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DISCOURSE TRANSCRIPTION

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PREFACE

As discourse analysis comes more and more to play a leading role among new approaches to understanding language, the need for close attention to its research tools likewise increases. The first task of this book is to teach how to transcribe spoken conversational discourse. Yet as things stand now in the field of discourse, any work which makes this its primary goal must also undertake a certain preparatory labor: in addition to explicating methods for transcribing discourse, it must simultaneously create, or rather codify and systematize, the very system that it describes. This is because, frankly, there has not yet emerged within the domain of discourse transcription any single preeminent system or convention that is agreed upon and used by all practitioners -- comparable, say, to the more or less universal employment by phoneticians of the International Phonetic Alphabet. Of course there are many individual transcription practices and notations which are quite widespread, and these provide a good foundation for any general discourse transcription system. Yet across the panorama of present transcription practice there remain many alternatives to be weighed, and uncertainties to be clarified. Thus the present work must add to its central goal of teaching discourse transcription the foundational task of codifying a system for carrying out this practice.

The system outlined in the following pages has emerged over a period of five years of research, experimentation, discussion, teaching, and lecturing about the transcription of everyday conversation. This work has benefitted beyond measure from the exceptionally stimulating and cooperative environments in which it was formed, amidst the aficionados of spoken discourse at the universities of Berkeley, UCLA, UC Santa Barbara, and Uppsala. The transcription system's roots go back further than the period of its writing, indeed further than the seven to seventeen years of transcribing experience of its authors, to encompass the several transcribing traditions which have provided the foundations as well as many of the details of the present formulation. The system arrived at in the end is one which seeks to select, distill, clarify, codify, and occasionally augment elements from a variety of current approaches to transcribing spoken discourse. In all of this we have seen our primary goal as that of systematizing a general framework for discourse transcription, rather than innovating for innovation's sake.

Naturally such a project draws very substantially from the work of others. Useful elements of theory, method, and notation have come from teachers, colleagues, students, and researchers in several disciplines. Among the most direct influences have been those of Wallace Chafe (1979, 1980a, 1980b, 1987, forthcoming), Norman McQuown (1967, 1971), Elinor Ochs (1979), and Emanuel Schegloff (Sacks, Schegloff, and Jefferson (1974) (and, indirectly, Gail Jefferson (Schenkein 1978, Atkinson and Heritage 1984)). Through the teaching of McQuown we became aware that documentary integrity requires not only accurate listening and precise annotation but a transcription system adequate to the task at hand, even if you have to build your own; and Ochs has made us keenly aware of the

theoretical implications which must accompany any decision about how to write down and display speech. Through the teaching of Chafe we have become attuned to the crucial significance of hesitations for clues about the process of verbalization, and to the importance of the intonation unit as the fundamental unit of the discourse production process. From Schegloff and the Conversation Analysis tradition we have sought to learn the fundamental techniques for attending to turn-taking, overlap, pause, and other elements which embody the interactional dimension of conversation. And from Chafe, Ochs, Schegloff and others we have acquired a certain preference for notational devices which are accessible to the nonspecialist, especially those adapted from the familiar conventions of ordinary literary style. Of course these represent but a few of the many insights, orientations, and techniques that so many discourse researchers have contributed to the present formulation; and many will doubtless recognize in this document their own contributions.

For their many valuable comments on and contributions to this document and to the system it describes, we thank Karin Aijmer, Bengt Altenberg, Roger Anderson, Ingegerd Bäcklund, Maria Luiza Braga, Wallace Chafe, Patricia Clancy, Laurie Crain, Alan Cruttenden, Alessandro Duranti, Jane Edwards, Christine Cox Eriksson, W. Nelson Francis, Christer Geisler, Charles Goodwin, Caroline Henton, John Heritage, Knut Hofland, Marie Iding, Stig Johansson, Geoffrey Leech, Marianne Mithun, Bengt Nordberg, Elinor Ochs, Yoshi Ono, Asa Persson, Janine Scancarelli, Emanuel Schegloff, Emily Sityar, Jan Svartvik, Sandra Thompson, Gunnel Tottie, and Donald Zimmerman. We are also most appreciative of the many comments we have received from the participants in a discourse transcription seminar held at the University of California, Santa Barbara (Summer-Fall 1988), and at presentations given by the first author at the Stockholm Conference on Computers in the Humanities, and at the Universities of Lund and Gothenburg (all September 1989). We thank the students in the first author's courses on discourse transcription at the University of California, Santa Barbara (Fall 1988 and Spring 1990) and Uppsala University (Fall 1989). We are especially grateful for the lively representation of diverse viewpoints and the incisive commentary at the conferences on Discourse Transcription (January 1989), Current Issues in Corpus Linguistics (June 1990), and Representing Intonation in Spoken Discourse (July 1990), all held at UC Santa Barbara under the sponsorship of the Linguistics Department and the Center for the Study of Discourse. We are glad to express our thanks to these people and the many others from whom we have gained insights and borrowed ideas -- while recognizing that undoubtedly they all would do things at least a little differently. Their contributions to the formulation of the transcription system and to our explication of the transcribing process have been invaluable, and are reflected in virtually every page of this work. None of our many benefactors should be held accountable for the choices made in arriving at the final form of the transcription system or its description, for which responsibility rests with us.

This work is based upon research supported by the National Science Foundation under grant No. IST85-19924 ("Information Transfer Constraints and Strategies in Natural Language Communication", John W. Du Bois, Principal Investigator), which we gratefully acknowledge. Additional support was received from the UC Santa Barbara Office of Instructional Development, and from the Center for the Study of Discourse, at the Community and Organization Research Institute of UC Santa Barbara.

PART ONE:

INTRODUCTION

CHAPTER 1. INTRODUCTION

1.1 What is discourse transcription?

With the rapid rise of interest in discourse in recent years, the ordinary conversation has come center stage. With it has arrived a need for better tools for investigating the nature of language and its use in everyday life. And central to the modern study of spoken discourse is the problem of transcription.

Discourse transcription can be defined as the process of creating a representation in writing of a speech event, in such a way as to make it accessible to discourse research. Discourse transcription thus encompasses a wide variety of approaches, each of which reflects a particular set of insights into the nature of discourse, as well as a set of views about what in it is important enough to write down and study. Virtually all approaches to spoken discourse make reference to one or another of the subtler aspects of speech, which may include pause, tempo, pitch, stress, laughter, breathing, prosodic units, speech overlap, and other characteristics. Whether such features are seen as relating to the interlocutors' negotiation of the ongoing conversational interaction, to the cognitive foundations of the speaker's verbalization process, or to some combination of these and other factors, they do need to be attended to. The transcriber must learn to listen for, classify, interpret, and notate the discourse features that are deemed significant.

In the past the assumption has sometimes been made that learners can just pick up transcribing by listening to tapes and writing down what they hear. But as discourse researchers have become increasingly aware of the large significance of small cues in speech, and have begun to demand transcriptions which faithfully represent these cues, the need for a more sophisticated and systematic approach has become evident. If discourse researchers are to enjoy data records worthy of intensive analysis, the transcribing process must produce transcriptions which are at once richly informative and reliable. For this, new transcribers need guidance. This need can be addressed in part through written materials like the present handbook, so long as their use is conjoined with a healthy portion of listening, transcribing, and discussing. Though a written description of the transcribing process can never substitute for the experience of listening and transcribing in good company -- whether in a classroom, a tutorial, or a research team -- it can go a long way toward supporting the transcriber's efforts to come to grips with the lively order of conversation.

1.2 The goal of discourse transcription

Every transcription system is naturally shaped by a particular perspective, and a particular set of goals. Key among the general goals that underlie much of modern discourse transcription practice is that of understanding the functioning of contextualized language in use. This kind of over-arching question informs the way the discourse

researcher approaches form, as constituted in the substantive details of speech ranging from pause to prosody to discourse unit structure. All these facets of speaking are put into a transcription for a reason: because they help us understand what is happening in the actual spoken interaction that the transcription seeks to depict.

The goal of discourse transcription, as we see it, is to represent in writing those aspects of a given speech event (as mediated through an audio or video record) which carry functional significance to the participants -- whether these are linguistic, paralinguistic, or nonlinguistic -- in a form that is accessible to analysis. The task is not, as it might appear at first blush, to produce a record of all the acoustic or physical (articulatory) events represented on a tape. The discourse transcriber seeks to write down what is significant to users of language,[1] and for this must draw on a knowledge of the language transcribed, as well as of the culture that goes with it. A pure acoustic record is not sought: for that there exist sound spectrograms, yet we have long since learned that they do not of themselves tell us what we need to know. The acoustic experience must be interpreted, within an interpretive framework which includes the linguistic categories of phonological, morphological, syntactic, and semantic knowledge but extends well beyond these to encompass the sociocultural matrix within which discourse is always embedded. This process of interpretation is highly complex and far from mechanical, drawing heavily on the transcriber's linguistic and sociocultural knowledge as a speaker of the language being transcribed, as well as on his or her judgment in evaluating the significance of the perceived cues. However much the transcriber might prefer to adopt the guise of a simple recorder of fact, and thereby be relieved of analytical responsibility, the interpretive reality of the transcribing process cannot in the end be avoided. The transcriber must squarely face the challenge, and strive to provide the most perceptive, faithful, and revealing interpretive account she can. To achieve this she prepares herself with a deep understanding of the processes that take place in discourse, and of the analytical categories that will most effectively reveal their nature.

At this early stage in the history of spoken discourse studies, of course, the question is certainly not settled as to just which cues in discourse have functional significance for participants, and hence merit transcription. One tries to record those cues which the interlocutors themselves attend to and make use of, in their process of monitoring and participating in the ongoing spoken interaction. But to do this the transcriber must rely on some conception of what speakers can and do attend to. To attempt to write everything (whatever that would be) just in case it might turn out to be of interest to someone some day is not only too altruistic, but also impossible in principle. While speakers are physically capable of attending to a virtual infinity of minute differences in phonetic detail, they are also selective, and attend particularly to those details which have consequences.

And from a practical point of view as well, the transcriber must be selective. A great deal of effort goes into serious discourse transcription, which makes it especially important to keep in view what kind of research questions one expects to ask, once one's labors have come to fruition in the form of a viable transcription. One must weigh the time and effort spent in transcribing against the likelihood that one is going to use the information transcribed. To decide this potentially circular question (how do you know you won't need the information if you don't attend to it?), one must draw on experience -- one's own or that of others -- as informed by one's theoretical perspective and research goals. Deciding what to transcribe, and what not to transcribe, is important not only for economizing effort, but also for focusing on fruitful research questions and the means required to answer them. This is the reason, we believe, that there will always be more than one way to transcribe spoken discourse: any transcription system will reflect its users' perspective and goals (Ochs 1979).

One way to clarify what discourse transcription is is to consider what it is not. Discourse transcription is just one of several approaches to writing down spoken words. It is distinguishable in principle and in practice from the kind of transcription which is done in phonetics, phonology, dialectology, variational sociolinguistics, oral history, court reporting, interview journalism, and other disciplines and practices. For example, a phonetician may seek to capture in writing subtle details of pronunciation which the native speaker is scarcely conscious of, as part of a close study of fine movements in the vocal tract and their acoustic consequences. Usually this kind of transcription is done for isolated words or sentences; to present this level of detail for a whole conversation would not only require a tremendous labor, but would also make it difficult for the discourse analyst to discern within the mass of symbols the overall patterns of discourse. So this well-established way of writing speech is clearly not the model for discourse transcription. But even scholars who typically work with extended discourse may differ greatly in the kind of information they write down and the purposes to which they will put it. Some dialectologists, for example, may transcribe whole interviews or conversations by a speaker of an interesting dialect in fairly close phonetic detail -- but with an eye to capturing those characteristic pronunciations which distinguish this individual's way of speaking from that found in the neighboring valley. Such transcriptions, though they treat extended discourse, are likely to contain too much information in some areas, and too little in others, to recommend themselves as models for the daily practice of discourse analysts. Similarly, variational sociolinguists often transcribe extended interviews -- but they may limit the recording of detailed phonetic information to certain key sounds that have been observed to differ from one social group to another, within the speech of the community in question.

At the other end of the scale, oral historians, because of their focus on the historical content of what was said by their interviewees, will often edit out false starts and other disfluencies when they prepare the final transcript. In the process they remove

information that the discourse analyst would consider to be especially revealing. Court reporters and interview journalists also tend to be content-focused (albeit with differing levels of commitment to verbatim accuracy), and hence to overlook or even actively suppress certain informative characteristics of the speech production process such as disfluencies. Each of these approaches to writing down what speakers say legitimately reflects its practitioners' goals; and to the extent that these goals and practices stand in contrast to those of the discourse analyst, they clarify what the role of discourse transcription must be. Discourse transcription, as we have defined it, creates a written representation of a speech event in such a way as to make it accessible to discourse research. To the extent that discourse research differs in kind from that of phoneticians, dialectologists, variationists, oral historians, and others, we should expect that the transcriptions of discourse researchers will differ from the others' in the information they contain.

But this is not to say that everything discourse researchers write down is necessarily part of discourse transcription. One must also consider where discourse transcription ends, and where other kinds of analytical activity performed by discourse researchers begin. In particular, one must distinguish between transcribing and coding. Discourse analysts will often take a transcription as a starting point, and then incorporate into it a certain amount of additional analytical information. For example, they may classify the turns in a conversation according to the kind of speech act or conversational "move" they constitute; delineate and classify syntactic units according to their structural properties; tag all noun phrases referring to one particular referent; mark phrases as conveying given or new information; and so on. All of these activities go beyond simple transcription to introduce higher levels of interpretative classification, and hence qualify as coding. As a general rule of thumb, one can say that transcription is anything you <u>have</u> to listen to the tape for; if you can mark something without listening to the tape, that's no longer transcription but coding. To take the examples just mentioned, an analyst can generally determine which noun phrases in a transcription refer to the same referent, or which contain new information, by working from a good discourse transcription on paper, without having to go back and listen to the tape again. Hence, this is coding rather than transcription. It is important to keep these two practices distinct. A transcription may come to be used by several different researchers, each pursuing quite different research goals; and each will probably want to have before them a "clean" transcription into which they can introduce their own coding decisions, without having to consider how much of the document consists of other people's analytical decisions at the coding level.

Once we have seen how other people -- from dialectologists to oral historians -- approach the problem of writing down speech, we may come to appreciate how much is shared, within the community of disciplines devoted to spoken discourse as such, in the way of goals and orientations. If transcription systems are necessarily shaped by their

users' goals and perspectives, it should still be possible to frame a system which is general enough, and flexible enough, to accommodate the needs of a wide range of users who share at least a broadly similar orientation. To the extent that certain goals and orientations will be shared by different discourse researchers, there is likely to be a degree of commonality in transcription methods as well.

While the present system necessarily differs in some of its notational choices from the many different systems in current use, this surface difference often simply masks an underlying unity of categories and orientation. In compiling the discourse transcription system described in this volume, we have sought to bring together a set of conventions and procedures which are in the spirit of current discourse research practice, and which can be expanded to meet the present and future needs of a wide range of researchers. To this end, the system seeks to provide standard means of transcribing basic discourse phenomena, while leaving room for innovating new transcriptional categories and conventions as the need may arise (§16.3).

Given the rapid spread of certain technological advances in recent years, there is a practical issue which any up-to-date system of discourse transcription must now address: how to make the most of the microcomputer's potential for working with discourse data. Nothing about the practice of discourse transcription requires using a microcomputer, and indeed some of us still happily transcribe using pencil and paper. But because the microcomputer is so ideally suited to making the process of transcribing and managing discourse data easier, more powerful, and altogether more attractive, most researchers these days want to be able to use this tool as effectively as possible. So this book provides guidance on certain transcription practices that make the exploitation of microcomputers as research tools easier and more effective. (Those who prefer the typewriter or the pen as their writing tool will find that the approach to transcription described below will work just fine with those devices as well, and no change in working style need be made. These readers can simply skip over the occasional computer-oriented tip below.)

1.3 Options

While the field of discourse studies undoubtedly stands to benefit from the existence of some sort of standardized convention for transcription, it also needs the freedom to select among alternatives on occasion. Although much of this volume focuses on providing a unified and consistent framework for transcribing, we also call attention to certain useful options, which fall into three main categories. The first regards notation: a symbol proposed for representing a certain phenomenon in one transcription system may be needed by an individual researcher for a different, perhaps more specialized function, in his or her own transcription practice. In this case it may be necessary to adopt a notational variant, that is, to substitute a different symbol. The second, more profound

case regards the actual categories of analysis. A researcher pursuing a particular theory may prefer to employ, in some domain, a different set of analytical categories, which actually reflect a different analysis of the phenomenon under study -- as when intonation patterns are analyzed in terms of a theory-specific framework of categories. Here the researcher may substitute different category definitions, symbols, or both. Third, there is the question of what degree of delicacy is to be pursued. Not every researcher needs the same level of detail; accordingly, transcriptions will vary with respect to how much subtlety they seek to incorporate. Researchers need to decide which features they consider essential, and where along the continuum of delicacy they want their transcriptions to end up.

For all of these reasons, a transcription system designed for general use should retain flexibility, making it easy for individual adaptations to be integrated within the larger system. In this book, notational variant options and analytical category options are addressed as the occasion arises in conjunction with the presentation of specific transcribing conventions; delicacy options are discussed in some detail in §3.2.

1.4 How to use this book

We hope that this book will be of interest to all who wish to make -- or just interpret -- transcriptions of spoken discourse, whether of English or any other language. Most of the transcription problems dealt with here are ones that many or all students of discourse must confront, to the extent that they concern themselves with (among other things) the substantive details of spoken language in use. For the individual who is approaching the task of transcribing for the first time, we have sought to provide a systematic framework for the classification and notation of discourse phenomena, along with a practical guide to the actual process of transcribing. For the researcher with extensive transcribing experience, we have sought to present a general perspective on the most pervasive issues that arise in discourse transcription, explicated in the context of an overall framework of transcriptional categories. For researchers who may currently use a different transcription system, this work will display one alternative image of conversational events. Since any transcription reflects a point of view, the detailed explication of one transcription system can perhaps serve to stimulate thinking about the reality behind the representational technique.

This volume can be used as a text in a course in research methods; as an accompaniment to a course in discourse analysis; as a handbook for members of a discourse research team; or, outside the classroom, for self-guided instruction and general reference by anyone interested in spoken discourse. Whatever the context, its effectiveness will certainly be increased if it is used in conjunction with practice in transcribing, structured listening to taped conversations, and, if possible, group discussion of conversational transcriptions.[2] But even those who would rather read about spoken

discourse than transcribe it themselves can benefit from a greater appreciation of what really goes on in discourse transcription. The transcribing process and the data representations it produces exert an important influence on the analyses and theories of discourse-oriented researchers. Anyone who would understand these theories and the thinking that lies behind them will gain from an understanding of just what the discourse transcription process really is.

The general layout of the book is as follows. In the remainder of Part One, Chapter 2 gives guidelines for making a good recording as a foundation for one's discourse transcription, and Chapter 3 presents basic pointers on how to get started transcribing. Part Two -- the longest part, comprising Chapters 4 through 13 -- presents a set of transcribing categories and conventions, along with examples and background commentary for each category. Part Three (Chapters 14-19) presents supplementary conventions which cover various advanced or specialized matters. Equipped with a general familiarity with the conventions from Part Two (and optionally Part Three), the discourse investigator can then consult Part Four (Chapters 20-22), which provides a more detailed description of the whole transcribing process, including specific suggestions on how to proceed step by step, how to identify and classify discourse units, and so on. Part Five (Chapters 23-25) takes up a variety of related background issues, including the kinds of information that should be recorded about the speech event, equipment for use in recording and transcribing, and the principles which underlie the design of a transcription system. The Appendices contain various reference resources: for example, they present extended samples of conversational transcriptions, sample forms for gathering information about the speakers and the speech event, and checklists of transcribing procedures. Finally, following the notes and references, an index is provided to the transcription symbols presented in this book.

Readers who wish to stick to just the basics of discourse transcription may prefer to focus initially on Chapters 1-6, 8, 13, and 20. These chapters cover most of the key features needed for a basic discourse transcription, in addition to describing the actual transcription process. Once the learner has gained experience and perspective in the practice of discourse transcription, he or she can always return to the more advanced features in the rest of this volume.

CHAPTER 2. A GOOD RECORDING

The first requirement for a good transcription is one which is often overlooked: a good recording. Good transcribing takes time,[3] so one might as well do it with a recording that is worthy of one's efforts. There are two key considerations for making a good recording: interactional naturalness, and good sound. (With videotapes, a third consideration is an informative picture.)

2.1 Naturalness

The first and most important consideration is to record a speech event which constitutes a naturally occurring interaction. One should start out with a natural context for interaction, in which the talk takes place for its own sake rather than for the benefit of the investigator. One of the least productive things the discourse data seeker can do is to say, "I need some conversation -- could you two please just talk to each other while I turn this machine on?" If this does not produce total silence, the nervous laughter and self-conscious talk will not be of much greater value to the researcher. Moreover, forcing a conversation is quite unnecessary. People talk all the time, for their own good reasons -- it's just a matter of catching them at it. Recording something that would have happened anyway, had the recorder not been there, requires a certain amount of sensitivity to cultures, persons, and interactions. It also requires some patience with the world. The attitude is akin to that of the wildlife photographer stalking a subject: be alert, and wait for the right moment to come. These days tape recorders (and even some video cameras) are small enough that it is easy to just carry one around, waiting for some good talk to happen in one's presence. The recording itself should be carried out in a way that injects as little self-consciousness and artificiality into the situation as possible. One should use unobtrusive recording equipment (§24), and avoid making a big fuss out of placing the microphone, monitoring the recording level, and so on. If the equipment is set up before the recording begins, the speech event can proceed in its own way, with a minimum of disruption for technical reasons.

There is of course a place in discourse research for the recording of controlled interactions, as in experimental settings where certain kinds of control are achieved at the expense of some naturalness. In this kind of work the loss of naturnalness must be justified by something gained in return, such as the opportunity to make systematic comparisons of parallel narratives across speakers of different languages (as in the Pear Film project of Chafe (1980b), or the Frog Story studies of Slobin and Berman (forthcoming)). A purely naturalistic observational stance like that which characterizes the conversational examples found throughout this book cannot by itself provide this kind of research opportunity. But even in controlled contexts, it is important to strive for the most natural situation possible under the circumstances (Du Bois 1980). Once the tradeoffs involved are recognized, it is possible to appreciate that both kinds of data can contribute to the goal of understanding language. Although natural conversation will be

emphasized in this volume -- because it represents the most challenging, and perhaps the most rewarding, kind of data -- the transcription methods and conventions described will also serve well for speech from controlled contexts. Obviously, they are likewise effective in such naturally formal or self-conscious contexts as political speeches, classroom lectures, sermons, committee meetings, counseling interviews, and other natural speech events with their own uniquely interesting character.

2.2 Sound

The second consideration, which unfortunately is neglected all too often, is to obtain a good, clear sound on the recording. The importance of good audio quality is not hard to appreciate. If the audiotape is noisy or unclear, the transcriber will be forced to spend an inordinate amount of time rewinding the tape and straining to catch the noise-obscured words. Moreover, the resulting transcription is likely to contain a needlessly high proportion of inaudible stretches or uncertain and unreliable guesses. This of course does not make a good foundation for discourse research. To make a good recording of conversation in natural contexts, the most important requirements are, in order of importance:

(1) Minimize background noise. Become aware of noise in the environment. Microphones are unfortunately not as selective as the human ear: they pick up all sounds in the environment, even the ones that speech event participants unconsciously filter out. If possible, turn off the radio, the television, and even the refrigerator, or pick an interaction that is taking place where these noise-makers are not present. Avoid recording around traffic, motors, other nearby conversations, barnyard animals, etc. Of course one cannot always eliminate all background noise, especially if it is a natural part of the context where one is recording. But reducing or avoiding background noise is probably the single most important factor in producing a natural tape recording that is easy to hear and transcribe accurately.

(2) Place microphones effectively. Place the microphones close to, and oriented toward, the target speakers. If a microphone is close to a speaker, it will pick up more sound from that speaker and less of any distracting background noise in the environment.

(3) Use the right recording equipment. The most effective equipment for discourse research is unobtrusive and of reasonably good quality. It need not be especially expensive. (For a discussion of equipment for recording and transcribing, see §24.)

By paying attention to the need for naturalness and good sound, the discourse researcher lays the foundation for an accurate and worthwhile transcription, as well as a more pleasant transcribing experience.

2.3 Videotape

For researchers who use a video camera to record an interaction, a third consideration comes into play: the need for an informative picture. This involves orienting the camera so that the speakers' bodies -- especially their faces -- can be seen as clearly as possible. It also involves questions of lighting, camera stability, and other issues affecting image quality, as well as techniques for minimizing the obtrusiveness of the apparatus and its operator. For guidance on these issues as well as a frank and insightful discussion of the difficulties and benefits in using videotape for studying conversational interaction, an excellent source is Goodwin (1981:40-46).

Because videotape offers visual as well as auditory information about an interaction, it is obviously called for in certain kinds of discourse research, such as research on the role of eye gaze in conversational interaction. But videotape can introduce problems of its own, due to its more cumbersome, single-perspectived, and intimidating apparatus, which may cause its objects to become more self-conscious. While the benefits of videotapes in certain areas assure them an important place in discourse research, audio recordings also have their advantages, not the least of which is the unobtrusiveness with which they can be gathered. The distinct potential offered by each medium will undoubtedly continue to assure both important roles in discourse research for a long time to come.

The present book focuses on the transcription of sound, which is essentially the same whether one is using audiotape or videotape. Even with a visual medium like videotape, the importance of striving for a high quality sound, as well as a high quality picture, remains paramount. (For further discussion of these issues, see Goodwin (1981).)

CHAPTER 3. GETTING STARTED

3.1 How to start transcribing

Learning to transcribe involves doing -- listening and writing -- but this must go hand in hand with learning what to listen for, and how to hear, categorize, interpret, and notate it. With a good recording of a natural conversation in hand (§2), the next step is to listen for and write down the basic facts about what is taking place -- in the process answering a variety of implicit questions. What are the words? Who spoke them? Where does the stream of words cleave into distinct units? Where do the speakers alternate with each other, and where do they overlap? When does the movement of pitch suggest finality, and when continuity? Where do the speakers pause? Laugh? Cough? Shout? Whisper? On one hand the transcriber needs to learn some symbols in order to be able to write any of this down; but on the other hand the best way to really learn the symbols is to actively use them to transcribe. To get things off the ground, at this point we can provide at least a brief thumbnail sketch to show the novice how to start transcribing. A more complete description of the transcribing process will be taken up in §20, after the various transcription conventions have been fully introduced in §4-18.

The transcribing begins with a good recording and a blank sheet of paper (or microcomputer screen). As the transcriber listens and re-listens to the tape, the transcription takes shape slowly, gradually filling in more and more of the picture. The first thing jotted down is the words uttered, perhaps one or two lines of speech at a time. Within a few more moments of listening, a speaker's name is attached to each line to indicate who uttered it. Listening again, the transcriber tries to capture the rhythms in the flow of speech by using space on the page -- one spurt of speech, or "intonation unit", to a line, with a break to a new line for the next spurt. Gradually it becomes clearer where words uttered by one speaker were simultaneous with those of another speaker, and with a little more listening the transcriber discerns just where the overlapping begins and ends, and notes it down using the appropriate symbols.

By this point the transcriber has pretty well fleshed out the general outlines of the speech event, in a basic transcription which indicates the words and who spoke them; the structure of turns at speaking and of speech overlap; the division of the stream of speech into intonation units; the general intonation contour of each unit; and the location and approximate duration of pauses between words. Already this basic transcription is sufficient for many research purposes; and it provides a good initial goal for the novice transcriber.

If more detail is needed, the transcriber can later return to add information about such features as accentuation, lengthening of sounds, direction of pitch movements, breathing and other vocal noises, special voice qualities, and other such features. But for starters, the novice transcriber will do well to stick to the basics -- what is called a

"broad", as opposed to a "narrow", transcription. This distinction is taken up in more detail in the following section.

Before any of the above transcribing actually begins, there are a few preliminaries that need to be taken care of (§20.2). In order to maximize the usefulness of one's recording, background information about the speech event and the speakers should be systematically documented (§23). And for some kinds of research it may be necessary to have speakers sign a form giving the researcher permission to use the tape recordings of conversations they participated in (Appendix 6). And rather than submitting one's original tape to the rigors of transcribing, a copy should be made, and the original placed in a safe location.

A word about tape recorders is useful at this point. While small tape recorders (e.g. "walkman" size) are very useful for making recordings of conversations in natural settings (§24.2), the rigors of the actual transcribing, with its frequent rewinding, can easily destroy their small motors. It is best to do one's transcribing on a full-sized tape recorder with a sturdy motor -- preferably, the kind used by secretaries for transcribing dictated tapes (§24.1).

3.2 Delicacy: Broad or narrow?

As noted earlier (§1), transcription practices vary according to what will be done with the transcription. One source of such variation regards the level of detail required. Sometimes a researcher needs a great deal of precise information about, say, special voice qualities, while at other times the same researcher may forego this level of detail, being satisfied to capture simply the general outlines of the spoken interaction. Transcriptions which respond to these differing needs can be classified as broad or narrow. A broad transcription is one which represents at least the fundamental features of spoken discourse, but does not seek to represent all the features and discriminations which are possible. A narrow transcription tries to represent more features and discriminations. For example, a broad transcription might omit indication of loud (forte) and quiet (piano) speech, where a narrow transcription might indicate this. Naturally this is a matter of degree, and transcriptions will vary along a continuous scale from broad to narrow.

Which discourse features are broad and which are narrow? Or more properly speaking: which features must be included in any broad transcription, and which will be expected only within the more refined domain of narrow transcription? While such questions can only be answered with reference to the goals of the asker, it is perhaps useful to illustrate one perspective on the question. Consider the scale of discourse features presented in Figure 1.

Items which are listed toward the top of the scale in Figure 1 represent fundamental discourse features which in our view should be included in any transcription, even the broadest. Features listed toward the bottom, on the other hand, will often be ignored in all but the higher delicacy, narrow transcriptions. Note that the ordering in Figure 1 is by groups of features (clusters separated by a blank line). Thus the items in the first group (1-9) rank before items in the second (10-14), which in turn rank before items in the third (15-21); but no great significance is ascribed to the ordering within each group (e.g. within items 1-9).

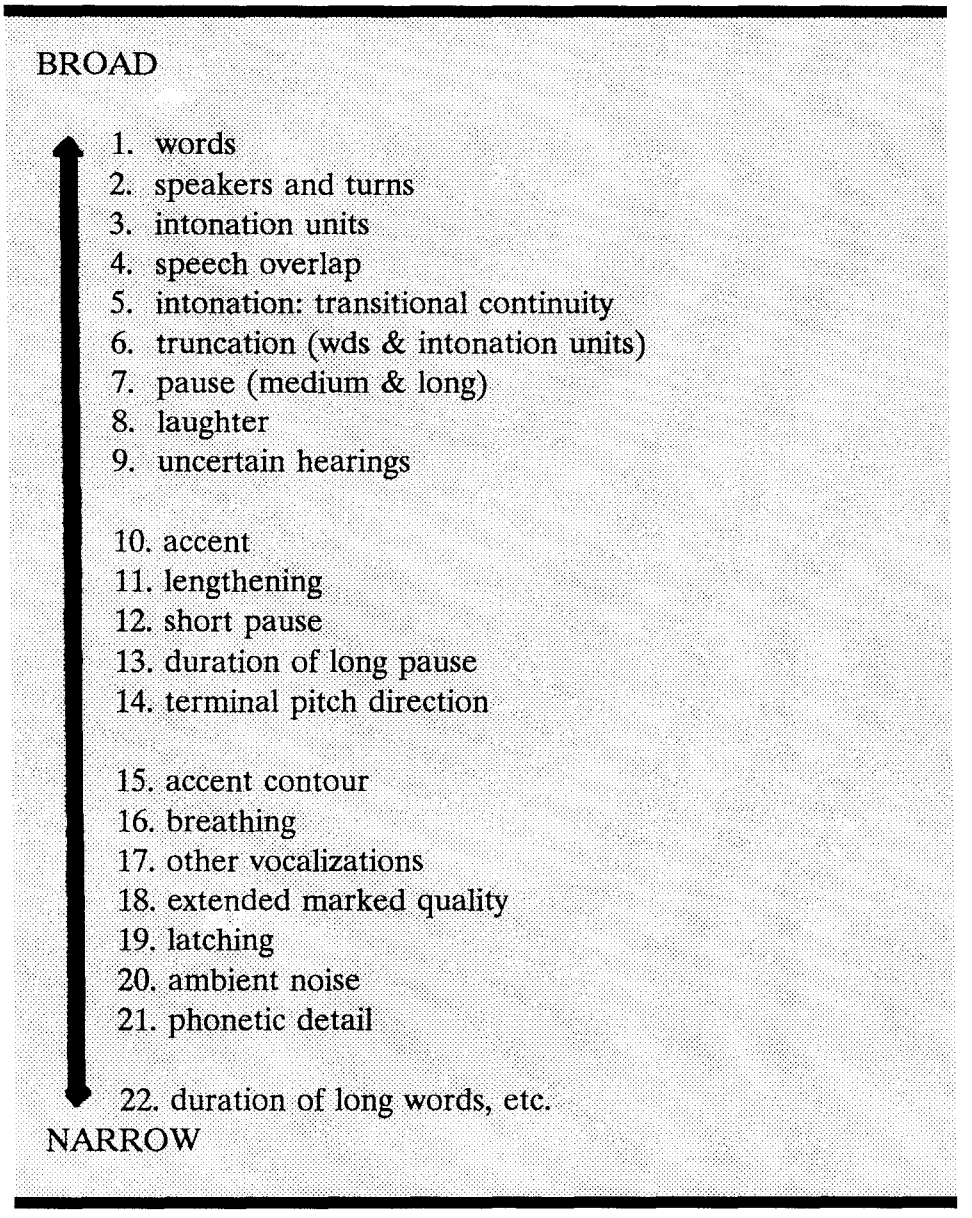

Figure 1. Broad vs. Narrow Features

It goes without saying that some of the categories listed in Figure 1 could be shifted up or down the scale, according to the importance attached to them within a particular theory -- or even within a particular conversational interaction. Thus for some researchers, terminal pitch direction will be considered a fundamental discourse feature, to be included in any transcription, even the broadest; while for others it will be ignored even in transcriptions which are otherwise quite narrow (e.g. those containing notations

for breathing, phonetic detail, and so on). Similarly, laughter and breathing will migrate up or down the scale according to the researcher's interests and assumptions. Thus, any ordering of items must be taken with a grain of salt. The ordering shown here represents just one way to think about the broad and the narrow; every discourse researcher's list will no doubt differ in some degree.[4]

The importance of a particular feature may even vary from one conversation to the next, or from one occurrence to the next. For example, an ambient noise that takes place in the next room is generally of marginal significance, but sometimes -- if the noise is of glass breaking or a doorbell ringing -- it may become crucial to understanding the subsequent interaction. Similarly, even a broad transcription which did not aspire to indicate every time a speaker coughed would not likely omit a cough offered as the sole response to an invitation. Some coughs are more important than others, and even the broadest transcription should reflect this. What this means is that the transcriber must always use a certain amount of judgement in deciding which features are to be noted, and which can be glossed over, at any level of delicacy. The decision will take into account how significant and revealing the phenomenon in question is for the interaction and for the discourse production process, as informed by the transcriber's research goals and theoretical framework.

3.3 Delicacy conventions in this book

In order to avoid overloading the reader with a host of new symbols to learn all at once, we have tried to keep the examples in this work simple by introducing one new symbol at a time. While we believe that a fairly narrow transcription will be the most powerful tool, and the best choice, for many kinds of discourse research, for pedagogical purposes the transcription illustrations in the main body of the text are kept fairly broad, with detail added only as needed. Transcriptions will always display the most basic "broad transcription" features (items 1-9 in Figure 1 above), but other features will be displayed only when relevant to the item currently under discussion. When a particular discourse feature is being illustrated, the transcription will display not only that feature but also any closely related features: in general, all distinctions introduced within a particular chapter will be marked in every example in that chapter. For example, in the chapter which introduces accent and lengthening (§9), all examples display primary and secondary accent as well as lengthening. Similarly, in the chapter on pauses (§8), all transcriptions show the distinction between short, medium, and long pauses.

In this way the learner, by encountering new and more precise symbols against a background of familiar broad transcription symbols, can gradually master the full range of categories needed for transcribing at any desired level of precision. To allow for more detailed scrutiny of the conversational samples cited, a full narrow transcription of every example cited in this book is given in Appendix 2.

PART TWO:

TRANSCRIPTION CONVENTIONS

This part presents a set of basic categories, symbols, and conventions for discourse transcription. For each symbol in this system, a brief explanation of usage is given, illustrated with examples drawn from transcriptions of actual conversations. Where appropriate, we comment on why the discourse feature in question should be attended to. We also comment on relevant details of orthographic convention or style such as the placement of spaces (§4.3), in style notes set off from the main text.

A word about the examples is in order. Every example cited is drawn from an actual conversation that has been transcribed and checked by the authors.[5] Although the examples cited in the body of the text are given in a fairly broad transcription (§3.2), a narrowly transcribed version of each is presented in Appendix 2. For brevity's sake the examples for the most part represent short stretches of discourse without a great deal of textual context (co-text), so that the portions cited are not always whole sentences or whole interactions. But each line that is cited is whole -- that is, each intonation unit is presented in its entirety -- and no omissions have been made within the stretch of transcription that is cited. Due to typographical necessity, in a handful of cases an unusually long intonation unit had to be broken over two lines; the second half of each such intonation unit has been aligned flush right to make it clear that it is a continuation rather than a separate intonation unit (§19.5). Whenever a new notational convention is being introduced, the symbol is written in **boldface** letters in the illustrative examples for that section, in order to highlight the feature in question. This use of boldface is for illustration purposes only (§19.2), of course, and would not ordinarily appear in an actual discourse transcription.

CHAPTER 4. UNITS

One of the most striking, if elusive, features of conversation is its division into recognizable units at various levels. Any discourse transcription should indicate at least the most fundamental of these. This chapter presents symbols for boundaries between units of various kinds, including the intonation unit and the word unit, as well as truncated (uncompleted) variants of these units. (The turn, which of course is a fundamental unit of conversational discourse, is treated in conjunction with the speaker identification label, §5.1.)

4.1 {carriage return} Intonation unit

A carriage return is used to indicate the end of an intonation unit (in effect, the boundary between two intonation units). Thus each intonation unit appears on a separate line.[6]

Roughly speaking, an intonation unit is a stretch of speech uttered under a single coherent intonation contour. It tends to be marked by cues such as a pause and a shift upward in overall pitch level at its beginning, and a lengthening of its final syllable. For a fuller discussion of intonation units, the cues which mark them, and the methods for identifying them, see §21, Chafe (forthcoming), and Cruttenden (1986:35-45).

No space appears between the final character of the line and the carriage return.

{4.1.1 DOOR}

```
A: Well,
   this is in ... bits and pieces,
   but I was coming down the stairs,
   and he was there talking,
   to this lady,
```

{4.1.2 AESTH}

```
S: That's interesting,
   I mean,
   th- that you should pair the word aesthetics,
   ... with advertising.
J: Yeah.
```

{4.1.3 DOOR}

```
A: for a new door,
   and door jambs,
   hardware,
   stain,
   paint,
   all the stuff that you need,
```

4.2 -- {2 hyphens} Truncated intonation unit

A double hyphen (--) indicates that the speaker breaks off the intonation unit before completing its projected contour.

This truncation occurs primarily in cases where a speaker utters the initial portion of a projected intonation unit, but abandons it before finishing -- that is, in a false start. The double hyphen is not intended to represent the case of a unit which appears incomplete when measured against the canons of normative grammar. Intonation units which do not constitute complete clauses are of course commonplace, and usually quite normal -- and "complete" as intonation units. For example, conjunctions (and) and particles (well) frequently appear as complete intonation units marked with a comma at the end, which signals "continuing" intonation (§6.2) -- a kind of incompleteness, if you will, but one which is distinct in principle from the truncation signaled by double hyphen. The unit marked with a comma typically constitutes (apparently) all that the speaker projected to say within the current unit, while in the unit marked with a double hyphen the speaker projected to say more within the current unit, but abandoned some portion of the projected utterance. Truncation is thus measured not against normative notions of clause completeness, but against the speaker's presumed projection for the current intonation unit.

> The double hyphen ordinarily appears as the last symbol of the line it appears in. It is separated by a space from the word that precedes it.

{4.2.1 FORCES}

```
A: ... But he's --
   He's decided he wants to be called Rock.
```

{4.2.2 J&J}

```
J: ... And he --
   and he kicks my feet apart,
```

{4.2.3 CARS}

```
D: ... you know,
   to get leads,
   and talk --
   communicate with people on the phone.
```

{4.2.4 DOOR}

```
A: ... So I- --
   I- --
   I get in the car,
```

{4.2.5 FORCES}

```
A:  And there's --
   ... Nothing --
   Nothing with two tee's in it,
   ... does he get right.
```

{4.2.6 RANCH}

```
R: He doesn't have any --
   ... He doesn't know what's going on in this world.
```

Note that for every intonation unit that is complete, there should be some representation of its intonation contour class (§6). In other words, virtually every complete (non-truncated) intonation unit will have some intonation contour symbol (comma, period, question mark) at the end of the line.[7] But if an intonation unit is not marked with a comma, period, or question mark, it will in general have a double hyphen to indicate truncation.

One reason for marking the truncation of intonation units overtly, rather than just leaving them with no punctuation symbol at the end, is to help ensure transcript reliability by encouraging transcribers to commit themselves to some statement regarding the unit's intonation contour, or lack thereof. Otherwise, the reader of the transcription will not know whether a missing intonation symbol is due to the speaker's truncation or the transcriber's oversight.[8]

4.3 {space} Word

The space character is used to separate words, as in normal orthographic convention.[9] A space also separates certain other notations, such as those for laughter, pause, inhalation, etc.

> For searching one's discourse data with a computer, it is useful to follow consistent conventions for the use of spaces. In general, for discourse phenomena which can be thought of as temporally sequenced events in the stream of discourse -- such as a laugh, a pause, or an inhalation occurring between two words -- the notation for the phenomenon is written with surrounding spaces, as a sort of separate "word". For phenomena which are simultaneous rather than sequenced -- such as lengthening or accenting of a syllable, speech overlap, and so on -- the notation is generally written without intervening spaces. This is only a general rule of thumb, however, since other considerations such as readability may call for the insertion of spaces. Style notes

for the individual notations introduced below will comment as necessary on the placement of spaces.

In the following example, each of the space-delimited strings (including the three-dot notation for pause) can be treated as a "word", if this is desired for research purposes.[10]

{4.3.1 AESTH}

```
S: Hm.
   Hm.
   ... Okay.
```

4.4 - {hyphen} Truncated word

A single hyphen (-) indicates where the speaker has truncated a word, leaving the end of the (projected) word unuttered.

Truncation is often cued overtly via word-final glottal constriction, but not always -- either phenomenon may occur independently of the other. Other truncation cues may include segment shortening, slight rhythmic discontinuities, etc. (Where it is deemed relevant, the precise pronunciation of the truncated word can be written using phonetic notation (§12.1).)

The single hyphen is written at the end of the word or word fragment, with no space intervening.[11]

{4.4.1 J&J}

```
J: ... You know how they do that,
   so you can't s- ha- --
   you don't have any balance.
```

{4.4.2 J&J}

```
N: and I came up behind him,
   and I wa- --
   I was hugging him,
   while he was shaving.
   ... And as I was hugging him,
   ... he just sli- dropped.
   ... slipped from my hands.
   to the floor.
   he like fainted.
```

Note that even if none of the segments (phonemes) of a word is entirely absent, a truncation may still be involved, if the final segment is cut off before it reaches the full duration it would have in a typical pronunciation. For example, if the word the is

pronounced so that the final vowel is interrupted before it reaches half the duration it normally would reach, this warrants use of the word truncation symbol (the-).

{4.4.3 DOOR}

A: But it was --
... till five- --
I remember,
five o'clock,
I finally got the door in,

This symbol is not used to mark words which have been pronounced in an abbreviated fashion as part of an informal speech style, etc. Truncation of a word is measured not against canons of "normal" or "standard" pronunciation, but against the speaker's projected pronunciation for the current word. Only when a speaker projects pronunciation of a word and then fails to complete that projected pronunciation is the phenomenon of word truncation involved.[12]

CHAPTER 5. SPEAKERS

This chapter provides notations for indicating which speaker is speaking, and for describing when two speakers overlap.

5.1 : {colon} Speaker identification and turn beginning

To identify the speaker of a given turn in a conversation, a code or a proper name (written all in capital letters) is inserted at the beginning of the turn, followed immediately by a colon.[13]

> The speaker code is written as the first item in its line (except for line numbers, if these are used), that is, it appears to the left of all the words uttered by the speaker. Successive lines uttered by the same speaker are left unmarked, and are simply indented. No space appears before the colon, but at least one space or tab is inserted after it to indent the words that constitute the speaker's utterance. The transcription is easier to follow if the beginnings of all utterances are all aligned vertically, using as many spaces or tabs (consistently used) as needed.[14]

{5.1.1 DOOR}

```
A: Now that we have the [side door] fixed,
B:                      [That's kind of] --
A: he could.
B: Yeah,
C: Yeah.
D: ... Sure.
```

While transcribers often assign prosaic codes like "A" or "B" to their speakers, the reader tends to get a more vivid impression of who the participants are if their utterances are tagged with personal names, which are always more memorable. The name should in general be a made-up name, since in any transcription destined for public presentation, privacy considerations would ordinarily preclude use of the speakers' actual names. The choice of names becomes especially important if speakers use names to refer to each other during the course of a conversation -- in which case, obviously, the made-up name in the speaker identification label should match the made-up name in the spoken reference, so that all relevant persons -- whether they are speaking or merely spoken about -- are clearly distinguished. If possible, made-up names should retain some flavor of the actual original names.

{5.1.2 AESTH}

JEFF: That's all it does.
It doesn't [even] reach a conclusion.
SARAH: [mhm],
JEFF: The conclusion is up to you.
SARAH: mhm,
JEFF: in going out to --
... to buy the thing.
SARAH: Hm.
Hm.
... Okay.

{5.1.3 AESTH}

SARAH: He would be just about **Ben Chang**'s age.

When it is unclear which of several speakers on a tape is responsible for a particular utterance or noise, the letter X is used to label the unidentified speaker.

{5.1.4 J&J}

X: ((BLOWS_WHISTLE))

Note that the stretch of speech between two different speaker labels constitutes, roughly speaking, the discourse unit known as a turn. The picture is somewhat complicated, however, by the listener's interjection of continuative backchannel responses (mhm, yeah, etc.) into a speaker's extended turn. Although a backchannel response must for clarity's sake bear a speaker label, as must the two sections of the turn it occurs within, one does not want to be misled by this practical consideration into overlooking the essential continuity of the extended turn unit across such fleeting interjections.[15]

5.2 [words] Speech overlap

Square brackets are used to indicate the beginning (left bracket) and the ending (right bracket) of overlap between the utterances of two speakers. One set of brackets is inserted surrounding the first speaker's overlapping utterance portion, and a second set of brackets surrounds the second speaker's overlapping portion. This notation signals that the two bracketed utterance portions were uttered at the same time.

> For the sake of reading clarity, the second speaker's left bracket is aligned vertically under the first speaker's left bracket (by inserting as many spaces as needed). This alignment of space on the page helps to give an iconic sense of the temporal alignment of the two overlapping utterances. Note that only the left bracket need be aligned vertically; for reasons of clarity and practicality it is not advisable to force the right bracket to do so.

{5.2.1 DEPR}

```
B: ... I remember,
   ... I used to help Billy,
   and I'd get twenty-five cents a week,
   ...
R: [A week].
B: [Twenty] --
```

{5.2.2 DEPR}

```
B: ... They were kind of scary.
   ...
   the [gypsies].
R:     [mhm],
```

{5.2.3 DEPR}

```
B: Clint is still screaming about that,
R: ... [Because he wanted the stamps],
B:     [all those stamps],
   ... Mom let Ted Kenner have.
```

{5.2.4 FORCES}

```
M: ... It's that young,
   [pale],
A: [Yeah].
M: guy with the dark hair.
```

Wherever several overlaps occur in rapid succession within a short stretch of speech, distinctive combinations of brackets (e.g. single brackets [ ] versus double brackets [[ ]]) may be needed to make clear what is overlapping with what. This will be necessary whenever two distinct cases of overlap occur without at least one line of non-overlapped text between them, since if only one kind of bracket were used (e.g. just single brackets) the reader could be misled to think that the first and second bracketed portions (marked with single brackets) were simultaneous with the third and fourth bracketed portions (if also marked with single rather than double brackets). Because the single-bracket versus double-bracket contrast is sufficiently explicit and robust to survive accidental reformatting, it should be called on whenever there is the possibility of confusion due to multiple overlaps occurring in close succession. (The vertical alignment of overlaps using inserted spaces is a "fragile" notation (§25.7) -- which can shift accidentally when word processing margins or tabs are changed -- so transcriptions should never rely on vertical alignment alone.)

> If two overlaps occur with less than one full line of non-overlapped text between them, the second overlap should be marked with double brackets ([[ ]]). After one full line of speech containing no overlaps -- when there is no longer danger of confusion -- the use of double brackets can be

dropped, and single brackets resumed. If distinctive bracketing is needed again later in the same text, the single and double brackets should be used in alternation. Whenever no other overlaps occur nearby, it is best to use just the single brackets alone. Square brackets are written without any space between them and the words they enclose.

{5.2.5 AESTH}

```
J: [Yeah].
S: [Which] colors ... all of the communication,
   [[after]] that.
J: [[Yeah]].
```

{5.2.6 DEPR}

```
B: ... But I thought Mom was raising ... hemp,
   or,
   ... [something] one time.
R:     [What]?
   ...
   [[Hemp]].
B: [[Hemp]].
```

{5.2.7 FORCES}

```
A: But,
   [the thing ab-] --
B: [The special] forces.
A: Yeah.
   ... [But the thing about him] --
B:     [This place is getting] weird.
```

{5.2.8 LUNCH}

```
R: ... He had pneumonia.
   [The second week] he had pneumonia,
M: [Eventually].
R: the first week,
L: Really?
R: apparently [he just had a virus],
M:            [He had a X virus].
L:            [I didn't] --
R: [[or either that or]] --
L: [[Oh,
   I thought that they didn't know what]] he had.
   ... He had pneumonia?
M: Yeah he eventually [developed it].
L:                    [Is that the first time] he's ever had pneumonia?
```

When there are many overlaps in very close succession, it may occasionally be necessary to use more than two kinds of distinctive brackets. For example, triple brackets ([[[ ]]]) or brackets indexed with numbers ([2 2]) can be used to create

distinctive bracketing. Thus, where three overlaps occur in close succession, the third pair of brackets could be indexed with the number 3, affixed to the inner side of the left and right brackets ([3 3]). (The numeral one ("1") is avoided because it is easily mistaken for the lowercase letter "l", or even the capital "I" in many typefaces; numerals 2 through 9 engender no such confusion.) When there are many overlaps in close succession, it may occasionally be necessary to use higher numbers for indexing (4, 5, etc.). However, numbering can almost always be avoided by alternating between single and double (and occasionally triple) brackets.

> When brackets are numerically indexed, it may be easier to read this notation if a space is inserted between the numbers and the words they enclose.

{5.2.9 DINNER}

```
B: Nobody wants [to leave].
A:              [They don't] move [[out]].
S: [[Berkeley]] just keeps [3 getting 3] bigger and [4 bigger 4].
B:                         [3 Yeah 3],
                                                    [4 Yeah 4],
   ... Well it's amazing to me.
```

Occasionally it may be useful to employ distinctively marked overlap brackets (e.g. doubled) even when no other overlaps occur nearby, in order to help the reader follow a complicated conversational exchange.

{5.2.10 HYPO}

```
G: ... Well,
   the worst [[thing I ever had,
K:           [[He's a medical miracle]].
G: was brain]] fever,
   when I <X had X> proposed to her.
K: ...  From which you haven't recovered.
```

If a given speaker's overlap portion continues onto a second intonation unit, this new intonation unit should begin from the left (text) margin -- as with any ordinary, non-overlapping intonation unit.

{5.2.11 AFRICA}

```
B: I've done [that .. ^lots of 'times].
A:           [We=ll,
   in the ^game] 'park,
```

Often enough the second speaker in an overlap begins to speak in the middle of a word being uttered by the first speaker. In such cases it is useful to keep track of precisely where the overlap begins, because this may carry significant information about how the speakers are responding to each other in "real time" (Schegloff, p.c.). To

indicate this, the bracket is placed within the word at a point corresponding to the overlap.[16]

> When a bracket is written inside a word, no space should be inserted -- whether the bracket is indexed or not -- since any space would break up the word and cause it to appear as two separate words.

{5.2.12 HYPO}

```
K: ...(1.2) They just represent,
   each of the days,
   that the oi[l ... continued to burn].
D:             [They don't have a word,
   there's no word]?
```

{5.2.13 HYPO}

```
G: ... Then I had,
   uh,
K: Cytomegalo[virus],
G:           [Don't] forget,
   cytomegalo[[virus]],
K:           [[@]]
D:           [[What is that]].
```

CHAPTER 6. TRANSITIONAL CONTINUITY

In speech, important information is carried in the speaker's intonation, encompassing fluctuations of pitch and other cues. While a discourse transcription can never capture a complete representation of the infinite variety of possible intonation contours, it can nonetheless provide a useful representation of at least the more critical intonational information, by distinguishing broad classes of contours. It is useful to distinguish here between functional and phonetic analyses of intonation, each of which has its place in discourse transcription. The symbols in this chapter deal with the functional analysis of intonation, while a set of symbols which address the phonetic analysis of intonation will be introduced in §7 and §9.[17]

The system of categories presented in this chapter seeks to identify in general terms one aspect of intonational function, that of marking "transitional continuity". When a speaker arrives at the end of an intonation unit, poised to continue on to the next -- or not continue -- the intonation contour usually gives a fairly clear indication of whether the discourse business at hand will be continued, or has finished. This is "transitional continuity": the marking of the degree of continuity which occurs at the transition point between one intonation unit and the next. The scope of the the continuity -- the question of what it is that is being continued, or finished -- is open-ended: a "final" contour may apply to the end of a sentence, the end of a turn, or the end of some other discourse unit. While it may be possible to make finer discriminations in transitional continuity within the broad class of contours covered by each transitional continuity symbol, the distinctions between "final", "continuing", and "appeal" (see below), at least, seem to be basic.

While the intonation contour classes in this set are defined in terms of their function, each category will be more or less consistently realized by a specific form: a specific phonetic contour, or a set of contours, where each member of the set is determined by its context. The range of phonetic realizations for a given transitional continuity class will differ somewhat from one language to the next, which is one reason for using functionally based categories: they help to ensure that similar intonational functions will be written similarly across languages, facilitating comparison even where phonetic realizations differ. Preliminary observations in a limited number of languages suggest that, remarkably, all languages are likely to make intonational distinctions between the transitional continuity classes presented in this chapter, though their phonetic realizations may vary.

The symbols used to represent transitional continuity are drawn from those employed in written punctuation. Although using commas and periods in ways that are reminiscent of their function in written language does make it easier to remember them, it also means that the transcriber must guard against slipping into habits of thought associated with written punctuation. In discourse transcription as presented here, the

punctuation symbols comma, period, and question mark always represent intonation classes, and never grammatical or semantic structure per se.

> The transitional continuity symbol is ordinarily written after the last word of the line it appears in, with no space intervening, as in the normal orthographic practice for punctuation symbols.

6.1 . {period} Final

Period (.) indicates a class of intonation contours whose transitional continuity is regularly understood as final in a given language. For English and many other languages, this means primarily (but not exclusively) a fall to a low pitch at the end of an intonation unit. It is important to recall that, since this symbol represents an intonational category rather than a syntactic one, it can appear in places other than the end of a sentence. Conversely, it need not appear at the end of every (normative) sentence.

{6.1.1 AESTH}

J: ... You're not saying something,
you're doing something to people.

{6.1.2 AFRICA}

A: You don't see them very often.

{6.1.3 DEPR}

R: For what.
B: ... They make rope of it.

6.2 , {comma} Continuing

Comma (,) indicates a class of intonation contours whose transitional continuity is regularly understood as continuing, in a given language. The contour is often realized in English as a slight rise in pitch at the end of an intonation unit (beginning from a low or mid level), but it may have other realizations as well, each of which presumably has slightly different pragmatic implications. One type of continuing contour is realized by a terminal pitch which remains level; another, by a terminal pitch which falls slightly, but not low enough to be considered final.[18] In practice the comma represents a broad cover symbol for a variety of nonfinal contours (i.e. the set of contours which are neither final, appeal, nor truncated), whose various members may be distinguished to some extent by their terminal pitch direction (§7).

{6.2.1 RANCH}

R: If you think about it,
yeah,
if it rains a lot,
the horse is always wet,
and it's always moist,
it's always on something moist,
... Sure it's going to be softer.

{6.2.2 CARS}

D: I have my own telephone,
my briefcase,
I can work on clients,
all the time,
You know,
call them on the phone,
and uh,
... take a lunch,

{6.2.3 J&J}

J: And I looked over,
... into the street,
and saw this cop car,
going along,
right ... next to me,
you know,
like five miles an hour.

6.3 ? Appeal

The question mark (?) indicates a class of intonation contours whose transitional continuity is regularly understood as as an appeal, in a given language. (For English, this is generally realized by a marked high rise in pitch at the end of the intonation unit.) "Appeal" here refers to when a speaker, in producing an utterance, overtly seeks a validating response from a listener. The most common type of appeal in this sense is a yes-no question. But not all yes-no questions are said with the appeal contour, and in such cases the question should not be written with a question mark. Conversely, the appeal contour may be used where there is no yes-no question; in such cases, the question mark is written. For example, a speaker will often check to see if listeners remember a particular person by uttering that person's name with an appeal contour (high rising pitch), where the response sought from this appeal may be nothing more than a slight nod of recognition. In such cases, the proper name will be written with a question mark following it.

It is important to emphasize that the question mark is not used for a grammatical question uttered with intonations other than the appeal contour, such as a declarative contours. Thus, there will occur grammatical questions (including some yes-no questions)

which do not carry this type of contour; and conversely, the question mark will appear in units which lack the morphosyntactic structure of a (normative) question.

{6.3.1 DEPR}

B: ... But were they rattle snakes?

{6.3.2 DEPR}

B: She never raised hemp?

{6.3.3 COMPAR}

MIRIAM: This?
FRANCO: This.

{6.3.4 CARS}

D: I ordered a thousand business cards.
G: Yeah?
... You get them printed here?

{6.3.5 AFRICA}

A: And we were mad,
because Glenda had told us we had to be back by Monday,
even though Monday was a holiday?
Remember that?

{6.3.6 J&J}

J: ... Should we waste him?
or should we stop him,
and ... then waste him.

CHAPTER 7. TERMINAL PITCH DIRECTION

While analysis according to functional classes (i.e. in terms of transitional continuity (§6) and/or other functional classification) captures one kind of information about an intonation contour, there is another kind of intonational information that is worth recording, involving the actual phonetics of the pitch movement. The symbols in this chapter and §9 iconically represent the movement of pitch, at two critical locations in the intonation unit: at the end of the unit, i.e. the transition point from one intonation unit to the next (this chapter); and at the final primary accent, where the greatest pitch prominence is generally found, and along with it the key semantic or pragmatic value of the intonation contour (§9). In contrast to the symbols in the last chapter, which represent a certain aspect of intonational function, these symbols are designed to represent the auditory shape of the pitch movement. Naturally no finite set of symbols can provide more than a general classification of pitch phonetics, since a complete representation would require an infinitely variable analog display. But when symbols for pitch movement (§7 and §9) are supplemented with symbols for functional class (§6), the combination is an effective means of capturing key features of intonation at the most reasonable cost in time and effort.[19]

Inevitably, different researchers will wish to take different approaches to representing intonation in discourse. Among the minimalist alternatives available are to use exclusively the categories for transitional continuity (§6); to use some other functional classification; to use just the phonetic categories for terminal pitch direction presented in this chapter; or to use just the categories for tone (§9). Or the transcriber can use some combination of these, such as the transitional continuity and terminal pitch classifications -- a combination that is particularly useful for those primarily interested in how extended discourse is chunked into units, rather than in the subtle and often elusive meanings distinguished by the various intonation contours. (Many other approaches to intonation re represented in the literature; see §21, Cruttenden 1986, and Couper-Kuhlen 1986.) The decision about what intonational categories to use will be influenced by one's research goals and theory of intonation, and the degree of delicacy sought for a particular transcription. Whatever the system employed, it is in the transcription of intonation in spoken discourse that the transcriber's interpretive skills and judgment are most heavily called into play.[20]

The symbol for terminal pitch direction is ordinarily written as the last character of the line it appears in, and is preceded by a single space.

7.1 \ {backslash} Fall

A backslash (\) indicates that the direction of the terminal pitch movement is falling. This downward-sloping line iconically represents downward movement, and is reminiscent of the International Phonetic Association (1989) arrow symbol (\) for a "global fall" in pitch.)

Depending on how low the endpoint of the fall reaches (relative to neighboring pitch levels), such pitch movements may be functionally assigned to the continuing or final contour classes.

{7.1.1 AESTH}

```
J: ... You're not saying something, \
   you're doing something to people. \
```

{7.1.2 LUNCH}

```
M: ... It isn't the same thing. \
X: ... Looks like it, \
```

{7.1.3 AESTH}

```
J: <X I mean X> why do people actually walk into, \
   art museums. \
```

7.2 / {slash} Rise

A slash (/) indicates that the direction of the terminal pitch movement is rising. This upward-sloping line iconically represents upward movement, and is reminiscent of the International Phonetic Association (1989) arrow symbol (/) for a "global rise" in pitch.

Depending on the specific shape and pitch level of the rising movement, the contour may be functionally analyzed as pertaining to the continuing class (often a low or mid rise) or the appeal class (a high rise).

{7.2.1 RANCH}

```
R: ... And then, /
   they videotape us, /
   as we go. \
```

{7.2.2 FORCES}

```
A: ... The thing about him is, /
   he can't spell. \
```

{7.2.3 RANCH}

```
R: and then, /
   ... our job, /
   is to shape the shoe, /
   ... to the horse's foot. \
```

7.3 _ {underscore} Level

Underscore (_) indicates that the direction of terminal pitch movement is level. This pitch movement is most commonly associated with the continuing contour class.

{7.3.1 CARS}

```
D: You know, _
   call them on the phone, /
   and uh, _
   ... take a lunch, /
```

CHAPTER 8. ACCENT AND LENGTHENING

The spoken word carries a range of prominences and durations not easily captured in the ordinary written representation of language (cf. Tedlock 1983). Speakers give to their words varying kinds and degrees of accentuation; they also give to certain individual sounds or syllables a greater duration than the usual. These subtle variations carry significance to the well-attuned ears of conversational participants, reflecting aspects of information flow and interactional stance that participants respond to whether they can put their finger on them or not. For this reason it is important for a discourse transcription to indicate which words and sounds carry the signals of accent and length.

8.1 ^ {caret} Primary accent

A caret (^) indicates a word which bears a primary accent. The primary accent is characterized by its prominent pitch movement carrying intonational meaning: it is where the significant intonational "action" is focused, within the intonation unit (§9). Primary accent is broadly comparable to the "nuclear accent" category of Crystal (1975), Cruttenden (1986), and others, which is characterized as "the most prominent syllable in a tone-unit", whose prominence is generally due to "presence of noticeable pitch movement" (Couper-Kuhlen 1986:79).

The degree of prominence on a given word must of course be judged relative to that realized on other words produced by the same speaker in the same stretch of discourse. Since many speakers shift the amount of prominence they employ in realizing a primary accent fairly frequently, the question of what words to use for comparison can be a difficult one; in many cases the scale must be readjusted for as little as a single intonation unit. And in some cases, the distinction between primary accent and secondary accent will be as much a matter of quality as of quantity: if the movement has a quite distinctive shape, this may give it prominence without necessarily involving a large pitch movement.

While there is some tendency for an intonation unit to contain exactly one primary accent, cases of two primary accents within one intonation unit are common enough. It is for this reason that we avoid the term "nuclear accent", with its apparent presumption that each unit will contain no more than one nucleus. Also, intonation units containing no primary accent are fairly common, especially among minor intonation units (e.g. one-word intonation units; see §21) and truncated intonation units. While some definitions would require one to find a nuclear accent in every intonation unit (or tone unit) -- even in the briefest minor unit -- this seems motivated more by definitional tidiness than by empirical observation, and sometimes can tempt researchers to lump a one-word intonation unit lacking an obvious nucleus with the nearest major intonation unit (§21). (In these respects there is some difference in definition between the tone unit (Crystal) and the intonation unit (Chafe), although in practice the two units coincide often.)

In English and many other languages, the particular syllable within the word on which a prominence is realized is lexically predictable, and thus need not be indicated in a discourse-level transcription.[21] (For the occasional utterance of a word token in which prominence is realized on a syllable other than the normal one, this fact can be captured by using the notation provided for phonetic transcription (§13.1).)

> The primary accent mark immediately precedes the first letter of the accented word, with no space intervening. For languages in which a word's stressed syllable is not lexically predictable, however, the primary accent notation should be written immediately before the stressed syllable (which hence may place the symbol within the word).

{8.1.1 FORCES}

```
B: ^I met 'him,
   and I 'thought he was a 'ni=ce ^kid.
S: He ^is a nice 'kid,
   but he's ^wei=rd.
```

{8.1.2 FORCES}

```
B: I ^never 'met the guy=.
```

{8.1.3 AESTH}

```
J: 'This is one of the things I've ^thought about,
   a ^lot.
S: 'Yeah.
```

8.2 ‘ {raised stroke} Secondary accent

A raised vertical stroke[22] (‘) indicates a word which bears a secondary accent, relative to nearby primary accented and unaccented words.

> The secondary accent mark immediately precedes the first letter of the accented word, with no space intervening. (For languages in which the particular stressed syllable within an accented word is not lexically predictable, the accent mark can be written immediately before the stressed syllable.)

{8.2.1 AESTH}

```
J: ... 'You know,
   'that's just a 'fact about that ^thing.
```

{8.2.2 HYPO}

```
G: ...(2.2) 'a=nd,
   of course,
   a 'lot of herb ^tea,
   when I'd 'rather be drinking ^whiskey.
```

{8.2.3 RANCH}

```
R: ... You know,
   ^I had been 'practicing this with my ^horse,
   for a 'lo=ng ^time.
   but ^never when anybody was 'around.
```

Because it can be difficult to distinguish reliably between three degrees of accent (Liberman 19??) -- i.e. between primary accent, secondary accent, and (implicitly) non-accent -- some researchers may prefer to mark only two degrees of accent, corresponding to "accented" (to be written with the raised stroke, i.e. the "grave accent" character) versus "unaccented" (unmarked).

8.3 ! Booster

The exclamation point (!) can be used optionally to mark "booster", a higher than expected pitch on an accented word. For a fuller discussion of the concept of booster, see Crystal (1975) and Cruttenden (1986).

> The exclamation point immediately precedes the word in question and any symbols for accent, with no space intervening.

8.4 = Lengthening

An equal sign (=) indicates that the preceding segment is lengthened prosodically, to a degree greater than what is expected on the basis of accent and lexical stress patterns. The slight lengthening which is to be expected when a syllable is accented is not marked with the equal sign, being implicit in the accent marking. Similarly, segments which are phonemically long (in a language with a contrast between long and short vowels, or long and short consonants) do not on that account receive the equal sign notation: phonemic length should be written with a different symbol (e.g. doubled letters, §16.1).[23]

Prosodic lengthening is especially important to indicate because of its role as a potential cue for intonation unit boundaries (Cruttenden 1986:35-45): it frequently occurs at the end of an intonation unit.

The equal sign is written immediately following the lengthened sound; no spaces separate it from the letters of the word it appears in. For sounds that are represented in standard orthography by a digraph (e.g. in English, ee, ea, oo, ph, ch, tt, etc.), the convention is that the equal sign is written after the final letter of the digraph.

{8.4.1 HYPO}

K: ... ^Greg's never had a a ^co=ld,
or the ^flu=,

{8.4.2 DOOR}

A: and I decide I'm going to get a ^ne=w door,
and a ^ne=w 'jamb.

{8.4.3 J&J}

N: she was ^f=rantically ^running 'arou=nd,
like 'trying to get ^away from him.

CHAPTER 9. TONE

Each major intonation unit (§21) is in general characterized by some kind of prominent pitch movement, which carries the most significant intonational information about that unit. The locus of this prominent pitch movement is generally centered on the word which bears the primary accent (§8.1): either the sole primary accent, or if there is more than one in a particular intonation unit, usually the last one. The various distinctive intonational shapes which are possible in this position are commonly called tones. A tone's pitch contour is often realized across a spread of several words, frequently extending from the last primary accent until the end of the unit. Because the shape of this pitch contour carries the most distinctive intonational meaning in the unit, it is useful to have symbols which can at least partly capture the differences. The classification of tones remains a substantial challenge for intonation specialists, as is attested by the existence of several competing classificatory systems, each with its adherents (see, for example, the various systems described in Couper-Kuhlen 1986 and Cruttenden 1986 and in the many references they cite). Perhaps the most straightforward approaches involve simply classifying the movements of pitch, using symbols like those §7. This chapter presents notations for rise, fall, rise-fall, fall-rise, and level tones.

> The symbol for tone is written immediately before the accented word, with no intervening space. (Alternatively, the marks can be placed immediately before the syllable, rather than the word, which bears the accent.) When tone is written, it may be possible to dispense with as redundant the primary accent mark (at least on one analysis); but if both are written, the tone symbol should immediately precede the primary accent symbol.

9.1 \ Fall

A backslash (\) before a primary accented word indicates that the contour associated with the accent is falling.

{9.1.1 FORCES}

```
A: he can't \spell.
```

9.2 / Rise

A slash (/) before a primary accented word indicates that the contour associated with the accent is rising.

{9.2.1 HYPO}

```
D: Is he going to make her become a /Catholic?
```

9.3 \/ Fall-rise

The combination backslash-slash (\/) before a primary accented word indicates that the contour associated with the accent is first falling, then rising. This pitch movement can cooccur with any of the transitional continuity classes, though it is more common with continuing and final than with appeal.

{9.3.1 RANCH}

```
R: If you \/think about it,
   yeah,
   if it /rains a lot,
   the horse is always \/wet,
   and it's always /moist,
   it's always on something \/moist,
   ... \Sure it's going to be softer.
```

{9.3.2 J&J}

```
J: So the guy \yells at me,
   ... Is that your \/dog?
```

9.4 /\ Rise-fall

The combination slash-backslash (/\) before a primary accented word indicates that the intonation contour associated with the accent is first rising, then falling. This pitch movement often cooocurs with a widened pitch range, which may be interpreted as expressing "high involvement" or "exclamation". The transitional continuity class it is most often associated with is final.

{9.4.1 AESTH}

```
S: ... A lot of it's really /\bad.
```

{9.4.2 DOOR}

```
A: That was the only thing that went \smoothly,
   that we've ever \done.
B: That /\you've.
   ... I couldn't even \begin to do it.
```

9.5 _ Level

An underscore (_) before a primary accented word indicates that the contour associated with the accent is level.

{9.5.1 HYPO}

K: ...(1.2) They just _represent,
each of the _days,

CHAPTER 10. PAUSE

The placement and timing of pauses in spoken discourse conveys significant information about the speaker's discourse production process (Chafe 1980c)[24] and orientation toward the ongoing conversational interaction (Schegloff et al., Goodwin 1981). Each pause should be indicated explicitly using one of the three notations presented in this chapter. Since the intonational symbols (e.g. comma and single period, §4) do not of themselves denote pause, any pause -- even a slight one -- that occurs in conjunction with an intonation contour must be specifically indicated using one of the pause notations.

> No spaces appear within the sequence of characters which make up a pause notation (i.e. between its periods, parentheses, and numbers), but each pause notation as a whole (for example, the pause notation consisting of a sequence of two dots) is preceded and followed by a single space.

10.1 ...(.n) Long pause

A sequence of three dots (...) immediately followed by a number in single parentheses is used to represent relatively long pauses (.7 seconds or longer). The approximate duration is indicated within parentheses to the nearest tenth of a second. That is, the duration is indicated as (.7), (.8), (1.6), etc. (cf. §12).

{10.1.1 CARS}

```
D: ...(3.0) I had them done at Pick's.
   ...(1.0) You see it,
```

{10.1.2 RANCH}

```
R: ... We start out ...(.8) with ...(.8) dead horse hooves.
```

{10.1.3 RANCH}

```
R: ... This .. is a type of person,
   ...(.9) that ...(.7) is like ...(1.0) a hermit.
```

Ordinarily, a pause between two intonation units is written together with the unit that follows it (never with the one that precedes it). However, if a pause is attributable to more than one speaker (as when, during a long pause, it is unclear who is going to speak next), it is often preferable to place the pause notation on a separate line by itself. In some cases, the questions of who a pause belongs to, how long it lasts, and even whether it has occurred in a specific place, become subtly and inextricably linked to the interpretation of turn-taking and overlapping between speakers (Schegloff et al.).

{10.1.4 DEPR}

```
B: ... I remember,
   ...(.8) I used to help Billy,
   and I'd get twenty-five cents a week,
   ...(1.2)
R: [A week]!
B: [Twenty] --
```

{10.1.5 DEPR}

```
B: ... They were kind of scary.
   ...(1.6)
   the [gypsies].
R:     [mhm],
```

The duration of a pause can be determined reliably by making a fairly simple instrumental analysis of the acoustic signal, i.e. measuring the flat stretch in a display of the waveform for a stretch of speech. A waveform display can be obtained, with varying degrees of accuracy and convenience, from a MacRecorder used with a Macintosh computer, a sound spectrograph, an Oscillomink, or a Visi-Pitch machine, among other sources. A rather less accurate method is to time the pause manually with a stopwatch. This somewhat crude (but cheap and easy) method gives an accuracy of perhaps ±0.3 seconds, depending on the transcriber's reaction time to something as elusive as the end of a silence. While probably not adequate for research whose primary focus is pauses, it can be useful as a rough preliminary indication of timing, and is certainly to be preferred over purely impressionistic estimates.

While some researchers use subjective judgments of pause duration relativized to each speaker's current tempo (a "second" for a fast speaker is objectively shorter than a "second" for a slow speaker), this is in general not advisable, due to the difficulties in making such judgments consistently and reliably, and in interpreting the "time" notations which result. Among other things, if a pause occurs at a turn boundary between the utterances of two speakers with different tempos, it is unclear which speaker should be used as the basis for relativizing the duration. Even a pause within the speech of a single speaker can be problematic, if it occurs between a rapid stretch of syllables and a slow stretch -- a fairly common configuration in everyday speech. Unless such ambiguities can be addressed, the only reliable practice is to indicate the actual pause duration in clock time.[25]

10.2 ... Medium pause

A sequence of three dots (...) indicates a pause of medium length -- one which is noticeable, but not very long, i.e. about half a second in duration (specifically, between 0.3 to 0.6 seconds, inclusive).

{10.2.1 AESTH}

J: mhm.
S: ... That's what .. the poet is after,

{10.2.2 AESTH}

S: .. Um,
... That's one kind of thing,

{10.2.3 HYPO}

G: ...(1.7) I'd like to have .. my ... lungs,
... my entire respiratory tract,
... replaced,
... with .. asbestos.
.. or something.

10.3 .. Short pause

A sequence of two dots (..) indicates a brief break in speech rhythm, that is, a very short, barely perceptible pause (about 0.2 seconds or less).

Perhaps the most effective impressionistic means of determining whether the two-dot symbol is called for is to imagine a metronome ticking at the same rate as the speaker is currently producing syllables. A word which lags behind the speaker's rate of syllable production (or lags behind one's mental metronome ticks) exhibits a tempo lag, and may be preceded by a short pause.

{10.3.1 RANCH}

R: ... And then,
.. they videotape us,
.. as we go.

{10.3.2 RANCH}

R: .. a reining pattern is,
.. a pattern where you .. do sliding stops,
.. spins,
... lead changes,
.. I know you probably don't know what that is.

{10.3.3 CARS}

D: .. I mean,
I have the opportunity,
to talk to people,
.. to get the phone book,

{10.3.4 DEPR}

B: ... She just .. pulled the cat .. and the kittens out,
.. and pulled off the bread that was dirty,
and,
... we served the rest of it.

{10.3.5 AESTH}

J: .. I mean,
there are people that are .. just hard to .. sell to,
S: .. mhm,
J: ... and hard to advertise to.

It is important to note that not all brief silences are to be classified as pauses. The moment of silence which necessarily occurs during a lexically or phonologically required voiceless stop should not be classified as a pause, even if it is longer than expected (as in an emphatic or "marcato" pronunciation of a word containing a voiceless stop). The reason for this is that for discourse research what matters is the pause as a functional cue to aspects of discourse production and conversational interaction, not as a raw acoustic fact.

10.4 (0) Latching

A zero within single parentheses **(0)** indicates that the following utterance "latches" onto the preceding utterance -- that is, there is no pause (or "zero" pause) between the two speakers' turns. Since it symbolizes a noticeable lack of pause between actual turns, mere continuative backchannel responses (m=hm, etc.) are not ordinarily marked with this symbol.[26]

{10.4.1 AFRICA}

A: They get their snake?
R: **(0)** Yeah!

{10.4.2 CARS}

G: ... <X Least X> she'll know what her good thing was.
D: ... Yeah.
G: **(0)** That's for sure,
D: **(0)** Definitely.

{10.4.3 CARS}

```
G: .. I was using number seven,
   .. gun number seven,
D: (0) It broke the [chisel].
G:                  [and] it broke my chisel,
   man.
   <X Now X> --
D: (0) So now you have no chisel.
G: (0) <X It's X> my only good chisel.
   man,
```

Since simply not writing in any pause notation -- not even a two-dot pause -- will already serve to suggest the absence of a pause, the latching notation is to some degree redundant. This plus the fact that determining the presence of latching presupposes a potentially difficult judgment about the turn (or non-turn) status of an utterance leads some researchers to avoid this transcriptional category.

CHAPTER 11. VOCAL NOISES

The participants in a conversation do more with their vocal tracts than just utter words: they also cough, yawn, click, inhale, laugh, and produce a variety of other noises. The notations in this chapter are designed to allow the transcriber to easily notate nonverbal sounds produced in the vocal tracts of speech event participants. The reason for distinguishing vocal noises made by speech event participants as a special category is that participants often use this channel to give each other subtle cues about aspects of the on-going linguistic interaction, as when a speaker takes a sharp in-breath in order to signal the purpose to speak next (Sacks et al. 1974). Crickets chirping and microphones rustling do not consistently carry such interpersonal meanings for humans.

11.1 (TEXT) Vocal noise

Single parentheses surrounding a description written in capital letters **(COUGH)** are used to indicate nonverbal sounds produced in the vocal tracts of speech event participants. This kind of notation encompasses coughing, throat-clearing, tongue clicking, breathing, etc., but not dish-washing, finger-drumming, dogs barking, etc. (for which double parentheses are available, §13.1).

> The capital letters and parentheses help to make it clear that the words so written were not actually uttered by the speaker; that is, rather than saying the word "cough", the speaker did cough. (For some high-frequency vocal noises, a special nonalphabetic symbol is used (e.g. @ for laughter, §10.5), and in such cases the parentheses are unnecessary.)

The notation (THROAT) indicates the sound made by someone clearing their throat. Similarly, (GULP) can be used to represent a gulping sound, and (SWALLOW), (SNIFF), (SNORT), (BURP), and (YAWN) likewise represent the indicated sounds. Additional notations in this format can be generated as needed for indicating other vocal noises.

{11.1.1 AESTH}

S: (H) **(THROAT)**
Yeah.

The notation (TSK) indicates the utterance of a click of the tongue -- in English this is usually an alveolar click -- as an isolated vocal sound, e.g. what is commonly written tsk in newspaper cartoon style.

{11.1.2 RANCH}

R: and then,
... **(TSK)** our job,
is to shape the shoe,
... to the horse's foot.

{11.1.3 AESTH}

S: um,
(TSK) has ... something to communicate,
with me,

{11.1.4 AESTH}

S: ... **(GULP)** **(TSK)** The gap is very big.

11.2 % Glottal stop

The percent sign (%) indicates a paralinguistically introduced glottal stop or glottal constriction. This notation is not used in positions where glottal stop is phonologically predictable, as at the beginning of vowel-initial words (under certain conditions) in English. Nor is this notation used where glottal stop is lexically required, as in certain words in languages with phonemic glottal stop. (For "creaky" or glottalized voice quality extending over whole words or stretches of speech, see §12.1.)

One reason for taking the trouble to transcribe paralinguistic glottal stop is that speakers often seem to produce it when they abandon a word or utterance. To the extent that glottal stop functions as an objective cue for abandoned utterances, it is useful to have it on record. Glottal stop and glottal constriction may act as cues to other aspects of the discourse production process as well.

> When glottal stop occurs as an isolated vocal sound, the percent sign is written with surrounding spaces; when it occurs as part of a word, it is written with no spaces intervening.

{11.2.1 AESTH}

S: ... % It's Thanksgiving time now,

{11.2.2 RANCH}

```
R: it's mandatory,
   you have to --
   % to graduate,
   you know,
   % well,
   to ... get the degree,
   you know,
   ... you have to take this class.
```

{11.2.3 AESTH}

```
J: ... that the% ... set of sentences,
```

11.3 (H) Inhalation

A capital H in single parentheses (H) indicates audible inhalation.[27]

In conversation, breathing is more than just a bodily necessity; it can be used, for example, as a signal that one is about to take a turn at speaking (Sacks et al. 1974, Jefferson 1984a:353f).

{11.3.1 CARS}

```
G: ... (H) I've got to get out of that place,
   man,
   I swear.
```

{11.3.2 HYPO}

```
K: ... (H) leukemia,
   ... (H) bronchitis,
   ... (H) uh,
   tuberculosis,
   @@@@ (H)
   and he's recovered from all of them.
```

Although it is important to record audible inhalation and exhalation, it must be frankly recognized that a simple difference in microphone proximity or background noisiness between two tape recordings, or even between two speakers on the same recording, can mean that breathing is heard in the one case where it would be missed in the other. There is not much that one can do about such biasing factors, except to seek the best audio quality possible in one's recordings, and to remain realistic about the possible effects of recording quality bias whenever one makes reference to audible inhalation or exhalation in an analysis.

Where a pause and a quiet inhalation occur in immediate succession, it is often difficult to separate the two (in order to time the pause, for example). In such cases, it may be preferable to write the pause and inhalation together with no intervening space,

and to assign any indication of duration to the pause-plus-inhalation complex taken as a whole.

11.4 (Hx) Exhalation

A capital H followed by a small x within single parentheses **(Hx)** indicates audible exhalation.[28]

```
                                                        {11.4.1  DEPR}
B: ...(4.3) (Hx) ... Kids in the city  miss so much.

                                                        {11.4.2  AESTH}
S:    (Hx) an artist,

                                                        {11.4.3  AESTH}
J: ...(1.5) So the- (Hx) --
   ...(2.2) Well.
```

Sometimes a speaker audibly inhales and exhales several times in immediate succesion. All of this can be written within a single set of parentheses: (H Hx H Hx).

Note that neither the inhalation symbol (H) nor the exhalation symbol (Hx) is used within a word (e.g. for breathy voiced segments, laughter, etc.). Because of the serious potential for confusion that an ambiguous use of H would introduce (§26.5), other notations, using discriminable characters, are preferable (§11.5).

11.5 @ Laughter

The @ symbol is used to represent laughter. One token of the symbol @ is used for each "syllable", or pulse, of laughter. (Some may perceive a mnemonic resemblance between the @ symbol and the pervasive "smiley face" icon.)

Although laughter falls in the category of nonverbal vocal tract sounds, and so by the present conventions could in principle be written within single parentheses (i.e. as (LAUGH)), it occurs so pervasively that it warrants its own distinctive symbol. The @ symbol has the additional advantages of being easily reiterated in a minimum of space -- allowing the duration of the laughter in "syllables" to be represented iconically -- and of being readily discriminable when written within a word (see below).

Because the placement of laughter can be of great consequence for a conversational interaction (Jefferson 1979, 1984a), it is important to note it carefully. Note that a laugh can be rhythmically integrated as part of a larger (major) intonation unit, or it can be uttered as a separate intonation unit on its own (§21).

{11.5.1 HYPO}
K: **@@@@**
... From which you haven't recovered.

{11.5.2 AESTH}
S: ... **@** There isn't any real communication going on.
J: Yeah.

{11.5.3 DOOR}
A: That was the only thing that went smoothly,
that we've ever done.
B: **@** That you've.
... I couldn't even begin to do it.

{11.5.4 AESTH}
J: The conclusion is up to you.
S: [mhm],
J: [**@@@**] in going out to --
... to buy the thing.

For laughter of extended duration, the transcriber may prefer to write just a single laugh symbol followed by an indication of duration (§16) -- if it is not easy to determine how many syllables of laughter there are (as is often the case when several people are laughing at once), or if the investigator is simply not especially interested in how many laugh syllables have occurred.

{11.5.5 MIRACLE}
ALL: **@(1.7)**

Sometimes it is useful to distinguish between different kinds of laughter. For example, the symbol **@N** can be used for nasal laughter, a usually voiceless laugh in which the air is emitted through the nose. To the extent that further distinctions among kinds of laughter may be significant (Jefferson 1979), such distinctions can be indicated by suffixing various characters to the @ symbol as modifiers of it, with the resulting complexes (e.g. @I@I, @A@A) defined by the researcher. (The unmarked symbol for all kinds of laughter, however, is simply @.)

{11.5.6 AESTH}
J: ... You're not supposed to use these powerful [techniques].
S: [**@N@N@N@N**]
... Hm.

CHAPTER 12. QUALITY

There are many occasions in conversation where, for a stretch of a few words or lines, a speaker's voice takes on some special quality, or shifts in pitch, slows in tempo, etc. Because this kind of momentary marked quality or prosody can serve important functions in exposing some perhaps unverbalized aspect of the speaker's stance, or of the speech production process, and because it can have consequences for the ongoing spoken interaction, it is important to be able to record it. But because the special qualities that can occur are so diverse, the notation must be flexible enough to meet any demands that may arise in the discourse material. The notational formula introduced in this chapter is designed to accomodate this kind of diversity.

12.1 <Y words Y> Quality

Angle brackets < > are used (in conjunction with an additional symbol, represented above by Y) to indicate that the stretch of text which they enclose has a marked quality or prosody of some sort. The particular quality (higher pitch, increased loudness, etc.) is specified by the supplementary symbol. The text enclosed within these symbols often amounts to several words, and may run across several lines. The marked quality is judged relative to the surrounding discourse produced by the same speaker. For example, a sentence would be marked for tempo if it is noticeably quicker or slower than the speaker's current or usual tempo. This set of symbols (partly based on Boase 1990) is in principle open-ended, and new ones can be developed to suit a particular investigator's needs.[29] For most transcribing purposes, these notations will be used sparingly, to indicate just phenomena which are of special interest and consequence for the spoken interaction.

Listed below are some of the more common types.

Loudness

<F F>	forte: loud
<FF FF>	fortissimo: very loud
<P P>	piano: soft
<PP PP>	pianissimo: very soft
<CR CR>	crescenco: gradually louder
<DIM DIM>	diminuendo: gradually softer

Pitch

<HI HI>	higher pitch level
<LO LO>	lowered pitch level
<W W>	widened pitch range
<N N>	narrowed pitch range
<PAR PAR>	parenthetical prosody

Tempo and Rhythm

<A A>	allegro: rapid speech
<L L>	lento: slow speech
<RH RH>	rhythmic: stresses in a beatable rhythm
<MRC MRC>	marcato: each word distinct and emphasized
<ARH ARH>	arhythmic: halting speech

Voice quality

<WH WH>	whispered
<BR BR>	breathy
<HSK HSK>	husky
<% %>	creaky (or: **<CRK CRK>**)
<FAL FAL>	falsetto
<TRM TRM>	tremulous
<SOB SOB>	sobbing
<CRY CRY>	crying
<YWN YWN>	yawning
<SGH SGH>	sighing[30]

Each symbol complex is preceded and followed by a single space, to ensure that the letters it contains are not confused with those of adjacent words. As to where the angle brackets are to be placed, for most transcription purposes it will be sufficient to use the angle brackets to frame whole words or group of words; to try to place them within a word (e.g. to mark its final syllable as piano) represents a level of delicacy that most transcribers will not need (though this remains an available option, should greater delicacy is desired).

Following are several instances of the above notations. The angle-bracket pair **<F F>** is used to enclose a stretch of forte speech (produced with relatively increased loudness).

{12.1.1 HYPO}

```
A: <F It's not the end of Chanukah F>,
   in case you're interested.
```

The angle-bracket pair **<P P>** is used to enclose a stretch of piano speech.

{12.1.2 RANCH}

```
R: ... But uh,
   ...(3.0) <P What was I going to say P>,
   ...(3.5) X- --
   Oh,
   it's really tiring,
   though.
```

The angle bracket notation **<W W>** marks widened pitch range. (This is a marked prosody often interpreted as "involvement", "surprise", or "exclamation".) The increased pitch range is often accompanied by sudden pitch movement, and in English is frequently associated with a pronounced rise-fall tone, which may be accompanied by increased loudness.

{12.1.3 AESTH}

```
S: <W Boy W> was that good.
```

{12.1.4 CARS}

```
D: ... No basketball.
G: ... <W Really. W>
```

{12.1.5 DEPR}

```
M: <W You're kidding. W>
S: Yeah.
```

{12.1.6 AESTH}

```
S: ... A lot of it's really <W bad. W>
```

{12.1.7 DEPR}

```
B: ... we served the rest of it.
R: ... You're kidding.
B: <W No. W>
```

The angle-bracket pair **<MRC MRC>** is used for a stretch of marcato speech, in which each word is uttered distinctly and with emphasis.

{12.1.8 J&J}

```
J: ... But the goldfish got stuck,
   ... <MRC halfway into his mouth MRC>.
```

The angle-bracket pair **<WH WH>** is used to enclose words uttered in a whisper.

{12.1.9 LUNCH}

```
M: ... <WH It isn't the same thing WH>.
X: ... Looks like it,
```

{12.1.10 AFRICA}

```
A: they let us alone.
   ... <WH But we were scared,
   And boy WH>,
   did we ever get in trouble,
   from Mel and Ervin.
```

The angle-bracket pair **<% %>** indicates creakiness or glottalization of the enclosed words (cf. §10.2).

{12.1.11 AESTH}

```
J: <% Tha%- this% --
   I wonder about that though,
   I mean %>,
   when I think of ads,
```

In cases where it seems useful to specify the precise location of a special quality that begins and/or ends at some point within a word, an underscore can be added to the usual angle bracket notation as a sort of "visible space" (e.g. **<WH_ _WH>** or **<%_ _%>**) so as to separate the (capital) letters of the quality notation from the letters of the word they enclose. Thus if just the fourth through sixth syllables of the word cytomegalovirus were whispered, this could be written as "cyto**<WH**_megalo_**WH>**virus". Where one is not so concerned to avoid ambiguity, the underscore symbols could be dispensed with, giving for example cyto**<WH**megalo**WH>**virus. This works especially well with nonalphabetic notations like those for creaky quality ("cyto**<%**megalo**%>**virus") or laugh quality ("cyto**<@**megalo**@>**virus"; cf. §12.2). This word-internal quality notation is likely to be used but rarely.

12.2 <@ words @> Laugh quality

The angle bracket pair **<@ @>** indicates a laughing quality over a stretch of speaking, i.e., laughter during the words enclosed between the two @ symbols. (The angle brackets can be combined with notations for other kinds of laughter as well, e.g. <@N @N>, etc.)

{12.2.1 AFRICA}

```
A: ... and they stepped out in the road,
   and not only did they have uniforms on,
   but they <@ also had guns @>.
   @@@
```

If a laugh occurs during the utterance of just one word, this can also be indicated simply by prefixing the word with one @ sign, and dispensing with the angle brackets.

{12.2.2 AESTH}

```
S: It's @pleasing.
```

{12.2.3 J&J}

```
N: You know,
   this was a rented @snake,
   @
```

{12.2.4 HYPO}

```
K: @
G: ... @ There isn't --
   It's <@ no disease,
   at all @>.
K: Athletic feet.
   ... @N foot.
D:  @N @foot.
```

For most transcription purposes, it is sufficient to use the laugh brackets to frame whole words or groups of words (the convention followed in this work). But some researchers may wish to indicate on which particular syllables within a word laughter occurs. To do this, each pulse (syllable) of laughter receives one @ token, which is written within the word at the appropriate place, before the laugh-tinged sounds.

Sometimes a speaker speaks with a smile rather than a laugh, causing their speech to be tinged with an audible "smile" quality. If desired, this can be written with laugh brackets with the letters "SM" affixed: **<@SM @SM>**.

12.3 <Q words Q> Quotation quality

The angle-bracket pair **<Q Q>** indicates a stretch of speech characterized by a "quotation" quality. Its use is warranted where there is some actual shift in the quality of the stretch of quoted speech, as when the quoting speaker imitates some mannerism of the quoted speaker. Where no such shift is audible, this notation should not be used.[31]

{12.3.1 J&J}

```
J: This is a literal quote,
   he says to me,
   ... <Q I'm going to restrain you.
   to the fence Q>.
```

{12.3.2 HYPO}

```
G: and then he'd say,
   <Q I can't believe it,
   Nobody will pick me up Q>.
```

{12.3.3 FORCES}

```
A: and he's saying,
   ... <Q Ah,
   yeah,
   We call ourselves,
   the special forces of Santa Monica Q>.
```

Note that the quotation symbol is not used for metalanguage, such as the name of a letter or a reference to a word (§16.1) -- unless, of course, this is accompanied by an audible quotation quality.

12.4 <Y<Z words Z>Y> Multiple quality features

When a stretch of speech is characterized by two or more coextensive special qualities worth noting, these are indicated with multiple angle brackets.

> The several angle-bracket notations are juxtaposed without any space between them.

{12.4.1 J&J}

```
J: So the guy yells at me,
   ... <Q<F Is that your dog F>Q>?
```

{12.4.2 HYPO}

```
G: They're drunk.
   <Q<F Where's these Americans F>Q>,
   They come bursting in the room.
```

12.5 <Y> Quality (one-line duration)

In many cases a marked quality of speech applies for the duration of a single intonation unit (one line) of speech (or sometimes slightly less). The speaker begins the special quality and continues it up to the end of the line, but does not carry it over into the next intonation unit. It is useful to have a shorthand way of indicating this common situation. As an alternative to placing a left angle bracket at the beginning of the stretch and a right angle bracket at the end, the transcriber can simply write the appropriate special quality notation once at the point where the special quality begins (at or near the beginning of the line), within angle brackets **<Y>**. By convention, it is understood that the marked quality applies from the point marked <Y> to the end of the line.

> No spaces appear between the angle brackets and the symbol they enclose, but the complex is preceded and followed by a single space. The notation is written immediately before the first word that bears the special quality in question.

The following examples illustrate use of this alternative notation (compare examples 4.1.1 and 4.1.2 above).

{12.5.1 HYPO}

A: <F> It's not the end of Chanukah,
in case you're interested.

{12.5.2 J&J}

J: ... But the goldfish got stuck,
... <MRC> halfway into his mouth.

CHAPTER 13. PHONETICS

Although a discourse transcription does not generally seek to represent every variation in pronunciation, there are times when the question of how a word was pronounced takes on immediate significance for the spoken interaction. In such cases it is useful to have available a way of writing that can unambiguously indicate the actual pronunciation of a particular word or words -- without, hopefully, requiring too much in the way of special knowledge, or special characters. This chapter presents a way of citing phonetic (or phonemic) transcriptions for selected words. (A set of symbols that can be used for making precise phonetic transcriptions without requiring special characters is provided in Appendix 6.)

13.1 (/phonemes/) Phonetic/phonemic transcription

A symbol complex composed of slashes surrounded by single parentheses (/ /) is used to enclose a representation of the actual pronunciation of a word. The phonetic (or phonemic) transcription is given in addition to the traditional orthographic representation of the same word(s), which it follows.

> No spaces appear between the parenthesis-plus-slash complex and the enclosed transcription. The paired orthographic and phonemic representations are optionally linked together using the underscore character.[32]

The transcription itself can be written in several different ways, depending on the degree of precision sought and the enthusiasm of the transcriber. Notational systems include (1) standard orthography supplemented by selected phonetic symbols, for example, accent marks applied to the standard spelling of a word (a method to be relied on only when it will not produce ambiguity); (2) the International Phonetic Alphabet (IPA) alphabet, which includes many specialized symbols not found on ordinary typewriters or computers (International Phonetic Assocationa 1989); and (3) a simplified phonetic transcription system that uses just ordinary roman letters, such as "SAM-PA" (Wells 1989) or its derivative, SAM-PA2 (Appendix 6).

The following example illustrates the option of supplementing standard orthography with selected phonetic symbols -- in this case, stress marks -- in order to represent just enough of the actual pronunciation to allow the interchange to be understood.

{13.1.1 CAFE}

```
A: Virago_(/'Virago/).
C: ... Virago_(/'Virago/)?
A: ... I don't know how you pronounce it.
B: [I thought it was] Virago_(/Vi'rago/),
A: [<X Does X> this] --
```

The following examples illustrate a more precise, and more ambitious, style of phonemic transcription, using SAM-PA2, a transcription system derived from the International Phonetic Alphabet (Wells 1989). For a key to the symbols used, see Appendix 6.

{13.1.2 CAFE}

```
A:   Virago_(/'vIr6go/).
C:   ... Virago_(/'vIr6go/)?
A:   ... I don't know how you pronounce it.
B:   [I thought it was] Virago_(/v6'rego/),
A:   [<X Does X> this] --
```

{13.1.3 COMPAR}

```
GEO: But this Naiman_(/'naIm6n/) book,
     or Naiman_(/'neIm6n/),
     I don't know how he says his name,
```

In general, phonetic transcription is used only where the actual pronunciation of a word is of special significance for the analyst's purposes. Most of the time standard orthography used alone will be sufficient. A sparing use of phonetic detail notations has the important advantage of making transcriptions easier to read.

CHAPTER 14. TRANSCRIBER'S PERSPECTIVE

In addition to symbols for representing speech per se, the transcriber occasionally needs to indicate some aspect of his or her perspective on the transcription -- in effect, a meta-transcriptional interjection. This chapter provides several symbols which allow the transcriber to insert useful comments or observations, while keeping such interjections clearly distinct from the actual speech.

14.1 ((COMMENT)) Researcher's comment

A pair of double parentheses (( )) encloses any comment the transcriber or researcher chooses to make. The comment is written all in capital letters, in order to make it quite clear to the reader that the words in question are not actual speech. Comments interjected into the transcription in this way are best kept short, for the sake of a readable transcription.

This notation is also used for indicating any non-linguistic events that take place within the spoken interaction, such as ambient noises or other noises (excluding vocal noises). But such sounds and other events will usually be noted only if they are relevant to the conversational interaction at hand -- as when participants comment on or otherwise react to the noise.

> No spaces appear between the parentheses and the words they enclose.[33] Comments are written in all capital letters, to help in visually distinguishing these words injected by the transcriber from the words actually uttered by speech event participants (§25.3). However, since the transcriber's comments are also distinguished (redundantly) by the double parentheses which surround them, those who find the aesthetic character of the upper-case comment to be overly bold can readily substitute lower-case letters in this context.
>
> The material written within double parentheses can be freed somewhat from the ordinarily strict constraints on symbol usage, since it is not intended to represent actual speech. Nor is it expected, given its ad hoc nature, to be readily interpretable by computer searches.

{14.1.1 J&J}

```
N: the way that the Indians live,
   like Cany- [Canyon de] Chelly?
X:            [((BLOWS WHISTLE))]
J: ... It's a whistle.
```

{14.1.2 J&J}

N: and they're,
... you know,
... **((DOG BARKS EXCITEDLY))**
...
J: You know --
You know,
about this piece?
N: She always does that. **((REFERENCE TO DOG))**

{14.1.3 DOOR}

A: Think of your door,
here. **((GESTURES))**

{14.1.4 AESTH}

J: I spend a lot of time,
((MIC)) ... analyzing ads,
myself,[34]

14.2 ((2_COMMENT)) Researcher's comment (specified scope)

If it is important to make clear that a given comment applies just to a certain stretch of speech, this can be indicated by enclosing the relevant stretch in angle brackets, and placing the associated comment (enclosed within the usual double parentheses) before the brackets. A numerical index (n=2, 3, 4, ...)[35] is then attached to both the angle brackets and the associated comment in order to link them, as in the following schema:

((2_COMMENT)) <2 words 2>

This notation can be used, for example, when during a certain stretch of speech the speaker begins chewing while speaking, or pounding a nail into the wall, and so on.

If a researcher plans to make fairly extended or pervasive commentary -- for example, commenting on every turn -- it may be preferable to set up a column format, using one side of the page for transcription and the other side for commentary.

14.3 <X words X> Uncertain hearing

A pair of angle brackets **<X X>** marked with the letter X -- the X suggesting an unknown quantity -- is used to mark portions of the text which are not clearly audible to the transcriber, to such an extent that there is some doubt as to what words were spoken. The words so enclosed represent the transcriber's best guess as to what was said, but their accuracy is not assured.[36]

A single space separates the upper-case X's from the words they enclose.

{14.3.1 AESTH}
J: <X I mean X> why do people actually walk into,
art museums.

{14.3.2 HYPO}
G: ... Well,
I [don't] normally sound like Lucille Ball.
K: [<X That's X>] --

14.4 X Indecipherable syllable

The capital letter **X** (again, mnemonically suggesting an unknown quantity) is used to indicate speech which is not audible enough to allow a reasonable guess at what was said. One X is used for each syllable of indecipherable speech. It is usually possible to make at least a rough estimate of how many syllables were uttered, even when one can't make out what the words are.

These X's are written alone, without the angle bracket-X symbol which indicates an uncertain hearing.

{14.4.1 DOOR}
A: It's some story,
XX.

{14.4.2 CARS}
D: It was basically me,
you know,
X going out.
The problem of going out.

{14.4.3 FORCES}
A: And he's got all this,
<X you know X>,
... and everything else X,

PART THREE:

SUPPLEMENTARY CONVENTIONS

The methods and conventions presented in this part deal either with specialized transcriptional categories, or with research practices which, while not strictly speaking part of transcription per se, are closely linked to the production and use of discourse transcriptions. For transcribers in the initial stages of working with spoken discourse, much of this part may be safely skimmed over for the present. In the long run, however, the methods and conventions described here will be a useful part of an overall approach to working with spoken discourse.

CHAPTER 15. DURATION

15.1 word(.n) Duration of simple event

A number in parentheses (.n) may be used to indicate the duration in seconds of any inhalation, hesitation, word, laugh, or other event which is of special interest. Aside from its use for notating pause duration (§10.1), for most transcribing purposes this degree of delicacy will not often be needed.

> The duration notation immediately follows the notation of the simple event it applies to, with no space intervening.

For instance, if an inhalation or exhalation is significantly long, its duration can be indicated in the same manner as for pauses, i.e. with a number in parentheses immediately following it. In the following example the notation indicates that the inhalation lasts 0.9 seconds.

{15.1.1 FORCES}

```
A: ...(1.0) (H)(.9) A=nd,
```

Similarly, in the following example, the hesitation word um (a "filled pause") is held for 0.7 seconds.

{15.1.2 AESTH}

```
S: u=m(.7),
```

15.2 <(.n) (.n)> Duration of complex event

The duration of a complex event (a sequence of pauses and hesitation words, for instance) can be indicated, when it is of special interest, using a notation similar to that for comments which have multi-word scope (§14.2) (cf. Chafe (1980:301)). Angle brackets enclose the items to be timed, and the duration (written in parentheses in the usual way) is affixed to both the left and right brackets.[37] Becauseproliferation of this kind of detail can quickly make a transcription difficult to read, for most purposes it will be used but rarely.

{15.2.1 RANCH}

```
R: <(1.3) % .. (H) %
   ... % .. (1.3)> But .. uh,
```

{15.2.2 J&J}

N: ...(.8) you know,
   ...(.9) <**(.8)** ((DOG BARKS EXCITEDLY)) **(.8)**>
   <**(2.6)** .. @@@@@ .. (H)
   @@@ (H) (Hx) **(2.6)**>
J: You know --

CHAPTER 16. SPECIALIZED NOTATIONS

This chapter presents a variety of specialized or miscellaneous notations and conventions. Some of the notations are for phenomena that are but rarely encountered, while other notations are of specialized interest or application.

16.1 & Intonation unit continued

An ampersand (**&**) is used to mark each of the two halves of an intonation unit which for one reason or another the transcriber has split up and written on two lines.[38]

This is a notation which is not needed very often; but occasionally, the complex realities of conversational interaction bring two fundamental representational principles of the present transcription system into conflict. First, vertical space on the page iconically represents the sequential order of turns (and the passage of time). Second, each intonation unit appears on a single line. But what is to be done when a speaker starts an intonation unit, pauses, and then finishes it, while a second speaker interjects a whole turn during the pause? In order to preserve (as far as possible) the principle that lines written higher on the page represent earlier turns, it is necessary, on rare occasions such as these, to break up an intonation unit into two lines. When this is done, the ampersands are used to represent the continuity of the unit across the intervening material. In such cases, even though the words appear on two separate lines, they should nevertheless be considered part of a single intonation unit.

{16.1.1 LUNCH}

```
R: When he was real little,
   [he] almost died of pneumonia.
L: [Oh].
R: when he was &
L: Oh really?
M: Hey.
R: & three.
```

{16.1.2 LUNCH}

```
L: ...(1.4) [That's] &
R:          [But] they had to go see [[her]],
L:                                   & [[pretty bad]].
R: ...(1.1) But he outgrew it.
```

{16.1.3 LUNCH}

```
A: ... Maybe she's &
B: Maybe she's [addicted].
A:             & [semi] ... hypochondriac.
```

Another, rather rare, situation where this notation may be needed is when an intonation unit is begun by one speaker and completed by another -- all within a single

coherent intonation contour, as performed by two different speakers in coordination. Here, the ampersands should be vertically aligned if feasible, to iconically highlight the continuity of the intonation unit across the speaker change.

16.2 | {pipe} Intonation subunit boundary

The "pipe" symbol (|) is used by some researchers to separate one intonational "subunit" from the next, within one intonation unit. The intonational subunit boundary represents a juncture which displays some of the features of a prototypical intonation unit boundary, but not all -- i.e. a minor or partial break in continuity. Needless to say, this is often a matter of close judgement, and should be evaluated accordingly. In fact, the intonation subunit notation is sometimes seized upon as a compromise, in cases where one transcriber hears an intonation unit boundary, while another hears none. The category is admittedly controversial, and some discourse researchers prefer not to use it (e.g. Chafe, forthcoming).[39]

> The intonation subunit symbol is by convention associated with the following text, and precedes any pause which is associated with the following unit.[40]

{16.2.1 DOOR}

```
A: ... The hinge is | on the inside.
B: Right.
```

{16.2.2 AESTH}

```
S: So that the reason | why I'm being communicated with,
   is | so that I can be made to do something.
```

{16.2.3 FORCES}

```
S: ... [Well],
A:     [You're off] the highway,
   aren't you | here?
```

16.3 <| |> Embedded intonation unit

Angle brackets marked with pipe symbols (<| |>) may be used to enclose an embedded intonation unit (cf. Svartvik and Quirk 1980 for a similar, yet distinct, category). This occurs where a larger intonation unit is temporarily interrupted while a parenthetical utterance -- usually at a different pitch register -- is inserted, after which the larger intonation unit is resumed. The impression given is that if the interrupting phrase were suppressed, the remaining material would fit together as a single coherent intonation unit. This potentially controversial category sometimes occurs with utterances of hesitation words like uh or phrases like you know.

16.4 {Capital Initial} Reset

A capital initial letter can be used to indicate a "reset", that is, the start of a new unit, or a restart after a false start, etc. Speakers often signal a reset by shifting to a new base-line intonation level. This usually involves a higher initial pitch level from which subsequent pitches will gradually tend to drift down over the next stretch of speech ("declination"; cf. Schuetze-Coburn et al. 1990), until a new reset begins the process all over again. (Capital letters are also used in the standard way for the first letter of a proper noun, the pronoun I in English, and so on.)

{16.4.1 HYPO}

```
K: But he'll recover,
   He'll --
D: What is that.
K: He'll be over his leprosy [soon].
G:                           [Nothing],
   it's just dry skin.
G: ... There isn't --
   It's no disease,
   at all.
K: Athletic feet.
   ... foot.
D: foot.
```

It must be recognized that the usual literary conventions for capitalization are problematic to the extent that, even if something like the "sentence" is found to exist in spoken discourse[41] -- which is far from certain -- it cannot in any case correspond neatly to the sentence of written discourse. While punctuation symbols such as period and comma are widely used to mark intonation in spoken discourse, the unit which in a spoken transcription is delimited between two period symbols does not often correspond directly to a standard written sentence. Moreover, the resulting transcription does not always make for easy reading, to the extent that the punctuation symbols, given their intonational value, are not available to effectively cue the reader to any other kind of unit structure. Given that speakers often mark the start of a major new unit by resetting the baseline pitch level, the capital initial letter will often correspond to the apparent beginning of a new "sentence"-like discourse unit -- which may itself correlate with the start of a new rhetorical, cognitive, speech act, or interactional unit.

Unlike in writing, there need not be any absolute correlation between a period at the end of one line and a capital letter at the beginning of the next. In fact, a very common configuration is a comma (,) or double hyphen (--) at the end of the first line followed by a capital at the beginning of the second. Since the capital letter reflects simply the beginning of a new discourse unit, and not necessarily the completion of the previous one, there is no guarantee that the previous unit will always have been brought

to a full conclusion. Thus it often happens that several truncated, false-start intonation units in a row, each beginning (or attempting to begin) the same utterance, will each be written with an initial capital -- even if only the last of the units is ultimately brought to completion.

It is important to emphasize that since the capitalization notation must remain inherently ambiguous -- for any orthography that capitalizes proper nouns -- its primary role in the suggested convention can only be to provide a rough feel for the restart structure of a conversation, which will possibly turn out to correlate with the initiation of some kind of rhetorical, cognitive, speech act, or interactional unit. At a minimum, using capitalization in this way generally helps to make the transcription more readable. But because the nature of the contrast signaled by capitalization is not easy to codify precisely, and because a full-fledged structural or functional analysis is not presently available, capitalization must be considered simply a rough device for displaying new unit resets, to be exploited or ignored at the researcher's discretion.

16.5 <words> False start

Plain angle brackets < > are used to enclose words which are "false starts" or "editables" -- when such indication is desired.

For a widely-known language like English it is probably best to avoid inserting implicit judgments about correctness and repair at the transcription level (Edwards 1989). (Such interpretations are of course commonplace, and fully appropriate, at the more interpretive and theory-bound level of coding.) But the picture changes when one considers little-known languages. A linguist who publishes a transcription of a language that is known by only a few individuals in the world would do a decided disservice to simply reproduce all the words as spoken, without any indication of which were considered correct and which were not, in the eyes of the native speaker. This is, after all, the kind of knowledge which native speakers of English make use of implicitly whenever they read and understand an English language transcription which does not explicitly alert them to the disfluencies it contains. But in a little-known language, such knowledge may well be inaccessible to any but the linguist who published the text and one or more native speakers in a faraway place.

One solution that has often been adopted is to edit out disfluencies in the text, in accordance with the judgments of a native speaker. While this kind of editing is appropriate for some purposes (e.g. publishing indigenous literature as the native author would have it presented), for serious spoken discourse research -- of the sort that takes into account the actual process of discourse production -- it is obviously preferable to retain every word exactly as uttered. If care is taken to indicate, for the benefit of the non-native speaker, which items are editable, these readers can then have the best of

both worlds -- they can skip over the overtly indicated false starts to obtain an edited version, and include them to better understand the discourse production process. But if the distinction between false starts and natively ratified material is not indicated, no one who lacks access to a native speaker can reliably reconstruct this information.

Thus, while for most purposes one would not specially mark false starts in a transcription of English discourse, one should do so in, for example, a language like Xinca or Sacapultec Maya. The plain angle bracket notation < > is made available for this purpose.[42] (English examples are presented below with this notation just to illustrate how it would be used.)

> No spaces appear between the angle brackets and the words they enclose.

{16.5.1 FORCES}

```
A: <He has> --
   <a> --
   The spelling is what first turned me on to him.
```

{16.5.2 DOOR}

```
A: and <they> --
   they poked into <the-> the molding,
   along the [side].
B:           [unhhunh],
```

{16.5.3 HYPO}

```
G: ... And,
   you know,
   <He would like>,
   He would like,
   walk out on the freeway,
   and try to hitchhike,
```

{16.5.4 AESTH}

```
J: in going out <to> --
   ... to buy the thing.
```

16.6 <L2 L2> Codeswitching

Angle brackets labeled with L2 (**<L2 L2>**) may be used to mark stretches where the speaker has shifted into a language different from the one he or she has been speaking, or from the one which dominates the current conversation. If several languages are involved, each can be indicated by its own number: <L3 L3>, <L4 L4>, etc. Alternatively, more mnemonic (if more cumbersome) codes can be assigned: <L-SP L-SP> for Spanish, <L-XIN L-XIN> for Xinca, and so on. In either case, a key should

be given in the header of the transcription, spelling out the full name of each language so abbreviated.

While this notation may go somewhat beyond pure transcription per se, it is useful for making clear to the reader when codeswitching (as opposed to borrowing) has taken place, and for ensuring that computer searches will not, for example, mix up words from two different languages.

CHAPTER 17. SPELLING

Although spelling the words in a discourse transcription is mostly quite straightforward -- you spell them just as you would in ordinary standard orthography -- there are at least three situations where special considerations need to be taken into account. First, in places where standard written practice might employ abbreviations, nonalphabetic symbols, numerals, and so on, it is important to spell out each word in letters, for reasons that will be made clear below. Second, in speech one encounters certain words and vocal sounds that almost never appear in writing, and since dictionaries generally fail to include such words, they also fail to give guidance on how to spell them. What the transcriber needs here is a set of conventions to facilitate consistent spelling. Third, in speech a particular word will sometimes be given a variety of different pronunciations, so that the question of how such variations are to be spelled -- if at all -- becomes an issue to be addressed.

17.1 Spelling out the words

Ordinary writing makes frequent use of various handy symbols and abbreviations, such as $2,000 for two thousand dollars, 60% for sixty percent, 1900 for nineteen hundred, 5:00 for five o'clock, Dr. for Doctor. But in a discourse transcription, this kind of shorthand should be strictly avoided. Each word uttered must be written out fully in letters, without relying on special symbols, abbreviations, or numerals, as in the following examples.

{17.1.1 BALCONY}
E: So Mom felt obligated to ask those **two** idiots to lunch.

{17.1.2 BALCONY}
E: **Four,**
five.
someplace around there.

{17.1.3 MIRACLE}
A: It was in a **sixty-nine** yellow Toyota Corona.
M: ... Was it a manual or an automatic.
A: ... @Automatic.

{17.1.4 WYOMING}
G: and he paid **two thousand dollars** for it,
and that was like the st- the m- store mascot crystal.

There are four main reasons for spelling out the words: to avoid ambiguity; to ensure lexical recognition; to allow the notation of word-internal prosody; and to

economize symbols. Each of these goals can be attained by the simple expedient of consistently writing out every word as uttered.

(1) Formal Ambiguity. First, while an abbreviated notation generally succeeds in communicating the content of what was said, it is often ambiguous regarding the form that was used to express it. For example, from a transcription using the notation 2,100 one may understand clearly what the meaning is and yet still be ignorant of whether the actual words uttered were two thousand one hundred or twenty-one hundred. Such ambiguities and imprecisions can undermine the discourse transcription as a record of language use, to the extent that language use concerns form. In many cases the standard written shorthand notations are potentially ambiguous regarding which words are actually being uttered, as illustrated in the next few examples. If a transcription writes 218, was this pronounced as two hundred and eighteen, two hundred eighteen, two eighteen, or two one eight? Given just the written notation 218, any of these would be possible. Although the discourse context will sometimes allow the reader to guess which pronunciation is being indicated, this cannot be relied on in all cases. Similarly, does 100 represent one hundred, a hundred, or hundred? In each case, the surest way to make clear what was said is simply to write it out.

{17.1.5 HYPO}

D: ... in **two hundred and eighteen** pages.
K: ... Glen got it.

{17.1.6 AESTH}

A: [because] his mother,
B: [Hm].
A: dared to speak out,
during the [[**Hundred**]] [Flowers] thing.

(2) Lexical Recognition. As a consequence of the formal ambiguity of many written shorthand notations, writing out each word that was uttered is the only way to ensure that a search for a particular word will turn up every instance that occurs in the data, that is, to ensure lexical recognition. Thus, the written notation 1 3/4 may communicate a meaning synonymous with that of one and three quarters (or one and three fourths?), but the numeric notation is more likely to cause the use of the word and to be overlooked -- which would undermine a study of conjunctions, for example.

{17.1.7 DOOR}

D: ... Now I have a good f- circular saw,
with **one and three quarters** horsepower,
so it was more than enough.

Shorthand indications of clock time are especially prone to ambiguity, in ways that may cause words to be missed in a lexical search. Is 5:00 shorthand for five o'clock or just five? Is 8:30 a.m. supposed to be eight thirty AM or eight thirty in the morning? Does 12:30 indicate twelve thirty or half past twelve? Does 12:00 represent twelve o'clock or noon (or even midnight)?

{17.1.8 DOOR}

D: I remember,
five o'clock,
I finally got the door in,
and I'd started at **eight thirty in the morning.**
S: ... Gosh.

{17.1.9 DOOR}

D: [And it's already **two o'clock**].
A: [@ XX,
XX],
D: And I'm getting madder and madder.
And so [finally],
J: [No],
it was only **twelve thirty.**
D: Yeah,
it's about **noon.**

(3) Word-Internal Prosody. Third, if the actual words uttered are not written out in letters, it becomes difficult or impossible to indicate certain details of how these words were pronounced. For example, any transcription that seeks to indicate which sounds are prosodically lengthened, or which words are stressed, will be defeated by a notation which represents not the actual sounds but only their meaning. If the transcription writes simply $2,000, where is the transcriber to place the marks that show which words were accented, and which sounds lengthened? One of the potential problems for shorthand notations is that they make it hard to show the location of any word-internal (or phrase-internal) prosodic phenomena, such as lengthened sounds, accented words, and so on. For example, in the phrases represented by $5.00 or $200.00 or 1900, are there any accented words, or lengthened sounds, and if so, where? Writing out 'five ^dollars, 'two hundred do=llars, nineteen ^hundred, and so on, makes it possible to show the details of pronunciation in the right place.

{17.1.10 HYPO}

N: Take a ^cab.
It will cost you about **'five ^dollars.**
to get to my ^house.

{17.1.11 DOOR}

D: 'turned out to be=,
J: ... 'miserable.
D: **'two hundred do=llars,**

{17.1.12 AESTH}

B: I mean,
   when you look at a=ds from **nineteen ^hundred,**
A: Hm=,
B: they're just ^pitiful.

{17.1.13 HYPO}

D: **One two three four five 'six.**

(4) Symbol Economy. Fourth, writing out words like dollar and percent means that symbols like $ and % are freed for better uses, such as representing high frequency speech phenomena.

{17.1.14 WYOMING}

G: because they had some sort of sale.
   you know,
   twenty to sixty percent off.
   type of thing.

17.2 Acronyms

One thing that complicates matters here is that over time, some abbreviations that originated in writing have come to be pronounced as such in speaking -- that is, pronounced as abbreviated forms or as spelled-out acronyms. It goes without saying that when a speaker pronounces an "abbreviated" word as such, the transcriber should always write what was said, and not substitute the "full" variant of the word. Thus, if the speaker says TV, the transcriber writes TV, not television. And while it may be momentarily tempting to avoid the abbreviation (and the periods) in Ph.D. by writing out the words Doctor of Philosophy, if what the speaker uttered was just the names of the three letters, then this pronunciation is what needs to be transcribed (as PhD).

{17.2.1 BALCONY}

E: Did you see Mike on **TV?**
   @@@[@@]
D: [Did she]?
E: Yeah.

As suggested by the previous example, one problem that comes up in some abbreviations and acronyms concerns the presence of the period symbol in their standard (or commonplace) spellings: for example, T.V., Ph.D., U.S.A., T.G.I.F., and so on. These words in a discourse transcription require special handling, due to the potential for confusion: because the period symbol is used for representing intonation, its appearance in a spelling like T.V. can create ambiguity, especially if the word appears at the end of a line. Thus, such words should be written without periods in them: TV, PhD, USA. Although in some cases this makes for a slight departure from standard spelling, the

departure is systematic, and should create no problem for lexical recognition (§25.4), etc.[43]

When it is necessary to show that an acronym was pronounced as a series of letter names rather than as a single word, spaces should be inserted around each letter: T G I F, as opposed to SWAT.

{17.2.2 BALCONY}

```
E: s- they were sitting there watching TV.

 BALCONY}
E: his name's D R
   ... and I said,
   Oh,
   like Doctor?
   and he goes,
   Exactly right.
```

Similarly, when a speaker utters the name of a letter, or of several letters (as in spelling a word out loud), each of these should be written as an individual word (with surrounding spaces).

{17.2.3 FORCES}

```
A: and he spelt heel,
   h e a l,
S: @
A: and he spelt said,
   s i a d.
```

17.3 Marginal Words

When listening to ordinary conversation, the transcriber is always confronted with a few words and sounds for which ordinary spelling conventions -- designed for written language -- offer little or no guidance. The transcriber faced with such a word, rather than simply inventing an ad hoc spelling which may or may not be recognized by other readers, should preferably follow some sort of standard practice.

In this chapter we present some suggestions on how to spell various marginal words (or "vocalizations"; cf. Tottie 1989) such as those used in filled pauses, backchannel responses, and so on -- so that they can be transcribed consistently, allowing for both ease of reading and automatic identification. Table 2 presents a list of spellings for such marginal words (all exemplified from English). For some of these words, the spelling derives from an already existing informal spelling convention discernable in the practice of playwrights, novelists, and especially cartoonists. In order to suggest to the reader which marginal word is meant, Table 2 provides for each word a descriptive gloss,

intended simply as an identifying label rather than an actual analysis of its discourse function.[44]

In these spellings, the sequence of letters nh roughly indicates nasalization of the preceding vowel.[45] (Note that many of these words tend to very commonly undergo lengthening of one or more of their sounds in ordinary conversation, to the point that length becomes almost a standard component of the word.) While this table offers conventions only for English, researchers who work with other languages can establish their own conventions as needed.

SPELLING	GLOSS
uh **unh** **um**	hesitation (filled pause)
m **hm**	awareness, wonder, backchannel
huh **hunh**	awareness, wonder, backchannel,
mhm **unhhunh** **uhuh**	backchannel or affirmative response (final syllable stressed)
unh-unh	negative response (initial syllable stressed)
uh-oh	alarm cry

Table 2. Spellings for Some English Marginal Words

{17.3.1 AESTH}

J: I think of ... aesthetics,
and,
S: **mhm**,
J: **uh**,
S: ... **Hm**.
... @
J: ... creation of desire,
for one thing.
S: **mhm**,

{17.3.2 J&J}

J: And I thought,
... **Uh-oh**.

17.4 Variant pronunciations

While discourse transcriptions generally do not try to capture the full phonetic details regarding how each word was pronounced -- the exception being when the pronunciation of a word has an immediate impact on the ongoing interaction, as in the examples in §12.1 -- there may be certain words whose variants are both significant and relatively easy to represent in a systematic way. In fact, sometimes the standard orthography provides standard spellings for two distinct variants. For example, in English the indefinite article is written either as a or an, according to its pronunciation; and the preposition until is standardly recognized as having a variant pronunciation written as till. But where standard orthography has not yet provided such a convention, the transcriber may occasionally wish to supplement it with a new convention. This will work all right as long as the new spelling is systematic, and all variants are kept track of. Note, for example, that anyone wishing to study the use of the indefinite article in English would need to search texts not only for a but also for an. The same goes for until and till, and any other set of variants distinguished in one's transcriptions.

One word for which it may be profitable to indicate the variants is because, which shows a common alternative pronunciation sometimes written as 'cause or cause.

{17.4.1 HYPO}

G: **Because,**
I was coming down with a fierce case of rhinitis,

{17.4.2 HYPO}

K: That's **because** you weren't sick,
two years ago.

{17.4.3 AESTH}

A: [**because**] his mother,
B: [Hm].
A: dared to speak out,

An apostrophe is sometimes used to cue the reader that the word represents a (reduced) variant pronunciation. This is also sometimes done to distinguish the reduced form from other similarly spelled words (e.g. the linker 'cause versus the verb cause, which despite their similar spellings are pronounced with a different vowel). However, this homonymy is generally no more of a problem than that of "bank of a river" and "savings bank", which in actual use are not likely to be confused.[46]

{17.4.4 HYPO}

G: And,
it can **cause** cancer.

CHAPTER 18. NON-TRANSCRIPTION LINES

It is useful to include a certain amount of background or "bookkeeping" information about the text being transcribed, within the text file itself. When this is done, the lines containing background information should be carefully distinguished from actual transcription lines. Other kinds of non-transcription information, such as interlinear gloss lines, should be distinguished as well.

18.1 $ Non-transcription line

The dollar sign (**$**) marks any line in a transcription file which is not part of the transcription per se, but which encodes other useful information. Examples might include lines indicating the title of a transcribed text, the transcriber's name, the recording date, and so on. In such lines, it is helpful to use the colon to mark the boundary between the information category label and the specific information that falls under that category.

> The dollar sign is written as the first character of the line it appears in. It is followed by a single space, the category label (written all in capitals), and a colon. For ease of reading, the words that appear following the colon can be (optionally) aligned vertically, using as many spaces or tabs as are necessary.

```
$ TRANSCRIPTION TITLE:     Door Story
$ TAPE TITLE:              Door
$ FILENAME:                door.trn
$ PRINTOUT DATE:           (etc., etc.)
$ RECORDING DATE:
$ RECORDING TIME:
$ RECORDING LOCATION:
$ RECORDED BY:
$ LANGUAGE:
$ DIALECT:
$ GENRE:
$ SETTING:
$ SPEAKER 1:
$ SPEAKER 2:
  (etc.)
```

18.2 $G Interlinear gloss line

For many languages (especially relatively little-known ones) it is advisable to include, along with the transcription itself, an interlinear gloss line. Such lines should be marked with a dollar sign plus capital G (**$G**) at the beginning of the line, to make it clear that they do not represent actual speech. Additional lines for indicating morphosyntactic category ($M), free translation ($F), etc., can be marked similarly if these are needed.[47]

If need be, interlinear lines marked with the dollar sign can also be used to introduce certain types of specialized transcription information. For example, for transcribing videotape, a separate line beginning with $EYE could be placed above each transcription line to record the eye-gaze of speech event participants, as iconically synchronized to their simultaneous verbal utterances (cf. Goodwin 1981). (This notation must be considered "fragile" (§25.2.5), however, because the indication of temporal synchronization depends on maintaining the vertical alignment of the two lines.)

CHAPTER 19. RESERVED SYMBOLS

In any transcription system designed for general discourse research, allowance must be made for recording certain kinds of specialized information, which may differ from language to language and from researcher to researcher. This information may include some kinds that are not strictly speaking part of discourse transcription per se. Language-specific spelling conventions and phonemic orthography, as well as coding of morphosyntactic categories and structure, may each call for the use of some specialized symbols. Some of the symbols that are not used for discourse transcription need to be reserved for this; this chapter presents suggested notations for each of these domains. In addition, a few symbols are left undefined, free to accommodate the diverse special needs of users of the system. Naturally, different researchers will have different requirements, and even the symbols which are spoken about here as "reserved" are available to be exploited for other purposes if they are not needed for the purposes described.

19.1 Phonemic and orthographic symbols

Apostrophe (') should be reserved for contractions (she'll, don't) in English and other similar orthographies. In other languages, it may be needed for representing palatalized consonants, ejective consonants, etc., according to the orthographic conventions of the language in question.

19.2 Morphosyntactic coding

Researchers who want to study the morphological and/or syntactic structures in their spoken discourse data will need to reserve a certain number of symbols for coding purposes. Probably the most important need is for indicating morpheme boundaries (in languages where this is desirable), for which the plus sign (+) can be reserved.[48] For other, more specialized forms of morphosyntactic coding, the following symbols may be reserved: number sign (#), ampersand (&), and brackets ({}), and tilde (~).[49]

Of course, if these symbols are not needed for morphosyntactic coding they can be freely used for other purposes.

19.3 User-definable symbols

Several symbols have deliberately been left without a specific definition in this system, to give researchers room to expand the system to meet their special needs. The double quote mark (")[50] or tilde (~) can be combined with numbers, letters, or other symbols to form digraphs (Y", 2", &", ~A, ~B, etc.), and in this way new symbols can be generated as needed. And while the semicolon (;) may in rare cases be needed as a substitute notation for speaker attribution labels (in languages where colon must

represent phonemic vowel length), in general it will also be available for definition by the user. Also, researchers who do not subscribe to a particular transcriptional category (such as the "intonation subunit") can redefine the symbols in question to fit their needs.

Among complex notations, the angle bracket notation (§12.1) allows for constructing an open-ended set of user-defined symbols, for features which apply over a stretch of discourse. And the single parenthesis notation (§10.1) allows for creation of an unlimited set of symbols for vocal noises.

CHAPTER 20. PRESENTATION

One important use of transcriptions is for illustrating some discourse phenomenon in an article or book, or arguing for some analysis of it. This use generally calls for the display of selected samples, whether short or long, which have been extracted from a longer stretch of transcribed discourse. Usually, the attention of the reader is being directed to some particular feature within the discourse extract in question. Thus, in addition to the symbols for transcription per se, certain conventions for the presentation of transcription examples are useful. In this chapter we introduce some suggestions, based in part on the practice of the Conversation Analysis tradition (Atkinson and Heritage 1984:xvi).

Since these symbols do not ordinarily need to be included in one's discourse database -- for most people they will be used only in public presentations of discourse data such as handouts, transparencies, published articles, books, etc. -- one is freed somewhat from the limitations imposed by the small array of symbols that are viable for a computer database (i.e. primarily nonalphabetic lower ASCII symbols). For presentation purposes one can thus make use of special symbols like arrows and "bullets" (filled circles), and stylistic features like boldface and italics, which are good for drawing a reader's attention to the relevant features. Because these symbols and typefaces serve mainly to draw a reader's attention, and not to represent some phenomenon per se, it is not so necessary to establish strict conventions for their use. Nevertheless, some general suggestions for presentational style may be found useful; they follow herewith.

20.1 Salient line of text

In order to call attention to an interesting feature which is exhibited in a particular line of text, a visually prominent symbol such as an arrow or bullet is placed in the left margin of the line that is to be highlighted.

{20.1.1 J&J}

```
    N: ... And as I was hugging him,
->     ... he just sli- dropped.
       ... slipped from my hands.
```

20.2 Salient words

Sometimes it is useful to pinpoint a more sharply focused stretch of discourse within the line. When it is necessary to call attention to a specific word or words, this can be achieved by using boldface for the salient words.

{20.2.1 J&J}

```
N: ... And as I was hugging him,
   ... he just sli- dropped.
   ... slipped from my hands.
```

Alternatively, underlining can be used to highlight a word or sequence of words (if, for example, boldface is not available, or is hard to distinguish).

{20.2.2 J&J}

```
N: ... And as I was hugging him,
   ... he just sli- dropped.
   ... slipped from my hands.
```

The use of boldface (or underlining) can be supplemented by also highlighting the line it appears in with an arrow (as suggested above), in order to make it especially easy for the reader to locate the feature of interest.

{20.2.3 J&J}

```
    N: ... And as I was hugging him,
->     ... he just sli- dropped.
       ... slipped from my hands.
```

20.3 Ellipsis

Occasionally a writer finds it useful to present an extract from a transcript which omits some discourse material between two points of current interest. Obviously it is important to let the reader know where something has been left out of a discourse example in this way. To indicate how much material has been omitted, the number of lines left out can be given within double parentheses.

{20.3.1 J&J}

```
N: And they're s- interspersed,
((6 LINES OMITTED))
J: You know --
   You know,
   about this piece?
```

Alternatively, a series of three diamonds (or bullets, etc.), each on a line by itself, can be used to indicate that several lines have been left out of a transcription, without specifying how many.

{20.3.2 J&J}

N: And they're s- interspersed,
♦
♦
♦
J: You know --
You know,
about this piece?

Note that in general it is not advisable to leave out material within a single line (i.e. within a single intonation unit), since not much space is saved, and the resulting example may be hard to interpret fully. If there is a special reason why this kind of editing needs to be done, the reader should be clearly informed about the kind of information that is being left out.

20.4 Source citation

It is often useful to cite the source for a transcription example: for example, the title of the transcription as found in the researcher's notes, the date of the transcription version, the page and/or line number, and so on. Depending on general editorial style for the publication in question, the citation might be presented in flush right alignment at the beginning of the example, perhaps enclosed in some kind of special brackets (as in the present work).

{20.4.1 **DEPRESSION, page 16:3-4**}

M: You're kidding!
S: Yeah.

20.5 Extra-long intonation units

Occasionally an intonation unit is too long to fit on one line. While the best way to deal with this is to make room for more characters on each line by changing the pitch or the margins used, sometimes this is not feasible. Whenever typographical considerations make it necessary to break a long intonation unit into two successive lines on the page, the remainder (the portion which is shifted down onto the second line) should be set flush right, i.e. even with the right-hand margin. In the unlikely case that an intonation unit is so long that its remainder extends beyond a second line, heavy indentation (ten spaces) should be used for each line of the intonation unit after the first.[51]

Extra-long intonation units are more likely to occur in narrow delicacy transcriptions, as in the following examples.

{20.5.1 AFRICA}
A: .. And we were 'ma=d, /
   .. because 'Glenda had told us we 'had to be 'back by
                                                **^Monday, **

{20.5.2 RANCH}
R: ... (H) 'We 'start 'out ...(.8) with ...(.8) 'dead ^horse
                                                **hooves. **

{20.5.3 AESTH}
S: ...(1.0) @ (H) There 'isn't any ^rea=l 'communication going
                                                **on. **

Typographically motivated breaking of intonation units may also occur when two moderate-sized intonation units overlap, because the second overlapped unit may have to begin in the middle of the line, and hence can easily run out of space by the time the right margin is reached.

{20.5.4 HYPO}
D: What's cytomega[lovirus].
G: [Cytomegalovirus] [[is an]] inflammation of the
                                                salivary glands,
K: [[@@@]]
G: that then,
   ... uh,
   ... causes all sorts of other problems.

In some such cases the overlaps may be so long as to make it necessary to forgo their iconic vertical alignment, and to simply start the second overlap portion from the left text margin. Note that even in this less iconic presentation, the crucial information about overlap location is completely preserved through the use of distinctive brackets.

{20.5.5 LUNCH}
L: ... He 'had ^pneumonia?
M: .. Yeah he ^eventually .. [^developed it].
L: [Is that the 'first 'time] he's 'ever had ^pneumonia?

{20.5.6 DINNER}
B: Nobody wants [to leave].
A: [They don't] move [[out]].
S: [[Berkeley]] just keeps [3 getting 3] bigger and [4 bigger 4].
B: [3 Yeah 3],
                                                [4 Yeah 4],
   ... Well it's amazing to me.

20.6 Line numbering

It is often useful to number the lines of one's transcriptions, to allow easy reference to specific places in them. For this, numbers can be placed in the left or right margin. Each line in the text is numbered consecutively, beginning with the number 1 for the first line, 2 for the second, and so on. (Or, every fifth line can be so marked).

> The cleanest display is achieved if the numbers are separated from the text of the transcription only by spaces or tabs, i.e. without intervening parentheses or periods, which only contribute visual clutter.

{20.6.1 J&J}

```
131  J:  And I looked over,
132      ... into the street,
133      and saw this cop car,
134      going along,
135      right ... next to me,
136      you know,
137      like five miles an hour.
```

Obviously, numbering should be done only after the transcription is considered finished (for present purposes), when further modifications are not expected.

The above are of course simply suggestions about stylistic matters in the presentation of discourse examples, and other symbols and conventions may be found equally effective.

PART FOUR:

THE TRANSCRIBING PROCESS

This part treats various aspects of the transcribing process, giving guidelines on how to go about making a discourse transcription.

CHAPTER 21. THE TRANSCRIBING PROCESS

When a researcher first listens to a tape recording of a free-flowing conversation, he or she is presented with a potentially overwhelming amount of raw information, from which the essential must be gleaned and set down on paper. For this it is important to master a certain number of transcription categories, symbols, and conventions, which allow the information to be adequately represented; and this need was addressed in the preceding pages. But the question still remains: where does one begin? How does one bring the transcription to the point where it becomes, if not perfect and complete -- a state which practically is unattainable -- at least adequate for scholarly analysis? In this chapter, we present some suggestions on how to go about producing a good transcription of a spoken interaction. Since at this level we are in effect talking about a working style, it should be clear from the outset that this is not the only way to proceed. The methods outlined below have worked well for many, and are offered as a general guide to the transcribing process. (Although some of the discussion below refers to audiotapes, the process described actually applies to the transcription of sound, regardless of whether it comes from an audiotape, videotape, or other source.)

21.1 Where to begin?

In transcribing a conversation, the first question is: how does one deal with all the information on the tape? Does one start by listening to the first ten-second segment twenty times over, while trying to write down every detail and nuance that occurs in it? Instead of this, it generally works better to start with broad brush strokes, as it were, and later proceed to fine. One first goes through a stretch of conversation to sketch in the general outlines, and later returns to fill in details. When the time comes for the details, they are most likely to be got right if one listens for one kind of detail at a time. For this the best procedure is to make several successive passes through the tape recording, focusing each time on a different listening task.

How much material should the listener address at one time? In general the transcriber listens to a few seconds of tape, and then stops the tape recorder to write down what was heard. If necessary the transcriber then winds the tape back two or three seconds to listen again -- and, perhaps, again and again, for any question that requires a close judgment. When the tape being transcribed is long, it is often helpful to work in this way through a stretch of perhaps three to five minutes, and then to go back through this segment again for each of the discourse features one is seeking to capture. Working on just a few minutes of material at a time, one's auditory memory of the discourse remains fresh from one pass to the next -- and, being auditorily oriented, one picks up new details more quickly.

In providing the outline of the transcribing process which follows, the division of the whole into discrete steps is no doubt artificially neat. While it is useful to follow a

systematic procedure -- especially in checking for intonation unit boundaries, overlap, phonetic detail, and so on -- it is to be expected that one will often notice, and write down, a detail from "Step 9" while one is mainly concentrating on "Step 4" (or vice versa). The "steps" then are to be taken with a grain of salt. But whether the procedures are carried out in sequence or not, the list remains useful as a summary checklist of the many details that one must at some point attend to. In the end, transcribing becomes a matter of personal working style, and each transcriber will arrive at a procedure that works best for them.

One way to make use of this chapter is to first read about the steps described under the headings "preliminaries" (§20.2) and "initial sequence" (§20.3), and then to carry out a transcription of a few minutes of conversation in the manner suggested. After this immersion in the transcribing process, the reader can then return to and follow the remaining steps (the "refining sequence" (§20.4), etc.), when the problems they refer to will be more familiar, and the commentary will make more contextualized sense.

Note that some of the steps below apply only to narrow transcriptions, and can be ignored for the time being by transcribers pursuing a broad transcription.

21.2 Preliminaries

Before the actual transcription process can begin, there are a few preliminaries to take care of.

Step 1. Documentation. Ethnographic information about the speakers and the speech event context, along with certain information about the transcription itself, should be documented either on paper or in a header at the beginning of one's computer file or, preferably, both (see §17.1 and Appendices 3 and 4).

Step 2. Tape copy. Rather than use the original tape for transcribing -- a rather risky proposition, given the wear and tear that heavy rewinding can inflict on a tape -- one should make a copy for this purpose. The original should be put away in a safe place, such as a tape archive if one is accessible. On both the original and the tape copy, the little plastic safety tabs on the upper edge ot the cassette should be broken out, to avoid the danger of accidentally erasing the tape. (For a discussion of how to care for audiotapes so that they will preserve a viable record of the speech event, see McWilliams (1979) and Center for Applied Linguistics (n.d.).)

For doing the transcribing, it is a good idea to use equipment designed specifically for this purpose, if at all possible (§24.1).

21.3 Initial sequence

Once the preliminaries are taken care of, the basic transcription is laid out in an "initial sequence" of steps, as follows (Steps 3 to 19).

Step 3. Words and speakers. Jot down roughly the words spoken. Concentrate on one speaker at a time: usually, the one who has the floor at a given point on the tape. Indicate who the speaker is, writing in at the beginning of each turn the speaker's name or code. Take care not to overlook filled pauses (um's, uh's, etc.) and false start words, which should be noted down exactly as uttered.

Many transcribers seem to find that the easiest way to catch the words in a conversation is to follow the voice of one speaker at a time, listening for every word he or she says. At this stage, one needn't particularly focus on catching what the other speakers are saying. The process is then repeated with each speaker in succession, until ultimately even the backchannel responses of speakers who don't have the floor have been noted down.

Step 4. Intonation units. Write each intonation unit on a separate line; that is, divide the stream of words into intonation units, each separated from the next by a carriage return (§4.1). At this stage the intonation unit boundaries do not have to be perfect, but it is important to get the transcription into manageable chunks at this early stage, so that overlaps can be aligned in the right place (§5.2), etc. The more accurate the intonation unit boundaries are at this stage, the less work of realignment there will be later on (§22).

As the transcriber becomes more adept at recognizing intonation unit boundaries, this step is likely to more or less merge with the previous one, so that the words are jotted down in provisional intonation units right from the start.

Step 5. Overlaps and backchannels. Listen for the words of all overlapped speech (§5.2) and backchannel responses (mhm, yeah, etc.), to make sure they have all been noted down -- without necessarily focusing, at this preliminary stage, on exactly where the overlaps occur. Having gotten the basic outlines of the overlapped speech down on paper, the transcriber can then focus on listening for the precise location of all overlaps, noting the beginning and ending of each (§5.2).

When, as often happens, it is hard to hear just where an overlap begins, or where it ends, the following listening technique may be usefully applied to the relevant stretch of speech. Concentrate on listening for the absence of overlap. Since overlap typically makes the affected words seem harder to hear, or more obscure, absence of overlap will be detected where the words seem "in the clear". To find the beginning of the overlap,

listen to determine which is the last word (or syllable) that sounds clear, i.e. not overlapped. The next word should be where the overlap begins, so insert the left bracket before it. Similarly, at the end of the overlap, determine which is the first word that sounds clear, and insert the right bracket (for overlap ending) just before it.

Step 6. Truncations. Listen for any truncated words (§4.4) and truncated intonation units (§4.2), and indicate these appropriately. (Remember to give false starts their own intonation unit if appropriate; see Step 22 and §21.)

If the language being transcribed is a relatively little-known one, it will be helpful to mark each false start using the angle bracket notation, for the benefit of non-native readers (§15.4).

Step 7. Transitional continuity. For each intonation unit, listen for the intonation contour, and indicate which transitional continuity class it belongs to (§6). This will be subject to fine tuning later on, but a rough indication is useful at this stage.

Note that the identification of intonation units (§4.1) is both practically and in principle prior to the specification of the intonational shapes of these units (§6 and §7). Contrary to what one might assume, intonation unit boundaries cannot be reliably derived from a transcription which was made with only an indication of continuing vs. final intonation (e.g. comma vs. period) and so on. The transcriber must listen for the specific complex of cues which mark the location of the intonation unit boundary per se, in order to identify it accurately. Once the unit is identified, a summary statement of its intonational shape can be given.

Step 8. Terminal pitch direction. For each intonation unit, indicate what the direction of the pitch movement is at the end of the unit (§7). Here it is important to attend to actual pitch movement, and not to prejudge the pitch shape based on syntactic or semantic expectations, nor even functional ones. (In certain kinds of broad transcribing (§3.2), this step may be skipped.)

Step 9. Pauses and latching. Listen for pauses -- short, medium, and long -- and write them in where they occur (§8). Where appropriate, indicate also the absence of a pause, i.e. latching (§8.4).

At this stage it is not necessary to clock the actual pause duration. It is useful, however, to provisionally indicate any long pauses by writing three dots followed by empty (for the moment) parentheses -- that is, ...( ) -- which will serve to remind one to return later and fill in the timing (Step 26).

(In some kinds of broad transcribing, short pauses and some or all of the next few items may be omitted (i.e. Steps 10-15 and 17-19).)

Step 10. Accent. Listen for words which receive primary accent, secondary accent, or no accent, as judged relative to their neighbors, and indicate them appropriately (§9.1 and §9.2). (Indicate any boosters, if this category is appropriate for your delicacy of transcription.)

Recall that, while it is true that in many cases there is just one primary accent in an intonation unit, there are likewise numerous cases of intonation units with more than one primary accent (§9.1).

Step 11. Accent contour. Listen to each primary accent to determine the intonation contour which characterizes it, and write this in.

Step 12. Lengthening. Listen for syllables or sounds which are lengthened relative to what is expected on general (lexical) grounds, and indicate them appropriately (§9.3).

Step 13. Vocalizations. Listen for vocalizations, and write them in (§10.1). It may be useful to make several separate passes through the tape, to check especially for laughter, breathing, clicks, and glottal stops.

(For a broad transcription, while one may not seek to record all vocalizations, at least the most interactionally significant ones (especially laughs) should be noted.)

Step 14. Ambient noises. Listen for and note any ambient noises (i.e. excluding vocal noises) which are interactionally relevant -- that is, noises in the environment corresponding to events that have consequences for the ongoing interaction (§14.1). (This step may be combined conveniently with the previous one.)

Step 15. Quality and phonetic detail. Listen for stretches of speech which display a marked alteration or shift in voice quality, tempo, pitch, etc., and indicate them using the appropriate angle bracket notations (§11). Be sure to indicate any instances of quotation quality or laughing while speaking. If more than one special quality applies to a particular stretch of speech, indicate this appropriately.

If the pronunciation of any word is unusual and of interest, indicate this using the notation for phonetic detail (§12).

Step 16. Hard-to-hear and indecipherable words. Listen to make sure that any hard-to-hear words have been written down in accordance with the transcriber's best guess as to what was said, and -- assuming the hearing remains uncertain in the end -- indicate the uncertainty appropriately (§14.3). Conversely, check to make sure that any words which were initially marked as uncertain, but which subsequent re-listening has allowed to be satisfactorily heard and confirmed, are no longer marked with the "uncertain hearing" notation. That is, if the words can now be understood clearly enough, any superfluous X-brackets should be removed.

Also, listen to make sure that any words that are indecipherable -- that simply cannot be heard well enough to make a good guess -- are recorded using the appropriate number of X's, as determined by the number of indecipherable syllables heard (§14.4).

Step 17. Nonaudibles. If working from audiotape only, check the transcription for places where nonaudible events seem likely to have occurred. The most common case where such information can be recovered tentatively (of course) is where an audible demonstrative pronoun or determiner was possibly accompanied by an inaudible gesture (e.g. Think of your door, || here. ((GESTURES?))).

Of course, the only reliable indicator of such visible but nonaudible events is a visual record such as a videotape. The reason for attempting to write this tentative information for audiotaped conversations is simply to remind readers that there is more to the recorded communication than audible vocalization, and to encourage them to be mindful of the at least potential consequences for interpretation of any gestural events that are likely to have occurred.

Even with videotapes, there may be significant events which take place off-camera. These should be noted down in the same way as best as possible, taking account of the same caveats.

Step 18. Resets. Check the transcription to make sure that each "reset" (including false start beginnings) is indicated using a capital initial letter (§15.3). (If the optional transcription convention of indicating resets is not being followed, this step will obviously be skipped.)

Step 19. Transcriber's comments. Make sure that any transcriber comments that may be necessary for clarifying unusual phenomena in the speech event have been inserted in the right place.

This is the final step in the "initial sequence" of transcribing steps. These steps should provide a good preliminary picture of the speech event being transcribed, which will be subjected to certain refining procedures, described in the next section.

21.4 Refining sequence

The steps in this section involve primarily refining and checking the transcription. These steps should be carried out with care, if the quality of the transcription is to be high.

Step 20. Overlap location (refinement). Listen carefully for the precise beginning and ending of any overlapped speech, using the listening techniques described in Step 5. Adjust the placement of brackets if necessary.

Step 21. Major vs. minor intonation units (refinement). This is a major step in the refining sequence, given that the accurate identification of intonation unit boundaries is both demanding and important (§4.1, §21). It is best if attention is paid individually to checking each of the various kinds of intonation units, via separate passes through the tape recording if necessary. One way to approach this is to focus on listening for the difference between major and minor intonation units. First listen for major (full-sized) intonation units, to check that the boundaries of these are correctly placed. Insert, delete, or shift carriage returns as needed to reflect any corrections. (Where appropriate, indicate the presence of any intonation subunit boundaries, if this convention is being followed.)

Then make a special effort (and perhaps a separate pass) to listen for minor intonation units, that is, units which are shorter than usual, and which may have less substantive content than a full-sized, major intonation unit. Do not hesitate to recognize one-word intonation units when they are called for. Likely candidates, each of which should be individually scrutinized for possible (not automatic) minor intonation unit status, include:

1. particles (well, hey, yes, no)
2. conjunctions (and, and uh)
3. filled pauses (uh)
4. vocatives (especially proper names)
5. adverbials (especially prepositional phrases)
6. miscellaneous (I mean, you know, etc.)

Step 22. Truncated intonation units (refinement). Listen for truncated intonation units, and make sure that each is accorded its own separate line (i.e. separate intonation unit). In listening for truncated intonation units, it is a good idea to carefully scrutinize any false starts. While not every false start is a separate truncated intonation unit, many (perhaps most) are.

Step 23. Realignment. In any place where a new intonation unit boundary has been introduced during the refining process, or where the sequence of turn-taking or speech overlap events has been reassessed, the surrounding lines of transcription should be carefully checked so that any necessary realignment of text lines, overlaps, turns, pauses, and speaker labels can be made (§22).

Step 24. Transitional continuity (refinement). Listen to the intonation contour for each intonation unit to determine the correct transitional continuity class (§6). Check every (complete) intonation unit to make sure that each comma, period, and question mark is correct, and is used appropriately for representing intonation function rather than presumed sentence structure.

Check to make sure that every intonation unit that is completed has an intonation notation at the end of it (§6 and §7), and that every intonation unit that is not completed has the truncation symbol at the end (§4.2).

Step 25. Terminal pitch (refinement). For every completed intonation unit, listen for the direction of terminal pitch movement (§7), and correct it if necessary.

Step 26. Accent and accent contour (refinement). Listen for the location of primary accents and check that their contours are classified correctly.

Step 27. Duration. With a stopwatch or other time measuring device at hand, determine the duration of each pause in the transcription. Where appropriate, adjust the classification of pauses as short, medium, or long, and write in the actual duration for the long pauses (§8). Note the duration of any other items (extended laughter, extra-long words, inhalations, etc.) whose length is deemed significant (§14). (For a broad transcription, indicating precise durations may be deemed unnecessary, except perhaps for extra-long pauses (e.g. of a couple of seconds or more).)

Step 28. Final check. Listen to the whole transcribed conversation, and make whatever corrections are needed. Preferably this final listening should be done using the reasonably hihg fidelity sound equipment, such as a stereo cassette deck with two loudspeakers, if available.

21.5 Other people

Up to this point, most of the work of transcribing will have been done alone. In the following two steps, in contrast, the transcriber works with other people to improve the transcription.

Step 29. Other checkers. Have someone else -- preferably an experienced transcriber -- check the transcription. This should not be a perfunctory step. The checking process is basically the same as the transcribing process, and it demands just as much care as is used in making the initial transcription. It is important that the checker, like the original transcriber, make several passes through the tape, systematically checking each individual transcription item (e.g. those on the appropriate "Transcriber's Checklist" in Appendix 3). If possible, a third individual should check the transcription as well. (Naturally, this kind of independent checking will not always be possible, e.g. for students or researchers working alone.)

Step 30. Transcription discussion session. Once two or more transcribers and checkers have worked on a particular tape, it is very helpful to gather them together in order to resolve any points of disagreement through general discussion. (Again, meeting in this way will not be practical for everyone, but it is worth trying for.) At this kind of meeting, the tape is listened to, and transcribing problems are discussed among members of the group, who are likely to have varying degrees of experience in transcribing. Decisions about transcribing issues, both specific and general, can then be made in a context of open discussion. Such meetings contribute greatly to improving transcription reliability, consistency of practice across transcribers, transcriber morale, and indeed the general level of fidelity and sophistication of all transcriptions produced by group members.

21.6 Presentation

Step 31. Line numbers. As a final step, line numbers can be added for reference purposes, if needed -- one number per line of text. (This can be done automatically with some word processing software.)

For a one-page summary which lists all of the above steps, see the "Transcriber's Checklist (Narrow)" in Appendix 3. A slightly abridged version, listing just the steps involved in a typical broad transcription, is given in Appendix 3 under the heading "Transcriber's Checklist (Broad)".

21.7 The transcription and the tape

The above described steps for transcribing spoken discourse no doubt sound like a tall order, and indeed the effort required for a full-fledged narrow transcription should not be underestimated. But as the transcriber gains experience in working with discourse materials, the transcribing procedures and conventions quickly become familiar, and the transcribing starts to flow smoothly. And once the transcription process has been carried through with care and insight, the result should be a transcription of high quality -- a document that researchers can use with confidence for serious research on discourse.

Even then, one must face the fact that no transcription can capture everything that takes place in spoken interaction. The transcription is always selective, reflecting concerns and theories of the researcher. The actual speech event itself always contains more information than its (necessarily partial) image on audiotape or videotape. And the tape in turn always contains richer -- if less analytically accessible -- information than its transcription. This speaks to the ultimate value of the tape itself, and to the need for archival preservation and access, which alone can make it possible to ask new questions in the future.

A cassette tape, which when blank has only a moderate value, soon appreciates, in effect, to as much as a thousand times its original value -- once it has received dozens of hours of attention from a transcriber and the same from a checker or two. To let such a valuable tape get lost, damaged, or accidentally erased is clearly profligate, but so is simply ignoring it. A tape that has been transcribed belongs in an archive, safe and accessible, even more than one that has not. Other researchers will appreciate that they do not have to take the transcription on faith, and moreover can go beyond it to investigate phenomena which the original transcriber was not attending to, and so left out of the transcription. A good transcription is without question a most valuable research document, incorporating as it does the keen perception and insightful analytical judgment of one or more dedicated transcribers. But part of its value, like that of the paper currency of old, derives from the fact that somewhere in a vault, as it were, there is "gold" to back it up -- or in this case, the original tape, which can be referred to for verification and for deeper inquiry.

CHAPTER 22. IDENTIFYING AND CLASSIFYING INTONATION UNITS

22.1 Intonation Units

Roughly speaking, an intonation unit is a stretch of speech occurring under a single unified intonation contour (Du Bois et al. forthcoming a, b, Chafe 1979, 1980a, 1987, forthcoming, Cruttenden 1986:35-45). Beyond this preliminary, general characterization lies the challenging question of just what counts as a "unified contour", and of what the prosodic cues are that contribute to the identification of the boundaries of any given intonation unit. This chapter seeks to address these questions. (An excellent discussion of cues for "tone groups" is presented in Cruttenden (1986:35-45); the discussion below follows Cruttenden's analysis in many respects.)

22.2 Five Cues for Intonation Units

There are five major prosodic cues that contribute to signaling the boundaries of intonation units. A prototypical intonation unit is characterized by:

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 the unit
5. lengthening: a prosodic lengthening of syllable(s) at the end of the unit (e.g. of the last syllable in the unit)

An intonation unit may well display all of these features; most intonation units are quite straightforward to identify. But some caution is in order, because several of the above cues (e.g. pause, lengthening) can occur for other reasons than an intonation unit boundary, so that their presence is neither a necessary nor sufficient criterion of intonation unit status. Also, several of the cues (e.g. resetting of the baseline pitch level), though clearly recognizable in many circumstances, may be hard to identify unequivocally under certain conditions. In the difficult cases, the transcriber must learn to weigh all of these factors together in order to come to a reliable determination of intonation unit status. Some of the problems that may arise are addressed in the following sections of this chapter.

22.3 Problems in Identifying Intonation Units

The previous section dealt with the features which characterize the prototypical intonation unit. Knowing what the prototype looks like is important, as it provides a stable point of reference for interpreting the shifting flux of intonational cues in conversation. But this ideal reference point doesn't always make it clear what to do when faced with a less than prototypical unit. In natural conversation the transcriber will often encounter stretches of speech exhibiting, say, four of the five main cues for intonation unit boundary. What is to be done here? Or the cues may all be present, but not quite at the same place; for example, the pause may appear before what in all other respects looks to be the second word of the intonation unit, rather than the first. While conversation contains quite a healthy proportion of rather neatly delineated intonation units, it also contains a certain amount of disfluency, repair, interruption, and so on, which may complicate the identification of intonation units. This chapter is designed to help resolve the transcription questions that arise in these more difficult conditions.

The following sections point out some of the common pitfalls that transcribers face in trying to identify intonation units, and suggests how to avoid them. The approach can be summed up in three maxims:

1. Avoid syntactic thinking
2. Avoid lumping
3. Avoid splitting

These three maxims will be taken up in turn below.

22.4 Avoid syntactic thinking

One common pitfall is to think syntactically -- to expect intonation units to precisely echo the syntactic structure of a sentence. This can be especially problematic if one's notions of syntactic structure are carried over (perhaps unconsciously) from traditional grammatical studies of written (or imagined) language. These are often tied to a view of the literary sentence as the fundamental unit of analysis -- one which is expected to be well-defined in principle. In spoken discourse, it is true, intonation units do match surface syntactic (especially clause) units with some frequency. Very often, however, these two unit types are not coextensive, but diverge in interesting ways. On one occasion a clause including a prepositional phrase will be spoken within a single intonation unit, while on another occasion the same prepositional phrase will be presented in a separate intonation unit. In one case an embedded clause will fall in an intonation unit separate from that of the main clause, while in another the entire structural complex will all be uttered within a single intonation unit. Even a single phrase, such as a noun phrase, is not infrequently split across two intonation units. With

this in mind, it is necessary to take special care to attend to intonational and other prosodic cues, rather than to (presumed) syntactic structure.

{22.4.1 AESTH}

```
J: 'That's all it ^does. /
   .. It 'doesn't [.. even] ^reach a 'conclusion. \
S:                [m=hm], /
J: .. The 'conclusion is up to ^you=. /\
S: [m=hm], /
J: [@@@] in 'going out to --
   (H) ... to ^buy the thing. \
S: .. 'Hm=. \
   .. 'Hm. \
   (H) ...(1.0) O=kay=. \
```

{22.4.2 HYPO}

```
G: ...(1.7) I'd 'like to 'have .. my% ... ^lu=ngs, /
   ... my ^entire respiratory 'tract, /
   ... (H) ^replaced, \
   ... (H) with .. 'asbestos. \
   .. or 'something. \
```

Prepositional phrases are often produced as an intonation unit separate from that of the rest of their clause.

{22.4.3 AESTH}

```
B: .. it can 'be= really ^f=ruitful,
   to look at 'art,
   .. in structural 'terms,
```

Similarly, demonstratives and other adverbials may be uttered as separate intonation units.

{22.4.4 DOOR}

```
A: .. ^Think of your 'door, /
   .. ^here. /\ ((GESTURES))
```

When speakers produce lists, they often will verbalize each item in the list as a separate intonation unit, which amount to a single word or phrase:

{22.4.5 DOOR}

```
A: for a ^new doo=r, /
   and ^door ja=mbs, /
   ^ha=rdwa=re, /
   ^stai=n, /
   ^pai=nt, /
   .. 'all the ^stuff that you 'nee=d, \
```

{22.4.6 HYPO}

```
K: ... (H) .. @^leukemia=, /
   ... (H) ^bronchitis=, /
   ... (H) uh=, _
   .. ^tuberculo=sis, /
   .. @@@@ (H)
   .. and 'he's ^recovered from all of them. /
```

{22.4.7 RANCH}

```
R: .. a ^reining pattern is, /
   .. a ^pattern where you= .. do sliding ^sto=ps, /
   .. spi=ns, /
   ... ^lead changes, /
   .. I ^know you 'probably don't 'know what that 'is. \
```

Adjectives also appear frequently in lists of properties, one adjective to an intonation unit:

{22.4.8 ROCK}

```
M: ... It's that ^you=ng, /
   .. [^pa=le], /
A:    ['Yeah]. /\
M: .. 'guy with the ^da=rk 'hair. /
```

22.5 Avoid lumping

Perhaps the commonest mistake in identifying intonation units -- one which is likely to persist even after one has gotten used to recognizing mismatches between intonational and syntactic structure -- is to lump together too much speech, or, more precisely: to fail to recognize an intonation unit boundary. This is especially common where the intonation unit in question is significantly shorter than the prototypical major intonation unit. Seemingly, students of spoken discourse transcription are at first reluctant to recognize a one-word or two-word intonation unit. To be sure, intonation units are usually longer than this, with an average size, in English, more on the order of five to seven words than one or two (Chafe 1985). But in some circumstances, one-word intonation units are actually quite common. For example, a discourse particle will often -- but not always -- appear as a separate, short intonation unit. This can be seen in the following examples:

{22.5.1 HYPO}

```
G: ...(1.2) Well, _
   I [^don't] 'normally 'sound like ^Lucille 'Ball. \
K:   [<X That's X>] --
```

{22.5.2 DOOR}

```
A: 'Well, _
   .. ^this is in ... 'bits and ^pieces, \ ((MIC))
   but I was 'coming 'down the ^stai=rs, /
   and he was there ^ta=lking, /
   .. to this ^lady, \
```

{22.5.3 RANCH}

```
R: % .. (H) %
   ... % .. 'But .. uh=, _
   ...(3.0) <P 'What was I going to 'say P>, /
   ...(3.5) X%- --
   'O=h, _
   it's ^really 'ti=ring, /
   though. \
```

{22.5.4 AESTH}

```
J: .. <% a=nd I think,
   <P Well P>,
   .. this is a 'terrible .. ^technique to use %>.
```

{22.5.5 RANCH}

```
R: .. it's ^mandatory, \
   .. you have to% --
   % .. to ^graduate, /
   .. you ^know, /
   .. % 'well, _
   to ... ^get the degree=, /
   you know, /
   ... (H) you ^have to 'take this ^class. /
```

Note that discourse particles like well need not always be uttered as part of a separate intonation unit:

{22.5.6 DOOR}

```
A: <Q Well ^I'll just put tho=se kind of ^hinges,
   that 'fit between the 'door and the ^ja=mb Q>.
```

The only way to tell is to listen to the prosodic facts: to determine what this speaker is doing on this occasion. There is no cook-book rule that tells speakers they must always make the same intonation unit division here, and hence no rule for transcribers either.

Similarly, conjunctions frequently appear as one-word intonation units.

{22.5.7 HYPO}

```
G: ...(2.2) 'a=nd, /
   of course, /
    a 'lot of herb ^tea, /
   when I'd 'rather be drinking ^whiskey. \
```

{22.5.8 DEPR}

```
B: ... 'She just .. pulled the 'cat | .. and the 'kittens ^out, /
   .. and 'pulled off the ^bread that was 'dirty, /
   and, /
   ... we ^served the 'rest of it. \
```

{22.5.9 DEPR}

```
B: ... But 'I thought ^Mom was 'raising= | ...(.7) ^hemp, /\
   or,
   ...(1.1) ['something] one time. \
R:          [^What]? /
   ... [2 ^Hemp 2]. \
B:     [2 'Hemp 2]. \
```

Again, speakers are by no means constrained to produce their conjunctions as separate intonation units, so the transcriber must listen to what was actually said.

Conjunctions also appear frequently in two-word intonation units, often with the hesitation word uh, or with a second member of a compound conjunction phrase.

{22.5.10 RANCH}

```
R: ... And 'then, /
   .. they ^videotape us, /
   .. 'as we ^go. \
```

Another commonplace type of one-word intonation unit -- perhaps the most frequent of all -- appears in so-called "backchannel" utterances:

{22.5.11 AESTH}

```
S: (0) Hm=. \
   .. Hm. \
   (H) ...(1.0) O=kay=. /
```

Vocatives are commonly produced as separate one-word intonation units:

{22.5.12 CARS}

```
G: ...(1.4) (H) .. ^I've got to get 'out of that 'place, \
   man,
   I 'swear. \
```

{22.5.13 CARS}

```
G: .. I was 'using number ^seven, \
   .. 'gun number ^seven, \
D: (0) It ^broke the ['chisel]. \
G:                  [and] it ^broke my 'chisel, \
   man. \
   <X Now X> --
D: (0) So 'now you have 'no chisel. \
G: (0) <X It's X> my ^only good 'chisel. \
   man, \
```

In sum, it is important for the transcriber to be aware that conjunctions, particles, backchannels, vocatives and other words are often produced as separate intonation units in everyday conversation, and to listen for this. But because these words are by no means always verbalized as separate intonation units, each individual instance must be carefully scrutinized, in order to determine its intonation unit status on prosodic rather than a priori grounds.

22.6 Semantically Insubstantial Intonation Units

There is also, apparently, an initial reluctance to recognize as an intonation unit a stretch of discourse that expresses no substantial idea, or which does not seem to contain its own independent referential meaning. This may derive from an overzealous interpretation of Chafe's hypothesis that intonation units (formerly referred to as 'idea units', Chafe 1979, 1980) correspond to the speaker's 'focuses of consciousness' (Chafe 1987). This view, however valid, need not commit one to a belief that every vocal noise that does not of itself correspond to some real-world referent or event (i.e. is not a plausible focus of consciousness, at least in terms of a verbalization of external experience) must then be a part of some adjacent, substantially meaningful, intonation unit.

But in reality it frequently happens that a fairly vacuous vocal noise is produced by a speaker, which clearly does not belong to any nearby, well-defined intonation unit (whether the unit is considered in prosodic or conceptual terms). The alternative analysis -- to lump these brief utterances in with their solid neighbors, just to avoid having to face them on their own -- can only lead to larger but strangely heterogenous units, lacking in any legitimately prosodic basis, or for that matter, functional coherence. Once again, the units which get overlooked in this way are usually the small ones. One must resist the rationalizing temptation to try to hide the insubstantial intonation units by slipping them in with a substantial neighbor. Rather, one must be ready to recognize small, semantically insubstantial intonation units, whenever these occur in shapes which are not prosodically integrated with their neighbors.

One kind of vocalization that is often overlooked as an intonation unit because of its lack of obvious lexico-semantic content is breathing. The rhythm of conversation is such that breathing is usually part of the same intonation unit with the words that follow it, being more or less tightly integrated into the overall thrust of a major intonation unit, as in the following case:

{22.6.1 CARS}

```
G: ...(1.4) (H) .. ^I'ven got to get 'out of that 'place, \
   man, _
   I 'swear. \
```

But sometimes it will not be united with the neighboring words in this way. The best way for the transcriber to decide this question is to listen to the adjacent major units, in order to decide what legitimately belongs within them; often this will make it clear that inhalation or exhalation in question cannot fit within these neighboring units, and hence should be recognized as separate.

{22.6.2 AESTH}

```
S: (H) (THROAT)
   .. Yea=h .
```

The speaker's timing of breathing in this way can carry considerable significance for the ongoing interaction, and it is important that the transcription should not hide signals that the speakers took the trouble to display to each other.

Another vocalization lacking in lexico-semantic content that is sometimes produced as a separate intonation unit is laughter. Again, laughter can go both ways: it is often integrated with the words of a major intonation unit, as in the following example:

{22.6.3 DOOR}

```
A: .. 'That was the ^only thing that went 'smoo=thly, \
   that we've ^ever do=ne. \
B: .. @ That ^you='ve. /\
   ... ^I couldn't even ^begin to do it. \
```

But it is also frequently produced with a noticeable pause, pitch reset, and other cues showing that, on this occasion, the speaker is producing the laughter as a rhythmically timed separate unit:

{22.6.4 ROCK}

```
A: and he 'spelt ^hee=l, /
   h e a ^l=, /
S: .. @
A: and he 'spelt ^said, /
   .. s i a ^d. \
```

{22.6.5 AESTH}

```
B: .. (H) I don't know how many ^people a=re,
   .. @
A: .. (Hx) Ri=ght.
```

{22.6.6 HYPO}

```
K: .. @@@@
   ... (H) From which you ^haven't recovered. \
```

{22.6.7 J&J}

```
N: 'You know, _
   'this was a 'rented @^snake, /
   @
```

A common kind of semantically insubstantial unit that it is tempting to shunt into the nearest major intonation unit is the filled pause (uh, um, etc.). While these are sometimes integrated into the body of a major intonation unit, by their very nature they are very frequently called on to hold the floor while a new utterance is being planned, and hence may appear as separate from any nearby units.

{22.6.8 AESTH}

```
S: .. (H) .. 'u=m, _
   .. (TSK) .. 'ha=s ... ^something= .. to= | .. ^communicate, /
   .. with 'me=, /
```

{22.6.9 AESTH}

```
J: .. I 'think of | ...(1.2) 'aesthetics, /\
   .. @ @a=nd, _
S: .. m=hm=, _
J: u=h, _
S: ...(1.5) 'Hm=. \
   ... @
J: ... 'creation of ^desi=re, \
   .. for ^one thi=ng. \
S: m=hm=, _
```

One of the most important types of short intonation units to recognize as such is the false start unit. Speakers very often produce a few words of an intonation unit which they then abandon, beginning over with a new intonation unit.

{22.6.10 ROCK}

```
A: ... But he's --
   .. He's 'decided he wants to be 'ca=lled ^Rock. \
```

{22.6.11 J&J}

```
J: ... And he= --
   .. and he .. ^k=icks my 'feet 'apart, /
```

{22.6.12 CARS}

```
D: ... 'you know, \
   .. to 'get leads, /
   .. and 'talk --
   .. 'communicate with 'people on the ^phone. \
```

{22.6.13 RANCH}

```
R: He 'doesn't have any --
   ...(.8) He 'doesn't 'know what's going 'on in this ^world. /

T: ...(1.0) ^I= ca=n,
   ... ^t=ake us 'both at%- --
   ... on a ^pa=r.
   .. (H) as=% ... 'human beings.
```

{22.6.14 DOOR}

```
A: But 'it was --
   ... till 'five%- --
   I 'remember, /
   .. ^fi=ve o'clock, \
   I 'finally got the 'door in, \
```

{22.6.15 HYPO}

```
G: ... 'A=nd, _
   .. 'you know, _
   .. 'He= would like, /
   .. (H) 'He would like, /
   ^w=alk out on the ^freeway, \
   and 'try to ^hitchhike, \
```

{22.6.16 AESTH}

```
J: [@@@] in 'going out to --
   (H) ... to ^buy the thing. \
```

Once again, there is no cookbook rule here, because speakers have a choice -- sometimes they just keep forging ahead within the same intonation unit. The transcriber must listen carefully to the prosodic cues, but for most false starts the only prosodic cue that remains viable is the resetting of baseline pitch level. This is because cues like lengthening of the final syllable are not available, since the truncation cuts off the intonation unit before its final syllable is produced. Similarly, it is not easy to apply the criterion of a unified intonation contour "gestalt" if the speaker did not produce the whole unit. What one can listen for is whether the speaker resets the baseline pitch at the point where the word repair is observed to begin. If so, the speaker is in effect saying "this is a new intonation unit"; if not, the repair is being carried out without establishing a new intonation unit for it, as in the following examples:

{22.6.17 J&J}

```
J: ... You 'know how they ^do that, \
   so you 'can't s- .. 'ha- --
   .. you don't 'have any ^balance. /\
```

{22.6.18 J&J}

```
N: .. and I 'came up 'behind him, \
   and I wa%- --
   .. I was ^hugging him, \
   while he was ^shaving. \
   ... (H) 'And as ^I was 'hugging him, /
   ...(0.8) 'he just 'sli%- .. ^dropped. \
   ... ^slipped from my 'hands. \
   .. to the ^floor. \
   he like ^f=ainted. /\
```

{22.6.19 DOOR}

```
A: and they% --
   .. they% .. ^poked into the%- | .. the ^mou=lding, /
   along the ['side]. \
B:           [unhunh], /
```

22.7 The Grab-bag Unit

A related error -- which is likely to persist even after one stops trying to hide insubstantial intonation units -- is to try to sweep a whole series of insubstantial vocalizations into one large, grab-bag intonation unit. This is especially likely when several false starts occur in a row. One must be prepared to recognize that sometimes a speaker produces two or three or four truncated intonation units before coming up with one fluent, full clause unit. Breaking the line after one word may use up the paper at a disconcerting rate, but if this is the way the speaker said it, such concerns should not hold one back.

One such case occurs in the case of multiple false starts. The transcriber must listen objectively to the prosodic cues (especially baseline pitch resetting) to determine whether each false start is verbalized as a separate unit, or whether several of them are uttered in succession without starting a new intonation unit.

{22.7.1 DOOR}

```
A: ... So I%- --
   .. I%- --
   .. I ^get in the 'ca=r, \
```

{22.7.2 ROCK}

```
A: .. (H) .. And there's --
   ... % ^Nothing --
   .. ^Nothing with two ^tee='s in it, \
   ... does he ^get 'ri=ght. \
```

{22.7.3 AESTH}

```
J: (0) (H) <% Tha%- .. this% --
   .. I ^wonder 'abou=t that though, \
   I mean %>,
   .. when 'I think of ^a=ds, /\
```

Another place where it is important not to sweep together several small intonation units is in the case that several backchannels have been uttered in response to another speaker's major intonation unit.

{22.7.4 DINNER}

```
C: ... We were .. 'messing ^around.
   .. [But we 'ain't 'messing] [2 'around 2] 'no ^more,
A:    [Hey].
B:    [X]
S:                              [2 All ^right 2].
B:                              [2 X 2]
S: ...(3.1) H=m.
```

22.8 Hard-to-hear Material

Another error is to lump indecipherable or indistinctly heard material in with an adjacent substantial (and clearly heard) unit. Even when one cannot make out just what words are being spoken on a noisy portion of a tape, it is often possible to recognize what the intonation contour is. (Failing to indicate this recognizable contour is, incidentally, another common transcription error -- which should be remedied through use of the usual notation of comma, period, etc., as appropriate, even following a stretch of indecipherable words.) And even if it is not possible to determine exactly what the contour is, it is still usually possible to determine whether the indecipherable words are part of the same intonation unit with the adjacent audible words or not. Again, one should not be afraid to recognize an intonation unit consisting solely of indecipherable words, if the prosodic cues which justify this segmentation are audible.

Even if the prosodic cues are not as clear as one would like them to be, it is still necessary to make one's best judgment -- one should not rely on a "default" transcription convention favoring lumping, since there is no valid default in such cases.

{22.8.1 DOOR}

```
A: (0) It's ^some 'story, /
   XX .
```

{22.8.2 CARS}

```
D: .. It was 'basically ^me=, /
   'you know, _
   X 'going ^out. /
   .. The 'problem of going ^out. \
```

22.9 Intonation Subunits

Most of this chapter has dealt with the recognition of difficult intonation units. In some cases, what is called for may be the recognition of something intermediate between a full intonation boundary, and no intonation unit boundary at all. For researchers who subscribe to the existence of intonation subunits in discourse, care must be taken to attend to these.

{22.9.1 ROCK}

```
S: ... ['Well], _
A:     [You're 'off] the ^highway, \
   'aren't you | ^here? /
```

{22.9.2 DOOR}

```
A: ... The 'hinge is | .. on the ^inside. /
B: (0) Right. \
```

{22.9.3 AESTH}

```
S: .. (H) So= that the= .. ^reason | 'why I'm being 'communicated
                                                        with, \
   .. 'i=s | so that 'I can be 'made to ^do something. \
```

{22.9.4 DOOR}

```
A: which was ^like a | ... (H) ^Workmate 'be=nch,
   .. type ^deal,
   with a 'gui=de,
   and everything,
```

22.10 Accuracy in Intonation Unit Identification

To catch any lapses, it is always a good idea to go back over one's "completed" transcription, making a special pass just to listen for intonation units (see Section 4, Step 14, Du Bois et al. forthcoming). Eventually, it is hoped, one develops facility in attending to prosodic and syntactic structure separately, and in recognizing genuine intonation units, whatever their size and semantic substance.

Identifying the boundaries of intonation units in natural spoken discourse with consistency is admittedly difficult. With practice and appropriate guidance, however, one should be able to attain a reasonably high degree of inter-transcriber reliability. Though there will doubtless always remain a small residue of cases where agreement is not

reached -- where the transcription will not be definitive -- as long as transcribers attend carefully to the appropriate intonational and prosodic cues, and keep in mind the guidelines and observations presented above, it should be possible to attain an acceptable degree of accuracy and consistency.

22.11 Point-by-point vs. Unit Summary Systems

Systems for analyzing intonation can be distinguished as point-by-point systems or summary systems. The differences between the systems involves the degree of detail, flexibility, and level of analysis. Implicit within the systems are different assumptions about intonation, particularly regarding unit structure.

22.12 Point-by-point systems

In a point-by-point system, an indication of what is happening to the pitch (direction of movement, height, etc.) is given at each actual point where something significant happens. For example, one symbol will be inserted before the word in the sentence where the pitch starts to go up, while another symbol will mark the word where it begins to fall, a third will indicate where the amplitude reaches its highest point, and so on. (This characterization is necessarily somewhat schematic.) Examples of point-by-point systems for intonation in spoken discourse are found in Crystal (1975), Svartvik and Quirk (1979), Gumperz (1982), and others.

22.13 Unit Summary systems

In a summary system, on the other hand, an indication of the intonation contour is given only once per unit. Here, a single symbol such as a comma or period in effect constitutes a summary statement of a set of movements that take place over the course of the unit in which it appears, and which may extend even to the onset of the following unit. The comma at the end of an intonation unit does not represent an intonational event that takes place just at that point, nor even necessarily during the word that immediately precedes it (though one may get the impression that this is where one "hears" the comma or period). Rather, it stands for a set of intonational events that occur in various places, which may include even the beginning of the next intonation unit (cf. Cruttenden's important remarks on anacrusis, 1986:39).

It should be obvious that one's conception of the unit becomes crucial in summary systems. Where a point-by-point system could afford to be agnostic regarding the existence of units in intonation (and some effectively are, e.g. Bloch and Trager 19??), a summary system must specify units if its symbols are to have meaningful scope.

A summary system is in general less precise than a point-by-point system, and cannot present as detailed information about the intonational phenomena in a stretch of discourse. This of course makes it easier to use, which is one of the reasons it is attractive for some kinds of discourse transcription (e.g. Du Bois et al. 1988). But the fact that the summary must be linked to a unit (over which it has scope) can also be an advantage, in certain respects: it encourages one to recognize, and to appropriately categorize, the units of intonational production.

22.14 Conclusions

In this chapter I have tried to outline some practical considerations involved in identifying and classifying intonation units. A distinction was made between major and minor intonation units, and the significance of this distinction was explored. A further factor of abandonment or false start was identified. Finally, the unit summary system of intonation contour analysis was introduced, and contrasted with traditional point-by-point systems.

CHAPTER 23. REALIGNMENT

One effect of introducing a new intonation unit boundary into a transcription -- as very commonly occurs when one goes back through a recording to double-check the intonation units -- is that certain portions of the transcription will no longer be aligned correctly, or at least, aligned in the clearest way. Unfortunately, this consequence of correcting intonation unit boundaries is often overlooked. It requires a careful examination of the transcription, with special scrutiny of all speech overlaps, backchannels, text line sequences, speaker labels, and pauses in the vicinity of any changed intonation unit.

Even without a change in intonation units, realignment is often called for in cases where one's assessment of "whose pause" changes, or where the sequencing of turns (in multi-speaker overlapping interchanges) could be improved so as to more clearly show who is responding to whom. Needless to say, realignment will probably also be required wherever previously overlooked speech is heard for the first time and introduced between two turns in the transcription.

Consider the following transcription revision,[52] and the realignment that it requires. The transcriber initially hears the first sentence as a single undifferentiated intonation unit:

Preliminary transcription:

```
                                                    {23.0.1   DOOR}
A: Now that we have the [side door] fixed he could.
B:                      [That's kind of] --
   Yeah,
```

On a subsequent pass through the tape, the transcriber realizes that the first sentence is actually uttered in two separate intonation units. To correct this, the transcriber then introduces into the first line of the transcription a new intonation unit boundary, with a comma and a carriage return:

First revision:

```
                                                    {23.0.2   DOOR}
A: Now that we have the [side door] fixed,
   he could.
B:                      [That's kind of] --
   Yeah,
```

But once this change is made, it becomes clear that the transcription needs to be realigned, by placing each of speaker B's responses directly following the utterance by speaker A that it immediately responds to. To achieve this, the order of the second and third lines is reversed:

Realignment:

{23.0.3 DOOR}

```
A: Now that we have the [side door] fixed,
B:                      [That's kind of] --
   he could.
   Yeah,
```

Since in reversing the order of two lines we have changed neither words nor speaker attribution labels, at this stage it is easy to assume that the revision is done, and the transcription now correct. But reversing the two transcription lines has made it appear that the words he could were uttered by speaker B, rather than speaker A. This is corrected by adding two additional speaker labels, one for the current third (shifted) line, and one for the fourth line, which was never shifted at all:

Relabeling:

{23.0.4 DOOR}

```
A: Now that we have the [side door] fixed,
B:                      [That's kind of] --
A: he could.
B: Yeah,
```

This revised transcription now displays more clearly to the reader the actual nature of the conversational interchange. While in this simple case, no great confusion might have resulted from failing to realign the revised transcription, in other cases realignment is more crucial to correct interpretation.

Note that all of this realignment was set in motion by the simple act of introducing a single new intonation unit boundary (plus a comma) between the words fixed and he could. It is easy to forget that moving or breaking a single line can require careful adjustment of speaker attribution labels and other features, even in lines that have not been modified or moved at all. In fact, before one begins moving lines around one should make sure that one has a record (on paper or in a separate computer file) of who is saying what -- otherwise one may be forced to go back to the tape just to reconstruct this information. In fact, the best way to avoid confusion when realigning is to insert a speaker label into every line that will be effected by the realignment (including merely adjacent lines) before actually moving any of the lines around. Once the lines have been moved into their new positions, any speaker labels which turn out to be redundant can be safely removed.

While the above example of realignment may seem obvious as presented in isolation, in the middle of a complicated overlapping transcription, just making a few such simple changes can make necessary a bewilderingly complex array of realignments, which will require quite careful attention. To sum up, in any realignment the following features of the transcription should be monitored carefully:

A. Overlapped turns and backchannels. The alignment of turns and the sequential order of lines needs careful scrutiny wherever a newly introduced intonation unit boundary breaks a long line into two shorter ones, especially if any portion of the original line overlaps with another turn.

B. Speaker attributions. While this might seem like little more than a bookkeeping problem, it is important to make sure that in moving some words to a new line, one does not create the appearance that a different speaker spoke them -- as may happen if the words are moved to a point after another speaker's turn (or backchannel). In such cases the speaker attribution labels (e.g. A:) for all the lines involved -- including nearby unmodified lines -- must be checked and updated as necessary.

C. Pauses. When the representations of the (partially overlapping) turns of two different speakers are transposed in sequence, a pause that was notated at the beginning of the turn of the former first speaker may now need to be reassigned to the beginning of the turn of the new first speaker. In some cases such changes can also affect the amount (timed duration) of a pause that is to be attributed to a given speaker, and even the entire existence of a pause. Thus, pause timings and attributions must be checked and updated in these circumstances, if errors are not to be inadvertently introduced.

PART FIVE:

BACKGROUND ISSUES

CHAPTER 24. DOCUMENTATION

In order for a recording of a speech event to be used effectively by discourse researchers, not only the tape, but certain background information about it as well, must be documented. In addition to a copy of the recording and its transcription (if completed), a discourse data collection needs to have on file a certain amount of ethnographic information about the speech event context and the speakers, which may include facts about what kind of people the speakers are, what kind of event was taking place, where and when it took place, and so on. It is also useful to document a certain amount of information about the data-gathering process itself, such as the name of the person who made the recording, the equipment used, and so on.

Discourse researchers will want to have some sort of systematic way of documenting and managing this information. One type of system involves filling out a set of short and simple paper forms, each of which contains a set of standard questions on a given topic. One such set of forms is described briefly below, and reproduced in Appendix 3. The first two forms (called Speech Event Sheet and Speaker Sheet) are designed to be filled out shortly after the tape recording is made. The others can be filled out later. It is a good idea to also write the most basic information (see Speech Event Sheet) on the cassette itself, as soon as the recording is made. (Also, the plastic safety tabs found on the top edge of the cassette should be removed immediately, so that the cassette cannot be accidentally erased or recorded over.)

24.1 Documentation sheets

(a) Speech Event Sheet. This sheet asks for the most basic and essential information about the tape recording. It is designed to be quick to fill out -- preferably on location immediately after the recording is made.

(b) Speaker Sheet. This sheet asks for basic information about the speakers on the tape: their age, sex, regional dialect, occupation, ethnicity, etc. A separate sheet is filled out for each speaker on the tape.

(c) Tape Log. This sheet asks for a brief notation of what is on the tape, to be filled out at the investigator's leisure upon listening to the playback. This information is often useful as a sort of table of contents for the tape -- a guide that can help researchers decide what portions of a tape to return to and transcribe later. Recording this sort of information is useful, but not strictly necessary.

(d) Transcription Sheet. This sheet asks for information about the transcription of the tape. It is designed to be filled out at the time the transcribing is done, and updated whenever the transcription is checked. (Alternatively, a header can be inserted at the beginning of the computer file for each transcription (§23.2).)

(e) Transcriber's Checklist. This sheet provides transcribers and checkers with a list of the various transcribing procedures that need to be done, allowing them to check each one off as it is completed. Appendix 3 contains two versions of the Transcriber's Checklist, one for narrow transcriptions and the other for broad.

A separate sheet should be used for each time the transcription is checked. As with the Transcription Sheet, the Checklist sheets should be attached to the draft of the transcription, so that they can be updated as the transcription is revised.

Discourse researchers stand to benefit greatly from recording the kind of information contained on these sheets. Recording this information is a relatively simple matter if it is done at the time of the taping. Trying to remember or recover the information later on -- when one needs it -- is likely to be more difficult, time-consuming, and unreliable.

24.2 File header

While recording information like the above on appropriate paper forms is useful, the fact is that the transcription itself is what gets the most attention, as it is passed from transcriber to checker, from checker to user, and so on. Thus it becomes useful to embed the most important items of information about the speech event within the transcription file itself, along with certain other useful items like the computer filename (where relevant) and the names of transcribers and checkers. Then, whenever this file is printed out or transferred from one researcher to another, the text will be accompanied by the relevant contextual information. Otherwise, some of the people who end up using the transcription are likely to have in their hands only the transcription itself, and no information about its speakers or its context, nor about who transcribed it.

When general contextual information is included in a transcription file, it should be distinguished overtly from the actual text of the transcription. This can be done by, for example, starting each line with a unique character, such as a dollar sign (§17.1). In addition to making it clear to the reader which lines are to be read as actual transcribed speech and which are not, this kind of line marker makes it possible for appropriately designed computational procedures to skip all lines beginning with the special character, or conversely, to apply exclusively to them.

Appendix 4 presents a sample of a header designed for recording items of information relevant to the transcription. A blank copy of a file containing just these headings can be inserted into the beginning of each transcription file, to be filled in at the appropriate time by the transcribers, as indicated below:

$ TRANSCRIPTION TITLE: Miracle on Wilshire Boulevard
$ TAPE TITLE: Miracle
$ FILENAME: miracle.trn
$ PRINTOUT DATE: (etc., etc.)
(And so on -- see §17.1 and Appendix 4.)

In such non-transcription lines (marked by the dollar sign), the colon functions to mark the division between the heading for a category and the information that is entered into that category (§17.1).

Note that the string of characters $ TEXT BEGINS: should appear on a line all by itself, immediately preceding the first line of actual transcribed speech. The string $ TEXT ENDS: should also appear on a line by itself, immediately following the last line of transcribed speech (i.e. at the very end of the file; cf. MacWhinney 1988). This serves to let users of the transcription know for certain where it begins and ends, and reassures them that no material is missing.

CHAPTER 25. EQUIPMENT

In transcribing as in other kinds of work, the task is made easier if one uses the right tools. Making tape recordings and transcribing them requires a moderate amount of specialized equipment, for which we give a few suggestions here. These suggestions represent but a few illustrative examples of equipment that might be used; many alternatives are available that would serve as well.

25.1 Transcribing equipment

Discourse transcription involves a great deal of listening, rewinding, and listening again. Given the amount of wear and tear that this kind of intensive listening can inflict on a tape, it is a good idea to work from a copy rather than from the original tape (§20.2). And since wear and tear on the transcriber and his or her equipment can likewise become considerable, it cannot be overemphasized how greatly preferable it is to use a cassette tape playback machine with a foot pedal, of the sort that office workers use in transcribing dictated letters. The labor saved in transcribing -- as much as 70 per cent -- can repay the cost of the machine in a short time. And since transcribing cassette players are built to stand up to lots of rewinding, their sturdy motors are not likely be damaged, as can easily happen with an ordinary tape recorder. Most importantly, the increased ease of use tends to encourage more accurate transcribing.

While foot-pedal cassette players are an invaluable aid to the transcriber, unfortunately they tend to be equipped with a monaural speaker of relatively low fidelity. The fidelity can be improved substantially by outfitting them with a separate (self-amplified) speaker, or a good pair of headphones -- preferably of the "open" design type, which does not enclose the ear, and hence causes less disorientation, discomfort, and fatigue during long transcribing sessions. To ensure that all the sounds that are on the tape actually get heard, at least one final check of the transcription should be made using a stereo cassette player with a pair of good loudspeakers (assuming the original recording was made in stereo).

One possible outfit of equipment for transcribing is the following:

1. A foot pedal-operated cassette player, such as the Sanyo Memoscriber TRC 8070A

2. A set of "open" headphones, such as the Sennheiser HD420SL, or HD450, or the less expensive and lighter "walkman"-style headphones (e.g. Sony MDR-55)

3. An adapter to fit the stereo headphones to the mono cassette player.

In addition, there are several items that are quite useful for transcribing, though not as essential as the above:

4. A good self-amplified external speaker, like the Bose Roommate II speakers, which come in stereo pairs, or the Realistik Minimus 0.8 (Radio Shack #40-1262), which can be used either singly or in pairs

5. The appropriate cable and adapter-attenuator for attaching the external speaker to the cassette player (e.g. Radio Shack #15-1538 and #274-300)

6. An inexpensive stopwatch (for timing pauses and such)

Since good transcribing virtually always requires multiple drafts, it goes without saying that it is desirable to do the typing on a microcomputer, if one is available. The transcriber can operate the cassette-player with one foot while keeping the fingers on the computer keyboard. Later, as corrections and new detail are added, the transcriber can easily revise the computer file and print out a copy of the new transcription version. While one's favorite word processor will usually do the job well enough, one should make sure that it will allow the file to be saved in a pure "lower ASCII" format (i.e. without any hidden formatting or control characters, etc.). For some purposes -- for example, for placing one's texts in a discourse data base (Du Bois and Schuetze-Coburn, forthcoming) -- the presence of such non-ASCII characters in one's file can cause problems, whether one is aware of their presence or not.

25.2 Recording equipment

As noted earlier (§2), the first requirement for a good transcription is a good tape recording, that is, a recording of a naturally occurring conversation with good, clear sound. For recording spoken discourse in natural conversational contexts, one possible outfit is the following:

1. A small, high quality portable stereo cassette recorder (e.g. Sony TCD-5, Sony TCD6-C, or Marantz PMD-340)

2. Two small lavaliere (lapel) microphones (e.g. Sony ECM-155), and/or a one-point stereo microphone (e.g. Sony ECM-939 or Sony ECM-959)

3. A pair of inexpensive lightweight "walkman" style headphones (e.g Sony MDR-55)

4. Spare batteries for the tape recorder and the microphones (rechargeable batteries are best avoided because they run down quickly and hence are more prone to fail during a crucial recording session)

5. A small power transformer to allow playback using AC (household) current when this is convenient[53]

6. Blank 90-minute cassette tapes (e.g. Maxell UD-II)

7. Blank copies of speech event information forms (especially forms like the Speech Event Sheet and the Speaker Sheet)

8. Blank copies of speaker release (consent) forms, if needed

9. A pen or pencil for filling out forms, and (optionally) a permanent marking pen for writing crucial recording information directly on the cassette case

10. A padded carrying case with shoulder strap to transport and protect all of the above, like those used for cameras (e.g. Tamrac 605R)

Substantially less expensive outfits will do as well, as long as an external microphone is used. The internal microphone that comes with some tape recorders -- built into the tape recorder body -- should never be used. The sound nearest to it is always the whirring of the tape recorder's motor, which will come out inordinately loud on the tape, and reduce the sound quality of the tape. Even the most inexpensive external microphone invariably performs better, and is easily substituted. (Stereo is also worth having if one can afford it, because it makes it easier to hear overlapped speech, etc.)

CHAPTER 26. TRANSCRIPTION SYSTEM DESIGN

26.1 Introduction

Transcribing is more than just writing down words. Doing justice to the richness and complexity of spoken discourse means transcribing in accordance with a carefully thought out plan. The transcriber must be able to draw on a total system of symbols, conventions, and procedures, each designed to mesh with the others, as well as to respond to the specific needs of the discourse researcher. If a transcription system is to meet the needs of a wide range of users, some care must be given to its design. In order to achieve the kind of functionality and integration that is called for, it is useful to examine the principles which govern the design of discourse transcription systems. Understanding what goes into the making of a transcription system is especially important for researchers who need to choose which transcription methods and conventions to adopt as most effectively serving their needs, and for those who need to adapt a particular system to their own specific research goals.

This chapter examines some of the issues and principles which govern the design of transcription systems,[54] with particular emphasis on how these principles have influenced the choices made in the present system. And since the question of the historical origins (or "etymology") of symbols and conventions is of some interest, this also is commented on where relevant.

Of the many considerations which must be taken into account in designing a system for discourse transcription, most fall into two broad classes: those which concern the functionality of the conventions, and those which concern their traditionalness or familiarity. Each of these topics is taken up in turn below. (For further discussion of general discourse transcription issues, see Chafe (forthcoming), Schenkein (1978), Atkinson and Heritage (1984:ix-xvi), Hakulinen (1989), Goodwin (1981), MacWhinney (1988), Ochs (1979), Pittenger et al. (1960), Svartvik and Quirk (1980), and especially Edwards (1989, forthcoming) and the references cited therein.)

26.2 Functionality

Transcriptions should be easy to read, yet explicit and consistent. It is important for discourse researchers to be able to browse comfortably through a stack of transcriptions, looking (in the literal visual sense) for patterns, gaining a feel for the data, and perhaps forming hypotheses to be tested later. While transcriptions must contain detailed information, they should not overwhelm the reader's capacity to absorb and organize it. And the detail that they do contain must be represented systematically enough to allow for effective use of the computer as a tool for searching, counting, concording, and so on. To simultaneously address the demands of clarity, economy, and explicitness, one must take into account a few transcription design principles.

26.2.1 Speech recognition

The first design principle regards readability. When browsing through a transcription it should be easy to recognize immediately which things on the page represent actual speech and which do not. One way to facilitate this discrimination is to consistently set off within parentheses any notations which do not represent actual speech, such as nonverbal vocal noises; or to set them apart by writing them with non-alphabetic characters, such as @ or %. Similarly, any comments or observations inserted by the transcriber can be set off in double parentheses.

The discrimination is further enhanced if normal case -- that is, mixed upper and lower case, as in conventional orthographic style -- is reserved for writing actual speech, while strings of letters all in capitals are used to write things other than actual spoken words (i.e. speaker labels, transcriber comments, ambient and vocal tract sounds, voice quality descriptions, etc.).[55]

26.2.2 Consistent lexical recognition and "regularization"

For many kinds of research, it is useful to be able to easily and consistently recognize each lexical item in one's texts. Whenever a speaker uses the word "anyway", or "says", or "and", one would like to be able to recognize it reliably -- regardless of how the word was pronounced on a particular occasion. Word recognition is desireable both for the human reader, and for any computer software that may be called on to help in managing one's data. For example, the discourse researcher who wishes to track the use of a particular set of discourse particles, or of the verb say and related verbs, will find that this task is not only greatly simplified but also made much more reliable if each word is easy to recognize as such. While not all discourse research is directly concerned with consistent lexical recognition, many and perhaps most researchers will wish to draw on this potential at some point or other in their work. Any transcribing system designed for general use should provide the means for consistent and reliable lexical recognition.

The simplest way to achieve consistent lexical recognition is to make sure that each word is spelled consistently. This way of allowing the researcher to easily and consistently recognize individual words is often referred to as "regularization" (which in turn is a prerequisite for lemmatization). A consistent, invariant spelling such as that provided by a standard orthography makes it easier to reliably find all instances of whatever word is sought (Edwards 1989, forthcoming).[56] This is important not just for computer searches, but also for the human reader, who has typically developed great skill at rapid gestalt recognition of whole words -- if they are written in a familiar way.

26.2.3 Discriminability of word-internal symbols

There are some phenomena in discourse which more or less require that a notation be inserted in the middle of a word, which of course must interfere with the sequence of letters in a standard spelling. For example, if a particular sound in a word is prosodically lengthened, this will usually be indicated by placing some symbol representing lengthening immediately adjacent to the appropriate letter. Similarly, indicating that a glottal stop or a laugh occurs within a word will generally require insertion of the appropriate symbols into the word. Notations for accent will often need to be placed, if not within the word, at least immediately adjacent to it. And for speech overlap that begins in the middle of a word, the most effective way to indicate this is by placing a bracket at the appropriate location within the word.

All of these notations might seem to present a problem for the ideal of consistent lexical recognition. But in fact there is a simple solution: make sure that any symbol which must be inserted within a word can be easily and unambiguously discriminated from the letters which make up the word. In other words, since words are standardly spelled using alphabetic characters (e.g. A through Z), what is necessary is that word-internal notations be drawn exclusively from nonalphabetic characters, such as the symbols =, @, %, ", the brackets, the numerals 2 through 9, and so on. (As noted elsewhere, although the numeral 1 is certainly nonalphabetic, its close resemblance in many typefaces to the alphabetic character l -- and to a lesser extent I -- makes it tricky for human readers, if not for computers; hence it should be avoided whenever possible.)

For example, while some transcription systems employ alphabetic symbols within words (e.g. the letter h to represent "breathing" or laughter, etc. within the word (Schenkein 1978:000)), the present system avoids any use of the breathing symbol (H) within a word (§10.4). Using an alphabetic (nondiscriminable) character within a word to represent prosodic phenomena is most ill-advised, since the confusion generated by the resulting ambiguous mix of letters (is h a letter in the spelling of the word, or a symbol for "breathing" or laughing?) is problematic not only for computer searches, but for human readers as well. While parentheses can be used to disambiguate, this tends to produce an ungainly long string of symbols that is needlessly difficult to read. Such phenomena as laughter within a word are better represented by easily discriminable nonalphabetic symbols, such as @.

The presence of prosodic symbols within or adjacent to words need not produce any problems for the goal of lexical recognition, because the human eye quickly learns to skim over nonalphabetic symbols, especially if the intrusion within the word is kept short (i.e. preferably limited to a single character). And for computer manipulation of data, many reasonably sophisticated programs for working with texts[57] can be told to consistently ignore such symbols when searching, alphabetizing, etc. Lexical recognition

is thus attained without difficulty, as long as one takes care to ensure that whatever symbols must appear word-internally are both discriminable and consistent in meaning.

26.2.4 Representing variation

Adherence to standard spelling of course means that certain kinds of variation become harder to represent directly. Most discourse transcription systems do not seek to be either a phonetic or a phonemic transcription system; rather, they are oriented principally toward phenomena which have the strongest implications for discourse. Thus, while discourse transcription systems tend to gloss over some kinds of segmental phonetic detail, they also tend to include a certain amount of prosodic detail, which typically has more significance for the production and structuring of the spoken interaction. For some research programs, such as variational sociolinguistics, the details of variable pronunciation are so central that texts which contain only lexical regularizations may not be viable. But for research programs for which only the occasional word receives a pronunciation of sufficient distinctiveness to warrant special transcription, one can at least partially accommodate both regularization and variation: the variant word is simply written twice, once in regularized fashion (its standard spelling) and again the way it was actually said (in phonetic or phonemic symbols) (§12.1).

That said, discourse researchers often find it worthwhile to track the variation of a limited number of selected words or phrases, such as a/an, until/till, because/'cause (§16.3). The main requirement here is to keep variation manageable -- that is, recoverable -- by spelling each variant consistently, and keeping track of all the different variant spellings that are used (e.g. by recording each one in a lexicon file). This will make possible a successful search for every variant corresponding to any given variably-pronounced word. All in all, most users of discourse transcriptions will do well to keep the notating of variation down to a minimum, for simplicity's sake.

26.2.5 Avoiding "fragile" notations

In some cases, older discourse transcription conventions that were suitable for paper transcriptions have become inconvenient or problematic now that most discourse researchers have begun to work with texts in a computer format. For representing speech overlap, the paper-oriented convention of first aligning the two overlapped utterance portions one under the other, and then placing brackets (or rather, bracket-like symbols) directly between the two overlapped lines, becomes very tricky on a computer in the face of changes in tabs, margins, justification, and other kinds of reformatting. (It also makes automatic identification of overlapping speech more challenging than it need be.) Notations which allow crucial information to be lost easily when minor transcription or formatting changes are made must be considered "fragile".

The same information about overlap can be retained, with far greater reliability, if one simply places a set of brackets within each of the lines that overlap (§5.2).[58] This allows the overlap alignment to be unambiguously reconstructed, even if the lines of text are somehow shifted in such a way that spacing, and hence alignment, are not preserved. In general, fragile notations based on the use of margins, tabs, insertion of multiple spaces, and so on, can be used redundantly to increase the visual clarity of information on the page. But any essential information (like overlap location) should be carried by robust notations, such as a bracket securely embedded within a text line.

26.2.6 Units and spaces

It is important for the discourse researcher to be aware of units, and this applies to the units implicit in the transcription itself, as well as to the units of the speech being transcribed. The most obvious case of a unit that appears in almost any discourse transcription is the word. With a little attention to the placement of spaces, one can take advantage of the capacity of many text-oriented computer programs to recognize a "word", that is, a space-delimited unit. While the transcriber should not, and need not, become locked into a particular unit analysis just because of the pervasive use of the space character to signify a unit boundary, it would be wasteful not to take advantage of this potential boundary notation.

Thus the placement of spaces becomes more than just a stylistic issue. Transcription symbols can be written either as part of a word or as a separate space-delimited entity. In the present system, the distinction is generally based on whether the phenomenon being represented occurs sequentially in the stream of speech, or simultaneously with the speech (i.e. suprasegmentally). For a phenomenon which is intrinsically part of a particular word (as when one sound in a word is lengthened) the symbol is written as part of that word (e.g. co=ld). But for a phenomenon which in some sense constitutes a distinct event within the linear sequence of utterance events (including words), the notation is best written as a separate unit, i.e. with surrounding spaces (cf. the pause and the laugh in ... @ There isn't --).

In addition, wherever possible the traditional stylistic arrangement of spaces and punctuation is taken into account. In the case of the intonational "punctuation" symbols (which apply to, or have scope over, as much as a whole line rather than just the word they happen to appear next to), maintaining traditional spacing and typographical aesthetics seems to make the transcriptions easier to read. (But note that the truncated intonation unit symbol (--) is separated by a space from the preceding word, to help distinguish it from the truncated word symbol (-).)

26.3 Familiarity

Of course any transcription convention has to be functionally adequate, but if it is going to be accepted and learned by the transcribing public, it will help if it also looks familiar. Familiarity can be borrowed from several sources, including the ancient if casual traditions of literature, and the youthful and precise traditions of existing discourse transcription practice.

26.3.1 Literary sources

Any notation that immediately strikes the reader of a transcription as familiar and even traditional is likely to be favored, as contributing to ease of reading and of learning. Perhaps the most important source of transcribing conventions which bear the stamp of familiarity is literature. Novelists and playwrights have long been concerned to capture at least some of the flavor of speaking in their written representations of dialogue (Chapman 19??), as have their less elegant but more adventurous colleagues, the cartoonists. Many of these general conventions are reasonably constant from language to language, at least within the Western world -- for example, the use of three dots to indicate (albeit not without potential ambiguity) a pause between words. We readers imbibe these literary conventions for writing spoken dialogue from a very early age, so that they soon enough take on a degree of seeming "naturalness", which can impart a sense of almost automatic and even non-arbitrary auditory recognition (cf. Friedrich 1919). Harnessing the representational resources of our literary experience must be considered a high priority for any discourse transcription system, if it hopes to claim as merits ease of learning and ease of use.

This harnessing necessarily involves the systematization of notations which in their "ordinary language" usages are often vague or ambiguous. What is required is that the meaning assigned within a transcription system should be consonant with the familiar literary meaning, wherever possible. For example, while the three-dot notation is commonly used by writers to represent a pause, the duration of this pause is left vague. And the literary usage is not only vague but ambiguous, since three dots may in fact indicate either pause or ellipsis. But the work of the discourse transcriber demands more precision and less ambiguity. So the three-dot notation is given a consistent and precise meaning; for example, it is specified as always representing a pause (never ellipsis), whose duration is approximately half a second. Then other notations, such as those for shorter and longer pauses, can be derived from the basic convention.

In the present transcription system, every endeavor has been made to base conventions on familiar literary models where possible. This has influenced in some degree the notations for pause, intonation contour class, truncation (all related to punctuation practices), intonation units (poetic lines), speaker labels (from character

labels in plays), transcriber comments and other non-speech interjections (from the stage directions in plays, etc.), among other notations. (Of course, many of the same literature-based conventions have been exploited by other transcription systems too.) Notations which draw in this way on the rich set of already learned associations from reading carry the great advantage that they are easier to learn and easier to read than arbitrary notations lacking such associations.

26.3.2 Transcription system sources

The second source of conventions which lay claim to at least some degree of familiarity lies in the much younger tradition of the transcription of spoken discourse.

Before the modern era there have been occasional efforts to render some of the special qualities of rhythm, stress, and intonation that are observed in extended stretches of speech. These efforts were often applied to speech in public performances of one kind or another -- oratory, sermons, theater, and the like. One nineteenth century example appears in a set of notes by Helen Potter (1891, cited in Ellman 1988:629), who made a career of impersonating on the stage the colorful figures on the day. Potter was able to capture on paper a number of prosodic features of the oratorical style of contemporary speakers like Oscar Wilde. Though historically interesting, such early attempts at discourse transcription are too obscure to contribute much in the way of resources boasting a widespread familiarity.

More modern traditions of discourse transcription do provide some notations which are both functionally adequate and "traditional" in some degree. For example, for a relatively long pause in a conversation, the duration is often indicated by enclosing a number representing seconds within single parentheses. Similarly, double parentheses are widely used to enclose comments interjected by the transcriber. But even these practices, while widespread, are far from universal.

The present transcription system generally tries to keep to existing convention where a widely acknowledged one exists, other things -- such as computational convenience -- being equal. But more often than not the fields of study concerned with language present us with several competing conventions. This may be two different symbols variously employed for representing the same phenomenon, or a single symbol used in two different meanings. In order to meet the fundamental requirements of clarity and explicitness, any discourse transcription system must take a stand on these conventions. As a result, while in some cases a transcription system can adopt both an earlier transcribing category and a symbol to represent it, in others -- as when a competing convention exists for the same symbol -- it is only possible to incorporate the category.

For example, while square brackets have a long tradition among phoneticians as representing phonetic transcriptions (and among syntacticians as indicating boundaries of syntactic units like clauses), in discourse studies the same bracket symbols (or visually similar ones) have a wide currency for marking the boundaries of overlap between two speakers (deriving from the Conversation Analysis tradition). The present system adopts the latter convention (or rather adapts it slightly; see §25.2.5), using square brackets to mark overlaps -- consistently and exclusively. Since overlap marking is a very fundamental, high frequency notation, whose visual immediacy should not be compromised by the use of square brackets in other meanings, it was necessary to find another way of marking phonetic transcriptions. The notation arrived at draws on another long-time convention for representing the sounds of speech, that of slant "brackets", long used for enclosing phonemic transcriptions (§12).[59]

Similarly, while the colon (:) has some favor as a symbol for prosodic lengthening (which value it derives ultimately from no less an authority than the International Phonetic Alphabet), it is also used -- by a still wider range of discourse researchers -- to mark speaker attribution labels.[60] In resolving this conflict, the present system uses colon exclusively to mark speaker attribution labels. For computational purposes, the distinctiveness of this code is quite important, as it marks the boundary between two different categories of data that are written on the same line: to the left of the colon, the speaker attribution, and to the right, the actual speech. Thus, the symbol selected for marking this division should preferably not be used for anything else (such as prosodically lengthened sounds).[61] For prosodic lengthening, then, an alternative to the colon was needed. The equal sign (=) is adopted here because of its resemblance to a convention long established in Western literary traditions, of using the "em" dash (--) to indicate lengthening of a sound within a word. This literary convention has provided the model for a similar notation used in some earlier discourse transcription practices, such as Chafe's use of two hyphens (--) for prosodic lengthening (1980b:301).

Designing a transcription system, or adapting an existing system to meet one's needs, involves balancing many considerations, including competing demands of functionality, as well as competing traditions as sources of familiarity. But if design decisions are carefully considered in light of research goals, the system arrived at in the end should facilitate the production of discourse transcriptions which are explicit, readable, and even, perhaps, enlightening.

APPENDIX 1: EXTENDED TRANSCRIPTION SAMPLES

{26.3.3 AFRICA}

A: and he showed us the very place,
that it happened.
And he uh- --
b- basically said at that time,
he wasn't really sure why,
they'd even got out of the car,
He really knew better.
than to get out of the car.
B: Well,
how many times have you and I,
gotten out of the car,
when we saw the- --
a- an animal,
I've done [that lots of times].
A: [Well,
in the game] park,
Yeah I've --
I'm usually pretty careful.
We did have to get out of the car,
the time we got stuck in the sand,
in the gamepark.
@@@
B: I have a picture,
where I'm reaching up and petting the knee,
of a giraffe.
B: ... [<X at X> --
down at Chiredzi].
A: [That --
that must] --
I was going to say,
that wasn't in ... at Kafui,
because there are no giraffes,
in Kafui.
B: [That was] at Chiredzi,
A: [Yeah],
Yeah,
well see,
when you go into the game reserve areas,
you're told,
not to get out of your car.
You're not supposed to,
but,
M: Have the animals,
ever attacked anyone in a car?
B: Well- I- --
well,
I heard of an elephant,
that sat down on a [VW,
one time].
A: [@] @@@@@@ [[@]]
B: [[There's a]] girl- --
Did you ever hear that.

A: @No,
B: Some elephants,
and these --
they --
B: there --
These gals were in a Volkswagon,
A: @@ [@@]
B: [and] uh,
they uh kept honking the horn,
hooting the hooter,
A: @@ [@@@@]
B: [and uh,
and] the elephant was in front of them,
so,
he just proceeded,
to sit down on the VW.
but they had managed to get out first.
M: ... He crushed it,
I assume.
A: [I would think so],
B: [X Like a can opener],
M: Flat,
... What did these girls do then.
B: ... I think he sat there,
and had a Marlboro cigarette,
or something,
M: The elephant.

{26.3.4 DINNER}

A: Then you ended up living back out here.
   Right,
B: [Yeah],
A: [Did]--
   Did it draw you back,
   or was it just coincidentally,
   that you happened to get X --
B: No I --
   I started graduate school here,
   in the sixties.
A: Mhm,
B: ... And I loved it.
A: Mhm.
B: ... And so when I finished,
   ... I really wanted to come back.
   ...(2.1) and so I did.
S: @ ... That's nice.
B: ... Yeah,
S: That's really [nice],
A: [A lot] of people I know,
   ... Uh,
   well,
   actually I don't know that many,
   But of the ones I do know,
   ... who went to school in Berkeley at one point,
   ... most of them,
   talk with fond memories.
   ... now that they're somewhere else.
   about trying to get back,
   if they could.
B: ... Yeah,
   ... Yeah,
   ... Well <X it X> almost--
   ... In the sixties,
   ... almost everybody I knew,
   ... dropped out.
S: ... Mhm,
B: There were very few people.
A: ... Mhm,
B: made it through.
   ... But--
   But they're all here.
   ... @@ They've all stayed.
A: [Yeah],
S: [Mhm],
B: They've all become successful.
   in some way,
S: [Mhm],
A: [And they're] the reason I can't get an apartment here.
S: [[Mhm]],
B: [[Yeah]],
   No,

```
   Well not--
   no they're not.
   ... I mean they're all hippie carpenters.
   XXX
S: [@@@]
A: [Mhm],
B: You've got lots of various kinds.
   XXX <X them living around X>,
A: ... That's what somebody did say to me,
   that,
   ... part of my problem in trying to find a place to live,
   is that so many people come here,
   ... and then when the time comes for a turn over,
   for them to move out,
   and for [me to] move in,
S:         [Right],
B: Nobody wants [[to leave]].
A:              [[They don't]] move [3 out 3].
S: [3 Berkeley 3] just keeps [4 getting 4] bigger and [5 bigger
5].
B:                            [4 Yeah 4],
                                                    [5 Yeah 5],
   ... Well it's amazing to me.
   ... How many people stayed on.
A: [Mhm],
S: [Mhm],
B: No matter what.
A: Mhm,
C: ...(10.4) Okay.
((FROM_KITCHEN))
C: ... All right,
   We're cooking now.
D: ... We are?
C: <X We got it X>.
D: Looks good.
A: ... What were you doing before.
C: ... We were messing around.
   [But we ain't messing] [[around]] no more,
S: [Hey].
B: [X]
S:                          [[All right]].
B:                          [[X]]
S: ...(3.1) Hm.
((EATING))
A: ...(2.9) Oh boy.
   ... I'm getting full already,
   and I XXX [XXX] XXX [[XX]] X,
B:           [@@]
                          [[No]].
S: I know.
   @@@@
```

{26.3.5 BRIDGE}

V: This is- --
Psychologically,
this is what was going on,
is that,
if you re- --
it wouldn't be any fun,
unless you really resisted.
like if you just,
you know.
didn't resist,
then it was no fun for the people,
[hanging you over],
F: [Yeah,
and you] [[just die]],
V: [[because]],
F: and,
[XXXX].
V: [Yeah].
E: [@@@]
V: Because --
F: Ah,
Fuck this.
[Boom].
V: [@@@] [[@@@@]]
E: [[@@]]
V: But,
if you resisted
then it was more fun
because then they could apply_(/appry/) --
apply more pressure,
to [force you over],
E: [<X More terror X>].
F: Right.
V: And then you --
And so the whole trick was,
I mean,
... I'm always trying to figure out,
what's the best thing for me.
you know and- --
and I hadn't been put over the edge,
in --
in quite a long time.
I mean,
in fact,
I'd never been put over the edge,
I'd always witness it,
and I --
I didn't really agree with it,
so I --
I always stayed over on the edge,
uh,
and not- --

I mean,
I would stay away from,
the actual grabbing,
and stuff,
And I --
I didn't --
I looked upon it,
as something that was,
just not the right thing to do,
But,
... in any case,
one time,
they grabbed me,
and the only thing going through my mind was,
Well,
I mean,
I can really kick and fight,
and push,
and then,
it's just going to encourage them.
right,
but at the same time,
I can't just do nothing,
But uh,
That wasn't the terror,
The terror was,
that,
Finally they grabbed me,
and they,
hung me over the side,
like this,
and everything was fine,
I figured,
because the only thing,
going through your mind is,
they're not really going to,
... [you know],
F: [Drop you],
V: drop you,
because this,
it's just this,
never crosses your mind.
But,
What --
What did cross my mind,
was,
I looked down,
and,
and for an instant,
just for- --
I mean a split millisecond,
... you think that,
there could be an accident.

and that,
and it was,
o- o- one of the very first times,
F: [Or that you could have hurt] somebody else.
V: [that I have] --
Well,
Well that,
somehow,
somebody could have slipped,
or,
something could happen,
where you could actually fall.
F: Oh,
I thought you were talking about,
causing an accident on the freeway.
V: Oh,
no [no,
XXXXXXX them],
F: [<X you know they X>] --
dri- --
They don't care.
V: No,
F: @@[@@]
[@@]@ They don't care,
V: [[No but]],
E: [[Oh,
XXX]] X [XX].
V: [But what] --
what occurred to me was,
the first time that --
that,
I really understood what the word reality meant.
Because reality was always to me was,
a concept.
you know,
which I ha- --
didn't understand really.
I mean I just --
... It's,
well,
it's this,
it's your flesh,
it's right now,
it's whatever.
I mean it was always attached to some concept.
where suddenly,
I realized that,
this could really really happen.
F: Unh-unh,
V: and --
and I- --
I was so terrified,
... that um,

I mean,
just,
at the thought,
that something like that,
was even possible.
that these guys,
could just for a moment,
lose their heads,
and just let you go.
And I said,
Oh my god,
and uh,
es- --
especially because
I remember wh- --
when it occurred,
is that,
we were over the edge,
and,
and I guess one of the guys like,
sort of tripped,
or did something,
where all of us went,
Whoa,
like that.
you know,
F: huh.
V: @@@[@]
F: [@@@@]
V: and it was --
@
and it was- --
and they all held on to me.
because they,
of course,
didn't want to let me go.
they didn't really want something like that to happen,
but,
at least,
being the guy on the end of this,
I --
I said,
Oh my gosh.
[This could really] occur.
F: [What a s-] --
What a stupid way to die.
[[@@]]
V: [[Yeah]].
E: [M],
V: [And so],
you know,
then we all m- --
you know,

went back,
but it was like,
and I remember it,
... life was never the same after that.

{26.3.6 CARSALES}

D: If I don't hustle,
I'm not going to make money.
G: ... Yeah.
D: ...(2.2) But everything's --
everything's ha --
Y- you know fell into place pretty good.
... I mean,
things happen for a reason.
This --
The situation that I'm in happened for a reason.
I changed my career,
...(1.5) I took care of everything,
I had to take care of the car,
...(1.5) and uh,
now I'm going to save my money,
and try to get my own pad.
... [condominium],
G: [X],
D: or whatever the case may be.
I'm going to be saving a lot of money working here,
so,
if I'm making decent money,
I'll be able to uh --
G: [to] --
D: [get] something on my own.
G: ... Yeah,
D: With the help of my parents of course,
because --
G: When you say it happens for a reason,
it's like,
... it happened to get you off --
D: off my ass.
G: [off] --
D: [get] me out of the factory,
get me into a career,
that I could make good money,
and uh,
to realize that uh,
...(2.1) I had a good woman,
and I shouldn't --
I shouldn't wanna,
have anybody else.
She spent twelve years of her life with me,
and uh,
...(1.8) She's always been positive,
thinker,
and uh,
always been good,
G: Yeah,
D: ... understanding,
... and uh,
G: Sure,

it would be different,
if she were a bitch,
and always [nagging,
you know,
and then] getting on your case,
D: [Yeah,
Exactly].
[[Or didn't like --
or didn't enjoy,
doing anything]].
G: [[and making your life impossible]].
D: She [always was,
you know].
G: [Yeah.
Exactly].
D: ...(1.6) pretty much uh,
... able to do anything that I wanted to do.
She was never negative or anything,
and uh,
it was basically me,
you know,
going out.
The problem going out.
...(2.3) So it happened for a reason,
Now I hope that,
you know,
in the future,
she --
she realizes that I'm,
ha- have changed and matured,
and --
and --
and she would give me that chance,
you know,
[to go] back with her,
G: [s-] --
D: [[and try]] to make our life work together.
G: [[to go back]].
... Yeah,
D: But only time will tell,
I gotta prove it to her,
... And,
I got to leave her on her own,
Let her see,
you know.
G: ... Yeah.
D: ... Even if she goes out with other men,
or dates other men,
if that's --
if --
if she does feel any attraction towards anybody else.
... I'll never know.
G: ... Then she'll know what her good thing was.

D: Yeah.
G: That's for sure.
D: Definitely.
... So that's why I uh m --
The more time I spend on working,
... The the least time,
I'll think about her and uh,
G: The only thing you can do is be the best you can.
[Right]?
D: [But definitely].
G: [[That's it]].
D: [[and let her]] know that,
G: Yeah.
D: Let her know that I still care,
and,
I'm not getting involved with anybody else.
G: ...(1.8) Yeah.
D: Because I don't have the time.
Right now I have a career.
I have goals set for myself,
also,
I want to make fifty thou a year,
G: ... But what about all those phone numbers.
are you going to call any of those chicks?
D: ... Well,
I hope it doesn't get to the point where I have to.

{26.3.7 FARMTALK}

A: ...(2.3) How uh --
How much you got,
to [disk]?
B: [Oh there's] thirty-five acres I guess,
A: Oh?
...(1.7) Jeez that's a shame,
that that didn't --
spray didn't work,
B: ... I'm sure glad it's only thirty-five acres @.
A: Yeah,
I bet you are.
... Yeah,
It's a good thing you [<X didn't X>] --
B: [Well],
it was a test plot,
I said it was a test plot,
so,
... [No],
A: [<X You X>] --
B: I'm going to give up on this Snakeoil,
I don't know what the hell.
... I mean like I say.
... I- I had ... a thick patch of barley,
or of wild oats there,
A: ... Mhm,
B: About the size of the kitchen and living room,
... I went over it,
and then,
... when I got done,
I had a little bit left,
so I turned around,
and I went and sprayed it twice.
Well it's just as yellow as [...(1.3)] ... [[can be]].
A: [Huh].
[[<X The peas are X>]] right in it,
B: ... [So that would] be,
A: [XXX]
B: ...(1.8) eighteen ounces,
which would be a quart,
...(1.5) and two ounces.
...(1.4) that killed that,
<X So it's got to be X>,
you can't kill peas.
How do you kill a pea.
A: @@@ [@ I can't] kill my peas.
B: [<X Shit usually X>] --
... XXX.
... Like Gary said,
Gary just pulled in there,
and a little bit left in the sprayer,
and he killed them deader than a doornail.
A: I guess,

... I don't know --
I [guess though] the price was right,
B: [The fro-] --
A: On --
If he gave you that stuff,
I --
B: ... Well them two frosts --
... The dang frost.
hurt all these [other people,
Why it killed] theirs,
A: [@@@@]
B: Hell I can't even kill mine,
A: @ Can't even get mother nature to kill them.
Maybe you'll hail out.
B: ... X,
A: ... @@@ [@@@@]
B: [Well we'll see you].
A: We'll see you Trax,
... Thanks for stopping.
B: ...Yeah.
... Well the kid's asleep,
No she's not.
A: Nope.

{26.3.8 LUNCH}

M: ...(2.0) But she thought she had a bladder infection,
when she was at Whidbey,
R: ... Oh did she?
I [didn't hear that].
L: [Or] did she have the opposite problem?
M: ... Well,
It's not exactly the opposite,
but,
... But they're kind of related aren't they?
R: ...(2.7) But she's [moving],
M: [But] --
R: XX [[XXX]],
M: [[But they]] didn't even do a urinalysis.
... which I think is ridiculous.
...(1.4) when she went in yesterday.
R: ... But will a urine show up kidneys?
M: ... Sure,
If there's an infection,
R: ... Oh I didn't know it would.
... I guess it would.
Because they did that for Bill.
They thought he had a kidney [<X infection X].
L: [Oh they did]?
But they never figured out what he had?
R: ... He had pneumonia.
[The second week] he had pneumonia,
M: [Eventually].
R: the first week,
L: Really?
R: apparently [he just had a virus],
M: [He had a X virus].
L: [I didn't] --
R: [[or either that or]] --
L: [[Oh,
I thought that they didn't know what]] he had.
... He had pneumonia?
M: Yeah he eventually [developed it].
L: [Is that the first time] he's ever had pneumonia?
R: ...(1.5) No.
L: ... He's had it before?
R: When he was real little,
[He] almost died of pneumonia.
L: [Oh].
R: when he was **
L: Oh really?
M: Hey.
R: ** three.
M: So,
Now Bill and Jonathan are a natural class,
Right?
R: Right.

L: Oh.
I get it,
R: ...(2.0) But he outgrew it,
when he was about <X three X>.
or a little older than that.
XXX.
... When they quit going to Lewiston,
every week to see his @grandmother @,
L: Oh that's when he outgrew it?
R: He used to have ... asthma attacks,
every time they'd go to Lewiston.
L: Hm.
... That's a drag,
He must have liked her a lot.
Huh?
... [Or was it the cl-] --
R: [He doesn't] remember.
L: Oh.
Oh.
R: ...(2.1) <X His mother XXX X>,
and she went every --
just about every weekend.
She hated going.
L: His mom?
... Which --
It was Jack's mother?
R: Mhm,
L: Oh.
...(1.5) Hmh.
...(1.4) [That's] &
R: [But] they had to go see [[her]],
L: & [[pretty bad]].
R: ... But he outgrew it.
...(2.6) But --
But it scared Marleen,
cause that was one of her dad's problems?
... One.
L: ... What.
asthma?
R: ... Unhhunh.
L: ...(1.9) Seems like we've got every bad [thing there can be.
in our family],
R: [He had a lot of things wrong with him],

APPENDIX 2: NARROW TRANSCRIPTIONS

The examples in this Appendix represent narrow transcription versions of all the examples cited elsewhere in this volume. The chapter and example numbers match those of the original (broad transcription) citations, to allow comparison of the broad with the narrow transcription.

Examples for Chapter 4. UNITS

4.1 {carriage return} Intonation unit

{4.1.1 DOOR}

```
A: 'Well,
   .. ^this is in ... 'bits and ^pieces, \ ((MIC))
   but I was 'coming 'down the ^stai=rs, /
   and he was there ^ta=lking, /
   .. to this ^lady, \
```

{4.1.2 AESTH}

```
S: (Hx) 'That's ^interesting, \
   .. I mean,
   th%- that you should ^pai=r the word 'aesthetics, /
   ... with [^advertising]. \
J:          [(H)] ^Yea=h! /
```

{4.1.3 DOOR}

```
A: for a ^new doo=r, /
   and ^door ja=mbs, /
   ^ha=rdwa=re, /
   ^stai=n, /
   ^pai=nt, /
   .. 'all the ^stuff that you 'nee=d, \
```

4.2 – {2 hyphens} Truncated intonation unit

{4.2.1 FORCES}

```
A: ... But he's --
   .. He's 'decided he wants to be 'ca=lled ^Rock. \
```

{4.2.2 J&J}

```
J: ... And he= --
   .. and he .. ^k=icks my 'feet 'apart, /
```

{4.2.3 CARS}

```
D: ... 'you know, \
   .. to 'get leads, /
   .. and 'talk --
   .. 'communicate with 'people on the ^phone. \
```

{4.2.4 DOOR}

A: ... So I%- --
.. I%- --
.. I ^get in the 'ca=r, \

{4.2.5 FORCES}

A: .. (H) .. And there's --
... % ^Nothing --
.. ^Nothing with two ^tee='s in it, \
... does he ^get 'ri=ght. \

{4.2.6 RANCH}

R: He 'doesn't have any --
...(.8) He 'doesn't 'know what's going 'on in this ^world. /

4.3 {space} Word

{4.3.1 AESTH}

S: (0) Hm=. \
.. Hm. \
(H) ...(1.0) O=kay=. /

4.4 - {hyphen} Truncated word

{4.4.1 J&J}

J: ... You 'know how they ^do that, \
so you 'can't s- .. 'ha- --
.. you don't 'have any ^balance. /\

{4.4.2 J&J}

N: .. and I 'came up 'behind him, \
and I wa%- --
.. I was ^hugging him, \
while he was ^shaving. \
... (H) 'And as ^I was 'hugging him, /
...(0.8) 'he just 'sli%- .. ^dropped. \
... ^slipped from my 'hands. \
.. to the ^floor. \
he like ^f=ainted. /\

{4.4.3 DOOR}

A: But 'it was --
... till 'five%- --
I 'remember, /
.. ^fi=ve o'clock, \
I 'finally got the 'door in, \

Examples for Chapter 5. SPEAKERS

5.1 : {colon} Speaker identity/turn start

{5.1.1 DOOR}

```
A: .. 'No=w that we have the [^si=de door] fixed, \
B:                           [That's 'kind of] --
A:   he could. \
B:   .. Yea=h, \
C: (0) @Yeah (Hx). \
D: ... Sure. \
```

{5.1.2 AESTH}

```
JACK:  'That's all it ^does. /
       .. It 'doesn't [.. even] ^reach a 'conclusion. \
SANDY:                [m=hm], /
JACK:  .. The 'conclusion is up to ^you=. /\
SANDY: [m=hm], /
JACK:  [@@@] in 'going out to --
       (H) ... to ^buy the thing. \
SANDY: .. 'Hm=. \
       .. 'Hm. \
       (H) ...(1.0) O=kay=. \
```

{5.1.3 AESTH}

```
S: .. (H) (TSK) He ^would be 'just about 'Ben 'Chang's a=ge. \
```

{5.1.4 J&J}

```
X: [((BLOWS_WHISTLE))]
```

5.2 [words] Speech overlap

{5.2.1 DEPR}

```
B: ... I 'remember, /
   ...(.8) I 'used to 'help ^Billy, /
   and I'd get ^twenty-five 'cents a 'week, \
   ...(1.2)
R: [A ^week]! /
B: ['Twenty] --
```

{5.2.2 DEPR}

```
B: ... 'They were kind of ^scary. \
   ...(1.6)
   the ['gypsies]. \
R:     [mhm], /
```

{5.2.3 DEPR}

B: (0) 'Clint is ^still | .. 'screaming about ^tha=t, \
R: ... [Because he 'wanted the ^stamps], /
B: [all those ^stamps], \
... 'Mom let ^Ted 'Kenner have. \

{5.2.4 FORCES}

M: ... It's that ^you=ng, /
.. [^pa=le], /
A: ['Yeah]. /\
M: .. 'guy with the ^da=rk 'hair. /

{5.2.5 DEPR}

B: ... But 'I thought ^Mom was 'raising= | ...(.7) ^hemp, /\
or,
...(1.1) ['something] one time. \
R: [^What]? /
... [[^Hemp]]. \
B: [['Hemp]]. \

{5.2.6 AESTH}

J: .. ['Yeah]. \
S: [Which=] .. ^colors ... ^a=ll of the 'communication, \
[[after]] that. \
J: [[Yeah]]. \

{5.2.7 FORCES}

A: .. (H) 'But,
.. [the 'thing ab-] --
B: [The 'spe=cial] ^f=orces! /
A: (0) 'Yea=h. /\
... [[But the 'thing ^about him]] --
B: [[This 'place is getting]] ^wei=rd. /

{5.2.8 HYPO}

G: ...(.7) Well,
the ^worst [thing | ^I 'ever had, /
K: [@N @^He's a 'medical 'miracle]. \
G: was ^brai=n] fever, \
when 'I <X had X> [['proposed]] to ^her. \
D: [[@@]]
K: .. @@@@
... (H) From which you ^haven't recovered. \

{5.2.9 HYPO}

K: ...(1.2) 'They just ^represent,
'each of the ^days,
that the ^oi=[l ... 'continued to 'burn]. \
D: ['They don't have a ^word, /
there's no ^word]? /

{5.2.10 HYPO}

```
G: ... Then I 'had=, _
   .. uh=, _
K: (0) 'Cytomegalo[virus], /
G:                [Don't] 'forget, \
   'cytomegalo[[virus]], /
K:            [[(Hx) @]]
D:            [[What is 'that]]. \
```

Examples for Chapter 6. TRANSITIONAL CONTINUITY

6.1 . {period} Final

{6.1.1 AESTH}

```
J: ...(1.5) You're 'not ^say=ing something, \
   you're ^doing something to people. \
```

{6.1.2 AFRICA}

```
A: You 'don't ^see them very often. \
```

{6.1.3 DEPR}

```
R: .. For 'what. \
B: ... They 'make ^rope of it. \
```

6.2 , {comma} Continuing

{6.2.1 RANCH}

```
R: If you 'think about it, /
   'yeah, /
   if it 'rains a lot, /
   .. the 'horse is always 'we=t, \/
   .. and it's always 'moi=st, /
   .. it's always on something 'moi=st, \/
   ... ^Sure it's going to be 'softer. \
```

{6.2.2 CARS}

```
D: .. I have my ^own 'telephone, \
   my ^brie=fca=se, /
   I can 'work on ^cli=ents, /
   all the 'time, /
   .. (H) .. 'You know, _
   ^call them on the 'pho=ne, /
   .. and uh=, _
   ... 'take a ^lunch, /
```

{6.2.3 J&J}

J: .. (H) And I ^looked 'over, /
... ^into the 'street, /
and saw this ^cop car, /
'going along, \
.. ^right ... 'next to me, \
you 'know, \
like .. 'five miles an ^hou=r. \

6.3 ? Appeal

{6.3.1 DEPR}

B: ... But .. ^were they 'rattle snakes? /

{6.3.2 DEPR}

B: .. 'She never 'raised ^hemp? /

{6.3.3 COMPAR}

MIRIAM: ^This? /
FRANCO: ^This. \

{6.3.4 CARS}

D: I 'ordered a ^thou=sand 'business cards. \
G: Yeah? /
... You 'get them 'printed ^here? /

{6.3.5 AFRICA}

A: .. And we were 'ma=d, /
.. because 'Glenda had told us we 'had to be 'back by ^Monday, \
.. even though 'Monday was a ^holiday? /
.. ^Remember that? /

{6.3.6 J&J}

J: ... <Q 'Should we ^waste him? /
or should we ^stop him, \
and ... ^then 'waste him Q>. \

Examples for Chapter 7. TERMINAL PITCH DIRECTION

7.1 \ {backslash} Fall

{7.1.1 AESTH}

J: ...(1.5) You're 'not ^say=ing something, \
you're ^doing something to people. \

{7.1.2 LUNCH}

M: ...(.9) <WH It 'isn't the ^same 'thing WH>. \
X: ... ^Looks like it, \

{7.1.3 AESTH}

J: .. <X I mean X> 'why do people actually ^wa=lk .. 'into=, \
(H) ^art museums. \

7.2 / {slash} Rise

{7.2.1 RANCH}

R: ... And 'then, /
.. they ^videotape us, /
.. 'as we ^go. \

{7.2.2 FORCES}

A: ... The 'thing ^about him 'i=s, /
.. he 'ca=n't ^spe=ll. \

{7.2.3 RANCH}

R: .. and ^the=n, /
...(1.2) (TSK) % ^our 'job, /
is to 'shape the ^shoe=, /
... to the 'horse's ^foot. \

7.3 _ {underscore} Level

{7.3.1 CARS}

D: .. (H) .. 'You know, _
^call them on the 'pho=ne, /
.. and uh=, _
... 'take a ^lunch, /

Examples for Chapter 8. ACCENT AND LENGTHENING

8.1 ^ {caret} Primary accent

{8.1.1 FORCES}

```
B: .. ^I met 'him, /
   and I 'thought he was a 'ni=ce ^kid. /
S: .. He ^is a nice 'kid, \
   but he's ^wei=rd. /\
```

{8.1.2 FORCES}

```
B: .. I ^never 'met the guy=. \
```

{8.1.3 AESTH}

```
J: 'This is one of the things I've ^thought about, /
   a ^lot. /
S: (0) 'Yeah. \
```

8.2 ‘ {raised stroke} Secondary accent

{8.2.1 AESTH}

```
J: ... 'You know, \
   'that's just a 'fact about that ^thing. /
```

{8.2.2 HYPO}

```
G: ...(2.2) 'a=nd, /
   of course, /
    a 'lot of herb ^tea, /
   when I'd 'rather be drinking ^whiskey. \
```

{8.2.3 RANCH}

```
R: ... You know, /
   ^I had been 'practicing this | .. with my ^horse, \
   .. for a 'lo=ng ^time. \
   but ^never when anybody was 'around. \
```

8.3 ! Booster

8.4 = Lengthening

{8.4.1 HYPO}

```
K: ...(.7) ^Greg's never had a% .. a ^co=ld, /
   .. or the ^flu=, /
```

{8.4.2 DOOR}

```
A: .. and I decide I'm going to get a ^ne=w door, /
   .. and a ^ne=w 'jamb. \
```

{8.4.3 J&J}

```
N: .. (H) she was ^f=rantically | .. ^running 'arou=nd, /
    like 'trying to get ^away from him. \
```

Examples for Chapter 9. TONE

9.1 \ {backslash} Fall

{9.1.1 FORCES}

```
A: he can't \spell.
```

9.2 / {slash} Rise

{9.2.1 HYPO}

```
D: Is he going to make her become a /Catholic?
```

9.3 \/ Fall-rise

{9.3.1 RANCH}

```
R: If you 'think about it, /
   'yeah, /
   if it 'rains a lot, /
   .. the 'horse is always 'we=t, \/
   .. and it's always 'moi=st, /
   .. it's always on something 'moi=st, \/
   ... ^Sure it's going to be 'softer. \
```

{9.3.2 J&J}

```
J: .. So the 'guy \yells at me, \
   ...(0.9) <Q<F Is 'that your \/^dog F>Q>? /
```

9.4 /\ Rise-fall

{9.4.1 AESTH}

```
S: ... A 'lot of it's really /\^ba=d! \
```

{9.4.2 DOOR}

```
A: .. 'That was the 'only thing that went \smoo=thly, \
   that we've ever \do=ne. \
B: .. @ That /\^you='ve. \
   ... ^I couldn't even ^begin to do it. \
```

9.5 _ {underscore} Level

{9.5.1 HYPO}

```
K: ...(1.2) They just _represent,
  each of the _days,
```

Examples for Chapter 10. PAUSES

10.1 ...(.n) Long pause

{10.1.1 CARS}

```
D: ...(3.0) I 'had them 'done at ^Pick's. \
   ...(1.0) You ^see it, /
```

{10.1.2 RANCH}

```
R: ... (H) 'We 'start 'out ...(.8) with ...(.8) 'dead ^horse
                                                    hooves. \
```

{10.1.3 RANCH}

```
R: ... ^This .. is a 'type of 'person, \
   ...(.9) 'that ...(.7) is 'like ...(1.0) a 'hermit. \
```

{10.1.4 DEPR}

```
B: ... I 'remember, /
   ...(.8) I 'used to 'help ^Billy, /
   and I'd get ^twenty-five 'cents a 'week, \
   ...(1.2)
R: [A ^week]! /
B: ['Twenty] --
```

{10.1.5 DEPR}

```
B: ... 'They were kind of ^scary. \
   ...(1.6)
   the ['gypsies]. \
R:     [mhm], /
```

10.2 ... Medium pause

{10.2.1 AESTH}

```
J: m=hm. \
S: ... 'That's what .. the ^poet is 'after, \
```

{10.2.2 AESTH}

```
S: .. (H) 'U=m, _
   ... That's ^o=ne 'kind of thing, /
```

{10.2.3 HYPO}

G: ...(1.7) I'd 'like to 'have .. my% ... ^lu=ngs, /
... my ^entire respiratory 'tract, /
... (H) ^replaced, \
... (H) with .. 'asbestos. \
.. or 'something. \

10.3 .. Short pause

{10.3.1 RANCH}

R: ... And 'then, /
.. they ^videotape us, /
.. 'as we ^go. /

{10.3.2 RANCH}

R: .. a ^reining pattern is, /
.. a ^pattern where you= .. do sliding ^sto=ps, /
.. spi=ns, /
... ^lead changes, /
.. I ^know you 'probably don't 'know what that 'is. \

{10.3.3 CARS}

D: .. I mean, /
'I have the 'opportunity, /
to ^talk to people, \
.. to ^get the 'phone book, \

{10.3.4 DEPR}

B: ... 'She just .. pulled the 'cat | .. and the 'kittens ^out, /
.. and 'pulled off the ^bread that was 'dirty, /
and, /
... we ^served the 'rest of it. \

{10.3.5 AESTH}

J: .. I mean, /
there are ^people that ar=e .. just 'hard to .. ^sell to, \
S: .. mhm, \
J: ... and 'hard to ^advertise to. \

10.4 (0) Latching

{10.4.1 AFRICA}

A: They 'get their 'snake? \
R: (0) ^Yeah! /\

{10.4.2 CARS}

```
G: ... <X Least X> she'll 'know what her ^good thing was. \
D: ... 'Yea=h. \
G: (0) ^That's for sure, \
D: (0) 'Definitely. \
```

{10.4.3 CARS}

```
G: .. I was 'using number ^seven, \
   .. 'gun number ^seven, \
D: (0) It ^broke the ['chisel]. \
G:                   [and] it ^broke my 'chisel, \
   man. \
   <X Now X> --
D: (0) So 'now you have 'no chisel. \
G: (0) <X It's X> my ^only good 'chisel. \
   man, \
```

Examples for Chapter 11. VOCAL NOISES

11.1 (TEXT) Vocal noises

{11.1.1 AESTH}

```
S: (H) (THROAT)
   .. Yea=h. \
```

{11.1.2 RANCH}

```
R: .. and ^the=n, /
   ...(1.2) (TSK) % ^our 'job, /
   is to 'shape the ^shoe=, /
   ... to the 'horse's ^foot. /
```

{11.1.3 AESTH}

```
S: .. (H) .. 'u=m, _
   .. (TSK) .. 'ha=s ... ^something= .. to= | .. ^communicate, /
   .. with 'me=, /
```

{11.1.4 AESTH}

```
S: ... (GULP) (TSK) The ^gap is very 'big. \
```

11.2 % Glottal stop

{11.2.1 AESTH}

```
S: ... % .. <Q It's ^Thanksgiving 'time ^now, /
```

{11.2.2 RANCH}

R: .. it's ^mandatory, \
.. you have to% --
% .. to ^graduate, /
.. you ^know, /
.. % 'well, _
to ... ^get the degree=, /
you know, /
... (H) you ^have to 'take this ^class. /

{11.2.3 AESTH}

J: ...(2.4) (TSK) that the=% | ...(.8) 'set of ^sentences, \

11.3 (H) Inhalation

{11.3.1 CARS}

G: ...(1.4) (H) .. ^I've got to get 'out of that 'place, \
man, _
I 'swear. \

{11.3.2 HYPO}

K: ... (H) .. @^leukemia=, /
... (H) ^bronchitis=, /
... (H) uh=, _
.. ^tuberculo=sis, /
.. @@@@ (H)
.. and 'he's ^recovered from all of them. /

11.4 (Hx) Exhalation

{11.4.1 DEPR}

B: ...(4.3) (Hx) ... ^Kids in the 'city | 'miss so 'mu=ch. \

{11.4.2 AESTH}

S: (Hx) (TSK) .. an ^artist, /

{11.4.3 AESTH}

J: ...(1.5) So= .. the%- (Hx) --
...(2.2) Well. \

11.5 @ Laughter

{11.5.1 HYPO}

K: .. @@@@
... (H) From which you ^haven't recovered. \

{11.5.2 AESTH}
S: ...(1.0) @ (H) There 'isn't any ^rea=l 'communication going on. \
J: (0) Yeah. \

{11.5.3 DOOR}
A: .. 'That was the ^only thing that went 'smoo=thly, \
that we've ^ever do=ne. \
B: .. @ That ^you='ve. /\
... ^I couldn't even ^begin to do it. \

{11.5.4 AESTH}
J: .. The 'conclusion is up to ^you=. /
S: [m=hm], /
J: [@@@] in 'going out to --
(H) ... to ^buy the thing. \

{11.5.5 DOOR}
ALL: [@=]
D: [<X<P<@ We 'all like to 'eat @>P>X>] .

{11.5.6 AESTH}
J: ... You're ^not supposed to 'use these 'powerful [^techni=ques]. /
S: [@N@N@N@N] (H)
... Hm=. \

Examples for Chapter 12. QUALITY

12.1 <Y words Y> Quality

{12.1.1 HYPO}
A: <F %= It's ^not the 'end of ^Chanukah F>, \
.. in 'case you're ^interested. \/

{12.1.2 RANCH}
R: % .. (H) %
... % .. 'But .. uh=,
...(3.0) <P 'What was I going to 'say P>, /
...(3.5) X%- --
'O=h,
it's ^really 'ti=ring, /
though. \

{12.1.3 J&J}
J: ... But the 'goldfish got ^s=tuck, \
... <MARC 'h=alfway 'into his ^mouth MARC>. /

{12.1.4 LUNCH}

M: ...(.9) <WH It 'isn't the ^same 'thing WH>. \
X: ... ^Looks like it, \

{12.1.5 AFRICA}

A: .. they 'let us 'alone. \
... <WH 'But we were ^scared, /
.. And 'boy WH>, /
did we ^ever get in 'trouble, /
from 'Mel and 'Ervin. \

{12.1.6 AESTH}

J: (0) (H) <% Tha%- .. this% --
.. I ^wonder 'abou=t that though, \
I mean %>,
.. when 'I think of ^a=ds, /\

12.2 <@ words @>, @word Laugh quality

{12.2.1 AFRICA}

A: .. (H) .. and they ^stepped out in the 'road, /
and ^not only did they have ^uniforms on, /
but they <@ 'also had ^gun=s= @>. /\
[@@@]
B: [(Hx)]

{12.2.2 AESTH}

S: (0) It's @^pleasing (Hx). \

{12.2.3 J&J}

N: 'You know,
'this was a 'rented @^snake, /
@

{12.2.4 HYPO}

K: .. @
G: ... @ There isn't --
It's <@ ^no 'disea=se, \
at 'a=ll @>. \
K: .. 'Athletic feet. \
... @N .. 'foot .
D: .. @N .. @'foot. \

12.3 <Q words Q> Quotation quality

{12.3.1 J&J}

J: .. 'This is a ^literal 'quote, \
.. he 'says to me, \
... (H) <Q I'm 'going to ^res=train 'you. \
.. to the ^fence Q>. \

{12.3.2 HYPO}

```
G: and 'then he'd 'say, /
   .. (H) <Q 'I 'can't ^believe it, \
   'Nobody will 'pick me ^up Q>. /\
```

{12.3.3 FORCES}

```
A: and he's 'say=ing, /
   ...(1.7) (TSK) (H) .. <Q 'A=h, _
   ^yea=h, /
   .. We 'call 'ourselves, /
   the 'special ^forces of Santa 'Monica Q>. /
```

12.4 <Y<Z words Z>Y> Multiple quality features

{12.4.1 J&J}

```
J: .. So the 'guy 'yells at me, \
   ...(0.9) <Q<F Is 'that your ^dog F>Q>? \/
```

{12.4.2 HYPO}

```
G: .. They're ^drunk. \
   .. <Q<F ^Where's these ^Americans F>Q>, \
   They come ^bursting in the ^room. \
```

12.5 <Y> Quality (one-line duration)

{12.5.1 HYPO}

```
A: <F %= It's ^not the 'end of ^Chanukah F>, \
   .. in 'case you're ^interested. \/
```

{12.5.2 J&J}

```
J: ... But the 'goldfish got ^s=tuck, \
   ... <MARC 'h=alfway 'into his ^mouth MARC>. /
```

Examples for Chapter 13. PHONETICS

13.1 (/phonemes/) Phonetic/phonemic transcription

{13.1.1 CAFE}

```
A:    .. ^Virago_(/'vIr6go/). /
C:    ... ^Virago_(/'vIr6go/)? /
A:    ... 'I don't know how you ^pronounce it. \
B:    .. ['I thought it ^was] ^Virago_(/v6'rego/), \
A:       [<R<X Does X> this R>] --
```

{13.1.2 CAFE}

```
A:   .. ^Virago_(/'vIr6go/). /
C:   ... ^Virago_(/'vIr6go/)? /
A:   ... 'I don't know how you ^pronounce it. \
B:   .. ['I thought it ^was] ^Virago_(/v6'rego/), \
A:      [<R<X Does X> this R>] --
```

{13.1.3 COMPAR}

```
GEORGE: (0) But this ^Nai=man_(/'naI=m6n/) book,
        or ^Nai=man_(/'neI=m6n/),
        ^I don't know how he says his name,
```

Examples for Chapter 14. TRANSCRIBER'S PERSPECTIVE

14.1 ((COMMENT)) Researcher's comment

{14.1.1 J&J}

```
N: .. the ^way that | .. the 'Indians ^li=ve, \
   .. like Cany%- .. [Canyon de] 'Chelly=? /
X:                   [((BLOWS_WHISTLE))]
J: ... <P It's a 'whistle P>. \
```

{14.1.2 J&J}

```
N: .. and they're=, /
   ...(.8) 'you know, \
   ...(.9) ((DOG_BARKS_EXCITEDLY))
   .. @@@@@ .. (H)
   @@@ (H) (Hx)
J: You 'know% --
   .. You 'know%, _
   .. about ^this 'piece? /
N: .. <PAR 'She ^always does that PAR>. \ ((REF_TO_DOG))
```

{14.1.3 DOOR}

```
A: .. ^Think of your 'door, /
   .. ^here. /\ ((GESTURES))
```

{14.1.4 AESTH}

```
J: (0) 'I spend a 'lot of ti=me, \
   ((MIC)) ...(1.0) ^analyzing 'a=ds, /\
   .. 'myself, \
```

14.2 ((1_COMMENT)) Researcher's comment (specified scope)

14.3 <X words X> Uncertain hearing

{14.3.1 AESTH}
```
J: .. <X I mean X> 'why do people actually ^wa=lk .. 'into=, \
   (H) ^art museums. \
```

{14.3.2 HYPO}
```
G: ...(1.2) Well, _
   I [^don't] 'normally 'sound like ^Lucille 'Ball. \
K:   [<X That's X>] --
```

14.4 X Indecipherable syllable

{14.4.1 DOOR}
```
A: (0) It's ^some 'story, /
   XX .
```

{14.4.2 CARS}
```
D: .. It was 'basically ^me=, /
   'you know, _
   X 'going ^out. /
   .. The 'problem of going ^out. \
```

{14.4.3 FORCES}
```
A: .. And he's got <P ^all this, \
   .. <X 'you know X>P>, _
   ... and 'everything ^else X , /
```

Examples for Chapter 15. DURATION

15.1 word(.n) Duration of simple event

{15.1.1 FORCES}
```
A: ...(1.0) (H)(.9) 'A=nd, _
```

{15.1.2 AESTH}
```
S: .. (H) .. 'u=m(.7), _
```

15.2 <(.n) words (.n)> Duration of complex event

{15.2.1 RANCH}
```
 R: <(1.3) % .. (H) %
    ... % .. (1.3)> 'But .. uh=, _
```

{15.2.2 J&J}

```
N: ...(.8) 'you know, \
   ...(.9) <(.8) ((DOG_BARKS_EXCITEDLY)) (.8)>
   <(2.6) .. @@@@@ .. (H)
   @@@ (H) (Hx) (2.6)>
J: You 'know% --
```

Examples for Chapter 16. SPECIALIZED NOTATIONS

16.1 & Intonation unit continued

{16.1.1 LUNCH}

```
R: .. When he was .. 'real ^little, \
   .. [He] 'almost ^died of 'pneumonia. \
L:    ['Oh]. \
R: .. when he was .. &
L: Oh ^really? /
M: Hey. \
R: & ^three. \
```

{16.1.2 LUNCH}

```
L: ...(1.4) ['That's] &
R:          [But] they had to go ^see [[her]], /
L:                                & [[pretty ^bad]]. /\
R: ...(1.1) But he ^outgrew it. \/
```

{16.1.3 LUNCH}

```
A: ...(1.0) (TSK) (H) 'Maybe she's % &
B: Maybe she's [^addicted]. \
A:           & [^semi] ... @^hypochondriac. \
```

16.2 | Intonation subunit boundary

{16.2.1 DOOR}

```
A: ... The 'hinge is | .. on the ^inside. /
B: (0) Right. \
```

{16.2.2 AESTH}

```
S: .. (H) So= that the= .. ^reason | 'why I'm being
                                     'communicated with, \
   .. 'i=s | so that 'I can be 'made to ^do something. \
```

{16.2.3 FORCES}

```
S: ... ['Well], _
A:     [You're 'off] the ^highway, \
   'aren't you | ^here? /
```

16.3 <| |> Embedded intonation unit

16.4 {Capital Initial} Reset

{16.4.1 HYPO}

```
K: (H) .. But ^he'll recover, \
   He'll% --
D: (0) What ^is that. \
K: ^He'll be 'over his leprosy [^soo=n]. \
G:                            [^Nothing], \
   it's just 'dry ^skin. /
K: .. @
G: ... @ There isn't --
   It's <@ ^no= 'disea=se, \
   at 'a=ll @>. \
K: .. 'Athletic feet. \
   ... @N .. 'foot ._
D: .. @N .. @'foot. \
```

16.5 <words> False start

{16.5.1 FORCES}

```
 A: .. <He has=> --
    .. <a%> --
    .. The ^spelling is what 'first 'turned me on ^to him. \
```

{16.5.2 DOOR}

```
A: and <they%> --
   .. they% .. ^poked into <the%-> | .. the ^mou=lding, /
   along the ['side]. \
B:           [unhhunh], /
```

{16.5.3 HYPO}

```
G: ... 'A=nd, _
   .. 'you know, _
   .. <'He= would like>, /
   .. (H) 'He would like, /
   ^w=alk out on the ^freeway, \
   and 'try to ^hitchhike, \
```

{16.5.4 AESTH}

```
J: [@@@] in 'going out <to> --
   (H) ... to ^buy the thing. \
```

16.6 <L2 L2> Codeswitching

Examples for Chapter 17. SPELLING

17.1 Spelling out the words

{17.1.1 BALCONY}
E: So Mom felt 'obligated to ask those two idiots to ^lunch.

{17.1.2 BALCONY}
E: (H) Four,
five.
someplace around there.

{17.1.3 MIRACLE}
A: It was in a sixty-nine yellow .. Toyota ^Corona.
M: ... Was it a 'manual or an ^automatic.
A: ... @Automatic.

{17.1.4 WYOMING}
G: a=nd he 'paid two thousand ^dollars for it,
(TSK) (H) and that was like the st- the m- 'store ^mascot ^crystal.

{17.1.5 HYPO}
D: ... in 'two hundred and eighteen ^pages. \
K: ... ^Glen got it. \

{17.1.6 AESTH}
A: [becau=se] hi=s ^mother,
B: [Hm].
A: .. (H) dared to speak ^ou=t,
.. during the [[Hundred]] [^Flowers] thi=ng.

{17.1.7 DOOR}
D: ... Now 'I have a good f=- 'circular sa=w,
with o=ne and three quarters 'horsepower,
so it was 'mo=re than enough.

{17.1.8 DOOR}
D: I 'remember,
.. 'fi=ve o'clock,
I 'finally got the 'doo=r in,
and I 'd 'started at | .. 'eight thirty in the morning .
S: ... Go=sh .

{17.1.9 DOOR}
D: (0) [And it's already 'two o'clock].
A: [@ XX,
XX],
D: (0) And 'I='m | .. getting 'ma=dder and 'ma=dder.
<X And X> so ['finally],
J: ['No=],
it was only 'twelve thirty.
D: (0) Yea=h,
it's about 'noo=n.

{17.1.10 HYPO}
N: <Q Take a ^cab.
.. It will cost you about 'five ^dollars.
.. to get to my ^house Q>.

{17.1.11 DOOR}
D: 'turned out to be=,
J: ... 'miserable.
D: (0) 'two hundred do=llars,

{17.1.12 AESTH}
B: .. I mean,
when you look at a=ds from nineteen ^hundred,
A: Hm=,
B: they're just ^pitiful.

{17.1.13 HYPO}
D: .. <MARC One two three four five 'six MARC>]. \ WYOMING}
G: because they 'had some sort of ^sale.
.. (H) you know,
'twenty to 'sixty percent ^off=.
.. type of ^thing.

17.2 Acronyms

{17.2.1 BALCONY}
E: <Q<F Did you see ^Mike on TV F>Q>?
@@@[@@]
D: [Did she]?
E: Yeah.

{17.2.2 BALCONY}
E: -- they were sitting there ^watching TV.

{17.2.3 BALCONY}

E: his name's ^D R
... (H) and I said,
<Q Oh,
like ^Doctor Q>?
.. and he goes,
<Q 'Exactly ^right Q>.

{17.2.4 FORCES}

A: and he 'spelt ^hee=l, /
h e a ^l=, /
S: .. @
A: and he 'spelt ^said, /
.. s i a ^d. \

17.3 Marginal words

{17.3.1 AESTH}

J: .. I 'think of | ...(1.2) 'aesthetics, /\
.. @ @a=nd, _
S: .. m=hm=, _
J: u=h, _
S: ...(1.5) 'Hm=. \
... @
J: ... 'creation of ^desi=re, \
.. for ^one thi=ng. \
S: m=hm=, _

{17.3.2 J&J}

J: .. (H) .. And I thought, /
...(0.7) <Q ^Uh-oh= Q>. \

17.4 Variant pronunciations

{17.4.1 HYPO}

G: ^Because, \
.. I was 'coming 'down with a ^f=ierce .. case of ^rhinitis, \

{17.4.2 HYPO}

K: 'That's because <@ you 'weren't ^sick @>, /
two 'years ago. _

{17.4.3 AESTH}

A: [becau=se] hi=s ^mother,
B: [Hm].
A: .. (H) dared to speak ^ou=t,

{17.4.4 HYPO}

G: .. ^A=nd, _
it ^ca=n cause 'ca=ncer. \

Examples for Chapter 18.
Examples for Chapter 19.
Examples for Chapter 20. PRESENTATION

20.1 Salient line of text

{20.1.1 J&J}

```
     N: ... (H) 'And as ^I was 'hugging him, /
->      ...(0.8) 'he just 'sli%- .. ^dropped. \
        ... ^slipped from my 'hands. \
```

20.2 Salient words

{20.2.1 J&J}

```
N: ... (H) 'And as ^I was 'hugging him, /
   ...(0.8) 'he just 'sli%- .. ^dropped. \
   ... ^slipped from my 'hands. \
```

20.3 Ellipsis

{20.3.1 J&J}

```
N: .. (H) And they're s- .. 'intersper=sed, /
((6 LINES OMITTED))
J: You 'know% --
   .. You 'know%,
   .. about ^this 'piece? /
```

{20.3.2 J&J}

```
N: .. (H) And they're s- .. 'intersper=sed, /
♦
♦
♦
J: You 'know% --
   .. You 'know%,
   .. about ^this 'piece? /
```

20.4 Source citation

{20.4.1 DEPR}

```
M: .. 'You're ^kidding! \
S: (0) 'Yeah. \
```

20.5 Extra-long intonation units

```
                                                        {20.5.1  AFRICA}
A: .. And we were 'ma=d, /
   .. because 'Glenda had told us we 'had to be 'back by
                                                              ^Monday, \

                                                         {20.5.2  RANCH}
R: ... (H) 'We 'start 'out ...(.8) with ...(.8) 'dead ^horse
                                                              hooves. \

                                                        {20.5.3  AESTH}
S: ...(1.0) @ (H) There 'isn't any ^rea=l 'communication going
                                                                   on. \
                                                       {20.5.4  HYPO}
D: .. What's 'cytomega[lovirus]. \
K:                    [<F (H) F> @@@]
G:                    ['Cytomegalovirus] [[is an]] 'inflammation
                                      of the 'salivary ^gla=nds, \
K:                                        [[@@@]]
G: that 'the=n,
   ... u=h_(/u=hb/),
   ...(.9) ^causes all sorts .. of 'other ^problems. \

                                                              {20.5.5  DINNER}
B: 'Nobody 'wants [to ^leave].
A:                [They 'don't] move [[^out]].
S: [['Berkeley]] just 'keeps [3getting3] 'bigger and [4^bigger4].
B:                           [3'Yeah3],
                                                             [4'Yeah4],
   ...(.8) 'Well its ^amazing to me.
```

20.6 Line numbering

```
                                                        {20.6.1  J&J}
131  J: .. (H) And I ^looked 'over, /
132     ... ^into the 'street, /
133     and saw this ^cop car, /
134     'going along, \
135     .. ^right ... 'next to me, \
136     you 'know, \
137     like .. 'five miles an ^hou=r. \
```

Examples for Chapter 21.
Examples for Chapter 22. IDENTIFYING INTONATION UNITS

{22.0.1 AESTH}

```
J: 'That's all it ^does. /
   .. It 'doesn't [.. even] ^reach a 'conclusion. \
S:                [m=hm], /
J: .. The 'conclusion is up to ^you=. /\
S: [m=hm], /
J: [@@@] in 'going out to --
   (H) ... to ^buy the thing. \
S: .. 'Hm=. \
   .. 'Hm. \
   (H) ...(1.0) O=kay=. \
```

{22.0.2 HYPO}

```
G: ...(1.7) I'd 'like to 'have .. my% ... ^lu=ngs, /
   ... my ^entire respiratory 'tract, /
   ... (H) ^replaced, \
   ... (H) with .. 'asbestos. \
   .. or 'something. \
```

{22.0.3 AESTH}

```
B: .. it can 'be= really ^f=ruitful,
   to look at 'art,
   .. in structural 'terms,
```

{22.0.4 DOOR}

```
A: .. ^Think of your 'door, /
   .. ^here. /\ ((GESTURES))
```

{22.0.5 DOOR}

```
A: for a ^new doo=r, /
   and ^door ja=mbs, /
   ^ha=rdwa=re, /
   ^stai=n, /
   ^pai=nt, /
   .. 'all the ^stuff that you 'nee=d, \
```

{22.0.6 HYPO}

```
K: ... (H) .. @^leukemia=, /
   ... (H) ^bronchitis=, /
   ... (H) uh=, _
   .. ^tuberculo=sis, /
   .. @@@@ (H)
   .. and 'he's ^recovered from all of them. /
```

{22.0.7 RANCH}

R: .. a ^reining pattern is, /
.. a ^pattern where you= .. do sliding ^sto=ps, /
.. spi=ns, /
... ^lead changes, /
.. I ^know you 'probably don't 'know what that 'is. \

{22.0.8 ROCK}

M: ... It's that ^you=ng, /
.. [^pa=le], /
A: ['Yeah]. /\
M: .. 'guy with the ^da=rk 'hair. /

{22.0.9 HYPO}

G: ...(1.2) Well, _
I [^don't] 'normally 'sound like ^Lucille 'Ball. \
K: [<X That's X>] --

{22.0.10 DOOR}

A: 'Well, _
.. ^this is in ... 'bits and ^pieces, \ ((MIC))
but I was 'coming 'down the ^stai=rs, /
and he was there ^ta=lking, /
.. to this ^lady, \

{22.0.11 RANCH}

R: % .. (H) %
... % .. 'But .. uh=, _
...(3.0) <P 'What was I going to 'say P>, /
...(3.5) X%- --
'O=h, _
it's ^really 'ti=ring, /
though. \

{22.0.12 AESTH}

J: .. <% a=nd I think,
<P Well P>,
.. this is a 'terrible .. ^technique to use %>.

{22.0.13 RANCH}

R: .. it's ^mandatory, \
.. you have to% --
% .. to ^graduate, /
.. you ^know, /
.. % 'well, _
to ... ^get the degree=, /
you know, /
... (H) you ^have to 'take this ^class. /

{22.0.14 DOOR}
A: <Q Well ^I'll just put tho=se kind of ^hinges,
that 'fit between the 'door and the ^ja=mb Q>.

{22.0.15 HYPO}
G: ...(2.2) 'a=nd, /
of course, /
a 'lot of herb ^tea, /
when I'd 'rather be drinking ^whiskey. \

{22.0.16 DEPR}
B: ... 'She just .. pulled the 'cat | .. and the 'kittens ^out, /
.. and 'pulled off the ^bread that was 'dirty, /
and, /
... we ^served the 'rest of it. \

{22.0.17 DEPR}
B: ... But 'I thought ^Mom was 'raising= | ...(.7) ^hemp, /\
or,
...(1.1) ['something] one time. \
R: [^What]? /
... [[^Hemp]]. \
B: [['Hemp]]. \

{22.0.18 RANCH}
R: ... And 'then, /
.. they ^videotape us, /
.. 'as we ^go. \

{22.0.19 AESTH}
S: (0) Hm=. \
.. Hm. \
(H) ...(1.0) O=kay=. /

{22.0.20 CARS}
G: ...(1.4) (H) .. ^I've got to get 'out of that 'place, \
man,
I 'swear. \

{22.0.21 CARS}
G: .. I was 'using number ^seven, \
.. 'gun number ^seven, \
D: (0) It ^broke the ['chisel]. \
G: [and] it ^broke my 'chisel, \
man. \
<X Now X> --
D: (0) So 'now you have 'no chisel. \
G: (0) <X It's X> my ^only good 'chisel. \
man, \

{22.0.22 CARS}
G: ...(1.4) (H) .. ^I've got to get 'out of that 'place, \
man, _
I 'swear. \

{22.0.23 AESTH}
S: (H) (THROAT)
.. Yea=h .

{22.0.24 DOOR}
A: .. 'That was the ^only thing that went 'smoo=thly, \
that we've ^ever do=ne. \
B: .. @ That ^you='ve. /\
... ^I couldn't even ^begin to do it. \

{22.0.25 ROCK}
A: and he 'spelt ^hee=l, /
h e a ^l=, /
S: .. @
A: and he 'spelt ^said, /
.. s i a ^d. \

{22.0.26 AESTH}
B: .. (H) I don't know how many ^people a=re,
.. @
A: .. (Hx) Ri=ght.

{22.0.27 HYPO}
K: .. @@@@
... (H) From which you ^haven't recovered. \

{22.0.28 J&J}
N: 'You know, _
'this was a 'rented @^snake, /
@

{22.0.29 AESTH}
S: .. (H) .. 'u=m, _
.. (TSK) .. 'ha=s ... ^something= .. to= | .. ^communicate, /
.. with 'me=, /

{22.0.30 AESTH}

J: .. I 'think of | ...(1.2) 'aesthetics, /\
.. @ @a=nd, _
S: .. m=hm=, _
J: u=h, _
S: ...(1.5) 'Hm=. \
... @
J: ... 'creation of ^desi=re, \
.. for ^one thi=ng. \
S: m=hm=, _

{22.0.31 ROCK}

A: ... But he's --
.. He's 'decided he wants to be 'ca=lled ^Rock. \

{22.0.32 J&J}

J: ... And he= --
.. and he .. ^k=icks my 'feet 'apart, /

{22.0.33 CARS}

D: ... 'you know, \
.. to 'get leads, /
.. and 'talk --
.. 'communicate with 'people on the ^phone. \

{22.0.34 RANCH}

R: He 'doesn't have any --
...(.3) He 'doesn't 'know what's going 'on in this ^world. /

T: ...(1.0) ^I= ca=n,
... ^t=ake us 'both at%- --
... on a ^pa=r.
.. (H) as=% ... 'human beings.

{22.0.35 DOOR}

A: But 'it was --
... till 'five%- --
I 'remember, /
.. ^fi=ve o'clock, \
I 'finally got the 'door in, \

{22.0.36 HYPO}

G: ... 'A=nd, _
.. 'you know, _
.. 'He= would like, /
.. (H) 'He would like, /
^w=alk out on the ^freeway, \
and 'try to ^hitchhike, \

{22.0.37 AESTH}

J: [@@@] in 'going out to --
(H) ... to ^buy the thing. \

{22.0.38 J&J}

J: ... You 'know how they ^do that, \
so you 'can't s- .. 'ha- --
.. you don't 'have any ^balance. /\

{22.0.39 J&J}

N: .. and I 'came up 'behind him, \
and I wa%- --
.. I was ^hugging him, \
while he was ^shaving. \
... (H) 'And as ^I was 'hugging him, /
...(0.8) 'he just 'sli%- .. ^dropped. \
... ^slipped from my 'hands. \
.. to the ^floor. \
he like ^f=ainted. /\

{22.0.40 DOOR}

A: and they% --
.. they% .. ^poked into the%- | .. the ^mou=lding, /
along the ['side]. \
B: [unhunh], /

{22.0.41 DOOR}

A: ... So I%- --
.. I%- --
.. I ^get in the 'ca=r, \

{22.0.42 ROCK}

A: .. (H) .. And there's --
... % ^Nothing --
.. ^Nothing with two ^tee='s in it, \
... does he ^get 'ri=ght. \

{22.0.43 AESTH}

J: (0) (H) <% Tha%- .. this% --
.. I ^wonder 'abou=t that though, \
I mean %>, _
.. when 'I think of ^a=ds, /\

{22.0.44 DINNER}
C: ... We were .. 'messing ^around.
.. [But we 'ain't 'messing] [['around]] 'no ^more,
A: [Hey].
B: [X]
S: [[All ^right]].
B: [[X]]
S: ...(3.1) H=m.

{22.0.45 DOOR}
A: (0) It's ^some 'story, /
XX .

{22.0.46 CARS}
D: .. It was 'basically ^me=, /
'you know, _
X 'going ^out. /
.. The 'problem of going ^out. \

{22.0.47 ROCK}
S: ... ['Well], _
A: [You're 'off] the ^highway, \
'aren't you | ^here? /

{22.0.48 DOOR}
A: ... The 'hinge is | .. on the ^inside. /
B: (0) Right. \

{22.0.49 AESTH}
S: .. (H) So= that the= .. ^reason | 'why I'm being 'communicated with, \
.. 'i=s | so that 'I can be 'made to ^do something. \

{22.0.50 DOOR}
A: which was ^like a | ... (H) ^Workmate 'be=nch,
.. type ^deal,
with a 'gui=de,
and everything,

Examples for Chapter 23. REALIGNMENT

{23.0.1 DOOR}
A: .. 'No=w that we have the [^si=de door] fixed he could. \
B: [That's 'kind of] --
.. Yea=h, /

```
                                                          {23.0.2  DOOR}
A: .. 'No=w that we have the [^si=de door] fixed, \
   he could. \
B:                          [That's 'kind of] --
   .. Yea=h, /

                                                          {23.0.3  DOOR}
A: .. 'No=w that we have the [^si=de door] fixed, \
B:                          [That's 'kind of] --
   he could. \
   .. Yea=h, /

                                                          {23.0.4  DOOR}
A: .. 'No=w that we have the [^si=de door] fixed, \
B:                          [That's 'kind of] --
A:   he could. \
B:  .. Yea=h, /
```

{23.0.5 AFRICA}

A: .. and he showed us the very place,
.. that it happened.
.. (H) And he uh%- --
b%- basically said at that time,
.. <% he= %> .. wasn't really sure why=,
they'd even got out of the <WH car WH>,
.. He really knew <WH better WH>.
.. than to <@ get out of the car @>.
B: .. Well,
how many ^times .. have 'you and 'I,
.. (H) gotten [out of the] ^car,
A: [(THROAT)]
B: when we saw the%- --
.. (H) a%- an ^animal,
I've done [that .. ^lots of 'times].
A: [We=ll,
in the ^game] 'park,
Yeah I've --
I'm 'usually pretty ^careful.
(H) We ^did have to get out of the 'car,
the 'time we got stuck in the ^sa=nd,
<@ in the 'gamepark @>.
@@@ [((H))]
B: [I have a 'picture],
where I'm .. (H) 'reaching up and petting the ^knee,
.. (H) of a ^giraffe.
A: .. (TSK)
B: ... [<X at X> --
down at ^Chiredzi].
A: [That% --
that must] --
.. I was going to ^say,
.. that wasn't in ... %at ^Kafui,
because there <% 'are %> no 'giraffes,
in ^Kafui.
B: [That was] at ^Chiredzi,
A: [Yeah],
.. (H) Yeah,
well 'see,
when you go 'into the game reserve ^areas,
.. you're ^told,
^not to <P get out of your 'car.
.. You're not ^supposed to,
.. but P>,
[(H)]
M: [Have the%] ^animals,
ever 'attacked anyone ^in a car?
B: Well%- I%- --
well,
I heard of an ^elephant,
that sat down on a [^VW,
one ^time].

```
A:                      [% Hx @] @@@@@@ [[@]]
B:                                      [[There's a]] 'girl%- --
   .. Did you ever ^hear 'that.
A: .. @No=,
B: .. [Some ^elephants,
   and these --
   .. they%] --
M:    [(THROAT)]
B: .. there% --
   These 'gals were in a ^Volkswagon,
A: .. @@ [@@]
B:       [and] uh,
   .. they uh kept 'honking the ^horn,
   .. (H) 'hooting the ^hooter,
A: .. @@ [@@@@]
B:       [and uh,
   .. (H) and] <% the= %> '%e=lephant was in ^front of them,
   so,
   he just 'proceeded,
   to sit 'down on the ^VW.
   .. (H) but they h=ad 'managed to get ^out first.
M: ... He ^crushed it,
   I ^%assume.
A: (0) [<@ I would ^think so @>],
B:     [X Like a ^can opener],
M: Flat,
   ... What did these 'girls ^do then.
B: ... I think he ^sat there,
   and had a Marlboro ^cigarette,
   or ^something,
M: The elephant.
```

{23.0.6 DINNER}

A: .. Then you 'ended 'up living back ^out here.
'Right,
B: .. [Yeah],
A: [Did]--
Did it ^draw you 'back,
.. or was it just ^coincidentally,
that you 'happened to get ^X--
B: .. No I--
.. I 'started ^graduate 'school 'here,
.. in the ^sixties.
A: .. Mhm,
B: ... And I ^loved it.
A: .. Mhm.
B: ... And so when I ^finished,
...(1.0) I 'really 'wanted to 'come ^back.
...(2.1) and so I ^did.
S: .. @ ...(.8) That's ^nice.
B: ... 'Yeah,
S: .. That's 'really [^nice],
A: [(TSK) A ^lot] of people I 'know,
... Uh,
.. well,
^actually I don't 'know that ^many,
.. But 'of the 'ones I ^do 'know,
... who= ^went to ^school in 'Berkeley at one ^point,
...(.9) ^most 'of them,
.. 'talk with 'fond ^memories.
... now that they're 'somewhere ^else.
.. about 'trying to get ^back,
if they ^could.
B: ... 'Yeah,
...(1.1) 'Yeah,
...(.7) Well <X it X> 'almost--
... In the ^sixties,
...(.9) almost 'everybody I ^knew,
...(1.3) 'dropped ^out.
S: ...(1.0) Mhm,
B: .. There were 'very 'few ^people.
A: ... Mhm,
B: .. 'made it ^through.
...(1.2) But--
But they're 'all ^here.
...(.8) @@ .. (H) They've 'all ^stayed.
A: .. ['Yeah],
S: [Mhm],
B: .. They've 'all .. become .. 'successful.
.. in 'some ^way,
S: .. [Mhm],
A: [And 'they're] the 'reason I 'can't get an ^apartment 'here.
S: .. [[Mhm]],
B: [[Yeah%]],
No=,

```
   Well not--
   .. no= they're ^not.
   ... I mean they're 'all .. 'hippie ^carpenters.
   .. XXX
S: .. [@@@]
A:    [Mhm],
B: .. You've got 'lots of 'various ^kinds.
   .. XXX <X them living ^around X>,
A: ...(1.2) 'That's what 'somebody 'did ^say to me,
   .. that,
   ... ^part of my 'problem in 'trying to 'find a place to 'live,
   is that so ^many people 'come here,
   ...(.7) and then .. when the 'time 'comes for a ^turn over,
   .. for 'them to 'move ^out,
   .. and for [['me to]] 'move ^in,
S:             [['Right]],
B: 'Nobody 'wants [to ^leave].
A:                [They 'don't] move [[^out]].
S: [['Berkeley]] just 'keeps [3getting3] 'bigger and [4^bigger4].
B:                           [3'Yeah3],
                                                    [4'Yeah4],
   ...(.8) 'Well its ^amazing to me.
   ... How many 'people .. 'stayed ^on.
A: .. [Mhm],
S:    [Mhm],
B: .. No 'matter ^what.
A: .. Mhm,
   ...(10.4)
C: 'Okay.
   ((FROM_KITCHEN))
C: ...(1.4) 'All ^right,
   .. We're 'cooking ^now.
D: ... We ^are?
C: .. <X We ^got it X>.
D: (0) Looks ^good.
A: ...(.8) 'What were you 'doing ^before.
C: ... We were .. 'messing ^around.
   .. [But we 'ain't 'messing] [['around]] 'no ^more,
S:    [Hey].
B:    [X]
S:                              [[All ^right]].
B:                              [[X]]
S: ...(3.1) H=m.
   ((EATING))
A: ...(2.9) Oh ^boy.
   ... I'm getting full ^already,
   and I XXX [XXX] XXX [[XX]] X,
B:           [@@]      [[No]].
S: .. I ^know.
   @@@@
```

{23.0.7 BRIDGE}

```
V: This is%- --
   Psychologically,
   .. ^this is what was going 'on,
   is that,
   (H) if you re%- --
   .. it 'wouldn't be any ^fun,
   'unless you really ^resisted.
   .. like if you ^just,
   you know.
   didn't ^resist,
   .. (H) then it was no ^fun for the 'people,
   .. ['hanging you ^over],
F:    [Yeah,
   and you] [['just .. ^die]],
V:          [[because]],
F: and,
   .. [XXXX].
V:    [Yeah].
E:    [@@@]
V: (H) Because --
F: (0) Ah,
   Fuck this.
   [.. Boom].
V: [@@@] .. [[@@@@]]
E:          [[@@]]
V: But,
   if you ^resisted
   then it was 'more ^fun
   because then they could 'apply%_(/appry/) --
   'apply more .. (H) ^pressure,
   % to ['force you ^over],
E:      [<X More ^terror X>].
F: .. [[Right]].
V:    [[(H)]] And then you --
   .. And so the 'whole ^trick was,
   (H) I mean,
   ... I'm always trying to 'figure ^out,
   what's the 'best thing for ^me=.
   .. you know and%- --
   and I hadn='t .. ^been put over the 'edge,
   in --
   (H) in 'quite a long ^ti=me.
   .. (H) I 'mean,
   in 'fact,
   I'd ^never been put over the 'edge,
   I'd 'always ^witness it,
   and I= --
   (H) I didn't 'really ^agree with it,
   so I --
   .. I always 'stayed over on the ^edge,
   <% uh %>,
   and not%- --
```

.. I mean,
V: I would 'stay ^away from=,
the 'actual .. ^grabbing,
and stuff,
.. (H) And I --
.. I didn't --
I ^looked .. 'upon it,
as 'something that was,
just not .. the 'right thing to ^do,
(H) (TSK) But,
... in ^any case,
'one ^time,
they 'grabbed ^me,
.. (H) and the ^only thing going through my 'mind was,
.. (SWALLOW) (TSK) (H) Well,
.. I mean,
I can really .. 'kick and ^fight,
and ^push,
and then,
it's 'just going to ^encourage them.
right,
(H) but at the 'same ^time,
I 'can't jus=t do= ^nothing,
.. (H) But uh,
.. ^That wasn't the 'terror,
The ^terror was,
that,
(H) 'Finally they .. ^grabbed me,
and they,
.. 'hung me over the ^side,
like ^this,
.. (H) and 'everything was ^fine,
I 'figured,
.. because the ^only 'thing,
'going through your ^mind is,
^they're not 'really going to,
... [you know],
F: [^Drop 'you],
V: ^drop 'you,
.. because ^this,
it's just 'this,
'never crosses your ^mind.
(H) Bu=t,
(H) What --
.. What ^did cross my 'mind,
was,
I 'looked ^down,
a=nd,
.. (H) .. and for an ^instant,
.. just for- --
I mean a <MARC 'split ^millisecond MARC>,
.. (H) ... you ^think that,
there 'could be an ^accident.

```
   and that,
   and it was,
   o- o- one of the very 'first ^times,
F: .. [Or that 'you could have hurt] somebody ^else.
V:    [(H) that I have] --
   .. Well,
   .. Well that,
   ^somehow,
   'somebody could have ^slipped,
   or,
   ^something could 'happen,
   where 'you could actually ^fall.
F: (TSK) (H) Oh,
   I ^thought you were talking about,
   causing an 'accident on the ^freeway.
V: .. Oh,
   no [no,
   XXXXXXX them],
F:    [(H) <X you know they X> --
   ..] dri- --
   ^They don't 'care.
V: No,
F: @@[@@]
     [@@]@ <@ ^They don't 'care @>,
V: [[(H) No but]],
E: [[O=h,
   XXX]] X [XX].
V:          [(H) But what] --
   what ^occurred to me was,
   the ^first 'time that --
   that,
   I really understood what the word 'reality ^meant.
   Because 'reality was always to ^me was,
   a ^concept.
   you know,
   which I ha- --
   'didn't understand ^really.
   I mean I just --
   ... (H) It's,
   well,
   it's ^this,
   it's your ^flesh,
   it's right ^now,
   it's ^whatever.
   I mean it ^was 'always attached to some (H) ^concept.
   (H) where suddenly,
   I ^realized that,
   .. this could <MARC ^really really 'happen MARC>.
F: .. Unh-unh,
V: .. and
   and I%- --
   <MARC 'I was so ^terrified MARC>,
   ... that um,
```

```
   (SWALLOW)
   I mean,
   just,
   at the ^thought,
   .. (H) that ^something like that,
   was 'even ^possible.
   that these ^guys,
   could 'just for a ^moment,
   'lose their ^hea=ds,
E: .. (SNIFF)
V: .. and 'just let you ^go.
   And I said,
   <Q ^Oh my god Q>,
   .. and uh,
   es- --
   ^especially because
   .. I remember wh- --
   when it ^occurred,
   is that,
   we were over the% .. ^edge,
   and,
   and I guess 'one of the ^guys like,
   sort of ^tripped,
   or did ^something,
   .. where ^all of us went,
   <Q Whoa= Q>,
   like that.
   you know,
F: .. huh.
V: .. @@@[@]
F:       [@@@@]
V: <@ and it was @> --
   @
   and it was- --
   and they 'all held ^on to me.
   because ^they,
   of ^course,
   didn't 'want to let me ^go.
   they didn't 'really want something like that to ^happen,
   (H) but,
   % .. at least,
   .. being the 'guy on the .. ^end of this,
   .. I --
   .. I said,
   .. <Q 'Oh my ^gosh.
   .. ['This could really] ^occur Q>.
F:    [What a s-] --
   What a 'stupid way to ^die.
   [[@@]]
V: [[Yeah]].
E: .. [M=],
V:    [And so],
   (SWALLOW)
```

you know,
then we all m-,
.. you know,
went ^back,
.. but it was 'like,
.. and I ^remember it,
... 'life was never the ^same after that.

{23.0.8 CARSALES}

D: .. If I don't ^hustle,
.. I'm 'not going to make ^money.
G: ...(.8) (H) 'Yeah.
D: ...(.8) (H) ...(1.4) But ^everything's --
.. everything's ha% --
Y%- you know 'fell into 'place pretty ^goo=d.
... I mean,
.. ^things happen for a ^reason.
.. This --
.. The 'situation that I'm 'in 'happened for a ^reason.
I 'changed my ^caree=r,
... (TSK) (H) ...(.9) I 'took care of ^everything,
.. I 'had to 'take 'care of the ^ca=r,
...(1.5) (TSK) and u=h,
.. 'now I'm going to% .. 'save my ^money,
and 'try to get my ^own 'pa=d.
... [^condominium],
G: [X],
D: .. or 'whatever the 'case may ^be.
.. I'm going to be= 'saving a lot of ^money working ^here,
so=,
if I'm 'making decent ^money,
I'll be 'able to uh --
G: .. (H) [to=] --
D: ['get] something on my ^own.
G: ...(1.1) 'Yeah,
D: .. With= the 'help of my ^parents of 'course,
.. becaus=e --
G: .. When you 'say it 'happens for a ^reason,
.. it's like,
...(1.0) it 'happened to 'get you 'off --
D: .. 'off my ^ass.
G: .. [off] --
D: ['get] me 'out of the ^factory,
.. 'get me into a ^career,
that I could 'make good ^money,
.. and uh,
.. to ^realize that u=h,
...(2.1) I had a 'good ^woman,
and I shouldn't --
.. I shouldn't 'wanna,
.. 'have anybody ^else.
.. She spent 'twelve years of her ^life with me,
and u=h,
...(1.8) She's 'always been ^positive,
.. ^thinker,
and uh,
.. 'always been ^good,
G: .. 'Yeah,
D: ... ^understanding,
... [and u=h],
G: [(H)] ^Sure,

'it would be ^different,
if 'she were a ^bitch,
and 'always [^nagging,
.. you know,
and then] .. 'getting on your ^case,
D: [Yea=h,
.. Exactly].
[Or didn't like --
.. or 'didn't ^enjo=y,
'doing ^anything].
G: [and 'making your 'life ^impossible].
D: .. She [^always was,
.. you know].
G: [Yeah.
.. ^Exactly].
D: ...(1.6) (H) pretty ^much u=h,
... ^able to do 'anything that I wanted to ^do.
.. She was 'never ^negative or 'anything,
and u=h,
.. it was 'basically ^me=,
you ^know,
going ^out.
.. The 'problem going ^out.
...(1.8) (TSK) (H) ... So it 'happened for a ^reason,
.. Now I ^hope% .. that%,
.. 'you know,
in the ^future,
she% --
.. she ^realizes that I'm,
ha%- ^have 'changed and ^matured,
and --
and --
and she would .. 'give me that 'chance,
.. you know,
.. [to go] ^back with her,
G: [s-] --
D: .. [[and 'try]] to make our 'life work ^together.
G: [[to 'go ^back]].
...(.8) ['Yeah],
D: [(H)] But 'only 'time will ^tell,
.. I gotta ^prove it to her,
...(1.1) (TSK) An=d,
I got to 'leave her on her ^own,
.. Let her 'see=,
you 'know.
G: ...(.9) 'Yeah.
D: ... 'Even if she goes out with other 'men,
or 'dates other ^men,
if that's --
.. <% if --
if %> she= 'does ^feel any ^attraction towards 'anybody ^else.
...(0.9) (H) I'll 'never ^know.
G: ... Then she'll 'know what her ^good thing was.

D: .. 'Yea=h.
G: (0) ^That's for sure.
D: (0) ^Definitely.
...(1.0) So 'that's why I uh m --
.. The 'more time I 'spend on .. ^wo=rking,
... <% The= %> the ^least 'time,
.. I'll ^think about her and uh,
G: .. (H) The 'only thing you can 'do is 'be the 'best you ^can.
.. [Right]?
D: [But ^definitely].
G: .. [[That's ^it]].
D: .. [[and 'let her]] ^know that,
G: .. 'Yeah.
D: .. 'Let her know that I ^still ^ca=re,
.. an=d,
I'm not 'getting ^invo=lved with 'anybody ^else.
G: ...(1.8) 'Yeah.
D: .. Because I don't have the ^time.
.. Right 'now I have a ^caree=r.
I have 'goals set for ^myself,
^also,
^I want to make 'fifty thou a ^year,
G: ... (H) <@ But 'what about all those ^phone numbers.
.. are you going to 'call any of those ^chicks @>?
D: ... 'We=ll,
.. I 'hope it doesn't get to the 'point where I ^have to.

{23.0.9 FARMTALK}

A: ...(2.3) 'How uh --
.. 'How much you ^go=t,
.. to .. [^disk]?
B: [^Oh there's] .. 'thirty five ^acres I guess,
A: (0) O=h?
...(1.7) 'Jeez that's a ^shame,
that that didn't --
.. ^spray didn't 'work,
B: ... I'm 'sure 'glad it's only 'thirty five ^a=cres= @.
A: .. ^Yea=h,
.. I 'bet you ^a=re.
... ^Yeah,
It's a 'good thing you [<X didn't X>] --
B: [^We=ll],
.. it was a ^test 'plot,
.. I ^said it was a ^test plot,
.. so,
... [^No],
A: [<X You% X>] --
B: .. 'I'm going to give ^up on this 'Snakeoil,
.. ^I don't know ^what the hell.
...(1.2) I mean like I ^sa=y.
... I%- I had ... a 'thick 'patch of ^barley,
.. or of .. 'wild ^oats there,
A: ... 'Mh=m,
B: .. About the 'size of the .. 'kitchen and ^living room,
... I 'went 'over ^it,
.. and 'then=,
... when I got ^done,
I had a little bit ^left,
so I 'turned ^around,
and I 'went and 'sprayed ^it ^twice.
.. Well ^it's just as yellow as [...(1.3)] ... [[can ^be]].
A: [Huh].
[[<X The 'pea's are X>]] 'right in ^i=t,
B: ... [So ^that would] be=,
A: [X^XX]
B: ...(1.8) ^eighteen 'ounces,
.. which would be a ^qua=rt,
...(1.5) and 'two ^ounces.
...(1.4) that 'killed ^that,
.. <X So it's ^got to be X>,
.. you 'can't ^kill peas.
.. How do you 'kill a ^pea.
A: .. @@@ [@ <Q I can't] 'kill my ^peas Q>.
B: [<X Shit usually X>] --
... XXX.
...(1.3) Like ^Gary said,
.. 'Gary just 'pulled ^in there,
and a 'little bit 'left in the ^sprayer,
and he 'killed them 'deader than a ^doornail.
A: (0) I ^gue=ss,

```
   ... I don't know% --
   I [^guess though] the ^pri=ce was 'right,
B:   [The fro%-] --
A: On= --
   .. If he ^gave you that 'stuff,
   .. I --
B: ...(1.1) Well them 'two ^frosts --
   ... The 'dang ^frost.
   'hurt all these [^other 'people,
   .. Why it killed] ^theirs,
A:                  [@@@@]
B: 'Hell I can't even kill ^mine,
A: .. @ 'Can't even get 'mother ^na=ture to 'kill them.
   .. Maybe you'll 'hail ^ou=t.
B: ... X=,
A: ... @@@ [@@@@]
B:         ['Well we'll ^see you].
A: .. We'll ^see you 'Trax,
   ...(.7) 'Thanks for ^stopping.
B: ...^Yea=h.
   ...(1.3) 'Well the 'kid's ^asleep,
   .. 'No she's ^no=t.
A: .. 'Nope.
```

{23.0.10 LUNCH}
M: ...(2.0) (SWALLOW) But ^she 'thought she had a ^bladder 'infection,
when she was at ^Whidbey,
R: ...(1.1) Oh ^did she?
.. I [didn't ^hear that].
L: [@Or] did she have the ^opposite 'problem?
M: ...(.8) Well,
It's 'not 'exactly the ^opposite,
but,
...(.9) But they're 'kind of ^related 'aren't they (H)?
R: ...(2.7) But she's [^moving],
M: [(H) But] --
R: .. XX [[XXX]],
M: [[But they]] 'didn't 'even do a ^urinalysis.
... which I 'think is ^ridiculous.
...(1.4) when she went ^in 'yesterday.
R: ...(1.2) But will a 'urine ^show up 'kidneys?
M: ...(1.0) ^Sure,
If there's an ^infection,
R: ...(1.2) Oh ^I didn't know it ^would.
...(1.0) I 'guess it ^would.
.. Because they 'did that for ^Bill.
.. They 'thought he had a ^kidney [<X 'infection X].
L: ['Oh they ^did]?
.. But 'they never 'figured ^out what he had?
R: ... He had ^pneumonia.
.. [The ^second 'week] he had 'pneumonia,
M: [^Eventually].
R: .. the ^first 'week,
L: ^Really?
R: .. ^apparently [he just had a ^virus],
M: [He had a X .. ^virus].
L: [I didn't] --
R: .. [[or either that or]] --
L: [['Oh,
I 'thought that they didn't ^know what]] he had.
... He 'had ^pneumonia?
M: .. Yeah he ^eventually .. [^developed it].
L: [Is that the 'first 'time] he's 'ever had ^pneumonia?
R: ...(1.5) ^No.
L: ... He's ^had it 'before?
R: .. When he was .. 'real ^little,
.. [he] 'almost ^died of 'pneumonia.
L: ['Oh].
R: .. when he was .. &
L: Oh ^really?
M: Hey.
R: & ^three.
M: .. 'So%,
.. (H) 'Now 'Bill and ^Jonathan are a 'natural 'class,
^Right?

```
R: .. ^Right.
L: (0) ^Oh.
   ^I get it,
R: ...(2.0) But ^he 'outgrew it,
   when ^he was about <X ^three X>.
   .. or a little ^older than that.
   XXX.
   ...(1.0) When they 'quit going to ^Lewiston,
   .. every 'week to see his ^@grandmother @,
L: .. Oh 'that's when he ^outgrew it?
R: (H) (Hx) He 'used to have ... (THROAT) ^asthma 'attacks,
   .. every 'time they'd go to ^Lewiston.
L: (0) Hm.
   ...(1.0) ^That's a 'drag,
   .. He 'must have ^liked her a lot.
   Huh?
   ...(1.0) [Or 'was it the cl-] --
R:          [He 'doesn't] ^remember.
L: .. ^Oh.
   'Oh.
M: ...(2.1) [(H) (COUGH)]
R:          [<X His ^mother XXX X>,
   .. and she] went 'every --
   .. just about 'every ^weekend.
   She 'hated ^going.
L: .. His ^mom?
   ... Which --
   .. It was 'Jack's ^mother?
R: .. 'Mhm,
L: .. ^O=h.
   ...(1.5) 'Hmh.
   ...(1.4) ['That's] &
R:          [But] they had to go ^see [[her]],
L:                                & [[pretty ^bad]].
R: ...(1.1) But he ^outgrew it.
   ...(2.6) But --
   .. But it ^scared 'Marleen,
   .. cause 'that was .. one of her ^dad's 'problems?
   ...(.8) ^One.
L: ...(1.2) What.
   .. asthma?
R: ...(1.0) 'Unhu=nh.
L: ...(1.9) 'Seems like we've got 'every 'bad .. ['thing there can ^be.
   .. in our ^family],
R: ['He had a ^lot of things 'wrong with him],
```

APPENDIX 3: DOCUMENTATION SHEETS

On the next few pages are a set of information sheets designed for documenting speech events for the purposes of spoken discourse research (§23). These forms can be used as is, or serve as models for the design of new forms adapted to other research needs. The forms are:

A. Speech Event Sheet
B. Speaker Sheet
C. Tape Log
D. Transcription Sheet
E. Transcriber's Checklist (Narrow)
F. Transcriber's Checklist (Broad)
G. Consent Form (see Appendix 5)

SPEECH EVENT SHEET

After you have made a tape recording (a whole tape or part of a tape), please fill out the following information as soon as possible:

Your name _____ Date _____

Tape (descriptive title)

_____

Date recorded _____ Time _____

Location _____

Recorded by (name) _____

Language _____ Dialect _____

Genre _____

Speakers (codes) _____

_____

_____

_____

Setting/circumstances _____

_____

_____

_____

_____

_____

Duration of event _____ Duration of recording _____

OPTIONAL:
Tape ID _____ Series # _____ of _____

Tape recorder _____ Stereo ____ Dolby ____

Microphone(s) _____

_____

(Archive use) Tape _____
Speech Event/A-Goldenrod/IX-9-90 Transcript _____

SPEAKER SHEET

Your name _____

Date _____ Tape _____

Please fill out a separate sheet for each speaker on the tape recording. This information will be held confidential, to be used for discourse research purposes only. Name information is optional. (If the speaker's real name is not given, a speaker code should be assigned.)

Speaker's code (or name) _____

Speaker's sex (M/F) _____ Age _____

Native speaker of _____ (language)

Dialect (i.e. city and/or region where speaker grew up)

_____

Current resident of (city and/or region):

_____ How long? _____

Education _____

Occupation _____

Ethnicity _____

Religion _____

What relationship does this speaker have to other people who speak, or are spoken about, in this conversation? Indicate the relationship (e.g. sister, boyfriend, neighbor, etc.) in the spaces below (optional):

Person		Relationship
(a) _____	is this speaker's	_____
(b) _____	is this speaker's	_____
(c) _____	is this speaker's	_____
(d) _____	is this speaker's	_____

Comments _____

_____

_____

(Archive use) Tape _____

Speaker/B-Blue/III-12-90 Transcript _____

TAPE LOG

Name ______________________ Date ________ Tape _______________

Please provide information about tape contents (e.g. "dinner conversation", "long silence"), elapsed time or duration (e.g. "15 min."), foot number (e.g. "76"), sound quality or audibility (e.g. "good", "noisy", "fair"), speaker codes (e.g "Cora and Mack"), and any general comments. Even approximate or partial information is helpful. Use a separate sheet for each tape.

SID A/B	TIME /FT#	CONTENTS	SOUND QUAL.	SPEAK -ERS	COMMENTS

(Archive use) Tape _______________

Log/C-Green/III-12-90 Transcript _______________

TRANSCRIPTION SHEET

Please fill out this sheet at the time of transcribing. Attach the sheet to the transcription draft, so that whenever the transcription is checked, the information in the box below can be updated.

Name _____ Date _____

Tape _____ Side (A/B) _____

Transcription title _____

Tape section transcribed (e.g. "foot 95-272", "mid", "end", etc.)

_____

Transcr. duration (min/sec) _____ Word count (est/act) _____

Filename _____

What transcribing conventions did you follow? (Cite reference)

_____

_____

Transcribed or checked by (name)	Date	Comments
1		
2		
3		
4		
5		
6		
7		

_____

_____

(Archive use) Tape _____

Transcription/D-Pink/I-1-90 Transcript _____

TRANSCRIBER'S CHECKLIST (NARROW)

Name _____ Date _____

Tape _____ Transcription _____

PRELIMINARIES

____ 1. Documentation (sheets and header)
____ 2. Tape copy

INITIAL SEQUENCE

____ 3. Words and speakers
____ 4. *Intonation units
____ 5. *Overlaps and backchannels
____ 6. *Truncations
____ 7. *Transitional continuity
____ 8. *Terminal pitch
____ 9. *Pauses and latching
____ 10. *Accent
____ 11. *Accent contour
____ 12. *Lengthening
____ 13. *Vocalizations (coughing, laughter, breathing, etc.)
____ 14. Ambient noises
____ 15. *Quality and phonetic detail
____ 16. Hard-to hear and indecipherable words
____ 17. Nonaudibles (esp. gestures)
____ 18. *Resets (optional)
____ 19. Transcriber comments

REFINING SEQUENCE

____ 20. *Overlap location
____ 21. *Major vs. minor intonation units
____ 22. *Truncated intonation units
____ 23. Realignment (overlaps, turns, speakers, pauses)
____ 24. *Transitional continuity
____ 25. *Terminal pitch
____ 26. *Accent and accent contour
____ 27. *Duration (pauses, etc.)
____ 28. *Final check

OTHER PEOPLE

____ 29. Other checkers
____ 30. Transcription discussion session

PRESENTATION

____ 31. Line numbers (optional)

*separate listening pass essential for checking accuracy

(Archive use) Tape _____
Checklist-Narrow/E-Lavender/IX-14-90 Transcript _____

TRANSCRIBER'S CHECKLIST (BROAD)

Name _____ Date _____

Tape _____ Transcription _____

PRELIMINARIES

____ 1. Documentation (sheets and header)
____ 2. Tape copy

INITIAL SEQUENCE

____ 3. Words and speakers
____ 4. *Intonation units
____ 5. *Overlaps and backchannels
____ 6. *Truncations
____ 7. *Transitional continuity
____ 8. *Pauses
____ 9. Laughter
____ 10. Hard-to-hear and indecipherable words

REFINING SEQUENCE

____ 11. *Overlap location
____ 12. *Major vs. minor intonation units
____ 13. *Truncated intonation units
____ 14. Realignment (overlaps, turns, speakers, pauses)
____ 15. *Transitional continuity
____ 16. *Final check

OTHER PEOPLE

____ 17. Other checkers
____ 18. Transcription discussion session

PRESENTATION

____ 19. Line numbers (optional)

*separate listening pass essential for checking accuracy

(Archive use) Tape _____
Checklist-Broad/F-Yellow/IX-14-90 Transcript _____

APPENDIX 4: DOCUMENTATION HEADER FOR TRANSCRIPTION FILES

The following is a sample of a documentation header file, designed to be inserted into the beginning of the transcription file. (The lines containing the notation "words ..." are of course not part of the header file, but are given here merely to show where the text of the transcription is to placed.)

```
$ TRANSCRIPTION TITLE:
$ TAPE TITLE:
$ FILENAME:
$ PRINTOUT DATE:
$ RECORDING DATE:
$ RECORDING TIME:
$ RECORDING LOCATION:
$ RECORDED BY:
$ LANGUAGE:
$ DIALECT:
$ GENRE:
$ SETTING:
$ SPEAKER 1:
$ SPEAKER 2:
$ SPEAKER 3:
$ SPEAKER n:
$ GENERAL COMMENTS:
$ TAPE SECTION TRANSCRIBED:
$ TRANSCRIBING CONVENTIONS:
$ DRAFT 1 BY:
$ DRAFT 1 DATE:
$ DRAFT 1 COMMENTS:
$ DRAFT 2 BY:
$ DRAFT 2 DATE:
$ DRAFT 2 COMMENTS:
$ DRAFT 3 BY:
$ DRAFT 3 DATE:
$ DRAFT 3 COMMENTS:
$ DRAFT n BY:
$ DRAFT n DATE:
$ DRAFT n COMMENTS:
$ STATUS (DRAFT/FINAL/APPROVED):
$ TRANSCRIPT DURATION (MIN/SEC):
$ WORD COUNT (ESTIM OR ACTUAL):
$ TEXT BEGINS:
words ...
words ...
words ...
words ...
words ...
$ TEXT ENDS:
```

APPENDIX 5: SPEAKER CONSENT FORM

[The following represents a general model for the construction of a form for obtaining the consent of each person whose conversation is recorded for research purposes. It should be adapted to the needs of the individual researcher and, where necessary, submitted to the appropriate research office for official approval. This form is to be taken as a rough guide and starting point only; researchers are responsible for ensuring that the form they construct meets any legal, ethical, or methodological standards regarding privacy, copyright, and so on, which are applicable to their project.]

SURVEY OF SPOKEN LANGUAGE
Department of _____
University of _____
City, State ZIP
Telephone Number

CONSENT FORM

In consideration of the efforts of the Department of _____ of the University of _____ to collect material of value for the study of the _____ language, I agree to its use of recordings and transcripts of conversations in which I was a participant.

I understand that my participation is voluntary, and that I have the right to hear, edit, or withdraw any portion of the recordings before they become part of the permanent collection of the Department of _____. I understand further that my name will not be attached to, or in any way associated with the recordings or transcripts.

I understand that these recordings and transcripts become the property of the University of _____.

I understand that the Department of _____ will, at its discretion, disseminate these recordings and transcripts, or portions thereof, to researchers, educators, and students in order to advance the study of spoken language.

If you have any questions regarding your rights under this agreement, you may contact the staff of the Human Subjects Committee in the Office of _____. The telephone number is _____.

_____
Signature Date

_____
Name (PRINT)

_____
Signature of Investigator Date

_____
Name of Investigator (PRINT)

APPENDIX 6: PHONETIC SYMBOLS

For cases when it is desirable to represent the precise pronunciation of selected words in spoken discourse, a notation is needed which is both phonetically adequate and easy to use on a microcomputer (§10.1). The following system is designed for representing phonemic transcriptions of English words, using only those symbols which are readily accessible on almost all microcomputers and software (i.e. the "lower ASCII" characters, also known as "seven-bit ASCII"). This system is based (with slight modifications and adaptations) on the SAM-PA system of Wells (1989). For a discussion of the phonological analysis of English which underlies it, and for comparable analyses and notations for several other European languages, see Wells (1989); for additional background, see Wells (1987). (There are a variety of other notational schemes around that are designed with this same end in view, e.g. MacWhinney 1988:000f.)

The phonetic transcription examples cited represent standard general American English pronunciation.

SAM-PA2	English Spelling	SAM-PA2 Spelling	IPA Spelling	IPA Symbol
p	pin	pIn	/pIn/	/p/
b	bin	bIn	/bIn/	/b/
t	tin	tIn	/tIn/	/t/
d	din	dIn	/dIn/	/d/
k	kin	kIn	/kIn/	/k/
g	give	gIv	/gIv/	/g/
tS	chin	tSIn	/tʃIn/	/tʃ/
dZ	gin	dZIn	/dʒIn/	/dʒ/
f	fin	fIn	/fIn/	/f/
v	vim	vIm	/vIm/	/v/
T	thin	TIn	/θIn/	/θ/
D	this	DIs	/ðIs/	/ð/
s	sin	sIn	/sIn/	/s/
z	zip	zIp	/zIp/	/z/
S	shin	SIn	/ʃIn/	/ʃ/
Z	vision	'vIZ6n	/'vIʒən/	/ʒ/
m	mitt	mIt	/mIt/	/m/
n	nit	nIt	/nIt/	/n/
N	sing	sIN	/sIŋ/	/ŋ/
r	rip	rIp	/rIp/	/r/
l	lip	lIp	/lIp/	/l/
h	hip	hIp	/hIp/	/h/
j	yip	jIp	/jIp/	/j/
w	win	wIn	/wIn/	/w/
I	pit	pIt	/pIt/	/I/
E	pet	pEt	/pɛt/	/ɛ/
8	pat	p8t	/pæt/	/æ/
a	pot	pat	/pat/	/a/
V	putt	pVt	/pʌt/	/ʌ/
U	put	pUt	/pʊt/	/ʊ/
6	again	6'gEn	/ə'gɛn/	/ə/
i	sieze	siz	/si:z/	/i:/
eI	raise	reIz	/reIz/	/eI/
aI	size	saIz	/saIz/	/aI/
OI	noise	nOIz	/nɔIz/	/ɔI/
u	lose	luz	/lu:z/	/u:/
oU	nose	noUz	/noʊz/	/oʊ/
aU	rouse	raUz	/raʊz/	/aʊ/
O	cause	kOz	/kɔz/	/ɔ/
%	uh-oh	%V%o	/ʔʌʔo/	/ʔ/
~	hunh	hV~	/hɤ/	/~/
'	re'ceive	ri'siv	/ri'si:v/	/'/
=	hmmm	hm=	/hm:/	/:/

APPENDIX 7: DISCOURSE TRANSCRIPTION SYMBOLS

UNITS	
Intonation unit	{carriage return}
Truncated intonation unit	--
Word	{space}
Truncated word	-
SPEAKERS	
Speaker identity/turn start	:
Speech overlap	[ ]
TRANSITIONAL CONTINUITY	
Final	.
Continuing	,
Appeal	?
TERMINAL PITCH DIRECTION	
Fall	\
Rise	/
Level	–
ACCENT AND LENGTHENING	
Primary accent	^
Secondary accent	‘
Booster	!
Lengthening	=
TONE	
Fall	\
Rise	/
Fall-rise	\/
Rise-fall	/\
Level	–
PAUSE	
Long	...(N)
Medium	...
Short	..
Latching	(0)
VOCAL NOISES	
Vocal noises	( )
Inhalation	(H)
Exhalation	(Hx)
Glottal stop	%
Laughter	@

QUALITY	
Quality	<Y Y>
Laugh quality	<@ @>
Quotation quality	<Q Q>
Multiple quality features	<Y<Z Z>Y>
PHONETICS	
Phonetic/phonemic transcription	(/ /)
TRANSCRIBER'S PERSPECTIVE	
Researcher's comment	(( ))
Uncertain hearing	<X X>
Indecipherable syllable	X
SPECIALIZED NOTATIONS	
Duration	(N)
Intonation unit continued	&
Intonation subunit boundary	|
Embedded intonation unit	<| |>
Reset	{Capital Initial}
False start	< >
Codeswitching	<L2 L2>
NON-TRANSCRIPTION LINES	
Non-transcription line	$
Interlinear gloss line	$G
RESERVED SYMBOLS	
Phonemic/orthographic	'
Morphosyntactic coding	+ * # { }
User-definable	" ~ ;

NOTES

1. Of course, the nature of the recording medium may limit the information that is accessible to the researcher. For example, visible phenomena such as eye gaze, though clearly quite significant to language users (at least in face-to-face interactions), are inaccessible to the transcriber of audio tapes.

Since this document focuses primarily on the transcription of sound, some of the observations in it make reference to audio recordings. Of course, the audible phenomena contained in audiovisual records such as videotape can be transcribed using the same methods and conventions used for the audible phenomena heard on audiotapes, and this document is intended for use with either kind of data. (Regarding videotapes, see §2.3.)

2. In the near future we expect to complete the development of computer courseware to facilitate the teaching -- and especially, self-teaching -- of discourse transcription, exploiting the text-plus-sound capabilities of modern microcomputers. The courseware will parallel this book, and will allow the learner to view a transcription example and simultaneously hear the recorded conversation that it represents.

3. While a basic, "broad" transcription can be produced reasonably quickly, a full-fledged "narrow" transcription (§3.2) -- one that gives close attention to details of intonation, accent, pause, hesitation, speech overlap, special voice quality, and so on -- can easily take several hours of listening for each minute of conversation. But whether the transcribing is to be broad or narrow, it will go more smoothly with a good recording.

4. Note that several transcription features are omitted from Figure 1 because they are particularly hard to place on a scale of broad to narrow. For example, a "researcher's comment" can be inserted wherever the researcher wants, but would hardly be considered a basic, "broad" feature. And specialized categories like intonation subunits and "resets" (§14) are so closely linked to particular analytical frameworks that their position on a general scale is unclear.

5. Most of the examples are from tape recordings made by the authors, but a few have been contributed by other researchers. For each example given, the source is cited immediately preceding the example. The sources (with the short citation form for each) include:

"Door Story"	DOOR
"Rock"	FORCES
"Hypochondria"	HYPO
"Aesthetics and Advertising"	AESTH
"Depression Days"	DEPR
"Lunch"	LUNCH
"Ranchers"	RANCH

"Africa"	AFRICA
"J&J"	J&J
"Car Sales"	CARS
"Cafe"	CAFE
(and others)	

6. In general a speaker's intonation unit should not be broken up into two lines; but for the occasional intonation unit that is so long that it will not fit on one line, see the treatment suggested in §20.5. Also, it may sometimes be necessary to break an intonation unit using the "intonation unit continued" symbol (§16.1).

7. A seeming exception occurs in the case of lines which contain only nonverbal elements such as laughter and audible inhalation, which do not ordinarily carry an identifiable intonation contour. Such exclusively nonverbal lines are not written with any intonation contour symbol at the end, nor with any intonation unit truncation symbol.

8. Note that two hyphens constitute a single two-character symbol, not a combination of two distinct symbols. Despite the resemblance of the hyphen symbol to the underscore symbol (§8.3), the two hyphens are not intended to indicate a level terminal pitch direction. While many truncated units do show a level pitch at the end, this is not always so, and is certainly not criterial. In any case the truncation symbol does not seek to represent terminal pitch direction, nor transitional continuity, but only the truncation of the intonation unit. As a marker of truncation, it suggests the absence of a well-defined and fully-realized intonation contour, of the sort categorized by the various intonational function symbols (comma, period, etc.). Although the intonation unit truncation symbol does not represent an actual intonational category, it does appear in the same position on the page as the intonational symbol set -- at the end of the line -- and is complementary to the members of the intonational paradigm.

9. Although in principle the word boundary pertains as much to morphosyntactic segmentation as to prosodic segmentation, it is normally taken for granted as a standard feature of any discourse transcription.

10. This would allow a discourse researcher to computationally link analytical coding not only to the words of the transcription, but also to each of the symbol tokens for speaker identification (and turn beginning), laughter, latching, pause, audible inhalation, etc., if desired.

11. Note that for standard orthographies like English which use hyphen to write certain compound words, some care needs to be taken to distinguish this orthographic use of the hyphen from its use for truncated words (and also for truncated intonation units). Since in truncated words the hyphen is followed by a space, while in compound words it is generally followed by a letter of the alphabet, this should in general be sufficient to allow

automatic discrimination between the two. Similar measures will work for the truncated intonation unit notation.

12. For those who might wish to ensure lexical recognition (or regularization) of even uncompleted words, the (hypothesized) full form could be written out within double parentheses, optionally linked to the truncated form with the underscore symbol. Compare the following alternative version of part of example (??):

> J: so you can't s-_**((stand))** ha-_**((have))** --
> you don't have any balance.

While this kind of clumsy notation would make the transcription harder to read, some researchers might find it advisable. But forcing the lexical regularization of uncompleted words may have undesired effects, including making it less immediately clear to the reader what words were actually said, and -- more significantly -- encouraging guessing as to what the speaker was about to say, and consequent analysis of the hypothesized words as though the speaker had actually fully uttered them. In general it is perhaps preferable not to introduce hypothesized full forms for truncated words into the transcription; that is, it best to leave truncated words unregularized. Since such words can be identified consistently by searching for the truncated word symbol (single hyphen followed by space), regularization can still be reliably achieved by giving individual attention to these few words at a later stage of coding or analysis.

13. For a discussion of the use of colon for marking speaker labels, see §25.7.

For certain kinds of processing of discourse data using computers, it is useful to insert a colon as the first character of any line that does not contain a speaker code (i.e. successive lines uttered by the same speaker), so that each line contains exactly one colon. This has the effect that the representation of the spoken words (and related nonverbal phenomena, etc.) is always found to the right of the colon, while the speaker label (if any) is always found to the left of it (Du Bois and Schuetze-Coburn, forthcoming). This insertion can be accomplished automatically at the final pre-coding stage, and need not be part of the transcription per se -- in fact, should not, because it introduces visual clutter.

14. While it is usually a good idea to avoid introducing extra spaces into a transcript, the surplus spaces (or tabs) following the speaker attribution label can be removed automatically easily enough (e.g. prior to importing the transcriptions into a discourse database).

15. For certain kinds of analytical coding, researchers may wish to make the continuity of the extended turn explicit by marking any intervening backchannel units with a distinctive symbol. For example, a tilde can be inserted immediately preceding the colon

that marks speaker label, to indicate that the speaker's utterance is a backchannel rather than a full turn (Du Bois and Schuetze-Coburn (forthcoming)). (Compare the use of the degree sign in the Conversation Analysis tradition.)

16. Since giving a precise rendering of overlap timing can be a rather demanding task, for some kinds of broad transcription a lesser degree of delicacy may be found adequate. On this approach the transcriber indicates not the exact syllable or segment where overlap begins and ends, but simply the nearest word. The result is that square brackets are not written within words. If a substantial portion of a word overlaps, it is included within the brackets; but if only a small portion overlaps, it is not. (In the present work, the more precise convention of marking overlap within the word is adopted.)

17. For researchers who wish to pursue the representation of intonation in discourse further, the work of Crystal (1975), Svartvik and Quirk (1980), Svartvik (1990a), Cutler and Ladd (1983), Gumperz (1982), Cruttenden (1986), Couper-Kuhlen (1986), and others should be consulted (see Cruttenden (1986) and Couper-Kuhlen (1986) for additional references). For the notion of intonation unit, see §21 and Chafe (forthcoming).

18. The significance of the endpoint of pitch movement is well-known (Couper-Kuhlen 1986:88-90). As one intonation specialist notes, "The lower the end point, the greater the degree of definiteness and conclusiveness" (Trim 1970:265, cited in Couper-Kuhlen 1986:88).

19. While in principle all combinations of the two symbols are possible, in actual discourse some combinations are naturally more frequent than others.

20. As Knowles and Lawrence frankly concluded, upon completing a project in which two trained phoneticians independently transcribed the same samples of extended discourse,

> there is no objective way of getting from the pitch movement to the tone-marks: one has to make a subjective assessment of the significance of minor pitch jumps, of the slope of pitch movement, and of the lengthening or shortening of syllables. This problem does not arise in studies of invented data, becuase "classroom" intonation patterns are perfectly clear. (1987:144).

But this need not be accounted a counsel of despair: it merely underscores the fact that transcription requires interpretation, and presses the demand for theories of intonation which have undergone the baptism of fire provided by living conversation.

21. However, for those who prefer to write the accent mark immediately before the actual stressed syllable, there is no harm in doing this.

22. The raised vertical stroke can be more or less adequately represented by the grave accent character (cf. Pullum and Ladusaw 1986:223) found on most microcomputer keyboards. Unfortunately, some printer fonts and computer screen fonts may make this character look the same as the apostrophe. Although this is problematic for reading, use of the grave accent character in one's computer-readable database does allow for effective searching, as long as one is consistent in employing it exclusively to mark accent. In many cases the screen and printer problems can be remedied. If the user can control how these characters appear on screen and printer, it is advisable to make the "grave accent" character (for secondary accent) look like a "superior vertical stroke" (Pullum and Ladusaw 1986:208), while making the apostrophe (used for contracted words, in English) look like a true apostrophe or "raised comma" (Pullum and Ladusaw 1986:216).

23. For some transcription purposes it may be desirable to indicate extra-long segments with two equal signs (e.g. wor==d), or even more. If the actual duration of a substantially lengthened word is deemed important, it can be indicated using the timing notation (§15); but for most transcription purposes this will not be needed.

24. As Chafe observes, "hesitation phenomena are welcome as overt, measurable indications of processing activity which requires a certain amount of time" (1980c).

25. If desired, each speaker's tempo can be indicated in average syllables per minute at the start of the transcription, to give at least some indication of who is a slow and who a fast speaker. To keep track of every acceleration and deceleration, however, would require the kind of special notation introduced in §12.1.

26. This symbol is not used to indicate simple continuation of one speaker's utterance across successive (or separated) lines of text on the page.

27. For some purposes, it may be useful to make use of multiple H's to represent iconically the relative duration of a long inhalation: (HHHHHHHHHH). For example, this may be called for if another speaker overlaps with the inhalation, and one wishes to show the exact point where overlap begins and ends.

28. Again, in some circumstances it may be helpful to make use of a series of H's to iconically represent the duration of a long exhalation: (HHHHHx). Note that since the lower-case x in this notation acts in effect as a sort of "subscript" attached to the string of H's, it is written only once.

29. Angle brackets are also used in several other notations which can apply to extended stretches of speech, including false start (§16.5), uncertain hearing (§14.3), researcher's comment with specified scope (§14.2), duration of complex events (§15.2), code-switching (§16.6), and embedded intonation unit (§16.3).

30. Additional categories of more specialized application (adapted from Boase 1990) include:

Speech tension

<SLR SLR>	slurred: very slurred speech
<LAX LAX>	lax: slightly slurred speech
<TEN TEN>	tense: somewhat precise
<PRC PRC>	precise: very precise

Spread of pitch-range

<ASC ASC>	ascending: general upward trend of pitch
<DSC DSC>	descending: general downward trend of pitch
<MON MON>	monotonous: all syllables at same pitch
<SCN SCN>	scandent: each succeeding syllable on a higher pitch

31. Some may wish to use plain double quotation marks (" ") for marking quotations that do not carry a special voice quality; but this should be recognized as part of functional coding, rather than transcription per se.

32. This linking may be found useful for computational purposes, so that the two representations (orthographic and phonemic) will not be treated computationally as two distinct words. If this is not a concern, the underscore linking character can be dispensed with.

33. For some kinds of computer analysis it is useful to write the transcriber comments with no spaces between the words, so that each comment will be treated as a single word-unit for sorting purposes (Du Bois and Schuetze-Coburn (forthcoming)). If this constraint is adopted, the underline character can be used in place of the space character, as a sort of "visible space" to separate the words of the comment.

34. One common notation using double parentheses, as standardized in brief form, is ((MIC)), which indicates noise from the microphone when it is moved (e.g. by the investigator.) This notation is sometimes useful for letting users of a tape know why a noise which, to the tape listener, appears very loud -- as noises from even minor microphone movements often do -- is not attended to by speech event participants (since it is not loud for them).

35. As noted elsewhere, the numeral 1 is best avoided because it is easily confused with the letter l, a problem which does not apply to the numerals 2 through 9.

36. If one is unable to decide between two possible hearings of a stretch of speech, it is possible to indicate both alternative possibilities, as follows:

<X words X><X2 other words X2>

This device should be used most sparingly, however. If the words can be made out at all, it is almost always possible to decide on one hearing as the more likely alternative.

37. Writing the duration (e.g. (2.6)) next to both the left and the right brackets is of course redundant, but it helps to make clear which right bracket matches which left bracket. Should it be found necessary to indicate more precisely the corresponding pairs, the brackets could be indexed numerically.

38. If a second instance of "intonation unit continuation" occurs within a short stretch of speech, the two can be distinguished by marking one with single ampersands (&) and the other with double ampersands (&&). (In unusual circumstances it might even be necessary to use triple ampersands.)

39. Chafe (forthcoming) uses the pipe symbol for an "accent unit", a usage similar to that of the International Phonetics Association (1989) for marking a "minor (foot) group".

40. Also, it follows any boundary markers (e.g. morphosyntactic boundary markers, §18.2) associated with the preceding subunit.

41. For a generally positive answer to this question, see Cumming (198??).

42. Transcribers who only occasionally need to mark false starts and hesitations may find it worthwhile to substitute a set of labeled brackets <FS FS> for the plain angle brackets < >, as in the following version of example (000):

A: <FS He has FS> --
<FS a FS> --
The spelling is what first turned me on to him.

If this is done, the plain angle brackets can be reserved for whatever other high frequency discourse feature is of special interest to the researcher. (For example, they could be used to mark rapid tempo anacrustic syllables.)

43. The same holds for commas, as in the written names of certain chemical compounds. For example, the chemical formula written as 2,4-D should -- when spoken -- be transcribed as two four D.

44. To allow positive identification of the marginal words in Table 2, their phonetic transcriptions are given here. The phonetic symbols are those of the SAM-PA2 system described in Appendix 6, plus tilde for nasalization and ? for glottal stop.

SPELLING	PHONETIC TRANSCRIPTION (SAM-PA2)
uh	/?V/
unh	/?V~/
um	/?Vm/
m	/m/
hm	/hm/
huh	/hV/
hunh	/hV~/
mhm	/m'hm/
unhunh	/?V~'hV~/
uhuh	/?V'hV/
unh-unh	/'?V~?V~/
uh-oh	/'?V?o/

45. Also, the hyphen in these words loosely corresponds to a lexically required glottal stop. Note that, because this is not a prosodically inserted glottal stop, the percent sign (%) is not appropriate. Lexical glottal stop is part of the normal pronunciation of words like uh-oh. Prosodically inserted glottal stop, in contrast, is a special feature which can carry distinctive interactional meaning, something not automatically present in words like uh-oh, which should thus be written distinctively. Since the standard spelling of at least some English words containing lexical glottal stop employs hyphen, this convention can be profitably extended to other words containing lexical glottal stop.

46. Other words whose variant pronunciations some discourse researchers may wish to keep track of include gonna (versus going to) and wanna (versus want to).

47. For some computational data management purposes it may be useful to insert a colon immediately after the dollar-sign complex, giving **$G:**, **$M:**, **$F:**, and so on.

48. The most widely used symbol for morpheme boundary is of course the hyphen; but hyphen is also rather widely used for word truncation (as in this system). If it is imperative to use hyphen for morpheme boundary, then the plus can be used for truncation, thus simply reversing the symbol values proposed here. (It would even be

possible to use hyphen for both morpheme boundary and truncation, given their distinct environments (cf. note 00**), but this is a bit risky.)

49. For a full discussion of a morphosyntactic coding system which uses these symbols to represent constituent structure in a discourse database, see Du Bois and Schuetze-Coburn (forthcoming). Briefly, the conventions used are as follows: asterisk (*) marks group boundaries (e.g. noun phrase boundaries); number sign (#) marks main clause boundaries; and curly brackets ({}) mark embedded clause boundaries or parentheticals.

50. But see a possible use for the double quote mark (") in §12.3.

51. When stylistic considerations make it impossible to give each intonation unit a separate line -- for example, when in the middle of a textbook paragraph one wants to cite a three-unit stretch of conversation without taking up the space that carriage returns would require -- the intonation unit boundary can be marked using a double vertical bar, that is, two pipe symbols: ||. (This is based on the IPA symbol for "major (intonation) group" (International Phonetic Association 1989).) Because this notation loses the clarity and iconicity of the one-unit-per-line convention, its use should be avoided when possible.

52. The case of transcription revision presented here is based on a genuine conversational extract. While the details of the sequence of transcription errors and subsequent revisions are hypothetical, the case presents a realistic illustration of a kind of revision that is very common in transcribing.

53. Often it is preferable to use batteries when recording, because anomalies in the electrical supply from household current can cause problematic noise to appear on one's tape recording.

54. For an insightful general discussion of the design of transcription systems -- from which the following discussion has greatly benefitted -- see Edwards (1989, forthcoming).

55. When notations like labels for extended voice qualities (e.g. <WH WH> for whispered speech) are devised, one way to reinforce the fact that these are not actual speech is to avoid using a sequence of letters that might be taken for a word. Thus, for marcato speech, the sequence MARC might be avoided in favor of the unpronounceable MRC, because in rapid reading this is less likely to be mistaken for an actual uttered word.

56. In the domain of "vocalizations", where dictionaries have feared to tread (Tottie 1989), it is sometimes useful to introduce some standardization of one's own; see (§16.2).

57. Such as the concordance program KWIC-MAGIC, a very useful program oriented toward the linguist's and discourse researcher's needs, which is available from Dr. LST: Software, 545 33rd St., Richmond, California 94804-1535, USA.

58. Roughly the same method of marking overlaps was arrived at independently by various researchers, including Hakulinen (1989?).

59. While this makes use of the slash character, which also carries the meaning of rising terminal pitch, there is no real danger of mistaking the two symbol uses, which typically appear in quite distinct places on the page. The same would not be true if square brackets were used for phonetic and phonemic detail.

60. Also, in the orthographies of some languages the colon is used for representing phonemic length -- which must be distinguished in principle, and is distinguishable in practice, from prosodic lengthening (Du Bois 1987:813); cf. §18.1.

61. If colon must be reserved for another meaning, such as phonemic length in orthographies which require this convention, the semicolon makes a workable substitute for marking speaker attribution labels. This has a good precedent in the work of the London-Lund corpus (Svartvik and Quirk 1980). Although in principle phonemic vowel length could be written with semicolon, thus retaining colon for speaker labels, this is likely to be felt as rather unaesthetic.

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