

A CONCEPTUAL FRAMEWORK FOR THE DEVELOPMENT OF INTERACTIVE  
VIDEO LESSONS DESIGNED TO ENHANCE FOREIGN LANGUAGE  
LISTENING ABILITY

APPROVED:

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Eric Paul Rogers

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VIDEO LESSONS DESIGNED TO ENHANCE FOREIGN LANGUAGE  
LISTENING ABILITY

by

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THESIS

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

MASTER OF ARTS

THE UNIVERSITY OF TEXAS AT AUSTIN

August 1992

## ACKNOWLEDGEMENTS

I want to extend thanks to Ingeborg McCoy and the other members of the LIBRA Project at Southwest Texas State University for allowing me to be involved in the development of the LIBRA authoring system which formed the impetus behind this thesis; to Project QUEST for providing the computer equipment necessary for the development of the software, and to John Weinstock and the Department of Germanic Languages at the University of Texas at Austin for providing the facilities to house the computer equipment. Many thanks to Janet Swaffar for sitting in on lesson development sessions and offering valuable suggestions and direction. I owe a great debt of gratitude to Dorothy Chun and Frank Donahue for reading and commenting on drafts, discussing ideas with me, and for their consistent support and encouragement during the past two years. Appreciation goes to Jay Kunz for his helpful suggestions and to Mark Doran for spending many hours using the IAV lessons under development and providing valuable feedback. I am grateful to Paul Luckau and Randall Lund at Brigham Young University whose instruction and example have motivated me, and to Hal Johnston and Barry Olson whose work in the trenches has inspired me. Most importantly I want to express love and gratitude to Kelly, Katie, Lelsy and the rest of my family for their sacrifice, love and devotion.

25 July 1992

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## Chapter 1

### INTRODUCTION

The role of listening comprehension in second language acquisition has been the topic of much debate in recent years. Many advocates of comprehension based approaches suggest that listening should be the focal point of foreign language (FL) instruction. O'Malley, Chamot and Küpper (1989) note the work of Asher (1969); Krashen, Terrell, Ehrman, and Herzog (1984); Winitz (1978); and Wipf (1984) whose theories of second language acquisition and instruction all take as their "keystone" listening comprehension. These theories rest on the basic assumption that language acquisition is an "implicit process in which linguistic rules are internalized by extensive exposure to authentic texts and particularly to comprehensible input that provides a modest challenge to the listener" (O'Malley, Chamot and Küpper 1989, 418).

Asher (1969) suggests that foreign language programs which focus on speaking, listening, writing, and reading may be too ambitious and proposes that a more effective strategy would be to focus on only one skill, namely listening. Especially in the early stages of language learning, it is argued that students be exposed to a large amount of verbal stimulus to achieve a high level of listening fluency prior to the transition to speaking. The *Total Physical Response Approach*

to FL learning developed by Asher primarily involves giving students verbal commands involving activities within the classroom. Attention to creating a low-stress environment is also important. As students are given commands, such as standing, picking up a pencil or shaking another student's hand, they physically perform the command given them. Asher notes "The intact pattern of the motor act seemed to be necessary for the achievement of a high level of listening fluency" (1969, 17). As students focused solely on comprehending and performing the instructions given them, their level of comprehension was quite high. However, when both listening and speaking were practiced at the same time, there was a significant decrease in comprehension.

Although he warns against "bandwagoning," Winitz (1978) echoes Asher's belief in the primacy of listening comprehension. Winitz notes three main premises upon which a "comprehension approach" to language learning rests. The first premise states that the language should be understood before it is spoken. Winitz argues that speech is not discouraged, but that it will "develop without any direct training" (1978, 53), if there is enough contact with the language. This leads to the second premise: grammatical knowledge is tacit in nature. In other words, grammaticality is developed or discovered by exposure to, or contact with, a variety of sentence patterns. Winitz recommends "that grammatical principles not be

taught at all as part of the language learning process” (Winitz 1978, 55). The third premise is that language mastery is not linear in nature. Winitz departs from the traditional notion that language is learned in discrete steps and that mastery of the language involves the culmination of all such steps. If language learning is non-linear then “errors” in production are not to be corrected. Winitz argues that the comprehension approach ignores errors in the modalities of speaking and writing because neither of these modalities is demanded. The focus of teaching and the assessment of progress is based solely on comprehension.

Although Wipf (1984) takes a more traditional approach to language instruction--particularly in the treatment of grammar--than do Asher and Winitz, his call to action with regard to helping students make the transition from carefully controlled listening materials to authentic materials draws attention to an area of need in FL listening pedagogy. Wipf proposes that, especially for adult learners, it would be “pedagogically wiser to challenge learners to proceed at a much faster pace in the receptive skills” (1984, 347). Wipf fears that the “lock-step” approach to language teaching, in which the students’ expected level of performance is equal for both the generative and receptive modalities, may hinder the development of the receptive skills. Questioning a lock-step approach that requires students to be able to produce everything they can comprehend, Wipf notes that students are not capable of this even in their native language. Ability in the receptive skills always

surpass the students' abilities in the generative skills. It is argued, therefore, that the primary focus of language instruction be on the receptive skills so as not to impede their development because of insufficient fluency in the generative skills.

Perhaps the best known theorist advancing a comprehension approach to language instruction is Stephen Krashen. Krashen, et al. (1984) argue that:

the major path to second language competence is implicit, subconscious acquisition via comprehensible input, [that] the ability to produce language is based primarily on comprehensible input, i.e. listening comprehension and reading, [and] since proficiency is built up via comprehensible input, students should concentrate on listening comprehension before speaking. (262)

Krashen, et al. (1984) distinguish between acquisition and learning, arguing that acquisition be the primary activity in FL education. As noted above, acquisition is a subconscious process, whereas learning involves conscious understanding of the rules governing the target language. A learner develops the ability to communicate in the language by exposure to large quantities of comprehensible input. As learners are exposed to the language they begin to pick it up naturally, like a child learns its first language. Acquisition occurs when a learner is exposed to language that is largely understandable, but that also contains some unfamiliar or unknown elements. Krashen expresses this idea in the formula  $i + 1$ , or comprehensible input

(i) plus an unknown element at the next level of competency (1). Listening and reading are the primary sources of comprehensible input, and, therefore, the cornerstones of language acquisition.

It is not my intent to enter the debate over the role of listening comprehension in second language acquisition. The focus of this thesis is not the acquisition of a FL, but rather the development of a single modality: listening. The works just cited illustrate a number of reasons for giving the development of listening skills increased attention in FL education. Although I do not subscribe completely to the premises behind communicative approaches such as those described, I do believe that listening is a neglected modality in most FL programs. Because most students desire, above all else, the ability to speak and comprehend, to interact with native speakers of the FL on their own terms, due effort to that end is justified.

A significant drawback to FL instruction, however, lies in the difficulty of providing students with an authentic language experience (unlike second language instruction where students live and interact daily in an environment in which the second language is spoken). The “teacherese” of our classrooms seldom approaches the type of natural discourse which our students will encounter in business, educational, diplomatic, domestic and other settings with native speakers of the FL. Even if our teachers have native-speaker language ability, it is difficult

to simulate the “whole” of the target language environment with its unique linguistic and non-linguistic features.

A possible, if only partial, solution to this problem lies in the medium of video. With video we can expose our students to contextualized, authentic language, spoken at natural pace. Video can take the student into the home of a middle-class German family living in rural Bavaria, into the office of a marketing executive for the Siemens Corporation, or into a lecture room at Berlin's *Freie Universität*. But authentic language on video also has its drawbacks. Students with limited language experience may, and often do, have real difficulties in making sense of the video presentation. Providing students with resources to fill the holes in their ability to comprehend becomes necessary.

These resources might include: 1) the ability to review easily and quickly certain portions of the video; 2) a script of the video text; 3) a list of lexical items in the video text with their English equivalents; 4) “advanced organizers” such as schematic representations of the main events and characters in the video; 5) a second sound track which provides a simplified and slower paced version of the natural sound track; 6) brief grammatical explanations of structures encountered in the video text; 7) questions and answers which focus student attention and allow the student to check comprehension of the video text; and 8) “flags” which draw attention to the communicative significance of culturally unique linguistic and

non-linguistic features of the video. Such resources can be integrated relatively easily by means of a computer/video interface, or what is referred to as “interactive video” (IAV).

Much has been written in recent years concerning the potential of IAV in the development of FL proficiency (Branvold, et al. 1986; Kim 1987; Reese, Eastmond, and Sutherland 1988; Saint-Léon 1988; Schneider and Bennion 1983; Schrupp, Busch and Mueller 1983; Scott, Jolly and O’Brien 1989; Sutherland 1986; Underwood 1989; Watts and Pickering 1991). The medium’s potential for interactivity and individualization, as well as its potential to provide a rich source of authentic linguistic and cultural input, has been much heralded. Despite this potential, however, relatively few FL IAV programs have been developed, and those that exist are somewhat limited. Most FL IAV programs are designed around a single videodisc. Additionally, the program cannot be modified easily by the teacher and adapted to particular curricular objectives.

Nevertheless, computer programs are being developed to allow teachers with little or no computer programming experience to develop FL IAV lessons themselves. Such programs are commonly called “authoring systems,” that is, they allow non-programmers to author computer programs. Because such authoring systems can be used with any videodisc, teachers have the freedom of choosing their own videodisc and writing customized programs based on their own objectives.

The latitude permitted the FL teacher by an authoring system, however, can be problematic. A teacher with little knowledge of the capabilities of IAV certainly needs some direction regarding lesson design. A framework is needed for the design of IAV lessons that has a solid pedagogical grounding.

In this thesis I will propose a framework for IAV lessons designed specifically to enhance students' *listening* abilities. An articulation of the theoretical and practical considerations upon which the framework is constructed will proceed from an overview of FL listening theory (Chapter 2), to pedagogical strategies based on our understanding of the FL listening processes (Chapter 3), to the specific application of IAV in the improvement of listening skills (Chapter 4). The application of listening pedagogy to the IAV medium will be based primarily on my personal experience in the development of IAV lessons for use by beginning and intermediate students of German. And I will conclude with a number of observations regarding the impact and effectiveness of IAV in FL education (Chapter 5).

## Chapter 2

### FOREIGN LANGUAGE LISTENING THEORY

The objective of this chapter is to articulate what is presently known about FL listening. More specifically, it is to describe what behaviors FL students exhibit and what cognitive processes are involved in FL listening. An understanding of these behaviors and processes will guide the choice of pedagogical strategies, and will ultimately shape the design of interactive video lessons intended to enhance students' listening abilities.

#### Neglect of Foreign Language Listening as Unique Modality

From the outset it must be understood that very little empirical research has been conducted which deals specifically with FL listening. The primary reasons for this lack of research appear to be: 1) the assumption that research and theory in related fields such as reading and first-language listening adequately explain the processes involved in FL listening; and 2) the fact that we simply do not have any proven methods for finding out how students listen, due to the covert nature of the listening processes. In response, it should be noted that, although there may be similarities between reading and listening, recent research suggests that the

differences are great enough to justify the treatment of FL listening as a distinct modality (Dunkel 1986; Long 1989; Lund 1990). Lund notes that, although research in reading and first language listening are useful, “it is also important to consider second language listening as a unique domain that differs from others in both its nature and its implications for pedagogy” (1990, 106). Furthermore, regarding the covert nature of the listening process, recall protocols--a means of identifying propositions or the basic ideas expressed in a text against which student recall of the text is measured--have been effective in determining what a student has comprehended. Unfortunately, however, recall protocols say little about the processes that lead to comprehension. Researchers have relied primarily on introspective methods, or thinking aloud, to try to determine what processes are at work in FL listening. Though unproven, these methods appear to be the best tool presently available. Long (1989) writes that “introspective methods, in which subjects’ report on their own processes and intuitions, have long been used in the field of psychology, sociology, and linguistics. There is an emerging validation and acceptance of introspective research methods in FL and second language (L2) research” (7).

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### Cognitive Processes Involved in Listening

Theorists generally agree that FL listening is an active process in which students focus on specific elements of the input, then segment the input into meaningful “chunks,” and then use their previous experience to get at the global meaning of the text (Byrnes 1984; Long 1991; O’Malley, Chamot, and Küpper 1989; Richards 1983). These processes are typically referred to as *perception*, *parsing* and *utilization*.

*Perception.* During this process student attention is focused on the oral text. Parts of the oral text such as individual sounds, words, and phrases are held in echoic memory. The sounds, words and phrases stored in echoic memory are only retained for a few seconds and then are immediately replaced by subsequent input.

Lund identifies a process in his research which approximates O’Malley’s notion of *perception*. Lund uses the term *identification* to label the process in which the listener focuses on “some aspect of the code itself, rather than on the content of the message” (1990, 107) and identifies the following as examples:

- Discriminating between minimal phonemic pairs or intonation patterns.
- Recognizing familiar words.
- Looking for categories of words, such as personal names, place names, or food words.

·Discriminating between singular and plural or between present and past tense. (1990, 108)

In their discussion of *perception* O'Malley, Chamot, and Küpper (1989) report that the primary factor during perceptual processing is attention. Successful listeners are more aware of whether they are attending to the input and can refocus their attention better than poor listeners. For example, one effective listener indicated that she was disturbed during the data collection session when a maintenance man entered the room, but then refocused her attention on the text. She said: "Then when she (the voice on the tape) said that, it was like I took more interest in understanding it. That's what I was thinking. I was telling myself just now that I should pay more attention" (428). Less effective listeners tend to get bogged down and distracted by unfamiliar words or phrases and then fail to maintain their attention to the subsequent input. They are easily distracted due to lack of topical experience, lack of vocabulary or too high a grammatical level. Nevertheless, environmental distractions can be deflected when the student's background knowledge is solid.

Research into the cognitive processes involved in listening, such as those cited previously, uses audio recordings as the source of aural input. The input in these studies is strictly aural in nature. In a recent study, however, Long used video

as the source of input, involving both aural and visual stimuli. Long discovered that FL students, when given complete control over the video text,

<sup>1</sup> process aural and visual input separately: “Allowing subjects complete control over manipulation of the text revealed that they use a multi-layered processing strategy, watching first for visual cues, then listening for audio cues” (1991, 21-22).

Long’s findings substantiate the view that students exhibit a multi-layered processing strategy supposed by O’Malley, Chamot, and Küpper:

It seems likely that the same factors in perceptual processing that focus attention on oral text to the exclusion of other competing stimuli in the environment also focus attention selectively on certain key words or phrases that are important in the context, on pauses and acoustic emphases that may provide clues to segmentation and to meaning, or on contextual elements that may coincide with or support the interpretation of meaning such as the listener’s goals, expectations about the speaker’s intent, and the type of speech interaction involved (for example, a conversation or a lecture). (1989, 420)

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<sup>1</sup>Subjects had complete control of the videocassette recorder controls and were encouraged to pause, rewind, and listen as many times as necessary in order to complete the task.

Students tend to focus their attention on one source of stimuli to the exclusion of all others. They focus their attention on those elements of the text which they deem interesting or useful in performing the task given them.

*Parsing.* This process involves the segmentation or “chunking” of input into meaningful representations which are then stored in short-term memory. These representations are abstractions “of the original word sequences but can be used to recreate the original sequences or at least their intended meaning” (O’Malley, Chamot, and Küpper 1989, 420). Because the memory span is shorter for the FL than for native language input, complex texts in the FL make comprehension especially difficult because the combining of parsed segments during comprehension places an increased burden on short-term memory, which already is loaded with unencoded FL elements (O’Malley, Chamot, and Küpper 1989).

*Parsing* is paralleled by Lund’s second function, *orientation*, which he defines as “determining essential facts about the text, including such message-externals as participants, their roles, the situation or context, the general topic, the emotional tone, the genre . . .” (1990, 108).

Effective listeners, according to O’Malley, Chamot, and Küpper, listen for larger segments of information and only focus on single words when comprehension breaks down, while poor listeners listen to each word and then try to put them together. Successful listeners, in other words, tend to use top-down

processing--working from an understanding of global meaning towards the details--and poor listeners a bottom-up strategy--looking first at the details to try to get at the global meanings in the text. O'Malley, Chamot, and Küpper (1989) add: Students who were effective listeners inferred the meanings of new words that were important for comprehension of the oral text by using the context of the sentence or paragraph in which the unfamiliar word appeared. (429)

Successful listeners employ a variety of strategies in *parsing* text, the most useful of which seem to be elaboration, self-monitoring, and inferencing (O'Malley, Chamot, and Küpper 1989)

*Utilization.* This process involves the relating of existing knowledge, stored in long term memory, to the representations created through *perception* and *parsing*. The student's interpretation of the given input is dependent upon their background knowledge of, or experience with, the particular scenario. O'Malley, Chamot, and Küpper (1989) write:

Effective listeners either have more prior information available than ineffective listeners, have the information better organized, access the prior information more efficiently, or use the prior information more strategically to comprehend and recall new information. (431)

During *utilization* effective listeners use their knowledge of the world, their personal experience and self-questioning to elaborate upon the text and make

inferences leading to comprehension. The use of background knowledge to give meaning to new information is often referred to as *Schema Theory* or *Script Theory*. As noted in the Introduction, however, the research base in this area is sorely lacking. In her article “Schema Theory and Listening Comprehension” Long (1989) notes the need for “L2 researchers to investigate how schemata affect auditory comprehension in a second language” (38).

#### Behaviors of Successful Listeners

Successful listeners demonstrate a number of behaviors which facilitate the effective function and interaction of *perception*, *parsing* and *utilization*. The following is a summary of these behaviors. Effective listeners:

- 1) Become aware of their inattentiveness and redirect their attention to the text. They continue to listen attentively, even when they encounter words or phrases they don't understand or when distracted by competing stimuli.
- 2) Listen for larger “chunks” of information employing top-down processing. The use of a bottom-up strategy is used only when needed for the comprehension of key words or phrases.
- 3) Infer meanings of key words and phrases based on context, which, in the case of video, includes visual cues.

4) Relate new information to their existing knowledge to infer meaning.

(O'Malley, Chamot, Küpper 1989)

Although listening has been largely neglected by researchers, the interrelated processes of perception, parsing, and utilization have been demonstrated to be at work in listening. Listeners who are more attentive to input, employ top-down processing strategies by listening for larger segments of information, infer meaning, and relate the new information to what they already know, are more successful in comprehending the listening text than those who do not. How, then, can our understanding of these cognitive processes and behaviors be exploited pedagogically? The answer to this question is the focus of Chapter 3.

## Chapter 3

### PEDAGOGICAL CONSIDERATIONS

Based on our current understanding of the listening process, what can be done pedagogically to enhance student listening abilities? The answer to this question requires attention to a number of factors including: behaviors students are to exhibit after they have been “taught,” and types of teaching materials and activities that facilitate the development of these behaviors. These pedagogical considerations will be referred to as *objectives*, *teaching materials*, and *listening activities* respectively.

#### Objectives

Pedagogical design must grow out of a clearly defined set of objectives. Furthermore, these objectives must be suited to the target group of learners. The *ACTFL Proficiency Guidelines* for listening, which attempt to articulate a national standard, provide useful descriptors for identifying approximate levels of student listening ability. For example, a student whose understanding is limited to only an occasional word, such as cognates or borrowed words is rated as a *novice-low* (see Appendix A for complete list of the *ACTFL Proficiency Guidelines* for listening),

whereas a student who understands short utterances, particularly those which are strongly supported by a context with which the student is familiar, as well as some words and phrases involving simple questions, statements, and high-frequency commands would be rated at *novice-mid*. The ACTFL guidelines are helpful in classifying students' listening abilities. This, however, is only one step in the process of creating learning objectives for groups of students.

Richards' (1983) proposes a method for the creation of objectives relative to listening pedagogy in which he analyzes students' listening needs, proposes a taxonomy of micro-skills, and establishes objectives for teaching those skills.

The purposes for which students need listening skills vary according to the type of listening activity or task in which they are involved. Activities such as social interaction, listening for information, and listening for pleasure require different skills. Richards suggests that procedures be employed which identify student needs such as questionnaires, interviews with the listener, and participant observation. The intent of these procedures is to obtain a profile of the listener's needs. Once the listener's needs have been identified, attention can be given to the types of skills required to satisfy those needs. Richards cites a rating instrument developed by Brindley (1982) which predate, but are similar to those proposed by ACTFL. Brindley's rating system, based on interviews, produces a profile of student listening ability on an eight level scale, ranging from minimal to

native-speaker-like. The following is an example of the type of information obtained using Brindley's instrument, included are a description of the student's listening comprehension abilities, followed by a description of the student's characteristic problems:

*Listening Comprehension*

- Able to understand enough to manage a very limited interchange about areas of immediate need. Can understand most predictable requests for basic personal and family information of the kind required by officials, though repetition often necessary if questions are not phrased in familiar form.
- Can recognize a few basic intonation patterns (e.g., Yes/no questions).
- Little understanding of syntax. Meaning deduced from juxtaposition of words and context. Still responds to isolated words in connected speech.
- Can handle very short, simple, ritual social exchanges but rarely able to understand enough to keep conversation going of his/her own accord.
- Can identify individual items in very short, simple recorded passages relevant to needs. May get global meaning but would need

more than one hearing. However misunderstandings frequent when s/he cannot see person speaking.

·When s/he does not understand, can usually ask very simply for repetition.

### *Characteristic Problems*

·Has great difficulty coping with subjects other than immediate priorities.

·Finds longer utterances (especially those containing subordinate clauses very hard to understand, owing to limitations on short-term memory load.

·Often fails to understand questions which require other than a short, concrete answer (e.g., *why* or *how* questions).

·Idiomatic expressions (even commonly used ones related to priority areas) normally not understood. Only understands when questions/statements are phrased in simplest, non-idiomatic form.

·Has great difficulty using grammatical cues to extrapolate meaning.

What seems clear to a native speaker would often be misinterpreted or seen as ambiguous by a listener at this level, owing to his/her

inability to recognize the form and function of many syntactic structures.

- May identify occasional words in a conversation between native speakers but could not identify topic.
- Similar-sounding words/segments often confused, causing misunderstandings. (Brindley 1982, 1)

After a profile of student needs and abilities has been established, a comparison can be made with the skills required for comprehension. By comparing student needs and abilities with his taxonomy of listening skills, Richards is able to identify those skills required for comprehension of a given listening text, sort out those skills which a student has not yet demonstrated and structure learning objectives around the development of those “missing” skills.

*Taxonomy of Listening Skills.* Based on a model of listening comprehension processes similar to that outlined in Chapter 2, Richards fashioned a taxonomy of micro-skills necessary for comprehension for two areas of need, conversational listening and academic listening (Appendix A). A separate taxonomy for pleasure listening (e.g., radio, movies, television) is not proposed, suggesting that the micro-skills identified in conversational and academic listening are inclusive of those required for comprehension of radio, movie, and television texts.

Although Richards (1983) does not categorize them as such, each of his 38 micro-skills are expressions of student ability to perceive, parse and utilize input. For example the “ability to retain chunks of language of different lengths for short periods” and the “ability to discriminate among the distinctive sounds of the target language” are skills involved in perception. Parsing involves such skills as the “ability to detect meanings expressed in differing grammatical forms/sentence types (i.e., that a particular meaning may be expressed in different ways)” and the “ability to reconstruct or infer situations, goals, participants, [and] procedures.” Utilization involves the “ability to use real world knowledge and experience to work out purposes, goals, settings, [and] procedures” (Appendix A).

The teacher systematically compares the information provided by the diagnostic instrument with the taxonomy of listening skills to identify the areas of need. For example, the student described above lacks:

1. ability to identify and reconstruct topics from ongoing discourse  
[micro-skill #27, Appendix A]
2. ability to recognize typical word order patterns in English  
[micro-skill #9]
3. ability to recognize major syntactic patterns in English  
[micro-skill #14]. (Richards 1983, 231)

The teacher now has the information necessary to formulate objectives which meet the needs of the students.

*Formulation of Objectives.* The formulation of an objective involves the transfer of the needed skill into a statement of what the student will be able to do after being instructed, “Objectives thus break down the micro-skills into descriptions of behavior or performance in terms which can be taught and tested” (Richards 1983, 231). Richards provides the following examples of objectives for the group identified previously:

1. The student will have a listening vocabulary of approximately 800 words, including dates, time, and numbers up to 100.
2. The student can recognize the different intonation patterns used for questions, statements, instructions.
3. The student can understand yes/no questions and wh-questions on topics connected with home life, the family, school, free time, health, shopping, personal identification.
4. The student can understand common phrases used in short conversations and interviews on the above topics.
5. The student can identify the topics of conversations between native speakers on the above topics.

6. The student can understand utterances within an 800 word vocabulary containing subordinate and coordinating clauses. (232)

Objectives, therefore, are constructed around the development of specific skills not manifested in the student's listening behaviors. I have already noted a number of behaviors exhibited by successful listeners in the previous chapter (see p. 11). Students who exhibit these behaviors tend to have a significantly higher degree of comprehension than those who do not, it is hypothesized, because such behaviors facilitate the effective functioning and interaction of the cognitive processes of perception, parsing and utilization. Richards' micro-skills do not replace the behaviors identified in the previous chapter, but are rather abilities revealed in the behaviors observed by O'Malley, Chamot, and Küpper.

In summary, the formulation of objectives for listening pedagogy involves the assessment of student needs and student abilities, the comparison of student abilities with the skills required for comprehension for the purpose of identifying "missing" skills, and the articulation of those skills in terms of behavior or performance as objectives around which listening activities can be designed. The choice of teaching materials and listening activities will be based on their respective applicability to and utility in the achievement of those objectives.

### Teaching Materials

There are many sources of FL listening material. Of these sources three general categories can be identified: pure audio, audio-video, and live speakers. A teacher's choice of listening materials should be informed by her behavioral objectives, which will differ according to the competence level of the individual student (i.e., intermediate students will have met objectives which beginning students have yet to meet). Each of the categories listed above has unique strengths and weaknesses relative to those objectives. There are also issues common to all three categories which a teacher must consider: For example, if and when one should use authentic materials such as radio and television broadcasts produced in the FL, for a native audience, or audio and video recordings designed specifically for the instruction of FL students. One must also consider the content of the materials as it relates to student interest and motivation.

*Audio, Audio-Video and Live Speakers.* The strengths and weaknesses of these three categories of listening materials should be considered relative to the behavioral objectives outlined above. Currently, the listening comprehension element of most FL teaching programs consists often of a single audio tape series that accompanies the particular textbook being used. The predominant use of audio tapes is most likely attributable to the ease of production and use, rather than any inherent pedagogical value.

Although the strictly verbal nature of audio allows students to develop such behaviors as retaining chunks of language of different lengths for short periods (conversational listening micro-skill #1, see Appendix I), discriminating among the distinctive sounds of the target language (micro-skill #2), and recognizing the rhythmic structure of the language (micro-skill #3), it falls far short of video and live speakers in terms of helping students to make use of facial, paralinguistic, and other clues to work out meanings (micro-skill #31), or to recognize the function of non-verbal cues as markers of emphasis and attitude (academic listening micro-skill #16).

Because comprehension involves more than simply decoding the verbal stimuli, it follows that listening practice should include as many elements of communication as is practically possible. Clearly, however, it is impractical to suggest that all FL students have access to native speakers and the FL environment, though that may be the ideal. Extracurricular attempts should be made to simulate the target language environment through language houses, conversation groups involving native speakers, exclusive use of the FL in the classroom, etc. Student involvement in these activities has proven helpful. Nevertheless, the language used in these environments tends to be oversimplified, particularly when novice students are involved.

Strictly in terms of improving listening ability, perhaps the best alternative to placing the student in the country where the target language is spoken is the use of video. Video can capture not only the language, but also the sights and sounds of the environment in which the language is spoken. Unlike the sometimes simplified language spoken in simulated settings, video can capture the language as it is actually spoken among natives. Whether or not the use of unedited authentic language in FL instruction is desirable, however, has been the topic of much discussion.

*Authentic vs. Pedagogically Oriented Materials.* In recent years there has been some debate over the use of authentic language materials in FL instruction. Although Ur (1984) and Dunkel (1986) have questioned the use of authentic materials, many others have encouraged their use (Byrnes 1985, Long 1991, Lund 1990, Omaggio 1986, Saint-Léon 1988). According to Omaggio (1986) if a teacher's focus is proficiency, then "Authentic language should be used . . . wherever and whenever possible" (36).

We know very little about the effects of authentic materials on the acquisition of a FL (Long 1989, 22). The primary concern voiced regarding the use of authentic materials is the difficulty level of the text. Some are concerned that students, particularly novice students, will not be able to comprehend authentic texts. Omaggio (1986) suggests, however, that "we might . . . consider providing

enough extralinguistic cues to render unedited authentic materials comprehensible to Novice- or Intermediate-Level students” (47). Byrnes (1984) and Lund (1990) argue that difficulty is an attribute of the *task* and not of the text. In other words, the teacher should adjust the difficulty of the listening task to the level of the student, rather than simplifying the text. Because students must become accustomed to the distinctive sounds, stress patterns, and rhythmic structure of the target language, it is proposed that authentic materials be used as much as possible in order to provide students with such an opportunity, which would potentially be forfeited with simplified or contrived pedagogical materials. The responsibility then lies with the teacher to adapt the listening task to the competence of the student.

*Content.* A teacher’s choice of materials regarding content is a significant one. Because student attentiveness is so critical to the comprehension process, it is likewise important to select materials that will both capture and sustain student interest and allow students to use their life experiences to make guesses and infer meanings. In other words, the materials to which students are exposed should be familiar in some way. Chastain (1988) writes:

Teachers should never require students to listen to an unfamiliar topic nor [*sic*] to any topic that has not been introduced and explored either in class or in the course materials. Students should have the opportunity to activate relevant schema and make predictions on the

content of the listening passage prior to undertaking the listening assignment. (205)

By using content areas in which students are interested and with which students have had some experience, the teacher encourages both motivation and comprehension.

### Listening Activities

Chastain (1988) notes the potential for overwhelming students because of the difficulty of comprehending oral messages. To avoid this, Chastain suggests that listening activities be carefully organized to ensure first, that students are prepared for what they are going to hear; second, that students are provided with help to complete the task successfully; and third, that students have follow up activities which provide feedback and further practice (200-204).

*Prelistening Activities.* Prelistening activities are perhaps the most important phase of listening pedagogy because they set the stage for students to be able to accomplish the objectives of the activity. Prelistening activities may include instruction towards a better understanding of the linguistic structures to be encountered, although Chastain is quick to note:

Recent theoretical assumptions justify including unknown structures and vocabulary because students should learn to manage even when they do not know all the structures, as will most likely be the case in real-language situations. In addition, they need to learn to use context and content to make rational inferences as to meaning. Also exposing them to unknown language forms in context is one way to teach new forms. (201)

In addition to *linguistic knowledge*, prelistening activities should provide students with *background information*. Teachers must make sure that students are familiar with the themes involved so students can make use of their own experiences to aid comprehension. Student *interest* is also critical in prelistening. If a teacher selects materials that interest students, or the activities are designed in such a way as to arouse student interest, then attention levels will be higher and comprehension enhanced.

Chastain (1988) notes four factors that tend to increase student motivation: 1) students should be interested in the content of the material, 2) students should have a specific purpose in mind as they listen, 3) students should have a specific task to accomplish, and 4) students need to feel they have the abilities necessary for completing the assignment without undue difficulties (201). The preview should

have a communicative *purpose* for the listening activity. For example, an assignment explained and given in the target language is a listening activity with a real communicative purpose. Finally teachers should assign *specific and realizable tasks*: “Prior to listening to the passage, students should know the topic that is treated, the specific information they should be listening for, and the exact task they are to perform” (202).

*Listening Tasks.* Richards (1983) identifies and describes eight common listening task types. These include *matching* or *distinguishing*, in which students choose a response in either written or pictorial form that corresponds to what was heard; *transferring*, in which students receive information in one form and transfer the information into another form, such as a teacher describing the clothes a person is wearing, and the students sketching the person; *transcribing*, in which students simply write down what was heard; *scanning*, in which students have to extract selected items by scanning the input for specific information; *extending*, in which students go beyond the information provided, such as providing a conclusion to a story; *condensing*, in which students reduce what was heard to an outline of the main points; *answering*, in which students answer questions based on the information provided (the questions may require recall, deduction, evaluation or reaction); and *predicting*, in which students have to guess outcomes, causes, relationships, etc. based on what was heard.

*Postlistening Activities.* These involve giving students feedback on their performance on the listening tasks as well as additional practice in which students use what they have learned in new contexts.

In summary, there are many choices a teacher must make in helping students improve their FL listening abilities. Attention must be given to behavioral objectives, teaching materials, and the design of listening activities. I have attempted to touch upon the most important considerations relative to listening pedagogy. The focus of Chapter 4 is to examine the suitability of IAV to listening pedagogy and to propose a conceptual framework for the development of IAV lessons designed to enhance FL listening ability.

## Chapter 4

## LISTENING PEDAGOGY AND INTERACTIVE VIDEO

As was stated in the Introduction, the primary goal of this paper is to advance a conceptual framework for the development of interactive video lessons designed to enhance students' FL listening abilities. The impetus behind the articulation of this framework is the desire to provide FL teachers with rational, step by step instructions to guide their use of the LIBRA<sup>12</sup> Interactive Video Authoring Program. In this chapter, I will first review the research dealing with IAV in FL teaching, secondly, I will examine the suitability of IAV to listening pedagogy as outlined in Chapter 3, and thirdly, I will propose a step by step guide to be used in the creation of IAV lessons. Although examples will be drawn from the LIBRA program, the conceptual framework is applicable to any program with similar multi-media and programming capabilities.

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<sup>2</sup>LIBRA is the title used for the IAV authoring system being developed at Southwest Texas State University by a project team consisting of James Champion (Spanish), Michael Farris (Programmer/Curriculum Designer), Robert Fischer (French), and Ingeborg McCoy (German), and consultants William Fletcher (U.S. Naval Academy), Janet Swaffar (University of Texas) and John Underwood (Western Washington University). Funding for the project has been provided by the Fund for the Improvement of Post-Secondary Education or FIPSE.

### Research Base for Interactive Video in Foreign Language Education

In recent years much has been written concerning the potential of IAV in the development of FL proficiency. Nevertheless, relatively few IAV materials have been produced and even fewer empirical studies have been conducted to test their effectiveness. What follows is a brief summary of the research conducted on the effectiveness of IAV in FL education.

While supported by the Fund for the Improvement of Post-Secondary Education (FIPSE), the McKay Institute Videodisc Project at Brigham Young University (BYU) produced and tested three separate IAV packages: *Montevidisco*, *Macario*, and *Dígame*.

In an initial report by Schneider and Bennion (1983), developers suggest that using *Montevidisco* materials can “provide highly motivating course segments for second language learning” (41). Furthermore, they conclude that highly interactive and entertaining videodiscs would result in “retaining young language learners . . . and . . . [would] greatly enhance the quality and appeal of the language courses of the future” (46). Unfortunately plans for more formal research were halted when funding was reduced and the project was dissolved. Gale (1989) suggests that the claims made by Schneider and Bennion may be valid, but adds that scores on standardized

tests were not significantly affected by the use of *Montevidisco*. Gale notes, however, that significant advantage in test scores were not expected due to the minimal amount of exposure to the IAV (1989, 243).

Prior to the development of *Montevidisco*, a feature-length Spanish-language film entitled *Macario* was transferred to videodisc format and integrated into a number of intermediate Spanish classes. The goal was to help students develop listening-comprehension skills, notice culturally appropriate cues and to recognize the symbolism, metaphor, and analogy used in the film (Gale 1989, 236). Four different studies were conducted with *Macario* IAV, each yielding similar results. IAV groups consistently outperformed traditionally taught students by statistically significant margins. It was initially believed that the difference in performance may have been due to the IAV treatment group's access to the English soundtrack. Interestingly, however, they found that less than 10% of the students used the English soundtrack. Furthermore, those who relied heavily on the English version performed lower than their counterparts who interacted exclusively with the Spanish videotext. Gale (1989) concludes that the difference in scores were attributable 1) to the learners increased degree of control over the flow of information on the videodisc, and 2) to the "inseparable nature of the symbolism, metaphor, and analogy that the teachers had wanted students to notice from the scope and content of the filmic materials themselves" (239).

Like *Macario*, *Dígame* is a videodisc repurposed from the BBC television production *Dígame*. In this study, three different treatments of identical material were used. The first group was exposed to “personalized interactive video” (PIV), the second “classroom interactive video,” which involved teacher intervention, and the third group to traditional instruction. Final test results revealed that “all interactive video treatments were significantly better than the traditional approach, but that none of the IAV treatments was significantly better than another” (Gale 1989, 246).

Bush and Crotty (1989) indicate that IAV learners involved in a seven-week immersion program for senior military officials using the *VELVET* IAV program “increased their average score on oral interviews from a 0+ to a 1” on the Defense Language Institute (DLI) oral proficiency rating scale (83). The report, however, was lacking details concerning the nature of the research design. Therefore, it is difficult to identify specific advantages accrued through the use of IAV in this case.

The DLI and National Security Agency’s involvement in the development of *VELVET* demonstrates government interest in IAV for the purpose of teaching FLs. This fact is further evidenced in the IAV research and development at the U. S. Air Force Academy in Colorado and the U. S. Naval Academy in Maryland. The results of three studies, conducted at the Air Force Academy, will be addressed here.

Schrupp, et al. (1983) conducted a project of limited scope in which IAV was not integrated into the entire course. Three treatment groups were tested on their

retention and comprehension of a film segment lasting 12 minutes. The results indicate “an advantage for IAV presentation over more conventional methods” (Bush and Crotty 1989, 83).

In another study by Crotty (Bush and Crotty 1989), a comparison of IAV and traditional classroom presentation yielded results which were not statistically significant. This study was also very limited, as only two class sessions (90 minutes of instruction) were involved. Crotty notes, however, that the “videodisc group outperformed the classroom group by a margin of 8% on posttest measure covering general comprehension as well as discrete vocabulary and grammar items” (Bush and Crotty 1989, 83).

Verano (1989) indicated in his study that the scores of the IAV instruction group were significantly higher than all other groups. The results were consistent with the findings of the *Montevidisco* project in which students who used the video in an interactive manner outperformed those who viewed the video in an unsegmented linear fashion. Verano concludes that “interaction, a concept that includes the element of practice, is most likely the factor that best accounts for the superior results of the interactive videodisc instruction group” (254).

A number of other IAV projects have been conducted, from which no research data have been reported to date. Among these are the Annapolis Interactive Video Project (Rivera-La Scala 1989) which has recorded satellite broadcasts of TV

segments to create a series of videodiscs for instructional purposes, several of which have been used for Spanish instruction at the U. S. Naval Academy; The Language Learning Disc (Rubin 1989), which has been used at the Defense Language Institute in a pilot program; The Colloquial Korean Interactive Video Project (Kim 1987), which is a joint project involving both Brigham Young University and the National Cryptologic School, and is designed to improve learners' listening comprehension skills; and the Athena Language Learning Project (ALLP) at MIT (Murray, Kramersch and Morgenstern 1985; Murray, Morgenstern and Furstenberg 1989), which incorporates IAV, audio and artificial intelligence in the instruction of German, French, Spanish and English as a Second Language.

Based on the limited research available, there are two conclusions which can be drawn with relative certainty concerning IAV. First, interactivity is very important. In other words, segmented, student-controlled viewing of video material appears to be superior to ordinary linear viewing: "The fact that a student may proceed at a pace appropriate to his own level and learning speed and can approach the material in the sequence that he himself feels to be most profitable is perhaps one of the most important advantages [of IAV]" (Scott, Jolly, and O'Brien 1989, 57).

Secondly, student interest and motivation seem to be increased, perhaps resulting in increased retention. Students are generally willing to invest more time with IAV than with conventional presentation modes. Underwood (1989) adds:

with hypermedia, human involvement is clearly central. . . . It is safe to assume that a learner thus actively and personally engaged in his own learning experience will retain more and retain it both longer and more deeply. (18-19)

The truth is, however, as Underwood later admits, that “we don’t know what effects such systems will have, and we won’t know until they are in widespread use” (1989, 19).

#### Suitability of Interactive Video to Listening Pedagogy

The primary advantages of IAV over classroom listening activities include the following interrelated abilities: 1) student control of the video, 2) the ease of integrating different types of media, and 3) the ability to branch into activities which suit the needs of the individual.

*Student Control.* When using video materials such as a soap opera, in a classroom setting, a teacher might provide key information about two characters who will be engaged in a conversation; this is done as a prelistening activity. If a particular student, however, has failed to understand an important part of the information provided, the student will not be sufficiently prepared to deal with the listening task until the gap in his understanding is corrected. The student could raise her hand and request that the teacher repeat or clarify what had been said, although

this is unlikely for affective reasons. Even if the student requests clarification, there are probably other students with differing gaps in understanding. Therefore, although the teacher meets the needs of the one, others may still require attention. Practically speaking, addressing the needs of each individual in a class can be overwhelming, if not impossible, within the constraints of the language classroom.

IAV, on the other hand, is student controlled and therefore inherently able to meet the needs of the individual. In the scenario described above, the student using IAV could return to the prelistening activity again and again if needed, focus on the specific information required for completion of the listening task, and proceed without disrupting the work of other students, effectively lowering the student's affective level.

Because IAV is student controlled, students will inherently spend more time practicing those skills that are most difficult for them. If, for example, a student is having difficulty with an activity designed to practice "guessing the meanings of words from the contexts in which they occur" (conversational listening micro-skill #12, see Appendix I), the IAV program allows the student to spend as much time as necessary to complete the respective task, while the classroom unfortunately can not typically afford the student that luxury.

Student control over the learning environment increases the opportunity for individual student needs to be met, for the lowering of the student's affective level,

and for student motivation to be increased because students “feel that they have the abilities necessary for completing the assignment without undue difficulties”

(Chastain 1988, 201).

*Multi-Media Capability.* In addition to the advantages of a student controlled learning environment, IAV allows for the use of a variety of media, including both audio and video. Any audio taped recordings can be digitized and integrated into the IAV lesson. Video taped material can also be integrated into a variety of forms, including laserdisc and digitized video formats. In other words, IAV is not limited to a choice between audio and video, but can easily integrate both. Very few video programs exist which are specifically designed for pedagogical purposes. IAV, however, allows the teacher to draw upon video produced for native audiences and exploit it pedagogically in a language learning context, opening up a whole world of teaching materials.

*Linking and Branching.* Prelistening, listening tasks, and postlistening activities are easily integrated and linked together. By linking I am referring to the ability to create “hot spots” or “buttons” on the computer screen, that, when clicked on, take the student to a related activity or resource. Although a teacher can answer individual questions and carefully sequence listening activities to enhance comprehension, linking allows the student to access any part of the video, additional activities, such as comprehension checks, and other resources virtually

instantaneously. As students encounter tasks with which they have difficulty, they can be directed into a series of postlistening activities which provide additional practice in that particular skill, or they can return to the relevant prelistening activity to reinforce their preparation and then come back to the listening task.

Branching differs somewhat from linking. Typically, branching is used in conjunction with feedback on student performance. IAV makes it possible to branch a student into a series of activities based on the response the student has given to a particular question. For example, if a student responds correctly to a question, the lesson can be programmed to branch the student into a series of activities requiring new skills. If the student responds inaccurately, she can be led into a series of remedial activities and then redirected back to the original listening task, allowing the student another opportunity to answer. Branching possibilities include textual responses, replay of the relevant video or audio segments, redirection to a different but related listening task, textual instructions regarding cultural or linguistic items encountered in the listening text, etc.

IAV thus provides some advantages over classroom listening practice which simply cannot be overlooked. How then does a teacher actually create an IAV lesson? Until recently the answer would have been: “Learn to program computers!”, a task very few teachers have the time to accomplish. McCoy (1990) writes:

Ideally, there should be a continuum that leads from recognition of ideas and words to active synthesis of concepts and vocabulary.

Unfortunately, however, most FL instructors lack the opportunity and training to create video-related learning tasks of this nature. (25)

With the advent of authoring programs like LIBRA, however, the prospect of language teachers creating their own IAV programs has become much more reasonable. Nevertheless, just as well designed homes cannot be built without accurate blueprints, neither can effective IAV lessons be created without reliable instructions. The following is an attempt to provide such instructions to aid teachers in writing their own IAV listening lessons.

### Mapping of Interactive Video Lessons

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<sup>3</sup>All examples are taken from “*Die Dame aus Amsterdam: An Interactive Listening Activity in German*” ©1992 by Ingeborg McCoy and Eric Paul Rogers, created with the LIBRA Authoring Program.

*Step #1-Select a Videodisc.* The primary considerations in selecting a videodisc are student *interest* and *familiarity*. For example, the videodisc *Die Dame aus Amsterdam*<sup>14</sup> (The Woman from Amsterdam) is written in a genre familiar to most students--the detective series. It involves intrigue and romance, both appealing and interesting to most students. By choosing a videodisc written in a familiar genre or dealing with familiar topics, the teacher allows students to utilize their knowledge of conventions to make sense of what they are hearing. Choices of genre might include romance, fable, adventure, or factual reporting.<sup>15</sup>

*Step #2-Segment the Videodisc into Lessons.* Although the overall length of the videodisc is not critical, it is important to segment the video into workable units

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<sup>4</sup>Available from PICS/The University of Iowa, 262 International Center, Iowa City, IA 52242, 1-800-373-PICS. *Die Dame aus Amsterdam* is the first videodisc produced from the German television series Derrick broadcast over ZDF (*Zweites Deutsches Fernsehen*). Stephan Derrick is a police inspector trying to solve crimes and catch criminals in and around Munich. Although *Die Dame aus Amsterdam* is the only episode from the series currently available on videodisc, PICS has expressed intent to produce videodiscs with other episodes from the same series. The price for one 60 minute videodisc is approximately \$120.

<sup>5</sup>For a more detailed description of genre around which the LIBRA Authoring Program was developed see "Report: Applications of the LIBRA Program Developed at Southwest Texas State University" by Janet Swaffar, University of Texas at Austin, 1992. Available from the author at EPS 3.102, Department of Germanic Languages, The University of Texas at Austin, Austin, Texas 78712.

around which lessons can be constructed. *Die Dame aus Amsterdam* is a sixty minute episode, but was divided at logical breaks into five segments. McCoy and Rogers (1992) felt that approximately twelve minutes of video presented a workable amount of material around which individual lessons could be constructed.

*Step #3-Identify Key Characters in Each Lesson.* Having divided the entire video into workable units or lessons, the next step is to identify those characters who play an important role in each lesson. Although some characters may not have any lines, they may still play a critical role in the overall narrative. Remember the advantage of video over audio for FL students: It allows them to draw upon visual as well as linguistic clues. This will be a basic element of the prelistening activities.

*Step #4-Identify Key Scenes in Each Lesson.* Key scenes are those in which something is said or done which is critical to the development of the narrative. For example, lesson 1 of *Die Dame aus Amsterdam* was divided into four scenes, each scene occurring in a unique locale: reception desk, bar, hotel room, and telephone booth. This division into scenes will provide material for prelistening activities.

*Step #5-Identify Key Words and Phrases in Each Scene.* Identify words and phrases which may be new, unfamiliar, or critical to the ideas expressed in each scene. For example, in Lesson 1 of *Die Dame aus Amsterdam* the term *Riesensache* (big deal) recurs several times and always in relation to the murder of the private detective named Hufland. *Riesensache* is a term students are not likely to be familiar

with, but is critical to the plot. The teacher needs to identify these kinds of words so that the listening activities can be designed in such a way as to encourage comprehension. The identification of key words and phrases will form the basis of the listening tasks in step #7.

*Step #6-Identify Student Competence and Select Behavioral Objectives.* The teacher must write the lessons with a clear vision of her students' level of competence. Their level of competence will determine which behaviors are to be developed. For beginning students, the focus will be primarily those behaviors which deal more with *perception*, such as the ability to discriminate among the distinctive sounds of the target language (conversational listening micro-skill #2, Appendix I), to recognize the rhythmic structure of the language (micro-skill #4), or to distinguish word boundaries (micro-skill #8), while the focus of lessons for more advanced students would deal more with *utilization* such as the ability to distinguish between literal and implied meanings (micro-skill #26), or to recognize markers of coherence in discourse, and to detect such relations as main idea, supporting idea, given information, new information, generalization, and exemplification (micro-skill #28).

*Step #7-Design Listening Tasks.* Design listening tasks for each scene that focus student attention on the key characters, words, and phrases identified in steps #4 and #5 and which require the behaviors listed in step #6. Select task types (e.g.

matching or distinguishing, transferring, transcribing, scanning, extending, condensing, answering, predicting) which are congruent with the type of behaviors being developed. For example, in *Die Dame aus Amsterdam* the authors identified the woman's room number as a key word in step #5, selected the ability to discriminate among the distinctive sounds of the target language as a behavioral objective in step #6, and chose matching or distinguishing as the task type which best suited the behavioral objective in step #7. The listening task required that the student then watch the "reception" scene and match the number heard with one of three similar, but unique written forms. Concrete examples of various listening tasks will be illustrated in the section of this chapter entitled: Creating the IAV Lesson.

*Step #8-Select Appropriate Feedback.* Students may provide correct, incorrect, or partially correct responses to the listening tasks. If the student responds correctly, she should be given the choice of how to proceed. The options are numerous, but might include moving to the next listening task, reviewing the video, returning to prelistening activities, exiting to another lesson, or quitting the program. However, if the student answers incorrectly or responds with a partially correct answer, she should be redirected back to the task with the options of reentering prelistening activities, accessing other helps, or simply reviewing the relevant video text.

For teachers developing IAV software, it is estimated that a sixty minute videodisc requires approximately 2-3 hours of viewing time for segmentation into lessons. Segmentation requires viewing the entire video to identify natural breaks in the narrative, and recording the beginning and ending frame numbers of each lesson. Similarly, the identification of key scenes in a ten minute lesson requires approximately 20-30 minutes of viewing to note logical breaks and record the respective frame numbers. At this point the teacher has viewed the first lesson segment at least twice, thus making the identification of key characters, words, and phrases relatively easy. It is estimated that steps #4 and #5 require an additional 30-40 minutes of viewing time. The design of listening tasks is probably the most time intensive element of the lesson mapping process. It is difficult to estimate the amount of time needed, due to the number of variables involved. One scene may have only three listening tasks, while another may have over ten. Generally, the number of listening tasks within a scene is commensurate with the density of language used in the scene. It is estimated, however, that the creation of a single listening task requires 5-20 minutes (including the selection of appropriate feedback), or perhaps even longer. However, as the teacher becomes more familiar with the process of task writing, the time required will likely decrease. Therefore, assuming an average of 5 listening tasks per scene, and 5 scenes per lesson, it would require approximately 195-350 minutes to complete all of the lesson mapping steps for the

first lesson, and 75-170 minutes for each subsequent lesson using the same videodisc. However, use of the lesson mapping process by FL teachers unfamiliar with these steps is required for an accurate assessment of the time required to design lessons.

Appendix C is a worksheet designed to allow teachers to make pedagogical choices and to “map out” the pedagogical design of the IAV lessons prior to sitting down at the computer. Pedagogical choices are made during the lesson mapping process, while computer programming choices are made at the computer. In order to clarify the transfer of the lesson map (Appendix C) to the actual IAV lesson, selected examples from *Die Dame aus Amsterdam* will be used.

### Creating the IAV Lesson

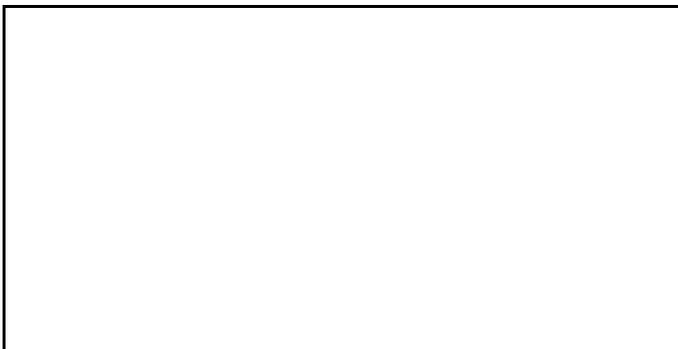
The first step in transferring the lesson map to the computer is the creation of the *Character Schema* (see Figure 1). The character icons are linked to video events. As the student clicks on “Alina Bradley,” for example, she is directed to a short video clip of that character. The student, therefore, is familiarized with the characters before performing any listening tasks.

In addition, a prelistening activity is designed around the character schema in which the students describe the characters by choosing from a list of adjectives (see Figure 2). This type of prelistening activity encourages students to make use of visual cues and to begin to form impressions of the characters.

The second step in transferring the lesson map to the computer is the creation of the *Scene Schema*, which utilizes the information from step #4 of the lesson mapping. This is a graphic representation of the key events found in the lesson. It is designed to provide the student with further background information to aid comprehension. In *Die Dame aus Amsterdam* four key scenes are identified. Each corresponds with a specific locality, and each is titled accordingly (see Figure 3).

The scene icons are linked to video events. As a prelistening activity the student identifies the characters who appear in each scene (see Figure 4). The student is introduced to relationships between characters, and may begin to make inferences regarding the roles played by each.

The character and scene schemata carry the burden of preparing the student to make sense of the video text, the same role played by prelistening activities in the classroom. These schemata, however, are always at the student's fingertips. They can be accessed immediately at any point in the lesson simply by clicking on the respective icons at the bottom of the computer screen (see Figure 5).



After the teacher has created prelistening-type activities around the character and scene schemata, she can proceed to the writing of listening tasks. These tasks are the product of decisions made in step #5, #6, and #7 of the lesson mapping. The sequence of tasks within each scene should encourage top-down processing; movement should be from macro-concepts to micro-concepts; meaning should come first and linguistic form second. For example, in scene 1 of *Die Dame aus*

*Amsterdam* the authors wanted to focus student attention on the room number of Alina Bradley which later plays an important role in understanding relationships between characters; this was a key word scene 1. The authors also wanted students to practice listening carefully in order to distinguish the between words and sounds and to maintain that information in short-term memory. Two tasks were therefore designed for scene 1. The first focuses on meaning and the task type *answering* was chosen (see Figure 6).

The second task focuses on linguistic form and employs *matching* (see Figure 7). If the student selects an incorrect match, she is given a textual message suggesting that she consider how the various options might be said in English. For example, would one say “room one, two, two, eight” or “room twelve, twenty eight”? The student is then prompted to view the scene again. In other words, when an incorrect answer is given, the post listening activities attempt to refocus student attention and better prepare her, in this case, to distinguish the sounds of the target language. If the student responds correctly, she would be prompted to move on to the next task, scene or lesson. For example, the concluding task of lesson 1 in *Die Dame aus Amsterdam* involves the synthesis of the scenes and a prediction regarding the opening of lesson 2 (see Figure 8).

<p>These examples illustrate a simple application of listening pedagogy to IAV including: the use of prelistening activities to provide students with background information and aid comprehension; the careful structuring of listening tasks to facilitate the development of productive listening skills and stimulate the kind of top-down processing employed by successful listeners; and the use of postlistening</p>

activities which facilitate remediation and continued progress, through a variety of forms of feedback. The illustrations given above, however, are not reflective of all questions and exercise types. In Appendix D a more detailed selection of examples from McCoy and Rogers' *Die Dame aus Amsterdam: An Interactive Listening Activity in German* is given.

By mapping out the lesson according to the steps outlined in this chapter, the teacher is able to create a lesson based on rational and pedagogically sound decisions. If these decisions are not made prior to sitting down at the computer, the teacher risks being distracted by programming considerations. Separating pedagogy from programming will save a great deal of time and effort, and will tend to maintain the integrity of the instructional design.

## Chapter 5

### CONCLUSIONS

The intent of this thesis has been to articulate a conceptual framework for the development of interactive video lessons designed to enhance FL listening ability. In concluding, I would first like to first make an observation about the separation of pedagogical design and programming mentioned at the conclusion of the previous chapter, with specific reference to the development of the authoring system used to create the IAV lesson by McCoy and Rogers.

If the pedagogical experts using an authoring system pay too much attention to the constraints of the most recent version of an authoring system under development, their creativity is reduced, resulting ultimately in the detriment of the program. If, however, the pedagogical experts create new teaching ideas, free from consideration of the authoring system design, they create an opportunity for the authoring program to be improved. Teachers thus need to let their imagination and their understanding of pedagogical principles guide their design of lessons, and place the burden of how to make the computer do what they want it to on the programmer. In my experience, a good programmer made the computer do most everything we

teachers wanted it to do. Had pedagogical ingenuity been hampered by perceived constraints, the authoring system would not have evolved to the extent that it has.

The collaboration between the teacher and the programmer in the creation of the LIBRA authoring program is an example of a seldom achieved, but significant success. The LIBRA project has been a virtual model of cooperation and teamwork between the teacher and the programmer. The limited amount of quality CALL (computer assisted language learning) software currently available can be directly attributed to the fact that such software requires both pedagogical and computer programming expertise. Both bodies of knowledge are seldom possessed by one individual. And, even when they are, the time-intensive nature of programming ordinarily precludes the teacher from creating any software. Additionally, in the university ranks, professors seeking tenure do not receive the same recognition for the publication of computer software as they do for professional journal articles and books. Therefore, few computer materials are developed. The LIBRA project has demonstrated how quality software, involving both sound pedagogical and outstanding technological design, can be developed through a cooperative effort between language teachers and programmers.

Secondly, I would like to make an observation regarding the effectiveness of the proposed framework for IAV lessons. The real test of the software lies in its effectiveness in achieving the desired objectives. As was noted in the Introduction

and in Chapter 4, much has been written concerning IAV's potential in the development of FL skills. Nevertheless, very few IAV materials have been produced and even fewer empirical studies have been conducted to test their effectiveness.

A number of challenges face researchers interested in studying the effectiveness of IAV. The first challenge is to make both the hardware and software widely available because in order to study effectiveness, one must first have and use the IAV materials. However, the cost of hardware and software is still prohibitive for many. A possible solution to the high cost of videodisc players and television monitors, however, is the consolidation of the media into a single unit. This is becoming increasingly inexpensive with technological advances in digitized video, which can be stored on a compact disc (CD) or on a hard drive. Most institutions with educational computers will have CD-ROM drives and hard drives capable of utilizing digitized video.

Related to the high cost of IAV workstations is the unavailability of videodiscs and software. As revealed in the studies cited previously, researchers have often had to produce their own videodiscs and software. The product, then, is often limited to in-house use, creating a real barrier to expansion beyond the institutions where they are developed. A possible solution for the lack of videodiscs is the repurposing of existent video: "experiences with Macario suggest that there is

value in ‘retrofitting’ existing filmic footage, although the process is laborious without appropriate authoring software” (Gale 1989, 247). Even if appropriate videodiscs are available the lack of authoring programs remains a stumbling block, although the production, widespread integration, and testing of LIBRA is an important step in overcoming this problem.

Finally, most empirical studies on IAV are very general in nature. They fail to focus on the effectiveness of IAV in the development of specific skills. Studies need to be conducted which look at the impact of IAV on specific modalities, such as listening, and skills within those modalities. Simply looking at oral proficiency interview scores, as is common practice in the studies cited in this paper, does not reveal what it is about IAV that “works.” Looking at specific skills will allow us to use IAV for those purposes for which it is best suited, and pursue other more effective avenues for other skills and modalities. The data collecting capability of the computer makes it a particularly valuable research tool in this regard. The computer can identify the choices a student makes as she interacts with the IAV lesson by tracking and recording key strokes and mouse clicks made by student. The ability to map student choices will allow correlations to be drawn between listening tasks, student behavior within those tasks, and the development of specific listening skills. This is the next logical step in the development of the conceptual framework here presented.

Figure 1  
APPENDIX A  
Listening Skills

*Micro-Skills: Conversational Listening*

1. ability to retain chunks of language of different lengths for short periods
2. ability to discriminate among the distinctive sounds of the target language
3. ability to recognize the stress patterns of words
4. ability to recognize the rhythmic structure of the language
5. ability to recognize the functions of stress and intonation to signal the information structure of utterances
6. ability to identify words in stressed and unstressed positions
7. ability to recognize reduced forms of words
8. ability to distinguish word boundaries
9. ability to recognize typical word order patterns in the target language
10. ability to recognize vocabulary used in core conversational topics
11. ability to detect key words (i.e., those which identify topics and propositions)
12. ability to guess the meanings of words from the contexts in which they occur

13. ability to recognize grammatical word classes (parts of speech)
14. ability to recognize major syntactic patterns and devices
15. ability to recognize cohesive devices in spoken discourse
16. ability to recognize elliptical forms of grammatical units and sentences
17. ability to detect sentence constituents
18. ability to distinguish between major and minor constituents
19. ability to detect meanings expressed in differing grammatical forms/sentence types (i.e., that a particular meaning may be expressed in different ways)
20. ability to recognize the communicative functions of utterances, according to situations, participants, goals
21. ability to reconstruct or infer situations, goals, participants, procedures
22. ability to use real world knowledge and experience to work out purposes, goals, settings, procedures
23. ability to predict outcomes from events described
24. ability to infer links and connections between events
25. ability to deduce causes and effects from events
26. ability to distinguish between literal and implied meanings
27. ability to identify and reconstruct topics and coherent structure from ongoing discourse involving two or more speakers

28. ability to recognize markers of coherence in discourse, and to detect such relations as main idea, supporting idea, given information, new information, generalization, exemplification
29. ability to process speech at different rates
30. ability to process speech containing pauses, errors, corrections
31. ability to make use of facial and paralinguistic clues to work out meanings
32. ability to adjust listening strategies to different kinds of listener purposes or goals
33. ability to signal comprehension or lack of comprehension, verbally and non-verbally

*Micro-Skills: Academic Listening (Listening to Lectures)*

1. ability to identify purpose and scope of lecture
2. ability to identify topic of lecture and follow topic development
3. ability to identify relationships among units within discourse (e.g., major ideas, generalizations, hypotheses, supporting ideas, examples)
4. ability to identify role of discourse markers in signaling structure of a lecture (e.g., conjunctions, adverbs, gambits, routines)
5. ability to infer relationships (e.g., cause, effect, conclusion)
6. ability to recognize key lexical items related to subject/topic
7. ability to deduce meanings of words from context

8. ability to recognize markers of cohesion
9. ability to recognize function of intonation to signal information structure (e.g., pitch, volume, pace, key)
10. ability to detect attitude of speaker toward subject matter
11. ability to follow different modes of lecturing: spoken, audio, audio-visual
12. ability to follow lecture despite differences in accent and speed
13. familiarity with different styles of lecturing: formal, conversational, read, unplanned
14. familiarity with different registers: written versus colloquial
15. ability to recognize irrelevant matter: jokes, digressions, meanderings
16. ability to recognize function of non-verbal cues as markers of emphasis and attitude
17. knowledge of classroom conventions (e.g., turn taking, clarification requests)
18. ability to recognize instructional/student tasks (e.g., warnings, suggestions, recommendations, advice, instructions)

## APPENDIX B

### ACTFL Proficiency Guidelines for Listening

The 1986 proficiency guidelines represent a hierarchy of global characterizations of integrated performance in speaking, listening, reading, and writing. Each description is a representative, not an exhaustive, sample of a particular range of ability, and each level subsumes all previous levels, moving from simple to complex in all “all-before-and-more” fashion.

Because these guidelines identify stages of proficiency, as opposed to achievement, they are not intended to measure what an individual has achieved through specific classroom instruction but rather to allow assessment of what an individual can and cannot do, regardless of where, when, or how the language has been learned or acquired; thus, the words “learned” and “acquired” are used in the broadest sense. These guidelines are not based on a particular linguistic theory or pedagogical method, since the guidelines are proficiency-based, as opposed to achievement-based, and are intended to be used for global assessment.

The 1986 guidelines should not be considered the definitive version, since the construction and utilization of language proficiency guidelines is a dynamic, interactive process. The academic sector, like the government sector, will continue

to refine advances of the profession. In this vein, ACTFL owes a continuing debt to the creators of the 1982 provisional proficiency guidelines and, of course, to the members of the Interagency Language Roundtable Testing Committee, the creators of the government's Language Skill Level Descriptions.

These proficiency guidelines are the product of grants from the U.S. Department of Education.

#### General Descriptions-Listening

These guidelines assume that all listening tasks take place in an authentic environment at a normal rate of speech using standard or near-standard norms.

Novice-Low	Understanding is limited to occasional words, such as cognates, borrowed words, and high-frequency social conventions. Essentially no ability to comprehend even short utterances.
Novice-Mid	Able to understand some short, learned utterances, particularly where context strongly supports understanding and speech is clearly audible. Comprehends some words and phrases for simple questions, statements, high-frequency commands and

courtesy formulae about topics that refer to basic personal information or the immediate physical setting. The listener requires long pauses for assimilation and periodically requests repetition and/or a slower rate of speech.

Novice-High	Able to understand short, learned utterances and some sentence-length utterances, particularly where context strongly supports understanding and speech is clearly audible. Comprehends words and phrases from simple questions, statements, high-frequency commands and courtesy formulae. May require repetition, rephrasing and/or a slowed rate of speech for comprehension.
Intermediate-Low	Able to understand sentence-length utterances which consist of recombinations of learned elements in a limited number of content areas, particularly if strongly supported by the situational context. Content refers to basic personal background and needs, social conventions and routine tasks, such as getting meals and receiving simple instructions and directions. Listening tasks pertain primarily to spontaneous

face-to-face conversations Understanding is often uneven; repetition and rewording may be necessary.

Misunderstandings in both main ideas and details arise frequently.

Intermediate-Mid      Able to understand sentence-length utterances which consist of recombinations of learned utterances on a variety of topics. Content continues to refer primarily to basic personal background and needs, social conventions and somewhat more complex tasks, such as lodging, transportation, and shopping. Additional content areas include some personal interests and activities, and a greater diversity of instructions and directions. Listening tasks not only pertain to spontaneous face-to-face conversations but also to short routine telephone conversations and some deliberate speech, such as simple announcements and reports over the media. Understanding continues to be uneven.

Intermediate-High      Able to sustain understanding over longer stretches of connected discourse on a number of topics pertaining to

different times and places; however, understanding is inconsistent due to failure to grasp main ideas and/or details. Thus, while topics do not differ significantly from those of an Advanced-level listener, comprehension is less in quantity and poorer in quality.

**Advanced**                      Able to understand main ideas and most details of connected discourse on a variety of topics beyond the immediacy of the situation. Comprehension may be uneven due to a variety of linguistic and extralinguistic factors, among which topic familiarity is very prominent. These texts frequently involve description and narration in different time frames or aspects, such as present, nonpast, habitual, or imperfective. Texts may include interviews, short lectures on familiar topics, and news items and reports primarily dealing with factual information. Listener is aware of cohesive devices but may not be able to use them to follow the sequence of thought in an oral text.

**Advanced Plus**                      Able to understand the main ideas of most speech in a standard dialect; however, the listener may not be able

to sustain comprehension in extended discourse which is propositionally and linguistically complex.

Listener shows an emerging awareness of culturally implied meanings beyond the surface meanings of the text but may fail to grasp socio-cultural nuances of the message.

Superior

Able to understand the main ideas of all speech in a standard dialect, including technical discussion in a field of specialization. Can follow the essentials of extended discourse which is propositionally and linguistically complex, as in academic/professional settings, in lectures, speeches, and reports. Listener shows some appreciation of aesthetic norms of target language, of idioms, colloquialisms, and register shifting. Able to make inferences within the cultural framework of the target language. Understanding is aided by an awareness of the underlying organizational structure of the oral text and includes sensitivity for its social and cultural references and its affective overtones. Rarely misunderstands

but may not understand excessively rapid, highly colloquial speech or speech that has strong cultural references.

Distinguished

Able to understand all forms and styles of speech pertinent to personal, social and professional needs tailored to different audiences. Shows strong sensitivity to social and cultural references and aesthetic norms by processing language from within the cultural framework. Texts include theater plays, screen productions, editorials, symposia, academic debates, public police statements, literary readings, and most jokes and puns. May have difficulty with some dialects and slang.

## APPENDIX C

## IAV Lesson Mapping Worksheet

*Step #1-Select a Videodisc*

Explain rationale for using this video:

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*Step #2-Segment the Videodisc into Lessons*

<u>Lesson Number</u>	<u>Length of Lesson (min.)</u>	<u>Begin Frame</u>
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Figure 1 <sup>6</sup>End Frame

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Figure 1 Each frame on the videodisc is numbered. When programming you will identify lessons and scenes by their respective beginning and ending frame numbers.

*Step #3-Identify Key Scenes in Each Lesson*

LESSON#      TitleBegin FrameEnd Frame

Scene 1 \_\_\_\_\_

Scene 2 \_\_\_\_\_

Scene 3 \_\_\_\_\_

Scene 4 \_\_\_\_\_

*Step #4-Identify Key Characters in Each Lesson*

LESSON#      Name or DesignationBegin Frame

Figure 1 <sup>7</sup>End Frame

Character 1 \_\_\_\_\_

Character 2 \_\_\_\_\_

Character 3 \_\_\_\_\_

Character 4 \_\_\_\_\_

Character 5 \_\_\_\_\_

---

Figure 1 Select a video clip which shows the character and, if possible, shows the character speaking so the students link the sound of the voice to the character.

*Step #5-Identify Key Words and Phrases in Each Scene*

LESSON#

Scene 1 \_\_\_\_\_

\_\_\_\_\_

Scene 2 \_\_\_\_\_

\_\_\_\_\_

Scene 3 \_\_\_\_\_

\_\_\_\_\_

Scene 4 \_\_\_\_\_

\_\_\_\_\_

*Step #6-Identify Student Competence and Select Behavioral Objectives*

LESSON#      SCENE#

Behavioral Objective 1 \_\_\_\_\_

Behavioral Objective 2 \_\_\_\_\_

Behavioral Objective 3 \_\_\_\_\_

Behavioral Objective 4 \_\_\_\_\_

Behavioral Objective 5 \_\_\_\_\_

*Step #7-Design Listening Tasks*

LESSON#    SCENE #

TASK# 1

-Key Word/Phrase (from list in step #5)\_\_\_\_\_

-Behavioral Objective (from list in step #6) \_\_\_\_\_

-Task Type (matching or distinguishing, transferring, transcribing, scanning,  
extending, condensing, answering, or predicting)\_\_\_\_\_

Describe the Task:\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## APPENDIX D

Listening Tasks from *Die Dame aus Amsterdam*:*An Interactive Listening Activity in German*

The following figures illustrate listening tasks from Lesson 1 of *Die Dame aus Amsterdam: An Interactive Listening Activity in German*, by McCoy and Rogers. They are divided and labelled by scene and task number, and correspond to the Scene Schema shown in Figure 3 (p. 47).

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## WORKS CITED

- Asher, J. J. 1969. "The Total Physical Response Approach to Second Language Learning," *The Modern Language Journal* 53: 3-17.
- Branvold, D., L. Li Chang, G. Probst, and J. Bennion. 1986. "Effectiveness of the Interactive Videodisc Workstation in Use in the English Language Center at Brigham Young University," *CALICO Journal* 4(2): 25-39.
- Brindley, G. P. 1982. *Listening Proficiency Descriptions*. Sydney: Adult Migrant Education Service.
- Bush, M. D. and J. Crotty. 1989. "Interactive Videodisc in Language Teaching," pp. 75-96 in W. F. Smith ed., *Modern Technology in Foreign Language Education: Applications and Projects* Lincolnwood, IL: National Textbook Company.
- Byrnes, H. 1984. "The Role of Listening Comprehension: A Theoretical Base," *Foreign Language Annals* 17: 317-29.
- Byrnes, H. 1985. "Teaching toward Proficiency: The Receptive Skills," pp. 77-107 in A. C. Omaggio ed., *Report of the Northeast Conference on the Teaching of Foreign Languages--Proficiency, Curriculum, Articulation: The Ties that Bind*.

- Chastain, K. 1988. *Developing Second-Language Skills: Theory and Practice*. 3rd ed., San Diego: Harcourt Brace Jovanovich.
- Dunkel, P. A. 1986. "Developing Listening Fluency in L2: Theoretical Principles and Pedagogical Considerations," *The Modern Language Journal* 70: 99-106.
- Gale, L. 1989. "Macario, Montevideo, and Interactive Dígame: Developing Interactive Video for Language Instruction," pp. 235-48 in W. F. Smith ed., *Modern Technology in Foreign Language Education: Applications and Projects*, ed. W. F. Smith, Lincolnwood, IL: National Textbook Company.
- Kim, W. C. M. 1987. "The Colloquial Korean Interactive Videodisc Project," *CALICO Journal* 4(4): 71-81.
- Krashen, S. D., T. D. Terrell, M. E. Ehrman, and M. Herzog. 1984. "A Theoretical Base for Teaching Receptive Skills," *Foreign Language Annals* 17:261-75.
- Long, D. R. 1989. "Second Language Listening Comprehension: A Schema-Theoretic Perspective," *The Modern Language Journal* 73: 32-40.
- Long, D. R. 1991 "Listening Processes and Authentic Texts,"
- Lund, R. J. 1990. "A Taxonomy for Teaching Second Language Listening," *Foreign Language Annals* 23: 105-15.

- McCoy, I. R. 1990. "Overcoming the Teacher/Technology Gap: Authentic Video Texts in Foreign Language Instruction," *IALL Journal of Language Learning Technologies* 23(1): 25-36.
- O'Malley, J. M., A. U. Chamot, and L. Küpper. 1989. "Listening Comprehension Strategies in Second Language Acquisition," *Applied Linguistics* 10: 418-37.
- Reese, L. G., J. N. Eastmond and R. Sutherland. 1988. "Integrated Use of Videodisc for Intensive Spanish Language Learning," *CALICO Journal* 6(1): 69-81.
- Richards, J. C. 1983. "Listening Comprehension: Approach, Design, Procedure," *TESOL Quarterly* 17: 219-39.
- Rivera-La Scala, G. M. 1989. "The Annapolis Interactive Video Project," pp. 257-61 in W. F. Smith ed., *Modern Technology in Foreign Language Education: Applications and Projects* Lincolnwood, IL: National Textbook Company.
- Rubin, J. 1989. "LLD: The Language Learning Disc," pp. 269-75 in W. F. Smith ed., *Modern Technology in Foreign Language Education: Applications and Projects* Lincolnwood, IL: National Textbook Company.
- Saint-Léon, C. B. 1988. "The Case for Authentic Materials on Videodisc," *CALICO Journal* 6: 27-40.
- Schneider, E. and J. Bennion. 1983. "Veni, Vidi, Vici Via Videodisc: A Simulator for Instructional Conversations," *System* 11: 41-6.

- Schrupp, D. M., M. D. Busch and G. A. Mueller. 1983. "Klavier im Haus: An Interactive Experiment in Foreign Language Instruction," *CALICO Journal* 1(2): 17-21.
- Scott, T., Y. Jolly and N. O'Brien. 1989. "Interactive Videodisc in Computer-Assisted Language Learning: A Communicative Project," *System* 17: 49-60.
- Sutherland, R. 1986. "Inexpensive Use of the Videodisc for Proficiency: An Attempt to Link Technology and Teachers," *CALICO Journal* 4: 67-80.
- Underwood, J. 1989. "HyperCard and Interactive Video," *CALICO Journal* 6(3): 7-20.
- Ur, P. 1984. *Teaching Listening Comprehension*. New York: Cambridge University Press.
- Watts, C. and A. Pickering. 1991. "Can Interactive Video Promote Communication Outside the Classroom?," *CALICO Journal* 8: 43-7.
- Winitz, H. 1978. "Comprehension and Language Learning," pp. 49-56 in C. H. Blatchford and J. Schachter eds., *On TESOL '78: EFL Policies, Programs, Practices*. Washington, DC: TESOL.
- Wipf, J. A. 1984. "Strategies for Teaching Second Language Listening Comprehension," *Foreign Language Annals* 17: 345-48.

## Figure 1

### VITA

Eric Paul Rogers was born in Newport Beach, California, on July 5, 1965, the son of Frances Louise Rogers-Weeks and Steven Ward Rogers. He attended Flathead High School, Kalispell, Montana and graduated from Beech Senior High School, Hendersonville, Tennessee. In 1983 he entered Brigham Young University in Provo, Utah. From 1984 to 1986 he served as a full-time missionary in the Germany Munich Mission of the Church of Jesus Christ of Latter-day Saints. After returning from his missionary service he enrolled again at Brigham Young University. While at BYU he taught German and supervised training at the Missionary Training Center of the Church of Jesus Christ of Latter-day Saints and in the Department of Germanic and Slavic Languages at BYU. In August, 1990, he received the degree of Bachelor of Arts. In August, 1990, he entered The Graduate School of The University of Texas where he has taught in the Department of Germanic Languages.

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