

**PROSODY IN URDU AND PAKISTANI
ENGLISH CONVERSATIONAL
DISCOURSE**

By

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**Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of
the requirements for
the Degree of
DOCTOR OF PHILOSOPHY
December 1997**

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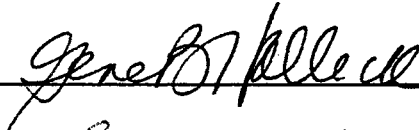
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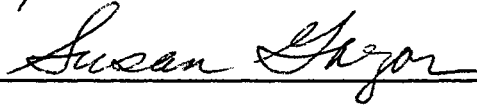
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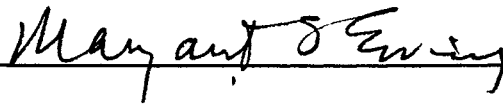
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ACKNOWLEDGEMENTS

I wish to express my deep appreciation to my advisor Dr. Carol Lynn Moder who has been an extraordinary mentor. She has, by example and instruction, encouraged me to strive for excellence in my professional endeavors and patiently endured my growing pains. Thank you also to Dr. Gene Halleck who has generously provided me opportunities from which to learn and grow as well as given her friendship. My appreciation goes to Dr. Susan Garzon who has provided invaluable guidance in this project and to Dr. Margaret Ewing for her encouragement and suggestions.

I would like to express my deep gratitude and appreciation to the members of the OSU Pakistan Student Association for their cooperation and efforts on the part of this project. I am especially thankful to M. Aslam Jalali for his assistance in transcription, Atif Rasheed for being instrumental in both phases of data collection, and to Mohamed Asim for his time, patience, and sharing his knowledge and love of his culture and language(s) with me.

Without help on the personal front, this project would have never been completed, much less started. Thanks to my parents Tom and Sue Beckett for their encouragement and to BA Sisson for her constant moral support, sense of humor, and editing skills.

Finally, and most importantly, my heartfelt gratitude to Josh and Aubry, encouragers extraordinaire, who have spent lots of time entertaining themselves so I could “lay eggs in my crow’s nest”. And to WSD, most ardent supporter and toughest critic: It’s been a long haul, but as usual, you were right.

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LIST OF TRANSCRIPTION SYMBOLS

Units	
Intonation unit	{carriage return}
Truncated intonation unit	--
Truncated word	-
Turn start	:
Speech overlap	[]
Terminal Pitch Direction	
Fall	\
Rise	/
Level	-
Lengthening	=
Tone	
Fall	\
Rise	/
Fall-rise	V
Rise-fall	^
Level	-
Pause	
Short	..
Medium	...
Long	...(N)
Latching	(0)
Vocal Noises	
Laughter	@
Inhalation	H
Specialized notations	
Code switching	<L2 L2>

Based on DuBois, Schuetze-Coburn, and Paolino (1992) transcription system.

CHAPTER 1

INTRODUCTION

Introduction

Humans interact constantly and accomplish tasks from the mundane to the abstract through communication. One of the most common types of communication is that of conversational discourse. Though integral to daily communication in every culture, conversation as a phenomenon for study by linguists has been largely ignored until the last few decades. However, there has been a growing interest in conversational discourse by conversation analysts, functional linguists, linguistic anthropologists as well as cognitive scientists who all take the view that language is integral to culture, social interaction and cognition.

In viewing language as integral to social and cognitive aspects of daily life, we must then view language not as an isolated, autonomous system, but as a phenomenon which interacts with situational factors to construct meaning for the participants in the interaction. Such aspects of interaction as speaker and hearer intentions, turn-taking and prosody play an important role for constructing meaning in real-life conversational discourse.

When examining real-life conversational discourse, we soon discover that spoken language is produced in 'spurts' which are constrained by physiological,

psychological and linguistic constraints (Chafe, 1994). These spurts do not necessarily come out as well-formed sentences. 'Utterances', rather than sentences, then, become the basic unit of analysis for spoken discourse with implications for how and what kind of meaning is expressed.

Sperber and Wilson (1996) differentiate between the scope of sentence analysis and utterance analysis, placing them in two realms of meaning: semantic and pragmatic. Semantic representation of sentences cannot completely account for meaning in utterances. They use the following example to illustrate how one thought is used to convey another.

Do you know what time it is? (p. 11)

This utterance, while explicitly asking a question, could implicitly be making a suggestion that it is time to go. Certainly the semantic meaning of the sentence is there; however, the pragmatic meaning is what determines our understanding of the speaker's intentions.

One element which would make the meaning of Sperber and Wilson's example "Do you know what time it is?" quite clear is prosody. Prosody is "understood to comprise the 'musical' attributes of speech—auditory effects such as melody, dynamics, rhythm, tempo and pause" (Couper-Kuhlen and Selting, 1996). Other elements of prosody include pitch, loudness, stress, or voice quality (Chafe, 1994). A rise in pitch at the end of the utterance "Do you know what time it is?" would indicate that the speaker is asking a question, while level pitch with stress on 'you' and/or 'time' could change the utterance to an accusation.

Prosody

Earlier research in prosodic features focused on trying to assign meaning to prosodic features much the way phonemes and morphemes are assigned meaning (Pike, 1945, Halliday, 1967). However, the view of the relationship between prosody and meaning has evolved over time as the study of interactional language has progressed.

This is illustrated in the work of Crystal (1969) who recognized the need to examine situational elements in order to determine prosody's role: "...the nonlinguistic situation regularly provides information without reference to which intonation patterns are regularly ambiguous...Consequently, any description of intonation without reference to situational information is likely to be too general and ambiguous to be really useful" (p. 284). Crystal recognized that situational elements such as kinesic activity and/or grammar, and other situational factors are intimately connected with pitch and tone, and called for a move away from describing and analyzing prosodic features as discrete units.

Coulthard and Brazil (1982) went one step further than Crystal and set up four principles for analyzing paralinguistic phenomena:

1. Features which are acoustically on a continuum must be analyzed as realizations of a small number of discrete units.
2. There is no constant relationship between particular acoustic phenomena and particular analytic categories; it is contrasts and not absolute values which are important.

3. There is no necessary one-to-one relationship between paralinguistic cues and interactional significances.
4. Intonation is primarily concerned with adding specific interactional significance to lexico-grammatical items.

They emphasize that we cannot derive meaning from prosodic cues without context and explicitly state that we cannot make one-to-one correspondences between meaning and prosodic features. Also, the main role of prosody is to add interactional meaning to grammar and lexical items.

Recent work in prosody has continued to expand on the ideas set up by Crystal and Coulthard and Brazil by taking into consideration such aspects of interaction as how prosody can signal speakers' intentions in the discourse. Pierrehumbert and Hirschberg (1990) indicate that speaker and hearer intentions are important in deriving prosodic meaning. Intention of the speaker as well as attention are integral to intonation choices speakers make, and as such, intonation contributes to the overall discourse structure.

Couper-Kuhlen and Selting (1996) go further to explain that prosody plays an integral role in the inferencing processes that occur in interaction. Prosodic cues "stand in a reflexive relationship to language, cueing the context within which it is to be interpreted and at the same time constituting that context" (p. 21). As such, language and prosody work together to structure interactional discourse.

Prosody has also been studied and discovered to have an important role in the context of the basic organizational element of conversational discourse—

turn-taking. Sacks and Schegloff and Jefferson (1974) state that turn-taking is a basic element in the organization of conversational language. Turns are constructed of units (hereafter TCUs) which could be a sentence, a clause, a phrase or a lexical item. Conversational participants are able to project which unit-type, i.e. a sentence, a clause, a phrase etc., is under way and predict the next unit or the end of the turn. They demonstrate projectability by illustrating how one speaker will start a new turn without waiting for a unit completion by the first speaker:

- (a) Desk: What is your last name [Loraine
 Caller:] Dinnis
 Desk: What?
 Caller: Dinnis. (p. 702)

The speaker at the desk hasn't even finished the utterance when the caller overlaps the desk. The caller has projected the lexical unit-type of the speaker at the desk, her last name, 'Dinnis.'

Intonation plays an important role in TCUs. Ford and Thompson (1996) demonstrated this in examining the places where a potential change of speaker may take place, hypothesizing that "prosody, syntax and meaning all seem to be involved in projecting the end of a turn unit" (p. 139). They studied the extent to which a syntactic completion is a predictor of turn completion and found that syntactic completion was not a good predictor; rather intonation and pragmatic completion points were better predictors.

In addition to the role of prosody in structuring the discourse in turn-taking, other work has been done in which claims are made about the nature of prosody as used by speakers and hearers. The question is whether prosodic features act as a set of culturally determined cues or whether prosody acts as a universal cognitive constraint for online processing. Gumperz (1982, 1984, 1996) proposes that prosody is a culturally determined phenomenon, while Chafe (1994) makes claims for a processing constraint.

Gumperz (1984) claims that prosody is a culturally determined phenomenon structured and conventionalized much the way formulaic talk is:

All prosodic signaling is based on a universal and limited set of elements (e.g. raising or lowering of pitch, rhythm acceleration or deceleration).

However, the ways in which these universal prosodic elements are used in relation to syntax and semantics to signal focus, perspective emphasis, and other thematic information are conventionalized... Equally culturally specific and conventionalized are prosodic cues of thematic progression in less formulaic talk (p. 6).

Likening prosodic conventions to other discourse strategies such as code-switching, Gumperz (1982) points out that these are culturally passed on "through personal contact, and are distributed along networks of interpersonal relationships rather than in accordance with language." (p. 118).

According to Gumperz, interactional language is structured with *contextualization cues*, nonlinguistic verbal signs, which "invoke a frame of interpretation for the rest of the linguistic content of the utterance" (1996, p.

379). He goes further to say that contextualization cues play a crucial role in the inferencing done in interactive discourse, "Contextualization cues channel the inferential processes that make available for interpretation knowledge of social and physical worlds" (p. 383). The contextualization cues are part of a larger system of contextualization, which is culturally bound.

On the other hand, Chafe (1994) claims a processing function for prosody. Chafe bases his approach in the notion of consciousness.

Consciousness, according to Chafe is "The crucial interface between the conscious organism and its environment, the place where information from the environment is dealt with as a basis for thought and action as well as the place where internally generated experience becomes effective—the locus of remembering, imagining and feeling" (pp. 38-39). Consciousness has constant properties:

Focus—manifested in brief spurts of language called intonation units, focus is the portion of consciousness which the speaker wishes the hearer's consciousness to be focused on (p. 29).

The Focus Is Embedded in a Surrounding area of Peripheral

Consciousness—"The active focus is surrounded by a periphery of *semiactive* information that provides a context for it" Clusters of intonation units which Chafe call discourse topics are the periphery which provide peripheral information (p. 29).

Dynamic Nature—The focus of consciousness is always moving, “each intonation unit expresses something different from the intonation unit immediately preceding and following it” (p. 30).

Point of view—Consciousness centers on self which establishes point of view (p. 30). One’s model of the world is necessarily centered on a self.

Orientation—“It is necessary for peripheral consciousness, at least, to include information regarding the self’s location in several domains, the most important of which appear to be space, time, society, and ongoing activity” (p. 30).

Chafe (1994) describes consciousness as a “complex internal model of reality,” (p. 27). While the human mind attempts to model a larger reality, the mind cannot keep all the pieces of the model active at once—only one piece of the model can be active at a time. According to Chafe, the small segment we focus on takes the form of an ‘intonation unit’: a prosodic unit which contains a single coherent intonational contour.

The intonation unit contains information which is in different states of activation during the course of a conversation. Some information is active, which Chafe calls ‘given’ information, and some, newly activated from an inactive state, is called ‘new’ information. As the discourse proceeds, information comes into and out of our focus of consciousness. More specifically, Chafe claims, the focus of consciousness in the form of an intonation unit, can only contain one new

piece of information at a time. He calls this claim the One New Idea Constraint and proposes it as a universal processing constraint (pp. 153, 159).

Conclusion and Overview of Chapters

The work in prosody reviewed here indicates that prosody codes speakers' intentions, helps hearers project the ends of turns, contextualizes the discourse and reflects our consciousness. However, work needs to be done to demonstrate specifically what prosody codes in interactional discourse.

Gumperz (1996) summarizes the problem in identifying the role of prosody in interaction: "While it is clear that contextualization cues cannot be assigned context-independent stable meanings, it is also true that contextualization cues cannot be dismissed as merely conveying transitory non-referential expressive, emotive or attitudinal effects as some sociolinguists' as well as phonetician's studies of decontextualized prosodic and paralinguistic signs seem to suggest" (p. 383). The goal of the current study is to address this question of where on this continuum prosody does fit.

Work on prosody in interactional language has mainly focused on American and British English. Although the work that has been done has come a long way from treating prosodic cues as phonemes or morphemes by studying prosody in the context of turns and by making cognitive claims for prosody, even recent studies such as Ford and Thompson's (1996) rely heavily on what happens between individual intonation units rather than looking for patterns beyond the intonation unit level.

In addition, the question remains as to how prosody is used cognitively by conversational participants. Do the participants rely on formulaically or schematically structured prosodic structures which are culturally determined or do they rely on prosody in the online processing of language in interaction?

This study intends to address these issues by analyzing prosody in Urdu and Pakistani English conversational discourse. The morphosyntax of these two languages is quite different, and yet they are both spoken in the same culture. When compared with the work done on American English prosody, the study of these two languages will help to answer the questions posed about the role of prosody in conversational discourse.

Chapter Two will discuss studies which have been done on prosody in conversational language and demonstrates why work such as the current study is needed in order to determine what prosody specifically cues in conversational discourse. Chapter Three will discuss the background of the relationship of Urdu and Pakistani English, provide a brief introduction to the structure of Urdu and review studies of prosody in Urdu and Pakistani English which inform the current study. Chapter Four reports the method and materials used in the study. Chapter Five reports the results of the study. Chapter Six completes the study with a discussion of the conclusions of the study and implications of the study for Urdu and Pakistani English prosody and prosody in general.

CHAPTER 2

PROSODY

Introduction

While Chapter 1 addressed the broader issues of prosody and its role in interactional language, this chapter will discuss the more specific issues of prosody which inform the current study. This chapter will discuss approaches to studying prosody and describe the approaches used in the current study. The basic auditory unit of study, the 'intonation unit', will be defined, described and discussed in the context of its relationship with clauses, information structure, and contrast. In addition, work on intonation units as part of the larger discourse will be reviewed.

Approaches to Studying Prosody

Empirical studies of prosody can take four approaches to data analysis: articulatory, perceptual-experimental, acoustic, and auditory-perceptual. These approaches vary in the type of data used, for example, constructed phrases, read passages, or recordings of discourse (Schuetze-Coburn, Shapley, and Weber 1991) The first type of prosody study, articulatory studies, are not relevant here. The focus of the current study is not how prosody is produced; rather the interest is in what is produced. The following section will discuss the remaining three approaches.

Perceptual-Experimental Analyses

The second type of prosodic study is the perceptual study. The purpose, for perceptual studies is two-fold: to determine how untrained speakers divide speech and to establish legitimacy for researchers' theoretically developed units. Brown et al. (1980) discuss both the drawbacks and potential usefulness of obtaining an auditory analysis by naive (untrained) listeners:

The naive listener can be asked to listen to a stretch of speech and divide it up into chunks where he thinks the speaker intends the division. The resultant chunking has no special theoretical status and cannot be directly correlated with intonation units, syntactic units or semantic units—none the less judgments by naive subjects show us that speakers with no formal training can divide a speech signal into units. If it can then be established that such 'perceptual' units coincide with formal units established with reference to independent criteria, this provides valuable ancillary evidence." (p. 48)

Thus, perceptual studies may be used to indicate what conversational participants, for example, are processing when they are listening to a stretch of speech. Or they may be able to tell us whether the unit of analysis being used, such as the intonation unit discussed later in this chapter, can be independently verified.

Researchers have recently turned to studying perception of prosody in discourse data from various perspectives. However, some studies used the spoken sample from a genre other than natural conversation. For example, Duez

(1985), studied pauses in speeches and interviews and Stephens and Beattie (1986) studied how ends of turns are judged in prewritten dialogues which were read into a tape recorder. Other studies, while using conversational speech, used only pieces of conversations such as sentences or phrases (Needham, 1990; Swerts and Geluykens, 1994; Schaffer, 1984; Schaffer, 1983).

McGregor (1982) used extracts from conversations to study how intonation plays a role in how naive listeners determine the meaning. So, current studies either rely on 'less natural' speech than conversations or only use bits and pieces. Studies in which natural conversations are used as the basis to determine how hearers chunk spoken language are lacking.

In the current study a perceptual analysis was done to determine how untrained speakers perceive intonation in Urdu and Pakistani English conversational discourse, and to determine whether the naive speakers are dividing the speech into units similar to the auditory units divided by the researcher.

Acoustic and Auditory Studies

The third and fourth approaches to the study of prosody are the acoustic and auditory study. Acoustic analyses are done with instruments which indicate the physical properties of sound. Auditory studies rely on the perceptions of the hearer. Both approaches have been used extensively by researchers. However, each has its drawbacks. This section will discuss the advantages and disadvantages of acoustic and auditory analyses, which will provide the reasons

for doing an auditory rather than an acoustic study here. Then it will describe the auditory units which were used for analysis in the current study.

Schuetze et al. (1991) indicate that acoustic studies have, for the most part, been limited to instrumental analysis of short segments of speech of the read-aloud sort while studies which use auditory analysis rely on narrative and conversational type data. Acoustic studies, while reliable, are limited by over reliance on syntax (Schuetze-Coburn et al. 1991) and the fact that instruments do not hear the way actual humans do (Brown, Currie and Kenworthy 1980). In addition, acoustic analysis of a large data set is cumbersome and the limitations of the data mentioned above prevent accurate acoustic analysis.

Auditory studies, on the other hand, have been criticized as being overly subjective (Lieberman 1965). Additional difficulties for auditory analyses include poor audio quality and instrument quality, inherent problems in the data such as speaker overlap and unidentifiable speakers (Schuetze-Coburn et al. 1991).

The current study will rely on perceptual and auditory analyses. Both of these types of studies focus on the perceptions of the speech. In addition, an auditory analysis will allow analysis of bulky conversational data being analyzed here; and the perceptual analysis may show what hearers perceive as prosodic units, from which we may be able to draw conclusions about the interactive component of prosody in interactive language.

An auditory analysis will be the main approach to prosody in the current study. In order to make auditory analyses of prosody, various linguists have proposed units which are indicative of intonational contour. Halliday (1967)

proposes 'tone groups', Crystal (1989) also calls them 'tone groups', Pike's (1946) intonation contours are similar. For the purposes of the current study, Chafe's (1988, 1993, 1994) and Dubois et al.'s (1992, 1993) intonation unit, which is similar to Cruttenden's (1986) intonation group, will be the unit of analysis. The next section defines the intonation unit, and discusses the features of intonation units, as well as important transcription issues.

Intonation Units

Because language is produced in spurts and these spurts not only have physiological, but psychological and linguistic correspondences, Chafe (1994) associates these spurts with a prosodic unit which he calls the intonation unit. An intonation unit (henceforth IU) is " a stretch of speech uttered under a single coherent intonation contour" (DuBois, Schuetze-Coburn, Cumming and Paolino, 1993) similar to Cruttenden's (1986) 'intonational group' and Pierrehumbert and Hirschberg's (1990) intermediate phrase (an acoustic unit which is part of an intonational phrase).

Features of Intonation Units

Chafe (1994) says that any or all of the following features can designate an IU:

- a. changes in the fundamental frequency (perceived as pitch),
- b. changes in duration (perceived as the shortening or lengthening of syllables of words)
- c. changes in intensity (perceived as loudness)

- d. alternations of vocalization with silence (perceived as pausing),
- e. changes in voice quality of various kinds and sometimes changes of turn. (p. 58)

DuBois et al. (1992) more specifically list five prosodic cues which help to signal IU boundaries:

1. coherent contour: a unified intonation contour, i.e. one displaying overall gestalt unity
2. reset: a resetting of the baseline pitch level at the beginning of the unit
3. pause: a pause at the beginning of the unit (in effect, between two units)
4. anacrusis: a sequence of accelerated syllables at the beginning of a unit
5. lengthening: a prosodic lengthening of syllable(s) at the end of the unit (e.g. of the last syllable in the unit) (p. 100)

In addition, Chafe (1994) says that change in voice quality will often occur at the beginning or end of a unified contour. For example, creaky voice is often present at the end of an IU. For the present study, intonation units were determined using the criteria of DuBois et al.; Chafe's criteria coincide, for the most part, with DuBois et al.; however, DuBois et al.'s features are more specific, and thus, more practical.

A prototypical IU would include all of the above cues; however, not all IUs demonstrate all five features. DuBois et al. warn that some of the cues may be used for purposes other than to signal IU boundaries and that baseline pitch

reset is hard to identify at times. Normal functions of conversation, such as repair or interruption, may also interfere with the recognition of IUs.

Another potential area of difficulty is the amount of material in an intonation unit. For example, a intonation unit may only consist of a discourse marker. In addition, there are units that can occur as separate IUs which DuBois et al.(1992) call "semantically insubstantial" IUs. These are units, such as breathing, laughter, filled pauses (*uh*, *um*), or false starts, which don't have any meaning prosodically or conceptually.

Pauses fall into this category of "semantically insubstantial units" and need to be discussed here. Although Brown et. al (1980) use pauses to define the units of analysis in their study, Chafe (1994) and Cruttenden (1986) caution against using pauses as the sole feature for identifying intonation units because pauses can occur within IUs. Cruttenden (1986) classifies pauses into two categories; 'filled' and 'unfilled', 'Unfilled' pauses are silences while 'filled' are those which have some vocalization such as *uh* or *um*. Additionally, there are three places where pauses occur within utterances: major constituent boundaries (between clauses or between subject and predicate) where major boundaries correlate with longer pauses, before high lexical content words as a word-finding strategy, and after the first word of an intonation group as a planning strategy (pp. 35-36).

Types of Intonation Units

Chafe (1994) categorizes two types of IU, *Fragmentary* units and *successful* units. *Fragmentary* units are truncated units. *Successful* units are of two types *substantive* and *regulatory*.

Regulatory IUs regulate interaction or information. Chafe gives examples of types of regulatory IUs:

textual (e.g. *and then, well*)

interactional (e.g. *mhm, you know*)

cognitive (e.g. *let me see, oh*)

validational (e.g. *maybe, I think*) (p. 64)

He regards these as coinciding with discourse markers (Schiffrin, 1987) which can stand as IUs themselves (as discussed earlier). *Substantive* IUs, on the other hand, express 'substantive' ideas in discourse. Chafe (1994) has determined the size of regulatory and substantive IUs in terms of number of words per IU. In English (American), regulatory IUs have a mean word length of 1.36 words per IU and substantive IUs have a mean word length of 4.84 words per IU.

Size of IU in terms of number of words is related to morphological complexity of the language studied. Chafe (1994) emphasizes that these numbers only apply to English because languages that "pack more information into a word" have fewer words per IU (p. 65). He uses the example of Seneca, a member of the Iroquoian language family. Seneca packs more information into a word and Chafe claims that the number of words per IU is half that of English.

This claim that languages which are more morphologically complex have shorter IUs will be examined in light of Urdu and Pakistani English for the current study.

IUs and Clauses

The syntactic correlate with the intonation unit, according to Chafe (1994), is the clause: "It appears that speakers aim at a focus of consciousness in the format of a clause, although...they are often forced to spread the clause across several intonation units" (p. 66).

Clauses, in Chafe's view, 'assert the idea of an event or state'. In Chafe's terminology pieces of information are 'ideas'. The category 'idea' includes 'events', 'states' and 'referents'. According to Chafe (1994) "A state involves a situation or property that exists for a certain period without significant change whereas an event typically involves a change during a perceptible interval of time" (p. 66). 'Referents' are ideas are typically people, objects or abstractions (p. 67). The following intonation units contain events or states:

- (9) ...and these gals were taking pictures
- (10) ..but then your back gets swàý báck
- (11) ..She has something with her gállbladder,

In the examples, (9) and (10) express events and (11) a state. Both event and state ideas contain 'referent' ideas which are the participants in the events or states.

Clauses code information in the discourse. According to Givón (1993) "clauses, also called sentences, code **propositions**. A proposition combines concepts—i.e. words—into **information**. Information is about **relations**,

qualities, states or events in which entities partake" (emphasis Givón's, p. 22).

Simple clauses which code propositions are illustrated in the following examples:

- a. The maid was driven insane.
- b. The butler constantly abused the maid.
- c. The maid killed the butler with a knife.

In each of these examples entities, i.e. the 'maid' and the 'butler' partake in different events or relations—'driven insane', 'abused' and 'killed'.

Although words code concepts, according to Givón, there are times when they may also code propositions as in the following example:

- a. SPEAKER A: -Who killed the butler?
- b. SPEAKER B: -The maid. (Givón, 1993, p. 24)

In this case, according to Givón, the response 'the maid' is a truncated clause which stands for 'The maid killed the butler' (p. 24). There are also 'rigidly prescribed communicative contexts' in which we find words used to express propositions such as when a surgeon says 'Scalpel!' in the operating room which stands for 'Give me a scalpel!' (p. 24).

Complex clauses are variations of a simple clause. Givón (1993) gives the following examples to illustrate his point. A simple clause such as 'Mary kicked the ball.' can have variations applied to it to create a complex clause such as 'Having kicked the ball, Mary left.' which contains a dependent clause 'to kick the ball' and a main clause 'Mary left'. The type of variation applied to a simple clause is determined by the context of the discourse.

For the current study, the Chafe's and Givón's discussions of clauses will be combined into the following definition of a clause: A clause is a proposition in which a referent participates in a state or an event. Complex clauses would include multiple referents and multiple states or events.

IUs and Information Structure

If clauses code propositions which are essentially information, then how propositions, or intonation units, structure information must be considered.

Chafe (1994) states that ideas are subject to different activation states which change throughout the course of an interaction. Speakers are aware of their own activation states and they are also aware of the mind of the hearer. The speaker adjusts his or her language based on what he or she believes about the activation of information in the hearer's mind and his or her own knowledge. The knowledge changes as the interaction develops and those changes are informed by previous linguistic interaction, previous talk, nonlinguistic interaction, shared experiences and shared cultures (pp. 54-55).

Chafe relates activation states to the status of information in the discourse equating 'given' with 'active' and 'new' with 'inactive' information. Given information is information that a speaker thinks is already in the mind of the listener, and new information is information the speaker judges not to have previously been in the listener's mind. Chafe applies these states of activation to discourse in which ideas can be 'given', 'new' and 'semiactive.'

given—already active at this point in the conversation

new—newly activated in this point in the conversation

semiactive—accessible information that has been activated from a previously semiactivated state (p. 72)

Chafe discusses these three states in terms of cognitive cost. It takes more mental effort to get something from an inactive state to active than it does to activate something that is accessible, and, of course given information has little cost because it is already active. There are activation costs for both the speaker and the hearer. Changes in activation states have an effect on language, and conversely, language can tell us something about activation states in intonation units.

Chafe argues that new information is usually found in the predicate of a clause (p. 108) not the subject; consequently, the clause and, by extension, the intonation unit is constrained to contain only one new piece of information. This restriction is referred to as the One New Idea Constraint. The current study tests the One New Idea Constraint for Urdu and Pakistani English.

There are four situations, according to Chafe (1994) in which more than one content word is expressed in an intonation unit, potentially violating the constraint. The first of these situations is the Verb plus Object. Chafe reports that there were three types of verb plus object combinations. The first type is the independently activated verb and object in which one quarter of the combinations contained a given pronoun referent and the verbs were split between those containing new information and those containing given information.

The second type of verb plus object combination is the low-content verb. These verbs are the type which don't carry an idea of their own; rather the verb "is subservient to the idea expressed by the object" (p. 111). Examples of such verb are 'have', 'get', 'give', 'do', 'have', 'make', 'take', 'use' and 'say'.

Lexicalized phrases are the third category of verb and object combination in which the verb-object combination are used as conventionalized collocations such as 'get on your case' (p. 113).

A verb plus a prepositional phrase is the second situation in which more than one content word might potentially express more than one new idea. Chafe's data showed that a verb expressing new information was often combined with a prepositional phrase which expressed given information. There were also cases in which a low-content verb was combined with a prepositional phrase which expressed new information. In the third situation, both the verb and the prepositional phrase expressed new information, but appeared in separate intonation units.

Attributive adjectives, the third situation for potential violation of the constraint, according to Chafe's study were expressed in lexicalized phrases.

The last area of potential for one new idea violation was in conjoined ideas in which either referent, states, or events are conjoined with 'and', 'or' or 'but'. In Chafe's data, when the conjoined elements expressed new ideas, they occurred in separate IUs. The remaining occurrences of conjoined elements were analyzed as lexicalized collocations.

None these situations in Chafe's study was shown to violate the One New Idea Constraint. However, these situations have not been tested for other languages, nor for other varieties of English.

IUs and Contrast

Stress and intonation are often used in English to code contrast. Contrast is based within the normal expectations of speakers and hearers in the discourse. There is a range of expectations that the speaker has about the hearer's knowledge, from total ignorance "hearer doesn't know the information" to contrary belief "the hearer holds contrary beliefs" (Givón, 1993, p. 176).

Chafe (1994) states that contrastiveness is independent of activation cost—a contrastive referent can be given, accessible or new. Normally a given referent will be expressed with weak accent, but when contrastive, it is expressed with a primary accent as we can see in the following example.

- a. Well,
- b. she wènt yèsterday,
- c. and the dóctor wasn't there,
- d. but the physícian's assístant...looked at her.

In this example, Chafe says that 'the doctor' was given and had primary accent, while 'the physician's assistant' which also received primary accent was new (p. 77). For the purposes of the current study, contrast needs to be further defined. Two types of contrast will be discussed, both defined by Myhill (1992): the 'focus construction' and 'contrastive topicalization'.

One type of contrast is what Myhill (1992) calls the focus construction. The focus construction is one in which the entire sentence is highly activated

except for one constituent which is focused. The focused element is marked with stress, and often in English, with the cleft construction (Myhill, 1992, p. 24). In terms of activation, Myhill says that activation is relative: "Focused constituents are not necessarily unactivated or low in activation; the only requirement is that they be **lower** on activation than the rest of the clause... Thus pronouns, definite nouns and indefinite nouns can all be focused or not... focused constituents must be low in **relative** but not necessarily **absolute**, activation" (p. 24).

While in focus constructions "only the focused element is being contrasted with something else, contrastive topicalization constructions have both the topic and the value assigned contrasted with something else" (p. 26). Here topic means, according to Myhill (1992), an entity which provides context for the following predication and often persists beyond the immediate clause. This will be referred to throughout the current study as a 'topic entity.'

Myhill (1992) describes contrastive topicalization as a pairing of a topic entity and a value (topic entity-value) which contrasts with another topic entity-value pair. In the discourse, the topic entity is high in activation because it is given information, but it is not the only activated entity. It shares the activation with another entity with which it is being contrasted. The following example demonstrates contrastive topicalization:

I had fish and vegetables. The fish was good. The vegetables were terrible. (Myhill 1992, p. 25).

The two topic entities are 'fish' and 'vegetables' and they are assigned the values 'good' and 'terrible', so the fish-good pair contrasts with the vegetables-

terrible pair. Very often in the discourse one of the topic entity-value pairs is left out, for example, 'The vegetables were terrible' might be omitted, leaving an implicit comparison (Myhill, 1992).

IUs in the Larger Discourse

Thus far the discussion has focused on the form and function of intonation units within the intonation units themselves. What happens beyond the intonation unit in the discourse is of interest here. Recently, Chafe (1996), while adhering to the "one idea at a time" perspective, has conceded that constructing discourse is more complicated than simply adding a string of new ideas together and has proposed a "flow" model which takes into account different influences on the flow of discourse such as memory, thoughts, language, and interactive factors (p. 56). He says we must consider (at least) the following relations when assessing a particular focus of consciousness expressed in an intonation unit:

1. A relation to what preceded
2. A relation to what will follow
3. A relation to current schema
4. A relation to the ongoing interaction (p. 61)

The flow model combines "linear development through time with the clustering of ideas into smaller and larger chunks, while allowing also for ideas that get nowhere, as well as for the contributions of other participants" (p. 57). Analyzing a piece of narrative discourse, Chafe divides, structures, and combines episodes to construct his model. Although he sketches a preliminary schema for his model, he recommends that further work needs to be done to fill it out.

Conclusion

What hearers and speakers do with prosody in conversational discourse is of interest here. As such, perceptual studies of prosody are valuable. Getting the perception of naive judges may tell us something about what conversational participants are doing. In addition, the intonation unit has been described and analyzed extensively by Chafe (1994).

Intonation units are the basic unit of analysis for the current study. No studies to date have been done to determine the characteristics of other varieties of English, nor has any study of intonation units in Urdu been done. This study intends to fill in these gaps by identifying and describing the characteristics of intonation units in Urdu and Pakistani English through an auditory analysis and a perceptual study.

The function of intonation units in conversational discourse is of interest to this study as well. Intonation units will be analyzed for their relationship with clauses and their role in organizing information in discourse. Contrast will also be examined in the conversational data for this study to determine how intonation units code contrast in Urdu and Pakistani English.

CHAPTER 3

URDU AND PAKISTANI ENGLISH

Introduction

This chapter provides background information about Urdu and Pakistani English. Socio-cultural information about Urdu will be discussed and a brief overview of the structure of Urdu will be provided. Finally, studies of prosody in Urdu and Pakistani English will be reviewed and discussed.

Background of Urdu and Hindi-Urdu

Urdu is an Indo-Aryan language. As the national language of Pakistan, it is spoken throughout the country; however, few Urdu speakers' first language is Urdu. Abbas (1993) reports that only nine percent of the population of Pakistan consists of native Urdu speakers (p. 148).

Hindi and Urdu both stem from Khari Boli, a language spoken in the northern part of India. Historical, religious and political forces put pressure on Khari Boli speakers to the point that the language became two. Urdu refers to the form of Khari Boli which has a strong Perso-Arabic influence and Hindi refers to that form which is based on Sanskrit. Hindi and Urdu at the colloquial level are mutually intelligible, but at the literary level diverge significantly (Masica, 1991). Many linguists, because of the syntactic similarities of the languages refer to them as Hindi-Urdu. The languages will be referred to with the terms the

individual researchers have used in this chapter. However, "Urdu" will be used throughout the Method and Results chapters because the subjects of this study are Pakistani and call their language Urdu.

Structure of Hindi-Urdu

The following section provides a brief overview of the structure of Hindi-Urdu. Word order, nominal markers such as gender, number and case will be explained as well as the verb system.

Mohanan (1994) illustrates the freedom of word order in Hindi in the following examples which illustrate variations on the canonical SOV word order presented in (1a). The capital letters E, D, N, stand for *Ergative*, *Dative* and *Nominative* respectively:

(1)

- a. *ilaa-ne anuu-ko haar b^hejaa*
 Ila-E Anu-D necklace-N send-Perf
 Ila sent Anu a/the necklace.
- b. *ilaa-ne haar anuu-ko b^hejaa*
 Ila-E necklace-N Anu-D send-Perf
 Ila sent Anu the/*a necklace.
- c. *haar ilaa-ne anuu-ko b^hejaa*
 necklace-N Ila-E Anu-D send-Perf
 Ila sent Anu the/*a necklace.
- d. *ilaa-ne b^hejaa anuu-ko haar*
 Ila-E send-Perf Anu-D necklace-N
 (It was) Ila (who) sent Anu the/a necklace. (pp. 11-12)

As we can see in (1a-d), grammatical function does not change with the change in word order. (1a) serves as the canonical word order where the direct object *haar* 'necklace' can be interpreted as definite or indefinite. Changing word

order can have an effect on definiteness as in 1b and 1c where an indefinite reading cannot occur as represented by the *. Sentence 1d shows that by moving the verb from its canonical position one can achieve emphasis, in this case emphasizing that Ila was the one who gave the necklace to Anu.

Nominals

This section will discuss nominals in Urdu.

Urdu marks nominals for gender, number and case.

Gender

The predominant suffix markers for gender are *-o* for masculine and *-i* for feminine. Example (2) illustrates the two forms.

(2)

- a. masculine
beT-aa
child-Masc.
Son

- b. feminine
beT-ii
child-Fem.
Daughter

Gender agrees with the sex of the animate noun. With the inanimate nouns, gender marking is arbitrary (Mohanani, 1994). For example, *kitaab* 'book' is feminine while *xat* 'letter' is masculine.

Number

Singular and Plural are marked in Urdu. The examples in (3) show singular and plural marking on masculine and feminine nouns.

(3)

a. Masculine singular and plural

beḷ-aa *beḷ-ee*

child M-S child M-P

son sons

b. Feminine singular and plural

beḷ-ii *beḷ-iiāan*

child F-S child F-P

daughter daughters

Example (3) shows simply that the suffix *-a* shifts to *-e* in the plural and *-aan* is added to the Feminine form to show plural. The examples of gender and number here show only one class each of noun in masculine and feminine, singular and plural form to show the most common morphological markers used in Urdu.

Case

The discussion of case is important to the current study. Urdu has a rich system of case marking: ergative, nominative, accusative, dative, instrumental, genitive or locative. Hindi marks subjects with ergative or nominative and objects with nominative or accusative. There is not necessarily a one-to-one correspondence between grammatical function and case marking; for example, a nominative may be the subject or the object, or conversely, a subject can be marked nominative, ergative, dative, instrumental, genitive or locative (Mohanani, 1994). The following discussion explains the cases and case markers in Urdu. Abbreviations for the cases include N-nominative, E-ergative, A-accusative, D-

dative, I-instrumental, L-locative. Tense markers on verbs include FUT-future, PERF-perfective, PAST-past.

∅ Nominative (N)

Nominative is the default case for subjects as in the following example in which the subject *main* 'I' is marked as nominative:

main kitaab-ko paṛ^he-gii
 I book-D read-FUT
 I will read the book.

Butt (1995) labels unmarked NPs as nominative and explains that nominatives only occur as subjects or direct objects.

ne: Ergative (E)

The ergative marker *-ne* on the subject correlates with the use of the perfective form of the main verb. We can see this in the following example.

Main-ne kitaab paṛ^hii
 I-E book read-PERF
 I read a book.

With the transitive verb *paṛ^hii* 'read', this sentence reflects a typical ergative construction in which, as Dixon (1994) explains, the subject of an intransitive clause is marked the same as the object of a transitive clause, but the transitive subject is marked differently. Mohanan (1994) argues, however, that the transitivity-intransitivity distinction does not hold entirely for Hindi. There are intransitive and transitive verbs which take the ergative marker. Instances of intransitive verbs which takes the ergative marker are *nahana* 'bathe (oneself)', *k^hāsna* 'cough' or *tjīkna* 'sneeze' (Kachru, 1987) and there

are transitive verbs which do not take the ergative marker such as *bolna* 'speak' and *lana* 'bring'. Mohanan (1994) proposes that the semantic property she calls 'conscious choice' (the speaker has control over the action) dictates ergativity for the most part. Butt (1995) also proposes the semantic feature of volitionality as a motivation for the ergative marker. Kachru (1987) characterizes a typical ergative NP as expressing "the volitional active agent of a transitive verb in the perfective" (p. 235). So it seems there is some agreement that in Hindi the ergative relies on semantic information for its formation rather than exclusively grammatical information in Hindi.

ko: Accusative or Dative (A) (D)

Although *ko* is often treated as the one case, Mohanan (1994) and Butt (1995) both argue for two cases. Mohanan (1994) analyzes accusative *ko* as the marker of primary objects and dative *ko* as the marker of goals. The accusative marks direct objects and the dative marks indirect objects as we can see in the following examples:

Accusative

anjum-ne khana-ko pakayaa
 Anjum-E food-A cook-PERF.
 Anjum cooked the food.

Dative

anjum-ne arif-ko kitaab dii
 Anjum-E Arif-D book give-Perf
 Anjum gave Arif the book.

Butt (1995) argues for analyzing *-ko* as homophonous accusative and dative rather than simply analyzing it as dative saying, "they fulfill two distinct

functions and appear in complementary distribution” (p. 17). She suggests this distinction because the dative *ko* is never optional while the accusative is. Decisions for using *ko* on the accusative have to do with animacy and definiteness— *ko* adds definiteness to animate nouns. In addition to definiteness, Butt argues that *ko* is a marker of specificity . Dative *ko* can appear on subjects and indirect objects as it indicates the notion of goal while accusative *ko* only appears on direct objects.

se: Instrumental (I)

Hindi-Urdu has an instrumental, *se*, which has been described as ablative (Platts, 1967) or instrumental (Mohanani, 1994). Mohanani described properties of *se* as instrument, source, cause, and demoted agent of passive (p. 66). The following example shows the typical instrumental use of *se*.

<i>arif-ne</i>	<i>kitaab-se</i>	<i>asim-ko</i>	<i>maaraa</i>
Arif-E	stick-I	Asim-D	hit-Perf
Arif hit Asim with a stick.			

ka: Genitive (G)

The genitive marker in Hindi-Urdu is *ka*. *ka* marks the possessor as in the ownership of something or relationship to someone (Mohanani, 1994). *ka* can be used attributively or predicatively (McGregor, 1972) as shown in the following examples.

Attributive

<i>Anjum-ne</i>	<i>Raza-kii</i>	<i>kitab</i>	<i>p^hankaa</i>
Anjum-E	Raza-G	book	throw-Perf
Anjum threw Raza's book.			

Predicative

je makan us-ka he
 this house hers/his be-PRES
 This house is hers/his. (McGregor, 1972)

mē and *par*: Locative (L)

There are two commonly used locatives in Hindi, *mē* and *par*.

mē

kitab kamre-mē he
 book room-L be-PRES.
 The book is in the room.

mē shows temporally or spacially that something is in the midst of something

else (Platts, 1967, McGregor, 1972).

-*par*. locative

kitab mez-par he
 book table-L be-Pres.
 The book is on the table.

par has the sense of 'on' or 'at'. (Mohanani, 1994, McGregor, 1972). The

meanings of *mē* and *par* extend to more abstract senses, but for the purposes

here the spacial meaning will be adequate.

Mohanani (1994) argues that all of the case markers can be used to mark grammatical subjects and exemplifies this as in (5) (pp. 63-64):

(4)

a. *ravii kela k^ha raha t^ha*
 Ravi-N banana-N eat Prog be-Past
 Ravi was eating a banana.

b. *ravii-ne kelaa k^haya*
 Ravi-E banana eat-Perf
 Ravi at the banana.

c. *ravi-ko kela k^hana t^ha*

Ravi-D banana-N eat-NF be-PA
 Ravi was obliged to/needed to eat the banana.

d. *ravi-se kela k^haya nahī gayaa*
 Ravi-I banana-N eat-Perf not go-Perf
 Ravi couldn't eat the banana.

e. *ravii-ke t̄far bat̄t̄je t^he*
 Ravi-G four children be-PAST
 Ravi had four children.

f. *ravii-mē bilkul dayaa nahī t^hij*
 Ravi-L at all mercy not be-PAST
 Ravi had no mercy at all.

In each case, Ravi is the grammatical subject of the sentence. But the case assignments depend on subcategorization and selectional restrictions. Hence 4a is the default nominative case used with the past progressive which does not take an indirect case marking. 4b carries the meaning of 'conscious choice' as discussed with the ergative earlier. Sentence 4c uses the dative case. Subjects marked with dative case in Hindi are called 'experiencer subjects' and have been given much attention (see Verma and Mohanan, 1990). In the example of 4c the dative *ko* gives the meaning of obligation. *Se* in example 4d as instrumental subject denotes capability and is often used with the negative or questions (Mohanan, 1994). Sentence 4e shows the inherent meaning of the genitive *ka* (in this instance inflected for number-*ke*) showing relationship. And, sentence 4f takes on the semantic notion of CONTAINMENT (Mohanan, 1994), an extension of the spatial sense of 'in'. In this sentence, Ravi contained no mercy.

Verbals

A verb agrees in number, gender and person with the subject of the sentence.

Simple Verbs

Example (5) illustrates simple subject/verb agreement :

(5)

- a. Agreement of singular, masculine, third person.

asim kitab pəɾʰt-a he
 asim book read-M-S be-PRES
 Asim reads a book.

- b. Agreement of masculine plural

uo kitab pəɾʰt-e hē
 they book read-M-P be-PRES
 They read a book.

- c. Agreement of feminine singular

anjum kitab pəɾʰt-i he
 anjum book read-F-S be-PRES-F-S
 Anjum reads a book.

- d. Agreement of feminine plural

uo kitab pəɾʰt-i hē
 they book read-F-P be-PRES-F-P
 They read a book

In each of these sentences, the main verb expresses gender and in the case of the masculine, number; and the auxiliary *be* expresses number.

Compound Verbs

According to McGregor (1982), compound verbs are “composites of verb stems with one of a small number of auxiliary verbs; their basic meaning is that of the verb stem, modified or made specific in some sense by the particular

auxiliary used" (p. 99). Hook (1974) looks extensively at compound verbs in Hindi and distinguishes between the simple and compound verb: "The relation of compound to simple verb is a privative, aspectual one, with the compound expressing completion of action" (p. 314). Mohanan calls compound verbs in Hindi complex predicates and divides them into two categories: verb plus verb complex predicates which are compound verbs, and the noun plus verb complex predicates which are referred to as conjunct verbs. The conjunct is exemplified by (7).

- (7) *ram-ne niinaa-ki madad ki*
 Ram-E Nina-G help-N do-PERF
 Ram helped Nina. (Mohanan, 1994, p. 197)

In this sentence, *madad* is the noun which takes the verb *karna* here in the perfective feminine form. Where *madad ki* is a complex predicate because "clause structure of the sentence is determined not by the verb alone, but jointly by the N and the V" (p. 197).

The compound verb on the other hand as described by Hook (1991) consists of a set of auxiliary verbs which he says are homophonous with basic lexical verbs. These verbs

express a change in location or posture, or an action that entails such a change: GO, GIVE, TAKE, THROW, LET, GO, GET UP, COME, STRIKE, SIT, FALL, etc. A *compound verb* (CV) comprises the finite form of one of these following a non-finite or stem form of a main or primary verb (pp. 59-60).

The compound verb is illustrated in (8) with the auxiliary *jana*:

Jana stresses the completion of an action, occurs with both transitive and intransitive verbs and is common with verbs of motion (McGregor, 1972).

(8) *jana*

- a. *asim aa gaya*
 asim come jana-PERF
 Asim came.

where *aa* is the main verb and *jana* is the auxiliary. This contrasts with the simple verb in (9)

(9)

- asim aya*
 asim come PERF
 Asim came.

where the completion of the act in example (9) is less emphasized than with the compound in (8).

Jana is an auxiliary that seems to have undergone more semantic bleaching than some of the other commonly used auxiliaries such as *lena* 'to take' or *dena* 'to give'. *Lena* gives the sense of reflexiveness where the action is focused on the doer and rarely used with intransitive verbs while *Dena* gives the sense that the action is focused on someone other than the doer and as with *lena* does not commonly occur with intransitive verbs.

(10) *lena* and *dena* auxiliaries

- a. *asim k^hana k^ha letaa he*
 asim food eat take be-PRES
 Asim eats food.

- b. *asim-ne k'hana p'hank diya*
 asim-E food-N throw give-PERF
 Asim threw the food.

In 10a we can see the activity of eating shows the action focused on Asim, the doer; whereas, in 10b the action is away from the doer. In this case Asim is throwing the food away from himself.

The focus of the current study is not on the compound verb in Urdu, however, further interest would necessitate studying Hook (1974) who has extensively described the compound verb in Hindi and Butt (1995), who discusses the structure of two complex predicates in Urdu: the *permissive* and the *Aspectual*.

Urdu is a language which is much more morphologically complex than English. This fact is important for the current study in light of Chafe's (1994) claims about number of words per intonation units in morphologically complex languages.

Prosody in Hindi-Urdu

Prosodic studies of Hindi-Urdu have focused mainly around word stress (Gumperz 1958, Gupta 1987, Elizarenkova 1988, Romyaceva 1988, Pandey 1989, Rahman 1991b), but there is not a standard approach to assigning stress among researchers. In fact, there have been doubts expressed about whether Hindi actually has stress.

However, there is some agreement that stress is less strong in Hindi than English (Ohala, 1977). Kachru (1990) says "stress is not distinctive in Hindi-

Urdu; words are not distinguished on the basis of stress alone...The tense vowels are phonetically long in pronunciation the vowel quality as well as length is maintained irrespective of the position of the vowel or stress in the word” (p. 472). She goes on to say that syllables are classified according to weight: light, medium and heavy. Syllables which end in a short, lax vowel are light; medium are syllables which end in a tense, long vowel or lax, short vowel followed by a consonant; heavy are classified as ‘others’. Word stress tends to be put on the syllable in the word that is heavier than others are. Cruttenden (1986) confirms this by classifying Hindi as a syllable-timed language which operates “with fewer distinctions of stress/accent than languages like English, which are called stress-timed” (p. 23).

In a brief comparison of intonation in English and Hindi at the sentence level, Bansal (1981) reports that the location of the nucleus of the sentence is different between the two languages. In Hindi, nucleus placement depends on the type of sentence: nucleus is on the question words in questions, the negative adverb in negatives and modifiers in modifier+headword structures.

Prosody in Indian English

Rahman (1991) has described phonological and phonetic features of several varieties of Pakistani English. He does address nonsegmental features; however, his analysis is limited to the word level which is not helpful here because this study is looking at prosody beyond the word level.

Gumperz (1982, 1992, 1996) has studied Indian English prosody. In comparing and contrasting sentence level prosody Gumperz (1982) claims in

much the same way that Chafe (1994) has, that the basic information unit in Western English is the single clause (a subject noun phrase and predicate verb phrase) and that is reflected in the basic tone group. He compares how South Asian English prosody is expressed at the simple sentence level. I have organized his conclusions (1982, p. 120) in Table 1. Gumperz' 'tone group' (mentioned in Table 1) is based on Halliday's tone group (1967) Gumperz (1982) describes the tone group as that which "consists of one or more feet, held together by a smooth continuous melodic contour and set off from adjoining units by features of timing similar to what is called phrasing in musical performance" (pp.109-110). He distinguishes between minor tone groups "which delimit a message treated as a component of a larger whole" and major tone groups "which are more independent, their boundaries having relatively more finality" (p. 110).

Table 1 indicates that Western English has more stress and relies more on stress for signaling information. Terminal pitch contours are also more distinctive in Western English than South Asian English, and the tone group rather than being unified is broken up into phrases rather than clauses (p. 121)

Table 1

Prosody in South Asian and Western English

Western English	South Asian English
The sentence will comprise one tone group.	The sentence will be spoken as a single whole (no pauses).
The tone group will have a smooth unified contour.	There will be no unified contour; rather there will be two or more subunits separated by fairly abrupt changes in pitch or loudness.
The tone group will have two or more most prominent syllables, corresponding to peaks of information, one of which will be the nucleus and carry the main accent.	There will be no clear prosodically marked nucleus.
The contour will end in a [distinct] fall or rise.	The pitch change on the final syllables will be narrower; frequently pitch will be held high and level.

The discussion of prosody in Hindi/Urdu earlier in this chapter confirms another of Gumperz' claims that these features of South Asian English are based on the languages of North India (p. 121). Gumperz (1982) says that the basis for the differences between Western and South Asian English is first of all in the differences in syllable level phonology—there is less difference between stressed and unstressed syllables and there are no reduced syllables in Hindi. Secondly, the breakdown syntactically, as mentioned earlier, is different—South Asian speakers are breaking at the phrase rather than the clause level.

Gumperz discusses how contrast is expressed prosodically in South Asian English in the following interaction, an exercise from a workshop in communication skills (I stands for Instructor and A for the name of a student).

I: A, what's your phone number?

A: 834 9578.

I: 835 9578?

A: No, 834 9578.

Western speakers would stress the '4' the second time giving it contrastive focus while South Asian English speakers would repeat the number exactly as it had been said the first time (pp. 122-123). At the longer sentence level, contrast is also expressed differently by Western and South Asian English speakers. The following examples (17) and (18) represent Western (W.E.) and South Asian English (I.E.) respectively (/ indicates a minor tone group, // a major tone group, ^h high secondary stress, [↑] upward pitch register shift):

(19) W.E.: If you don't give me that cigarette / I will have to buy a cigarette //

(20) I.E.: If you don't give me [↑]that ^hcigarette / I will have to buy [↑]a ^hcigarette//

The difference between these two utterances is in where the main emphasis is placed. In the Western English version 'give' and 'buy' are given the primary

accent and 'cigarette' is set off by rising and falling tones in the two clauses respectively. On the other hand, the Indian English utterance 'cigarette' is given the main emphasis in both clauses while 'give' and 'buy' are not distinguished at all. In this case, the Westerner hears 'cigarette' with repeated stress, which is disconcerting (pp. 124-125).

In terms of information structure, Gumperz et al. (1984) state that South Asian English speakers present background information with "high pitch and rhythmic stress" and then "shift to lower-pitched, less emphatic speech" for the main point itself where American speakers of English do the opposite; the main point is emphasized with stress while the background information is de-emphasized (p. 6). The result of these differences affects the Western English speaker's perception of Indian English:

"...Indian English can sound either full of stress and staccato, or droning and monotonous. This is because, on the one hand, Indian English speakers rarely reduce syllables and pronounce almost all consonants with a higher degree of articulation than native speakers, thus in one sense employing a great deal of stress; yet, on the other hand, no syllables are stressed significantly more than any others. (Gumperz, 1982, p. 121).

Thus the Western speaker is faced with the difficulty of determining central information, which is presented with relatively low pitch and nuclear syllables because of the differences in stress.

The differences in prosodic conventions for both varieties of English then show differences in “signaling function among the various channels which make up prosody” (p. 122)—different components of prosody are used differently by each group. Shifts in pitch register by Indian English speakers signal points in information structure while in Western English the accent placement and tune are the signal for information structure (1982, pp. 122-23).

Although Gumperz’ work provides valuable information about characteristics of prosody in South Asian English, much of the analysis is done with sentences rather than larger discourse chunks. This study will look at the larger discourse picture to determine whether Gumperz’ claims for prosodic features of South Asian English hold for Pakistani English, but also to determine whether the signaling functions for information structure are also confirmed.

Conclusion

Current studies of Hindi-Urdu and Pakistani English demonstrate a lack of work done in the areas of prosodic analysis of extended discourse, and the use of interactive language as the data of analysis. There has been one notable exception to this gap in research for Hindi-Urdu and Indian English and that is the work of Gumperz (1982a, 1982b, 1984, 1992, 1996). However, empirical studies which confirm Gumperz’ claims for South Asian English are needed. This study intends to address this gap. Chapter 4 will explain the materials and methods used to obtain the results of this study.

CHAPTER 4

METHOD

Introduction

In order to find answers for the research questions posed for this study, I collected conversations in Urdu and Pakistani English, transcribed coded and analyzed them. In addition, I did a perceptual study in order to get independent judgments for intonation units for Urdu and Pakistani English. In this chapter I will describe the method for obtaining the conversational data and the participants of the conversations. I will also describe the method for transcribing and coding intonation units as well as the method used for choosing the excerpts used in the analysis. In addition I will describe the methods, materials and subjects for the perceptual study.

Collecting Conversational Data

In this section I will describe the Urdu and Pakistani English conversations which provide the database from which excerpts were chosen for the main analysis of this study. The participants, conversation, transcription method, and method of excerpt choice will be included. Choosing the excerpts included several steps and these will be described individually.

Participants

Seven Pakistani students at Oklahoma State University participated in recording conversations for this study. The students were all male because there were not enough females on campus to match for gender. Three Pakistanis participated in the Pakistani English conversation and four Pakistanis participated in the Urdu conversation. I was the fourth participant in the Pakistani English conversation because the Pakistani students were concerned they would lapse into Urdu without an English speaker in the room. All the participants are considered Pakistani English speakers because of their extensive English experience in Pakistan. In addition, all had been in the U. S. for several years. All participants were fluent in Urdu and English and some, whose first language was not Urdu, had a third language. Table 2 shows the first languages of the participants in both the Pakistani English and Urdu conversations. Participants are identified by a capital letter, as they will be throughout the method, results and discussion sections of this study.

Table 2

Language Backgrounds of Conversation Participants

Pakistani English Conversation		Urdu Conversation	
Participant	Native language	Participant	Native Language
M	Punjabi	A	Hindko
S	Sindhi	R	Hindko
SH	Urdu	F	Pushto
B	RESEARCHER	L	Urdu

Although the participants were not chosen for native language background, several native language backgrounds were represented here, which was desirable in order to show that native language did not have an effect on intonation in Urdu. My (RESEARCHER) contributions to the Pakistani English conversation were not analyzed since I am not a native Urdu speaker.

Conversations

The Pakistani English conversation, *PE* was recorded. The participants were aware that the purpose of the meeting was to record a conversation in English. The presence of the researcher made the situation slightly less natural than had they been alone, however, the discourse was conversational. The length of recording time for this conversation was 90 minutes.

The Urdu conversation was recorded. Participants were informed that they were being recorded which resulted in some starting and stopping of the tape at times when they did not want what they were saying recorded. Of the

several tapes collected, one conversation I have called *Urdu* was chosen for the clarity of the recording and the number of participants (four). The recording time for this conversation was 60 minutes. It was a casual conversation among four friends.

Transcription

I then transcribed the two conversations. *PE* was transcribed using Standard English orthography. A Pakistani first transcribed *Urdu* using English orthography. Then, I transcribed the *Urdu* into the International Phonetic Alphabet (IPA) using an IPA font.

After transcribing the conversations, I divided the conversations into intonation units, hereafter IUs. At this point, my divisions were based on the general features described by Chafe, rather than coded specifically, in order to get a general idea of the number and shape of intonation units in the conversations. The following criteria were used to do this.

- a. changes in the fundamental frequency (perceived as pitch)
- b. changes in duration (perceived as the shortening or lengthening of syllables of words)
- c. changes in intensity (perceived as loudness)
- d. alternations of vocalization with silence (perceived as pausing)
- e. changes in voice quality of various kinds and sometimes changes of turn. (Chafe, 1994, p. 58)

I then extracted excerpts from the first 17 minutes of each conversation for analysis. The next section will discuss the method of choosing the excerpts.

Excerpts

This section will discuss the methods used to choose the excerpts that were eventually analyzed and will be discussed in Chapter 5. There were several steps in this procedure: categorizing long turns, coding substantive and regulatory IUs, determining word per IU and choosing four Pakistani English and four Urdu excerpts for analysis.

Turns

From the two conversations, *PE* and *Urdu*, I chose the clearest excerpts. These excerpts were 'long' speaker turns. First, I marked all turns containing at least five intonation units in the first 17 minutes of each conversation. The reason for excluding turns shorter than five was to get samples not completely obscured by overlap or backchannels which often occur as a speaker is trying to establish a turn. Turns of five intonation units allow a clear speech sample. In addition, turns that were unclear due to overlap or other situational interference (e.g. background music) were omitted.

Table 3 shows the number of long turns produced by each speaker and total number of turns for each conversation

Table 3

Speaker Turns of More Than Five Intonation Units Long

Conversation and Speaker	#of Turns
<i>PE</i>	
S	13
SH	9
M	1
Total	23
<i>Urdu</i>	
R	8
L	3
A	4
F	13
Total	28

Having determined the number and distribution of turns across speakers, I then observed that there were what appeared to be long IUs which occurred in turns. In order to determine the distribution and nature of these long IUs, I coded IUs as substantive or regulatory and then counted words per substantive IU.

Substantive and Regulatory IUs.

In order to determine which type the long IUs identified, I coded turns for substantive and regulatory IUs. This section will illustrate (from *PE*) substantive

and regulatory IUs and show the number and distribution of IU types in the conversations. The following examples illustrate regulatory IUs coded for the current study

PE-1
like-./

PE-3
...uh=

These are examples of Substantive IUs:

PE-1
...and it's named engineering science building,\

PE-2
...their protocol was to speak English most of the time,\

Table 4 shows total number of IUs, and the distribution of regulatory and substantive IUs for each speaker. Total percentages of regulatory and substantive IUs per total were calculated for *PE* and *Urdu*. The distribution of regulatory and substantive IUs for *PE* and *Urdu* is very close. For *PE*, 90 percent of the IUs were substantive and for *Urdu*, 89 percent of IUs were substantive.

I then determined the distribution of long IUs between regulatory and substantive IUs. The data showed that 100 percent of long IUs occurred in substantive IUs. The next step was to determine the number of words per IU.

Table 4

Distribution of Substantive and Regulatory IUs in Conversations

Conversation and Speaker	# IUs	Regulatory	Substantive
<i>PE</i>			
S	220	26	194
SH	82	5	77
M	13	2	11
Total	315	33	282
<i>Urdu</i>			
R	103	10	93
L	34	3	31
A	28	4	24
F	133	18	115
Total	298	31	263

Words per Intonation Unit

As a final criterion for choosing excerpts, I chose long turns containing at least one IU with a number of words higher than that of the speaker with the highest mean, who was L, with a mean length of 8.25. I chose 10-word-IUs, which was a number higher than the mean length of L's IUs, as those which I would define as 'long' IUs. Table 5 shows the mean of number of words per IU by speaker (based on total IUs produced in all long turns by speakers).

Table 5

Words per IU by Speaker

Conversation and Speaker	Mean Words per IU
<i>PE</i>	
S	6.6
SH	5.8
M	3.63
<i>Urdu</i>	
R	7.15
L	8.25
A	5.23
F	5.88

As Table 5 shows, the mean for speakers in this study ranges from 3.63 to 6.6 for Pakistani English and 5.23 to 8.25 for Urdu. However, it is very difficult to generalize these even for individual speakers because their total number of turns varied. For example the two ends of the spectrum M, with 3.63, and L, with 8.25, produced only one and three turns respectively.

The mean words per IU were also calculated for all substantive IUs in both conversations. The results of this calculation and a discussion importance of these results for this study are contained in Chapter 5.

Excerpts Chosen

Substantive IU lengths ranged from one to 30 words in the *PE* turns and from 1 to 27 in *Urdu* turns. To determine the nature and structure of the turns containing these 'longer' intonation units, I chose four turns from each conversation. The criteria were that the turns had to be long (at least five IUs long), relatively clear in audio quality, and contain at least one IU which was 10 words long. In addition, as many speakers as possible had to be represented. The turns, which I will call excerpts for the remaining discussion are presented in Table 6 by speaker, topic, and length of turn.

M's one turn did not contain any 10-word-or-longer IUs, so the excerpts chosen for *PE* were limited to those produced by S and SH. In order to determine the function of long IUs in different turn contexts, turns were chosen and matched across conversation (*PE* and *Urdu*). Each set of excerpts had two turns with one long IU, one turn with two long IUs and one turn with five or more long IUs. Two of the four *PE* excerpts (1 and 2) were part of the same discourse topic 'speaking English in Pakistan'. Three of the four *Urdu* excerpts (2, 3 and 4) were part of the same discourse topic 'Stereotypes of Pathans'. Excerpts with segments of preceding discourse, provided as context, are found in Appendix B

Table 6

Excerpt Information

Conversation and Excerpt #	Speaker	Topic of Turn	Length of Turn (in IUs)	# of 10 word or more IUs
<i>PE</i>				
1	SH	A building at the University of Texas-Austin	14	1
2	SH	Speaking English in Karachi offices	10	1
3	S	Difference between Indians and Pakistanis	22	2
4	S	A group of people in Pakistan called Memons	52	5
<i>Urdu</i>				
1	R	Shalwar-Kamiz (traditional dress of Pakistan) wearing in the U.S.	29	2
2	F	Comparison between Punjabi and Pathan culture	12	1
3	A	Examples of use of the word 'tarbur' (Pushto word)	6	1
4	L	Report of an interview between a reporter and a murderer	14	6

The excerpts are the focus of analysis for the main research questions of this study: What is the form and the function of these long IUs? How do they function in the larger discourse? The next section explains the methods used to obtain the results that answer these questions.

Coding of IUs in Excerpts

This section will describe the methods used to code intonation units in the excerpts. In addition, I describe the method for glosses and translations of the excerpts.

Intonation Units

The theoretical background and justification for using intonation units in this study has been discussed in Chapter 3. Here I will present a description of the features and conventions of intonation units as discussed by Cruttenden (1986), Chafe (1993,1994) and DuBois et al. (1992, 1993). A list of the transcription symbols used for coding the intonation units is included on the List of Symbols page.

The following features were coded, based on DuBois et al.'s (1992) system of transcription: pauses, lengthening, tone, terminal pitch contour, and codeswitching.

It must be noted that I was not able to code accent. Although, as noted in Chapter 2, there is a school of thought which maintains that word stress exists in Hindi, there are others who assign stress to 'weighted' syllables. In any case, the language in which DuBois et al. (1993) define accent is English (varieties spoken in the U.S. and Britain), which proved inadequate as I tried to code this category. There are places where speakers in the excerpts seem to 'stress' words, but I have coded these as 'tone'-pitch contours, rather than as accent.

Pauses

The coding of short, medium and long pauses will be illustrated.

Pauses are coded according to length in which a short pause (.2 seconds or less is marked with two dots (..).A medium pause (.3-.6 seconds) is marked with three dots (...).Long pauses (.7 seconds or longer) are marked with three

dots (...) followed by a number in parentheses ...(n). The following examples show the differences in coding short, medium and long pauses:

PE-4

..like you have uh, _

PE-2

...but nobody used to speak English over there, \

PE-2

...(8) but when I moved to \another company, /

The transcript notation here is the same as DuBois' et al. (1992) in which they place the pause notation at the beginning of the new intonation unit rather than at the end of the old one.

Lengthening.

Lengthening is an IU boundary feature. Lengthening is marked with (=)

PE-1

Vthey=, /

Terminal pitch direction.

Terminal pitch direction indicates the movement of pitch at the end of the IU. There are three pitch directions noted here: fall, rise and level.

A fall at the end of an IU is noted with a backslash (\). A rising pitch at IU final point is represented by a slash (/). Level terminal pitch direction is represented by the underscore symbol (_). The following examples from *PE 1* and *PE 2* show the coding of terminal pitch:

PE-1
...and it's named engineering science building \

PE-1
...(7)they're at UTA /

PE-2
I mean was \also to speak English _

Tone

Tone coding indicates the most prominent pitch movement. In English this is usually centered on the word with primary accent. However, because Urdu is a syllable-timed language, there often is not a primary accent while there is a pitch movement. Pitch movement can take place over several words. DuBois et al. present notations (also used here) for rise, fall, rise-fall, and fall-rise. Tone marks are placed before the word with the movement.

A rising pitch movement is marked with a slash (/). A falling pitch movement is represented by a backslash (\). There were no falling pitch movements in the data for this study. A rise-fall pitch movement is represented by a slash-backslash (/ \). Fall-rise pitch movement is represented by backslash-slash (\ /). The following examples from *PE 1* and *PE 2* illustrate rising, rise-fall and fall-rise pitch movements.

PE-1
...(1.1)and he was telling me /that, /

In this case we have a rising pitch movement and a rising terminal pitch direction both represented by the / before and after 'that' respectively.

PE-2

...(8)but when I moved to another company, /

PE-1

Vthey=, /

Codeswitching

Codeswitching is marked when more than one language is used in the discourse. *Urdu* excerpts contained codeswitching. The language designated as L2 is English and the language designated as L3 is Pushto. Codeswitching is marked with angle brackets with "L" and the number assigned language of the word. <L2 word L2>

Urdu-1

...sari zindagi ek pakistan ke <L2cultureL2> se Aaja he, _
 all life one pakistan of culture from come beAUX
 All his life he lived in Pakistani culture.

Urdu-3

<L3tarburL3> ke matlab Adufman hi hota he \
 tarbur of meaning enemy EMPH is beAUX
 Tarbur does mean enemy.

The English word 'culture' was used in *Urdu-1* and marked with L2. The Pushto word 'tarbur' is used in *Urdu-3* is marked with L3. L2 is English and L3 is Pushto throughout the *Urdu* excerpts.

After the IUs were coded, intonation units were numbered for ease of discussion as in the following example

35 ...(.7)so now that they /came back they didn't have their Aidentity, _

The IUs were numbered as they occurred in the excerpt. IUs will be referred by line as 'IU(number). In the case of the example, I would refer to it as IU35

Glosses and Translations of Urdu

The Urdu excerpts were then given interlinear glosses and English translations. The following example shows a typical line of transcription of *Urdu* with glosses and translation.

23 ...(1.)Vʃəlwar qamiz g^har ke əndər to tʃəlaə/
 shalwar kamiz house of inside EMPH go
 I do wear shalwar-kamiz inside the house

The second line of the transcription contains words and grammatical assignment abbreviations listed in Appendix B.

In addition to counting frequency of IUs for the excerpts, IUs were coded as substantive or regulatory, as described in the Initial Study. The features of IUs which were coded will be discussed with multi-clausal IUs. Results of these analyses are discussed in Chapter 5.

Perceptual Analysis—IU Boundary Judgements

Independent verification for intonation units was the purpose for conducting this part of the study. Another goal was to determine whether Americans and Pakistanis hear the same intonation unit boundaries. American and Pakistani subjects were asked to make IU boundary judgements on the English excerpts. In addition to judging boundaries in the English excerpts, Pakistanis were asked to make IU boundary judgements on the Urdu excerpts. The following section will describe the subjects, the administration of the excerpts and the analysis done on the boundaries marked by the subjects.

Subjects

There were 23 Americans who were members of an introductory linguistics class at Oklahoma State University, and 18 Pakistanis, who were students attending Oklahoma State University, who participated in the study. There were 23 sets (intonation unit boundaries marked on four excerpts) obtained from the Americans. From the Pakistanis, 18 sets of English excerpts were obtained, but only 17 sets of Urdu excerpts were obtained because one Pakistani could not read Urdu well enough to mark the transcripts.

Administration of the Excerpts

The excerpts were administered to the Americans during a single class meeting. The excerpts were administered to the Pakistanis in small groups at different times. The following paragraphs will describe the methods and materials used to obtain IU boundary judgements from the Americans and Pakistanis.

To establish a baseline for intonation units, an excerpt from an English conversation titled "Appease the Monster"¹ was played for the subjects. This conversation was divided into intonation units using the DuBois et al. (1993) system of transcription by trained persons at the University of California-Santa Barbara.

Subjects were also provided with the transcript of the excerpt which had been divided into intonation units (although transcription symbols other than the words themselves were omitted to avoid confusion for the subjects).

APPEASE THE MONSTER

KEVIN: Allen County Motors told me
 they recommended McMann Tire
 Downtown
 And uh
 I already knew what I needed
 so I didn't have to haggle about what kind of tires
 or where to k-
 you know
 put em
 front or back
 Allen County Motors already told me
 you know
 all that stuff

The only other information I provided on intonation units was an explanation based on Chafe's (1994) discussion of the fact that we have physiological constraints, such as breathing, on the amount of speech that we can produce at a time. I also mentioned generally that there were psychological and linguistic constraints, but made no mention of examples. See Appendix C for specific comments made to the subjects.

Subjects were then given transcripts of the Pakistani English excerpts (contained in Appendix D) and told to use vertical lines to mark where the intonation unit divisions were in each excerpt which were presented as blocks of information (see- *PE-1*)

¹ Tape and transcript for "Appease the Monster" were provided as part of a course taught by Sandra Thompson at the 1995 LSA Summer Institute entitled "Grammar and Interaction".

PE-1

sh: I was speaking with my friends like 3 4 days ago they're at UTA university Texas Austin and he was telling me that they have this uh engineering building and it's named engineering science building so its ens building and by ens they I mean there are so many foreign students in that engineering science building that ens does not stand for engineering science no more it stands for english not spoken building

In addition, the Pakistani subjects were asked to divide the *Urdu* excerpts. These excerpts were transcribed into Urdu orthography to facilitate reading for the Pakistanis (Urdu transcripts included in Appendix E)

IU Boundary Judgements Analysis

Intonation unit boundaries marked by the American and Pakistani subjects were then tabulated, percentages were calculated and boundaries marked by 50 percent or more of the subjects were recorded as in the following example from the American set of results

PE-2

sh: also the difference like /my office,/ 78

The number at the end of the line indicates that 78 percent of the American subjects chose this as an IU boundary. American and Pakistani IU boundary judgements are marked in all excerpts and found in Appendix F. Pakistani results are reported on IPA transcriptions rather than the Urdu transcription for ease of reading. Results of the judgements will be presented and discussed in Chapter 5.

The boundaries identified by these results were analyzed for prosodic and clausal features, to discover what the subjects were using to mark intonation unit boundaries. Results of the analysis of cues used by the subjects to demarcate IU boundaries will be reported in Chapter 5.

Conclusion

Collection and transcription of the Urdu and Pakistani English conversations revealed that there were 'long' intonation units. These long intonation units were analyzed for form and function within the context of the excerpts and within the context of the larger discourse. Results of these analyses will be reported and discussed in Chapter 5. In addition, the results of the perceptual study will be reported and discussed in Chapter 5.

CHAPTER 5

RESULTS

Introduction

The purpose of this study was to determine the role of prosody in Urdu and Pakistani English. This chapter will report the results of the analysis of intonation units in the Pakistani English and Urdu excerpts according to the methods described in Chapter 4.

Intonation Units

This section will present the results of IU analysis of the excerpts. Frequency and distribution of substantive and regulatory IUs will be reported, then mean words per substantive IU, and finally, the results of IU boundary judgements by naive speakers will be reported.

Substantive and Regulatory IUs

The number of IUs for the four English and four Urdu excerpts totaled 169. Table 6 shows the results for the excerpts. Number of IUs, and number and percentage of substantive and regulatory IUs are included.

Table 7

Substantive and Regulatory Intonation Units in Excerpts

Excerpt	IUs	Substantive IUs		Regulatory IUs	
		#	%	#	%
<i>PE</i>					
1	14	12	86%	2	14%
2	10	10	100%	0	0
3	22	19	86%	3	14%
4	56	44	80%	12	20%
Total	102	85	83%	17	17%
<i>Urdu</i>					
1	35	30	86%	5	14%
2	12	11	92%	1	8%
3	6	5	83%	1	17%
4	14	12	86%	2	14%
Total	67	58	87%	9	13%

Of the total number of IUs, we can see that the majority of them are substantive.

Because the English and Urdu excerpts were produced by different speakers

and controlled for variables such as length, comparisons between or among

excerpts would not reveal any valid results. However, comparing the overall

numbers reveals that the percentages of substantive and regulatory IUs for Urdu

are the same as for English. A much larger percentage of the intonation units are

substantive rather than regulatory which, would be expected since one role of communication is to convey information.

Mean Words per Substantive IU

Size of IU in terms of number of words per IU was important to the study. Determining words per IU allows us to establish a baseline of mean words per IU for Urdu. This then will allow us to determine whether the PE and Urdu means were similar. In other words, are Pakistanis producing the same average number of words per IU in Pakistani English as they are for Urdu? Number of words per IU were counted and averaged for the *PE* and *Urdu*.

In addition to calculating individual mean words per IU as reported in Chapter 4, mean words per IU were determined for total IUs in each 17 minute conversation (*PE* and *Urdu*). Mean words per IU for Pakistani English based on 282 IUs was 5.9. For *Urdu*, mean words per IU based on 263 IUs was 6.32. As indicated in Chafe (1994), the mean length of substantive units for American English is 4.84 words per substantive IU. Thus, Pakistani English speakers in this set are producing an average of one word more per IU than American English speakers.

Prosodic Features of Substantive IUs

In order to characterize IUs for *Urdu* and *PE*, I examined the types of prosodic features found internally and types of terminal pitch contour. Table 8 shows the frequency and distribution of these features.

Table 8

Prosodic Features of IUs

Feature	Internal feature		Terminal Pitch contour	
	PE	Urdu	PE	Urdu
/	15	15	25	12
\	0	0	12	14
=	4	4	4	4
-	N/A	N/A	44	28
Λ	11	13	N/A	N/A
V	0	3	N/A	N/A
trunc.	N/A	N/A	7	1
Total	30	32	85	58

Of the 85 substantive IUs in PE, 30 contained some kind of internal prosodic feature. In some instances more than one internal prosodic feature per IU occurred. However, in most cases only one prosodic unit per IU occurred. This leaves many IUs without any internal prosodic contour. The most frequently occurring prosodic features were the rising pitch contour and the rise-fall pitch contour. No pattern of use for these was found. For example, although the rise-fall pitch contour always occurred on multi-syllabic words, not all multi-syllabic words were marked with a pitch contour. In addition, there were multi-syllabic words which were marked with a rising pitch contour, so there was not a one-to-

one correspondence at the lexical level. This suggests that speakers may have been using the contours for discourse emphasis.

Level pitch was the most frequently occurring terminal pitch contour. For *PE*, 52 percent of the IUs were level pitch contour and for *Urdu* 48 percent had level terminal pitch.

Pauses were another feature which occurred at IU boundaries in conjunction with other features. The occurrence of pauses was similar to level pitch contour with 51 percent of substantive *PE* IU boundaries and 52 percent of substantive IU boundaries in *Urdu* marked with a pause. However, pauses were not limited to occurring with level pitch contour. They occurred with all types of terminal pitch contour features.

In sum, *PE* and *Urdu* IUs are characterized with no regular nuclear accent, such as is a characteristic of American English. In addition, level pitch is common in *PE* and *Urdu* at the end of IUs. Pauses also played an important role in defining IU boundaries in this data set.

IU Boundary Judgements by Americans and Pakistanis

This section will report the results of the naive speaker judgements of IU boundaries. The purpose of the perceptual study was first to determine whether Americans and Pakistanis used the same cues to determine IU boundaries and secondly to determine whether perceptual data in this case would independently confirm the IU as the unit which hearers use to chunk information. The distribution of IU units marked by the subjects is reported across excerpt and across group in Table 9.

Table 9

American and Pakistani Responses to English Excerpts

Excerpt	Number of Intonation Units*	
	American	Pakistani
1	9	9
2	8	9
3	9	8
4	18	15
Totals	44	41

*These totals reflect only the IU boundaries marked. Excerpt final IUs were not marked.

There is no significant difference between the number of IU boundaries identified by each group as indicated by a Chi-square analysis [$\chi^2=.106$, 1 *df*, $p>.05$]. This could mean that the two groups are using the same cues or that they are using the same number of cues, but different types. This will be examined next.

Although the difference in the number of IU boundaries marked was not significant, it was necessary to look at whether the same boundaries were marked and what features the subjects relied on for marking IUs boundaries. Table 10 shows total IUs and individual prosodic features (see Symbol List page for symbols) across excerpts for the Americans and Pakistanis. 'P' indicates

'pause' and 'P+ (feature)' indicates a combination of pause plus other prosodic feature 'Trunc' indicates truncated units.

Table 10

Prosodic Features of IU Boundary Judgements

Feature	PE-1		PE-2		PE-3		PE-4		Total	
	A	P	A	P	A	P	A	P	A	P
# IUs	9	9	8	9	9	8	18	15	44	41
/	1	1	0	0	0	1	0	0	1	2
\	0	0	0	0	0	0	0	0	0	0
_	0	0	1	1	0	2	1	0	2	3
=	0	0	0	0	1	0	1	1	2	1
P	0	0	0	0	0	0	0	0	0	0
P+/ P+\	5	5	3	3	2	2	2	1	12	11
P+_ P+=	2	2	2	2	0	0	7	6	11	10
P+_	1	1	1	1	4	1	6	6	12	9
P+=	1	1	0	0	2	2	1	1	4	4
Total P	8	8	6	6	8	5	16	14	38	34
Trunc.	0	0	2	3	0	0	0	0	2	3

The totals on the prosodic features indicate that there is very little difference between what the Americans and Pakistanis use as cues to indicate IU boundaries in these excerpts. Table 10 shows that the subjects were not using single prosodic features for demarcation. Pauses alone were not marked by the

subjects. However, pauses combined with other features made up 86% of American IUs and 83% of Pakistani IUs. The most common combinations were pause+/, pause +_ and pause+\. There was no significant difference between totals of these two groups' use of pause combinations based on a Chi-square analysis [$\chi^2 = .342$, 1 *df*, $p > .05$]. Pause+ did occur within IU boundaries; however, the majority of these were short pauses, pauses following a long segment, or pauses following a filled pause. In all three of these cases, perceptual limitations, e.g. room acoustics, may have caused the subjects not to hear them as pauses.

The excerpts were analyzed for differences in placement of boundary markers for the two groups. There were a total of 8 discrepancies in IU boundary marks between the two groups. One-half of Pakistanis marked the truncated word 'Urdu' in *PE-2*, while the Americans did not.

PE-2

...most of the time /we communicate in Ur- (50)

in Urdu._

There were several differences in *PE-3* between the Americans and Pakistanis. The entire excerpt has been included below. The ends of IUs are marked with the initials A or P or both to indicate where Americans marked and where Pakistanis marked the excerpt. In addition arrows and plus signs were added for ease of reading. An arrow (→) indicates boundaries Pakistanis marked, which Americans did not. A plus sign (+) indicates boundaries Americans marked, but Pakistanis did not.

PE-3 IU Boundary Judgements

- s: /pakistanis I think uh= (A,P)
 ...what /I have noticed there is that you know, _the /way we dre=ss/ (A,P)
 ...(.7)and the /way we are built/ (A,P)
 ..we are built a bit different than uh= from bangladeshis and uh=indians
 basically\..cause-...cause in /pakistan also you have
 + different races_ (A)
- ...you have the /pathans_(P)
 b: uh hm
 s: and then you have the punjabi=s (A,P)
 the sindhi=s the baluchi=s and then the urdu speaking people and
 + everything_ (A)
- + ...so /traditionally the pathans and punjabis they are like you know_ (A)
 ...uh= (A,P)
 ...(.7)they are fai=rskinned and you know-bi=g,/ and-stro=ng and burly_
 (A,P)
- ..(.8)the sindhis are also /more burly_(P)
 you know,/..but uh, _...baluchis, ...I don't know much about baluchis\

A pattern emerges when we look at how the Pakistani and American boundary demarcations differ. The Pakistanis seemed to be marking for pitch contour while the Americans seemed to be relying on pauses for their cues. The two IUs marked by only the Pakistanis (see IUs with arrow) contained internal pitch contours on the words 'pathan' and 'more' respectively. While the IUs marked by the Americans only were at pauses (see IUs with plus signs).

The differences in judgements in *PE-4* all took place in what were the first two IUs marked by the Pakistanis.

- s: so you have some names in sindhi,/..like you have uh_ (A)
 jato=,_you have bhutto=,_you have uh/ (A)
 .../memon,_like some names right/ (A,P)
 ...so-/originally some of them they came fro=m_...basically what I have
 you know learned_ (A)
 ...that we ou=r ancestors they came from greece\ (A,P)

In this excerpt the Americans produced five IUs to the Pakistanis two. Again, the Americans seemed to be relying on unfilled pauses for cues. They also relied on filled pauses, in this case 'uh'. In contrast, the Pakistanis in this short piece relied on the regulatory unit 'right' (a comprehension check on the part of the speaker) and a falling terminal pitch contour on 'greece' for their cues.

The small number of differences between the results of the two groups in their judgements indicates that the two groups are using similar cues. However, the analysis here relied on prosodic clues. Larger samples of IU boundary judgements and analysis of other factors may reveal further insight into similarities and differences between the two groups.

Whether naive judgements of IU boundaries were the same as researcher judgement is the other question the perceptual study was designed to address. Essentially, can we get independent verification for Chafe's (1994) and DuBois et al.'s (1993) intonation units? Table 11 illustrates frequency and distribution of IU boundary judgement by Pakistanis and Americans with frequency and distribution of researcher determined IUs.

Table 11

IUs and IU boundary judgements for PE and Urdu

Excerpt	Urdu		Pakistani English		
	Researcher IUs*	Pakistanis	Researcher IUs*	Americans	Pakistanis
1	29	15	13	9	9
2	10	7	9	8	9
3	5	4	21	9	8
4	13	8	47	18	15
Total	57	34	90	44	41

* Numbers of IUs are adjusted by omitting last IU since they were not marked in the boundary judgements study. In addition, IUs for turns were added as the discourse context was being analyzed. These numbers do not reflect the added IUs.

The frequencies in Table 11 show that researcher and untrained speakers differed greatly in their judgements of IUs. These results are not surprising since making IU boundary judgements requires a conscious effort, whereas much processing of interaction and language goes on unconsciously. In addition, each excerpt was played only three times for the subjects on consumer grade equipment while the researcher relied on transcribers and reviewed each excerpt many more than three times. While the American and Pakistani speakers did make IU boundary judgements in this study, further studies on methodologies and data will need to be done on perceptual judgements to confirm the findings presented here.

Intonation Units and Clauses

Having coded the excerpts for intonation units features and tested them for independent verification from the subjects in the perceptual study, I went on to analyze the clause structure of IUs.

Givón (1993) and Chafe (1994) provide the basis for the determination of clauses in the present study as discussed in Chapter 2. In short, a clause consists of a proposition coded by the idea of a state or event.

The following discussion describes how clauses and IUs interacted in the excerpts. There are four categories which will be discussed: uni-clausal IUs, incomplete clauses, cross-IU clauses and multi-clausal IUs.

Uni-Clausal IUs

I have labeled the IUs which contained a single clause as uni-clausal IUs. This is to distinguish them from the multi-clausal IUs which I will be discussing later. A typical uni-clausal IU in the data is represented in the following example.

PE-1

...and it's named engineering science building,\

This is a proposition which codes the event 'named engineering science building'

Incomplete Clauses

In addition, there were incomplete clauses. These were truncated clauses in which the proposition was incomplete based on the constraints of the verb.

Truncated

PE-2

...their regular protocol was to-

The verb 'was' requires something following it. In this case the speaker started to produce an infinitive with 'to', but didn't add the verb to finish the clause. The clause was truncated as indicated by the '-' at the end of the IU. Truncated clauses were distinguished from truncated words which were not counted as separate clauses as in the following example.

PE-4

...and they sta-lived in uh sind.\

In this example the word 'stayed' is truncated and replaced with 'lived'.

Cross-IU Clauses

There were also instances of clauses expressed across IUs which I will call 'cross-IU clauses'. These are marked with a bracket] as in the following example from PE-4.

PE-4

10	...you have the]
11	Apathans, _	

In this case, the clause is spread across two IUs. The constraints on the verb 'require' it to have an object following it—in this case, 'pathans' which is produced in as separate IU.

Multi-Clausal IUS

The clausal analysis revealed that there were IUs which contained more than one clause. Many of these were the 'long' IUs observed in the Initial Study. These will be referred to as 'multi-clausal' IUs.

Table 12 shows the number of clauses and the types of clauses in relation to IUs. Three categories of clauses were analyzed: uni-clausal IUs, cross-IU clauses and multi-clausal IUs. Members of one category discussed, incomplete, have been grouped with other categories. Therefore, truncated IUs which express one event or state idea have been categorized under 'single'.

In Table 12, the category 'Multi' contains the number of multi-clausal units, not the total number of clauses in multi-clausal IUs. However, the number of clauses contained in multi-clausal IUs is indicated in parentheses.

One other structure classified under cross-IU clause occurred infrequently (five instances across excerpts). These were IUs which contained a full clause plus part of a cross-IU clause either preceding or following the clause. *PE-4* illustrates this.

PE-4

50 you have uh □
 51 ...Akachiawari memons [there is a place in india called
Akachiawar]

In this case, the clause 'you have kachiawari memons' is spread over two IUs and 'there is a place in India called kachiawar' is included in the second IU.

Table 12

Clauses Within and Across IUs

Excerpt	# Clause	Uni	Cross-IU*	Multi
English				
1	11	5	3	1(3)
2	9	9	0	0
3	18	11	3	1(4)
4	46	25	5	7(16)
Total	84	50	11	9(23)
Urdu				
1	40	14	4	7(22)
2	9	6	1	1(2)
3	5	2	0	1(3)
4	25	3	0	9(22)
Total	79	25	5	18(49)

*Cross-IU clauses attached to multi-clausal units were counted as part of the multi-clausal units. These will be discussed later.

According to Chafe (1994), 60 percent of his sample consisted of single-clause intonation units. Since Chafe does not discuss intonation units which contain more than one clause, it is unclear whether these are present in American English. In examining the total number of single-clause IUs relative to the total number of clauses in multi-clausal IUs, there is evidence that in Pakistani English and Urdu there are many intonation units which contain more

than one clause. In the Pakistani English excerpts, 60 percent of the clauses belonged to single-clause intonation units while 27 percent belong to multi-clausal intonation units.

While the majority of the clauses in this case were single-clause units, which supports Chafe's claim, one-third of the clauses produced belong to a category for which Chafe has made no claim at all. The Urdu data shows even more startling results in which 62 percent of the clauses produced belong to multi-clausal units while 32 percent belong to single-clause intonation units.

While Excerpt 4 in the Urdu excerpts may be problematic because the proportion of clauses contained in multi-clausal IUs is unusually high (22 of the 25 total clauses), the percentages are still high even if we take only Excerpts 1-3 into consideration. There, 41 percent of the clauses belonging to single-clause IUs and 50 percent belonging to multi-clausal IUs.

Table 12 shows that one excerpt did not contain any multi-clausal IUs. *PE-2* contained all single clause IUs. The prosodic features of the IUs in this excerpt were similar to uni-clausal IUs produced in other excerpts.

PE-2

- 1 sh: also the difference like /my office,/
- 2 ...they're regular protocol was to-
- 3 /when I was working for one office,/
- 4 ...their protocol was to speak English most of the time,\
- 5 ...(.8)but when I moved to \another company,/
- 6 ...their protocol was to s-
- 7 I mean was \also to speak English,_
- 8 ...but nobody used to speak English over there,\
- 9 ...most of the time /we communicate in Ur-
- 10 in \Urdu._

In this excerpt, SH actually introduces the turn as a contrast by using the word 'difference'. The contrast is indicated lexically with 'one office' in IU 3 and 'another company' in IU 5 and the use of 'but' in IUs 5 and 8. Based on Chafe's single-clause claim for English, this excerpt would be a typical example of a turn in English. However, the prosodic structure marks it as a Pakistani English excerpt. If we look at the IUs which contain no pitch contour, '2, 4, 6', and '8', we can see that these IUs are commenting on a contrast. IUs 2 and 6 are truncated, but 4 and 8 successfully express the contrast. Contrastively, those IUs which contained a pitch contour '1, 3, 5, 7, 9' and '10', set up the topic of local contrast. It may be that single-clause IUs with no prosodic marking show local contrast.

Interestingly, IUs 9 and 10 are not marked with contrastive intonation.

This can be explained in the context of the larger discourse. The topic at hand was speaking English in Pakistan, not speaking Urdu. Hence, we get the contrastive prosody on IU 8 'but nobody used to speak English over there' rather than on 9 and 10 'most of the time we communicate in Ur- in Urdu'.

Another excerpt in Table 12 showed that it had a multi-clausal IU. *PE-3* contained an IU which I categorized as a multi-clausal IU. However, it was not a typical multi-clausal IU because it did not contain more than one event or state idea:

PE-3

12 s: and then you have the punjabi=s| the sindhi=s| the baluchi=s |and then the urdu speaking people and everything, _

In this case, there is the state idea 'you have punjabis' followed by a list of referents. I counted these referents as what Givón calls 'truncated' in which the

word stands for the proposition (see Chapter 2). Although it may be questionable whether each of the words stands for a proposition, it is clear that the speaker is doing something different in this IU with referents than what he is doing with predications about a referent later in the excerpt as the following example shows:

PE-3

15 ...(.7)they are fai=rskinned and you know-
 16 bi=g,/
 17 and-
 18 stro=ng
 19 and burly, _

In this case, 'big' and 'strong' and 'burly' are produced in separate IUs. This indicates that S is doing something different with the predication than with the referents. On the other hand, S, in *Pe-4* introduces referents in separate IUs with the state idea intact as in the following example:

46 ../they are called ^memons.\
 47 ...(.8)they are ^different memons, _
 48 you have ^kuchi memons,/
 49 you have ^gujrati memons,/

In this case 'memons', 'kuchi memons' and 'gujrati memons' are all introduced in their own IUS with the state idea 'have' intact. This indicates that S is making a choice in IU 12 of *PE-3* to clump the referents together in a long IU. Whether it is counted as a multi-clausal IU or not, IU 12 is different than 'short' uni-clausal IUs.

This type of IU which contained 'truncated' propositions was only produced by one speaker, so it is difficult to draw any generalization. However,

further study on the ways that referents and states or events are distributed across IUs may tell us something about how speakers and hearers process each.

The IUs of primary interest here are the IUs I have labeled multi-clausal IUs. These long IUs occur frequently in the discourse of the Urdu and Pakistani English speakers, but more importantly, they help to structure the discourse at the turn and larger discourse level. The next section will show the results of the form and function analysis of multi-clausal IUs.

Multi-Clausal IUs

As the prosodic structure of analysis central to this study, multi-clausal IUs were analyzed for form and function. First, to determine whether the multi-clausal IU was a frequently occurring phenomenon in the conversational discourse, I analyzed the frequency and distribution of multi-clausal IUs in the 17-minute segments of *Urdu* and *PE*. The distribution and frequency of these *multi-clausal units* was determined by counting the number of turns which contained multi-clausal intonation units. Table 13 presents the number of turns, the number of multi-clausal units and the number of turns which contained multi-clausal units for each speaker.

turns (without Ms turn) of *PE*, 59 percent of the turns contained multi-clausal IUs; while 79 percent of the *Urdu* turns produced contained multi-clausal IUs. In addition, multi-clausal IUs accounted for 18 percent of the total two IU or higher turns. The appearance of multi-clausal units universally across speakers and in a relatively high number of turns indicates that multi-clausal units are a frequently used construction among this set of Pakistani English and Urdu speakers.

Prosodic features and Multi-clausal IUs

Multi-clausal units were analyzed for the frequency and distribution of prosodic features. The following examples show the types of prosodic features found in multi-clausal IUs.

There were IUs which contained no prosodic features internally.

14 →...I mean there are so many foreign students in that engineering science building |that ens does not stand for engineering science no more |it stands for english not spoken building_

IU14 is bounded by a pause at the beginning and a level terminal pitch.

There were IUs which had internal prosodic features such as IU 12 and IU 35.

12 s: and then you have the punjabi=s the sindhi=s the baluchi=s and then the urdu speaking people and everything

35 ...(.7)so now that they /came back they didn't have their ^identity,_

IU12 has several words lengthened as indicated by the =, while IU35 had two pitch contours, one in front of 'came' and one in front of 'identity'.

The multi-clausal units either contained no prosodic features or contained some type of internal prosodic features. Both tended to have level terminal pitch contours. Table 14 illustrates the frequency and distribution of these two types of multi-clausal units.

Table 14

Prosodic Features in Multi-Clausal IUs

Excerpt	Total M-C IUs	Internal Feature	None
<i>PE</i>			
1	1	0	1
3	1	1	0
4	7	5	2
<i>Urdu</i>			
1	7	1	6
2	1	1	0
3	1	1	0
4	9	2	7
Total	27	11	16

For this set of excerpts, there are relatively more multi-clausal IUs which have no prosodic features internally. The types of prosodic features expressed in multi-clausal units were limited to one prosodic feature per multi-clausal IU with the exception of one multi-clausal unit in *PE-4* which contained two. Two types of prosodic features were used: lengthening and pitch contours. Lengthening

occurred on two of the six multi-clausal IUs in the *PE* excerpts while the remaining four were pitch contours. The *Urdu* excerpts displayed only pitch contours in the five multi-clausal units which contained an internal prosodic feature.

Clauses in Multi-clausal IUs

The following examples show the clause structure of multi-clausal units. Clause boundaries are marked with |. Three major types of Multi-Clausal IU structures were identified in the excerpts.

First, there were Multi-Clausal IUs which contained a main and subordinate clause.

PE-4

..they they used the language |that was spoken the=re,

Second, there were Multi-clausal IUs which contained more than one independent clause:

PE-1

..I mean there are so many foreign students in that engineering science building| that ens does not stand for engineering science no more| it stands for english not spoken building

And thirdly, there were those which contained cross-IU clauses

PE-4

...when-the pakistan and india they were not then separate they went to different /parts of india they spread all over uh]
india paki subcontinent, _

The final element of the clause in this example is separated. The final NP of the sentence is produced in a new IU.

To determine the form of multi-clausal IUs, clausal and prosodic features were examined. Table 15 shows the frequency and distribution of types of clauses found in multi-clausal IUs. Multi-clausal IUs with main+subordinate clauses, more than one independent clause, and those containing clauses which crossed IUs are presented.

Table 15

Clauses Types in Multi-clausal IUs

Excerpt	Total	Main+Sub	Independent	Cross-IUs
<i>PE</i>				
1	1	0	1	0
3	1	0	1	0
4	7	3	3	1
<i>Urdu</i>				
1	7	4	2	1
2	1	1	0	0
3	1	0	1	0
4	9	5	4	0

The table illustrates that Cross-IU Multi-clausal units were not as frequently used as the other types. However, the distribution of main+subordinate clauses and independent clauses was very similar. The multi-clausal IUs were then analyzed to determine the differences in use between main+subordinate clause and independent clause multi-clausal IUs, if any.

Types of Multi-Clausal IUs

In fact, there were differences. The main+subordinate clause types tended to be Reporting Clause+Quote IUs. Of the 10 main+subordinate clauses in the *Urdu* excerpts, seven were Reporting Clause+Quote type in function. 'Reporting Clause+Quote' multi-clausal IUs were those consisting of a 'reporting clause' plus a quote. Reporting Clause+Quote multi-clausal IUs are illustrated in IUs 5-7 from *Urdu-4*.

Urdu-4

- 5 bola| mē ne qətəl kar dija
 said I ERG kill did give-AUX
 He said I killed.
- 6 to bola| ke kijū ḷqətəl kar dija|
 so said that why kill do give AUX
 So he said that Why did you kill?
- 7 to bola |meri bəhən dʒo he na uo <L2collegeL2> dʒarahi tʰi
 so said my sister you know she college going AUX
 ḷpaḷhne ke lije
 So he said My sister, you know, she was going to college to study.

Each direct quote is expressed in a separate IU with the reporting clause. These multi-clausal units are expressed in groups in two excerpts, *Urdu-1* and 4.

These reporting clause+quote multi-clausal units also occurred in the excerpts with clauses preceding the reporting clause as well, as IU 3 from *Urdu-4* shows.

Urdu-4

- 3 Huo <L2jailL2> mē tʰa |to us ne ɪs se <L2interviewL2> lija |bola ke
 he jail in was so he ERG him from interview took He said that
 | bai tum =ne-
 man you ERG
 He was in jail. So he took an interview from him. He said Man you-

There were no Report+Quote multi-clausal IUs in the *PE* excerpts and only two of the four *Urdu* excerpts contained this structure. *Urdu-1*, the excerpt about

shalwar-kamiz wearing, was reporting an interaction between two people and the speaker switched styles between indirect reporting with personal commentary and direct reporting style whereas *Urdu-4*, the excerpt about the interview with a murderer, was mainly presented in a direct reporting style.

The remaining multi-clausal IUs are of the topic entity+focus of assertion type. I am calling the multi-clausal IUs 'Topic Entity+Focus of Assertion'; those for which a topic entity was introduced earlier in the excerpt about which the multi-clausal unit makes a comment. These were multi-clausal IUs which were observed in the data in which the multi-clausal unit served as the 'focus of assertion' after Givón's use of the term as discussed in Chapter 2. Table 16 shows that Topic Entity+Focus of Assertion multi-clausal IUs occurred more frequently than Reporting Clause+Quote IUs.

There were two main functions observed for the Topic Entity+ Prosodic Focus of Assertion multi-clausal IUs. Those which simply made a comment on the topic entity are shown in *Urdu-1*

Urdu-1

- 5 ...sari zīndagi ek pakīstan ke <L2cultureL2> se Āaja he, _
 all life one pakistan of culture from came aux
 All his life he lived in Pakistan.
- 6 ...dʒahā qawāljan b^hi hoti hē |sɒb kʊtʃ hota he. _
 where qawalian also are aux everything is aux
 Where there are qawalian and there is everything.

The topic entity is 'Pakistan' and the multi-clausal unit expresses an assertion about Pakistan "Where there are qawalian (a type of music). There is everything". The second type included those whose comment included some

kind of contrast either within the multi-clausal unit or as part of the larger discourse. Before going on to discuss the role of multi-clausal IUs in coding contrast, I will discuss the information structure of the multi-clausal IUs.

Table 16

Types of Multi-Clausal IUs

Excerpt	Total Multi-Clausal IUs	Topic Entity+ Multi-Clausal IU	Reporting Clause+Quote
<i>PE</i>			
1	1	1	0
3	1	1	0
4	7	7	0
Total	9	9	0
<i>Urdu</i>			
1	7	4	3
2	1	1	0
3	1	1	0
4*	9	3	5
Total	18	9	8

**Urdu-4* contained a multi-clausal IU which did not reflect either pattern. as the first IU of the turn, it is possible that L was rushing in order to take the floor.

New Ideas in M-C IUs

One of the goals of this study was to test whether Chafe's One New Idea Constraint applies to Urdu and Pakistani English. In order to do this *given* and

new and *accessible* ideas were coded in intonation units. Clauses in multi-clausal IUs were analyzed for the three types of information as defined by Chafe (1994) and discussed in Chapter 2:

given-already active at this point in the conversation

new-newly activated in this point in the conversation

semiactive-accessible information that has been activated from a previously semiactivated state (p. 72)

These states were identified by determining whether a clause contained a topic entity (Chafe uses the term 'referent') event or state idea which was new to the discourse. *PE-1* shows how *given*, *semiactive* and *new* ideas were determined in the multi-clausal IU-IU14.

PE-1

- 1 sh: I was speaking with my /friends,/
- 2 like-,/
- 3 ...(1.1)3 4 days ago/
- 4 ...(7)they're at UTA,/
- 5 university Texas Austin,/
- 6 ...(1.1)and he was telling me /that,/
- 7 they have this uh=
- 8 ...engineering building/
- 9 ...and it's named engineering science building,\
- 10 ...so its ens building\
- 11 ..and-
- 12 by /ens,/
- 13 Vthey=,/
- 14 ..I mean there are so many foreign students in that engineering science building [that ens does not stand for engineering science no more [it stands for english not spoken building_

In analyzing IU14, ideas were identified (topic entities, states, events). *Given* ideas include the topic entities 'engineering science building' which was introduced in IU9 and 'ens' which was introduced in IU10. *New* ideas include the

event idea 'does not stand for engineering science no more' and new topic entity 'english not spoken building'. *Semiactive* is a difficult status to identify. For example, in this case, 'foreign students' may be considered new or it may be considered semiactive because 'foreign investors' was introduced into the conversation immediately preceding this turn, hence, activating 'foreign' and because we can assume from our world knowledge that SH's friends are students at the University of Texas-Austin. The research question identified here is whether multi-clausal units violate Chafe's One New Idea Constraint. As a consequence, results of this analysis will only report the number of new ideas per multi-clausal units. Table 17 shows the results of this analysis. Reporting Clause+Quote IUs were counted as having one new idea, and are not included in the table.

The multi-clausal units in this data set contained more than one new idea. The frequent presence of more than one new idea per multi-clausal IU indicates that Chafe's One New Idea Constraint does not seem to hold for Pakistani English or Urdu—or at least for these speakers of Pakistani English and Urdu.

Multi-clausal IUs tend to have one or no internal prosodic features and consist of either main+subordinate clauses or independent clauses. In addition, the most frequently occurring type of multi-clausal IU is the Topic+Focus of Assertion multi-clausal IU which codes a comment about a topic in the discourse. Multi-clausal IUs also code more than one new piece of information at a time. In the next section, I will discuss how the Topic+Focus of Assertion multi-clausal IU more specifically codes contrast; and I will show how multi-clausal IUs

play an important role in schematically organizing the discourse at the turn and beyond the turn.

Table 17

Number of New Ideas per IU

Excerpt	# Multi-Clausal IUs	# New Ideas
<i>PE</i>		
1	1	3
3	1	4
4	8	15
<i>Urdu</i>		
1	4	12*
2	1	2
3	1	3
4	1	5*

*Reporting Clause+Quote IUs were not analyzed.

Multi-Clausal IUs and Contrast

This section will discuss the results of analyzing the multi-clausal IUs within the context of immediately preceding IUs and the turn. I am analyzing Topic+Focus of Assertion multi-clausal IUs as coding contrast in the *Urdu* and *PE* excerpts.

There are two types of contrast expressed in multi-clausal IUs. The first type of contrast is 'local contrast' in which the topic entity has a value which is

The major findings of this study are in the results of analysis of the Topic Entity+Focus of Assertion multi-clausal IUs. The Topic Entity+Focus of Assertion multi-clausal IUs acted as an element of contrastive topicalization which was spread over several intonation units; and often framed the excerpt. The multi-clausal IUs, already shown as a clearly violating of the One New Idea Constraint, are further shown to play a role in schematically organizing the excerpts as the next section will show.

I examined the placement of multi-clausal IUs in the context of the turn to determine how many multi-clausal IUs displayed this structure. Table 18 shows the frequency and distribution of local contrast and contrastive topicalization.

Table 18

Contrastive Topicalization and Local Contrast

Excerpt	Total	Contrastive Topicalization	Local
<i>PE</i>			
1	1	1	0
3	1	1	0
4	6	3	3
<i>Urdu</i>			
1	3	2	1
2	1	1	0
3	1	1	0
4	1	1	0

There was a pair of IUs in *PE-4* which displayed local contrast, but together demonstrated turn contrast. IUs 39 and 40 are shown here:

PE-4

39 ...(.7)so now that they /came back they didn't have their Λ identity, _

40 ..they were neither sindhis neither Λ gujratis, _

Here, IU40 itself expresses a contrast as a comment on the topic entity 'they' in IU39. Together they display turn contrastive topicalization with the topic entity 'they' (the ones who stayed in Sind) who are introduced earlier in the excerpt.

PE-4 demonstrates how local and turn contrast is structured.

Each excerpt was observed to have a topic entity mentioned earlier in the discourse which contrasted with another topic entity—the topic entity of the topic entity+ focus of assertion structure. The value for that topic entity is then added with information which establishes the second topic entity₂ (the topic entity of the topic entity+prosodic focus of assertion structure) as given information and then Value₂ is expressed in a multiclausal IU. Figure 1 schematically represents how this is expressed in the text. The figure depicts the representation of time as it unfolds as would a transcript—from top to bottom .

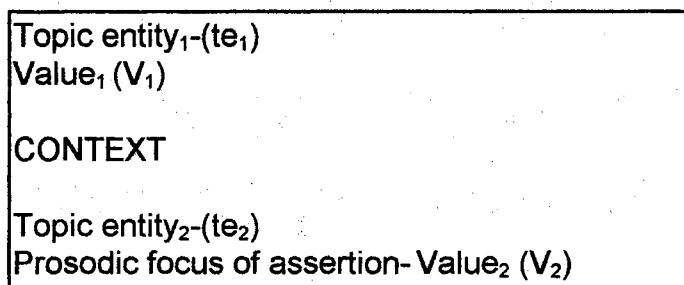


Figure 1- Contrastive Topicalization

PE-1, which is an anecdote about a building at the University of Texas at Austin, exemplifies this schema. Arrows (→) are placed next to relevant IUs and the specific items discussed are in bold in the text.

PE-1

- 1 sh: I was speaking with my /friends,
 2 like-,
 3 ... (1.1) 3 4 days ago/
 4 ... (.7) they're at UTA,
 5 university Texas Austin,
 6 ... (1.1) and he was telling me /that,
 7 they have this uh=
 → 8 ... **engineering building**/
 → 9 ... and it's **named engineering science building**,\
 10 ... so its ens building\
 11 ... and-
 → 12 by /ens,
 13 \they=,
 → 14 .. I mean there are so many foreign students in that engineering science building | that ens does **not stand for engineering science no more** | it stands for english not spoken building

The schema is set up in the following way for *PE-1*

Topic entity ₁	engineering building
Value ₁	named engineering science building
Topic entity ₂	ens
Value ₂	does not stand for engineering science building/stands for english not spoken building

In this case the first topic entity is 'engineering science building' and 'named' is introduced as the first value in the upcoming contrast. Note that this is produced in a single-clause IU. Then 'ens' is topic entity₂. IU14 then serves as

the focus of assertion which expresses Value₂ : 'does not stand for engineering science building/stands for english not spoken building.' There may be some question as to analyzing 'ens' as topic₂. However, I interpret SH's 'by ens' to mean that he is already thinking of 'ens' in terms of 'english not spoken building.'

Triggers for the Contrastive Topicalization Schema

The excerpts contained elements which trigger the contrastive topicalization schema. *PE-3* starts with a contrast between Pakistanis and Indians (and Bangladeshis).

PE-3

- 1 s: /pakistanis I think uh=, _
- 2 ...what /I have noticed there is that you know, _
- 3 the /way we dre=ss,/
- 4 ...(.7)and the /way we are built,/
- 5 ..we are built a bit different than uh=
- 6 from bangladeshis and uh=indians

In this segment S, actually sets up the contrast between Indians and Pakistanis for which he goes into more detail in following IUs.

The contrastive topicalization schema was also introduced with a 'contrast word'. *PE-2* demonstrates this.

PE-2

- 1 sh: also the difference like /my office,/

SH expresses the word 'difference' in the first IU of his turn.

A contrastive topicalization schema prototypically at the turn level is invoked at the beginning of the turn with an implicit or explicit trigger. This is followed by a topic value pair in which topics and the first value are expressed in

shorter single clause and cross-IU clause IUs, while the second value is expressed in a multi-clausal IU.

While Figure 1 schematically represents a short turn, Figure 2 shows how contrastive topicalization is expressed in a longer turn. Figure 2 builds on Figure 1. Excerpt text and IU number are presented to the left of the figure.

Turn Topic entity₁ = i'm a sindhi IU3

Turn Value₁ =Implied—

I have my identity

Topic entity₁ = they-IU 19

Value₁=implied-went back to Greece

Topic entity₂ = some of them-IU 20

Value₂=chose to live here changed their religion became muslims and stuff-IU20

Topic entity₂=they -IU 21

Value₃= lived in sind IU 21

Topic entity₃=they-IU 23

Value₄=

went to different parts of India

spread all over the subcontinent IU23

Topic entity₂=

they IU 31

Value₅=

were staying there in sind-IU31

Topic entity₄=some of them they-IU32

Value₆= came back because they were muslim-IU32

Local topic entity₁ value₁

=they didn't speak sindhi-IU34

Local value₂

=used the language that was spoken there-IU35

Turn Topic entity₂ = they(te₄)

Turn Value₂ = didn't have their identity

neither sindhi neither gujrati

IUs 39 1 and 40

Turn topic entity₁-(Tte₁)

Turn value₁(Tv₁)

te₁

v₁

te₂

v₂

te₂v₃

te₃v₄

te₂

v₅

te₄v₆

L te₁ v₁

L te₁ v₂

Turn topic entity₂

Turn value₂ (Tte₂ Tv₂)

Turn

Figure 2—Turn Contrast

Looking at *PE-4* (Appendix B) starting with IU 3, we have topic entity₁. This topic entity 'sindhi' provides topic entity₁ for the turn contrastive topicalization structure. This will be contrasted with topic entity₂ 'they' meaning 'Gujratis' which is first presented in IU 32. Turn Value₁ 'I have my identity' is implied, but Turn Value₂ is expressed in two multi-clausal IUs, IUs 39 and 40 'they didn't have their identity. they were neither sindhi, neither gujrati'. This is the structure for contrastive topicalization for the turn. However, the intervening multi-clausal IUs between IU 3 and IU 39, also show contrast.

The context for this contrast is provided in the intervening IUs with contrastive structures. Topic entity-value pairs are formed, although this becomes rather complicated as some topic entities persist beyond the initial contrastive structure in which they participate. S is expressing all of the topic entities in the intervening IUs as 'they'. These are groups which are divided away from the original group expressed in IU 19—those of the ancestors who went back to Greece with Mohammed bin Quasm. So topic entity₁ is those who went back. Topic entity₂ is those who stayed. Topic entity₂ persists to be contrasted with topic entity₃ 'they'—those who went to India. Then Topic entity₂ is contrasted with topic entity₄ 'they'—those who returned from India.

A very important point to note here is that all even numbered values of the pairs are expressed in multi-clausal IUs. These multi-clausal IUs fill out the schema. In doing so, the schema is produced to work beyond a single IU or even a pair of IUs—it is working to structure a turn.

are you talking about memons?

→ sh: **memon and gujrati they are the same basically**
 s: but see basically
 you can say [that but]

→ b: **[but your]name is memon**
 s: see
 its its a very long story

b: @@[@]
 sh: [its] a sad story [@@@]
 b: [its a sad] story
 [@@@@@@@@@@@@@]
 sh: [@@@@@@@@@@@@@]

The discourse topic at this point in the conversation is Gujratis, a group of people in Pakistan. SH has introduced a subtopic which is how Gujratis are viewed in Pakistan. Gujrati is discourse topic entity₁. S brings in the topic of 'memon' which is discourse topic entity₂. SH then makes the remark that Gujratis and Memons are the same which combines with B's 'but your name is memon', to create discourse value₁: 'you (S) and Gujratis are the same' S intends his turn to contrast with this discourse value as we will see.

S's bid for a turn takes several IUs. In the process of bidding for his turn he provides the trigger for the contrastive topicalization schema. As he bids for the turn, he uses the contrastive discourse marker 'but' twice in two consecutive IUs:

s: **but** see basically
 you can say [that **but**]

He is trying to show that he disagrees with what is being said and takes a long turn to reinforce it. He then moves into the turn which contains the contrastive

topicalization discussed in association with Figure 2. Figure 3 builds on Figure 2 to show how contrastive topicalization is achieved beyond the turn.

Discourse topic entity₁ = gujratis
 Discourse topic entity₂ = memons
 Discourse Value₁ = are same

Turn Topic entity₁ = i'm a sindhi IU3
 Turn Value₁ = Implied—I have my identity

Topic entity₁ = they-IU 19
 Value₁ = implied-went back to Greece

Topic entity₂ = some of them-IU 20
 Value₂ = chose to live here changed their religion became muslims and stuff-IU20

Topic entity₂ = they -IU 21
 Value₃ = lived in sind IU 21
 Topic entity₃ = they-IU 23
 Value₄ =
 went to different parts of India
 spread all over the subcontinent IU23

Topic entity₂ =
 they IU 31
 Value₅ =
 were staying there in sind-IU31
 Topic entity₄ = some of them they-IU32
 Value₆ = came back because they were muslim-IU32

Local topic entity₁ value₁
 = they didn't speak sindhi-IU34
 Local value₂
 = used the language that was spoken there-IU35

Turn Topic entity₂ = they (te₄)
 Turn Value₂ = didn't have their identity
 neither sindhi neither gujrati
 IUs 39 1 and 40

Discourse Implication (DI)

Discourse Value₂ = are not same
 (I'm not the same as Gujrati)

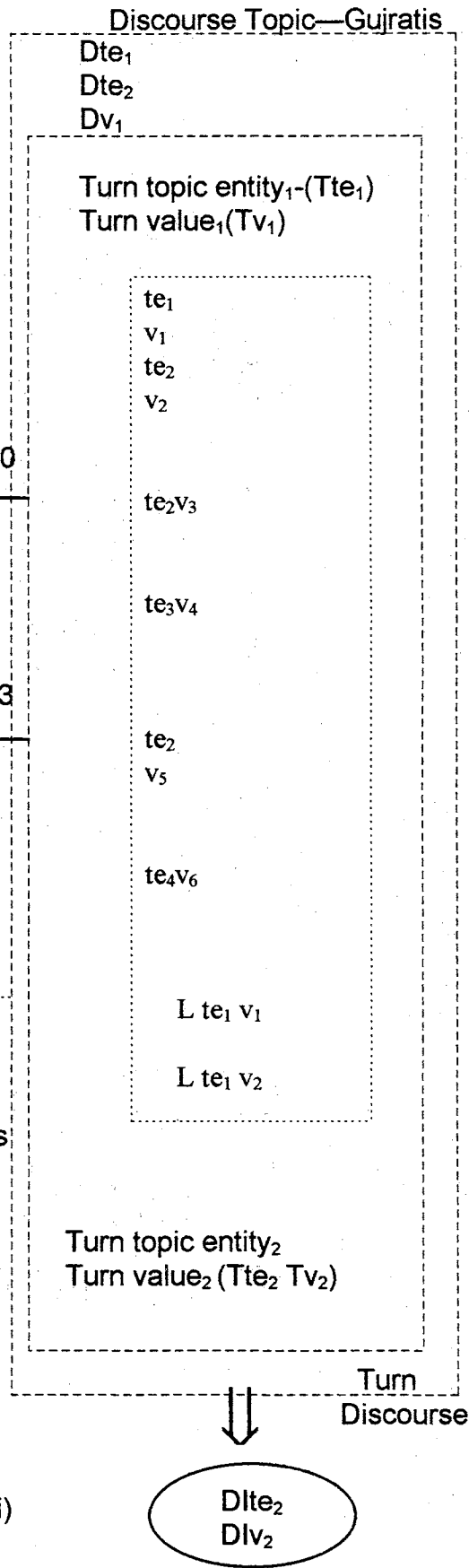


Figure 3—Contrast Beyond the Turn

The analysis of *PE 4* shows that the contrastive topicalization schema can be extended beyond the turn to the discourse context in which the turn is produced. This further confirms that the role of prosody is not limited to a single unit such as the intonation unit, but goes far beyond that to structure the interaction.

Conclusion

Analysis of the form and function of intonation units in the *Urdu* and *PE* excerpts revealed that this prosodic unit signals contrast in the discourse. More importantly, however, the analysis of the multi-clausal IU coding contrast revealed that the multi-clausal IU acts in conjunction with the shorter uni-clausal IUs to create prosodic schemas which structure the information in the discourse both within the turn and beyond the turn. The implications of these results for the questions posed in Chapter 1 are important for establishing the role of prosody in conversational discourse and for speculating as to the role prosody plays in the cognition of the conversational participants.

The results will be discussed in Chapter 6 in the context of the research questions set out earlier in this study. In addition, the limitations of the study as well as the implications for the study of prosody and conversational discourse will be presented. Finally, I will propose a discourse schema which incorporates other contextual factors as a recommendation for further study of conversational discourse.

CHAPTER 6

DISCUSSION

Introduction

In this chapter, I will discuss the results of this study in the context of the research questions posed earlier. In addition, I will discuss the limitations of the study as well as the implications and recommendations for further work.

Discussion

This section will discuss the major findings reported in Chapter 5 in the context of the questions posed and claims reported in Chapters 1, 2 and 3.

Intonation Units in Urdu and Pakistani English

Urdu was characterized in Chapter 3 as having less stress than English. The results of this study confirm this. There was no regular nuclear accent in the Urdu IUs. The IUs were identified as having one, perhaps two prosodic features per IU. These prosodic features seemed to be either lengthening or pitch contours. The results for Pakistani English were the same as those for Urdu.

For Pakistani English, some of the characteristics which Gumperz presents for South Asian English (discussed in Chapter 3) were confirmed here, some were not. Keep in mind that Gumperz' auditory unit was the tone group not the intonation unit. However, the intonation units did not seem to have a clearly

marked nucleus and the most frequently occurring terminal pitch contour was level. These results from the current study confirmed Gumperz' statements. It is difficult to draw any conclusions about Gumperz' remaining two characterizations for South Asian English: 'The sentence will be spoken as a unified whole and 'There will be no unified contour'. In the first statement, it is difficult to make an equation with the current study because clauses, rather than sentences were the syntactic unit of study here. In the second statement, it is unclear what a 'unified contour' is and this unified contour is applied to the tone group so it is unclear whether a parallel could be drawn.

Gumperz did not identify pauses as a characteristic of tone group boundaries; however, the IU boundaries identified for Urdu and Pakistani English in this study were characterized, for the most part, by pauses plus a terminal pitch contour—most frequently the level contour.

It seems that Urdu and Pakistani English speakers do not rely on the same prosodic resources for their intonation units as American English speakers. Less stress within IUs and a smaller range of pitch range in terminal pitch contours may necessitate more reliance on pauses as an IU boundary marker.

Mean words per IU

Chafe states that there are fewer words per IU in languages which "pack more information into a word" (p. 65) such as Seneca (discussed in Chapter 2). Urdu is one such language which packs more information per word (as noted in Appendix A, nouns mark gender and number, and verbs mark person, number

and gender) than English. However, the Urdu speakers are producing one and one-half more words per IU than the mean for American English and almost one-half word more than the Pakistani English speakers. Thus, Chafe's claims do not hold for the two groups of speakers in this study, which suggests that further study needs to be done on other morphologically complex languages to determine whether a generalization can be made for morphological complexity and mean words per IU.

Chafe (1994) comments that there is a narrow range in the number of words per intonation unit for a given language. However, this study indicates that the range seems to be set higher for Pakistani English than American English. The focus of consciousness is expressed in more words in Pakistani English than American English. It would appear, then, from the results of this study that not only languages, but also varieties of languages differ in the size of focus of consciousness (in terms of number of words per substantive IU). Therefore, factors other than morphosyntax must control number of words per IU. These results indicate there is something other than a processing bias at work here.

Perceptual Study

Independent verification of IUs as units which hearers process as they listen to conversational discourse was not confirmed in this study. In general, the naive judges identified units larger than a typically defined IU. One possible explanation includes the difficulty in developing a method which would access the unconscious processing of individuals. The differences between IU boundary judgements made by naive speakers and judgements made by the researcher

judgements made by naive speakers and judgements made by the researcher may be due to the researcher's access to both better equipment and her extended contact with the data.

Multi-Clausal IUs

Multi-clausal IUs, as I have called them, were identified as a frequently occurring IU type in the Urdu and Pakistani English excerpts. They consisted of IUs which contained more than one clause and were characterized by a lack of prosodic features.

The presence of the Reporting Clause+Quote type IUs indicates that there are different functions for multi-clausal IUs. Since this type of IU only occurred in two excerpts for two speakers, further work needs to be done with more speakers to confirm whether the Reporting Clause+Quote multi-clausal unit is a widespread phenomenon.

Further studies also need to be done with other languages to see whether multi-clausal IUs are limited to Urdu and Pakistani English or whether they are a widespread prosodic phenomenon. In addition, it is not clear from Chafe's study whether multi-clausal IUs might occur in American English as well. Further work in this area is needed.

New Idea Constraint

The multi-clausal IUs called into question Chafe's (1994) One New Idea Constraint. There was no necessity to examine Chafe's borderline cases such as verb plus object or verb plus prepositional phrase etc. (discussed in Chapter 2) when analyzing the multi-clausal IUs for new information because the multi-

clausal IUs in this study constituted much more clearcut violations of the constraint. The multi-clausal IUs coded multiple entities and events or states in a single IU.

At the IU level of discourse, it seems that the One New Idea Constraint does not hold for Pakistani English and Urdu as predicted by Chafe's claim for a universal focus of consciousness of one new idea per IU. He does propose that we are constantly pushing our "capacity of focal consciousness beyond the bounds of a single focus, attempting to embrace larger, more intellectually challenging conglomerates of information" (p. 140); but he discusses this in the context of topic tracking in discourse, not within IUs.

These larger chunks that we try to embrace are "superfoci of consciousness" expressed in language as "super-intonation units" which are too large for a single focus (p. 140). We handle this "superfocus" by "allowing a series of more limited foci to play across it, fully activating first one part and then another"(p. 140). These superfoci of consciousness derive "not from our neural makeup, as do foci of consciousness, but from a variety of 'higher' intellectual considerations" which do not display a typical schema. They may be part of a larger schema. Chafe is rather more vague in his proposal of these superfoci of consciousness than he is about his One New Idea Constraint.

Perhaps the multi-clausal units found in Urdu and Pakistani English represent a superfocus of consciousness at the IU level, in which the multi-clausal IU as a whole functions as the focus of one new idea while its internal

structure consists of several new clausal propositions. In Chafe's (1994) terms, multi-clausal units would then act as 'superfoci of consciousness'.

Chafe's One New Idea Constraint cannot explain the presence of multi-clausal IUs. It is possible that we do have a focus of consciousness expressed in one new 'idea' as we are processing. However, the results of this study would suggest that the term 'idea' be defined in broader terms such as those propositions which are coded by prosodic units such as the multi-clausal units proposed here. As the discourse unfolds, these propositions allow participants to make inferences which themselves serve as a focus of consciousness for the discourse.

IUs and Contrast

The results of this study indicate that multi-clausal IUs of the topic entity+focus of assertion type identified here, signal contrast in Urdu and Pakistani English. Multi-clausal units serve as the second value in a contrast which involves one topic entity. In contrastive topicalization, the multi-clausal unit also serves as the locus for the second value expressed in the contrast, but may also contain the second topic entity of the contrast.

The role of multi-clausal IUs as coding contrast in this study suggests a schema for contrastive topicalization which works at the turn level and beyond the turn in the discourse. The implications that these schemas have for discourse processing will be discussed later in the chapter.

Limitations

The main limitation to this study is the limited number of conversations used and the limited number of speakers producing the speech samples analysed here. Further studies need to be done with larger samples of conversations produced by a variety of speakers.

Although numbers of multi-clausal units were high enough to draw some conclusions about them, further analysis of multi-clausal units in the context of more conversational samples across a larger number of speakers needs to be done. This may result in the identification of more types and functions for multi-clausal IUs.

In addition, the contrastive topicalization schemas at turn and discourse levels were based on a very small sample, so further work needs to be done on larger numbers of samples in order to confirm the schemas.

Implications

Form and function analyses of multi-clausal IU revealed that certain forms of multi-clausal IUs function as the contrastive element of a contrastive topicalization structure. However, I would propose that multi-clausal IUs serve a more general role in structuring the discourse. Gumperz (1984) claims (as discussed in Chapter 3), that background information in South Asian English is presented with higher pitch and rhythmic stress patterns, and that the main point is presented with lower pitch and stress. The results of this study indicate that in Urdu and Pakistani English, stress and rhythm have less to do with the signaling of background and main information than length of IUs. Background information

is presented in shorter IUs divided by pauses and the main point is presented in a longer IU—a multi-clausal IU. As such, multi-clausal IUs would not only function as the focus of a contrast, but would function in general as the focus of new information for the main idea of a given discourse topic or subtopic. These 'superfoci of consciousness' point the hearer to the main idea.

If multi-clausal IUs code the main ideas for Urdu and Pakistani English discourse, they can help to form and inform increasingly larger schemas from which hearers can make inferences as the discourse unfolds. A larger schema for a given discourse topic would also include the dimensions of stance and culture.

Stance is "a pragmatic relation between linguistic elements and context" (Field, 1997, p. 800). Field (1997) says that stance expresses the speakers attitude in the discourse and that attitude may be expressed toward the information given, the other participants in the discourse or implications created by other participants. Stance may be expressed two ways: affectively or epistemologically. In other words, it may express feelings, moods or attitudes (affective) or beliefs or knowledge (epistemological) of the participants (p. 800).

Culture is the other dimension added to the schema. Cultural knowledge informs the discourse topic and also plays a role in determining the stance of the speaker. Socio-cultural assumptions inform our stance as well as our responses in the discourse to create inferences for a given discourse topic.

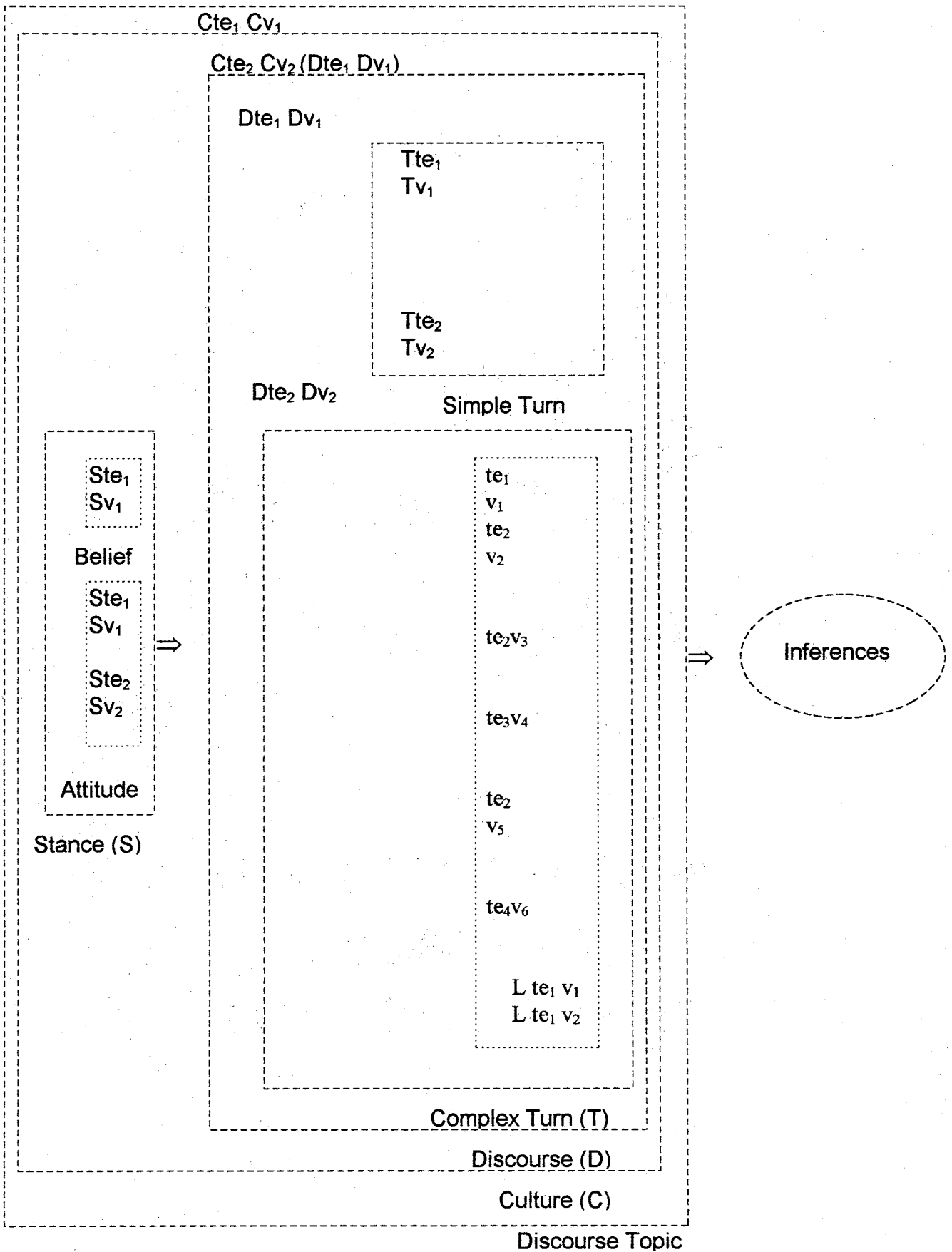


Figure 4—Discourse Inferencing

Figure 4 illustrates how a possible model for contrastive topicalization could be schematized at the different discourse levels. In figure 4, the double arrow from the stance box indicates that stance can be expressed at any point in the discourse; and the double arrow from the largest box means that inferences can be made from any segment of the discourse.

Relating the schema specifically to the current study, multi-clausal IUs represent prosodic contextualization cues which build schemas for turns, discourse, stance, and socio-cultural inferencing. The relationships between the schemas allow conversational participants to make discourse inferences based on contrast created by the prosodic schemas in the discourse.

More generally, the schema represented in figure 4 with the elements of stance and culture included shows how, in much the way that Gumperz (1996, discussed in Chapter 1) has characterized contextualization cues, prosodic schemas tell us which information from our social and physical knowledge, as well as beliefs and attitudes, should be used to make discourse inferences.

The model depicted in Figure 4 is a cognitive model. It represents a hypothesized prototypical structuring of schemas in the discourse. As such, further studies need to be done to identify instantiations of the model in order to determine the range and variation of structures which allow the model to schematically abstract the cognitive processes of conversational participants (after Langacker, 1987, p. 132).

Questions were posed in Chapter 1 about Chafe's (1994) processing constraint of one idea per IU and Gumperz' claim that contextualization cues are

conventionalized and culturally determined. In light of the results of the current study, which show that multi-clausal units violate the one new idea constraint, there does not seem to be a processing bias at work here. On the other hand, the schemas proposed here would indicate that prosodic cues do work in conventionalized ways to code information structure in the discourse. The presence of schematic knowledge of this type would allow the hearer to project the ends of turns and free online processing space for other types of activities such as tracking referents in the discourse.

Conclusion

The presence of multi-clausal IUs in discourse across speakers with different native language backgrounds and across languages found here strengthens the evidence that the multi-clausal unit is a prosodic schema which warrants further study. More data needs to be analyzed across more speakers in order to confirm the frequency of use and particular functions proposed here for multi-clausal IUs.

The results of this study indicate that prosody is a crucial pragmatic element for the interpretation of discourse. Further work needs to be done cross-linguistically/culturally to discover the extent to which prosodic functions are culturally grounded and to confirm prosody as a larger discourse schema which informs the interactional discourse of all languages/cultures.

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APPENDIX A

IU Excerpts

PE-1 CONTEXT

they try to speak English

sh: oh yea

they're trying to speak English

b: why do think that is
that they speak English?

s: well the basically I think to cope up with the modern world

m: modern world

s: you have different companies all over world foreign investors and stuff
and you have to maintain a you know
a kind of a
level of your uh
what you can say like uh
uh uh

sh: there is a parity

s: uh not a parity

it's like a

like a five star hotel if you go there
right?

you have to have so=me specific conditions
like

you have to have a underground parking

<XXX> swimming pools and everything

like to achieve a five star hotel status right?

so

that's the same case in Pakistan economy

like you have foreign investors and you have to have you know

uh people coming in dressed in suits

or at least a tie and stuff

so all this is a part of I think uh

world uh

you can say that uh

its a trend

I think

it's what's going on

PE-1

1 sh: I was speaking with my /friends,/

2 like-,/

3 ...(1.1)3 4 days ago/

4 ...(.7)they're at UTA,/

5 university Texas Austin,/

6 ...(1.1)and he was telling me /that,/

7 they have this uh=

8 ...engineering building/

9 ...and it's named **engineering science building,**\

10 ...so its ens building\

11 ..and-

12 by /ens,/

13 \they=,/

14 ..I mean there are so many foreign students in that engineering
science building [that ens does not stand for **engineering science**
no more [it stands for **english not spoken building**

@@@@@

PE-2 CONTEXT

b: um

Isn't English a

it's a it's a language that's spoken all the time in Pakistan

m: yes

s: and basically you know you can understand me

it's not like you can't understand me or anything like that

..so

PE-2

- 1 sh: also the difference like /my office,/
- 2 ...they're regular protocol was to-
- 3 /when I was working for one office,/
- 4 ...their protocol was to speak English most of the time,\
- 5 ...(.8)but when I moved to another company,/
- 6 ...their protocol was to s-
- 7 I mean was also to speak English,_
- 8 ...but nobody used to speak English over there,\
- 9 ...most of the time /we communicate in Ur-
- 10 in Urdu._

PE-3 CONTEXT

- m [if some guy] if some guy's from south asia and he is playing cricket or
 some enjoying,
 and if he's enjoying he's pakistani
 if he's studying he's indian
- sh that's right
- s but the thing is you can tell by the way they are dressed,
 [they way]
- b [i didn't know] that distinction,
 that [distinguishing]
- m [pakistanis] don't like to study
 @@@ <@at all@>
- s <@ that's true@>.
 @@@

PE-3

- 1 s: /pakistanis I think uh=,_
 2 ...what /I have noticed there is that you know,_
 3 the /way we dre=ss,/
- 4 ...(.7)and the /way we are built,/
- 5 ..we are built a bit different than uh=
 6 from bangladeshis and uh=indians
- 7 basically\
 8 ..cause-
- 9 ...cause in /pakistan also you have different races,_
 10 ...you have the
- 11 /pathans,_
- b: uh hm
- 12 s: and then you have the punjabi=s the sindhi=s the baluchi=s and then
 the urdu speaking people and everything,_
- 13 ...so /traditionally the pathans and punjabis they are like you know,_
 14 ...uh=
 15 ...(.7)they are fai=rskinned and you know-
 16 bi=g,/
- 17 and-
 18 stro=ng
 19 and burly,_
- 20 ..(.8)the sindhis are also /more burly you know,/
- 21 ..but uh,_
- 22 ...baluchis I don't know much about baluchis.\

PE-4 CONTEXT

- sh: I mean
if you listen to somebody who's from gujrat or speaks in- who speaks
gujrati normally and when he speaks urdu it has become like
a= comedy cult back home
the way they speak urdu
its funny
- b: are there jokes about it?
- sh: oh [a lot]
- s: [ah God]
- sh: a lot
- s: @@[@]
- sh: [those] guys are being abused right now
for comedy [cult]
- s: [gujratis]
are you talking about memons?
- sh: memon and gujrati they are the same basically
- s: but see basically
you can say [that but]
- b: [but your]name is memon
- s: see
its its a very long story
- b: @@[@]
- sh: [its] a sad story [@@@]
- b: [its a sad] story
[@@@@@@@@@@@@]
- sh: [@@@@@@@@@@@@]

PE-4

- 1 s: [its not a sad story
- 2 c'mo=n]
- 3 i'm a me- i'm a sindhi
- 4 right?
- b: uh huh
- 5 s: so you have some names in sindhi,/
- 6 ..like you have uh, _
- 7 jato=, _
- 8 you have bhutto=, _
- 9 you have uh,/
- 10 ...Λmemon, _
- 11 like some names right?/
- 12 ..so-
- 13 Λoriginally some of them they came fro=m, _
- 14 ...basically what I have you know learned, _

- 15 ...that we
 16 ou=r ancestors they came from greece.\
- 17 ...when mohammed bin quasm conquered sind and stuff,
 b: hmm
- 18 s: so=,
 19 ...they,/
- 20 ..some of them chose to live here they changed their religion
 became muslims and stuff, _
- 21 ...and they sta-lived in uh sind.\
- 22 ...and /the=n/
 23 ...when-the pakistan and india they were not then separate they went
 to different /parts of india they spread all over uh
- 24 india paki subcontinent, _
- 25 ...and uh=,
 26 ...when this /division came ove-
 27 uh uh=
 28 when /pakistan was founded,
 29 .../most of them they ca-
 30 you know,
 31 they were staying there in uh sind,\
- 32 ..but some of them they come back because they were /muslim./
- 33 ...(.7)and /now because they have uh=,
 34 they didn't speak sindhi over there, _
- 35 ..they they used the language that was spoken the=re,
 36 ..with which was gujrati= or uh,
 37 ...iichi,/
- 38 or something like that. _
- 39 ...(.7)so now that they /came back they didn't have their /identity, _
- 40 ..they were neither sindhis neither /gujratis, _
- b: ummhmm
- 41 s: so they were like a separate
 42 uh you know=,
 43 uh=/
 44 group of race,/
- 45 so=, _
- 46 ../they are called /memons.\
- 47 ...(.8)they are /different memons, _
- 48 you have /kuchi memons,/
- 49 you have /gujrati memons,/
- 50 you have uh
- 51 .../kachiawari memons there is a place in india called
 /kachiawar.\
- 52 ...(.9)so there are /lots of memons.\
- 53 ...(.8)and these are business people.\
- 54 ...uh-

55 they dominate uh almost dominate
56 [uh dominate karachi economically]

sh: [they own karachi for all practical [purposes]]

Urdu-1 CONTEXT

a: nahī gār b^hi lagate hē . \

no say also attach is

No he's just saying that.

Urdu-1

- 1 r: nahī nahī a-a-apko ek admi batata ho\
- no no a a you-to one man tell aux
- No no y-y-let me tell you about a guy
- 2 ..sahī ?/
- right?
- 3 ...ek admi Akaratji ka.\
- one man karachi of
- A man from Karachi.
- 4 ...(1.7)bandə /
- guy
- 5 ...sari zindagi ek pakīstan ke <L2cultureL2> se Aaja he, _
- all life one pakistan of culture from came aux
- All his life he lived in Pakistan.
- 6 ...d̤zahā qawaljan b^hi hoti hē [s̤b kut̤] hota he. _
- where qawalian also are aux everything is aux
- Where there are qawalian and everything.
- 7 /t^hik he /
- o.k.
- 8 ...(1.4)pakīstan, /
- Pakistan
- 9 ...uo bəndə d̤zab jahā Aa gaja, \
- that guy when here come went
- When that guy came here.
- 10 ...(.8)Inka uo <L2classicalL2> muziki d̤so-
- their that classical music which
- Their (Americans) classical music which
- 11 <HOWLING>
- 12 kar ke-
- CP that
- Do
- 13 <L2howlingL2> karte hē je
- howling do aux this
- They do this howling.
- 14 ...(.7)uo uo A b^heriō ki si
- they they wolved like
- Like wolves

((3 TURNS OF OTHER PARTICIPANTS OMITTED))

- 15 r: <L2 /symphoniesL2>, \
- 16 a=r /
and
- 17 ...dʒo pakistani ʌqawalian tʃəl rahi hē , /
which pakistani qawalian go CONT be-aux
Those pakistani qawalian which are playing
- 18 ...(.8)o dʒi je to ʌbɪliā laʃ rahi hē . \
oh kii those EMPH cats fight CONT be-aux
“Oh jii those are cats fighting”
- 19 ...tʰik he , _
O.k.
- 20 .. /mē sun lija baʃe aram se , _
I listen aux very calm with
I listened very calmly
- 21 pʰir, /
Well
- 22 ... (2.8) /dʒo <L2americanizeL2> he uski tərəf |ʊo=
who americanize is thatGEN way he
He who is americanized that way
- 23 ..ke /je ɛsa he to ɛsa |atʃtʃa ʃəlwar qamiz pəhənə bənd kar di|me
this is the way it is good shalwar kamiz wearing stop CP aux I
He who is this way (americanized) stopped good shalwar kamiz
wearing. I
- ne kaha kiyū nahī pəhəntə hāsne ʃəru kar dija. /
ERG said why not wear laugh start CP aux
said why don't you wear? he started laughing.
- 24 ... (1.) /ʃəlwar qamiz gʰar ke əndər to tʃələo /
shalwar kamiz house of inside EMPH go
I do wear shalwar-kamiz inside the house
- 25 ..Vnəmaz paʃni hoti he |mē ne kaha |əb mē
pray reading be-IMP aux I ERG said now I
for praying| I said| now I
- 26 /gʰar mē pəhəntə hū ,
house in wear aux
I wear in the house
- 27 Vzərur pəhəntə hū , /
certainly wear aux
Certainly I wear
- 28 ...lekən bahar nahī pəhəntə| kiūke do char dəfə əwazē sun li hē
but outside not wear because two four times sounds hear aux then
But outside I don't wear because a few times I got catcalls. Then I don't

[bʌs nahī pəhənta] je <L2university campusL2> he [kɪsi pər ɛtəraz kar nahī
 not wear this university campus is anyone on annoy CP not can
 wear. This is a university campus . You can't annoy anyone.
 səkte, /

29 .../tʰik he, \
 o.k.

30 ...(1.8)ab ʌnahī dʒi ham ʃəlwar qamiz nahī pəhənte. \
 now no sir we shalwar kamiz not wear
 Now no sir, we don't wear shalwar kamiz.

31 kijū nahī pəhənte? /
 why not wear
 Why don't we wear?

32 ʌb usne bat ɛsi kar di ke mē ne kaha tɛra əbba bʰi is liye nahī
 now heERG thing this way that I ERG said your father also for this reason not
 pəhənta ke gʰar mē tʃəda pəhənta he uo, /
 wears that house in shorts wears is he
 Now he did this thing that I said your father also for this reason doesn't wear that
 in the house he wears shorts.

33 <@kɛh dʒi us mē nəqʃe bən dʒate hē @> _
 said jii them in patterns make go are
 I said Jii in them 'make nocturnal emissions'

34 <@ɪs ke lije log ʃəlwar qamiz pəhənte hē taka kɪsi ko pəta na tʃələ
 for this reason people shalwar kamiz wear are so that anybody to know not go
 @>
 People wear shalwar kamiz for this reason, so that nobody will know

35 <@mē ne kaha tɛre gʰar mē walədæ hō ho@>
 I ERG said your house in parents areSUBJ
 If your parents are in your house.

a: Okisi ko na?

Urdu-2 and 3

Urdu-2

- 1 f: je \
this
- 2 pəṭʰanō ki əgər /tarix dekʰ lē=,/
pathans GEN if history look take-AUX
If you take a look at the Pathan's history.
- 3 ...purani Afyanō ki vadzəse, _
old afghanis GEN because
Because of the old Afghans
- 4 ...ek /bʰai idhar se gaja dusre ne us ki=
one brother here from went second ERG he-GEN
(When) one brother went away, the other his
- 5 ..dzəgə pe qəbzə kar lija \
place on usurp do take-AUX
usurp place.
- 6 ...uo uska duʃman ho gaja
he his enemy be go-aux
He became his enemy.
- 7 Ohameʃə se
always from
Always
- 8 ...kəbʰi mē ne nahī dekʰa ke pəndzabi mē=,/
ever I ERG not saw that Punjabi in
I never saw in Punjabi
- 9 ...tarbur= \
tarbur
- 10 ...ke ap ka <L2cousinL2> ap ka duʃman ho ga
that you GEN cousin you GEN enemy be will-FUT
That your cousin would become your enemy
- 11 O/paṭʰan mē = /
pathan among
among pathans
- 12 ...<L2cousinL2> ke lije /lafz dʒo hē na uo duʃman ka lafz
cousin for word you know that enemy GEN word
<L2useL2> hota he
use be-IMP be-AUX
The word for cousin (is) you know that one used for enemy.

a: <L2cousinL2> ko tarbur [kəhte hē]

cousin to tarbur say-IMP is-AUX
They say 'tarbur' for cousin.

f: [duʃman]
enemy

Urdu-3

- 1 a: <L2tarburL2> ke maṭleb ʌduʃman hi hota he \
- tarbur of meaning enemy EMPH be-IMP is
The meaning of tarbur is 'enemy'
- 2 paṭa- je pʌʃto mē \
- path- this pushto in
Patha-in Pushto
- 3 ...(1.5)to =
- so
- 4 ʌkhte hē
- say-IMP is
They say
- 5 jani koi=uh-/ dost ke satʰ
- rather some uh friend of with
Rather with some friend
- 6 ...ta- taluq at[ʃa na ho] to khte hē |kiū tumhara /<L2tarburL2> he uo
- ta-relationship good not be-SUBJ then say-IMP is why your tarbur is he
If the relationship is not good, then they say why is he your tarbur?

f: @@@[@@@@@@@]
a: [əksər hota he]

f: mera ek <L2cousinL2> he /

Urdu-4

- 1 l: [ap ko]kahana |ʌqəl ki bat he
- you to say true GEN thing is
I'm telling you. A true story (thing).
- 2 uo /ənsar barni ne ek <L2reportL2> di tʰi |to us ne ek admi tʰa, /
- he Ansar Barni ERG one report givePERF AUX so he ERG one man was
Ansar Barni gave a report. So there was a man.
- 3 Huo <L2jailL2> mē tʰa |to us ne ɪs se <L2interviewL2> lija |bola ke
- he jail in was so he ERG him from interview took He said that
| bai tum =ne-

man you ERG

He was in jail. So he took an interview from him. He said Man you-

4 Akija hoa,/
what was

What happened?

5 bola| mē ne qətəl kar dija
said I ERG kill did give-AUX
He said I killed.6 to bola| ke kijū Ḷqətəl kar dija\
so said that why kill do give AUX
So he said that Why did you kill?7 to bola |meri bəhən dʒo he na uo <L2collegeL2> dʒarahi tʰi
so said my sister you know she college going AUX
Ḷpaṛʰne ke lije
studying for

So he said My sister, you know, she was going to college to study.

8 ...ar=/
and9 hamare ə əbbə udhar tʰe nahī |bʌs meri /mā tʰi |/mē tʰa| mera
our a-father there was not only my mother was I was my
koi /bʰai nahī tʰa | bʌs ek /bəhən tʰii,_
any brother not was only one sister wasOur father wasn't there. Only my mother was. I was. I didn't have any brother.
There was only one sister.10 H...to usko dʒo he na usne /tʃɛɾ dija tʰa \
so her you know heERG harassed give was
So you know, he was harassing her.11 ...(.8)to=,_
So12 is lije me ne usko qətəl kar dija \
this reason I ERG to him kill did give-AUX
For this reason I killed him.13 ...(.7)to bola |atʃtʃa bai je tum ne us ko qətəl kar diya |kijūke
so said ok man this you ERG him to kill did give-AUX because
bəhən ko tʃɛɾa ,/
sister ACC harassed

So he said O.k. man you killed him because he harassed (your) sister

14 ...to bola |ʌb kija ho ga
so said now what be will

So he said Now what will happen?

APPENDIX B

Grammatical Assignment Abbreviations

ACC	Accusative
AUX	Auxiliary
CONT	Continuous
CP	Conjunctive Participle
EMPH	Emphatic Particle
ERG	Ergative
FUT	Future tense
GEN	Genitive
IMP	Imperfect
PERF	Perfect
SUBJ	Subjunctive

APPENDIX C

Instructions

Have you ever noticed that spoken English is different than written? What is different?

Spoken language is produced in spurts. We cannot produce indefinitely long sentences in spoken language. We are restricted by the physiological processes of speech. For example, we have to breathe! There are psychological and linguistic phenomena that affect this spurtlike quality. Some linguists have noticed that these "spurts" coincide with what they call intonation units. These are intonation contours which segment our speech.

Let me show you an example. Look at the text under the "Appease the Monster" heading on your handout. The speaker in this conversation is KEVIN—each line of text in this segment represents an Intonation Unit. Follow along as I play the excerpt two times for you.

Now I want you to do some dividing of Intonation Units. I have 4 excerpts and I will play each 3 times for you. The excerpts are in blocks on the page and what I would like you to do is segment these blocks into Intonation Units by placing a vertical line at each Intonation Unit break. Then I will ask you to underline the most important idea in each excerpt and circle the ideas, words, or phrases the speaker is highlighting.

These are Pakistanis speaking in English.

Excerpt 1 Sh is talking about a building at UT Austin

Excerpt 2 Sh is talking about English spoken at the office.

Excerpt 3 S is talking about different ethnic groups in Pakistan

Excerpt 4 S is talking about a group of people in Pakistan.

APPENDIX D

English Excerpts

Appease the Monster

KEVIN: Allen County Motors told me
they recommended McMann Tire
Downtown
And uh
I already knew what I needed
so I didn't have to haggle about what kind of tires
or where to k-
you know
put em
front or back
Allen County Motors already told me
you know
all that stuff

As the following excerpts are played:

- 1) divide the transcript into intonation units using **vertical lines**.
- 2) **underline** what you interpret to be the most important idea in each excerpt
- 3) **circle** the words or phrases the speaker is highlighting in the excerpt.

Excerpt 1

sh: I was speaking with my friends like 3 4 days ago they're at UTA university Texas Austin and he was telling me that they have this uh engineering building and it's named engineering science building so its ens building and by ens they I mean there are so many foreign students in that engineering science building that ens does not stand for engineering science no more it stands for english not spoken building

Comment:

Excerpt 2

sh: also the difference like my office they're regular protocol was to when I was working for one office their protocol was to speak English most of the time but when I moved to another company their protocol was to s- I mean was also to speak English but nobody used to speak English over there most of the time we communicate in Ur- in Urdu

Comment:

Excerpt 3

s: pakistanis I think uh what I have noticed here is you know the way we dress and the way we are built we are a little bit different than bangladeshis and uh indians basically cause cause in pakistan also you have different races you have the pathans

b: uh hm

s: and then you have the punjabis the sindhis the baluchis and then the urdu speaking people and everything so traditionally the pathans and punjabis they are like you know uh they are fairskinned and you know big and strong and burly the sindhis are also more burly you know but baluchis I don't know much about baluchis

Comment:

Excerpt 4

s: so you have some names in sindhi like you have uh jato you have bhutto you have uh memon like some names right so ordinarily some of them they came from basically what I you know learned that we our ancestors they came from greece when mohammed bin quasm conquered sind and stuff

b: hmm

s: so they some of them chose to live here they changed their religion became muslims and stuff and they star-lived in sind and then when the pakistan and india they were not then separate they went to different parts of india they spread all over india-paki subcontinent and uh when this division came over- uh uh when pakistan was founded most of them they ca-you know they were staying there in sind but some of them they come back because they were muslim and now because they have have uh they didn't speak sindhi over there they used the language that was spoken there with which was gujrati or uh iichi or something like that so now when they came back they didn't have their identity they were neither sindhis neither gujratis

b: ummhmm

s: so they were like a separate you know uh group or race uh they are called memons they are different memons they are kuchi memons they have gujrati memons they have uh kachiawari memons there is a place in india called kachiawar so there are lots of memons and these are business people uh they dominate uh almost dominate

Comment:

APPENDIX E

Urdu Excerpts

نیشن نیشن نیشن آپ کو سر آپ کو ایک آدمی بتاتا ہوں |

ساتھ ایک آدمی کراچی کا بندہ ساری زندگی ایک پاکستان کے culture سے

آیا ہے جہاں قوالیاں بھی ہوتی ہیں سب کچھ ہوتا ہے ٹھیک ہے پاکستانی

وہ بندہ جب یہاں آگیا ان کا وہ classical موسیقی جو <howling>

کر کے howling کرتے ہیں یہ وہ وہ بھڑکیوں کی سی

نیشن آپ کتوں والی کہہ دیں نا

اس کو تو وہ کہتا ہے کہ یہ موسیقی روح غذا ہے

وہ symphonies کی بات کرتے ہیں شاید

symphonies اور جو پاکستانی قوالیاں چل رہی ہیں اوجی یہ تو

بلیاں لڑ رہی ہیں ٹھیک ہے میں سن لیا بڑے آرام سے پھر جو

americanize ہے اس کی طرف وہ کہہ رہا ہے تو ایسا اچھا شلوار

قمیص ^{پہنتا بند} کردی میں نے کہا کیوں نہیں پہنتے ہنسنا شروع کر دیا شلوار

قمیص گھر کے اندر تو جلاؤ نماز پڑھنی ہوتی ہے میں نے کہا اب میں گھر میں

پہنتا ہوں ضرور پہنتا ہوں لیکن باہر نہیں پہنتا کیونکہ دو چار دفعہ آوازیں

سن لی ہیں بس نہیں پہنتا یہ university campus ہے کسی پر اعتراض

کر نہیں سکتے ٹھیک ہے اب نہیں جی ہم شلوار قمیص نہیں پہنتے

2

یہ بٹھانوں کی اگر تاریخ دیکھ لیں افغانوں کی وجہ سے ایک
 بھائی ادمر سے ادمر گیا دوسرے نے اس کی جگہ پہ قبضہ کر لیا وہ
 اس کا دشمن ہو گیا ہمیشہ سے کبھی میں نے نہیں دیکھا کہ پنجابی میں
 ترپور کہ آپ کا cousin آپ کا دشمن ہوگا پٹھان میں cousin
 کے لیے لفظ جو ہے نا وہ دشمن کا لفظ use ہوتا ہے

cousin کو آپ

3

ترور کا مطلب دشمن ہی ہوتا ہے بیٹھان ادیہ پشتو میں تو کہتے
 ہیں یعنی کوئی دوست کے ساتھ تو تعلق اچھا نہ ہو تو کہتے ہیں کیوں
 تمہارا ترور ہے وہ

- ۵

4

4

ل

آپ نے کہا نا عقل کی بات ہے وہ انصار برنی نے ایک رپورٹ دی تھی

تو اس نے ایک آدمی تھا جہ جیل میں تھا تو اس نے اس سے interview

لیا بولا کہ بھج تم نے کیا ہوا بولا میں نے قتل کر دیا تو بولا کیوں

قتل کر دیا تو بولا میری بہن جو ہے نا وہ کالج جا رہی تھی بڑھنے کے لیے

اور ہمارے آبا اُمہر تھے نہیں بس میری ماں تھی میں تھا میرا کوئی بھائی

نہیں تھا بس ایک بہن تھی تو اس کو جو ہے نا اس نے چھڑ دیا تھا تو

اسی لیے میں نے اس کو قتل کر دیا تو بولا اچھا بھج یہ تم نے اس کو قتل

کر دیا کیونکہ بہن کو چھڑا بولا اب کیا ہو گا

APPENDIX F

IU Boundary Judgements

American Responses with IUs complete**Excerpt 1**

sh: I was speaking with my /friends,/like-,/ 83

...(1.1)3 4 days ago/ 96

...(7)they're at UTA,/university Texas Austin,/ 100

...(1.1)and he was telling me /that,/ 78

they have this uh= 72

...engineering building/ 91

...and it's named engineering science building,\ 78

...so its ens building\ 91

...and-by /ens,/they=,/ 78

..I mean there are so many foreign students in that engineering science

building that ens does not stand for engineering science no more it stands for

english not spoken building

Excerpt 2-American Responses

sh: also the difference like /my office,/ 78

...they're regular protocol was to- 61

/when I was working for one office,/ 57

...their protocol was to speak English most of the time,\ 100

...(8)but when I moved to \another company,/ 87

...their protocol was to s- 61

I mean was \also to speak English,_ 83

...but nobody used to speak English over there,\ 96

...most of the time /we communicate in Ur-in Urdu._

Excerpt 3-American Responses

s: /pakistanis I think uh=, _ 65

...what /I have noticed there is that you know, _ the /way we dre=ss,/ 83

...(7)and the /way we are built,/ 74

..we are built a bit different than uh= from bangladeshis and uh=indians

basically\..cause-...cause in /pakistan also you have

different races, _ 57

...you have the /pathans, _

b: uh hm

s: and then you have the punjabi=s 52

the sindhi=s the baluchi=s and then the urdu speaking people and

everything, _ 83

...so /traditionally the pathans and punjabis they are like you know, _ 61

...uh= 70

...(7)they are fai=rskinned and you know-bi=g,/ and-stro=ng and burly, _

78

...(8)the sindhis are also /more burly you know,/..but uh, _... baluchis, ...I

don't know much about baluchis.\

Excerpt 4-American Responses

- s: so you have some names in sindhi,/..like you have uh,_ 70
 jato=,_you have bhutto=,_you have uh,/ 61
 ...Amemon,_like some names right?/ 87
 ...so-/originally some of them they came fro=m,_...basically what I have
 you know learned,_ 83
 ...that we ou=r ancestors they came from greece.\ 87
 ...when mohammed bin quasm conquered sind and stuff,/
- b: hmm
- s: so=,...they,/..some of them chose to live here they changed their religion
 became muslims and stuff,_ 70
 and they sta-lived in uh sind.\ 91
 ...and /the=n/...when-the pakistan and india they were not then separate
 they went to different /parts of india they spread all over uh india paki
 subcontinent,_ 83
 ...and uh=, 61
 ...when this Adivision came ove-uh uh= 89
 when Apakistan was founded, 65
 .../most of them they ca-you know,they were staying there in uh sind,\
 ..but some of them they come back because they were Amuslim.\ 96
 ...(.7)and /now because they have uh=,they didn't speak sindhi over
 there,_..they they used the language that was spoken the=re,..with which
 was gujrati= or uh,...iichi,/ or something like that._ 74
 ...(.7)so now when they /came back they didn't have their Aidentity,_ 83
 ...they were neither sindhis neither Agujratis,_
- b: ummhmm
- s: so they were like a separate you know=,uh=/group of race,/ so=,_../they
 are called Amemons.\ 87
 ...(.8)you have Adifferent memons,_ you have Akuchi memons,/ you

have /Gujrati memons,/ you have uh.../Akachiawari memons there is a place
in india called /Akachiawar.\ 96

...(9)so there are /lots of memons.\ 91

...(8)and these are business people.\ 87

...uh-they dominate uh almost dominate

Pakistani Responses IUs**Excerpt 1**

sh: I was speaking with my /friends,/like-,/ 100

...(1.1)3 4 days ago/ 78

...(7)they're at UTA,/ university Texas Austin,/ 94

...(1.1)and he was telling me /that,/ 50

they have this uh= 72

...engineering building/ 83

...and it's named engineering science building,\ 89

...so its ens building\ 83

...and-by /ens,/they=,/ 72

..I mean there are so many foreign students in that engineering science

building that ens does not stand for engineering science no more it stands for

english not spoken building

Excerpt 2-Pakistani Responses

sh: also the difference like /my office,/ 78

...they're regular protocol was to- 78

/when I was working for one office,/ 50

...their protocol was to speak English most of the time,\ 94

...(8)but when I moved to \another company,/ 72

...their protocol was to s- 61

I mean was \also to speak English,_ 61

...but nobody used to speak English over there,\ 72

...most of the time /we communicate in Ur- 50

in Urdu._

Excerpt 3-Pakistani Responses

s: /pakistanis I think uh=_ 78

...what /I have noticed there is that you know,_the /way we dre=ss,/ 72

...(7)and the /way we are built,/ 56

..we are built a bit different than uh= from bangladeshis and uh=indians

basically\..cause-...cause in /pakistan also you have different races,_

...you have the /pathans,_ 67

b: uh hm

s: and then you have the punjabi=s 56

the sindhi=s the baluchi=s and then the urdu speaking people and

everything,_...so /traditionally the pathans and punjabis they are like you

know,_...uh= 72

...(7)they are fai=rskinned and you know-bi=g,/ and-stro=ng and burly,_

50

...(8)the sindhis are also /more burly 50

you know,/..but uh,_...baluchis,...I don't know much about baluchis.\

Excerpt 4-Pakistani Responses

s: so you have some names in sindhi,/..like you have uh,_.jato=,_you have
 bhutto=,_you have uh,/.../Amemon,_like some names right?/ 67
 ...so-/originally some of them they came fro=m,_...basically what I have
 you know learned,_...that we ou=r ancestors they came from greece.\ 78
 ...when mohammed bin quasm conquered sind and stuff,/

b: hmm

s: so=,...they,/..some of them chose to live here they changed their religion
 became muslims and stuff,_ 72

and they sta-lived in uh sind.\ 72

...and /the=n/...when-the pakistan and india they were not then separate they
 went to

different /parts of india they spread all over uh india paki subcontinent,_ 61

...and uh=, 61

...when this /division came ove-uh uh= 89

when /pakistan was founded, 61

.../most of them they ca-you know,they were staying there in uh sind,\

..but some of them they come back because they were /muslim.\ 83

...(7)and /now because they have uh=,they didn't speak sindhi over

there,_...they they used the language that was spoken the=re,..with which

was gujrati= or uh,...iichi,/ or something like that._ 50

...(7)so now when they /came back they didn't have their /identity,_ 50

...they were neither sindhis neither /gujratis,_

b: ummhmm

s: so they were like a separate you know=,uh=/group of race,/ so=,_.../they
 are called /memons.\ 83

...(8)you have /different memons,_ you have /kuchi memons,/ you

have /gujrati memons,/ you have uh 50

.../kachiawari memons there is a place in india called /kachiawar.\ 83

...(9)so there are /lots of memons.\ 61

...(8)and these are business people.\...uh-they dominate uh almost dominate

Pakistani Responses-Urdu

Excerpt 1 Urdu

r: [naī naī naī naī a -a -apko sətɾ] apko ek admi batata ho\..sahī ?/ 65

...ek admi ᳚karatʃi ka.\ 94

...(1.7)᳚ndə /...sari zɪndagi ek pakɪstan ke <L2cultureL2> se ᳚aja he,_ 65

...dʒahā qawalʃan bʰi hoti hē 59
s᳚b kutʃ hota he._/tʰik he / 100

...(1.4)pakɪstan, / 76

...uo bəndə dʒ᳚b jahā ᳚a gaja, \ 88

...(8)ɪnka uo <L2classicalL2> muziki dʒo-<HOWLING>kar ke-

<L2howlingL2> karte

hē je ...(.7)uo uo ᳚bʰeriō ki si 65

l: nahī ap kutte vali keh dē na /

r: usko to uo kehna he je

musiki hue udʰar

f: uo simpaniz ki bat kar rahe hē

r: <L2 ᳚symphoniesL2>,\ a=r /...dʒo pakɪstani ᳚qawalian tʃəl rahi hē ,/ 100

...(8)o dʒi je to ᳚bɪliā laɾ rahi hē .\ 88

...t^hik he ,_./mē sun lija baṛe aram se ,_p^hir, / 88

...(2.8)/dʒo <L2americanizeL2> he uski tərəf uo=..keh /je əsa he to əsa

atʃtʃa ʃəlwar qamiz pəhənə bənd kar di mē ne kaha kiyū nahī pəhente

hāsne ʃəru kar dija./ 88

...(1.)Vʃəlwar qamiz g^har ke əndər to tʃəlao/..Vnəmaz paṛhni hoti he mē ne

kaha

ab mē /g^har mē pəhenta hū , ? Vzərur pəhenta hū , / 65

...lekən bahar nahī pəhenta kiūke do char dəfə əwazē sun li hē bəʃ nahī

pəhenta je <L2university campusL2> he kisi pər ətəraz kar nahī səkete, / 59

.../t^hik he, \ 76

...(1.8)ab Anahī dʒi ham ʃəlwar qamiz nahī pəhente. \

Excerpt 2 Urdu-Pakistani Responses

f: pəʃʰanō ki əgər /tarix dekʰ lē=, / 94

...purani ʌafyanō ki uadzese, _ 62

...ek /bʰai ɪdhar se gaja dusre ne us ki=..dzəgə pe qəbzə kar lija \ 76

...uo uska duʃman ho gaja 59

Ohaməʃə se 65

...kʌbʰi mē ne nahī dekʰa ke pəndzabi mē=, / 53

...tarbur= \...ke ap ka <L2cousinL2> ap ka duʃman ho ga 76

O/pəʃʰan mē = /...<L2cousinL2> ke lije ʌʌfz dʒo hē na uo duʃman ka ʌʌfz

<L2useL2> hota he

Excerpt 3 Urdu-Pakistani Responses

a: tarbur ke matlab Adulfman hi hota he \ 100

paṭa- je pṭo mē \ 100

...(1.5)to=ʌkḥte hē jani koi=uh- 76

/ dost ke sat^h...ta- 53

talūq atʃtʃa na ho to kḥte hē kiū tumhara /tarbur he uo

Excerpt 4 Urdu-Pakistani Responses

1: [ap ne]kahana laqal ki bat he 65

uo /ənsar barni ne ek <L2reportL2> di t^{hi} to us ne ek admi t^{ha}, / 88

Huo <L2jailL2> mē t^{ha} to us ne is se <L2interviewL2> lija bola ke bai tum

=ne

lkija hoa,/bola mē ne qatəl kar dija 53

to bola ke kijū laqatəl kar dija\ to bola meri bəhən dzo he na uo

<L2collegeL2>

dzarahi t^{hi} laqat^hne ke lije,\ 94

...ar=/ hamare ə əbbə udhar t^{he} nahī bəs meri /mā t^{hi} /mē t^{ha} mera koi

/b^hai nahī t^{ha} bəs ek /bəhən t^{hi},_ 76

H...to usko dzo he na usne /tʃɛɾ dija t^{ha} \ 88

..(8)to=,_is lije me ne usko qatəl kar dija \ 94

...(7)to bola atʃtʃa bai je tum ne us ko qatəl kar diya kijūke bəhən ko tʃɛɾa

,/ 82

...to bola ab kija ho ga

APPENDIX G

IRB FORM

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 10-28-97

IRB#: AS-98-025

Proposal Title: CONVERSATIONAL DISCOURSE IN URDU AND PAKISTANI ENGLISH

Principal Investigator(s): Carol L. Moder, Rebecca L. Damron

Reviewed and Processed as: Exempt

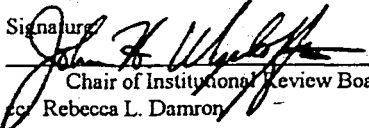
Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.

ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Disapproval are as follows:

Signature: 
Chair of Institutional Review Board
cc: Rebecca L. Damron

Date: November 5, 1997

VITA

Rebecca Damron

Candidate for the Degree of

Doctor of Philosophy

Thesis: PROSODY IN URDU AND PAKISTANI ENGLISH CONVERSATIONAL DISCOURSE

Major Field: English

Biographical:

Education: Graduated from Wittenberg-Birnamwood High School in May 1981; received Bachelor of Arts degree in South Asian Studies from the University of Wisconsin-Madison in August 1987; received Master of Arts degree in English in December 1992. Completed the requirements for the Doctor of Philosophy degree at Oklahoma State University in December 1997.

Experience: Taught Freshman Composition at Oklahoma State University, 1989-90; taught ESL Composition at Oklahoma State University, 1991-93; taught and did research for the International Teaching Assistant program at Oklahoma State University 1995-96; Assistant Director of ESL Composition program at Oklahoma State University 1995-96; taught introductory linguistics at Oklahoma State University 1994-96; Instructor of ESL composition at the University of Tulsa 1996-97. Currently Visiting Applied Assistant Professor of ESL at the University of Tulsa.

Professional Memberships: Oklahoma Teachers of English to Speakers of Other Languages, Cognitive Linguistics, Linguistic Society of America, Southeastern Conference on Linguistics.