5-1-2009

Australian English Rising Intonation: Frequency and Function During Talk-in-Interaction

Susan Buescher

Follow this and additional works at: https://digitalrepository.unm.edu/ling_etds

Susan Marie Buescher
Candidate

Department of Linguistics
Department

This thesis is approved, and it is acceptable in quality
and form for publication:
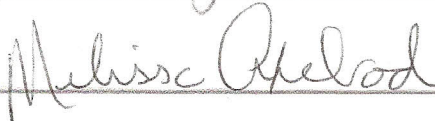
Approved by the Thesis Committee:

Catherine E. Travis, Chairperson

Caroline L. Smith, Member

Melissa Axelrod, Member

AUSTRALIAN ENGLISH RISING INTONATION:
FREQUENCY AND FUNCTION DURING
TALK-IN-INTERACTION

BY

SUSAN MARIE BUESCHER

B.A. LINGUISTICS

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

Master of Arts
Linguistics

The University of New Mexico
Albuquerque, New Mexico

May 2009

DEDICATION

First, and foremost, I dedicate this thesis to Ana Aurora. Amora, without you, I would have been desperately lonely as I traveled on this journey. Although your enthusiasm and eagerness for me to finish my degree never wavered, it was your presence that meant the most to me. Because I knew that you were there, and that you cared about me, I always knew that I could do exactly what I had set out to do. Thank you for your endless love and support and for helping me to refocus when I lost sight of where I was. I am so happy that you have been a part of this experience. Te amo mucho.

I also dedicate this to Barbie, my lifelong best friend. In the midst of everything, you forced me to pause and take note of the importance of this accomplishment. Knowing that you are proud me, and of how far I have come since I was a stepdancer in the Festival, gave me the strength to forge on and finish at a time when I was feeling overwhelmed. My academic experience has become more meaningful to me since you have come here and shared it with me and more significant because you have reminded me of who I am while still accepting the person I have become.

This is also for Lydia Katherine, who has grown up during the years that I have been away pursuing my academic career. Each time I go home for a visit I am astounded to see what an intelligent, astute young girl you have become. You are very special to me and I am honored to say you are my little sister.

ACKNOWLEDGMENTS

AUSTRALIAN ENGLISH RISING INTONATION:
FREQUENCY AND FUNCTION DURING
TALK-IN-INTERACTION

BY

SUSAN MARIE BUESCHER

ABSTRACT OF THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

Master of Arts
Linguistics

The University of New Mexico
Albuquerque, New Mexico

May 2009

AUSTRALIAN ENGLISH RISING INTONATION:

FREQUENCY AND FUNCTION DURING TALK-IN-INTERACTION

by

Susan Marie Buescher

B.A., Linguistics, University of New Mexico, 2004

ABSTRACT

Research on Australian English has shown that in this variety, a high-rising intonation contour typically used with yes/no questions, is also often used with declarative statements (Guy et al. 1986, Fletcher et al., 2002, 2005). Previous researchers, working with data from sociolinguistic interviews have claimed that the Australian high-rising terminal (HRT) pitch contour functions as a floor-holding device to mitigate semantic complexity (Guy et al., 1986, Guy and Vonwiller 1989). However, the notion of 'semantic complexity' has not been well-defined, and despite its proposed role in turn-taking, there have been no studies to date which have taken into account the use of the high-rise in spontaneous conversation, where we can best observe the dynamics of turn-taking at work (cf. Ford and Thompson 1996, Sacks et al. 1974).

In this thesis I analyze 135 tokens of HRT contours drawn from a corpus of spontaneous Australian English conversation. My results indicate that the use of the HRT

is on the rise in comparison with previous studies (cf. Guy et al. 1986) and furthermore, that HRTs are multifunctional in conversation. With respect to the role of the HRT in turn-taking, I find that the majority of the HRTs are not used to project turn completion points, but rather to mark local points of pragmatic completion, which allow the speaker to both clarify important information within the turn in addition to projecting more talk.

I argue that the varied discourse functions of the HRT are directly related to its frequency and to its interactional source as question intonation. In conclusion I demonstrate how this work supports a functional view of language change in which frequency and generalization play a large role in the emergence of linguistic structure.

Table of Contents

List of Figures

x

List of Tables

1 Introduction

One distinctive feature of Australian English spoken discourse is a high-rising intonation contour that occurs with declarative statements. This high-rising contour has been well-documented in the literature (Guy et. al 1986, Guy and Vonwiller 1989, Fletcher et. al 2002, 2005) and previous researchers have noted that while it is the same contour used to turn declarative statements into *yes/no* questions in many dialects of English, when used by speakers of this dialect, the result is not always a *yes/no* question. Researchers of Australian English have shown that in many cases speakers use this high-rising declarative for some other function than to question the propositional material of their utterance.

In the present work I examine how the high-rising intonation contour is used by speakers of Australian English in spontaneous conversation. My research will primarily focus on two aspects of this linguistic device. First, I will determine how frequently the high-rising contour is used in conversation, and compare my results with those of previous studies in order to make a conclusion from a diachronic perspective. The second focus of my research concerns the meaning of the high-rising intonation contour. Since contradictory claims have been made by prior researchers about the function of the contour, my work will examine how it is used by conversational participants, and whether it functions differently in conversation than has been shown for other discourse genres.

This thesis begins with a review of the previous literature on the high-rising intonation contour, and the claims that have been made about its distribution and functions by other researchers. The data and methodology for my research is presented in

section 3, and section 4 reports on the frequency of the HRT in comparison with earlier time periods. I will then turn my attention to a discussion of the nature of conversation as a form of discourse, as well as a description of turn-taking and the role of intonation in conversational discourse and how this relates to my hypotheses regarding the HRT. Finally, I will present the results of my research, focusing on the varied discourse functions of the HRT, but most specifically its role in turn-taking and negotiating the floor, before making my conclusion in section 8.

2 The high-rising contour in Australian English

Before beginning my discussion of the discourse functions of the high rising terminal pitch contour (henceforth referred to as the HRT) I will first describe how previous researchers have defined this contour in terms of its phonetic characteristics. I will then outline the previous research on the HRT, including what has been found for its social distribution as well as its meaning and function.

2.1 Prosodic definition of the high-rising terminal contour

What has come to be known as the HRT contour was first identified by Halliday (1967) as Tone 2 in his seminal work on *Intonation and grammar in British English*. Researchers since his time claim that the high-rising intonation contour "must rise to a pitch level approximately 40% higher than the high nuclear accent" (Fletcher et. al 2005:391). Recent research presented in Fletcher et al. (2002, 2005) suggests that the HRT can have either a low or high onset, and is transcribed as either L* H-H% or H* H-H% respectively, following the transcription method outlined by Pierrehumbert (1980). Fletcher et al. describe the HRT with the low onset as having "an observable F0 trough in the low part of the speaker's range associated with the primary stressed syllable of the accented word, rising to relatively high pitch level at the edge of the intonational phrase" (2005:392). Meanwhile, the HRT with the high onset "commences relatively high in the speaker's range, and continues to rise towards the phrase edge" (Fletcher et al. 2005: 392). An example of an H* H-H% contour, taken from my data, is shown below.

Figure 1: Pitch track of the HRT contour
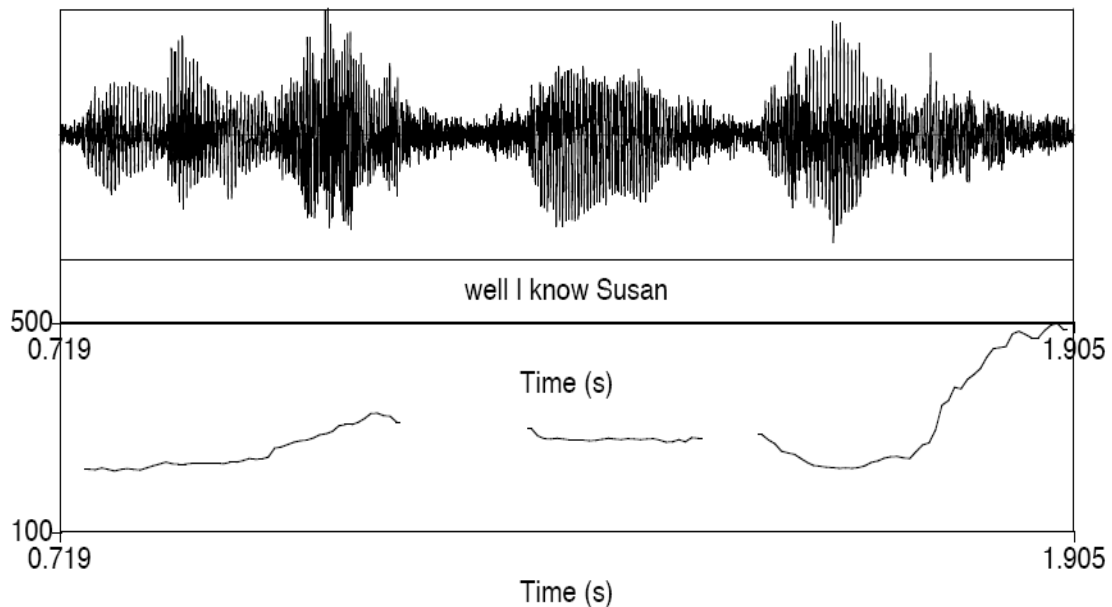
Although the HRT contour is canonically used by English speakers to express a

yes/no question, in the example above the contour is used with the declarative utterance,

well I know Susan. Notice the large rise at the end of the pitch track as the speaker utters

the word *Susan*. This is a very distinct example of the HRT contour. Not all of the

contours represented in this study are as sharp and defined. About one-third of the

contours contain more gradual rises that are somewhat different perceptually.

Nevertheless, for the purposes of this research, all of the contours containing a high-rise

were analyzed. This innovative usage of the HRT is an intriguing and unique feature of

Australian English, and as Fletcher et al. emphasize this "makes Australian English ...

intonation different from Standard Southern British (SSB) English ... where the high-

rising nucleus is used primarily with *yes/no* questions, and never with declarative

utterances" (2005:391).

The difference between the two variant forms of the HRT, the L* H-H% contour

and the H* H-H% contour, is not clear since current studies within the field have had

contradictory results. In a study conducted in 2002, Fletcher et al. proposed that

"statement high rises are not phonetically identical to rises associated with *yes/no*

questions" (2002:1).   Instead, Fletcher et al. (2002) suggest that subtle phonetic

differences in the HRT, primarily the presence of a high-onset versus a low-onset,

correspond to different meanings of the contour within Australian English. The HRT

associated with declarative statements in this variety, is proposed to have a low-onset (L*

H-H%) while the HRT used by the same speakers for yes-no questions, makes use of a

high-onset (H* H-H%). The researchers conclude that the different phonetic realizations

of the HRT support the claim that they have different functions for speakers of Australian

English.

Contrary to this is the research conducted by Fletcher et al. in 2005, in which the

evidence indicates that, on the whole, both forms of the HRT, the L* H-H% and the H*

H-H%, are used by speakers of Australian English with declarative utterances as well

with as *yes/no* questions (2005:393). Indeed, Fletcher et al. claim that for some speakers

"it is apparent that there are no discernable phonetic differences between the HRTs

associated with questions and declaratives" (2005:395). However, other speakers

"systematically use high nuclear rises for questions (i.e. H* H-H%) and low nuclear rises

for statements (L* H-H%)" (2005:396). Fletcher et al. conclude that, "effectively for

some speakers, there may be some kind of system-internal phonetic difference emerging

between the kinds of rise used for questions versus statements, at least with respect to the

starting point of the rise" (2005:396).

Perhaps it is misleading to imply that the two studies mentioned above are

contradictory, since they are in agreement as to which type of onset tends to correlate to

questions and which type to declaratives. The disagreement between them concerns the extent to which speakers maintain a distinction between the contours, where Fletcher et al. (2002) suggest the distinction to be always present, and Fletcher et al. (2005) propose that some speakers maintain a distinction while others do not. One possible explanation for the difference in these results is that the intonational system in Australian English is in transition, and the status of the HRT within the system is yet to be determined. However, without diachronic evidence this explanation remains unsatisfactory. Nevertheless, what is clear is that researchers have not yet reached a consensus as to whether HRTs associated with questions are phonetically distinct from those associated with declaratives.

My work here does not investigate this aspect of the HRT contour specifically, nor does it seek to provide an answer to this question, since I am primarily concerned with the way speakers negotiate the floor using the HRT and not with the rise or the onset of the contour. However, I have found that in my data there appears to be a notable and systematic difference between HRTs used with questions and those used with declaratives, where a low-onset tends to correlate with questions, and a high-onset correlates with declaratives. This supports the results described in Fletcher et al. (2002) since the HRTs in my data are patterning in a similar way.

In this section I have discussed the different phonetic realizations of the HRT contour, and how they have been found to pattern within Australian English. The defining characteristic of the HRT is its rising pitch contour, regardless of whether it has a low of high onset. The primary way that the HRT is distinguished from *yes/no* questions is syntactically; HRT contours have declarative syntax, while *yes/no* questions

typically have interrogative syntax. It is possible for *yes/no* questions to occur with

declarative syntax as well, but in these cases the context of the conversation, and the

listener's response can be used to determine whether the high-rise contour was an HRT or

a *yes/no* question. This distinction will be further discussed in section 3.3. In the next

section I will review the literature which discusses the way the HRT is used.

2.2 Previous research on the HRT

2.2.1 Social distribution of the HRT

In an early report on the HRT contour in Australian English, Guy et. al (1986)

consider whether the use of the HRT with declarative utterances is a change in progress.

Their research compares data drawn from sociolinguistic interviews collected in Sydney

between 1982 and 1987, with data compiled by Mitchell and Delbridge (1965), who

surveyed adolescent speech in Sydney at an earlier period in time, between 1959 and

1960. The focus of the work presented by Guy et. al (1986) has both a synchronic and

diachronic aim. They first seek to investigate the social distribution of the HRT in their

data to determine if there are differences in usage patterns according to social variables

such as age, class, sex and ethnicity. Secondly, they endeavor to determine whether the

use of the HRT is more frequent in the data from the 1980s than it was in the data

collected by the earlier researchers.

With respect to the synchronic state of the HRT, the results indicate that "there is

age-grading, with the highest rate of use found in the older teenagers; there is social class

differentiation, with the highest rate of use occurring in the working class, [and] the

women are leading the men, which is typical of most linguistic changes reported in the

literature" (Guy et. al 1986:41). Further evidence of the synchronic variation surrounding

the HRT is based on the social status attributed to it by speakers. Guy et. al note that "the working class is advancing and extending the use of [the HRT] and has a positive local evaluation of it, while at the same time the dominant social classes are resisting and stigmatizing the new form ... and have assigned it a negative overt status" (1986:45).

In order to examine the way the HRT changed over time, Guy et. al compare the relative frequency of the HRT within each set of data. Their results show that the HRT accounts for 1,724 of the 107,685 declarative utterances in the data from the 1980s which is the equivalent of 1.6% of the data (1986:34), while it accounts for only 8 of the 2,630 utterances, or 0.3% of the data from 1960 (1986:41). Based on these results Guy et. al argue that the difference in the rate of use between these two time periods is substantial, and is indicative of the fact that the innovative HRT contour with declarative statements is a change in progress.

2.2.2 The meanings and functions of the HRT

Besides attempting to determine whether the HRT is a case of change in progress, and therefore becoming more frequent, researchers of Australian English have also made varied and sometimes contradictory proposals about the meaning and function of the HRT.

In their attempt to explain the pragmatic extension of the HRT, Guy and Vonwiller (1989) note its canonical use in creating *yes/no* questions in English by occurring with declarative utterances. An utterance produced in this way has "the effect of questioning the propositional content of the utterance" (1989:32). According to Guy and Vonwiller, "the syntax and intonation involved in [HRT] are the same as [those of *yes/no* questions]; what makes [HRT] different is just its meaning. Instead of questioning

propositional content, [HRT] questions the listener's *state of understanding*" (1989: 32).

Guy and Vonwiller further conclude that this function of the HRT is "a modest and

natural extension of the meaning of the HRT-in-declarative construction" (1989:32).

In addition to its "social meaning of seeking verification of a listener's

comprehension" (Guy et. al 1986:43), the HRT contour has also been thought to play a

role in turn-taking. According to Fletcher et. al, "one of the 'consensus' interpretations of

the HRT by almost all of the earlier studies of this phenomenon in Australian English is

that it is often used as a floor-holding device" (2005:399). The notion behind this aspect

of its function follows from the work of Sacks et al. (1974) where the HRT is assumed to

constitute the first part of an adjacency pair, or, "a 'continuer'-- a solicitation of the

listener's consent to an extended turn for the speaker" (Guy and Vonwiller 1989:44). The

HRT functions in this sense to hold the floor during an extended turn at talk, while still

allowing the interlocutor a brief turn to ask for clarification or acknowledgement of what

the speaker is saying.

The claim that the HRT functions as a floor-holding device is also supported by

the follow-up work on text complexity and information flow by Guy and Vonwiller

(1989). The results of their interview data suggest that during complex-verbal tasks, such

as narratives or descriptions of events, speakers had a tendency to use the HRT more

frequently. When stating facts or opinions speakers were less likely to use the HRT,

which Guy and Vonwiller tie to the fact that these kinds of discourse are simple semantic

structures and have "little sequential structure or internal dependency of one part of the

text on another, and consequently little motivation to seek confirmation of listener

comprehension" (1989:25-26). They also relate the results of their work to information

flow, claiming that the HRT was more likely to be used during times when new information is being presented by the speaker.

Because different researchers have often worked with different discourse genres, they have often made claims about the function of the HRT within a particular genre, which do not hold for various other genres. Based on their work with sociolinguistic interviews, which necessarily involve a structured form of turn-taking, Guy and Vonwiller (1989) reject the notion that the HRT is used to express hesitance, uncertainty, politeness, or deference, claiming that "none of these seems to account very well for the way [HRT] is used." (1989:24) Contrary to this however, in their work with map-task dialogues, which inherently contain uncertainty, Fletcher et. al (2002) found that the HRT was associated with speaker uncertainty as a primary function and was often used to mark deference and politeness.

The present work seeks to address some of the inconsistencies and claims made about the use of the HRT, by examining its distribution and function in conversational Australian English. The choice to study spontaneous conversation as opposed to other forms of discourse is based on the fact that prior research has focused almost exclusively on either sociolinguistic interviews (Guy et. al 1986, Guy and Vonwiller 1989) or map-task dialogues (Fletcher et. al 2002). Although the results of these studies have contributed much to our current understanding of the meaning and use of the HRT contour, the genres of discourse that they represent are very different from spontaneous conversation and will presumably have different results. Whereas conversation is dialogic and spontaneous, sociolinguistic interviews and map-task dialogues are structured and

10

purpose-driven. Participants in such discourse genres will arguably have different kinds of discourse needs, and will negotiate the floor in different ways.

Using spontaneous conversational data then, I will examine the frequency and the meaning of the HRT. My work will follow from earlier studies and note the extent to which the HRT has spread throughout Australian society within the last twenty years since it was first claimed to be an innovative usage by Guy et. al (1986). Given the strong impact that frequency and conventionalization has on processes of language change, (cf. Bybee 2001) we can conclude that if the high-rise intonation contour has become increasingly frequent among all speakers of Australian English, then perhaps it has also become more routinized and has generalized in meaning.

3 Data and methodology

3.1 Data

The data for this project are drawn from the Corpus of Australian English (Florey: University of Newcastle Ethics Approval #99/2), which was collected and compiled between 1999 and 2000. The corpus consists of approximately 12 hours of speech, from 25 spontaneous conversations between close friends and family members. The speakers range in age from 18 to 79, have varying levels of education, and are mainly from the Central Coast region of New South Wales, Australia.

For this research, 10 minute excerpts from 6 of the conversations (representing 13 speakers) in the corpus were selected and transcribed. In order to obtain a maximally clear sample, where each HRT can be clearly identified, the excerpts were chosen based on the quality of the recording and the absence of background noise and/or static. Each 10 minute segment was transcribed into intonation units according to the Du Bois et al. (1993) method, yielding 60 minutes of spoken discourse, and approximately 2,280 intonation units (and approximately 9,000 words). The recording date, participant information, and setting of each conversation included in the study is displayed in Table 1.

Table 1: Corpus				
Transcript Title (Recording Title)	Recording Date	Participants	Setting/Content	Length (mins.)
censorship (AusE_MF_6)	2000	Marilyn: F/45 Freda: F/65	Neighbors catching up on each other's lives over cup of tea.	10.00
kids & horses (AusE_MF_15)	2000	Heidi: F/36 Kerry: F/40	Two mature-aged university students chatting about kids/holidays (vacations).	10.00
land rovers (AusE_MF_17)	2000	Julie: F/45 Rhys: M/43	A couple at home discussing the day's events.	10.00
on holidays (AusE_MF_20)	2000	Carol: F/~50 Allan: M/50 Joshua: M/18	A family chatting at home around the dinner table.	10.00
palm reading (AusE_MF_5)	2000	Alexia: F/23 Dimity: F/21	Two university students discussing holidays (vacations), friends and email.	10.00
footy teams (AusE_MF_25)	1999	Alice: F/~30 Beth: F/~30	Two good friends chatting over a cup of tea.	10.00
			TOTAL	**60.00**

3.2 Reliability of the data

In order to ensure accuracy and objectivity with respect to my perception of the HRT in

the data for this research, I conducted a reliability test. Four transcribers, trained in

linguistic methods and familiar with the Du Bois et al. (1993) method of identifying

intonation contours in spoken discourse, but unfamiliar with the specifics of this project,

were chosen to perform reliability checks. Each participant was given audio files

containing discourse from three different conversations of 5 minutes each, giving a total

of 15 minutes to each transcriber. The transcripts for the conversations were also given to

the transcribers, although all prosodic information was removed, so that the transcribers

13

could not see where the researcher had identified intonation breaks, or instances of the HRT contour.

The transcribers were also given a page of instructions stating that they were to highlight each word in the transcript that they perceived as having a rising intonation pattern. The transcribers were not asked to distinguish HRT contours from *yes/no* questions; rather they were allowed to mark both forms of rising intonation contours. A copy of the instructions given to the transcribers is provided in Appendix A. The transcribers were also provided with four audio examples of the type of contour they were asked to identify. Each of the example contours were produced by different speakers than those included in the data set for this research.

The transcribers were given all of the transcripts and audio files on a single CD, which they were allowed to take home and work on at their leisure. Using *Voicewalker* software, the transcribers were allowed to repeat and re-listen to segments as many times as they wanted.

Before the results of the reliability tests could be calculated, the number of possible locations in which the HRT could potentially occur had to be determined. It was assumed that the HRT could occur with any content word uttered, and so the content words in each transcript were counted. Prepositions, articles, laughter, truncated words, backchannels (such as *hm, uh, um,* and *oh*) and uncertain hearings (marked in the transcripts as XX) were excluded from the count of possible locations for the HRT, since these would be unlikely places for the contour to occur. Furthermore, genuine *yes/no* questions that were uttered with an HRT contour were also excluded from the analysis, regardless of whether or not the transcribers identified them.

The results for the reliability tests are displayed in the following four tables. Four different figures are displayed in each table. These figures represent (1) the number of times the transcriber and the researcher both marked an HRT in the data, (2) the number of times that neither the transcriber nor the researcher marked an HRT in the data, (3) the number of times the transcriber marked an HRT in the data, while the researcher did not, and (4) the number of times the researcher marked an HRT in the data, while the transcriber did not.

Table 2: Reliability results for transcriber A

		Researcher	
		marked HRT	did not mark HRT
Transcriber A	marked HRT	19	14
	did not mark HRT	12	2248

Table 3: Reliability results for transcriber B

		Researcher	
		marked HRT	did not mark HRT
Transcriber B	marked HRT	25	29
	did not mark HRT	15	1780

Table 4: Reliability results for transcriber C

		Researcher	
		marked HRT	did not mark HRT
Transcriber C	marked HRT	17	30
	did not mark HRT	18	2482

Table 5: Reliability results for transcriber D			
		Researcher	
		marked HRT	did not mark HRT
Transcriber D	marked HRT	27	33
	did not mark HRT	16	2563

Finally, the disagreement rate between the researcher and each transcriber was calculated. This involved combining the total number of cases in which the transcriber marked an HRT in the data while the researcher did not, with the total number of cases in which the researcher marked an HRT in the data and the transcriber did not. This sum was then divided by the total number of possible words, including those marked as HRTs and those not marked as HRTs. The disagreement rates are all less than 2.5% and are displayed in Table 6.

Table 6: Inter-transcriber disagreement rates	
Transcriber A	1.16% (26/2248)
Transcriber B	2.47% (44/1780)
Transcriber C	1.99% (48/2417)
Transcriber D	1.97% (49/2487)

3.3 Exclusions

All HRTs to occur within the data were included in the analysis. However, high-rises that occurred with actual questions or *yes*/*no* questions were excluded from my analysis. There were 109 excluded questions in the data, which were recognizable by either their syntax, as in example (1) or by the context and response of the interlocutor, as in example (2).

(1)   Kerry ;   ... Was it --
                                Did everybody who booked turn up?
        Heidi;   I think so,
                                there was a fair few people up there.

                                                (kids and horses: 110-113)

(2)   Freda;   That was a nice holiday we went to Tasmania for,
                                Because uh,
                                although we had to do our own cooking,
                                mainly we just cooked for breakfast and went out for the evening
                                      meal.
        Marilyn;   **When you went to Cradle Mountain?**
        Freda;   Yes that was lovely.

                                                (censorship: 28-33)

4 The frequency and distribution of the HRT contour

In contrast to what researchers in earlier time periods have found, HRT contours occur frequently in the present data, accounting for 6% (135/2280) of the total number of intonation units uttered. The breakdown for the number of HRT contours to occur in each conversation is shown in Table 7.

Table 7: Frequency of the Australian HRT contour	
Transcript Title	% HRT (HRT IUs / total N of IUs
censorship	4 (15/385)
kids and horses	4 (16/398)
land rovers	4 (15/395)
on holidays	7 (26/355)
palm reading	8 (31/390)
footy teams	9 (32/357)
TOTAL	6 (135/2280)

As can be seen, even the smallest percentage of HRT contours to occur within an individual conversation is 4% (15/385).

The following figure indicates how the use of the HRT has changed diachronically. The results of the present work are compared with the results of Guy et al. (1986) and Mitchell and Delbridge (1965). The HRT was measured according to comparable criteria in each of these studies, as the present work makes use of intonation units, while Guy et al. (1986) similarly provide results in terms of tone groups, and Mitchell and Delbridge (1965) give a breakdown by clauses, which have been shown to have a high correspondence with intonation units (cf. Chafe, 1994). A diachronic comparison between these works then is worthwhile, and indicates that the HRT is steadily increasing in frequency over time. Contemporary speakers use the HRT at a rate

that is 3.5 times more frequent than what was found to be true of the data collected twenty years earlier, and 20 times more frequent than the results reported in 1960. Usage-based linguists have noted the fact that changes in the form and function of linguistic devices typically coincide with increases in frequency (cf. Bybee et al. 1994, Bybee 2001). Because the HRT is now so frequent, an analysis of the use of its current functions is particularly important, especially in order to identify patterns and tendencies against which future researchers can compare.

Figure 2: Frequency of the HRT contour over time
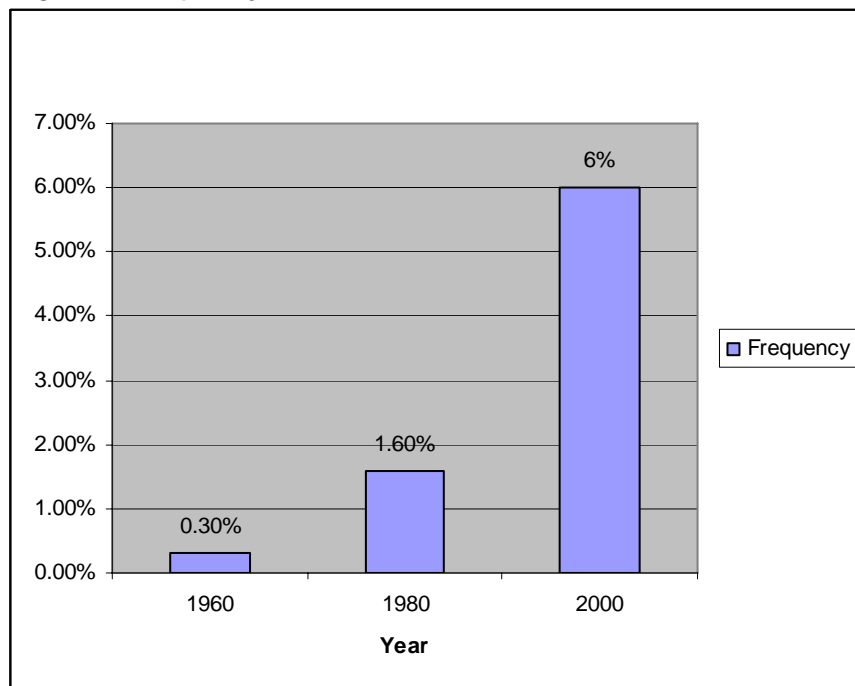
Another important result from the present work concerns the distribution of the HRT contour among speakers. Previous research has claimed that the contour was a change in progress, citing that specific demographic groups, specifically young adults, women, and members of lower socio-economic classes, used the contour more regularly than others (Guy et. al 1986).

My research indicates that the contour is not restricted to any specific demographic group in its usage, but is much more widespread. As Table 8 indicates every speaker uses the HRT contour[1]. However, individual speakers do differ in the frequency with which they use this linguistic feature. Table 8 is organized according to the speaker's age, beginning with the youngest speaker and descending to the oldest speaker.

Table 8: Distribution of the HRT contour among speakers

		Age	No. of IUs	No. of HRT IUs	% of HRT IUs
Female					
	Dimity	21	226	21	9 (21/226)
	Alexia	23	164	10	6 (10/164)
	Alice	~30	220	22	10 (22/220)
	Beth	~30	137	10	7 (10/137)
	Heidi	36	216	8	4 (8/216)
	Kerry	40	182	8	4 (8/182)
	Marilyn	45	202	12	6 (12/202)
	Julie	45	145	8	6 (8/145)
	Carol	~50	147	16	11 (16/147)
	Freda	65	183	3	2 (3/183)
	FEMALE TOTAL		**1822**	**118**	**6 (118/1822)**
Male					
	Joshua	18	61	Ø	--
	Rhys	43	250	7	3 (7/250)
	Allan	50	147	10	7 (10/147)
	MALE TOTAL		**458**	**17**	**4 (17/458)**
	TOTAL		**2280**	**135**	**6 (135/2280)**

While the two speakers to use the most HRT contours overall, (Alice; age ~30 and Dimity; age 21), are both female and fairly young, it is actually Carol (age ~50), one of the three oldest speakers, who uses the HRT at the highest rate in her speech. Of the 147 intonation units she produces, 16 of them (11%) are uttered with a high-rise contour.

---

[1] Joshua does not use any high-rise contours. This is most likely due to the level of his participation in the conversation, since he utters only 61 intonation units in total, instead of the average 175 (2280/135).

What this indicates now is that the use of the HRT is not restricted to a specific age group, as was claimed in past research.

It is difficult to make any strong conclusions about the correlation between gender and the use of the HRT contour, since only 3 males are represented in this study. However, one interesting result of my work reflects that of the 2 male participants involved in this research, Allan (age 50) produces high-rises at a rate of 7% (10/147), which is a higher rate than the 6% (118/1822) average for the female speakers. However, the other male speaker, Rhys (age 43) produces high-rises at a much lower rate of 3% (7/250). The vast difference in the use of high-rises among the two male participants indicates that more research involving a stratified sample of participants must be conducted in order to best determine how gender correlates with the use of this linguistic phenomenon.

5 Functions of the HRT contour in conversational discourse

In this section I will discuss the various discourse functions of the HRT contour. I will begin with a discussion of how the HRT is used for both hedging and focus marking, demonstrating that the HRT has several roles during talk-in-interaction, but no one unified function.

5.1 Hedging

During conversational interaction, participants are often very careful to avoid making direct requests or impositions on one another. Conversational participants also find ways to avoid taking full responsibility for informational statements if they are unsure of the accuracy of the information or the way in which the listener may interpret their statement. This tendency to frame utterances based on the 'face needs' of other participants has been discussed by Brown and Levinson (1987). Both the interactional goals can be met through the use of linguistic hedges. Through the use of a hedge a speaker is "slightly distancing herself, softening the request, and shielding herself in the case of refusal" (Underhill 1988:241). The category of linguistic hedges includes words like *sorta* and *kinda* as well as discourse markers (eg. *like, well, you know*) and epistemic parentheticals (eg. *I think, I guess, I mean*). In the following example, Dimity is describing a friend's encounter with a palm reader. She uses both the discourse marker *like* and the hedge *sorta* in her turn as she describes the event. The use of these hedges signals to her listener that although the event may not have happened exactly as she is describing, it is more or less accurate. Further evidence that she is slightly uncertain about her retelling of the story is the final line of her turn, in which she says, *I can't remember the full story*.

(3)   Dimity;   no she was telling me this story and,
                        there was a lady that could also read **like** spirits?
                        and things around you,
                        and things like that,
                        and Kirsty's mum had a few problems with family,
                        and her dad passed away,
                        and all this **sorta** stuff,
                        and.
                        And,
                        I can't remember the full story,

(palm reading: 354-363)

What is also particularly intriguing about this example is the co-occurrence of the HRT contour and the hedge *like* in the second line. Although it is typically lexical items which are claimed to be hedges, I argue that the HRT contour also has this function. In addition to the hedging achieved by the use of the discourse marker *like*, the HRT contour is also in a particularly pivotal statement to show that Dimity does have some hesitancy about what she is saying, and she is appealing to her interlocutor to make sure she is understood.

A possible motivation for the extended hedging function of the HRT comes from its canonical source function of turning declarative utterances into questions. When an HRT contour is used to create a genuine *yes/no* question it has the meaning of questioning propositional content. An association is formed between the intonation contour and the meaning of speaker uncertainty. This association can then extend to situations in which the HRT does not turn an utterance into an actual question, but instead softens the utterance in a notable way.

The following example demonstrates a case where the HRT is used to soften the utterance and imply speaker uncertainty. In this example Marilyn and Freda are discussing television shows. Marilyn does not want to impose on Freda by making an

assumption that she watches particular shows, and in order to avoid doing so, without

forming an actual question, Marilyn simply hedges her utterance.

(4)   M;   I have heard so much about that since you went there,
                     maybe they've always talked about the place,
                     but on TV on documentaries or on the --
                     Do you know,
                     I don't know whether you watch any of the TV shows?
                     But um you know,
                     Uh,
                     What is it called.
                     ... (Hx) Get Away and those types of shows?
        F;   Yes.
        M;   Bill likes them?
                     And I mean,
                     they'll often be doing something on Cradle Mountain,
                                               (censorship: 34-46)

This is an example of a case of an HRT with a hedging function that occurs in

turn-medial position. However, the HRT did not have to occur in turn-medial position to

have a hedging function. Many of the cases where the HRT was the only IU in the

speaker's turn also have a hedging function.

Perhaps the reason that these cases were so often hedges is because of their

tendency to be direct opinion statements, as is shown in the following two examples. In

the first example the opinion statement co-occurs with the periphrastic collocation *I think*,

which further supports the idea that the speaker is trying to hedge her statement.

(5)   Alice; He always wanted to but he never did.
                 I don't know wh:y.
                 probably c- like too much touch footy.
                 [like]--
     Beth;   **[<XI thinkX>] they're pretty much the same thing?**
     Alice; .. I think there's slightly different rules.
                 That's about it I think.
                                        (footy teams: 263-269)

(6)   Rhys;   You'd be lucky to g- --
                  to get your weekly groceries in the back of them.
         Julie;   **They're notoriously unstable?**
         Rhys;   .. Well I –-
                  Well then Tom went up to Cross Arbor to that conference with Noah,
                  .. and,
                  and Ray and,
                  .. Debra.
         Julie;   They're a bloody disaster when they're cornering,
                   cause their center of gravity is rather strange.
         Rhys;   We were lucky to get one over- --
                  small overnight bag each in there,

                                                          (land rovers: 164-176)

The cases of the HRT that occur in turn initial position have a very similar function. The most noticeable feature that sets the cases of turn initial HRT apart from other instances of the HRT in the data, is their overwhelming tendency to start with the discourse marker *well*, once again further evidence of the use of the HRT to hedge an opinion or contradictory statement from the speaker. Examples (7) through (10) below are all instances of the HRT in turn-initial position with a hedging function.

(7)   Rhys;   Like I- I get more [luggage],
         Julie;   **[Well people] use it for a- a car?**
                 You know that,
                 they just like sitting up high so they can see everybody in front of them.
                                                          (land rovers: 160-163)

(8)   Carol;   **well I know Susan?**
                  Ran it for them for a week or two while they were on holidays.
                                                          (on holidays: 325-326)

(9)   Julie;   **Well I just can't understand why if it was doing the job?**
                  It's not that they really go off the beaten trek that often,
                                                          (land rovers: 150-151)

(10)   Joshua; It would cost more than that,
            for the mattress wouldn't it.
       Alan;   Ah,
       Carol; **I wouldn't think so?**
            .. [How much was she in um] --
       Joshua; .. [It's about a] hundred pound --

                                                        (on holidays: 38-43)

What has been made clear in this section is that one function of the HRT contour

in conversation is hedging direct requests and opinions. This is a noteworthy result of the

present work, since Guy and Vonwiller (1989) previously suggested that the HRT was

more likely to occur with semantically-complex narratives than opinions. However, one

can attribute this difference in findings to the fact that Guy and Vonwiller (1989) were

working exclusively with sociolinguistic interviews, which have an express purpose of

eliciting narratives. Conversation on the other hand, is a genre of discourse far more

likely to contain opinions and explanations than narratives. It is not surprising then, that

somewhat different results were found for the conversational data, as opposed to the

interview data.

5.2 Focus marking

Another function of the HRT contour that I will discuss pertains to its role as a

focus marker. In this sense the HRT contour is used in a conversation to "bring in new

information, and, in particular, significant new information" (Underhill1988:236). Again,

focus marking is something which is typically achieved through the use of lexical items

such as discourse markers, since they can easily be inserted into a stream of speech

before something which the speaker wants to flag as being important. However,

intonation, which has already been noted to play a role in information flow, can also be

used with this function. This makes the use of the HRT contour as a focus marker particularly interesting.

The use of the HRT as a focus marker is demonstrated very well in the following example. In this example Marilyn and Freda are discussing the Australian film *Muriel's Wedding*. Freda reports that one of her friends who is Catholic thought the movie was vulgar. She then asks Marilyn if she can think of anything in the film that might have been objectionable to her Catholic friend. Marilyn contemplates what might have been objectionable material in the film, and it isn't until she mentions the specific subject material that she thinks may have been what offended Freda's Catholic friend that she uses the HRT. This material is also new and significant in light of the question at hand.

(11) Freda;   She's a real dedicated catholic,
                  was there anything in there,
                  I couldn't remember afterward.
      Marilyn;   No,
                  she had a bit of a thing,
                  when she was sharing a flat with the girl when they were in Sydney,
                  but nothing --
                  oh well --
                  (Hx) She was,
                  just kissing a- this guy and,
                  the other,
                  friend of hers was in the bedroom with two men?
                  And they came racing out because they thought something was
                      happening to her,
                  but actually she was just being very vocal.
                  So they started to attack the man,
                  but they were naked,
                  but you only saw them from the back,
                  there wasn't --
      Freda;   Hm.
      Marilyn;   You know,
      Freda;   I don't know what she's on about,
                  because these days yo- --
                  you don't worry so much about,
                  what you did worry about in the old days.
                                              (censorship: 164-187)

The next example also demonstrates the function of the HRT as a focus marker. In this example Dimity and Alexia are discussing illnesses related to traveling. Dimity mentions that some people don't seem to suffer and get sick from local food the way others do. When she then later states that her friend Hayden and her brother were ill, she uses the HRT as a focus marker on this contradictory new information.

(12) Dimity;   especially a place like Bali,
                   you wouldn't want to go out and have to find your own meals?
      Alexia;   well yeah that's right,
                   like oh that's why I won't go to Bali?
      Dimity;   ah- --
                   but some people do?
                   some people just go and eat whatever and don't get sick and,
                   Emma got sick.
                   she was the only one.
                   no one else did.
                   .. oh:,
                   my dad and,
                   .. Hayden and my brother got a ear infection?
                   from the water?
                   but that's it.
                   (0.5) so not too bad.
      Alexia;   got an ear infection from the water cause it was dirty,
      Dimity;   oh just different I think.

                                          (palm reading: 157-174)

As was shown earlier, the majority of the tokens of the HRT are cases that occur turn-medially, and without including focus marking as one of the functions of the HRT, we can not easily account for these cases. It is important then to recognize the focus marking function of the HRT. Furthermore, this is a function of the HRT which has not been presented in prior research and is therefore a noteworthy contribution of the present work.

6 Turn-taking and negotiating the floor during talk-in-interaction

Having discussed how the increasing frequency of the HRT makes this particular feature of Australian English worthy of analysis, I will now turn my focus to the genre of discourse upon which my research is based, namely conversation. While the HRT can be used as both a hedge and a focus marker, or in a variety of other ways in conversation, one of its more reliable functions can be found in an analysis that takes turn-taking into account. I will now review the previous literature on turn-taking and intonation units while also discussing my coding and methodology.

One of the most intriguing aspects of spontaneous conversation, which is outlined in Sacks, Schegloff and Jefferson's seminal work, is that "overwhelmingly, one party talks at a time, though speakers change, and though the size of turns and ordering of turns vary, [and] … transitions are finely coordinated" (Sacks et al. 1974:699). These observable tendencies demonstrate that despite the variety of factors which may be present in any given situation, talk-in-interaction is actually a highly systematic and organized process. However, despite its systematicity, turn-taking and the negotiation of the floor are also complex, multi-faceted events which have prompted much research in the field of discourse analysis. We will now look at the ways conversationalists construct turns and negotiate the floor during talk-in-interaction using projectable points of transition.

Before this, however, I will turn my attention to a brief description of intonation units, which are fundamental to the majority of the work on talk-in-interaction.

6.1 Intonation contours and intonation units

One very important characteristic of spoken discourse is the fact that it is not the production of a continuous flow of sound, but rather tends to be uttered in a series of brief spurts of vocalization (Chafe, 1988:1, 1994:57). These perceptual bursts of speech are called intonation units, and are characterized as functionally relevant segments of spoken discourse, which are typically marked by the presence of several prosodic cues, such as pausing, a pattern of acceleration-deceleration, an overall decline in pitch level, a falling pitch contour at the end, and a change in voice quality (Chafe, 1994:60). Chafe suggests that intonation units play an important role in producing and comprehending speech because an intonation unit is the vocalization of the activated information in a speakers mind, and once vocalized the speaker can assume that the information has become activated in the mind of the listener as well (1994:63). Despite the fact that all intonation units are distinguishable prosodic chunks of discourse, there are a variety of functions associated with them which become meaningful in light of their role in turn-taking.

In their outline of transcription methodology, Du Bois et al. (1993) propose three major classes of intonation units, which are differentiated by the contour under which they are uttered and are represented in transcripts with different symbols. The classes of intonation contours can be seen in the following example, and include, (1) final contours, which are marked by a decrease in pitch, and are indicated in transcription with the use of a period, (2) continuing contours, represented by a comma, which are distinct from final contours in that a slight rise in pitch occurs at the end of the intonation unit, and (3) appeal contours, which are marked by a high rise in pitch, and are symbolized with a question mark (Du Bois et al., 1993:54-55).

(13)   Marilyn;   Actually watching some of the old shows we,
                                 Michael was saying,
                                 <u>I don't find this funny,</u>
                                 <u>@ well maybe the second time round I don't either.</u>
                                 You know it had --
                                 <u>it was totally different to what we watch now?</u>
                                                                           (censorship:115-120)

With respect to the pragmatic implications of these classes of different intonation contours, Du Bois et al. state that, "when a speaker arrives at the end of an intonation unit, poised to continue on to the next – or not continue – the intonation contour usually gives a fairly clear indication of whether the discourse business at hand will be continued or has finished" (1993:53). Therefore, a final contour is more likely to mark the end of a turn, a continuing contour usually occurs when a single turn is ongoing, and an appealing contour is likely to be used to engage another participant and elicit a response (Du Bois et al., 1993:53-55).

Beyond the fact that intonation contours play a large role in negotiating turn-taking, there has also been substantial research into how intonation units themselves contribute to turn-constructional units and discourse management. Along these lines, Chafe (1993) discusses the kinds of intonation units found in discourse. The first kind are substantive intonation units, which are full of content about people, places, objects, events and states, and also tend to resemble clauses, or syntactic constituents (Chafe, 1993:37). Chafe's discussion of the functions of substantive intonation units within conversational discourse focuses on "the relevance of these units to certain aspects of information flow, specifically the movement of ideas into and out of active, semi-active, and inactive consciousness" (1993:33). The last two lines of the following example are considered substantive intonation units.

(14)   Dimity;   um,
                          um,
                          Oh: yeah.
                          Like um,
                          What's that movie,
             .   ... City Slickers?

                                                                (palm reading:7-12)

On the other hand, regulatory intonation units, such as discourse markers (e.g.

well, like), connectives (e.g. *and, but*), backchannels (e.g. *uh huh, mhm*), and other

interactive devices (e.g. laughter, pausing) , have very little content, but have a

particularly important role in structuring a conversation as they allow speakers to attend

to a variety of discourse needs. These various functions are described by Chafe, when he

states, "the regulatory intonation unit *well* may be interpersonal in responding to a

question from an interlocutor, textual in showing that the upcoming response will be

relevant to the context, and cognitive in buying time for the speaker" (1993:37). The first

four lines in the example above are regulatory intonation units.

While regulatory intonation units are clearly vital to the interactional process,

there is some disagreement between linguists as to their status in terms of turn-

constructional units. This is because some regulatory intonation units, particularly

backchannels, are not used in an attempt to take the floor, and are therefore generally not

considered to be part of the turn-taking system. In their discussion of transcription

methodology, Du Bois et al. take this perspective with respect to these unique kinds of

intonation units, stating, "Although a backchannel response must for clarity's sake bear a

speaker label, as must the two sections of the turn it occurs within, one does not want to

be misled by this practical consideration into overlooking the essential continuity of the

extended turn unit across fleeting interjections" (1993:50). However, at the same time

backchannels are not uttered randomly, as their placement in conversations demonstrates.

For this reason, according to Ford and Thompson, 'real' turns and backchannels are, "similar from the point of view of understanding the units of conversation which are validated by next speaker turn onset" (1996:152). In other words, speakers anticipate the same transition-relevance places when using backchannels or taking 'real' turns. Consequently, despite the functional difference between these kinds of turns, they are considered the same in the sense that both make use of the projectability of the completion of a prior speaker's turn at talk.

6.2 The systematicity of turn-taking

The model of turn-taking proposed by Sacks et al. (1974) includes two major components and "a basic set of rules governing turn construction, providing for the allocation of a next turn to one party, and coordinating transfer so as to minimize gap and overlap" (1974:704). The first component relates to turn-allocation, and simply acknowledges that in terms of deciding to take a turn, speakers can either self-select, or be selected by the current speaker. The second and perhaps the most significant contribution of the Sacks et al. (1974) model is the turn-constructional component, which acknowledges the fact that speakers in a conversation construct their turns using a variety of syntactic unit-types, including "sentential, clausal, phrasal, and lexical constructions" (1974:702), all of which "have points of possible unit completion, points which are projectable before their occurrence" (1974:720).

Sacks et al. (1974) underscore the importance of recognizing that turns within a conversation are necessarily shaped by the interaction itself, and the turn-unit is therefore difficult to define independent of its context. Their definition of a turn therefore does not specify the form, but rather, the function:

> "the turn is a unit whose constitution and boundaries involve such a distribution of tasks as we have noted: that a speaker can talk in such a way as to permit projection of possible completion to be made from his talk, from its start, allowing others to use its transition places to start talk, to pass up talk, to affect directions of talk, etc.; and that their starting talk, if properly placed, can determine where he ought to stop talk. That is, the turn as a unit is interactively determined." (Sacks et al., 1974:727)

As we will see, this initial outline of what constitutes a turn-constructional unit (TCU) has been very influential in research on talk-in-interaction. Furthermore, as can also be seen from the definition provided above, central to the TCU is the idea that it contains possible completion points of sentences, clauses, phrases, or single-word constructions, and that the next speaker will typically begin her turn at one of these completion points (Sacks et al. 1974:721). Sacks et al. conclude that speakers are able to project possible completion points in such a way that they become transition-relevance places for other participants in the conversation (1974:721). The notion of transition-relevance places is also an important contribution of the model proposed by Sacks et al. (1974) and the studies discussed here have done much to enhance our understanding of the features that project completion in conversation.

6.3 Intonation, TCUs, and speaker change

The claims made in the section above about the role of intonation contours in turn-taking are supported by the work of Ford and Thompson (1996), who present a quantitative analysis of the correlation between speaker change and units which are syntactically, pragmatically, and prosodically complete. The results of Ford and Thompson's (1996) research demonstrate that speakers can produce several syntactic units in one turn and so syntax is not a good indication of a possible transition-relevance

place when considered independently of other factors. However, their study found that when units which were syntactically and pragmatically complete were also uttered with final intonation, including an appeal, they were followed by a speaker change 71% of the time (1996:156). This result led Ford and Thompson to conclude that, "intonation and pragmatic completion points select from among syntactic completion points to form what we will call 'Complex Transition Relevance Places' (CTRPs)" (1996:154). Although these transition places are not always acted upon, and although transitions sometimes occur elsewhere in a conversation, the majority of CTRPs are followed by speaker change (1996:156) and where a CTRP is not followed by a speaker change, other interactional work is being done.

Based on the work by Ford and Thompson (1996), my research has centered on the role of the HRT in turn-taking. I defined a 'turn' as a substantial portion of talk with a viable attempt to take the floor. In example (15) below, Alice's contributions are substantial and help to move the conversation forward. As such, they represent viable turns. Beth's laughter is not a substantial contribution or an attempt to take the floor and as such would not be considered a turn.

(15) Alice;   yeah sorry I'm in labor.
                   can you just fly back.
      Beth;   @@
      Alice;   But um,
                   .. no he wasn't real happy.
                                                        (touch footy: 56-60)

This restricted definition of the notion of 'turn' meant that I also did not consider backchannels, such as Alan's in example (16), to be turns.

(16)   Carol;   A hundred fifty pounds?
                        wouldn't be much more than tha:t.
                        for a couple of weeks accommodation?
        Alan;   .. Hm.
        Joshua;   It would cost more than that,
                        for the mattress wouldn't it.

                                                    (on holidays: 34-39)

While I recognize that backchannels play an important role in interaction they are not

substantial attempts to take the floor and therefore cannot be considered viable turns. The

unique role of backchannels in conversation has already been discussed in light of the

function of regulatory IUs in the section above.

        Since previous researchers have claimed that the HRT is used to seek listener

feedback it is reasonable to hypothesize that they regularly co-occur with CTRPs, which

offer an opportunity for another speaker to take the floor. While CTRPs necessarily

contain final intonation contours, traditional accounts of CTRPs have focused almost

exclusively on falling contours. Although it is a final contour, the HRT is also an

appealing contour, and as such when CTRPs occur with these types of contours they are

slightly different.

        In order to determine if the HRT contours were also CTRPs, each HRT was

analyzed to determine if it was a complete syntactic and pragmatic unit. Example (17)

demonstrates an HRT that was not a CTRP, because it is neither pragmatically nor

syntactically complete. Example (18) on the other hand is a CTRP, since this HRT is

complete in terms of syntax and pragmatics.

(17)   Carol;   **well I know Susan?**
                    Ran it for them for a week or two while they were on holidays.
                                                    (on holidays: 325-326)

(18)   Julie;   The rhyme of the ancient mariner.
                    We'll have to buy him that book?
                                                    (land rovers: 247-248)

By definition, the HRT is complete in terms of intonation, which made it unnecessary to code the tokens for this feature. Then each token was additionally coded as to whether or not it was followed by a speaker change.

Each token was coded as either being followed by the same speaker continuing her turn, or being followed by a speaker change. Example (19) shows a case where the same speaker continues with her turn after using an HRT, while example (20) shows a case of speaker change following the HRT.

(19)   Freda; No no.
                I only briefly towards the end,
                And I watched Joan of Arc towards the end,
                Now I would like to watch Joan of Arc?
                 but I didn't see it,
                And uh,
                we watched the other two films.
                                                        (censorship; 97-103)

(20)   Alice; And I'd given up by the time I got to the green.
                 I thought I'm never gonna get the ball in that hole?
        Beth;   It's too frustrating.
                                                        (footy teams: 188-190)

Because my interest lies primarily in determining whether the speaker continued with her turn, or yielded the floor to another speaker, I did not consider backchannels following the HRT to be a case of speaker change. As was discussed earlier in this section, this was because the other speaker did take a substantial turn. There were 8 cases where a backchannel followed an HRT, and these cases were coded as not having a speaker change.

The other methodological decision made with respect to this variable arises from cases of overlap. In 7 of the 135 cases, the HRT was followed by an overlap, where two participants were talking at the same time. In these cases, the discourse after the overlap

was taken into consideration, to determine whether the same speaker continued with her turn, or another speaker took the floor. Example (21) illustrates an instance where an overlap resulted in the same speaker continuing her turn. This token was therefore coded as not having a speaker change, while example (22) illustrates a case of another speaker taking the floor after an overlap which was coded as having a speaker change.

(21)   Carol; **I wouldn't think so?**
                .. [How much was she in um] --
        Joshua; .. [It's about a hundred pound] --
        Carol; Well we were looking at --
                fou:r- two hundred pound?

                                                        (on holidays: 41-45)

(22)   Alice; oh no he's got no hand eye coordination [XX].[2]
                and like he won't do anything unless he's really good at it?
                .. [and um] --
        Beth;   .. [yea:h] that's fair enough I suppose.

                                                        (footy teams: 129-135)

In order to clarify the impact that the HRT has on turn-taking, it was also necessary to consider where the HRT occurred in the turn. Given that previous claims about the function of the HRT indicate that it is used to elicit listener feedback, my hypothesis was that it would occur most often in turn final position. In order to test this hypothesis, the tokens were coded for turn initial, turn medial, and turn final position. Some instances were cases where the HRT was the only IU in the turn, and these cases were coded as such.

The first variable to be coded for was the distance of an HRT from a preceding HRT in terms of intonation units. This variable was chosen in order to determine whether a priming effect was influencing the distribution of the HRT contours. Tokens were coded if they followed an HRT within 5 intonation units. There were no cases of HRTs

---

[2] For clarity's sake 3 intervening IUs have been removed from the example.

following another after 6 intonation units, so this number became the break-off point, and it was assumed that if the instances of HRTs were separated by more than 6 IUs the distance would be too great to have an influence from priming. Tokens were coded by the number of IUs which separated them from a prior HRT, unless they were separated by more than 6 intonation units, in which case they were coded with an X.

Following from research on CTRPs, Ford et al. (2002) focus primarily on how speakers extend their turns verbally in cases where an appropriate turn-taking transition place is reached, but a transition is not achieved. Their findings from naturally-occurring data show that, in these cases, speakers often add incremental extensions onto their turn to hide the fact that an interactional goal was not met, and to provide another transition-relevance place for their interlocutors (2002:33). Ford et al. discuss the variety of forms and functions of turn increments stating, "increments that are syntactic Extensions of prior turn segments function as action continuations, adding more to the same turn action … in contrast, when speakers produce Unattached NP increments, the actions characteristically involve stance displays or assessments" (2002:33). Because speakers build upon the utterances which have already been spoken, the presence of these turn increments challenge the traditional notion of syntactic constituents.

The HRT contours under analysis here were also examined in light of the research on turn extensions. Since, as has been mentioned, HRT contours are thought to be used to seek listener feedback, it is possible that they occur as turn extensions, allowing for new completion points, and further opportunities to take the floor.

The research presented in this section has shown that intonation is a major part of TCUs and the turn-taking system. The work presented by Ford et al. (2002) has indicated

that when a CTRP is reached, but is not acted upon speakers will extend their turns by adding increments to them. The situation discussed in the next section involves cases of speaker change which occur without the presence of a CTRP, situations which highlight the importance of projectability in conversational discourse.

6.4 The importance of projectability

As has already been mentioned, not all speaker change directly follows a CTRP, a fact which is supported by the research of Ford and Thompson, who found that 29% of the cases of speaker change in their data occurred at non-CTRPs (1996:157). Ford and Thompson propose that these cases are not violations of the turn-taking system, but rather a creative use of the system which is sometimes necessitated in order to meet particular discourse needs.

The case of speaker change which occurs at non-CTRPs is investigated by Lerner (1991) in his analysis of the co-construction of TCUs by different participants in talk-in-interaction. Lerner works to characterize "single sentences that are produced across the talk of two (or more) speakers" (1991:441) by providing a qualitative analysis of formats, such as quotations, parenthetical inserts, list structures, and prefaced disagreements in which a first component projects, or implies that a second component will also occur (1991:446-451). His research indicates that outside of transition-relevance places speaker change sometimes happens in these formats with one participant finishing the unit begun by another participant. An important conclusion that Lerner makes is that in these contexts, the "completion of a compound turn-constructional unit-in-progress by another participant is sequentially possible but not necessarily sequentially required or implicated" (1991:454). This notion that spoken discourse is organized sequentially is

also discussed in the work of Chafe though his focus is "limited to the links between intonation units that are produced by a single speaker, and … thus ignore[s] connections across the turns of different speakers" (1988:5-6).

Chafe claims that "intonation units provide us with valuable windows to the flow of thought by showing how much and what kinds of information are being focused on at different times, but also – of special interest to us here – the kinds of movement that take place from one focused piece of information to the next while thought is being verbalized" (1988:3). The large number of intonation units which Chafe (1988) finds that tend to be linked to each other, either prosodically or syntactically, indicate that speakers build upon their ideas in real time as they speak, and that the movement from one idea to another is also important.

In cases where speakers are able to participate in finishing another speaker's utterance, or help supply a word during another speaker's word-search, it is plausible to assume that participants have projected the direction of movement of the speaker's flow of ideas. In essence this is what Sacks et al. (1974) described as the speaker's ability to project the completion points of their utterance in a conversation, though in the cases described by Lerner (1991) participants are able to anticipate the direction of movement of the turn, due to a first pair part, and are then able to jointly construct the second pair part with the speaker. As was proposed by Ford and Thompson (1996) this kind of co-construction of TCUs is interactionally motivated and allows participants to show their involvement with what the speaker is saying, or attend to the discourse needs of the particular situation.

The early model of the organization of turn-taking proposed by Sacks et al. (1974) has set the background against which much research in the field of discourse analysis has been conducted. The notions of turn-construction units (TCUs) and transition-relevance places which were first suggested by Sacks et al. (1974) have been greatly refined by subsequent research, especially research which has examined the contributions made to such phenomena by intonation. This research also offers a new perspective with which to analyze the HRT contours, as previous researchers have not taken into account many of the dynamics of conversational interaction. Although previous researchers have noted that the HRT contour seems to play a role in turn-taking, there has not yet been a systematic analysis of the way speakers use the HRT contour to manage their turns. In the remainder of this thesis I will provide an account of how the HRT is used during talk-in-interaction.

7 Managing turns with the HRT contour

Throughout the qualitative analysis of examples from the data we can see that hedging and focus marking are clearly functions of the HRT contour, indicating that this linguistic device is multi-functional. However, neither of these two functions is particularly easy to operationalize and neither function accounts for all 135 tokens found in the data. Furthermore, hedging and focus-marking do not directly relate to turn-taking which is the most notable feature of spontaneous conversation, setting it apart from other genres of discourse. In order to investigate how the HRT is used to negotiate the floor and manage turns I will now examine where the HRT occurs in turns, how often it is used as a CTRP, and how often it is followed by a speaker change.

One way to analyze the role of the HRT contour in terms of turn-taking and conversational interaction is to consider the placement of the HRT contour within turns. Items that occur at the end or the beginning of a turn play a different role in interaction than those which are used turn-medially. Therefore, an analysis of where the HRT tends to occur most often can reveal what its role in conversation is. In order to determine this, the instances of the HRT were coded for their placement in turns, and the results for this variable are displayed in Table 9. This table displays the results in terms of the presence of a speaker change, thereby combining the two variables discussed in this section.

Table 9: HRT placement in turns

		No.	%
Same speaker continues			
Initial IU		6	8
Turn medial		74	92
	Total	**80**	**100**
New speaker takes floor			
Final IU		47	85
HRT = only IU in turn		8	15
	Total	**55**	**100**

As can be seen in Table 9, in 60% (80/135) of the cases of the HRT contour, the

same speaker continues speaking. Meanwhile in 40% (55/135) of the cases of the HRT a

new speaker takes the floor. This supports previous research that has suggested that

"speakers tend to use it [the HRT] as a device to hold, rather than yield the floor in

discourse situations" (Fletcher et al. 2005:392). Following this, it is reasonable to

hypothesize that the HRT is not used to project a completion point, and will also

consequently not be followed by a speaker change. Table 10 indicates the number of

times the HRT occurs as a CTRP in the data and also the number of times it was followed

by a speaker change.

As was mentioned in the coding section, backchannels were not considered to be

cases of speaker change, since they are not substantial turns. On the other hand, when an

overlap occurred following an HRT, it was considered to be a case of speaker change if

the new speaker held the floor. If the same speaker who had previously used the HRT

continued to hold the floor after the overlap, then the instance was not counted as a

speaker change.

Table 10: Turn-taking and the HRT contour		
	N	%
CTRPs		
With speaker change	51	43
No speaker change	67	57
TOTAL	**118**	**100**
Non-CTRPs		
With speaker change	4	24
No speaker change	13	76
TOTAL	**17**	**100**

The results in Table 10 indicate that the majority or 87% (118/135) of the HRTs are also CTRPs. Of these, 43% (51/118) are followed by a speaker change, while 57% (67/118) result in the same speaker holding the floor. These results are extremely similar to those of Ford and Thompson (1996) who found that in their data 47.5% of the CTRPs were followed by a speaker change and 52.5% were cases of no change. What we can conclude then is that when the HRT contour occurs as a CTRP it is not functioning any differently than a CTRP with a falling final contour would. In many cases the completion point occurring with the HRT results in a speaker change, but when a speaker change does not occur, the same speaker continues with her turn, and the completion point is used for other interactional work.

One form of alternative interactional work is when a speaker continues her turn with an incremental turn-extension. As was mentioned earlier in the discussion of the research by Ford et al. (2002) increments often take the form of unattached noun phrases or prepositional phrases, and are used to extend a turn-at-talk by building on what was said in the prior IU. They function to provide additional completion points in which another speaker can take the floor.

The following four examples all demonstrate how the HRT is used as a turn increment. Increments composed of HRTs account for 30% (20/67) of the cases of same speaker continuation after a CTRP. In the first two examples the HRT occurs following a CTRP that is with an HRT contour, while in the latter two examples the HRT increment occurs following a CTRP with a falling intonation contour. The fact that the HRT increment occurs in both contexts supports the idea that it is functioning to elicit listener uptake. Furthermore, increments are also used to provide additional completion points in a turn, and so the co-occurrence of HRTs as increments indicates that the HRT is specifically suited to the purpose inviting another speaker to take the floor.

In example (23) Kerry is telling Heidi about the experience of some mutual friends. After the first HRT she utters she extends her turn through the use of an unattached NP, which clarifies the topic she first introduced and provides Heidi with another opportunity to take the floor. The overlap which occurs immediately following this is further evidence that there was interactional trouble.

(23)   Kerry;   **Brian and Megan went down to see the horse**
                                whisperer?
                        Th- the real horse whisperer?
                        [down at] –-
        Heidi;   [Oh yeah].
                        Yeah.
        Kerry;   They said it was .. phenomenal.
                                                    (kids and horses: 218-223)

Example (24) is similar to (23) in that the unattached noun phrase with the HRT is used as a turn extension after a CTRP. However, in this case the CTRP occurs with falling intonation rather than appealing intonation.

(24)   Freda: But they do produce a lot of Shakespeare,
                               on um,
                               television now don't they.
                               Shakespeare plays?
               Marilyn;   Well I saw one at the movies,
                               just can't recall what it was called.

<div align="right">(censorship: 257-262)</div>

In the following example, the turn extension occurs in the form of a prepositional phrase rather than an unattached noun phrase. Notice that in example (25) Carol extends her turn twice with incremental HRT contours before then continuing her turn with additional material.

(25)   Carol;   Even if you bought --
               Joshua;   XXX
                               @@@
               Carol;   **an inner-spring mattress you can put it- on the floo:r?**
                               For yourself?
                               at your mom's place?
                               and just keep it there,
                               I mean,
                               I don't know if she'll have room for it,
                               but maybe somebody could use it after you go.

<div align="right">(on holidays: 24-33)</div>

Finally, in example (26) there is another example of a prepositional phrase being used to incrementally extend the turn, this time following a CTRP with falling intonation. Also worth noting is that earlier in her turn Carol also used an HRT to express the unattached noun phrase, *a hundred fifty pounds*.

(27)   Carol;   I don't know if she'll have room for it,
                               but maybe somebody could use it after you go.
                               A hundred fifty pounds?
                               wouldn't be much more than tha:t.
                               for a couple of weeks accommodation?
               Alan;   .. Hm.
               Joshua;   It would cost more than that,
                               for the mattress wouldn't it.

<div align="right">(on holidays: 32-39)</div>

Example (28), in which Dimity is telling Alice about a recent trip to Bali, is similar to the examples above. However, in these examples the HRTs do not meet the qualifications for turn-increments outlined by Ford et al. (2002), because syntactically they are independent from the prior discourse. Nevertheless, these 'respecifications' of what the speaker said are used to achieve the same interactional goal as turn increments, which is to provide another completion point after a CTRP. In example (26) the CTRP is also an HRT, and in example (29) the CTRP has a falling intonation contour.

(28)   Alice;   well what do you do there.
           Dimity;   anything you want.
                       there's shows on every night?
                       like they put on these huge: shows?
           Alice;   oh really.

                                    (palm reading: 111-115)

(29)   Dimity;   actually I'd be interested --
                       but I want to go and see a really good clairvoyant?
                       like I don't want to see those crappy ones,
                       that,
                       don't really --
                       can't really do it.
                       I want to see a really good one?
           Alexia;   well,
                       why don't you pay?

                                    (palm reading: 323-331)

Based on these examples we can see that the HRT contour can be used to project a completion point, and can also be used as a turn increment to provide another transition point when a CTRP is not acted on.

Another aspect of the use of HRT contours, which is related to incremental turn-extension is the case of multiple HRT contours occurring in succession. During the process of coding the data it became evident that in some cases the HRT contours occur

in succession within a single turn without any intervening material or speaker change. Table 11 shows how often HRT contours occur within the space of 1, 2 and 3 or more intonation units.

Table 11: Distance of HRT from the preceding HRT		
Distance	No.	%
1 IU	22	16
2 IUs	13	10
> 3 IUs	100	74
TOTAL	135	100

The results of my analysis of the distance between HRT contours indicates that 26% (35/135) occur within the space of 2 intonation units, immediately following the use of an HRT by the same speaker without any intervening material. Meanwhile, 16% (22/135) of the HRTs occur immediately following another HRT. A qualitative analysis of some specific instances of these cases shows that some speakers are using strings of HRT contours within their turns.

However, not all of the speakers use the HRT contour in this way. As can be seen in Table 12, those speakers that have a tendency to use the HRT more frequently also tend to use it in succession within their turns, while speakers who use it at a lower frequency do not.

Table 12: Distribution of HRTs with an HRT in the preceding IU (HRT + HRT)[3]	
Speaker	% of HRT + HRT (N of HRT + HRT / total N of HRTs)
Alice	27 (6/22)
Dimity	24 (5/21)
Alexia	30 (3/10)
Carol	19 (3/16)
Allan	20 (2/10)
TOTAL	24 (19/79)

As was shown in Table 8 in section 4, the speakers that used the HRT at the highest rate were Carol, Alice and Dimity among the women and Allan among the men. It is not surprising then, that these four speakers were also among those to use the HRT in succession. Table 12 shows that on average, speakers who use the HRT frequently also use it in succession. 24% (19/79) of the cases of HRT + HRT in the data come from only 5 speakers.

Now that we have seen that only a subset of the speakers use the HRT in this intriguing way, and that they are the speakers who most frequently use the HRT, let us turn our attention to a qualitative analysis of some examples from the data.

One interesting characteristic of the consecutive HRTs is their tendency to have a similar syntactic structure to one another. This can be observed in the following example, in which Alexia and Dimity are discussing their experiences with travel during the holidays. Alexia uses three HRT contours in a row, all with clauses that have similar comparative syntactic structures.

---

[3] Kerry and Marilyn each used only 1 instance of an HRT preceding another HRT within the next IU, and were consequently not included in Table 6.

(30) Dimity;   and then,
                    on the plane cause it was really um,
                    ... it was um,
                    ... you know like pressure on the plane,
      Alexia;   [Plant],
      Dimity;   [high altitude].
      Alexia;   yeah,
                    smells good.
                    that's like when I fly on planes I blow up like a big
                        balloon?
                    and that's just on the way to like Queensland?
                    imagine what I'm gonna be like when I get off n- in
                        Perth?
      Dimity;   Oh I swelled up when I went to Bali.
      Alexia;   well yeah I swell up on trains.
      Dimity;   oh do you?
                                              (palm reading: 175-188)

The tendency for HRTs occurring in succession to have similar syntactic structures is also demonstrated in the following example, where Beth explains to Alice why her husband is unable to play on a football team. She begins by introducing the topic in the first HRT with a *because* clause, then adds an increment in the form of a prepositional phrase, and finally ends her turn with two consecutive clauses as HRTs, the first of which is another *because* clause.

(31) Beth;   so: how many .. can't play just him?
      Alice;   just him.
                  yeah.
                  Cause um n- see the team he left?
                  at world's end?
                  cause they're all two years older than him?
                  They're all playing thirty-fives and he's not old enough
                      or he'd go and play with them?
      Beth;   can't they have so many underage in the team Alice?
      Alice;   not anymore.
                                              (footy teams: 101-110)

The notion that speakers are extending their turns through the use of consecutive HRTs has been discussed in the literature before. In their research on the HRT, Guy and Vonwiller observed that the HRT "almost always evokes a response from the listener ...

51

[but] if such confirmatory response is not forthcoming, the speaker will often add further clarifying remarks, perhaps repeating the rising intonation until the listener finally does respond" (1989:24). However, Guy and Vonwiller did not specifically relate the turn extensions they observed to the idea of turn increments from the body of research on talk-in-interaction.

8 Conclusion

In conclusion, this work has contributed much to our understanding of the HRT contour. I have presented results from conversational data concerning both the frequency of use of the HRT as well as its meaning. After briefly summarizing my results I will discuss the implications they have for the field of Australian English discourse analysis.

To begin, I have shown that in the current data speakers use the HRT at a higher rate than in earlier time periods. My work furthers our understanding of the diachronic path of change of the HRT, which begins with the data collected by Mitchell and Delbridge (1965), and was further documented twenty years later by Guy et. al (1986). Since it was originally studied by Mitchell and Delbridge in the mid-sixties, the HRT contour has grown in frequency, originally accounting for a negligible 0.3% of the data, and then accounting for 1.6% of the data in the 1980's (Guy et. al 1986:34). In my data the HRT contour occurs even more frequently, and accounts for 6% of the data. Based on this diachronic evidence, it is fair to say that the HRT contour unequivocally appears to be growing in frequency among present-day speakers of Australian English.

Another important result from my work is the discovery that a variety of discourse functions are associated with the HRT contour. While prior researchers made claims about the meaning of the contour based on its use in structured genres of discourse, my work takes into account the way the contour is used spontaneously by speakers in conversation. My results indicate that while there may be limitations to the way the HRT is used in interviews or guided dialogues, in conversation, speakers use the HRT contour to meet a variety of discourse needs.

One important function of the HRT contour is its use as an increment to extend a speaker's turn. Although such a function was briefly alluded to in previous research, it has never been operationalized or looked at in much detail. This work has made use of insights from research on talk-in-interaction and conversation analysis to more clearly outline how the HRT is used in turn-taking, considering not only where turn change takes place, but also where it is projected and how speakers use the HRT to deal with non-speaker change at projected points of completion. Meanwhile, an examination of the HRT in conversation reveals that it is also frequently used as a hedge, to soften a statement or opinion, and as a focus marker, to highlight information that the speaker wants to bring into focus for the listener to notice.

Since this work centers on conversation, a form of discourse unexamined in prior research, my work also has broader implications for those researching Australian English intonation. As was mentioned above, this is the first study to make use of spontaneous conversational data, since all of the prior research has been conducted using sociolinguistic interviews and structured dialogues. It is necessary to take spontaneous conversation into account, because it is the form of discourse speakers most often engage in during everyday interactions. My work shows the necessity for including conversation in descriptions of linguistic phenomena. Of course, there are many benefits in researching other genres of discourse, but without examining conversation, and the ways that speakers adapt language to meet their discourse needs during talk-in-interaction, we can not fully understand the meaning and functions of different linguistic devices.

Another important contribution of the present work is that it is an addition to the growing body of research supporting the theory of functional language change.

Fundamental to this theory is the idea that language change happens as a result of language use and that frequency impacts both form and function. Several studies have shown that highly frequent grammatical constructions are also more generalized in meaning (cf. Bybee et. al 1994). In this work I have shown that an intonation contour which is very frequent is also generalized in meaning and has a variety of discourse functions. The implication of this is that grammatical constructions and intonation contours show similar tendencies with respect to increased usage patterns. Furthermore, both phenomena are accounted for by the theory of functional language change.

Finally, my work here has highlighted the innovation and creativity of language users and their ability to adapt a linguistic form to meet their needs during talk-in-interaction. By discussing the variety of meanings associated with the HRT, I hope to have shown that a speaker's use of this contour during spontaneous conversation is a testament to her proficiency as a language user. Although speakers themselves often do not have a positive evaluation of innovative forms, it is my hope that the present work demonstrates the falsity of the notion that the HRT is anything other than a well-adapted, sophisticated and expressive linguistic device.

List of Appendices

Appendix A: Data Reliability Instructions

Appendix A

Data Reliability Instructions

You have been asked to help verify whether or not I have correctly identified H-H% contours in my Australian English conversation. H-H% contours have a rising intonation pattern, and they may sound somewhat like a question even when they are used with declarative utterances.

You have been given three sound recordings and matching transcripts. Each sound recording contains 5 minutes of spoken discourse. The transcripts show speaker labels and turns, but the turns are not broken down into intonation units and all other prosodic information has been removed.

1. Listen to the examples before marking the H-H% contours in the transcripts you have been given.
2. Then listen carefully to each recording while reading through the transcript.
3. Highlight each word that you think is uttered with an H-H% contour. You may either do this electronically or on a hard copy of the transcript.

Examples of H-H% contours in Australian English conversation

Listen to each of the sound files that match the transcription below. Words uttered with an H-H% contour have been highlighted. All of the examples contain H-H% contours, but the first example is a genuine yes/no question, while the other three examples demonstrate declarative utterances.

	sound file name	transcription
1	made4	Marianna made the `marmalade`
2	two_days	two days a week and then she cut back to `one`
3	book	so she'd finish a book and pass it on to `me`
4	garden	and then I'm `finished` in the `gardens` so I've got one day a week `free`

References

Brown, Penelope and Levinson, Stephen. 1987. *Politeness: Some universals in language usage.* Cambridge: Cambridge University Press.

Bybee, Joan. 2001. *Phonology and Language Use*. Cambridge: Cambridge University Press.

Bybee, Joan and Perkins, Revere and Pagliuca, William. 1994. *The Evolution of Grammar: tense, aspect, and modality in the languages of the world*. Chicago: The University of Chicago Press.

Chafe, Wallace. 1988. Linking intonation units in Spoken English. In John Haiman & Sandra A. Thompson (eds), *Clause combining in grammar and discourse*, 1-27. Amsterdam / Philadelphia: John Benjamins.

Chafe, Wallace. 1993. Prosodic and functional units of language. In Jane Edwards & Martin Lampert (eds), *Talking data: Transcription and coding in discourse research*, 33-43. Hillsdale, NJ: Lawrence Erlbaum Associates.

Chafe, Wallace. 1994. *Discourse, consciousness and time: The flow and displacement of conscious experience in speaking and writing*. Chicago: University of Chicago Press.

Du Bois, John W., Stephan Schuetze-Coburn, Susanna Cumming & Danae Paolino. 1993. Outline of discourse transcription. In Jane Edwards & Martin Lampert (eds), *Talking data: Transcription and coding in discourse*, 45-89. Hillsdale, NJ: Lawrence Erlbaum Associates.

Fletcher, Janet; Wales, Roger; Stirling, Lesley; and Ilana Mushin. 2002. A dialogue act analysis of rises in Australian English map task dialogues. Paper presented at the Speech Prosody conference.

Fletcher, Janet; Grabe, Esther; and Paul Warren. 2005. Intonational variation in four dialects of English: The high rising tune. In Sun-Ah Jun (ed.), *Prosodic typology: The phonology of intonation and phrasing*: 390-409. Oxford: Oxford University Press.

Ford, Cecilia E., Barbara A. Fox & Sandra A. Thompson. 2002. Constituency and the grammar of turn increments. In Cecilia E. Ford, Barbara A. Fox & Sandra A. Thompson (eds), *The language of turn and sequence*, 14-38. Oxford: Oxford University Press.

Ford, Cecilia E. & Sandra A. Thompson. 1996. Interactional units in conversation: Syntactic, intonational, and pragmatic resources for the management of turns. In Elinor Ochs, Emanuel A. Schegloff & Sandra A. Thompson (eds), *Interaction and grammar*, 134-184. Cambridge: Cambridge University Press.

Goodwin, Charles. 1979. The interactive construction of a sentence in natural conversation. In Charles Goodwin (ed), *Everyday language: Studies in ethnomethodology*, 97-121. New York: Irvington.

Guy, G.; Horvath, B.; Vonwiller J.; Daisley, E.; and I. Rogers. 1986. An intonational change in progress in Australian English. *Language and Society* 15(1): 23-52.

Guy, G., and Vonwiller, J. 1989. The high-rise tones in Australian English. In P. Collins and D. Blair (eds.), *Australian English*: 21-33. St Lucia: University of Queensland Press.

Halliday, M.A.K. 1967. *Intonation and grammar in British English.* The Hague: Mouton.

Kärkkäinen, Elise. 2003. *Epistemic stance in English conversation: A description of its interactional functions, with a focus on I think*. Amsterdam: John Benjamins.

Lerner, Gene H. 1991. On the syntax of sentences-in-progress. *Language in Society* 20: 441-458.

Mitchell, A. G. and Delbridge, A. 1965a. *The speech of Australian adolescents.* Sydney: Angus and Robertson.

Mitchell, A. G. and Delbridge, A. 1965b. *The pronunciation of English in Australia.* Sydney: Angus and Robertson.

Pierrehumbert, J. 1980. The phonology and phonetics of English intonation. PhD. dissertation: Massachusetts Institute of Technology.

Pierrehumbert, J. & Hirschberg, J. 1990. The meaning of intonational contours in the interpretation of discourse. In Cohen, P., Morgan, J. and Pollack, M. (eds.), *Intentions in communication*: 271-311. Cambridge, MA: MIT Press.

Sacks, Harvey, Emanuel A. Schegloff & Gail Jefferson. 1974. A simplest systematics for the organization of turn-taking in conversation. *Language* 50(4): 696-735.

Schiffrin, Deborah. 1987. *Discourse markers.* Cambridge: Cambridge University Press.

Thompson, Sandra A. 2002. "Object complements" and conversation: Towards a realistic account. *Studies in Language* 26(1): 125-163.

Thompson, Sandra A. and Anthony Mulac. 1991b. A quantitative perspective on the grammaticization of epistemic parentheticals in English. In Elizabeth Closs Traugott and Bernd Heine (eds). *Approaches to grammaticalization*. Vol. 1: 313-329. Amsterdam/Philadelphia: John Benjamins.

Underhill, Robert. 1988. Like is, like focus. *American Speech* 63:234-246.