.

Signature: ___________________________________________ Date: ____________
Appendix B

Questionnaire

Before beginning the study, participants were given a brief oral overview about the purpose of the study. They were informed that the study looked how NNS perceived teacher feedback and that they were be exposed to teacher feedback and asked to identify if the teacher requested a correction and also to make requested corrections. They were then asked to read the instructions, which explained again the process of the study. Then they were allowed to go through a sample essay with the research assistant. The instructions were as follows:

Thank you for participating in this study. The test has three essays. Each essay will be shown in sections.

1. Read each section and when finished press the return key.

2. A teacher’s comment will appear. Read the comment and decide if a correction is requested. Enter ‘y’ for yes and ‘n’ for no. Then press enter.

3. If you entered that a correction is needed, you will be prompted to retype the sentence with the requested correction. Then an additional section of the essay will appear. Repeat the above steps until the essay is complete. Then you will be prompted to answer additional questions about the teacher of that essay.

Then the practice section appeared. The practice section was the same for each participant. It contained two teacher comments and all of the questions that appeared on each essay. For example:
In all languages, phonetic suprasegmentals are used to emphasize part of a speech act. Volume, stress patterns, and intonation are frequently used. A child quickly learns that if a mother’s voice is raised, she is likely angry. A high-pitched quiet voice always depicts [1] sadness.

Press enter to continue

Then the following teacher comment appeared

[1] You might want to qualify this statement.

Is a correction requested?

Press y or n for <yes/no>

If the participant entered ‘y’ they were prompted with the following direction:

Make the requested correction

If the participant entered ‘n’, they proceeded to the next section of the essay.

Without hearing or understanding the words involved in a conversation, listeners can guess the emotions of the speakers simply by the intonation patterns. When overhearing a conversation in a different language, one can often determine the emotions of the speakers [2]. The exact use of these patterns can vary in languages.

Press enter to continue

Then the following teacher comment appeared

[2] Interesting insight

Is a correction requested?

Press y or n for <yes/no>

If the participant entered ‘y’ they were prompted with the following direction:
Make the requested correction

If the participant entered ‘n’ they proceeded to the next section of the essay. The following were questions about the essay in general:

Now that you have finished the essay:

What grade did the student earn? A  B C D

Then the essay appeared completely and they answered the following questions

In all languages, phonetic suprasegmentals are used to emphasize part of a speech act. Volume, stress patterns, and intonation are frequently used. A child quickly learns that if a mother’s voice is raised, she is likely angry. A high-pitched quiet voice always depicts [1] sadness. Without hearing or understanding the words involved in a conversation, listeners can guess the emotions of the speakers simply by the intonation patterns. When overhearing a conversation in a different language, one can often determine the emotions of the speakers [2]. The exact use of these patterns can vary in languages.

After answering each question, the participants pressed the enter key and the following question appeared.

What were the strengths of the essay?

What were the weaknesses of the essay?

Is the teacher male or female?

Explain your reasoning.

Is the teacher new or experienced?

Explain your reasoning.
After the practice section is completed, the participants begin essay 1 with the following instructions:

Please read this essay selection. Press enter when you are finished for the teacher comment to appear. Read the teacher comments carefully and quickly. Then answer the questions that appear quickly. You are being timed.

After completing three essays, participants were prompted to enter demographic information including: the person’s age, gender, year in school, major, place of origin and native language. See Appendix C.

After pressing enter, the test disappeared.
Appendix C

Demographic Information Questions

Age: Gender: Male or Female Year in School: Major:
Place of Origin: Native Language:

1. How have you learned English?

2. How long have you studied English?

3. How long have you been in an English speaking environment?

4. Why did you decide to learn English?

5. How many college writing classes have you taken in any language? What classes were they?

6. Have you ever misunderstood a teacher’s comments on a writing assignment in your native language?
   If yes, were the comments oral or written?
   Explain any problems you experienced personally from these misunderstandings.

7. Have you ever misunderstood a teacher’s comments on a writing assignment in English?
   If yes, were the comments oral or written?
   Explain any problems that you experienced personally from these misunderstandings.

How would you rate: 

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<th>low</th>
<th>high</th>
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<td>10</td>
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Your general proficiency in English

Your ability to understand teacher’s comments in your native language

Your ability to understand teacher’s comments in English
Appendix D

Written Teacher Feedback- Indirect Speech Acts

Essay 1

Longing for Home

Little droplets of sweat trickled down my spine as I wiped the sweat off my face before it dripped down my nose. Luckily my nose was congested so I could not smell the awful stench coming from the middle-aged man whose arm was reaching for the bar that ran the length of the bus. I would have moved, but I could not; stinky, wet bodies were crammed into the bright orange bus, leaving no place to turn or direct my eyes. The doors opened and the dance began. Fifteen people squeezed in between and past other passengers to the exit doors. Another twenty simultaneously climbed on and all tried to resituate. I smirked as I remember my first time on the bus.

It was April and the blistering heat had not yet begun, but it was hot. As we waited for the bus in the sun, I swore that I would never wear anything silky again. It created a greenhouse effect and made it seemed hotter than what it really was. Then I saw the bus. I had seen buses before. They looked more like livestock trucks than buses because the people were so squished in beyond capacity. My naïve American mind thought, “What would the Fire Marshall say about that?”

As the doors creaked open I saw the exchange of people and wondered how I would find a way to get into the middle of the mess. My companion pushed forward, and I said excuse me as soon as I bumped someone. My attempted politeness defied cultural norms. That is when the stares began. What was this American girl trying to say? I found out later that my accent wasn’t the problem; it is that no one says excuse me. I felt stripped by their eyes that seemed to look at me from all directions. I didn’t know how to escape them, so I looked down. Greasy men snickered and young girls gawked wide-eyed at me. I would not have wished the experience upon anyone. I felt myself invert as I, the sheltered little girl from suburbia, faced the harsh realities of 3rd world life.

Essay 2

BREAKFAST FOR THE HYPOGLYCEMIC

One of the crucial lessons learned in nutrition is that breakfast is the most important meal of the day. The importance of this meal is exponentially increased for those with hypoglycemia. Hypoglycemia is a condition resulting in low blood sugars. Both reactive and fasting hypoglycemia have the same symptoms of hunger, nervousness, perspiration, shakiness, dizziness, light-headedness, sleepiness, confusion, difficulty speaking, and

Comment [1]: I don’t know where you are.
Comment [2]: Do you want your verbs to agree?
Comment [3]: How about that imagery?
Comment [4]: Don’t you think it would be better to explain the background of this thought?
Comment [5]: Onomatopoeia
Comment [6]: insightful
Comment [7]: Can you make the three bus experiences more distinct?
Comment [8]: Don’t you think it would be less wordy if you combined these sentences?
feeling anxious or weak. Though the causes of hypoglycemia are still undetermined, the way to relieve the symptoms is clear.

Hypoglycemic people should eat small and frequent meals with a variety of foods, and choose high-fiber foods. Despite the fact that sugary foods would quickly increase blood sugars, they should actually be avoided. Some health professionals recommend a diet high in protein. Breakfast is the way to set the body in motion for that person’s day, and the affects of what is eaten can last all day long. Thus, the question arises, is basic cereal and soymilk a more appropriate meal or peanut butter toast? Both meals fit well into my fast-paced lifestyle and conform to the restrictions of my milk-allergy.

1. METHODOLOGY. In order to evaluate which breakfast choice is more appropriate for me and other people who are hypoglycemic, we will refer to the nutritional facts on the packages. Despite the fact that I enjoy a quick and easy breakfast, being hypoglycemic overrides the desire for the fastest options for breakfast. The meal that has the most protein and the least amount of sugar will be chosen. I will use the example of two cups of cereal and 8 ounces of soymilk for the first meal option. For the second, 2 slices of bread and 4 tablespoons of peanut butter. Each gram of protein will be considered a positive point (+1). Every 2 grams of sugar will be a negative point (-1). Then we will add the points together; the meal with the highest amount of points will be judged as the best.

2. ANALYSIS. Two cups of cereal contains four grams of protein (+4) and twenty grams of sugar (-10). Eight ounces of soymilk contains seven grams of protein (+7) and ten grams of sugar (-5). The total points for the cold cereal meal are (-4). There are 11 grams of protein and 30 grams of sugar. Two pieces of bread contains eight grams of protein (+8) and six grams of sugar (-3). Four tablespoons of peanut butter contains 16 grams of protein (+16) and 6 grams of sugar (-3). The total points for the peanut butter toast are (+18).
Appendix E

Written Teacher Feedback- Hedging

Essay 1

Longing for Home

Little droplets of sweat trickled down my spine as I wiped the sweat off my face before it dripped down my nose. Luckily my nose was congested so I could not smell the awful stench coming from the middle-aged man whose arm was reaching for the bar that ran the length of the bus. I would have moved, but I could not; stinky, wet bodies were crammed into the bright orange bus, leaving no place to turn or direct my eyes. The doors opened and the dance began. Fifteen people squeezed in between and past other passengers to the exit doors. Another twenty simultaneously climbed on and all tried to resituate. I smirked as I remember my first time on the bus.

It was April and the blistering heat had not yet begun, but it was hot. As we waited for the bus in the sun, I swore that I would never wear anything silky again. It created a greenhouse effect and made it seemed hotter than what it really was. Then I saw the bus. I had seen buses before. They looked more like livestock trucks than buses because the people were so squished in beyond capacity. My naïve American mind thought, “What would the Fire Marshall say about that?”

As the doors creaked open I saw the exchange of people and wondered how I would find a way to get into the middle of the mess. My companion pushed forward, and I said excuse me as soon as I bumped someone. My attempted politeness defied cultural norms. That is when the stares began. What was this American girl trying to say? I found out later that my accent wasn’t the problem; it is that no one says excuse me. I felt stripped by their eyes that seemed to look at me from all directions. I didn’t know how to escape them, so I looked down. Greasy men snickered and young girls gawked wide-eyed at me. I would not have wished the experience upon anyone. I felt myself invert as I, the sheltered little girl from suburbia, faced the harsh realities of 3rd world life.

Essay 2

BREAKFAST FOR THE HYPOGLYCEMIC

One of the crucial lessons learned in nutrition is that breakfast is the most important meal of the day. The importance of this meal is exponentially increased for those with hypoglycemia. Hypoglycemia is a condition resulting in low blood sugars. Both reactive and fasting hypoglycemia have the same symptoms of hunger, nervousness, perspiration, shakiness, dizziness, light-headedness, sleepiness, confusion, difficulty speaking, and feeling anxious or weak. Though the causes of hypoglycemia are still undetermined, the way to relieve the symptoms is clear.
Hypoglycemic people should eat small and frequent meals with a variety of foods, and choose high-fiber foods. Despite the fact that sugary foods would quickly increase blood sugars, they should actually be avoided. Some health professionals recommend a diet high in protein. Breakfast is the way to set the body in motion for that person’s day, and the affects of what is eaten can last all day long. Thus, the question arises, is basic cereal and soymilk a more appropriate meal or peanut butter toast? Both meals fit well into my fast-paced lifestyle and conform to the restrictions of my milk-allergy.

1. METHODOLOGY. In order to evaluate which breakfast choice is more appropriate for me and other people who are hypoglycemic, we will refer to the nutritional facts on the packages. Despite the fact that I enjoy a quick and easy breakfast, being hypoglycemic overrides the desire for the fastest options for breakfast. The meal that has the most protein and the least amount of sugar will be chosen. I will use the example of two cups of cereal and 8 ounces of soymilk for the first meal option. For the second, 2 slices of bread and 4 tablespoons of peanut butter. Each gram of protein will be considered a positive point (+1). Every 2 grams of sugar will be a negative point (-1). Then we will add the points together; the meal with the highest amount of points will be judged as the best.

2. ANALYSIS. Two cups of cereal contains four grams of protein (+4) and twenty grams of sugar (-10). Eight ounces of soymilk contains seven grams of protein (+7) and ten grams of sugar (-5). The total points for the cold cereal meal are (-4). There are 11 grams of protein and 30 grams of sugar. Two pieces of bread contains eight grams of protein (+8) and six grams of sugar (-3). Four tablespoons of peanut butter contains 16 grams of protein (+16) and 6 grams of sugar (-3). The total points for the peanut butter toast are (+18).
Appendix F

Written Teacher Feedback- Direct

Essay 1

Longing for Home

Little droplets of sweat trickled down my spine as I wiped the sweat off my face before it dripped down my nose. Luckily my nose was congested so I could not smell the awful stench coming from the middle-aged man whose arm was reaching for the bar that ran the length of the bus. I would have moved, but I could not; stinky, wet bodies were crammed into the bright orange bus, leaving no place to turn or direct my eyes. The doors opened and the dance began. Fifteen people squeezed in between and past other passengers to the exit doors. Another twenty simultaneously climbed on and all tried to resituate. I smirked as I remember my first time on the bus.

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As the doors creaked open I saw the exchange of people and wondered how I would find a way to get into the middle of the mess. My companion pushed forward, and I said excuse me as soon as I bumped someone. My attempted politeness defied cultural norms. That is when the stares began. What was this American girl trying to say? I found out later that my accent wasn’t the problem; it is that no one says excuse me. I felt stripped by their eyes that seemed to look at me from all directions. I didn’t know how to escape them, so I looked down. Greasy men snickered and young girls gawked wide-eyed at me. I would not have wished the experience upon anyone. I felt myself invert as I, the sheltered little girl from suburbia, faced the harsh realities of 3rd world life.

Essay 2

BREAKFAST FOR THE HYPOGLYCEMIC

One of the crucial lessons learned in nutrition is that breakfast is the most important meal of the day. The importance of this meal is exponentially increased for those with hypoglycemia. Hypoglycemia is a condition resulting in low blood sugars. Both reactive and fasting hypoglycemia have the same symptoms of hunger, nervousness, perspiration, shakiness, dizziness, light-headedness, sleepiness, confusion, difficulty speaking, and feeling anxious or weak. Though the causes of hypoglycemia are still undetermined, the way to relieve the symptoms is clear.
Hypoglycemic people should eat small and frequent meals with a variety of foods, and choose high-fiber foods. Despite the fact that sugary foods would quickly increase blood sugars, they should actually be avoided. Some health professionals recommend a diet high in protein. Breakfast is the way to set the body in motion for that person’s day, and the affects of what is eaten can last all day long. Thus, the question arises, is basic cereal and soymilk a more appropriate meal or peanut butter toast? Both meals fit well into my fast-paced lifestyle and conform to the restrictions of my milk-allergy.

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