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Formulaic Language in Speech Fluency Development in English as a Second Language

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# **Formulaic Language in Speech Fluency Development in English as a Second Language**

A doctoral thesis submitted in partial fulfillment  
of the requirements for the degree of Doctor of Philosophy

Faculty of Education

University of Ottawa

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*Your file* *Votre référence*  
*ISBN: 0-494-11038-4*  
*Our file* *Notre référence*  
*ISBN: 0-494-11038-4*

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**Formulaic Language in Speech Fluency Development in English as a Second  
Language**

**David Wood, Faculty of Education, University of Ottawa**

**Abstract**

This thesis is an investigation of the role of formulaic language in second language (L2) speech fluency development, within a cognitive and information processing framework. Fluency has been studied and defined in terms of temporal variables of speech such as rate of speech, pause frequency and distribution, and the length of fluent runs between pauses. It has been suggested by several researchers that the key to fluency in spontaneous speech is mastery of a repertoire of formulaic language sequences, multi-word strings processed mentally as single words (Schmidt, 1991; Towell, Hawkins, and Bazergui, 1996; Chambers, 1998). If formulaic sequences are automatized or stored and retrieved as wholes from long term memory so as to allow longer lexical units to be produced within the limits of controlled processing (McLaughlin, Rossman, and McLeod, 1983; Kahnemann and Treisman, 1984; DeKeyser, 2001) and short term memory (Anderson, 1983; Baddeley, 1988), then they may facilitate spontaneous speech under the constraints of real time. The present study was designed to examine whether this could be so.

The study draws on a synthesis of research from three areas: *fluency* and its development in second language (L2) speech; *formulaic language*, multi-word lexical units which are stored and retrieved in long-term memory so as to be retrieved as wholes; *social and cultural factors* related to fluency development and formulaic language use, including first language and culture, voice, and identity. The research was interpreted in

light of psycholinguistic knowledge about mental processes underlying L2 speech production, particularly the growing evidence that formulaic language sequences are fundamental to fluent language production as they allow production to occur despite the restrictions of controlled processing and the constraints of short term memory capacity.

The hypotheses which frame the research centre around the idea that increased use of formulaic language units by learners over time facilitates the development of speech fluency as measured by temporal variables such as speech rate, pause phenomena, and the length of fluent runs occurring between pauses. Specifically, it was hypothesized that, with continued learning and experience, L2 speech would exhibit a faster rate of production, a greater proportion of production time spent speaking as opposed to pausing, longer runs between pauses, and that formulaic sequences would appear more frequently in the longer runs between pauses.

A repeated measures longitudinal study was conducted using data collected from eleven intermediate-level learners of English as a Second Language (ESL) over a six-month period. The learners were from three typologically different first language groups, Spanish, Japanese, and Chinese (Mandarin), and from both genders. Speech samples from these participants were collected once a month over the six-month period using retells of the narratives of short silent film prompts.

The data were analyzed for changes in temporal variables of fluency and the use of formulaic sequences, as hypothesized. Quantitative analysis of these results using repeated measures analysis of variance shows statistically significant fluency growth as measured by temporal variables, as well as a corresponding increase in use of formulaic language units. No significant effects of first language or gender were observed;

however, possible effects of social and cultural factors in the performances were explored for individual participants. A qualitative analysis of the ways in which increased use of formulaic language facilitated the growth in fluency in many cases showed that use of formulas was related to reductions in pause times and frequencies and to increased speech rate over time. It was also discovered that formulas were used in various ways to assist in the production of more fluent speech over time: self-talk or fillers in the discourse; repeated formulas or strings of formulas to extend runs; rhetorical devices to organize the discourse; repeated use of one particular formula throughout a retell.

The quantitative and qualitative results have implications for knowledge about fluency. It appears that the participants in this study did use formulaic sequences more as the temporal aspects of their speech indicated greater fluency over time. This implies that automatized formulaic sequences did in fact facilitate the development of speech fluency. Furthermore, the study sheds light on possible ways that use of formulas can facilitate change in temporal aspects of speech. As well, the study takes the methodology of the study of speech fluency in new and productive directions by using silent film prompts to elicit speech samples, by using participants from three typologically different L1's, by quantitatively linking formula use to temporal variables, and by examining how formula use facilitated fluency development as measured temporally.

## Chapter 1

### Introduction

Second language (L2) speech fluency is a language performance phenomenon which, while integral to effective communication and ability to thrive in an L2 milieu, is not particularly well understood by the language teaching profession. Unfortunately, many L2 learners grapple with the effects of inadequate fluency long after completing basic L2 study. As well, L2 teachers and assessors tend to bypass efforts to facilitate development of fluency and focus instead on language accuracy and a hope that input and practice will help learners to speak “more smoothly.” This may be due to the fact that fluency is a challenging construct whose psycholinguistic foundations and place in the language curriculum have not been investigated or discussed fully. The present study is intended to investigate the nature of fluency development in an effort to further our understanding of this important element of L2 performance, so instrumental for effective communication, yet so marginalized in the language curriculum. More specifically, it investigates the role of formulaic language and psycholinguistic processes in the development of speech fluency in a second language. The research is undertaken within a cognitive theory framework.

Research to date on fluency has largely focused on temporal variables of speech, namely, speech rate, repairs, amount and frequency of hesitation, location of pauses, and length of runs of fluent speech between pauses (Raupach, 1980; Möhle, 1984; Lennon, 1990A, 1990B; Riggensbach, 1991; Freed, 1995; Towell, Hawkins & Bazergui, 1996; Hansen, Gardner & Pollard, 1998). Some recent research indicates that a possible key to speech fluency lies in the mastery of a repertoire of formulaic speech units, multi-word strings or frames which are retrieved from

long-term memory as if they were single words (Nattinger and DeCarrico, 1992; Towell et al, 1996; Chambers, 1998; Wray, 2002). These multiword units include, among other categories, two-word collocations such as *good time*, or *first step*, phrasal verbs such as *run into*, or *come across*, idioms, routine expressions with social pragmatic functions such as *have a good day* or *how are you*, whole clauses, discourse markers such as *on the other hand* or *in summary*, and frames with fillable lexical slots such as *a (year/day/week...) ago* or *a (one/two/three...) step process*.

In cognitive theory, a number of key concepts help to explain how formulaic sequences can be learned and processed in the mind so as to facilitate fluent speech production. The following paragraphs outline these concepts, and for a more complete discussion see chapters two and three below.

A central distinction in cognitive theory is made between two types of knowledge, *declarative* knowledge and *procedural* knowledge. Declarative knowledge has been defined as knowledge of content and information, or as knowledge of things or as *what* is known. On the other hand, procedural knowledge is defined as knowledge of *how* to do or perform things, and it is the basis of skilled behavior. Connected to these two distinct types of knowledge is the concept of *automatization* or *proceduralization*, a process by which declarative knowledge may become procedural knowledge. In this process, declarative knowledge is transformed into procedural knowledge so as to enhance and speed up skilled performance and permit declarative knowledge of information and content to be used rapidly and efficiently in performance of skilled behavior (Anderson, 1983, 1993; Levelt, 1989). Given that formulaic sequences are multiword units which appear to be dealt with cognitively as single words, knowledge of formulaic sequences may be

automatized as single words are. This could allow expression to occur fluently under the constraints of time which real-life speech entails.

Research into how human memory operates also has yielded information which can help to inform research into mental processing of language. The concepts of *long term memory*, *short term memory*, and *working memory* are key in this. In dealing with language processing, long term memory is a storehouse of knowledge of all kinds about language, including lexis, syntactic and morphological rules, semantic information, and so on. For utterances to be produced, however, items must be extracted from long term memory to express the concepts required. According to Levelt's (1989) lexically-driven model of speech production, lexical items must be retrieved relevant to the intended expression, and the semantic, morphological, and syntactic rules applied to them, after which phonological rules need to be employed to create the utterance. This seemingly laborious process requires the use of short term memory. However, short term memory capacity in humans is restricted to holding at most seven or eight discrete items at a time, which would seem to make the construction of complex or lengthy sentences and utterances time consuming and almost impossible (Anderson, 1983). Formulaic sequences retrieved from long term memory as wholes can bypass the storage limit of short term memory, allowing many words to be held in short term memory rather than merely seven or eight single words at a time. *Working memory* (Baddeley, 1997; Gathercole and Baddeley, 1994), is proposed as the site of rehearsal, practice, and assembly of language sequences. Working memory may be key to automatization of language, specifically formulaic sequences, according to Anderson (1993). Anderson's model of automatization involves three types of memory, declarative, procedural, and working memory. According to Anderson (1993), automatization may develop over time as

chunks of language are separately taken from long term memory and assembled in working memory. Robinson (1995) outlines a similar process involving novel language to which learners are exposed, by which language input is converted into intake, or becomes part of language competence, as chunks of input are rehearsed in working memory. With repeated practice of this, the chunks may become part of the production rule and bypass declarative memory, or they may be retrieved directly from declarative memory without need for working memory.

The distinction between *controlled* and *automatic* processing is another important part of discussions about language processing. Controlled processing is a conscious, effortful process of selecting and organizing or manipulating language knowledge, using consciously learned rules and parameters. Word-by-word construction of a novel utterance under controlled processing would require following the steps outlined above in extracting lexical items from long term memory and applying rules to them using short term or working memory to create utterances. Conversely, automatic processing is a result of automatization of such knowledge, as well as automatic access to certain elements under given conditions. It is a fast, virtually effortless process which occurs below the level of the speaker's conscious awareness (McLaughlin, Rossman, and McLeod, 1983). Later models of controlled and automatic processing tend to see the two as more of a continuum than as two discrete systems, and that language production processes may be strongly, partially, or occasionally automatic or controlled, depending on aspects of the production situation (DeKeyser, 2001). On the other hand, memory-based models of retrieval and production such as Logan's (1988) instance theory hold that single-step memory retrieval is key. In such models, what appears to be automatization of a previously controlled process is in fact the replacement of a controlled process by holistic retrieval from long term memory. As instances of

processing and retrieval accumulate in memory over time, memory itself takes over from the processing task and a conscious, laborious and time-consuming task can be accomplished in a single step of remembering. In explaining how speech fluency occurs, it appears that some sort of automatic processing which involves the use of formulaic sequences may be essential to fluent speech production.

Cognitive theory can help explain how proceduralization or automatization happens. In information processing theory, the power of language input to drive the acquisition process is often emphasized. In connectionist models of human cognition, frequency of experience with stimuli such as language sequences increases the strength of mental connections between relevant features of the input and the categories to which they belong (Ellis, 2002; Rumelhart, Hinton, & McClelland, 1986). Thus, as one becomes more fluent in a language with increased exposure and experience with language input, one develops an implicit statistical awareness of the behavior of elements of language such as lexical items, formulaic sequences, phonology, morphology, syntax, as well as discourse aspects. According to Ellis (2002: 144), frequency of experience with language input is the key determinant of acquisition because structural regularities such as lexical choices, including formulaic sequences, and rules of language emerge from a learner's long-term analysis of the distributional characteristics of language input.

Also important in discussions of the power of input frequency are consciousness and awareness (Schmidt, 1990, 1993). Schmidt proposes that noticing or awareness of aspects of input is key to acquisition, and that noticing formal or lexical features of input causes input to be converted to intake. It is possible that noticing or awareness of aspects of input such as formulaic sequences, like single words, is the first step in a process of acquisition based on frequency and

strengthening connections between elements of language and the categories to which they belong. In short, it may be that language acquisition and automatization are largely driven by frequency of input and noticing and awareness of how words and patterns and sequences are used.

In fluent speech production, lexical items, including multi-word formulaic sequences are likely automatized, meaning they are retrieved from long-term memory so as to be used with less need for conscious effort or control. Short-term or working memory use is reduced or the lexical units processed therein are larger and multi-word. Research on formulaic language units, which are increasingly recognized as constituting a large part, perhaps most of everyday spontaneous speech, has rich potential for helping to explain how spontaneous speech can occur under the heavy processing and time constraints of real-life discourse (Weinert, 1995; Miller and Weinert, 1998; Skehan 1998; Wray and Perkins, 2000). It appears that a great part of everyday spontaneous speech is formulaic (Pawley and Syder, 1983).

A gap exists within the current body of knowledge about fluency between the work focusing on temporal correlates of fluency and that which describes formulaic sequences and infers their role. There is a need for empirical investigation into how formula automatization might contribute to fluency.

This study investigates fluency development and formula automatization by linking developments in the temporal aspects of learner speech with learners' use of automatized formulas. Speech samples from English L2 learners were collected over a 24-week period and were analyzed to determine their fluency growth as measured by changes in key temporal variables such as speech rate, hesitation phenomena, and mean length of runs. The speech samples were elicited by means of short silent animated films which the learners viewed, then recounted in

English. Their use of automatized formulas was studied, as it related to changes in temporal variables. Statistical analysis of the measures for each temporal variable was conducted to determine significant development of learners' fluency. Fluency development was examined in relation to increased use of formulaic language. Comparison of the speech samples for the same film prompt at two different points in time yielded comparable exemplars of speech situations in which the use of formulas could be related to increased fluency.

## Chapter 2

### Review of Literature

An overview and synthesis of research on fluency in second language speech is first presented in order to define the construct and determine what elements of language proficiency are most relevant to fluent speech production. This research falls into four large categories: temporal variables of speech; the nature and functions of formulaic language; automatization and mental processing in language production; social and cultural aspects of fluency.

### Defining Fluency

*Fluency* is a term frequently used to describe oral language performance, yet it is often only vaguely defined, if at all, and may be used as a substitute for a cluster of aspects of proficiency. Despite this lack of precision in use, the construct of fluency has been defined and studied in the language learning field, and has been a subject of theoretical and empirical inquiry. The body of literature concerning fluency has identified key temporal variables of speech which can be linked to psycholinguistic aspects of performance and production. It has become increasingly clear over the past twenty years that spoken fluency in a second language is largely a function of a speaker's pauses and hesitations both in temporal terms and in terms of their appropriate links with discourse pragmatics and structure.

In general parlance, fluency is often used as a synonym for effective spoken use of a language. It is frequently used to mean "native-like," having a high overall degree of proficiency, or having a "good command" of a language. In the language teaching profession, fluency is generally more tightly defined. We tend to use the word to mean a naturalness of flow of speech, or speed of oral performance. Explorations of fluency have ranged from studies of speech and

thinking processes (Chafe, 1980), to studies of production and temporal aspects of speech (Dechert, 1980; Möhle, 1984; Raupach, 1980, 1984). As well, in the second language literature, fluency and accuracy are often distinguished (Schmidt, 1992), and fluent speech is sometimes seen as not necessarily being representative of good linguistic competence (Sajavaara, 1987). Indeed, the development of the construct of communicative competence, integral to the evolution of teaching methodology through, in part, the communicative approach, has done much to further awareness of aspects of language performance beyond the merely grammatical. Bachman (1990), in a highly developed model of communicative competence and language proficiency drawing on earlier work by others, notably Canale and Swain (1980), gives equal weight to pragmatic/sociolinguistic and strategic aspects of competence as to grammatical and textual aspects, expanding the notion of communicative competence to include non-linguistic realms of knowledge and skill which contribute to spoken language performance. The concept of fluency has likewise developed to include elements of performance beyond just accuracy of syntax, lexis and phonology. Based on a body of work in recent decades, discourse coherence and cohesion, conversational pragmatics, sensitivity to register and idiom, and communication strategies are all considered integral parts of overall proficiency and, by association, fluency. It appears that fluency is influenced by a broad range of competencies.

Just as classroom teachers need a clear concept of fluency, so do those involved in the assessment of spoken language. Research on proficiency testing has grappled with identifying fluency, and the growth of performance-based testing over the years has necessitated a clearer definition of oral fluency. If oral performance is to be assessed, fluency is a key area of ability which needs to be pinned down to specific proficiency criteria and levels. The Government of

Canada Second Language Oral Interview assessment (1983), using criteria largely based on Foreign Service Institute descriptions, lumps fluency together with accuracy in the descriptors of proficiency levels, together with pronunciation, grammar, and vocabulary. The descriptors dealing with proficiency levels referred to speed, hesitation, and “groping for words” (p. 25). Fluency came to be defined more fully over time. Fulcher (1996) refers to recent fluency scales which attempt to identify six levels, discriminating among number and frequency of pauses in speech, and, more importantly, positioning and perceived purpose of pauses (Fulcher, 1996: 50, 51). As shall be seen later, this refined scale of fluency levels is evidence of how far we have come in our understanding of what fluency is and how temporal variables in second language speech are seen to link with underlying psycholinguistic mechanisms and elements of competence.

Defining fluency as distinct from other aspects of oral proficiency repeatedly leads us back to temporal variables in speech, such as speed, pauses, hesitations, and fillers. It is speed and pauses which receive the greatest attention in the general literature on fluency. Lennon (1990B: 391) states that fluency is distinct from other aspects of proficiency precisely because it is a purely performance-based variable:

Fluency differs from the other elements of oral proficiency in one important respect: whereas such elements as idiomaticness, appropriateness, lexical range, and syntactic complexity can all be assigned to linguistic knowledge, fluency is purely a performance phenomenon, there is presumably no fluency “store.” Rather, fluency is an impression on the listener’s part that the psycholinguistic processes of speech planning and speech production are

functioning easily and efficiently. Dysfluency markers, as it were, make the listener aware of the production process under strain (Lennon, 1990B: 391).

While Lennon's characterization of fluency as a strictly performance-based phenomenon does not account for apparent disfluency, which is often due to the pressures of complex thinking and decision-making about *what* to say in certain situations, or variable individual fluency due to task pressures or different knowledge domains or genres, it does shed light on important aspects of fluency as it has been studied in empirical research. This purely performance-based view of fluency allows measurement through marking of temporal variables, but it is difficult to analyze or explain since it has no direct link to a body of knowledge or set of rules in language competence.

In fact, fluency has been defined as "automatic procedural skill" (Schmidt, 1992: 358-359), meaning that it is speech produced at a speed and ease which requires little or no effort or attention. It is characterized by the fact that "the psycholinguistic processes of speech planning and production are functioning easily and efficiently" (Lennon, 1990B: 391). Schmidt (1992: 358-359) goes on to state that fluency depends on procedural knowledge, or knowledge of how to do something, not declarative knowledge, or knowledge about something. Schmidt makes a further distinction between procedural knowledge and procedural skill, placing fluent speech in the latter category, since it clearly has more to do with the actual performance of something in real time than the knowledge of how to do it (359). Rehbein (1987) would seem to agree in part with Schmidt, asserting that "fluency of speech means that uttering and planning/controlling are to be executed at least partly simultaneously." (Rehbein, 1987: 99) A similar concept is treated by Levelt (1989), whose model of speech production requires that various processes involved in speech work more or less in parallel with each other. But before examining the psycholinguistic

definitions of fluency and speech production, it is important to review the empirical work on fluency and look at the variables studied, particularly those which appear to correlate the most strongly with fluency.

### Temporal Variables

Empirical research focusing on fluency has generally involved the elicitation of a speech corpus and analysis of its temporal and qualitative aspects. Some studies have attempted to link clusters of performance variables with rater assessments of fluency (Lennon, 1990; Riegenbach, 1991; Freed, 1995); others have compared first and second language speech performance (Deschamps, 1980; Raupach, 1980), or conducted longitudinal examinations of the development of aspects of second language spoken fluency (Dechert, 1980; Towell, 1987; Lennon, 1990A; Hansen et al, 1998). Across all of the studies of spoken fluency and its development, there has been a remarkable degree of agreement on the types of temporal variables to be tracked.

Over the several decades during which oral fluency has been studied empirically, there has been a growth and development in the corpus size of data analyzed, and more varied sources of oral performance under different discourse conditions, but the variables have remained largely consistent. The earliest such studies involved having one or two learners retell stories, and the results were analyzed for a limited set of performance variables, such as speech rate and the number and duration of pauses. Prime foci in these studies were the comparison of first and second language speech (Deschamps, 1980; Raupach, 1980), and the comparison of speech performance in a second language before and after a stay abroad (Dechert, 1980). Later research continued the story retell procedure and often used limited numbers of subjects, but included interviews as well. Elicited speech came to be analyzed in greater depth in these studies; while

speech rate and pause features continued to be the temporal variables most quantified, qualitative interpretation of the data focused on possible speech planning strategies (Raupach, 1984) and the use of formulaic speech and its relation to underlying planning procedures (Dechert, 1984; Lennon, 1984). In other studies from the mid-to-late 1980's, researchers analyzed speech using the same types of temporal variables, but interpreted the results with reference to transfer of production strategies from the first language (Möhle, 1984; Faerch and Kaspar, 1989); Möhle and Raupach, 1989). In the 1990's, the temporal variables which were used to analyze the corpus of elicited speech were retained, but there was a greater variety in the purposes and construction of the studies. During this time cognitive theory began to influence the studies. For example, introspective studies of immersion language learners attempted to determine the extent of improvement in automatization of lexical items including formulaic sequences (Lennon, 1989), and elicitation tasks included story retell and informal conversation to determine the effect of task on performance (Lennon, 1990B). Some research used native speaker judges to rate the fluency level of second language speakers, then compared the ratings to microanalyses of the temporal variables in the speech samples (Riggenbach, 1991; Freed, 1995). Other research compared the speech performance on a range of tasks of learners, native speakers, and attriters of a language (Hansen et al, 1998), in an effort to determine how fluency develops or can diminish over time under various circumstances.

Examining the variables used in the key studies will help to clarify what constitutes an empirical correlate of fluency, and which of these variables seem most relevant to the study of fluency development.

Möhle (1984), in a study of comparison of the spoken texts of German students of French and French students of German, analyzed the texts using four temporal variables which are now common in the literature:

- 1) *Speech and articulation rate*, i.e. the average number of syllables spoken per minute during recording time and the average number of syllables articulated per second during net speaking time, excluding silent pauses.
- 2) *length and position of silent pauses*
- 3) *length and quality of speech units*, i.e. the string of syllables or words between two silent pauses
- 4) *number, type, and position of hesitation phenomena in the text*, such as filled pauses (euh, hmm, and other articulations used to bridge the gaps between pauses), draws, repetitions, and self-corrections. (Möhle, 1984: 27)

In a longitudinal study of the fluency development of a British student of French, Towell (1987) used a set of four temporal variables related to those of Möhle:

- 1) *Speaking rate*: normally expressed in syllables per minute and calculated by dividing the total number of syllables produced by the total time taken to produce the utterance (including pause time) and multiplying the result by sixty. It allows comparisons of how much time it takes to formulate and produce the speech.
- 2) *Articulation rate*: normally expressed in syllables per second and calculated by dividing the total number of syllables produced by the amount of time taken to produce them (not including pause time). This measure gives an indication of the speed at which speech is being produced.

- 3) *Pause/time ratio*: gives the percentage of time spent speaking as a proportion of the whole.
- 4) *Lengths of runs between unfilled pauses*: this is the mean (or median) number of syllables between unfilled pauses of no less than 0.2 seconds. (Towell, 1987: 123, 124).

In his study of German students of English in the United Kingdom, Lennon (1990B) took a qualitative approach to the study of fluency, using ten native speakers to rate the fluency of the subjects and analyzing the texts for markers of fluency. At the beginning of a six-month stay, then again at the end, subjects were asked to retell a picture story. Judges made global decisions on their fluency according to twelve criteria:

- 1) words per minute unpruned
- 2) words per minute pruned

“Pruned” in this study refers to the deletion of words which were repeated, were asides, addressed to the interviewer, or self-corrections.

- 3) repetitions per t-unit
- 4) self-corrections per t-unit
- 5) filled pauses per t-unit

T-units were defined as “one main clause and all its attendant subordinate clauses and non-clausal units”

- 6) % of repeated and self-corrected words
- 7) total unfilled pause time
- 8) total filled pause time as % of total

Filled pauses were non-words, three vocalizations represented as “er,” “erm,” and “mm.”

- 9) length of runs between pauses
- 10) % of t-units followed by a pause
- 11) % of total pause time at t-unit boundaries
- 12) mean pause time at t-unit boundaries

(Lennon, 1990B: 406).

A large multivariate study of fluency development was conducted by Riggenbach (1991) with six Chinese students of English. In this case, a taped dialogue was analyzed for five fluency-related variables, and judged by native speakers for global fluency. Riggenbach’s selection of fluency variables differed somewhat from those in the previously described studies:

- 1) hesitation phenomena
  - hesitation
  - unfilled pause
  - filled pause
- 2) repair phenomena
  - retraced restart (including part of the original utterance)
  - unretraced restart (original utterance is rejected)
- 3) rate and amount of speech
  - rate (syllables uttered per minute)
  - amount (total number of syllables produced)
  - percent of speech native speaker/non-native speaker
  - percent of turns native speaker/non-native speaker

## 4) interactive phenomena (by non-native speaker)

- backchannels (encouragement)

- echo (repetition)

- questions

- repair initiation

- laughter particles

## 5) interactive features

- latch (speaking immediately upon the end of previous turn)

- overlap

- gap

- collaborative completion (one speaker tries to complete another's sentence)

In a similar study Freed (1995) examined the speech of thirty native English speaking students of French, and had native speakers globally rate their fluency. Half her subjects spent one semester abroad in France, while the other half continued French study at home in the United States. In the analysis of fluency-related features she focused on seven points:

- 1) amount of speech

- 2) rate of speech

- 3) unfilled pauses

- 4) filled pauses

- 5) length of fluent runs between pauses

- 6) repairs

- 7) clusters of disfluencies

In looking at empirical correlates of fluency across recent studies, it is obvious that researchers have had a high degree of agreement on the relevant temporal variables. Amount, rate of speech, repairs, pauses, and the length of runs between pauses are common elements of analysis in such studies. These are discussed in turn below.

#### Amount of Speech

Data elicited in empirically-based fluency research relating to increases in the amount of speech produced has generally not been shown to be related to other measures of fluency. Only a few studies have included measures of amount of speech produced as part of a list of features to quantify.

Riggenbach (1991) included a raw measurement of the amount of speech produced by six Chinese university students of English in the United States. The subjects participated in a taped dialogue with a native speaker, and a five-minute segment of the corpus was analyzed for fluency markers: hesitation phenomena, repair phenomena, rate and amount of speech, interactive phenomena and interactive features. The samples were also evaluated for global fluency by a panel of native speaker judges. All semantic units were counted, including filled pauses and partial words. Quantitative analysis showed virtually no significant difference between amount of speech produced between subjects rated as highly fluent and those rated as having low fluency, despite the fact that other fluency markers did show a difference.

Freed (1995) also looked at this variable with her thirty American students of French. Half the group spent a term in France, while the other half stayed home. The speech of the two groups was compared on an oral interview based on the ACTFL/ILR (American Council for the Teaching of Foreign Languages / Inter-language Round Table) Oral Proficiency Interview; a

microanalysis of fluency was conducted and a panel of native speaker judges evaluated their fluency. One of Freed's measures of fluency was amount of speech, calculated as frequencies of non-repeated words or semantic units. Amount of speech turned out not to show any statistical significance in discriminating among levels of fluency, although other temporal variables did show statistically significant differences.

### Rate of Speech

Many more studies have focused on the speed or rate of speech as a feature of fluency. Measured as syllables uttered per minute or second, speech rates tend to increase over time along with certain other measures of learner fluency or to correlate with judges' perceptions of fluency. It is commonly believed that perceived fluency has to do with increased speed of speech, and the empirical studies generally tend to show that this is true. Measures of speech rate and articulation are relatively easy to link to fluency.

Möhle's 1984 study comparing the fluency of French and German language students was influential in its selection of temporal variables to be studied, among which speech and articulation rate featured large. Möhle calculated speech rate as the average number of syllables uttered per minute, and articulation rate as number of syllables produced per minute excluding silent pauses. She found that both speed indicators showed increases for German students of French, but that for French speakers of German as a second language, speech complexity, rather than speed, increased. Clearly, then, features such as speech rate tell only a part of the fluency story.

Towell (1987), in his longitudinal, four-year study of fluency development of a student of French, found a significant improvement in both speaking rate and articulation rate over time. In this study, speaking rate was calculated as syllables per minute, indicating how long it took to

formulate and produce speech. Articulation rate was calculated as syllables per minute excluding silent pauses, and was intended as a measure of the speed of actual production. Over the four years, the subject increased her speaking rate by 65%, and her articulation rate by 20%.

Lennon (1990A) (1990B), in his longitudinal study of fluency development in four German students of English, measured words per minute produced in tasks involving text retells and conversation. The data showed that speed of delivery was rather stagnant over the 23 weeks of the study. Interestingly, however, Lennon found that the speech of the subjects increased in complexity, and he attributes lack of speed increase to the greater processing burden of producing longer clauses and t-units.

Riggenbach's 1995 multivariate study of fluency in Chinese ESL students found that words per minute (semantic units) correlated with perceived fluency as rated by native speaker judges. Of the six subjects, words per minute ranged from a low of 102 per minute for the lowest rated, to 253 per minute for the highest rated.

Freed's 1995 study of the fluency effect of a term abroad for American students of French found that rate of speech was the only fluency measure to show a significant difference when the term-abroad group was compared to a control group who remained in the United States. Calculating speed as the number of non-repeated words or semantic units per minute of speech, Freed found that "not only was this the most salient of all the factors of fluency analyzed, it was also the most striking in listening to the differences in the pre and post samples of the Abroad students (Freed, 1995: 137)." The average number of words per minute for the "at home" group in her study was 83.7, while that for the "abroad" group was 115.2.

Using measures of speaking and articulation rate similar to those of Möhle (1984) as described above, Towell et al (1996) analyzed speech samples of twelve French students of English before and after a period of residence in Britain. The group as a whole increased in average speech rate from 136.61 syllables per minute to 156.88 syllables per minute. Articulation rate also increased, on average, from 3.85 syllables per second to 4.17 per second. Clearly, speech and articulation rates were important markers of fluency development in this study.

In an ambitious study measuring fluency acquisition and attrition in speakers and learners of Japanese, Hansen et al (1998) tracked words per minute as a measure of speech rate related to fluency. It was discovered that the mean number of words per minute increased over time for learners of Japanese. The reverse time effect was just as significant for attriters of Japanese, who had left Japan and were living in English in the United States without contact with Japanese. In story-retelling tasks, the attriters produced fewer words per minute over time.

From this survey of empirical research on speech rate as a marker of fluency, it appears that it is a fairly sound indicator. In most of the studies, speech and articulation rates increased with overall fluency or correlated well with evaluations of fluency, time spent learning the language, or composite measures of overall fluency. In Lennon's longitudinal studies (1990) speech rate failed to show significant improvement, but complexity of speech did improve. Similarly, Möhle (1984) found fluency improvements linked to speed increases in some groups of learners, but that complexity of language was a stronger fluency indicator for others. This is an important point to which we will return later in the discussion. It seems that speed gives us little information about the workings of fluency unless it is viewed in interaction with certain other variables.

### Repair Phenomena

In the fluency literature, many studies have tracked how learners self-correct and repeat or restart utterances. There is a focus on such repair phenomena in the empirical data from research on fluency, and the results are mixed.

Möhle (1984) paid some attention to repair phenomena in her influential study of German and French learners, noting briefly in her results that as other measures of fluency showed improvement, there were also “fewer linguistic signs which repeat or correct words or syllables already articulated” (Möhle, 1984: 44).

Lennon’s 1990 study of the speech performance of four Germans studying English in Britain looked at repetitions per t-unit, self-corrections per t-unit, and percent of repeated and self-corrected words over 23 weeks. Lennon found that the learners generally had fewer repetitions per t-unit as time passed, but that the number of self-corrections stayed fairly constant as did the overall percent of repeated and self-corrected words. Lennon concludes that this self-correction provides some useful information about fluency:

... certain sorts of self-correction, particularly those involving reformulation of discourse, do not make for perceived disfluency at all, and are a feature of certain sorts of fluent native-speaker performance. Indeed, that 3 of the 4 subjects had increased self-corrections per t-unit at week 23 may even suggest that part of fluency development in the advanced learner may involve increased ability to reformulate, monitor, and self-correct production on-line.

(Lennon, 1990B: 412, 413)

Other studies have drawn less positive conclusions about repairs and fluency indicators.

Riggenbach (1991) included an analysis of repair phenomena in her study of fluency development in Chinese learners of English. Riggenbach's measures of repair included counting retraced restarts and unretraced restarts:

*retraced restart* - reformulations in which part of the original utterance is repeated

-repetition - exact adjacent repeats of sounds, syllables, words or phrases

-insertion - a retraced restart in which new unretraced lexical items are added

*unretraced restart* - reformulations in which the original utterance is rejected (= "false start") (Riggenbach, 1991: 427)

The results showed a complicated pattern of repairs when comparing learners rated as highly fluent to those rated as less fluent. The subjects at the low end of the fluency scale in Riggenbach's group seemed to be rated less fluent for various reasons. One learner repaired frequently, but overmonitored and was rated as having low fluency due to other temporal features. Another low fluency subject rarely repaired and produced flowing speech, but had so many grammatical and syntactic inaccuracies, she was rated low by judges. From Riggenbach's research, we are left wondering how repair phenomena can link to fluency.

Freed (1995) also studied repair phenomena in her research on thirty American French students. In this research, four repair features were tracked:

- *repetitions* of exact words, syllables, or phrases...

- *reformulations/false starts* - repairs which suggest a decision to rephrase because the speaker perceives that the best form for the intended meaning was not originally selected...
- *corrections/grammatical repair* - specific correction of a structural feature...
- *partial repeat*: realized as a search for the appropriate form but distinct from a part of a false start... (Freed, 1995: 130)

The results indicated that the presence of repairs in nonnative speech was not particularly indicative of a lack of fluency. Generally, the group rated by judges as highly fluent, the “Abroad” group, displayed more repair markers in their speech than did the “at home” group.

Reformulations and repetitions were the two repair markers the fluent group used more (Freed, 1995: 140). Freed states that this may be a sign of greater linguistic sophistication:

There is a tendency for students who have been abroad, especially those whose speech is more advanced, to attempt linguistic expressions which they sometimes find don't work: they reformulate their speech producing more false starts than is evidenced in the speech of those who have never been abroad. (Freed, 195: 142)

It is possible that the enriched input to which such learners have been exposed, in addition to the varied interaction with native speakers, has given them a broader repertoire of language which will manifest itself at varying degrees of accuracy in speech. So far, it seems that repair phenomena in second language speech provide mixed and inconclusive information about competence and performance. It appears that while repair phenomena may have something to tell

us in qualitative terms about how fluency develops or occurs, repairs are only weakly linked in the literature with overall development of fluency.

### Pause Phenomena

The most complex and one of the most informative elements of fluency studied so far in empirical research involves pause phenomena. There are two aspects of pauses which have been studied, namely, frequency and location. It can be seen from a survey of the research that certain elements of pauses, particularly where they occur, can provide us with a great deal of information about the nature of fluency.

### Pause Times and Frequencies

Comparisons of the pause times and frequencies in first as opposed to second language speech have yielded some relevant results. Möhle (1984) looked at the length and number of silent and filled pauses in a study of French and German second language learners in cartoon descriptions and interviews. She found differences between the first and second language performance of the subjects in the number of pauses, but no great difference as regards length of pauses. Lennon (1984) had twelve German students of English retell a story from listening. Their performance was compared to a native speaker model, and it was found that there was a higher ratio of pause time to speech time in the performance of the second language speakers, due to more frequent and longer pauses.

Towell (1987) tracked pauses in the speech performance of a British learner of French over a four-year period. The only measure of pausing in the study was a calculation of total pause time as a ratio of total speaking time. The ratio improved 37% over the course of the study, meaning that total pause time reduced in relation to total speaking time.

Lennon (1990A) studied the pause time of the four German English students in his longitudinal research. He found that total unfilled pause time as a percentage of total speech decreased by an average of 25% in three of four subjects. Total filled pause time showed no significant change.

Riggenbach (1991) used four categories of pauses in her study of fluency development in four Chinese learners of English:

*micropause* - a silence of .2 seconds or less...

*unfilled pause* - a silence of .5 seconds or greater...

*filled pause* - voiced “fillers” which do not normally contribute additional lexical information

- a) nonlexical...fillers that are not recognized as words and that contain little or no semantic information
- b) sound stretches - vowel elongations of .3 seconds or greater...
- c) lexical...fillers that are recognized as words but in context contribute little or no semantic information (Riggenbach, 1991: 426)

The results indicated that unfilled pause frequency was an important discriminator between subjects rated as highly fluent and those rated as less fluent. In general, pause frequencies in total were higher for the less fluent subjects.

Freed (1995) also tracked unfilled and filled pauses in the speech of her American learners of French, comparing learners who spent a term abroad with those who stayed in the United States. She measured unfilled pauses not occurring at clause junctures, and filled pauses including “drawls” and sound stretches. She found some differences between the fluent group and the less

fluent group, in that the fluent learners had generally shorter and fewer silent pauses and filled pauses, although the total percent of speech time taken up by pauses was similar for both groups.

Hansen et al (1998), in their study of acquisition and attrition of Japanese among English-speaking learners and those who left Japan to live in English in the United States, found that the length of pauses was longer for students in early years of acquisition than in later years. It was also found that attriters paused longer in their Japanese speech the longer they lived in English outside of Japan.

The findings of previous research about the importance of pause times and frequencies tells us a great deal about speech fluency, particularly that related to the value of unfilled pauses. It appears that analyzing filled pauses yields mixed and inconclusive results.

So what does the information about pause times and frequencies tell us about fluency? It appears that length and frequency of pauses, be they filled or unfilled, is of some significance to fluency. These results do not, however, inform us about how fluency works or how it relates to psycholinguistic mechanisms of production. The empirical research on the positioning of pauses in speech is more important in this regard. To appreciate the significance of the placement of pauses, it is useful to combine a survey of empirical evidence with some explanations of why pauses occur where they do in fluent and non-fluent speech.

### Pause Location

Déchert (1980), in a study analyzing the speech performance of a German student of English who retold a story in English before and after a stay in the United States, found some importance in pause location. He noted that the second speech sample showed that pauses tended to be located at breaks corresponding to what are termed “episodic units,” or before and after

segments of a story which have specific narrative functions such as establishing setting, location, reaction, attempts, and so on. The more fluent second recording displayed more pauses at these junctures and fewer within the episodic units. Dechert notes that the subject was able to use the structure of the narrative to provide himself with natural breaks in which to search for words, phrases, and so on. (Dechert, 1980: 274)

Lennon (1984), in a comparison of second language learners' retelling of a story after listening to a native speaker model, found significant differences in pause distribution between first and second language narration. In the model narration, 100% of the pauses occurred at clause breaks or after non-integral components of the clause, with no pauses within clauses. The second-language narrators, however, showed different patterns, pausing frequently within clauses. Lennon concludes that they are "planning within clauses as well as in supra-clausal units." (Lennon, 1984: 61) It seems, then, that locating pauses within clauses and not at clause junctures is a discriminator between fluent and non-fluent speech.

A similar finding was reported by Deschamps (1980), in a comparison of students' performance in their first language, French, and in English, their second language. It was found that the second language speech showed more pauses within sentences, and even within verbal phrases:

A comparison between French L1 and English L2 shows an important decrease in the number of pauses at "end of S" for English L2, and a corresponding increase in "inside S"...hesitation phenomena marked by an increase in the number of pauses at non-grammatical junctures. (Deschamps, 1980: 261)

Deschamps finds not only an increase in pauses within sentences, but a decrease in pauses at the end of sentences.

Riggenbach (1991) noted that the pause locations in the speech of her six Chinese students of English gave some useful information about fluency. She remarks that the location of pauses had a significant effect on the perceived fluency of some subjects:

A number of the short pauses produced by high-group subjects...were considered native-like, because they occurred at junctures and often in isolation...for members of the low group, most of the regular unfilled pauses...occur in chunks of disfluencies...it is possible, therefore, that a high number of disfluency chunks in a NNS's (non-native speaker) speech may indicate low fluency...whereas a low number of disfluency chunks may indicate high fluency or proficiency. (Riggenbach, 1991: 431-32)

The location of pauses at clause junctures, and the avoidance of clustered pauses (disfluency chunks) seems to play a role in perceived fluency.

Freed (1995), in her study of American students of French, found a similar force at work in the pause distribution of highly fluent speakers as opposed to those rated less fluent. The presence of clusters of pauses in the speech of less fluent subjects is significant:

...the presence of pauses is not exclusively associated with a lack of fluency in a second language...the function of pauses in the context of discourse is as important as their frequency. ...a single pause might be accepted as normal or fluent...but clusters of such disfluencies create other impressions. (Freed, 1995: 138-139)

The location and the clustering of pauses, then, are much stronger indicators of relative fluency than the number or the duration of pauses.

One can conclude from the above that the location of pauses in speech is an important indicator of fluency. The clustering of pauses is a correlate of reduced fluency, and the syntactic location of pauses appears salient as well. Highly fluent second language speakers and native speakers tend to pause at sentence and clause junctures, or between non-integral components of clauses and clauses themselves. Pausing at other points within sentences and clauses gives the impression of disfluency.

What does this information tell us about speech production and the speaker's ability to juggle the cognitive processing loads which characterizes fluent and native-like speech performance? It has been posited that there is a pattern of pausing in first language speech performance which is a natural consequence of the weight of psycholinguistic processing needed to produce speech. Chafe (1980) states that first language speech occurs in "spurts" of two seconds, containing an average of five words. Pauses occur at these junctures, usually after a single clause, also marked by the intonation contour. Pawley and Syder (1983) state that the norm in native speaker production is to pause or slow down near clause boundaries generally after four to ten consecutive words, and only extremely rarely in mid-clause. In conversational speech in English, an average 270 to 300 syllables per minute are produced, and over 50% of fluent units are complete and grammatical clauses. It is uncommon to pause more than .5 seconds in mid-clause, generally for emphasis or to breathe. Pauses of less than two seconds are the norm for pauses at clause boundaries. The second language performances in the empirical studies reviewed indicate pause patterns which deviate from these native speaker norms.

Chafe (1980) conducted an influential study of the pause structures of native speakers retelling the story of a brief film. The speakers' performance exhibited common features having to do with attention focus and pausing. Chafe noted that sentence-final intonation indicated the shift between what he terms "focus clusters":

The majority of foci of consciousness are expressed in linguistic phrases or clauses which end in rising pitch contour...but approximately one-third of those in our data end instead with the kind of falling pitch contour interpreted as "sentence-final intonation." This conspicuous sentence-final contour, as well as various other criteria including the syntactic properties associated with a "grammatical sentence," define what I will call a "focus cluster." In other words, foci of consciousness appear to cluster together to form longer units which are verbalized as sentences. There are various kinds of coherence that bind the foci within such clusters together. (Chafe, 1980: 173)

Chafe goes on to note that the majority of pauses occur between focus clusters and not within them, and that the clusters themselves focus into "episodes," which act like paragraphs in oral production (Chafe, 1980: 176). Therefore, pauses serve a blend of rhetorical and syntactic functions in speech, as human consciousness and awareness activate small chunks of information and formulate speech to encode them. Second language speech is characterized by disfluent pause distributions likely because of the difficulty of the encoding.

Hieke (1981) sees hesitation and pauses in speech as a means of content and quality control. He states that they "serve as devices by the speaker to produce more error-free, high-quality speech." (Hieke, 1981: 150) He classifies pauses as serving either a stalling function, as in

silent or filled pauses, drawls, and so on, or a repair function, as in false starts. Presumably, second language speech is characterized by more of both sets of hesitation phenomena, occurring more frequently and within clauses, sentences, and focus clusters.

### Length of Fluent Runs

The final, and most important variable of speech associated with fluency is the size and quality of the runs of speech which occur between pauses. Together with the distribution of pauses, this feature not only serves as a discriminator of fluent and disfluent speech, it also provides us with a key to the means by which fluency development can be facilitated through instruction.

One of the earliest studies of temporal variables in second language speech is that of Raupach (1980), which includes useful data on the significance of the length of runs between pauses. When Raupach had French and German students tell a story in their first and second languages, the second language speech exhibited shorter runs between pauses, as expected. Möhle (1984) was another of the early fluency researchers to track the length of runs in an empirical study. Both the French and the German speakers in her study produced shorter runs between pauses in second language speech than in first language speech.

Towell's (1985) study of a British learner of French, involving analysis of speech samples over a four-year period, focused on length of runs between pauses. For the subject of this research, the mean length of runs increased a remarkable 95% over the first three years.

Lennon (1990B) noted that, in his study of the second language fluency development of four German students of English, their mean length of runs between pauses increased markedly in

three cases. Over 23 weeks, three subjects increased the mean length of runs by 20 to 26%. One subject exhibited a decline in the mean length of runs, perhaps due to methodological procedures.

Freed (1995), in her large study of fluency development in American students of French, also included length of runs in her analysis. She found no significant correlation between this feature and overall fluency ratings, but the raw data of her results indicate a trend in the direction of longer runs. Due to issues of complexity of language, two of the more fluent subjects in the study exhibited a mean length of runs equal to those of the less fluent subjects, a phenomenon which skewed the data somewhat. (Freed, 1995: 139,140)

Towell et al (1995) focused quite rigorously on mean length of runs in the speech of English learners of French. Mean length of runs did, in fact, increase over time in the productions analyzed in the study, although there was variation among the performances of the subjects.

The general consensus in these studies seems to be that mean length of runs between pauses is a significant indicator of fluency in a second language. Why is this so? The answer likely has to do with the need to balance skills, attention, and planning during speech, and the fact that advanced, fluent speakers and native speakers have a greater repertoire of automatized chunks of language to use to buy time in order to formulate the next sequence or phrase. In fact, an increasingly skillful blend of automatized chunks of formulaic strings and frameworks of speech, together with newly assembled strings of words, is thought by some to be what enables speakers to produce the longer runs between pauses which distinguish fluency.

As Chafe (1980) notes, fluent speech occurs in spurts, punctuated by pauses at meaning and syntactic junctures. The ability to perform in this way necessitates a facility in handling plans which often could compete for attention and “jam the system.” When this jamming happens, the

result is disfluent speech, characterized by slow speed, pauses at mid-clause, sentence, or phrase, and brief, incomplete or simplified language runs between pauses. Rehbein (1987:104) notes that “one may propose that fluency in a second language requires the capability of handling routinized complex speaking plans.” Routinized speaking plans are those plans which have become more or less automatized, that is, stored in long-term memory in such a way as to be easily pulled from a repertoire and encoded into speech. Simultaneous to the encoding and production of the automatized strings, the speaker must generate new words and constructions to encode the new or novel elements of the message.

This complex process needs to happen in real time, under all the temporal, perceptual, and contextual constraints which genuine oral communication entails. The planning which occurs in speech generation needs to be conducted on several levels. It was Lennon (1984:67) who, based on observation of learners completing a story retell task, noted a possible distinction between planning at the level of syntax, and planning at the lexical level:

The indicators are that planning is conducted on at least two levels:

- a) topic and overall syntax structure are planned in advance chunks, ideally identical with the clause/statement breakdown of the passage. In practice, however, the subjects are forced to break these units down still further...
- b) Planning at the level of lexical selection would appear to be on more of an ad-hoc basis. The self-corrections at this level would indicate the late stage at which this planning takes place.

The advance frames appear, then, to be generated early as frameworks within which concepts can be mapped, with the attendant lexical items, both single and multi-word, fitted in closer to the moment of articulation.

### Clause Chaining

The structures of discourse as to the way clauses are chained is another aspect of fluent speech which has been examined by Pawley and Syder (1983). Apparently, everyday speech of a fluent nature is characterized by strings of more or less independent clauses, with little grammatical integration with earlier or later clauses. Subordination, for example, is minimized in spontaneous speech (Pawley and Syder, 1983: 202-204). Pawley and Syder analyzed two stretches of native-speaker production to see how fluency relates to clause-chaining. One speaker, George Davies, produced speech in which fluent units were separate clauses:

/we had a /fan tastic time ---

[slows] (1.1)

/there /were/ all kinds of re/lations /there/

[accel] [slows ]

/I dun/no where they/all come /from/

[accel] [slows ]

I didn't know /'alf o' them --

[accel} (0.9)

and' ah - the kids/sat on the floor --

(0.2) (1.5)

and ol' Uncle Bert/he/ah

o<sup>3</sup>/course /he was the life and soul of the party

[accel] [slows ]

/Uncle /Bert 'ad a /black bottle ---

[accel] [slows ] (1.5)

an ah - 'e' d t/tell a/few stories

(0.2) [accel] [slows]

an 'e' d/take a /sip out of the /black bottle

[accel] [slows ]

n' the / more sips he /took /outa / that bottle –

[accel] (1.0)

the worse the /stories got ---

(1.6)

(Pawley and Syder, 1983: 203)

Another speaker, Q., produced comparatively nonfluent speech, in a PhD dissertation oral defence:

and it / seems to be –

[accel]

if a /word is/fairly -- /high on the frequency /list/ -

[slow] [accel]

I /haven't /made /any count -

[accel]

but - /just – im/pression istically – um

[slow]

um – the /chances are -

that you get a - com /pound -

[slow]

or - a /nother – phono /logically deviant - - form -

[slow]

with ah / which is al/ready in other /words

[accel]

[slow]

/which is /fairly frequent - ly the /same - /phono /logical

[accel]

[slows]

shape –

(Pawley and Syder, 1983: 201)

It appears from the pattern of his disfluencies that, unlike Davies, Q is planning only a few words at a time. It is conceptually novel discourse for him, and he has to think through the content while under stress. Q uses a clause-integrating strategy, which means each new clause is dependent on the structure of a previous one, for example, his struggle (false start or reformulation) of the final clause in the sample, beginning with “with,” repaired to begin with “which.” He has little choice, given the genre, register, and relative lack of interactivity in the context of his speech production. Davies, on the other hand, is speaking more spontaneously, and exhibits clause-chaining of independent clauses linked by ‘and,’ in most cases. Pawley and Syder state that this style is more effective in narrative than Q’s integrated style:

With the chaining style, a speaker can maintain grammatical and semantic continuity because his clauses can be planned more or less independently, and each major semantic unit, being only a single clause, can be encoded and uttered without internal breaks...we may speak, then, of “a one clause at a time *facility*” as an essential constituent of communicative competence in English: the speaker must be able regularly to encode whole clauses in their full lexical detail, in a single encoding operation and so avoid the need for mid-clause hesitations. (Pawley and Syder, 1983: 203,204)

Given this norm of clause-chaining in native-like conversational/narrative speech in English, a speaker should be able to encode whole clauses in order to avoid hesitations in mid-clause. The hallmarks of fluent speech include pauses at clause junctures and a certain length of speech runs between such pauses. The way to accomplish this seems to be the recall of most clauses as more or less intact, or automatically chained. Pawley and Syder assert that only a minority of spoken clauses are novel (Pawley and Syder, 1983: 205), and that memorized chunks form a high proportion of the speech of everyday conversation. As expected, the memorized sequences need little encoding. Since speech is therefore not produced word-for-word, the speaker can focus on rhythm, variety, combining memorized chunks, or producing creative connections of lexical strings and single words.

#### Transfer and Strategies in Fluency Development

Evidence of transfer of aspects of fluency can bear out this distinction between the two types of processing and knowledge. Raupach (1980) found that, when French and German subjects were compared when speaking in their first language and in a second language, they

tended to transfer a preference for silent or filled pauses from the first language into the second.

Möhle and Raupach (1989) analyzed the first and second language speech of a German student of French. Comparing first and second language production as to length of unfilled pauses, intonation contours, pronunciation, and hesitation phenomena, they found evidence of transfer of these phenomena from the individual's first language production patterns. They concluded that second language declarative knowledge, that is, knowledge of content or information, was blocked by the predominance of first language procedural knowledge, or awareness of how to perform or execute a skill:

The omnipresence of the first language procedural knowledge... "disposes" the learner to select and organize second language material in a quite specific way and, therefore, may have a considerable impact on the nature of the "productions"...or processing units in the individual's second language performance. In some instances, the learner is able to process second language linguistic material directly...just as he or she proceeds in the native language, that is, without any need for retrieving items from the declaratively encoded knowledge. The highest level of automaticity is attained with the use of prefabricated patterns and routines; here the linguistic data are intimately tied to the procedures...(Möhle and Raupach, 1989: 207-208)

Möhle and Raupach go on to note that the application of proceduralized productions from the first language contributes to disfluency, and they also suggest that if declarative knowledge from the first language is used repeatedly in second language speech it could become automatized and

lead to fossilization. Möhle and Raupach conclude that transfer of procedural knowledge from the first language likely occurs at several levels:

...one has to distinguish between different levels of transfer: the learner might conceptualize and plan parts of his or her L2 performance “automatically” in an L1 manner and thus transfer procedural knowledge; in addition to this, the linguistic data used as slot fillers within the chosen frame can likewise be processed with L1 knowledge involved, be it in the form of another transfer of procedural knowledge at a lower level or in the course of retrieval process working on L1-affected declarative knowledge. (Möhle and Raupach, 1989: 213)

The authors give the example of a German learner of French using German phrase constructions inaccurately transferred to French, such as declining the indefinite pronoun *on* and translating idioms, as well as correlations between temporal patterning in the first language and the second language which lead to non-native-like speech (210, 211). So, the transfer of procedural knowledge could occur wholesale, in an automatic way, or it could confuse the retrieval and use of second language declarative knowledge, even in tandem with first language declarative knowledge. Faerch and Kaspar (1989), in an analysis of first and second language performance of a Danish learner of English, found evidence of three types of such transfer:

- 1) strategic transfer, in which learners use first language speech routines when faced with a gap in their second language or interlanguage knowledge.
- 2) subsidiary transfer, in which performance constraints such as speed, work against the learner’s ability to use second language knowledge

- 3) Automatic transfer, in which attention is diverted to some other aspect of the production process, such as articulation or conceptualizing, and highly automatized first language plans take over. (Faerch and Kaspar, 1989: 175-76)

The predominance of automatization and proceduralization of first language speech appears to lead to transfer of some temporal aspects of speech into second language production. The competing and challenging constraints of second language speech are characterized by less automatization and more need to resort to controlled processing, the step-by-step construction of utterances based on assembly from component lexical items into syntactic patterns. This makes the transfer of automatized speech routines from the first language virtually inevitable.

There is evidence as well that learners tend to use strategies such as avoidance to facilitate the automatization process. Clahsen (1987), in an analysis of the naturalistic acquisition of German, discovered that apparent simplification of performance rules takes place at certain stages in the acquisition process. Learners in the study tended to avoid use of structures which would seem to involve complex learning tasks. The example of subject-verb inversion in German is discussed:

Deletions not only accompany, but also prepare for the acquisition of inversion. During a period of uncertainty a learner systematically reduces the number of obligatory contexts for the application of the rule...inversion can be seen as a complex learning task. As a result, this operation cannot be automatized immediately...during this transitional period the complexity of then task is reduced by diminishing the number of contexts. After having

automatized inversion, there is no need anymore for simplifying these structures, and the deletions vanish.(Clahsen, 1987: 73)

This simplification and task-management strategy could help to account for the short runs characteristic of disfluent speech. Learners may be using avoidance of this type to reduce the complexity, and, by implication, the length, of runs spoken. This would free up attention and time for managing the lexical planning which Lennon (1984) posits as the second and more immediate planning stage, after syntactic planning has created a framework. It seems that the evidence of disfluency which is observable in the pause locations and short runs between pauses in second language speech may be evidence of some sophisticated underlying processes.

Other information about the development of fluency over time, reflected in the correlates of disfluency most present at each stage of development, accords with this interpretation. It seems that lower level proficiency learners show a greater variety of largely idiosyncratic planning behavior, whereas more advanced learners show more regularity and consistency in planning (Raupach, 1984; Lennon, 1990A; Lennon, 1990B; Freed, 1995;). Raupach's study of formulaic speech and its effect on fluency (1984) identified a sort of simple taxonomy of disfluency markers linked to speech planning activities:

At a certain level of second language competence, most planning activities have to take place during unfilled pauses and in connection with standard pause fillers...With the adoption of new forms of hesitating (eg. *drawls*) combined with a new way of segmenting speech stretches...learners gradually abandon, in their second language speech productions, the "temporal patterning" they use to follow in their native language...part of the planning

activities that previously had been reserved for silent and filled pauses is now processed in connection with other hesitation phenomena and at other places than before. (Raupach, 1984: 135)

It was noted earlier that duration of silent pauses was a relatively significant correlate of lower fluency levels. This is likely due to the need to plan based more on declarative knowledge, rather than proceduralized skill, which leads one to fall back on first language pause patterns. As well, frequent hesitations, unfilled or filled with non-words, give time for processing to be completed. Later, the more advanced speaker is able to use chunks of formulaic speech and lexical “hedges,” such as *you know* and *I mean* as ways of buying time for processing. In their qualitative analysis of the results of a study of the speech fluency development of advanced learners of French, Towell et al (1996) take exactly this view, that first language transfer and then proceduralization and automatization are key to second language production:

We have taken the view that second language production may be based on multiple knowledge sources: these include setting L2 parameters on the basis of external evidence, transfer of L1 parameter settings, transfer of L1 surface structures (transliteration), situationally based lexical phrases, and consciously learned rules. These knowledge sources, available to post-7-year-old learners, have to be developed ... in proceduralized and tuned productions ... if speech which even approximates to native fluency is to be produced. (Towell et al, 1996: 103)

Thus, use and transfer of various knowledge sources may be involved in speech production by second language speakers. This knowledge must also be proceduralized to help achieve fluency.

There is evidence that one of the knowledge sources listed by Towell et al, a type of formulaic language unit called *lexical phrases*, may constitute one of the building blocks of fluency and nativeness for second language learners. Equating fluency with proceduralization of knowledge is a plausible way of conceptualizing the process of fluency skill development, but the use of formulaic sequences may constitute much of the raw material of the fluent speech itself.

### Formulaic Language

There has been an increased interest recently in the nature and role of formulaic lexical units. A growing body of work suggests that ready-made chunks or preferred sequences of words play a significant part in language acquisition and production. Numerous researchers have attempted to define and categorize this generally overlooked aspect of language, and there is growing evidence that formulaic language is basic to language learning, processing, and production.

The following is an investigation of the phenomenon of formulaic language, which defines the construct through a survey of literature and examines the research evidence on the role of formulaic sequences in acquisition and production.

### Defining and Categorizing Formulaic Language

While researchers have studied the phenomenon of formulaic language from different perspectives over the years, there is a certain amount of agreement on basic definitions of what constitutes a formulaic sequence and what characteristics such sequences share which makes them distinct. Definitions typically focus on cognitive storage and processing of formulas. The consensus seems to be that formulaic language sequences are multi-word units of language which

are stored in long-term memory as if they were single lexical units. Wray and Perkins (2000) define formulaic sequences as multi-word units of language:

A sequence, continuous or discontinuous, of words or other meaning elements, which is, or appears to be, prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar. (2000:1)

This type of definition is common in the literature. Pawley and Syder (1983) refer to formulas as “sentence stems” which are lexicalized, that is, which are “regular form-meaning pairings.” (p. 192) This notion of lexicalization is echoed by Nattinger and DeCarrico (1992) in a highly influential work which focuses on lexical phrases, a term for particular formulaic language units which serve pragmatic functions. They also indicate that lexical phrases function as a sort of bridge between lexis and grammar:

...lexical phrases [are] form/function composites, lexico-grammatical units that occupy a position somewhere between the traditional poles of lexicon and syntax; they are similar to lexicon in being treated as units, yet most of them consist of more than one word, and many of them can, at the same time, be derived from the regular rules of syntax, just like other sentences. Their use is governed by principles of pragmatic competence, which also select and assign particular functions to lexical phrase units (p.36)

The notion that storage of formulaic units is as single lexical or lexico-grammatical units is key to a common definition. Hickey (1993) puts it most succinctly by noting that definitions of formulaic language units are often expressed in terms of processes, referring to multi-word or multi-form

strings produced and recalled as a chunk like a single lexical item rather than being generated from individual items and rules.

It is interesting to posit the existence of multi-word strings or chunks of language which are stored in long-term memory as if they are single units, but how does one recognize a formulaic language sequence in productions? Some researchers have attempted to elaborate criteria for the identification of formulaic language sequences. Coulmas (1979) outlines conditions which need to be met if a sequence is to be considered formulaic. Two conditions, that the unit must be at least two morphemes long and cohere phonologically, are identified as *necessary* for formulaicity. Utterances which are formulaic, then, are polymorphemic and produced without internal hesitation or pausing. Coulmas also specifies that a formula may be more grammatically advanced than surrounding language, exhibiting a level of syntactic and phonetic complexity beyond the norm for the language produced by the learner. Other criteria laid out by Coulmas for formulaic sequences are that they are typically shared within a community, situationally dependent, and repeatedly used in the same form:

1. at least 2 morphemes long (i.e. two words)
2. coheres phonologically
3. individual elements are not used concurrently in the same form separately  
or in other environments
4. grammatically advanced compared to other language
5. community-wide formula
6. idiosyncratic chunk
7. repeatedly used in the same form

8. situationally dependent
9. may be used inappropriately (p.32)

Similarly, Peters (1983), in an effort to elaborate criteria for identifying formulas in learner first language, focuses on phonological coherence, greater length and complexity than other output, non-productive use of rules underlying a sequence, situational dependence, and frequency and invariance in form.

Clearly, formulaic sequences are characterized by certain key features. They are multi-word or polymorphemic units of language, stored in memory as if they are single lexical units, and recalled and produced as wholes. This production is marked by a degree of phonological coherence, and the unit may outstrip other output in terms of length and complexity. As well, formulaic units can be invariant in form and be used for specific situational purposes.

Formulaic sequences have been classified in a variety of ways in the research literature over the years. They have been labelled by as many as forty different terms (Wray and Perkins, 2000), and a number of distinct categories of the sequences have been identified. Across these classifications, themes of degree of syntactic and structural flexibility, and pragmatic function emerge.

A simple, early function-based classification of formulas is that of Yorio (1980), who identifies four general categories of formulaic sequences. The four types are *situational formulas*, which fit to certain conversational parameters, for example *how are you*, or *excuse me*, *stylistic formulas*, which are specific to particular registers of language, for example *in conclusion*, or *by way of conclusion*, *ceremonial formulas*, which are ritualistic and required by certain formal

settings, for example *may I have your attention please*, or *ladies and gentlemen*, and *gambits*, which organize interactions or activities, for example *what do you think* or *it's your turn*.

Other researchers later elaborated classifications of formulaic language sequences. Cowie (1988) distinguishes between phrases which are pragmatically specialized and those which are grammatically specialized:

Word combinations can be divided into two major groups, which differ according to the kinds of meaning which their members convey and to the structural level at which they operate. The first category, of which *good morning* and *how are you* are members, have evolved meanings which are largely a reflection of the way they function in discourse...In so far as those discourse meanings have stabilized, the expressions are *pragmatically specialized* (Leech, 1983, p. 28) The second category, of which *kick one's heels* and *pass the buck* are examples, have developed more or less unitary referential meanings by virtue of their use as invariable units in grammatical constructions. To the extent that their meaning and form have stabilized in this way, the expressions have become *semantically specialized*, or *idiomatic*.

(pp.132,133)

Cowie goes on to refine the classification further, referring to formulaic sequences as *composites*, which seem similar to the strings of lexical items referred to by Nattinger and DeCarrico:

Composites are word combinations, more or less invariable in form and more or less unitary in meaning, which function as constituents of sentences (as objects, complements, adjuncts, and so on) and contribute to their referential,

or propositional, meaning. They are lexical building-blocks comparable in their syntactic functions to nouns, adjectives, adverbs, and verbs.” (pp.134,135)

The idea that formulaic sequences such as composites or lexical phrases have grammatical functions as units shows their utility and ubiquity in language.

Sinclair and Renouf (1988) identify a particular aspect of language based on corpus study, in which particular verbs in English possess a quality they refer to as *dilexicality*. This leads to the possible creation of large numbers of formulaic sequences of various function:

A major feature of the language...is the phenomenon known as “dilexicality”, the tendency of certain commoner transitive verbs to carry particular nouns or adjectives which can in most cases themselves be transitive verbs. In general, the more frequent a word is, the less independent meaning it has, because it is likely to be acting in conjunction with other words, making useful structures, or contributing to familiar idiomatic phrases. (153)

They give the examples of the verbs *give* and *have*, which tend to often collocate with nouns in regular patterns, as in *give advice, give a look, give information, or have a good look, have a deep longing, have a heart to heart talk, have a strange feeling*. Another example is that the primary function of *make* is to carry nouns such as *decision, discovery, arrangement*. Sinclair and Renouf go on to note that other types of regular word combinations are characteristic of everyday language, for example the regular collocations of *happy marriage, accidental death*. As well, function words often have grammatical restrictions. For instance, *each* occurs with units of time, *of leftward* with *kind, part, sort*. Furthermore, combinations of grammatical words produce

discontinuous frameworks, such as *a \_\_\_\_ of*, attracting particular lexical insertions such as *lot*, *kind*, *number*, and so on.

Nattinger and DeCarrico (1992) provide a complex and broad classification of lexical phrases, a pragmatically specialized subset of formulaic sequences. They outline two large categories of the phrases, strings of specific lexical items and generalized frames. The former are generally unitary lexical strings and may be canonical in the grammar or not, while the latter consist of category symbols and specific lexical items. Four criteria help in classifying the phrases: length and grammatical status; canonical or non-canonical shape; variability or fixedness; whether it is a continuous, unbroken string of words or discontinuous, allowing lexical insertions. (pp.37, 38). They also identify four large categories of lexical phrases which display aspects of the four criteria: *polywords*, which operate as single words, allowing no variability or lexical insertions, and including two-word collocations (e.g., “for the most part,” “so far so good”); *institutionalized expressions*, which are sentence-length, invariable, and mostly continuous (e.g., “a watched pot never boils,” “nice meeting you,” “long time no see”); *phrasal constraints*, which allow variations of lexical and phrase categories, and are mostly continuous (e.g., “a \_\_\_\_ ago,” “the \_\_\_\_er the \_\_\_\_er”); *sentence builders*, which allow construction of full sentences, with fillable slots (e.g., “I think that X,” “not only X but Y”). (pp.38-45) Nattinger and DeCarrico see a great deal of variety and diversity in formulaic sequences, and their comprehensive taxonomy covers a large proportion of the types of utterances which are produced in a language.

A more recent descriptive scheme for formulaic sequences is that of Wray and Perkins (2000), in which they focus on semantic and syntactic irregularities of the sequences. A vital aspect of formulaic sequences, according to Wray and Perkins, is their semantic irregularity. They

are not composed semantically, but are holistic items, like idioms and metaphors. Another key element of formulaic sequences is their syntactic irregularity, which is manifest in two qualities: a restriction on manipulation, for example one cannot pluralize *beat around the bush* or passivize *face the music* or say *you slept a wink* or *feeding you up*; the fact that, in formulaic language normal restrictions are flouted, such as the sequences which contain an intransitive verb + direct object, for example *go the whole hog* or other gross violations of syntactic laws like *by & large*.

Wray (2002) elaborates a set of criteria for determining if strings are prefabricated.

Structure or form of the sequences is one such criterion, and she notes that such strings often begin with conjunctions, articles, pronouns, prepositions, or discourse markers (p. 31).

Compositionality or internal structure of strings is another such criterion, in which “the string is no longer obliged to be grammatically regular or semantically logical. (p. 33).” Fixedness, or the tendency for prefabricated sequences to be of invariable form is another such criterion, although Wray does allow that a large subset of formulaic sequences often have fillable slots (p. 34). She also identifies intonation contour and speed of articulation of sequences as being markers of prefabrication, and fluency criteria such as lack of internal pausing during utterance as indicative as well (p. 35). Of most relevance to the identification of formulaic sequences in spoken language is Wray’s statement that “it may simply be that identification cannot be based on a single criterion, but rather needs to draw on a suite of features (p. 43).”

Classifications and descriptions of formulaic sequences tend to concentrate on functional-pragmatic aspects of their use, or on syntactic and linguistic aspects of their structure. The research underlying all of these classifications and descriptions demonstrates that formulaic sequences are common, widespread, and necessary parts of human communication.

### Formulaic Language and Child Language Acquisition

There is a certain amount of evidence of formulaic sequences being used as a strategy by children in first and second language acquisition. It appears that initial first and second language acquisition in children includes attending to formulaic sequences in language input, adopting them for use, and later segmenting and analyzing them. The analysis may take place later partly as a result of neurological development and a resultant increase in analytic cognitive skills.

Wong-Fillmore (1976) was one of the first to study the second language acquisition of a child and find that one prominent process involved formulaic chunk acquisition followed by a process of segmentation or syntactic and semantic analysis and breakdown which fostered development of overall linguistic competence. Hakuta (1974) conducted a 60-week study of the second language acquisition of a Japanese child and found evidence of initial acquisition of prefabricated chunks later analyzed and used to facilitate overall language development. Hickey (1993), in a longitudinal examination of the acquisition of Irish Gaelic of a child also discovered a role for formulas in acquisition. Again, they were later broken down and analyzed, providing grist for the linguistic competence mill.

Peters (1983), in a seminal piece of work on child first language acquisition, documents how this process of formulaic chunk acquisition and later segmentation might work. She claims that there is evidence for eight assertions about the process:

1. first acquisition units by children often consist of more than one morpheme
2. there is no difference between these units and minimal ones in terms of storage

3. all of the polymorphemic units can be segmented (broken down)
4. smaller units from segmentation are stored in the lexicon
5. both the original unit and the segmented ones can both be stored in the lexicon
6. segmentation produces structural information, starting with simplest frames with slots, then generalized into patterns
7. the lexicon grows through units perceived in conversation and their segmentation, as well as fusion (storage of combinations)
8. fusion continues into adulthood

According to Peters, early on the child develops strategies for extracting meaningful chunks from the flow of conversation. She is able to remember them, compare them phonologically with others, and remember them as new lexical units. They are stored as wholes in the lexicon as individual words or as multiword units. Later in her cognitive development, she is able to analyze the stored chunks and then recognize and remember structural patterns and information about distribution classes revealed by the analysis. She is then ready to develop an ability to utilize lexical and syntactic information already acquired to analyze new chunks in the linguistic environment.

Other researchers have been able to determine that processes related to pragmatic competence are at work when children acquire formulaic sequences. Bahns, Burmeister and Vogel (1986) investigated the second language acquisition of a group of children and found evidence of a formula segmentation process at work. They found two particular pragmatic factors at work in the use of formulas by the children, namely, situational frames requiring their use, and

frequency of occurrence of the formulas. The authors note that it was common for researchers to discover exceptionally sophisticated language in stretches of child learner speech in research:

In their attempts to write grammars for different stages of development, mainly in structural areas like negation or interrogation, child language researchers were very often confronted with utterances of a rather complex nature. The structure of these utterances was somehow “outside” the rules written to account for the bulk of data representing syntactic development for the stage in question. (pp. 696, 697)

In their study, Bahns et al. found a large range of formulas used by the children, accounting for the complex utterances noted by earlier researchers. The categories found included:

1. expressive formulas - indicators of a sudden state of mind, eg. *shut up, stupid idiot, thank you*
2. directive formulas - intended to change the hearer’s behavior, eg. *let’s go, knock it off, wait a minute*
3. game or play formulas - tied to specific play activities, eg. *who’s up, you’re out*
4. polyfunctional formulas - exceed a single semantic-pragmatic value, eg. *what is it? I don’t know*
5. question formulas - elicit information, eg. *how come? What time is it?*
6. phatic formulas - to establish, prolong, or discontinue interaction, eg. *good bye, see you later, You wanna see X?*

The study also found evidence of a progression of development of use of the formulas, starting with use of the simpler expressive and game formulas. This was followed by a broadening of the range of formulas as pragmatic awareness and ability grew, and, eventually, full native-like

selection and use of formulas with more precise knowledge of when an expression is pragmatically targetlike.

It is interesting to note the double role of formulaic sequences as an element of child language acquisition. They are acquired and retained in and of themselves, linked to pragmatic competence and expanded as this aspect of communicative ability and awareness develops. At the same time, they are segmented and analyzed, broken down, and combined as cognitive skills of analysis and synthesis grow. Both the original formulas and the pieces and rules which come from analysis are retained. The next question to attend to is whether or not adult language development has been shown to take place following a similar process.

#### Formulaic Sequences in Adult Language Acquisition

A great deal of evidence has also been collected over the years of a role for formulaic sequences in the process of adult language acquisition, but the development processes uncovered by researchers in this area are not exactly like those found in the child language acquisition studies.

Yorio (1980) was an early investigator of adult language development and formulaic sequences. Examining several longitudinal studies based on instructed adult learners' written work, he found that unlike children, adult learners do not make extensive use of prefabricated formulaic language, and when they do, they do not appear to use it to further their language development. Instead, they appeared to use it more as a production strategy, to economize effort and attention in spontaneous communication.

Schmidt (1983) conducted an in-depth case study of the English language development of a Japanese adult in Hawaii and found a definite role for formulaic sequences. In fact, the learner

under study used a great and ever-increasing number and range of formulaic sequences as a communication strategy, while appearing fossilized and grammatically inept in other aspects of language. Schmidt found that his highly motivated, rapidly acculturating research subject was resistant to error correction and was able to develop linguistically and adapt socioculturally through use of formulaic sequences almost exclusively. There was little or no evidence of the processes of segmentation and analysis so marked in the child acquisition studies.

Ellis (1996), in an overview of sequencing in language acquisition, finds a role for formulas in adult language acquisition. He asserts that much of language acquisition is really acquisition of memorized sequences, and that short-term repetition and rehearsal permit the development of long-term sequence information for language. In turn, this information allows chunking of working memory contents to these established patterns. Long term storage of frequent language sequences allows them to more easily serve as labels for meaning reference, and they can be accessed more automatically. The result is more fluent language use, freeing attentional resources for dealing with conceptualizing and meaning. Ellis asserts that multiword units in long-term storage serve as a database for grammar acquisition.

Bolander (1989), in a study of acquisition of Swedish by adults, found that formulaic sequences contributed to a greater facility and economy in learning and use. The adults in this longitudinal study consistently used prefabricated language units which contained target language structures well in advance of demonstrating that they had actually acquired the structures themselves. Like the child subjects of Peters (1983) and Hickey (1993), they produced formulaic sequences which contained language which outstripped their normal abilities. As well, Bolander

noted that the learners appeared to sometimes use canonical formulas to help in acquiring specific rules of Swedish syntax.

It appears that adults in naturalistic L2 learning environments, like children, tend to acquire and use formulaic sequences. However, the established cognitive and learning styles of adults, their diverse acquisition contexts, knowledge of L1, and other factors make for more variety in the route of language acquisition generally, and with regard to use of formulaic sequences specifically. Some adults may be more analytic and seek to infer rules from chunked units or from pieces of input, while others, such as Schmidt's (1983) subject, may rely heavily on acquired formulas and not attempt to break them down or analyze them. Furthermore, degree of literacy and type and degree of instruction may play a part. One important fact remains, however: formulaic sequences are extremely important for language performance, and it is to this part of the picture that we turn to next.

#### Pragmatic Aspects of Formulaic Language

Many researchers have noted the links between formulaic language use and pragmatic competence. Nattinger & DeCarrico (1992) state that a particular type of pragmatic competence is required in the use of the subset of formulaic sequences they call lexical phrases:

(...) selection is accomplished by (...) competence (...) a particular type of pragmatic competence, which takes specific strings generated by the syntactic component and assigns them functional meanings, so that these strings not only have syntactic shapes, but are capable as well of performing pragmatic acts, as for example basic forms selected for speech acts such as promising,

complimenting, asserting and so on. Pragmatic competence thus selects the form/function composites required for particular circumstances. (p. 11)

Nattinger & DeCarrico are not alone in focusing on the pragmatic value of formulas. The link between specific types of formulas and pragmatic functions has been examined, and it appears that, while we have come far in many ways from the evolutionary source of this behavior proposed by Wray (1998) of protohumans uttering meaning-specific sound strings while engaging in grooming behaviors together (see below), we are still assigning specific formulaic sequences to quite particular social needs.

Formulaic sequences are highly context dependent for their meaning and selection. As Coulmas (1979: p.241) puts it, “As they provide the verbal means for certain types of conventional action, their meanings are conditioned by the behavior patterns of which they are an integrated part.” Specific cultural situations provide specific contexts for the use of particular formulas, and only an understanding of the relevant dimensions of certain social situations, and their relative value, guarantees an understanding of the meanings of the formulas which are highly likely to occur in them. In fact, it appears that, typically, formulas are used in situations with highly specific and regularly occurring and continuing patterns of behavior and communication (Coulmas, 1979: p.242, 243). They help one cope with the complexity of many social situations, help structure orderly and unambiguous communication, and help with a sense of group identity.

Various studies have looked at the functions of particular sets of formulas in communication. Bahns et al. (1986), in a study of the use of formulas in child language acquisition found six main pragmatic categories of formulas emerging, expressive, directive, game or play, polyfunctional, question, and phatic formulas. Bygate (1988), in a study of formulas in adult

learner classroom interaction, found a wide range of syntactic and pragmatic uses of formulas.

These are some of what he terms *satellite units* conversational utterances which lack a finite verb and are syntactically dependent. Further conditions are that they are finite or non-finite, uttered in a turn which does not include a main finite clause to which they may be attached, and the turn does not contain a related main finite clause for which the unit is syntactically superfluous. A large range of types and functions were exhibited in their speech. The types can be classified into six main groups:

noun group - e.g. *a little toy*

prepositional phrase - e.g. *at the door*

adjective group- e.g. *polite really polite*

adverb group - e.g. *more or less*

verb group - e.g. *compare, looking down*

sub. Clause - e.g. *because he is running with a handbag*

(p. 68)

These formulaic units were used in a remarkable range of conversational functional contexts and for a wide variety of pragmatic purposes. The purposes included repetition, questioning, agreeing, confirming, clarification, and focusing attention, among others. Bygate notes as well that oral productions such as these must be supported by the surrounding spoken discourse which provides a meaning context, and that speakers tend to use their interlocutor to adjust their choice of expression. Obviously, conversation of this type is glued together and built of prefabricated particles of speech which depend heavily on the conversational context and the ongoing co-

construction of meaning. After all, these are the features of spontaneous spoken interaction as a whole.

### Protolanguage and Formulas

Wray (1998) elaborates a theory of the evolutionary origins of formulaic sequences in human language and their connection to aspects of acquisition and production. In producing a model of the evolution of language from primate protolanguage, she highlights the value of formulaic sequences in the development of pragmatic knowledge and the ability to engage in real-time performance.

Wray points out that many high level primate species produce a range of holistic utterances which serve to help with social behaviors such as grooming, as well as inciting desired behavior in others. She posits that our human ancestors, at an early stage of evolution, developed more complex systems of such vocalizations. Then, as the human brain evolved and cognitive skills developed, analytic, generative language became available, and segmentation of holistic utterances began, but was stymied by the limitations of short-term memory. In her view, formulaic sequences were born of a protolanguage from the earliest stages of human development, and were retained as a feature of language production because analytic language abilities proved to be of limited use in real-time production due to short-term memory boundaries. Similarly, holistic utterances are still used to maximize limited memory processing space during speech production.

According to Wray, protolanguage originally had no grammar, but rather, large numbers of specific utterances were used for specific pragmatic purposes. Chimpanzees, for example, use different vocalizations to refer to things, states, or events, with no internal morphological

structure, producing strings and chunks of sounds functioning as free-standing wholes to achieve a limited number of specific communication goals. Presumably the first humans communicated in the same way, with language perhaps evolving during grooming to talk about other members of the group, to manipulate or control the behavior of others, to move communication and awareness beyond mere personal experience and to get a second-hand perspective on things.

The transition from single-meaning to structured phonetic sequences was likely very gradual, developing along with the physical evolution of the speech tract. As well, each individual would have to memorize all of language piece by piece, in the absence of a grammar or formal structure of any sort. However, along with cognitive development over thousands of years, it is probable that rudimentary grammars emerged from the strings of sounds associated with specific meanings. The emergence of grammar would likely have happened through a gradual linking of various areas of the brain as awareness of various aspects of experience developed, such as thematic analysis, conceptualization of actor, recipient, action. These awarenesses would then carry over into language so as to express and describe the more complex aspects of perceived reality. The originators of this rustic grammar probably had a brain like ours today.

This proposed development in many ways parallels the development of language ability in children as documented by Wong-Fillmore, Hickey, Peters, and others. A process of segmentation likely occurred in the evolution of human language as formulaic sound sequences were broken into pieces using pragmatics and context, inserting morpheme boundaries. Holistic sequences may have been refined into components with regular patterns and functions to accommodate grammar, which led to construction by rule. Perhaps the use of fixed formulaic frames with fillable slots was the first step in this move toward grammar.

## Mental Processing, Formulaic Language, and Fluency

As noted earlier, the importance of formulaic sequences in language performance, particularly speech performance, has been documented quite extensively. Studies which have investigated the nature of fluency in speech, discussed below, have revealed a strong facilitative role of formulaic sequences in the production of fluent, running speech under the time and attention constraints of real life communication.

### Formulaic Language and Performance

Early research in the area of fluency, in the 1980's, produced mention of notions of elements of speech fluency which may be interpreted to imply that formulaic language was of importance. Raupach (1984), in a study of an adult learner of French, found evidence of formulaic constructions contributing to fluency, particularly modifiers and rhetorical organizers. He noted that two types of such formulae had primarily been identified in the literature:

“routines”...are utterances which seem to be memorized wholes, such as *what's that? How are you?* and which allow little or no internal structural variation. In studies on first and second language acquisition, a clear distinction is often established between routines and patterns. Utterances in which segments of sentences operate in conjunction with a moveable component, such as *where's* (plus slot for different noun phrases), are called prefabricated patterns...or sometimes “frames.” (p. 115)

This distinction between two types of such formulae is a useful one, in that it allows us to see that the formulaic phrases can have at least two distinct uses. For one, they can, in the case of prefabricated routines, express more or less complete functions and operate as complete clauses,

allowing the speaker time and attention to planning the subsequent utterance. The second way is that they can create a structure within which to insert novel items relevant to the content and context of speech, buying some syntactic and lexical retrieval and encoding time.

Formulae of these types are likely generated at many points in the planning and execution of speech. Dechert (1984) observed that the most fluent German students of English, required to retell a narrative in their second language in his study, appeared to establish “islands of reliability” of ideas and language, around which they pieced together a spoken narrative. Sajavaara (1987), in a reflection on a wide range of factors affecting second language speech, observed that retrieval of a concept or a single lexical item could trigger the release of other lexical items and phrases for the learner:

A “word” activates, for example, certain frequent and prefabricated phrases, word combinations, grammatical constraints, selectional restrictions, semantic concepts and fields. (Sajavaara, 1987: 54)

A store of many aspects of conceptual items and links, lexical items, phrases, and patterns of language and ideas may be activated by stimuli in the input or the context. Automatized, proceduralized strings of language could then be generated appropriate to the ideas linked to the stimuli, while more specific items and constructions can be placed with or within the formulae. In this way, fluent speech may be generated.

It seems likely that fluency is greatly enhanced by the control of large numbers of formulaic sequences and sentence stems, at least in English, a relatively uninflected language, although fluency can also be achieved by using automatized individual words in familiar situations.

Pawley and Syder (1983) refer to the need for mastery of a body of lexicalized sentence stems to achieve fluency:

A lexicalized sentence stem is a unit of clause length or longer whose grammatical form and lexical content is wholly or largely fixed; its fixed elements form a standard label for a culturally recognized concept, a term in the language. (Pawley and Syder, 1983: 191)

Thus, a string or frame is needed for expression which links to the concept or part of the concept to be expressed. These prefabricated pieces are often strung together in a way appropriate to the communicative situation. This allows the speaker's energy or attention linked with single lexical units in the speech run to be freed up to plan larger stretches of speech. Many of the most familiar concepts and speech acts can be expressed formulaically, and, if a speaker can pull these formulas readily from memory, that is, if they are proceduralized or automatized, fluency is enhanced. This reduces the amount of planning, processing, and encoding needed within clauses. It gives the speaker time to pay attention to the multitude of other tasks necessary while speaking, such as generating specific lexical items, planning the next unit of discourse, syntactic processing of novel pieces, and so on.

The hallmarks of fluent speech usually include pauses at clause junctures and a certain minimal length of speech runs between such pauses. The way to accomplish this seems to be the recall of many clauses as more or less intact, or automatically chained. Pawley and Syder assert that only a minority of spoken clauses are novel (Pawley and Syder, 1983: 205), and that

memorized chunks form a high proportion of the speech of everyday conversation. As expected, the memorized sequences need little encoding. Since speech is therefore not produced word-for-word, the speaker can focus on rhythm, variety, combining memorized chunks, or producing creative connections of lexical strings and concepts. The degree of novelty in expression is often due to the proportion of use of two-word lexical units or collocations and the use of entire clauses which are formulaic.

. Peters (1983) sees formulas as being primarily a shortcut in communication:

For mature speakers of a language...formulaic speech may serve as a shortcutting device: It saves processing time and effort, allowing the speaker to focus attention elsewhere, for instance on the social (opposed to the linguistic) aspects of a situation... (p. 3)

Peters also states that certain expressions or variations on them are so useful it is convenient to be able to retrieve them in as prefabricated a form as possible. (p. 85)

It appears that, at least in English, the retrieval and combining of lexical chunks and frames is the foundation of fluency. Fluency in a highly inflected language such as Finnish might involve less reliance on clause-chaining (Sajavaara, 1987). In any case, any stretch of discourse can only be planned a certain number of words ahead of articulation, so, for the second language speaker there is a high degree of risk of breakdown inside clauses, a typical feature of disfluent speech. Having a broad and highly automatized store of memorized clauses and clause stems or frames gives the second language speaker a chance at approaching native-like fluency. Given that, as found by Pawley and Syder, normal conversational English does not entail a high degree of syntactic interaction between clauses, planning is simplified. If clauses can be retrieved and

produced automatically, without need for individual planning, then the speaker generally should be able to be a clause or two ahead of himself as he articulates. This can buy a considerable amount of time and freedom of effort to attend to issues of vocabulary, articulation, suprasegmental aspects of pronunciation, and so on.

Clearly, there are some genres of speech in which the cognitive load and need for creative construction are so high as to mitigate against such heavy use of automatized chunks. Situations involving sustained spontaneous monologic speech or which require processing of novel or complex content would normally require a greater proportion of controlled processing and complex formulation of utterances, as was the case with the speaker Q in Pawley and Syder's examples cited earlier (1983: 202-204).

Wray (2002: 97) summarizes the value of formulaic sequences in speech production by listing functions of formulaic language in speech. She sees formulas as aiding in the manipulation of information content in speech, that is, as a means of controlling the nature and flow of information. They also serve as tools for allowing time for mental processing of creatively constructed strings or in conceptualizing ideas to be uttered later. She uses the term "textual bulk" to describe the quality of this function of formulas, in that they allow for a continuing flow of speech to occur while the conscious mind is focused elsewhere in the communication process. In addition, Wray notes that formulaic sequences have the function of shortening the processing route of speech by bypassing the need for assembly of components or use of short-term memory. A final function of formulaic sequences is that they help in signaling the organization of spoken discourse.

As speech fluency research seems to have also discovered, the value of the role of automatized formulas is hard to overstate. It is important to note that formulas are not just common clichés or very frequent collocations, but that they function in all registers and in highly specialized content domains. They may have quite low general frequency of occurrence but be quite frequent within certain cultural groups or in specific genres. For example, among vocabulary specialists or applied linguists the collocations *lexical phrase* or *formulaic sequence* are frequent and accepted, whereas these particular multiword units are virtually unknown outside of these academic contexts. In any event, the wholesale production of chunks retrieved automatically from long term memory appears important in everyday spontaneous communication. In discussions of the role of formulaic sequences in production, the need for economy in mental processing is seen as primary. The consensus among those who have studied formulas in language production seems to be that their prime value is in lightening the attentional and processing burdens of utterance construction and allowing for fast and fluid communication.

#### Psycholinguistic Aspects of Formulaic Language and Fluency

Thus far, a picture of the role of formulaic sequences in language acquisition and production has emerged. Formulaic language is basic to communication, likely having its origins in an early protolanguage of our primate ancestors. In addition, the limitations of working memory, combined with the time and attention constraints imposed by real-life spontaneous communication, have ensured that formulaic language continue to be important. Both children and adults appear to make use of formulas in language acquisition. Children use them as a database for grammar acquisition, and there is evidence that some adults may do so as well.

## Mental Processing and Fluency

Key to the entire process of spontaneous speech production are the workings of mental processes and skills. In cognitive theory in general there is agreement on a number of concepts which can help in understanding how mental processing of language contributes to speech fluency.

One key element of cognitive theory which relates to mental processing and fluency is the distinction between two types of knowledge, *declarative knowledge* and *procedural knowledge*. Declarative knowledge relates to consciously known content and information, while procedural knowledge relates to knowledge of how to do things, and is related to performance of skilled behavior. A related concept is *automatization* or *proceduralization*, by which declarative knowledge is converted into procedural knowledge through repeated recall and use. In this process, knowledge which has been stored in the mind declaratively is transformed into procedural knowledge so as to speed up skilled performance and allow a more efficient use and implementation of content and information in real-time performance (Anderson, 1983; Levelt, 1989). See below for a discussion of theoretical perspectives on how automatization may take place with formulaic language to facilitate fluent speech production.

The concepts of *long term* and *short term memory* also help to provide a means of understanding how language may be processed mentally. Long term memory is a repository of all kinds of knowledge, including knowledge about language such as syntactic and morphological rules, semantic information, and lexis. For this information to be used in speech performance, however, it must first be assembled in short term memory. Lexical items need to be selected to express concepts, and syntactic, morphological, and phonological rules applied to construct

utterances. However, short term memory capacity in humans is limited to roughly seven or eight discrete items at a time, making construction of long and complex sentences and utterances laborious and time consuming (Anderson, 1983). Baddeley (1988) posits the existence of *working memory*, a different conceptualization of short-term memory, and the site where declarative knowledge taken from long-term memory is assembled or rehearsed. In particular, he proposes a *phonological loop* of working memory where necessary lexical elements encountered in language input or from long-term memory are rehearsed. The piece or string of knowledge or language is silently repeated and rehearsed in the phonological loop to allow the form-meaning relationship to be retained and possibly accessed as a whole from long term memory in future. A common example of this is the mental repetition of a newly heard seven-digit telephone number in order to facilitate recall later. Robinson (1995) posits that language input can be converted into language intake through this type of process, as chunks of input are rehearsed and repeated in short term memory. Hulstijn (2001) likewise concludes from his research that rehearsal is an essential process in lexical acquisition.

A final dichotomy often used to frame discussions of language processing is that of *controlled and automatic processing*. Controlled processing is seen as a conscious process of selecting and manipulating language knowledge, which is amenable to the use of learned rules and parameters. Automatic processing, on the other hand, is seen as a fast, effortless process of retrieving elements from long term memory, which occurs without conscious attention or below the level of a speaker's awareness (McLaughlin, Rossman, and McLeod, 1983).

A deeper discussion of these current understandings or generally agreed upon points can provide a framework for understanding first and second language speech production from an information processing perspective.

#### Declarative and procedural knowledge and automatization.

One psycholinguistic model with implications for fluency **development** is that of Anderson (1983) and his *Adaptive Control of Thought (ACT\*)* model of cognitive development, later modified as *ACT-R* (1993). In this model, there are two types of memory stores, long-term memory and working memory, the latter having a limited capacity. The long-term stores deal with the outside world via the working memory. For behavior such as speech production, which requires rapid performance, conversion of declarative knowledge into procedural knowledge is essential. This is because working memory has a very limited capacity, and declarative knowledge requires attention and takes up much more “space” than knowledge which does not require the focal attention of the speaker. Procedural knowledge, on the other hand, does not require focal attention and can be processed by working memory in larger units without running out of working memory capacity.

#### Automatic and controlled processing.

McLaughlin, Rossman, and McLeod (1983) distinguish between the two mental processes of controlled and automatic processing as these apply to second language production. Citing Shiffrin and Schneider, they describe memory as “a large collection of nodes that become ‘complexly interassociated’ through learning.”(McLaughlin et al., 1983: 139) These nodes can become activated by either controlled or automatic processing. Controlled processing is described as a response which is not yet learned, but temporary. In controlled language use, attention by the

subject or speaker is required. Automatic processing causes certain memory nodes to activate every time certain appropriate types of stimuli occur. Consistent, repeated activation of a group of nodes in a certain pattern by the same type of input over time leads to a learned, automatic response process. This process is extremely rapid, and requires little or no effort or attention. In contrast, only one sequence of activation of “nodes” can be controlled at any time. Schmidt (1992: 360) categorizes controlled processing as slow, inefficient, effortful, limited by short-term memory capacity, under voluntary control, and at least partly accessible to introspection. It is extremely important, though, because it allows novelty and flexibility in expression. Automatic processing is described as fast, efficient, effortless, not limited by short-term memory capacity, not under voluntary control, and inaccessible to introspection. It is efficient, but not appropriate where a novel response is required. Controlled processing is particularly important in situations requiring a high degree of novel construction or in which sustained or highly complex content is required. Evidently, both types of processing are in constant interaction in normal fluent discourse. Once a response sequence, originally requiring attention and control, has been used repeatedly and become automatized, then attention and effort can be used to perform other tasks at the same time. In this view, strengthening of the connections among given nodes to develop automaticity requires repeated exposure to the input, together with practice.

Over time, researchers have tended to see controlled versus automatic processing as being more a spectrum than a dichotomy (DeKeyser, 2001). Some, such as Kahnemann and Treisman (1984) have conceptualized the two processing modes as having various levels: a process may be strongly, partly, or occasionally automatic. For fluency to be achieved in speech, a learner must use automatic processing for certain elements of a given utterance, and save attention and control

for other elements such as expression of new or complex content. However, it is not a given that any particular part of a production will always be produced using fully automatic processing. A formulaic sequence may be produced automatically in one social, discourse, or linguistic context, partially so in another, and be assembled using controlled processing in another.

#### A model of speech production.

A highly influential and comprehensive model of speech production is that of Levelt (1989). Levelt's model of speech **production** (figure 1) represents two kinds of knowledge: declarative and procedural. *Declarative knowledge* is knowledge "that," or knowledge about the world, while *procedural knowledge* is knowledge "how," or that which underlies skilled behavior. Levelt argues that due to the nature of working memory and the speed with which speech is usually produced, fluent speech requires procedural knowledge. Production involves three stages: conceptualizing; formulating; articulating.

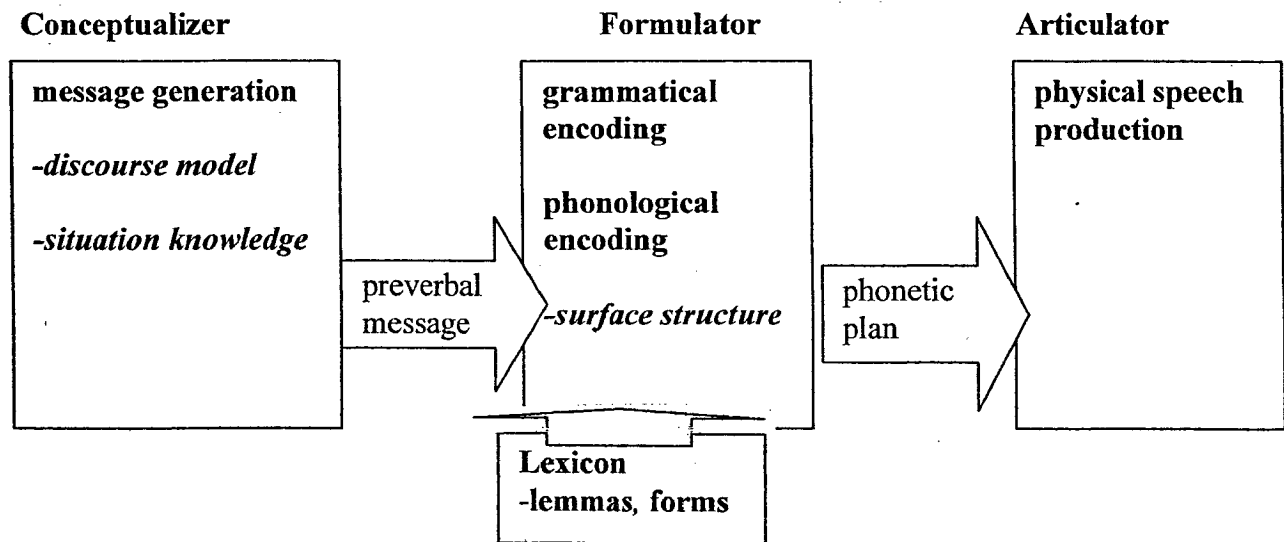
**Conceptualizing stage:** This involves procedural knowledge in developing the propositional content of the intended message, accessing declarative knowledge of the information to be expressed, the situation, and discourse organization. A propositional pre-verbal message goes to the formulator.

**Formulation stage:** The propositional message is given an acceptable form by a formulator which takes the semantic and pragmatic meanings of the preverbal message and searches the lexicon for a means of expression. The mental lexicon contains form/meaning pairs called "lemmas," which are combinations of the conceptual meanings of lexical items, linked with their syntactic features. The formulator selects an appropriate lemma from the lexicon and builds utterances by combining lemmas in a way relevant to their syntactic requirements and the meaning

to be expressed. The formulator then produces a surface syntactic form and phonologically encodes the utterance.

**Articulation stage:** The phonetic plan is then passed on to the articulator which produces explicit speech.

**Figure 1: The Levelt model**



All these speech operations, initially under conscious control, gradually become proceduralized in the production system of fluent speakers. The speech production process is continuous, without feedback between the preverbal message and the phonetic plan, since the procedural stages involved in formulation run automatically to meet speed requirements.

#### Theories of how automatization occurs.

In *instance theory* Logan (1988) posits a process by which automatization occurs, based on memory. Logan's assumptions about how memories are stored and retrieved have to do with a process of substitution. Unlike Anderson, who held that underlying processes do not change, but simply speed up and form proceduralized chunks, Logan theorizes that the initial utterance construction process is replaced over time by a qualitatively different process which is simpler and faster. This process is one of single-step memory retrieval, driven by storage of exemplars or key

sample items representing rules or concepts. The status of a given repeated output over time is determined, in this view, by a sort of competition between the original step-by-step declarative sequence, and memory retrieval. Eventually, if the sequence is produced frequently enough, memory retrieval dominates, being a more efficient means of producing strings of language under the time and attention pressures of spontaneous speech. Thus, in Logan's view, it is not the internalization of rules or procedures which accounts for fluent speech production, but rather, the shortcut of direct memory retrieval, likely of lexicalized chunks (Skehan, 1998). Later theorists have said that the process of direct memory retrieval likely applies to instances which are similar or which belong to similar categories, and that it does not apply only to situations in which the same instance is repeated to allow single-step memory retrieval (DeKeyser, 2001).

A related cognitive psycholinguistic conceptualization of how automatization or proceduralization occurs is *restructuring* (Cheng, 1985; McLaughlin, 1990). Restructuring models, like instance theory but in contrast to the Anderson or Schiffrin and Schneider models, see improved and faster skilled performance as the result of changes in the organization of knowledge rather than mere speeding up of the processes of storage and retrieval. In restructuring, underlying patterns or rules are substituted for the entire strings of memory retrieval required to access declarative knowledge through controlled processing.

It has been posited that frequency of exposure and experience with language input may be the basis of language acquisition and automatic processing of language. From such a connectionist perspective, Ellis (2002: 144) sees language learning as a process of developing a set of associations of statistical probabilities of how language is used to accomplish pragmatic functions:

Language learning is the associative learning of representations that reflect the probabilities of occurrence of form-function mappings. Frequency is thus a key determinant of acquisition because “rules” of language at all levels of analyses (from phonology, through syntax, to discourse), are structural regularities that emerge from learners’ lifetime analysis of the distributional characteristics of the language input.

The idea is that language production and comprehension is determined by a huge amount of implicit statistical information about the behavior of various items of language such as parts of speech, and, especially, lexical items. Through experience with input which exhibits distributional properties such as the relative frequencies with which certain verbs appear in different tenses, as active or passive constructions, and so on.

Ellis (2002: 145) draws a distinction between explicit and implicit memory, important to understanding how memory-driven exemplar-based learning can occur. Explicit memory is conscious, implicit memory less so:

(explicit memory) is a conscious process of remembering a prior episodic experience or fact such as questions like *what did you have for breakfast?* or *What is the capital of Andorra?* ... (implicit memory) involves facilitation of the processing of a stimulus as a function of encounters with an identical or related stimulus but where the subject at no point has to consciously recall the prior event.

Logically, the frequency-based development of knowledge of statistical frequency distribution of form and function mapping theorized by connectionists is largely based on implicit memory.

Humans are conscious of communicating, focusing on meaning first and foremost, but in the course of communicating we naturally acquire the knowledge of the frequencies of the elements of language and their patterns, combinations, and mappings.

Connectionist views of language learning are based on cognitive science models of human mental categorization ability. The basic tenet of connectionism is that each repetition of a stimulus increases the strength of memory connections between a particular mental category to which the stimulus belongs and the features of the stimulus which allow it to be assigned to the category. In assessing whether an entity belongs to the same category as other previously encountered entities, one retrieves the memories of past encounters and assesses their similarity to the new one, which is then classified accordingly. Such learning through association is seen as the “raw basis of human cognition” (Ellis, 2002: 146). The model applies to language acquisition in that such learning is seen as exemplar-driven and largely implicit. Although implicit, the process is not exclusive of conscious control. Schmidt (1990, 1993) theorizes that attention and noticing of features of language input allow learners to make hypotheses about how language works and even how their own output compares to native-like norms. Ellis (2002: 145) allows that such conscious focus is important in that it allows initial registration of a pattern-recognition unit which then can be the basis of a category or an exemplar to be classified.

Associations and classifications are made and strengthened through multiple cue sources, according to research by connectionists. An example is the determination of how children come to segment words from continuous speech which they hear, that is, word boundary perception. The research evidence is that using phonotactic information alone, a child can achieve 47% success. Adding utterance-boundary and relative stress information boosts the success rate to 70% (Ellis,

2002: 140). There is also evidence of cohort effects in lexical retrieval, in that retrieval or exposure to the initial phoneme of a word activates other words in the lexicon with that initial phoneme. As more information is retrieved we narrow down the possibilities and high frequency words get much more such activation (Ellis, 2002: 141). For formulaic sequences, as with all lexical items, it is likely that they are automatized through repeated exposure and frequency in input due to the pragmatic requirements of the communication contexts that learners encounter regularly. They are likely stored and retrieved automatically over time through a variety of cue sources, including initial phoneme classification and more.

While it is not clear which of these explanations, instance theory, restructuring, or connectionist models, best characterizes how knowledge becomes automatized or proceduralized, there is agreement on one point which is of crucial relevance to the study of formulaic sequences in second language speech fluency. The ability of a speaker to produce given sequences is dramatically speeded up with time and practice through psycholinguistic mechanisms, and in the process the sequences change in nature to phonologically coherent units retrievable as fixed chunks. Therefore, production becomes faster and there is a qualitative change to the mental procedures underlying speech production.

#### Storage and Retrieval of Formulas

One key issue in the psycholinguistic aspect of the examination of formulaic language is the question of what is meant by “produced or recalled as a whole.” As suggested above, there are several possible answers to this question. According to Weinert (1995), the first could be that formulas are recalled based on the linear surface order of their parts, or by their phonological units, following a particular type of lexical recall ... first and last words of a unit might be most

prominent in memory, and act as triggers for total recall. This is echoed by the cohort element of recall discussed by Ellis (2002) in which recall of the initial phoneme of a formulaic string triggers the activation of a mental network of connections related to all lexical items which contain that phoneme in the initial position, and in which most frequent strings are activated the most strongly. Secondly, it could be that formulas are stored as “cognitive bundles,” retrieved in various ways, depending on their form, pragmatic aspects, and so on. Indeed, this links to the connectionist view that, based on frequency of input, lexical items such as formulaic sequences may be retrieved based on various cues and that such retrieval may be speeded up as repeated exposure and experience activate the response sequence over time and implicit awareness develops of how such strings function and are used. It may be that, in accordance with the variability of automatic and controlled processing suggested by Kahnemann and Treisman (1984) there is a continuum of creative/formulaic-holistic processing, for example, different for fixed strings as opposed to frames which accept different inserts. This could mean that a formula is sometimes retrieved automatically, sometimes partially so, and sometimes by controlled processing.

How might a string acquire formulaic status? As Peters (1983) indicates, it may be simply due to a perception of meaning in chunks extracted from input by a learner, then stored as a whole. Or, according to Weinert (1995), it might be either due to initial segmentation of the input, followed by fusion or combination of formulas, or due to lexicalization of syntactic strings through frequent production. This latter process would involve automatization of the string and storing it as a piece of procedural knowledge, no longer available for analysis. It has been shown that the brain can use automatization to bypass the processing route that was used to learn an item (Wray & Perkins, 2000). It may be that consciousness, awareness and noticing of salient formulas

in input (Schmidt, 1990) leads to an initial registration of a pattern-recognition unit, which then is consolidated by frequency in input and leads to single-step memory access. Or, it could be that frequent production of a formula, requiring assembly in working memory, leads to its automatization over time, or its retrieval in a single-step process of remembering as posited by instance theory (Logan, 1988).

An intriguing aspect of the storage and retrieval of formulas as wholes is that they appear to be articulated as wholes as well, exhibiting phonological coherence. Bolander (1989), remarks that this quality of the production of formulas could be due to chunk processing, quoting Ladefoged (1972:282):

There is a great deal of evidence that muscular movements are organized in terms of complex, unalterable chunks of at least a quarter of a second in duration (and often much longer) and nothing to indicate organization in terms of short simultaneous segments which require processing with context-restricted rules. (p. 85)

This process of storage and retrieval of sequences of small muscle movements adds to the evidence for formulaic sequences as a real and necessary part of human communication, suggesting that humans are, so to speak, built and wired to use them.

Peters (1983), looking at child L1 acquisition, suggests that formulaic sequences are a result of identification of meaningful chunks in the input, and that the resulting multiword chunks are used for specific functions. This is at least partly echoed by adult L2 acquisition research (Ellis, 1996; Schmidt, 1983). Other researchers (Fillmore, Kay, & O'Connor, 1988:504) remark that there are "... things which are larger than words, which are like words in that they have to be

learned separately as individual whole facts about pieces of language.” It is clear that formulaic sequences exist, but the question of how they achieve storage and retrieval as wholes is still uncertain. It may in fact be a result of a combination of processes, including segmentation of chunks from input based on frequency or pragmatic salience, repetition and practice, and an interplay between automatization and instance retrieval.

#### First Language and Social and Cultural Aspects of Speech Fluency

Second language acquisition (SLA) theory has tended to draw a division between the language user and the context in which the language is being used. In addition to a cognitive or linguistic explanation of L2 performance, there is a need to reconceptualize the individual and the social in SLA, as the relationship between the learner and larger social processes has often been overlooked. Speech is an interactive process, and its performance is integral to identity, acculturation, and the development of cultural fluency and the emergence of voice in the target language. Discussions of L2 spoken language performance must take into account the dynamics of how the way in which one speaks influences how one is perceived by others, as well as how the act of communicating in L2 is influenced by a range of factors beyond the linguistic: first language, culture, identity, and issues of voice and attitudes, among others.

Four related sociocultural concepts which relate to L2 performance are anxiety, self-efficacy, voice, and social identity. Discussions of language anxiety are heavily influenced by early social psychological work on anxiety which took place within a largely positivist paradigm. The literature on self efficacy, voice, and social identity stem from other, psychoanalytic or poststructuralist paradigms. However, all four of these factors can help inform how sociocultural issues play a role in speech performance in L2.

### Language Anxiety

Language anxiety is one factor which may affect speech fluency, both in performance and in the development of fluency, which requires practice. It is linked to the concept of communication anxiety, defined as “level of fear or anxiety associated with either real or anticipated communication with another person(s)” (Beatty, Balfantz, and Kuwabara, 1989: 278). Researchers studying communication and speech anxiety have traditionally operated on a strongly positivist, clinical and experimental base. They typically have distinguished between *trait* and *state* anxiety as measures of anxiety. Behnke and Sawyer (1998) discriminate between the two: state anxiety is viewed as a transitory state or condition of the organism which varies in intensity and fluctuates over time; trait anxiety is described as a personality trait or an inherited personality characteristic which is antecedent to social experience and not learned or dependent on social or learning experiences. Discussions of state and trait anxiety have a long history in experimental social psychology and psychometric tools have been developed to measure them. Communication anxiety may be either state or trait in nature, depending on the nature of the learner and/or the learning context.

The distinctive type of anxiety connected with language learning has been connected with the quality of oral language production, making students appear less fluent than they really are. Perceived lack of ability can have negative consequences for one’s success in school, social life, and overall adaptation to culture and society in L2 (Horwitz, Horwitz, and Cope, 1991). Fear of public embarrassment is key to language anxiety, and two particular personality variables have been linked to it, perfectionism and fear of public speaking, as well as a belief that one’s skill level is lower than that of classmates or others (Price, 1991:106).

While language anxiety may play a role in fluency development in L2, alternative and more post-structural views of sociocultural factors influencing communication have emerged which can enrich understanding of how social processes affect communication.

### Self-efficacy

Another key social element of fluency is the individual's sense of self-efficacy. As developed by Alberto Bandura (1986) as an element of social cognitive theory, rather than the experimental and positivist paradigm, self-efficacy refers to the development of perceptions about the self and one's abilities and characteristics. These guide behavior by influencing what one tries to achieve and how much effort to put into performance. This is linked to Bandura's notions of reciprocal determinism, in which the environment, personal factors, and behavior interact. In this, Bandura drew on Adler's personality theories which held that behavior is purposeful, motivated by the pursuit of goals, that perception of and attitude towards the environment influence behavior, and that thoughts, feelings, and behavior are transactions with one's physical and social surroundings.

While there is no substantial body of literature on the subject, a sense of self-efficacy could influence and be influenced by speech fluency in L2. A high degree of self-efficacy built by a history of positive experiences as a communicator, a sense of belonging to an empowered group, and as a speaker of L1 and/or L2 could encourage self-efficacy as an L2 speaker. This could lead to the early emergence of voice and a sense of power in L2 discourse. Linked as it is with confidence and assertiveness of the self, self-efficacy could lower the barriers to communication, encourage risk-taking, and allow expression in the L2 to occur more easily through practice and

experience and exposure to more input. Less reliance on controlled processing and a facility with formulaic language units of relevance to the speech context could be the result.

This ties in with the influence of anxiety on language ability, in that it appears that accumulated perceptions of self and one's relationship to the world can play an inhibiting role in the motivation to speak, which in turn limits the development of speech fluency.

Related ideas lie in self-determination theory (Deci and Ryan, 1985; Noels, Pelletier, and Vallerand, 2000), which distinguishes among several aspects of motivation. According to self-determination theory, there are two fundamental categories of motivation: intrinsic motivation, defined as motivation based on intrinsic interest in an activity, and extrinsic motivation, based on rewards which are external to the activity itself. These two categories are not mutually exclusive, but are situated on a spectrum of self-determination. Intrinsic motivation may be based on enjoyment and satisfaction in engagement in an activity, and the pleasure may be derived from feelings associated with new ideas and knowledge development, from feelings related to mastering a task or achieving a goal, or from feelings of fun, excitement, or esthetic appreciation.

Extrinsic motivation may relate more closely to self-efficacy. At base, extrinsic motivation implies that one engages in activity in order to earn a reward or to avoid punishment, but such motivation can be situated along a spectrum of integration with the self-concept, or how they are self-determined. Three general categories of such extrinsic motivation have been identified: external regulation, introjected regulation, and identified regulation, in order from lowest to highest level of self-determination. External regulation relates to activity motivated wholly from sources external to the person. Introjected motivation refers to activity performed due to external pressures which have become internalized, for example, speaking an L2 out of a feeling of shame

associated with not doing so, or to reduce guilt. The most self-determined is identified regulation, in which activity is performed for reasons personally relevant, for example, in order to achieve a cherished goal.

It appears that self-determined motivation is useful in explaining the ways in which social and cultural factors influence L2 learning and performance. In many cases in which learners study abroad, such as those in the present study, it may be the case that any of the three categories of extrinsic motivation may apply to their activity. Some may be motivated purely by the expectations of their parents or family, or by certain requirements of the education system in their home countries. In such situations it is unlikely that a learner would invest in communicating in the L2 often or for sustained periods, thus generating little input. Consequently, it could be expected that L2 acquisition would be slow and based largely on classroom experience, and that development of a repertoire of formulaic sequences could be inhibited. Similarly, introjected regulation could have inhibitory effects on input generation, connection with the L2 community, and comfortable use of formulaic sequences for learners. Participating in a study abroad program out of guilt or duty, while perhaps requiring more personal investment than simply because of parental or community expectations, is unlikely to produce much desire to engage with the L2. Identified regulation may be a better basis for L2 learning abroad, as in cases in which one studies the L2 in order to enter degree programs at a university in the L2 country. All in all, it is likely that extrinsic motivation is a dynamic construct which may shift over time in individuals due to the effect of living in an L2 milieu. In any case, self-determination, in conjunction with self-efficacy, likely has strong and deep influences on the development of fluency and use of formulaic sequences in learner speech.

### Voice

While little research has been conducted into fluency and the concept of voice in communication, there are links to be made. Voice in the sense of “voice with authority” (Elbow, 1994) is clearly linked to the development of fluency in speech, as it can influence others’ perception of competence in speech or mastery of communication patterns and elements which may include formulaic sequences. Voice with authority is the sense of voice that is frequently used in feminist research (Belenky, Clinchy, Goldberger, and Tarule, 1986), and it relates to the possession of the authority to speak or wield influence in a group. Voice in this sense can also be referred to as the “speaking consciousness” (Wertsch and Smolka, 1993). The social learning theories of Russian theorists such as Vygotsky and Bakhtin have contributed heavily to an understanding of voice and its role in learning and development of identity and consciousness. Vygotsky (1934/1986) elaborates a concept he terms “verbal thought” (p. 83), in which external or outward-directed speech becomes egocentric or self-directed speech, which then evolves into inner speech, the framework of cognition. Vygotsky sees language as the set of tools necessary for the shaping of perceptions and thought, and voice is the outward expression of inner speech or thought. Similarly, Bakhtin (1986) posits that language is learned through contextualized social interaction, and that all language use is dialogic, in that it is contextual and directed toward an audience. Dialects, idiolects, and genres develop specific to groups, and are loaded with traces of the values, perspectives, and experiences of those groups. Voice is the expression of the consciousness which has developed through group social interaction.

Voice and speech fluency are inextricably linked in a two-way dynamic. It is through fluent speech that voice can emerge, and fluency can best be achieved if one's voice is present in the discourse. The social context is key to the existence of this interplay; if the power structures of the situation silence the voice of the group to which a learner belongs, then the emergence of speech fluency is likely to be inhibited through low input generation and reduced opportunities for output practice. It is through speech that one is able to control and make choices in everyday life, and it is through increasing facility in speech that an L2 learner can gain access to the L2 world and empower himself or herself therein. In a sense, developing fluency is a process of convergence of multiple realities, in that becoming fluent in an L2 parallels a process of altering one's own reality to more closely fit with that of the L2 community. In fact, spoken language has a strong link to learner identity, which is, according to Morgan (1997) "... a guide with which ESL students negotiate their place in a new social order and, if need be, challenge it through the meaning-making activities they participate in." (p. 431) The greater the level of L2 fluency, the greater the ease with which the learner can achieve a level of comfort in interaction with L2 interlocutors and make personal connections to enhance life experience. The sense of voice in the L2 world can emerge through fluent speech.

Vygotsky's (1934/1986) model of inner or private speech has implications for fluent language production and formulaic sequences. The internalized and reduced language of inner speech can be vocalized by adults in times of stress, and appears to be used as a metacognitive aid in planning, guiding, or monitoring the performance of an activity or as an affective support as in "I did it" upon completion of a task (McCafferty, 1994). In such cases one is basically talking aloud to oneself. Drawing on the earlier work of Wertsh and Frawley and Lantolf, McCafferty

(1994) outlines three stages of development of inner or private speech which can also occur in adult L2 learners. The earliest form is *object-regulation*, by which the learner describes and names elements of the environment, for example naming characters in a narrative or stating the obvious aspects of a picture such as “it is a boy.” The second stage is *other-regulation*, by which a learner uses self-directed questions such as “what’s this?” to gain control over a task or to substitute for not having assistance from an interlocutor. The third stage is *self-regulation*, in which the learner is able to resolve difficulties related to a task by him or herself, and the private speech shows signs of such mastery, for example “OK,” or “now I know.”

McCafferty (1994) conducted a study attempting to show that these three stages correspond to stages of L2 learner proficiency. Of the 39 participants in the study, whose task was to retell a picture story aloud in their L2, English, the lowest proficiency group did tend to produce more object-regulating private speech, but there were no significant differences among the proficiency levels for the other types of private speech. In any event, it is worth noting that this phenomenon of private speech often can consist of formulaic strings such as “I know,” “I don’t understand,” “what is the thing’s name?” and so on. Furthermore, production of such speech in L2 during an L2 speaking task may indicate a certain level of automatization of L2 formulas as well as a sense of voice in that the self is present in the speaking task, despite difficulties or the need to hesitate to formulate or recall content.

### Social Identity

Linked to this, and related to the emergence of voice, is the concept of social identity. An early theorist, Tajfel (1981), saw social identity as the product of a process of social categorization, formation of awareness of social identity, and a search for psychological

distinctiveness. In Tajfel's view of social identity formation, the social context of learning provides categories into which individuals, through recognition of linguistic cues, allocate themselves and others and learn the values and valuation associated with those categories. Weedon (1987), has a more poststructuralist concept of social identity, seeing it as being multiple and flexible over time and contexts, and subject to change. She states that "language is the place where...our sense of ourselves, our subjectivity, is constructed (1987: 21)." Drawing on this, Peirce (1995) puts forth the idea of learner *investment*, arguing that learners have complex social histories and multiple desires, and may exhibit more or less accurate or fluent language depending on the context and the interlocutor. As is the case with voice and self-efficacy, it appears that the role of social identity in speech fluency is linked to a sensitivity to context, audience, and the speaker as a social being. Angelil-Carter (1997)) found that the learner in her case study showed a variation in investment in L2 communication over time and subject to context, and that his sense of the right to speak changed over time. Context and socially constructed senses of the self and power make a great difference in fluent speech performance.

We have seen how gender can be a relevant issue in terms of voice, and an L2 can be an empowering force in women's lives and can enhance their abilities to talk fluently - to give them a voice they would not otherwise easily find in L1. McMahon (1997), dealing with women's groups in Japan, found that English language ability was for some a way to find a voice to talk about otherwise difficult issues:

Fluency in another language, especially English, empowers women to be more active in the world and thus is seen as congruent with feminist goals for oneself and for other women ... native Japanese-speaking women in particular

may perceive English as allowing or requiring them to express themselves more directly and specifically than Japanese does and thus undermining prescribed feminine linguistic roles. (P. 613)

Here it would appear that the nature of L1 communication is key to L2 fluency. The social and cultural order of the L1 community and its effects on voice and social identity can play a heavy role in fluency in L2. If the nature of the L1 communication is incompatible with the nature of fluency in L2, there may be a gap in the development of fluent speech in L2. Still, if the L2 is seen as a liberating and empowering medium because of its discourse structures, an acceleration in L2 fluency could be expected. As well, it could be expected that the emergence of a sense of social identity in a second language would allow learners to include content related to the self, affect, and perceptions in discourse. This in turn could influence the range and choice of formulaic language sequences used, with implications for the development of speech fluency.

#### Cultural Fluency and the Nature of the First Language

Another key sociocultural point to be considered in discussing L2 speech fluency is cultural fluency (Poyatos, 1984). A culturally fluent person, according to Poyatos, makes contextually correct behavior choices from alternatives, developing an ability to move back and forth between cultures with flexibility. This movement is expressed in linguistic, paralinguistic, kinesic, proxemic, and chronemic forms, and is context-dependent. According to Barnlund (1987), cultures determine the content of conversation and the amount of self-disclosure. For example, fixed patterns of conversation are preferred in Japan, and the level of spontaneity and self-disclosure there are much more restricted than in North American conversation. As well,

vagueness, ambiguity, and a slower message delivery format are preferred in Japanese social discourse as compared to North American conversation.

The linguistic relativity idea of Whorf (in Lee, 1997) supports this idea of cultural fluency. Whorf sees language capacity as central to the uniqueness of human cognition, noting that as humans we communicate thoughts through language and, during the process of socialization, incorporate language into our cognitive processes, which affects the way the mind functions. As well, Whorf argues that we attend consciously to certain aspects of our sensory input and impressions of our environment, relegating others to the background. Part of what drives this process in any individual is the way that his or her language has encouraged attention to particular elements of a situation.

This has, of course, implications for fluency in speech. If the first language is built on different abstractions and principles, it stands to reason that cultural fluency and therefore speech fluency in L2 are likely to be inhibited. It may be that learners have perceptions of what a given speech task involves based on first language cultural norms. This could influence what they attend to in, for example, narrative retells, and how much of their own perceptions and opinions are included in such tasks, or whether they perceive a need to abstract lessons or morals from stories and experiences. Wray (2002) provides an interesting overview of how oral storytelling is constructed in different cultures and how such verbal activity plays important social and cultural roles. She concludes that "... the culturally sanctioned forms of words symbolize the identity of the society and mastery of them is a mark of status and trust."(p. 76)

Furthermore, the structure of a first language could influence the development of ability to use formulaic language. Native speakers of an agglutinative and highly inflected language such

as Japanese might have a different way of dealing with formulaic sequences in a word-order dominant language such as English, whereas speakers of word-order dominant Chinese or Indo-European Spanish might be able to draw on first language abilities to deal with English phraseology. There is evidence that in agglutinative languages which are structurally similar to Japanese, such as Finnish and Turkish, lengthy polymorphemic words are used and mentally processed just as multiword strings are in word-order dominant languages such as English (Wray, 2002: 268, 269). As for the use of formulaic sequences in Spanish or Chinese, Nattinger and DeCarrico (1992:67-69) provide evidence and examples of multi-word formulaic sequences in both languages. Therefore, while the process of learning, storing and retrieving complex units such as formulas may be similar across language types, the nature of the complex units themselves may differ, including their orthographic representation in the mind. This could have implications for the ways in which native speakers of typologically different languages might deal with formulaic sequences in English as a second language.

A final cultural and linguistic issue which might have an effect on the development of fluency in English as a second language is the discourse and temporal features of first language speech. According to Ho (1993), spontaneous discourse in spoken Mandarin Chinese has some distinct temporal features which stem from the ways topics are linked and themes are elaborated. In Mandarin there are various possible syntactic categories from which the main theme of an utterance may be selected, unlike in English where the theme, at least in narrative, tends to be a noun. As a result of this, spoken discourse in Mandarin may be characterized by temporal patterns which could be perceived as dysfluent in English:

...in spoken Chinese discourse, hesitation and false starts are a noticeable feature such that a chosen theme is often abandoned or reformulated the moment it is uttered ... (compared to English speakers) there are more disfluencies manifested as premature starts, reformulation, stammers, long pauses and hedges in the spontaneous response of Chinese speakers.

(Ho, 1993: 61, 62)

In addition to the discourse structure of spoken Mandarin, features of syntax, lexical chunking, and prosody in Mandarin speech also can help create a distinctive set of temporal features if transferred into English. For example, according to Ho (1993), Mandarin tends to be spoken without sentence boundaries, and in fragments juxtaposed without distinct boundary markers, in sequences which Ho terms "utterance clusters." Ho describes Chinese spoken discourse as "long series of simply constructed and loosely connected short utterance segments with the major constituents often suppressed or not suppliable. (p. 84)." The prosody of spoken Mandarin also reflects the syllable-timed nature of the language, with word stress generally absent but mostly monosyllabic words uttered rapidly and tonically (p. 85). If transferred to English speech these features of spoken Chinese can produce a discourse pattern showing a high degree of hedges, false starts, reformulations, frequent short pauses, rapid syllable-timed clusters of fragmentary utterances.

Spanish is an Indo-European language like English, and so it can be expected that the two languages share certain key features of syntax and discourse. However, temporal features of spoken Spanish may differ from English. While speech rate data for Asian languages are not highlighted in the literature, Laver (1994) notes that the range of speech rate for Spanish is from

276 to 420 syllables per minute (pp. 541-542). This is fast compared to the 270 to 300 syllables per minute for English (Pawley & Syder, 1983), and might have a noticeable influence if Spanish L1 learners of English transfer this high rate of speech to their L2. Neither Laver nor Pawley and Syder specify whether these speech rates include filled pauses in the syllable counts.

Japanese has its own set of distinctive discourse features which could influence how Japanese learners of English perform in their L2. According to Maynard (1989), phrasal units in Japanese are often accompanied by pause-warning decreased speed, resulting in variations in articulation speed over a given stretch of discourse (p. 24). As well, in Japanese clauses are often uttered broken into smaller units bounded by short pauses, resulting in a high frequency of pausing overall. There is also a high frequency of use of hesitations, fillers, and sentence-final particles, often drawled, for a range of purposes including politeness, and building of utterances from fragments called *bunsetsu*, typically containing one content word and function words and bracketed by pauses (Maynard, 1989:24-32). The result of this is that spontaneous speech in Japanese may be more fragmented and show more speed variation and more frequent pausing than English. If transferred to English, this type of speech style could appear disfluent.

#### Social and Cultural Factors in Fluency Development

Clearly, affective factors, be they learner-internal or socially influenced, can have an effect on speech fluency development and performance. In order for the automatic processing and spontaneous use of formulaic sequences to occur, a certain amount of “free head space” is needed. Feelings of lack of identity and voice, undeveloped L2 social identity, limited investment in the L2 learning and communication experience, minimal cultural fluency, restricted self-efficacy and high

levels of language anxiety can block the development of fluency and the ability to produce of fluent speech.

Given that formulaic sequences retrieved and produced as wholes are important in fluent speech production, it is logical to assume that learner language output will exhibit the use of such phrases learned due to genuine interactional needs (such as apologizing or claiming a turn in conversation), or due to pressure to reduce mental processing load at key points in talk. Therefore it stands to reason that one's social-interactional experience will influence fluency and use of formulaic sequences. Language is the way we externalize our innermost sense of ourselves - including insecurities, hopes and fears, personal perception of the world and its animate and inanimate aspects, including other humans. People exchange knowledge to achieve real-life goals or simply because that knowledge is there to be known. L2 teaching, especially with regard to fluency, requires an activation of the same socio-interactional, processing, and information management stimuli that stimulate the use of formulaic sequences in native speakers. It is also important to remember that the expression of one's self identity and group membership may entail the "failure" to sound fully native-like.

In the end, there is a complex relationship among all of these factors to influence fluency in L2 speech. Certainly, the immediate context plays a strong role, as social factors all may have varying effects depending on the nature of the interlocutors, the purpose of the speech produced, setting, and degree of self investment required. The underlying psycholinguistic processes allow the emergence of voice, cultural fluency, and self-efficacy. Formulaic sequences, if internalized, allow for the expression of those aspects of the self in society, and fluent temporal patterns in speech allow social and cultural contact to bloom and change the degree of anxiety, self-efficacy,

cultural fluency, and so on, and the emergence of voice. In turn, these developments permit ever more social contact in L2 and result in higher levels of fluency over time.

## Chapter 3

### Conceptual Framework

This study will integrate study of the temporal nature of speech with that of the role of formulaic sequences in L2 fluency, and test several hypotheses.

The research examines language development over time, and is framed by two theories - one of language production, and the other of language development. In addition, the research is guided by hypotheses drawn from previous temporal research on fluency.

#### Language Production and Development

##### production.

The model of production is that of Levelt (1989), which represents two kinds of knowledge: declarative and procedural. Production requires procedural knowledge of three types: conceptualizing; formulating; articulating (see Figure 1, p. 10). The conceptualization stage involves generating a “preverbal” message. The formulation stage of production involves taking the preverbal message from the conceptualizer and assigning it an acceptable grammatical form, mapping on lexical information at the same time, and developing a phonetic plan, followed by the stage of physical articulation to produce speech. Speed requirements for fluent speech can only be met insofar as operations of formulation and articulation are proceduralized.

##### development.

The model of language development here, which explains how the procedural knowledge in the production model is created, is a synthesis of the information discussed above on formulaic language and mental processing. The notion of automatization is basically that of Anderson (1983, 1993) and his Adaptive Control of Thought (ACT\*) model of cognitive development.

Procedural knowledge consists of units called “productions” and takes the form of “if/then” kinds of match and execution sequences. In this way, an entire previously learned production sequence can be accessed instantly, reducing greatly the strain on working memory. These units of production are inflexible, however, and must be recalled as single units without modification. Basically, then, it is claimed that proceduralization of the knowledge needed to produce speech can occur through several means: through automatization, which develops gradually through repetition and practice, through restructuring leading to single-step memory retrieval, or by segmentation and rapid automatization of some salient formulaic sequences from input due to their utility in types of discourse frequently encountered. This process may be driven by activation of memory sequences due to input frequency, with the most frequent and salient lexical strings retrieved more quickly. Hence, the encoding processes detailed in the Levelt model are simplified or even bypassed, and formulaic sequences can be retrieved as single lemmas, avoiding the need to assemble phrases word-by-word.

### Hypotheses

Hypotheses for this study were generated by integrating the temporal variables associated with speech fluency with the Levelt model. This may be seen by considering speaking rates and interpreting them in relation to aspects of the model. If overall speaking rate (SR) increases over time, it is likely that more knowledge is being proceduralized. It is also possible to posit that an increase in the mean length of runs (MLR) over time is an indicator of increased proceduralization at the formulation stage of the model. Although it may be that this increase in MLR is attributable at least in part to greater time spent planning each utterance, if this is true, then this planning would have to be occurring outside of the time during which speech is being produced. This

means there would have to be more pauses, and/or longer pauses between utterances. Therefore, the temporal pattern expected from increased proceduralization of knowledge would be increased MLR, no increase in pause times, and an increase in percentage of time spent speaking (PTS), overall. In the present study location of pauses was not taken into account in measuring fluency. This is because previous empirical studies of fluency have not done so, in addition to the fact that it is problematic to determine where clauses begin and end in spontaneous speech in an L2 context. In any case, MLR provides a measure of how pauses relate to stretches of unbroken discourse.

At the surface, empirically observable level, then, it is hypothesized that speech rate will increase over time, that the percent of time spent in speech will increase, and that the mean length of runs will increase. These comprise the set of quantitative hypotheses in the research. Underlying this set of temporal variables is the psycholinguistic foundation of fluency. Evidence of change at the surface level will be taken as evidence of increased proceduralization or automatization of knowledge in the formulation stage of speech production. The key linguistic element to be automatized is formulaic sequences, including all multiword units such as collocations and lexical phrases, which allow for the increase in mean length of runs in particular, and for a general facility in speech production.

Hypotheses:

Over time, with continued learning and experience:

1. L2 speech will exhibit a faster rate of production.
2. L2 speech will exhibit a greater amount of production time spent speaking as opposed to pausing.

3. L2 speech will exhibit longer runs between pauses.
4. Formulaic sequences will appear more frequently in the longer runs between pauses.

Furthermore, consideration will be given to whether linguistic, social and cultural factors may have played a role in the development of fluency as measured by temporal variables and use of formulaic sequences, in the context of a given performance.

## Chapter 4

### Methodology

#### Overview

The present study was undertaken to examine the development of speech fluency in ESL and the facilitating role of lexical phrases in that development. The design, based on a pilot study (below), is longitudinal using repeated measures; speech samples were collected on tape from participants at regular intervals six times over the course of a six-month period and analyzed for changes in temporal variables and learners' use of formulaic sequences. The study was conducted over the six months from June to November, 2001 in an intensive ESL program at Carleton University, in Ottawa, Canada. The participants were eleven students enrolled full-time in the program, all at approximately the same level of oral proficiency as measured by an interview-based placement test. They were from three L1 groups: Spanish; Chinese (Mandarin); Japanese. The Spanish L1 group consisted of two females and two males, as did the Japanese L1 group, while the Chinese L1 group consisted of one female and two males (originally two Chinese females participated but data from one of them was flawed and removed from the final analyses). Once per month over the six-month period, participants watched three short animated films as speech prompts, after which they were asked to retell the story of the film. These retellings were tape-recorded and transcribed. The three films used were of similar length and narrative complexity, and each was viewed twice, film one the first and fourth months, film two the second and fifth months, film three the third and sixth months.

Measures of the key temporal variables of speech rate, articulation rate, phonation/time ratio, and mean length of runs were calculated for each specific sample, six per participant. Formulaic sequences of all types including two-word collocations were identified in the samples by three expert native speaker judges. Based on these, a formula/run ratio was calculated. This ratio was a measure of the proportion of formulas to the number of runs in a sample, an indication of how the number of formulas per run may have changed over the time of the study. A discourse analysis of the samples was then conducted for each participant to identify comparable exemplars in which segments of earlier and later speech samples were compared. This comparison focused on the role of formulaic sequences in more fluent expression of the same ideas and content, as pauses reduced and speech and articulation rates increased. Multiple analysis of variance was carried out on the temporal variables and formula/run ratios to determine the significance of any changes over time as well as to identify any differences based on L1 or gender.

#### Pilot Research

A pilot research study testing the four hypotheses and the conceptual basis outlined in Chapter Three was conducted in the summer of 2000. Six high-beginner level ESL learners from Carleton University's Intensive ESL program participated, providing samples of spontaneous spoken narratives at four intervals over a thirteen-week period of study. The learners were from three typologically different languages: Spanish; Chinese; Japanese, to control for influence of L1 type. Samples were elicited through the use of two silent animated films, each viewed on two occasions, and participants were instructed to retell the film narrative spontaneously, without notes or preparation time, in the

university's language laboratory after viewing it. They were instructed not to rewind or stop their tapes during telling.

The tapes were then transcribed and, using SpeechStation 2 speech analysis software, the transcripts were marked for pauses and their durations. The samples were analyzed for rate of speech, length of fluent runs, and the number of formulaic sequences used and the ratio of formulaic sequences to runs per sample. Formulas in the oral texts were identified by two native speaker judges using criteria developed from the taxonomy of Nattinger and DeCarrico (1992), as well as the criteria put forth by Coulmas (1979) and Peters (1983), of phonological coherence and greater complexity than other non-formulaic output by the same speaker. This proved to be a complex task, as many strings of speech appeared to fit the criteria but not qualify as formulaic sequences. For example, entire sentences were sometimes uttered with phonological coherence, appearing to be more syntactically complex than the immediately surrounding text, yet not fit with any one pragmatic purpose as in the Nattinger and DeCarrico categories of lexical phrases. On the other hand, items which appeared to fit with the Nattinger and DeCarrico taxonomy sometimes did not exhibit phonological coherence. These issues are addressed in the methodology of the larger study.

Results showed trends in the direction of both increased fluency as measured by temporal variables and greater formulaic sequence use for all participants. A debriefing session with the participants revealed that they felt that they had become stronger and more fluent in expressing ideas and content in producing the samples over time. Although most were satisfied with the relative difficulty of the two film prompts, they reported that repeating the same film two times might have affected the quality of their participation in

that they felt that they paid less attention to the film on the second viewing and might have tended to use their memory of the previous viewing to construct the narrative on a second viewing and retelling.

Several important aspects of data collection and analysis were clarified as a result of the pilot study experience. The pilot study provided confirmation of the importance of including equal numbers of participants from each gender as well as from typologically different languages and cultures. Differences in the rate and extent of fluency development were noted both among the L1 groups and between genders. The Spanish speakers showed strong and consistent gains across all temporal measures, while the Chinese and Japanese speakers showed less consistent developments according to the temporal variables. Both the Chinese and the Japanese female participants showed stronger fluency gain than the Chinese and Japanese males. Three other methodological issues which arose during the pilot study are addressed in the larger study: **the number of film prompts** - Three film prompts are used; **the statistical analysis of data** - The larger study uses repeated measures analysis (ANOVA); **the means of determining what constitutes a lexical phrase** - The transcripts and audio samples in the larger study have been analyzed for formulaic sequences by three expert judges. The procedures and criteria are detailed below.

### Data Collection

#### Sample

The study is a longitudinal examination of the spontaneous speech of eleven young adult L2 learners of English. It involves native speakers of three typologically different languages, Japanese, Chinese (Mandarin), and Spanish, to allow exploration of any

influence of L1 typology on the development of fluency and the acquisition of formulaic sequences. It might be a common-sense expectation that Spanish L1 speakers would acquire English L2 fluency and formulas more readily than would those from typologically more distant languages such as highly agglutinative and inflected Japanese or monosyllabic, tonal, word-order dominant Chinese. As well, having three different L1 groups allows for greater generalizability of results, bearing in mind the limitations of the small sample studied.

In addition to representing different L1's, the participants in this study are also representative as to gender. At the beginning of the data collection, half of the learners from each L1 group were males, half females, all aged from 20 to 25. The recordings for the twelfth original participant, a Chinese female, were flawed due to equipment failure for several samples so that comparisons across recordings could not be made. Her data was removed from the final data set, leaving two Chinese males and only one female. As is the case with L1 typology, gender may play a role in the development of L2 fluency and acquisition of formulaic sequences. The inclusion of approximately equal numbers from each gender among the participants allows exploration of this factor.

### Selection

The participants, all of whom had completed secondary education in their own countries, were at an intermediate level of English proficiency. All were students in an intensive ESL program at Carleton University, which provides 24 hours of classroom instruction per week, and had been enrolled for at least one twelve-week term prior to the study. The participants remained in the program for the summer and fall terms as well, meaning that they continued to receive the same rate of instruction over the six months.

Students were initially selected at the beginning of the first summer term based on the results of their oral proficiency scores on the four-skills placement test used in the program. Due to weighting of all their component scores on the test, the participants, all of whom scored within the intermediate range on the oral test, were enrolled in different classes.

The oral part of the placement test consisted of an interview with an examiner who was an experienced instructor in the program. Typical topics of conversation included past English language learning experience, travel abroad experiences, experience in the city of Ottawa, and future plans and motives for studying English. The topics elicit mainly narrative talk, which influenced the decision to use narrative retell as a prompt for the speech samples collected in this study. The oral proficiency of the students was judged holistically by the examiners and entered in a band scale corresponding to the three class levels of the intensive ESL program itself: beginner, intermediate, advanced. The students selected for participation in the present study were all placed in the band level corresponding to intermediate oral proficiency.

The intensive ESL program provided 24 hours of language instruction per week, of which six were specifically focused on spoken language. The program consisted of four main components:

**Core four skills course:** thematically organized and content-based, with all four language skills integrated in the teaching plans. 9 hours per week.

**Writing course:** largely process oriented. 6 hours per week.

**Elective component:** selected by students from content or language options such as TOEFL preparation, vocabulary building, sports themes, cross-cultural activities, and so on. 3 hours per week.

**Speech-focused course:** preparation for formal speech presentations, semi-prepared assignments, and spontaneous speech activity of various kinds. 6 hours per week.

All courses and all levels of the program followed essentially the same curriculum, so that the types of classroom tasks experienced by the participants in the present study were much the same regardless of their class placement. The acquisition of fluency and formulaic sequences in such a situation can be assumed to take place in a more or less naturalistic way. The curriculum for the oral and four-skills components of the program did not specify any particular focus on fluency or formulaic language.

The participants in this study also lived in homestay situations with Canadian families. This provided a naturalistic acquisition environment with rich and sustained opportunities for English input and communication outside of the university ESL classrooms. Since fluency and formulaic sequences were not an explicit part of the ESL program curriculum, the experience of homestay may have played a strong role in the development of fluency and formulaic language competence in the participants over the time of the study.

### The Participants

#### **Spanish L1 Group**

##### **Female**

**Lilia** was a 22-year-old woman from Venezuela. She had been enrolled in the program for one previous term and had studied English at university in Venezuela as well. At the time

of the study she had moved out of a homestay into an apartment with a friend from her country.

**Sally** was a 20-year-old woman from Venezuela. She had studied English in secondary school in Venezuela but had no university study experience. She had been enrolled in the program for one previous term and was living in homestay during the time of the study.

#### **Male**

**Miguel** was a 25-year-old man from Venezuela. He had been enrolled in the program for one previous term and had studied English at university in Venezuela. At the time of the study he had moved out of homestay into an apartment with a friend from his country.

**Carlos** was a twenty-year-old man from Venezuela. He had been enrolled in the program for one previous term and had studied English at secondary school in Venezuela, but had no university study experience. He was living in homestay at the time of the study.

#### **Japanese L1 group**

##### **Female**

**Natsuko** was a 24-year-old woman from Japan. She had been enrolled in the program for one previous term and had studied English in university in Japan. She was living in homestay during the time of the study. During part of the summer she left the intensive program to take a diploma program in teaching EFL at Carleton University, but returned to the intensive program in the fall term.

**Yuka** was a 22-year-old woman from Japan. She had been registered in the program for one previous term and had studied English in university in Japan. She was living in homestay at the time of the study.

**Male**

**Jun** was a 23-year-old man from Japan. He had been enrolled in the program for one previous term and had studied English at university in Japan. He was living in homestay at the time of the study.

**Isamu** was a 23-year-old man from Japan. He had been enrolled in the program for one previous term and had studied English at university in Japan. He was living in homestay at the time of the study.

**Chinese L1 group****Female**

**Meiling** was a 20-year-old woman from China. She had been enrolled in the program for one previous term. She left homestay partway through the study to live with other Chinese speakers. She left for several weeks during the course of the study to visit family in China, and her speech samples were collected separately from the other students at one point because of this. She passed Carleton University's Canadian Assessment of English Language (CAEL) test during the time of the study and spent the fall term in credit English for Academic Purposes (EAP) instead of the intensive program.

**Male**

**Lin** was a 20-year-old man from China. He had been enrolled in the program for two previous terms. He had studied English at secondary school in China. He was living in homestay during the time of the study.

**Liang** was a 20-year-old man from China. He had been enrolled in the program for two previous terms. He was living in homestay during the time of the study.

## Procedure

### Narrative Retell

The spontaneous speech of the participants was sampled six times at regular intervals over a twenty-four-week period. A narrative retell task was used to elicit speech samples. There were four factors which influenced the decision to choose narrative retelling to elicit speech: the tradition in fluency research; the nature of the testing used to assemble the sample of participants; the need to standardize the procedures; the nature of clause chaining in spontaneous narrative speech.

First, it has been the tradition in both quantitative and qualitative research into speech fluency to use narrative retell prompts to elicit speech samples. In many cases, narratives were presented as picture sequences from which participants were required to create a narrative (Raupach, 1980; Lennon, 1987, 1990A, 1990B, 1987; Hansen et al, 1998), and sometimes a written narrative was presented first (Dechert, 1980, 1987). In other cases, viewing a short film was the stimulus for narrative speech (Chafe, 1980; Towell et al, 1996). In general, these research designs produced clearer results as compared to those which used interview or discussion tasks for elicitation (Riggenbach, 1991; Freed, 1995).

Second, the nature of the test used to select the participants and the desire for standard elicitation procedures also influenced the choice of instruments in this study. As described above, the sampling procedure here involved identifying potential participants by looking at the results of their oral proficiency interviews on the intensive ESL program Placement Test. This interview consisted largely of questions and discussion likely to elicit narrative responses, such as the nature of previous English learning, experiences in Ottawa

to date. Therefore it seemed that, if the participants were selected based on a narrative-type placement task, then requiring narrative speech samples in the actual research procedure would follow from the initial placement task criteria. It was thus possible to compare their progression on a measure related to the initial placement procedure.

Third, having one monologic speech task is a way to standardize the experience for participants and avoid the complications of determining reliability among various interlocutors in dialogic tasks. A standard one-way speech task seemed to be the safest way to ensure equality of opportunity to speak for all participants.

A fourth and important motivation for requiring narrative retells in this sample elicitation procedure has to do with the nature of spontaneous speech with respect to clause chaining. As Pawley and Syder (1983) note, a great deal of everyday speech consists of narrative discourse. It is in this narrative discourse that clause chaining and use of formulaic sequences is most apparent. In other types of tasks such as expository speech or spontaneous explanations of complex interrelated topics, a high degree of cognitive load occurs and fluency suffers even for native speakers. Therefore it would appear that a narrative retell procedure would provide optimal opportunities for participants to produce discourse exhibiting clause chaining and use of formulaic sequences.

#### Silent film prompts.

It was decided to use short 8 to 10 minute silent films as prompts. Films with spoken dialogue or voiceover could have presented problems related to listening ability and other language skills. In other words, if participants had difficulty understanding the speech in such films, the retell task might have become more of a challenge for them due to factors other than their speaking ability. Also, silent films allowed the learners to

control what to attend to and what to say on tape, rather than trying to repeat spoken language heard in the films.

The prompts for the retells were three silent animated short films from the National Film Board of Canada: Neighbours (Norman McLaren, 1952: 8 minutes 10 seconds), to elicit samples 1 and 4; Strings (Wendy Tilby, 1991; 10 minutes 18 seconds), to elicit samples 2 and 5, and The Cat Came Back (Cordell Barker, 1988: 7 minutes 37 seconds), to elicit samples 3 and 6. The first two of these films had been used in the pilot research, the third is similar in length and narrative complexity. All three include roughly the same number of characters, have equally complex settings, and the same number of plot movements. Having three films, each used twice over twenty-four weeks, allowed a three-month time interval between viewings of the same film and minimized the chance of participants remembering the previous viewing and not paying full attention when viewing and retelling the second time.

The film used to elicit samples 1 and 4, Neighbours (Norman McLaren, 1952: 8:00 minutes), tells the story of two neighbours who live peacefully and happily side by side, sharing the front lawn, sharing a newspaper, sharing a light for their pipes. A flower suddenly appears between them one day and they are overjoyed by its presence, dancing, spinning, and somersaulting around the property. Things get nasty when one of them gets too possessive of it, covering it with his hand and smelling it closely. The two begin to trace property lines between their homes which place the flower on one side or the other. They magically create wooden fences which run on one or the other side of the flower. Pieces of the fence are used as weapons as punching and pushing give way to outright savagery, they club each other, rip each other's clothes. One of them pounds the other's

face to a pulp while his own face transforms into an evil mask of twisted rage. They each take a fence stake and smash each other's houses, beat their wives senseless, and kick their infant children like footballs. Eventually they kill each other and end up in side-by-side graves, the fence stakes serving as crosses, and two little flowers like the original one marking where they lie. A multilingual message appears on the screen advising us to "Love your neighbour."

The film used to elicit samples 2 and 5 is Strings (Wendy Tilby, 1991: 10:00 minutes), which tells the story of two elderly people who live in the same apartment building, a woman on the third floor directly above a man on the second floor. They take the same elevator to go home one day, both carrying shopping bags. They enter their respective apartments and go about their business: the woman unwraps her parcel, which contains a piece of a model ship she is building in her living room, and carefully attached the piece to the model using string. She then proceeds to pour a hot bath for herself. Meanwhile the elderly man is downstairs laying out a meal of canned fish, fruit, and wine while his cat looks on. The woman upstairs looks out the window and sees a taxi disgorge several people carrying string instruments. The musicians arrive at the old man's apartment and all begin to play chamber music together. Back upstairs the woman is soaking in her bath and listening to the music rising from downstairs. However, water is trickling from the tub through a hole in the floor and dripping down into the old man's apartment. He notices it and hastily grabs tools and goes upstairs to the woman's place, ringing her bell and entering to try to fix the problem. While he attempts to repair the problem, with the old woman looking wistfully on, the chandelier on the ceiling of his apartment downstairs lets go from the plaster and crashes to the floor. The musician

friends quickly leave the premises. The old man returns downstairs and plays his violin alone, while the old woman returns to her hot bath.

The film used to elicit samples 3 and 6 is The Cat Came Back, (Cordell Barker, 1988: 7 minutes 37 seconds), tells the story of a man tortured by a stray cat which appears unannounced at the door of his house one evening. He is playing a horn alone and the cat comes to his door. He loves it at first and plays with it happily until it destroys a cherished childhood toy of his. He then makes repeated attempts to get rid of the cat, to no avail. He takes it to a forest to abandon it but it returns to wreak havoc in his home. He takes it to the ocean to drown it in a bag but is outwitted and the cat reappears at home. He is repeatedly foiled in his attempts to destroy the cat as he tries to throw it from a balloon and throw it from the top of a mountain. Finally he attempts to blow it up with dynamite but inadvertently kills himself instead. As his corpse falls from a height after exploding, it lands on the cat, who dies in turn. The final scene shows the soul of the man flying to heaven screaming in frustration as nine souls of the cat follow him into eternity.

#### Narrative complexity.

All three films have two main characters and are of similar length. As for narrative complexity, it is of course impossible to be certain that any two films are of exactly the same narrative complexity, but roughly eight narrative turns are present in each of the three films used in this study.

In Neighbours, the eight turns are as follows:

1. Neighbours are relaxing together.
2. Flower appears
3. Initial excitement

4. Growing competitiveness
5. Fence building
6. Violence
7. Murder of families
8. Mutual destruction.

In Strings, the eight turns are as follows:

1. Neighbours return home in elevator
2. Man unpacks food.
3. Woman prepares bath
4. Man's guests arrive
5. Water leaks
6. Man goes upstairs
7. Chandelier falls
8. Guests leave, all back to silence.

In The Cat Came Back, the eight narrative moves are as follows:

1. The man discovers the cat at his door.
2. The cat destroys a cherished possession.
3. Attempt to abandon the cat in the forest.
4. Balloon incident
5. Boat incident
6. Train and mountain incident.
7. Dynamite explosion and accidental suicide.
8. Death of the cat and all ten souls head for heaven.

### Viewing and Retelling

The participants were shown each film in its entirety without pause only one time for each sample collection. The viewing took place in a university classroom with the entire group present. In some cases individual participants were unable to attend a group viewing and they were shown the film in the same room at a different time. The content of the films was not introduced and no language help was provided, nor were participants allowed to take notes; they simply watched. After viewing, they were immediately provided with blank cassette tapes and instructed to retell the story of the film spontaneously in the university language laboratory. They were advised not to write a script of their retellings, but to push the record button on the console and tell what they remembered from the narrative. They were not permitted to stop, pause, or rewind the tapes.

What resulted was truly spontaneous retelling of the narratives from the viewings. The samples were raw speech complete with pauses, restarts, circumlocutions, self talk such as “I don’t know the word in English,” or “I don’t remember exactly, but ...”

### Data Analysis

#### Transcribing and Pause Marking

The data recorded on tape in the language laboratory were transcribed from a Sony hand-held tape recorder using Microsoft Word. To locate pauses in the speech samples, the tapes were then recorded into SpeechStation2 speech analysis software, and a spectrogram produced for each. The visual representation of the speech was used to identify pauses and their duration. In SpeechStation2, a spectrogram of five to ten seconds of speech can be viewed. For all of the speech samples, spectrographic segments of this

size were examined while the researcher listened repeatedly to the corresponding speech. Each speech sample was analyzed from beginning to end in this way, segment by segment. The pauses observed in this way were marked in the corresponding transcripts. In determining the lower cut-off point for pauses, .3 seconds was used. Anything less than .3 seconds is easily confused in a spectrogram with other speech phenomena such as the stop phase of a plosive sound, and anything longer can omit significant pause phenomena. Given that native speakers seldom hesitate longer than .5 seconds in mid-clause or 2 seconds at a clause juncture, .3 seems a reasonable cut-off. As well, the tradition in fluency research has been to use .25 to .3 seconds as a lower end cut-off (Towell et al., 1996: 91).

#### Calculation of Temporal Variables

Four temporal variables of speech are analyzed in this study, as well as a variable linking MLR with use of formulaic sequences:

- **Phonation/time ratio (PTR)**, calculated by dividing the time spent speaking (excluding pauses) by the total time of the speech sample. See above for cut-off criteria for determining pauses.
- **Speech rate (SR)**, calculated by dividing total number of syllables uttered by the total number of seconds of recording time, including pauses.
- **Articulation rate (AR)**, calculated by dividing total number of syllables uttered by the seconds of speech time only, excluding pauses.
- **Mean length of run (MLR)**, calculated by dividing the total number of syllables uttered by the number of runs between pauses.

- **Formula/run ratio (FRR)**, determined by dividing the number of runs by the number of formulaic sequences, to see whether the use of formulaic sequences corresponds to the changes in the temporal variables. More specifically, this ratio is a quantitative measure of how the use of formulas contributed to longer runs (greater MLR).

### Statistical Treatments

As this is a repeated measures study, involving measurement of continuous variables, statistical tests were employed to determine the significance of differences in scores on the variables over time. A repeated-measures one-way analysis of variance (ANOVA) was used to determine the statistical significance of changes in the temporal variables of speech over time, as well as the formula/run ratio. The ANOVA was used to compare the scores on each variable for all samples; with pair-wise comparisons sample 1 was compared with samples 2, 3, 4, 5, and 6, sample 2 with samples 3,4 5,6, and so on. Two-way ANOVA was employed to check for possible effect of L1 and gender on the scores.

### Identifying Formulaic Sequences

Identifying formulaic sequences in the data is a central concern in this study. Wray (2002) reviews approaches to the issue of what constitutes a formula and how to detect formulaic sequences in corpora. She notes that use of corpus analysis computer software is one possible method of identification, but presents some serious concerns:

It seems, on the surface, entirely reasonable to use computer searches to identify common strings of words, and to establish a certain frequency threshold as the criterion for calling a string 'formulaic' ... (however) problems regarding the procedures of frequency counts can

be identified. Firstly, corpora are probably unable to capture the true distribution of certain kinds of formulaic sequences... The second serious problem is that the tools used in corpus analysis are no more able to help decide where the boundaries between formulaic sequences fall than native speaker judges are (pp. 25, 27, 28).

Clearly, especially for a small corpus like that used in the present study, use of computer corpus analysis software presents problems. First, the specific nature of the type of speech elicited here and the relatively small number of samples from each participant mean that mere frequency cannot suffice as a criterion for determining formulaic sequences. Some formulas may be used only once or idiosyncratically in such a situation. But it is Wray's second major concern which is most serious in this case. Many formulas are blended into surrounding language in the transcripts and many have larger fillable slots, which are impossible for machine analysis to cope with. As well, since the participants in the study are L2 learners, many formulas are nonstandard or idiosyncratic. So we are left with what Wray terms "the application of common sense (p. 28)" in determining what constitutes a formulaic sequence.

#### Native Speaker Judgement

Native speaker judgement is another possible means of identifying formulaic sequences in a corpus. However, Wray (2002: 23) identifies five weaknesses in this method: it has to be restricted to smaller data sets; inconsistent judgement may occur due to fatigue or alterations in judgement thresholds over time; there may be variation between judges; there may not be a single answer as to what to search for; application of intuition

in such a way may occur at the expense of knowledge we do not have at the surface level of awareness.

In the present study, native speaker judgement was used to determine what constitutes a formulaic sequence. The small corpus accords with Wray's first concern about native speaker judgement. Inconsistent judgement was addressed by having judges individually listen to as well as read the transcripts, and variation among judges was addressed by having a discussion and benchmark identification session before actual individual judging began. The samples used for the benchmark session were not included in later judgement processes, but were set aside as complete after the benchmark session ended. In the benchmark session, two random transcripts were analyzed individually and judges presented the formulaic sequences they had marked. As for knowledge beyond the surface level of awareness of judges, all judges read the most salient literature on criteria for identifying formulaic sequences. In the benchmark sessions, the criteria taken from the background literature were used as justification for selecting particular items as formulaic sequences in the transcripts, and features of the recorded speech such as speed and volume changes were also used as guides. Given the small and very specific corpus obtained, it is logical to avoid complete reliance on frequency counts as required when using computer corpus analysis. As mentioned previously, some formulas might be uttered only once or be highly idiosyncratic. As well, it would require a great deal of ad hoc judgement on the part of the researcher as to what is or is not actually a formula after conducting computer analysis; not all combinations of words can be deemed formulas simply by combining. And it must be borne in mind that the participants here were intermediate L2 English speakers with a tenuous grip on English phraseology.

Perhaps the most compelling reason for using native speaker judgement in the present study was the fact that this was a corpus of spoken language and the act of *listening* to speech and noting intonation and pause patterns cannot be done by machine. In other words, human judgement was required if all the factors relevant to formulaicity in speech were to be determined.

### Judgement Criteria

Five overarching criteria were applied in deciding whether a sequence was a formula:

- **The taxonomy used by Nattinger and DeCarrico (1992).** It was a guide for selection, as sequences from the transcripts were identified with an eye to categories:
  1. *Syntactic strings* are strings of category symbols, such as ‘NP+Aux+VP’(...)
  2. *Collocations* are strings of specific lexical items, such as *rancid butter* and *curry favor*, that co-occur with a mutual expectancy greater than chance (...)
  3. *Lexical phrases* are collocations, such as *how do you do?* and *for example*, that have been assigned pragmatic functions (...) (p. 36)

The authors go on to refine these categories and further refine their shared characteristics.

- **Phonological coherence.** Coulmas (1979), and Peters (1983) state that if a sequence is to be considered formulaic, it must be at least two morphemes long and cohere phonologically, that is, be produced without internal hesitation or pausing. This was one of the most important aspects of the formula identification process in the present study.

- **Greater length/complexity than other output.** Also pointed out by Coulmas (1979) and Peters (1983), chunks which are uttered in a longer run and/or show greater semantic or syntactic complexity than the rest of a speaker's output are likely formulas. Examples would include using *I would like ...* to express a desire for something, or *I don't understand* to show a lack of comprehension, while never using *would* or negatives using *do* in other contexts.
- **Semantic irregularity.** According to Wray and Perkins (2000), formulas are often not composed semantically, but are holistic items like idioms and metaphors.
- **Syntactic irregularity.** Formulas often do not follow rules of syntax (Wray & Perkins, 2000). This can restrict the manipulation of elements in a formula (one cannot pluralize *beat around the bush* or passivize *face the music*), or require the flouting of normal syntactic restrictions as in the intransitive verb + direct object construction of *go the whole hog* or the gross violation of syntactic laws in *by and large*.

In order to ensure careful application of these criteria, three expert judges with a background in the literature on formulaic language made separate judgments of the presence of formulaic sequences in the transcripts, and their consensus guided decisions about formulas.

#### Judgement Procedure

The expert judges were two graduate students in Applied Language Studies at Carleton University, and the researcher himself. All read Nattinger and DeCarrico (1992), Coulmas (1979), Peters (1983), Wray and Perkins (2000). A preliminary discussion session was held in which the criteria were clarified, and a benchmark session on two transcripts was held to standardize the overall approach to identification of formulas.

Given that the speech samples were very specific narrative retells, some quite specific formulas were identified and covered a wide range, from idioms (*love your neighbour, that's it, instead of*) to two-word verbs (*throw away, come back, let out, give up, got mad, fall down*) to repeated prepositional and participial phrases (*living in the same house, taking a bath, started fighting, out of the house, at the moment, in the middle*). Idiosyncratic and deviant formulaic sequences were accepted along with those more typical of native speakers. In the end, a high degree of consensus emerged, with rather surprising results as witnessed by the marked transcripts in Appendix A. The judges then marked the transcripts individually, in the sequence of the production of the speech samples, beginning with sample number one for a given participant and continuing to sample two and on through sample six for the same participant. After the judges had individually marked the transcripts for formulaic sequences, marked items were accepted as formulaic if two or all three of the judges were in agreement. In some cases issues such as location of the boundaries between formulas and the surrounding language, or judges' determination that some items were *possibly* but not *definitely* formulaic, were decided by the researcher.

Given the hypothesis that formulaic sequences would occur with greater frequency over time in learner speech, and that they play a facilitative role in fluency as a temporal aspect of speech, qualitative analysis was conducted. The transcripts were examined for specific instances in which participants were able to use formulas to produce longer runs and fewer hesitations or clusters of dysfluencies compared to earlier samples in which they attempted to express the same element of the narrative without using formulas. Exemplars of these situations were sought for each participant across the samples collected.

## Chapter 5: Quantitative Results

### Overview

#### Data Analysis

The analyses presented in chapters 5 and 6 are based on the taped retells of the film prompts by the eleven participants. The participants were four Japanese L1 learners of English, two female and one male, three Chinese (Mandarin) L1 learners of English, one female and two male, and four Spanish L1 learners of English, two female and two male.

The taped speech samples for all participants were transcribed and the hesitations marked and timed using the spectrograms in SpeechStation 2 software. Formulaic sequences were identified and marked by three expert judges who listened to the samples and studied the transcripts. Four temporal variables and a formula/run ratio were calculated for each speech sample in this corpus:

- **Speech Rate (SR):** The actual number of syllables uttered, divided by the total speech time in seconds. This is a gross measure of speed of speech production, it includes the hesitation time in the total time spent speaking.
- **Articulation Rate (AR):** The actual number of syllables uttered, divided by the total amount of time spent speaking. In this case, the hesitation time is eliminated from the calculation; this gives a measure of the speed of actual articulation only.
- **Phonation/time Ratio (PTR):** This is determined by totaling the pause times for each speech sample and calculating it as a percent of the total speech time. It indicates the amount of hesitation relative to actual speaking time, a combined measure of pause frequency and duration.

- Mean Length of Runs (MLR): The mean number of syllables uttered between hesitations. It indicates the length of utterances between pauses.
- Formula/Run Ratio (FRR): The ratio between the length of runs and the number of formulaic sequences in a sample. It indicates how many formulaic sequences were used relative to the number of runs in a sample.

The pattern of change over time to indicate increased fluency is increased SR and AR, reduced PTR, and increased MLR. In addition, a higher FRR would indicate increased use of formulaic sequences in connection with increased length of runs, a possible indication that formulas may play a role in expanding the amount of speech produced between hesitations.

The data were examined from four perspectives:

- First, the temporal variable means for the whole group were analyzed for change over the six samples. One-way repeated measures analysis of variance (ANOVA) was used to test for statistical significance of changes over time. If significance was indicated by the ANOVA calculation, pairwise comparisons were examined to locate where significance occurred over the six speech samples.
- Second, the changes in means for the temporal variables for the two gender groups were compared. Two-way ANOVA was conducted to see if there was a main effect of gender or an interactive effect between gender and time for each temporal variable.
- Third, the means for the temporal variables for the three L1 groups were compared. Two-way ANOVA was conducted to see if there was a main effect of L1 or an interactive effect between L1 and time for each temporal variable.

- Fourth, changes in the temporal variable scores of each individual participant were examined.

To determine whether the three different film prompts may have affected the scores over time, correlations of scores were calculated. These correlations were calculated between the sets of scores for all film prompts for each temporal variable, that is, scores for sample one were compared with sample two, three, four, five, six, and so on. The correlation coefficients were compared to see if higher correlations appeared between samples related to the same film, that is, samples 1 and 4 (*Neighbours*), samples 2 and 5 (*Strings*), and samples 3 and 6 (*The Cat Came Back*), than between samples from different film prompts..

## Results

### Whole Group Data

#### Speech Rate (SR)

Descriptive statistics for SR across all participants are shown in figure 5.1. Data are listed by L1 group in ascending rank order based on the first sample, indicated by J (Japanese), mean 75.0, S (Spanish), mean 84.9, and C (Chinese), mean 117.8. Within each L1 group, individuals are listed in ascending order based on the first sample. Gender is indicated for each participant by F (female) or M (male).

**Figure 5.1: SR Scores by Participant**

Sample #	1	2	3	4	5	6
JM Isamu	58.4	59.0	59.5	74.4	96.2	105.9
JF Yuka	61.5	56.6	72.0	77.8	53.9	65.0
JF Natsuko	89.0	73.3	86.9	94.4	88.5	113.9
JM Jun	91.1	79.5	97.3	91.1	87.4	98.5

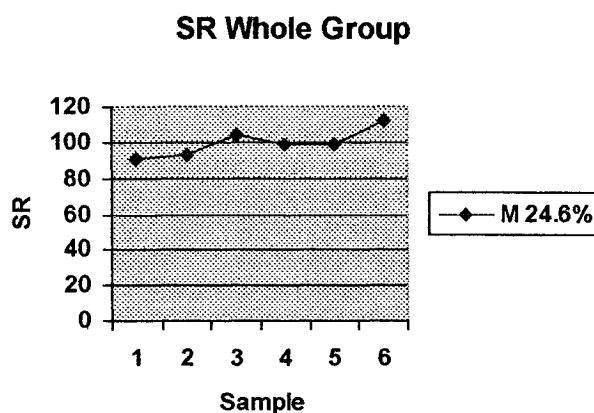
SF Sally	23.3	88.3	94.3	96.1	85.8	93.3
SM Carlos	75.6	97.7	135.6	110.4	101.1	119.6
SF Lilia	120	87.0	108.9	93.1	101.6	109.4
SM Miguel	120.6	116.5	118.6	110	108.4	119.8
CM Liang	93.3	108.3	106.2	107.4	123.9	126.8
CM Lin	127.8	141.1	153.6	149.4	118	144.8
CF Meiling	132.3	116.6	116.5	80.7	116.6	140

For SR, the correlation coefficients for earlier and later viewings of the same film prompts were not systematically higher than correlations between scores based on different film prompts. Therefore it can be concluded that there was no observable effect of film prompt on the SR scores in this study.

The mean and standard deviation for the total sample are shown in figure 5.2. A repeated-measures analysis of variance test revealed a significantly higher SR over the six samples,  $F(5,50)=3.26$ ,  $p < .05$ . Pairwise comparisons revealed significance between the whole group means for samples 1 and 6, 2 and 3, 2 and 6, 4 and 6, and 5 and 6. While a significant difference between the means for the first and last samples indicates growth as measured by SR over the six months, no significance was found between the means for earlier and later performances based on the same film prompt. That is, for SR, there is no statistically significant difference between the whole group means for sample 1 compared to sample 4 (*Neighbours*), between samples 2 and 5 (*Strings*), or between samples 3 and 6 (*The Cat Came Back*). However, there are gains for the means for samples from the same film prompt, a 9.2% gain for sample 4 over sample 1, a 5.6% gain for sample 5 over sample 2, and a 7.7% gain for sample 6 over sample 3.

**Figure 5.2: Mean and Standard Deviation of SR**

	1	2	3	4	5	6	Change
<i>M</i>	90.3	93.1	104.5	98.6	98.3	112.5	24.6%
<i>SD</i>	34	26.1	27	21	19.6	22.3	



### Discussion

The SR scores show a high degree of variability. The standard deviations are consistently large and the range of scores is broad in every case. For example, in sample 1, scores ranged from a low of 23.3 for Sally, to a high of 132.3 for Meiling, in sample 2 from a low of 56.6 for Yuka to a high of 141.1 for Lin, in sample 3 a low of 72.0 for Yuka to a high of 135.6 for Carlos. In Sample 4, scores range from a low of 77.8 for Yuka to a high of 149.4 for Lin, in sample 5 from a low of 53.9 for Yuka to a high of 123.9 for Liang, and in sample 6 from a low of 65.0 for Yuka to a high of 144.8 for Lin.

These variations may reflect a range of fluency ability, effects of the task and context among the participants, or be an indication of effect of gender or L1 on fluency as measured by this particular variable. In all cases the lowest end of the range is the score of a female participant, in five out of the six samples it is a single participant, Yuka. The highest end of the range is held by a male participant five out of six times, two of them

Chinese males. To determine what this pattern may mean it is necessary to look at the results for all variables and statistically explore the possible effects of gender and L1 on the results. As well, individual participants may have performed inconsistently and in different ways depending on factors unrelated to L1 or gender, but including temporary situational factors.

The participants who scored lowest on the SR measure on the first sample all show increases over the six samples, although the patterns of development vary among them. For line graphs of individual participants on this measure, refer to pages 135 to 169. The two lowest Spanish L1 participants, Sally and Carlos, both show strong increases in SR over the first two or three samples, then uneven development over the last three samples. Isamu, the lowest Japanese male participant, shows the opposite pattern of development, level for the first three samples, then steady increase for the last three samples. The two Japanese female participants, Yuka and Natsuko, do not appear to share a pattern of SR development over the six samples. Yuka rises steadily over the first four samples, then drops for sample five and rises for the sixth. Natsuko drops for the second sample, then rises steadily over the remaining four samples except for a drop for the fifth.

The participants with higher SR scores at the beginning of the study do not appear to share a general pattern of six samples. For the two Miguel shows relatively flat SR development overall, while Lilia has scores which drop and rise twice over the six samples, displaying a W-shaped profile. The three Chinese L1 participants show similarly varied SR profiles over the six samples, Meiling dropping in SR over the first four samples, then increasing for the last two. Lin shows a steady rise in SR over the six

samples except for a drop for sample five, while Liang shows an initial increase, levels off for three samples, then increases again for the sixth and final sample.

The Chinese participants show relatively high SR scores across the six samples in this study, due perhaps in part to transfer of aspects of discourse from their first language. As noted in Chapter Two, spoken Chinese is characterized by rapid production of sequences of fragments, together with a high degree of false starts, reformulations, stammering, and hedging (Ho, 1993). The Chinese participants in this study show evidence of transfer of this speech style to English, and it may be this that allowed them to show such high speed scores compared to the other two language groups.

The Spanish L1 participants show lower SR scores overall than the Chinese participants, but higher than the Japanese group. Given the high speech rate in spoken Spanish of 276-420 syllables per minute (Laver, 1994), compared to the 270 to 300 syllables per minute in English (Pawley & Syder, 1983), the relatively high SR scores for these participants may be due to L1 influence or transfer.

As for the Japanese participants, their relatively low SR rates may be due in part to transfer of speech style from their L1. As discussed in Chapter Two, spoken Japanese is characterized by speed variations and a high degree of fragmentation and frequent pausing, a combination of features which might mitigate against rapid speech rates (Maynard, 1989).

#### Articulation Rate (AR)

Descriptive statistics for AR across all participants are shown in figure 5.3. Data are listed by L1 group in ascending rank order based on the first sample, indicated by J (Japanese), mean 117, S (Spanish), mean 163.5, and C (Chinese), mean 177.7. Within

each L1 group, individuals are listed in ascending order based on the first sample. Gender is indicated for each participant by F (female) or M (male).

**Figure 5.3: AR Scores by Participant**

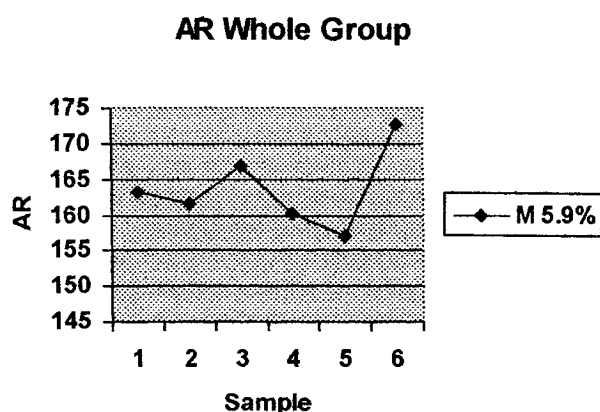
Sample #	1	2	3	4	5	6
JM Isamu	112.3	121	97.6	132.6	154.8	150.9
JF Yuka	134.9	136.9	147.3	158.5	114.9	152.7
JF Natsuko	155.8	121.7	152.1	154.7	152.3	187.3
JM Jun	205	175	185.2	192.2	181.5	189.2
SM Carlos	161.3	153.6	187.7	162.6	173.3	179.4
SF Sally	122.5	176.7	146.7	179.3	147.8	155.6
SM Miguel	170	178.2	176.1	170	168	198.7
SF Lilia	200	146.7	178.2	153.2	162.1	147.3
CM Liang	160	191.2	196.5	170	188.4	198.7
CM Lin	164.3	206.2	200.6	207.8	168.6	200.7
CF Meiling	208.9	169.5	167.5	80.7	116.6	140

For AR, the correlation coefficients for earlier and later viewings of the same film prompts were not systematically higher than correlations between scores based on different film prompts. Therefore it can be concluded that there was no observable effect of film prompt on the AR scores in this study.

The mean and standard deviation for the total sample are shown in figure 5.4. A repeated-measures analysis of variance test revealed no significantly higher SR over the six samples,  $F(5,50)=.706$ ,  $p=.621$ .

**Figure 5.4: Mean and Standard Deviation of AR**

	1	2	3	4	5	6	Change
<i>M</i>	163.2	161.5	166.9	160.1	157.1	172.8	5.9%
<i>SD</i>	32.2	27.8	29.7	33.2	23.8	23.6	



### Discussion

While there is no statistical evidence of significant development for the whole group in AR over the six months, the data do show some important patterns. In the case of AR, again we see a high degree of variability in scores as witnessed by the high standard deviations and the range of scores. For example, in sample 1, Isamu has the lowest score, 112.3, while Meiling is the highest with 208.9, in sample 2 scores range from a low of 121 for Isamu to a high of 206.2 for Lin, and in sample 3 from a low of 97.6 for Isamu to a high of 200.6 for Lin. In Sample 4, scores range from a low of 80.7 for Meiling to a high of 207.8 for Lin, in sample 5 from a low of 114.9 for Yuka to a high of 188.4 for Liang, and in sample 6 from a low of 140 for Meiling to a high of 200.7 for Lin.

In addition, the mean AR for the whole group dropped considerably for the fifth sample. It is unclear why this is the case, but it is an effect seen in the performance of Yuka, Natsuko, Jun, Lin, Sally, and Miguel, more than half of the group. The same phenomenon occurred with sample two, the same film prompt, *Strings*. In sample 2, AR dropped for Natsuko, Jun, Meiling, Lilia, and Carlos. Only Natsuko and Jun declined in AR for both samples. Different individuals show declines in AR for the second as

compared with the fifth sample, making it unlikely that the film prompt itself is a cause of the phenomenon.

As was the case with SR scores, these results may indicate variation in fluency ability among participants or could be a matter of gender or L1 effect. Chinese males, Lin in particular, have the highest AR, whereas the lowest scores seem to be distributed among participants. The influence of L1 in this case appears dubious, since Meiling, a Chinese female, is in both bottom place and top place for different samples. Unlike the SR data, Yuka is only in bottom place in one sample here. The reasons for these shifts may have to do with individual speech strategies or with hesitation phenomena as opposed to speed measures such as SR and AR.

For AR, the participants who began the study with the lowest scores generally show profiles over the six samples similar to those of their SR scores. For line graphs for individual participants on this measure, refer to pages 135 to 169. The AR scores of the two Japanese L1 female participants, Yuka and Natsuko, are particularly consistent with their SR scores. The lowest Japanese L1 male participant, Isamu, also shows a pattern of AR scores consistent with his SR scores except for sample three. Similarly, Sally, the lowest Spanish L1 female participant, shows a pattern of AR development similar to her SR scores except for sample three. Carlos, the lowest Spanish L1 male participant, shows a pattern of AR development similar to his SR profile except for samples two and five. Those two samples are based on the same film prompt, *Strings*, and for sample two his SR score shows an increase but reduced AR, while for sample five he shows reduced SR over sample four, combined with increased AR. It may be that he articulated more slowly

for sample two than sample one, while not increasing hesitation, but articulated faster for sample five compared to sample four, but with a resulting increase in hesitation.

As for the higher AR scorers, for the most part their AR score patterns over the six samples mirror those of their SR scores, except for Lilia and Liang, who show clear differences for one particular sample. Lilia had a difference in AR patterns from sample five to sample six, and Liang from sample three to sample four.

The language groups fall into the same basic pattern for AR as they did for SR, with the Chinese group fastest, followed by the Spanish group, with the Japanese group slowest. Some of the reason for this may be based on transfer of speech styles from L1, as discussed earlier.

#### Phonation/Time Ratio (PTR)

Descriptive statistics for phonation/time ratio (PTR) across all participants are shown in figure 5.5. Data are listed by L1 group in descending rank order based on the first sample, indicated by J (Japanese), mean 50.2, S (Spanish), mean 49.6, and C (Chinese), mean 36.3. Within each L1 group, individuals are listed in descending order based on the first sample. Gender is indicated for each participant by F (female) or M (male).

**Figure 5.5: PTR Scores by Participant**

<b>Sample #</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
JM Jun	55.1	55.3	47.5	52.4	52	48.6
JF Yuka	54.4	58.7	51	51.1	53	57.3
JM Isamu	49	49.9	39.4	43.5	37	30
JF Natsuko	42.3	39.3	43	39.7	42	39.1

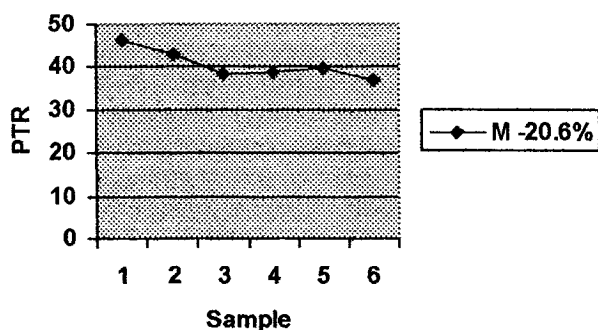
SF Sally	82	49.2	39.9	45	42.5	38.3
SM Carlos	51.8	35.9	27.9	32.8	41.9	33.3
SF Lilia	35.7	41.7	40.2	39.8	38.1	23.9
SM Miguel	29	36	33	36.2	35.4	39.7
CM Liang	43.5	42.6	45.5	37.8	33.5	37.1
CF Meiling	38.2	31.7	30.1	23.1	31.3	27.9
CM Lin	27.1	31.3	24.6	28	30.3	28.2

For PTR, the correlation coefficients for earlier and later viewings of the same film prompts were not systematically higher than correlations between scores based on different film prompts. Therefore it can be concluded that there was no observable effect of film prompt on the PTR scores in this study.

The mean and standard deviation for the total sample are shown in figure 5.6. The one-way ANOVA test revealed marginal significance in the decrease in the PTR of the participants over the six speech samples,  $F(1.99, 19.88) = 3.33$ ,  $p = .057$ . Since the sphericity assumption was rejected in this analysis, the degrees of freedom (df's) were adjusted using the Greenhouse-Geisser epsilon. Pairwise comparisons showed that significance occurred between the means of samples 1 and 6, 2 and 3, 2 and 4, and 2 and six. While a significant difference between the means for the first and last samples indicates strong development as measured by PTR over the six months, no significance was found between the means for earlier and later performances based on the same film prompt. That is, for PTR, there is no statistically significant difference between the whole group means for sample one compared to sample four (*Neighbours*), between samples two and five (*Strings*), or between samples three and six (*The Cat Came Back*). However, an observable reduction in mean PTR of 40.8% occurred between samples 1 and 4, and of 18.3 % between samples 2 and 5.

**Figure 5.6: Mean and Standard Deviation of PTR**

	1	2	3	4	5	6	Change
<i>M</i>	46.2	42.9	38.4	39	39.7	36.7	-20.6%
<i>SD</i>	15.2	9.3	8.5	9	7.6	9.8	

**PTR Whole Group**Discussion

In the case of PTR, as with SR and AR, considerable variability exists among participants. For example, in sample 1 the scores range from a high of 55.1 for Jun to a low of 27.1 for Lin, in sample 2 from a high of 58.7 for Yuka to a low of 31.3 for Lin, and in sample 3 from a high of 51.0 for Yuka to a low of 24.6 for Lin. In sample 4, scores range from a high of 52.4 for Jun to a low of 23.1 for Meiling, in sample 5 from a high of 53.0 for Yuka to a low of 30.3 for Lin, and in sample 6 from a high of 57.3 for Yuka to a low of 23.9 for Lilia.

PTR is a different type of measure from SR and AR in that it is related to hesitation in speech as opposed to speed of delivery. The highest scores here (indicating the most hesitation in speech) are for Japanese participants, with Yuka, the Japanese female, the highest in 5 out of 6 samples. The lowest scores (indicating less hesitation) are held by the Chinese participants in 5 out of 6 samples, with Lin, a male, highest in 4 of these. Lilia, a Spanish female L1 participant, has the lowest score in one sample only.

For the less fluent participants, looking at PTR patterns in connection to those for SR and AR, some indications of individual speech processing emerge. For line graphs for individual participants on this measure, refer to pages 135 to 169. For example, Yuka, generally a less fluent speaker on all three measures throughout the six samples, shows more hesitation but faster articulation for samples two and six. It may be that she attempted to speak faster but suffered an increased cognitive load as a result and so needed to hesitate to formulate utterances more in these cases. On the other hand, Sally, also generally a less fluent participant, shows slower articulation in sample three but less pausing as well, perhaps indicating an attempt to slow down speed of utterances with the positive consequence of less stopping as a result of being able to do real-time formulating of utterances. Natsuko's PTR patterns display a similar effect for sample two. It may be that she attempted to articulate more slowly in the second sample to avoid hesitation. Carlos shows a pattern of PTR consistent with his SR and AR patterns, generally pausing less and speaking faster over time.

The more fluent participants also show some PTR patterns which can be linked to SR and AR patterns to indicate how they approached the speaking tasks and what types of mental processing might have been used. Liang shows an interesting overall profile on the three measures. He has relatively high speed measures combined with a high proportion of pausing for the first three samples, as might be expected, since maintaining speed would require more hesitation for formulating. In samples four and five, on the other hand, his PTR and AR are lower but SR higher. It may be that his speech style altered somewhat over the time of the study to slow articulation somewhat to reduce pausing and allow formulating of utterances to occur online. This could help to maintain

an illusion of fluency. Lilia shows a similar pattern for sample six. Lin, however, shows a rather opposite pattern in several samples, showing a higher proportion of pauses in sample two along with high speed scores. Meiling also shows this combination in sample five. It may be that these two Chinese L1 participants produced relatively rapid speech in these instances, but had to hesitate more frequently and for longer times as they were unable to formulate utterances quickly enough or had not automatized formulaic sequences and other aspects of language to a degree which would allow such rapid speech. There may also be an influence of transfer from L1 Chinese, characterized by bursts of fragmentary speech and a high degree of reformulation, restarts and fillers (Ho, 1993).

The three language groups rank similarly for PTR as they do for SR and AR. Again, transfer of speech styles from L1 may have played a part in this, particularly for the Japanese participants, whose L1 is characterized by a large amount of hesitation in spoken discourse.

#### Mean Length of Runs (MLR)

Descriptive statistics for mean length of runs (MLR) across all participants are shown in figure 5.7. Data are listed by L1 group in ascending rank order based on the first sample, indicated by J (Japanese), mean 3.3, S (Spanish), mean 3.7, and C (Chinese), mean 3.8. Within each L1 group, individuals are listed in ascending order based on the first sample. Gender is indicated for each participant by F (female) or M (male).

**Figure 5.7: MLR Scores by Participant**

Sample #	1	2	3	4	5	6
JM Isamu	2.7	2.6	2.5	3.7	3.8	4.2
JF Yuka	2.8	2.5	3	3.7	1.8	3
JF Natsuko	3.7	3.1	4	3.6	3.6	4.1
JM Jun	4.1	3.6	4.1	4.3	4.3	5.1
SF Sally	2	2.9	3.4	3.2	3	3.3
SM Carlos	2.3	3.6	5.5	4.2	3.5	4.2
SM Miguel	4.9	5	4.3	4.1	4.3	4.3
SF Lilia	5.5	3.9	4.8	4	4.4	5.6
CM Liang	3.2	3.4	3.4	3.8	4	3.9
CM Lin	3.8	4.4	5	6	4.4	4.7
CF Meiling	4.5	4.8	5.1	5.3	5.2	5.1

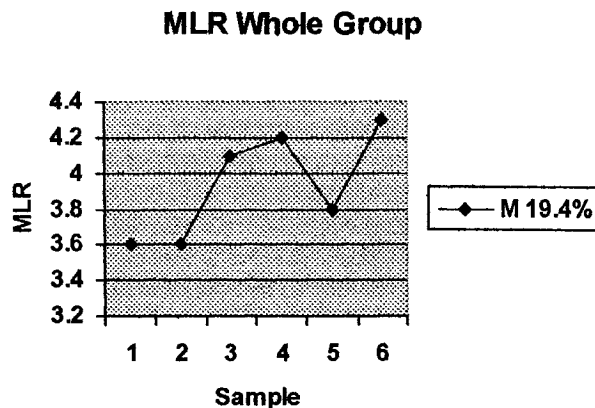
For MLR, the correlation coefficients for earlier and later viewings of the same film prompts were not systematically higher than correlations between scores based on different film prompts. Therefore it can be concluded that there was no observable effect of film prompt on the MLR scores in this study.

The means and standard deviations are shown in figure 5.8. The one-way ANOVA test revealed a significantly higher MLR over the six speech samples,  $F(5,50)=3.21, p<.05$ . Pairwise comparisons showed that significance occurred between samples 1 and 6, 2 and 3, 2 and 4, 2 and 6, and 5 and 6. While a significant difference between the means for the first and last samples indicates strong development as measured by MLR over the six months, no significance was found between the means for earlier and later performances based on the same film prompt. That is, for MLR, there is no statistically significant difference between the whole group means for sample one compared to sample four (*Neighbours*), between samples two and five (*Strings*), or

between samples three and six (*The Cat Came Back*). However, an increase in MLR of 16.7% occurred between samples 1 and 4, an increase of 5.6% occurred between samples 2 and 5, and an increase of 4.9% between samples 3 and 6.

**Figure 5.8: Mean and Standard Deviation for MLR**

	1	2	3	4	5	6	Change
<i>M</i>	3.6	3.6	4.1	4.2	3.8	4.3	19.4%
<i>SD</i>	1.1	.8	1	.8	.9	.7	



### Discussion

As was the case with the other temporal measures, the data for MLR show considerable variability as evidenced by standard deviations and the range of scores. MLR ranged from a low in sample 1 of 2.0 for Sally to a high of 5.5 for Lilia, from a low in sample 2 of 2.5 for Yuka to a high of 5.0 for Miguel, and from a low of 2.5 for Isamu in sample 3 to a high of 5.5 for Carlos. In sample 4, scores ranged from a low of 3.2 for Sally to a high of 5.3 for Meiling, in sample 5 from a low of 1.8 for Yuka to a high of 5.2 for Meiling, and in sample 6 from a low of 3.0 for Yuka to a high of 5.6 for Lilia.

Similar to AR scores, the whole group mean for MLR drops considerably for the fifth sample. This is largely an effect of the performance of Yuka, Lin, and Carlos. Unlike the AR pattern, the MLR drop in sample five is not matched by a drop in sample two, the same film prompt, *Strings*. Instead, the whole group mean MLR for sample two is unchanged from that of sample one. Also, on Yuka and Lin show a drop in sample five for both AR and MLR. Therefore, it is unclear why the drop in performance on these two variables occurs; it is likely not an effect of the film prompt, since sample two scores, the same film prompt, do not decline as much and for different participants. Furthermore, MLR declines on sample five do not occur for the same group of participants as for AR scores.

If it was the case that AR and/or SR decreased for sample five, in combination with an increase in PTR and a decrease in MLR, we might conclude that the film prompt or something in the circumstances surrounding the retelling negatively influenced fluent speech production. However, that is not the profile shown in these data and it is likely that these somewhat random declines on some variables for some participants do not represent any observable influence of the film prompt, the gender or L1 characteristics of certain participants, or the data collection situation.

It is clear that the pattern of development of MLR over the six samples reflects those for other measures for most participants. For line graphs for individual participants on this measure, refer to pages 135 to 169. As SR, AR, and PTR rise and fall from sample to sample, MLR follows a similar route. This is especially the case for Isamu, Lin, Liang, Sally, Lilia, and Carlos. This indicates that as speed of speech increased and time spent pausing decreased, length of runs grew, and vice versa.

Formula/Run Ratio (FRR)

Descriptive statistics for formula/run ratio across all participants are shown in figure 5.9 Data are listed by L1 group in ascending rank order based on the first sample, indicated by S (Spanish), mean .22, C (Chinese), mean .27, and J (Japanese), mean .30. Within each L1 group, individuals are listed in ascending order based on the first sample. Gender is indicated for each participant by F (female) or M (male).

**Figure 5.9: Formula/Run Ratio by Participant**

Sample #	1	2	3	4	5	6
SF Sally	.08	.22	.39	.33	.29	.36
SM Carlos	.09	.26	.30	.30	.24	.23
SF Lilia	.32	.28	.44	.40	.40	.59
SM Miguel	.41	.44	.45	.50	.48	.41
CM Liang	.13	.22	.32	.26	.34	.37
CM Lin	.33	.21	.41	.61	.46	.53
CF Meiling	.35	.47	.69	.51	.61	.62
JM Isamu	.06	.12	.07	.22	.16	.25
JF Yuka	.22	.45	.33	.40	.31	.38
JF Natsuko	.36	.23	.33	.31	.27	.29
JM Jun	.56	.47	.51	.58	.47	.57

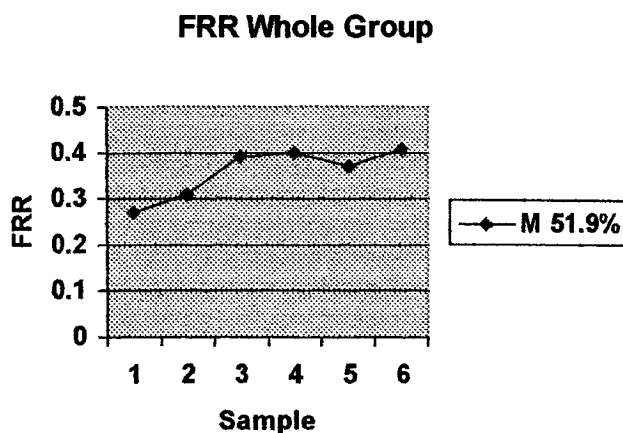
For FRR, the correlation coefficients for earlier and later viewings of the same film prompts were not systematically higher than correlations between scores based on different film prompts. Therefore it can be concluded that there was no observable effect of film prompt on the FRR scores in this study.

The means and standard deviations are shown in figure 5:10. The one-way ANOVA test showed a significant increase in formula/run ratios over the six months,  $F(5,50)=7.38, p<.05$ . Pairwise comparisons showed that significance occurred between many of the sample means, including samples 1 and all the other samples, 2 through 6.

As well, significance occurred between sample 2 and samples 3, 4, and 6, and between samples 5 and 6. A significant difference between the means for samples 1 and 6 indicates strong development of FRR over time for the whole group. On the other hand, there is no significance in the differences between means for FRR on samples based on the same film prompt except for the samples based on *Neighbours*, samples 1 and 4. FRR means increased 48.1% between samples 1 and 4, 19.4% between samples 2 and 5, and 5.1% between samples 3 and 6.

**Figure 5:10: Mean and Standard Deviation for Formula/Run Ratio**

	1	2	3	4	5	6	Change
<i>M</i>	.27	.31	.39	.40	.37	.41	51.9%
<i>SD</i>	.15	.12	.15	.13	.13	.13	



### Discussion

Typically for the temporal measures in this data, the FRR variable shows a high level of variability and a large range in every sample. In sample one, they range from a low of .06 for Isamu to a high of .41 for Miguel, in sample two from a low of .12 for Isamu to a high of .47 for both Jun and Meiling, in sample three from a low of .07 for Isamu to a high of .69 for Meiling. In sample four the lowest position is held by Isamu again, at .22, while the high is held by Lin at .61. For sample five, scores range from a

low of .16 for Isamu to a high of .61 for Meiling, and in sample six the lowest is again Isamu, at .25, while the highest is again Meiling, at .62.

As was the case with other measures, the FRR mean for the group dips slightly for sample five, but shows increases in all other samples. From sample one to six, FRR increased a substantial amount, almost 52%.

The FRR is a measure of how use of formulaic sequences might have influenced the growth of MLR, a key hypothesis for the present study. An increase as shown here, combined with the increase in MLR shown earlier, indicates that as MLR increased, use of formulas did also.

The fact that one participant, Isamu, is consistently at the bottom of the range in all samples for FRR is in no way a reflection of his failure to improve on this measure over the six samples. On the contrary, he shows strong increases in FRR over the course of the study. At the other end of the scale, Meiling is in first position several times. Her MLR increased modestly at the same time, perhaps indicating that she used a large number of formulaic sequences throughout the samples she produced, regardless of her performance in terms of other measures.

The overall picture which emerges from the whole group data on FRR is that increased formula use went hand in hand with improvement on other temporal variables, including MLR. This might be a sign that the formula use facilitated the improvements in other measures. In fact, in many cases, FRR patterns over the six samples mirror those for MLR, and the SR, AR, and PTR patterns. For line graphs for individual participants on this measure, refer to pages 135 to 169. Lilia, Sally, Liang, Carlos, Isamu, and Yuka all show this pattern. On the other hand, in several cases it appears that increases in MLR

and SR, AR, and PTR scores do not relate to use of formulas as measured by FRR. For example, in sample two Lin shows increases in SR and AR, together with MLR, but his PTR score shows increased hesitation and a lower FRR. This indicates that he used non-formulaic fillers or repeated individual lexical items to lengthen runs and increase speed, but not formulaic sequences. In any event, the picture which emerges from a comparison of patterns of all measures over time is that in general speed and hesitation changes were matched by increased length of runs, and that use of formulas followed a similar path of development.

### Overall Discussion

It is clear from these data that the participants improved significantly in fluency as measured by the temporal variables, and that they used more formulaic sequences along with that improvement. The overall trend in this group fits the pattern outlined in Chapter Four: Increased speech and articulation rates, although articulation rate increases were not statistically significant and were irregular, decreased amount of hesitation, increased length of runs, and increased use of formulas per run. ANOVA tests show significance in the changes over time for all measures except for AR, and in all of those cases, significance appears between samples 1 and 6. As well, correlations of scores on various film prompts show no evidence of systematically higher correlations for the samples for the same film prompt.

The small sample used in this study makes it difficult to generalize from these results. Generalizations about gender or L1 are particularly problematic given that the groups consist of only three or four individuals. As well, it is important to bear in mind that these data are based on speech samples involving narrative retell, and, as such, are

limited indicators of the real communicative ability of the participants. These are performance samples, and thus far from perfect mirrors of underlying ability.

### Influence of Gender and First Language

There is little in these results to make us suspect an overall effect of gender or L1, as all three language groups and both genders appear at the top and bottom of the range of scores, the exception being that Japanese participants never held top place. Yuka again appears at the bottom of the range several times, likely an indication of her general fluency level. The Spanish L1 group holds top place four out of six times here, although in one sample the lowest score is held by Sally, an L1 Spanish participant. Statistical analysis of the relationships between L1 and gender and MLR will reveal whether there is significance in the showings of the different groups. It is possible that the performance on this measure of some individuals in some samples is a reflection of personal or situational factors other than L1 or gender.

### Gender Groups Data

The means by gender group for each temporal variable and for each speech sample are presented in figure 5:11.

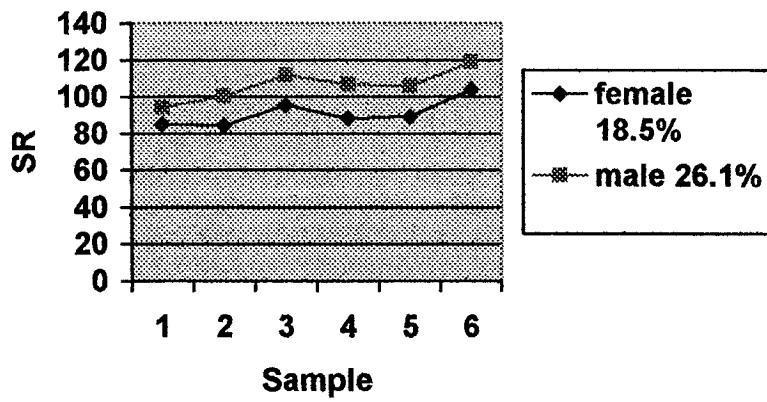
**Figure 5:11: Temporal Variables by Gender**

	1		2		3		4		5		6	
	M	F	M	F	M	F	M	F	M	F	M	F
SR	94.5	92.6	100.4	84.4	111.8	95.7	107.1	101.3	105.8	96.0	119.2	109.7
AR	162.2	165.2	170.9	150.3	174.0	158.4	172.5	163.7	172.4	154.4	186.3	171.8
PTR	42.6	45.8	41.8	44.1	36.3	40.8	38.5	38.0	38.4	38.8	36.2	36.2
MLR	3.50	3.83	3.77	3.44	4.13	4.10	4.35	4.27	4.05	3.85	4.40	4.27
FRR	.26	.27	.27	.33	.34	.44	.41	.39	.36	.38	.39	.45

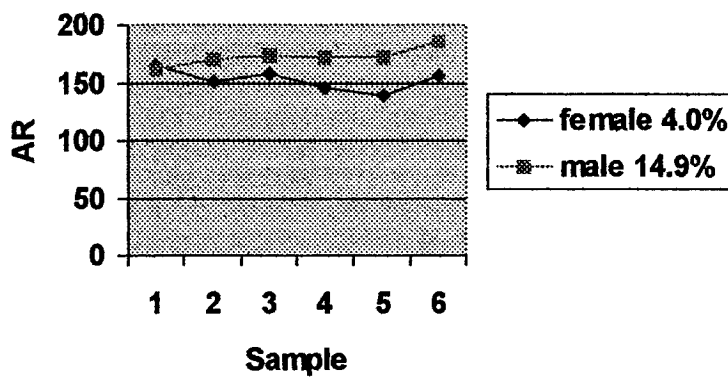
% Change Sample 1 to Sample 6

	Male	Female
SR	26.1%	18.5%
AR	14.9%	4.0%
PTR	-15.1%	-21.0%
MLR	25.7%	11.5%
FRR	50.0%	66.7%

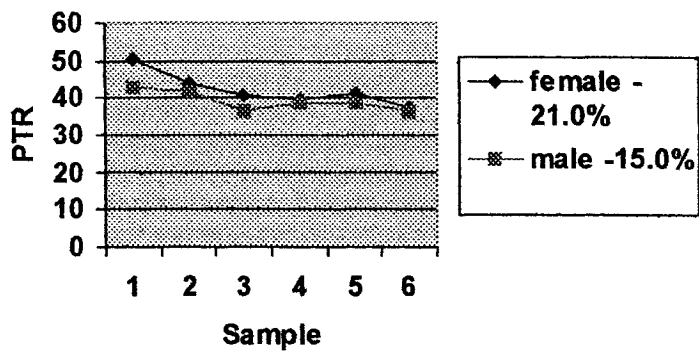
SR by Gender



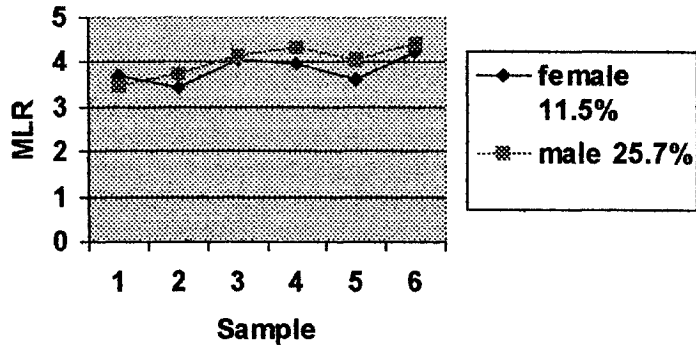
AR by Gender



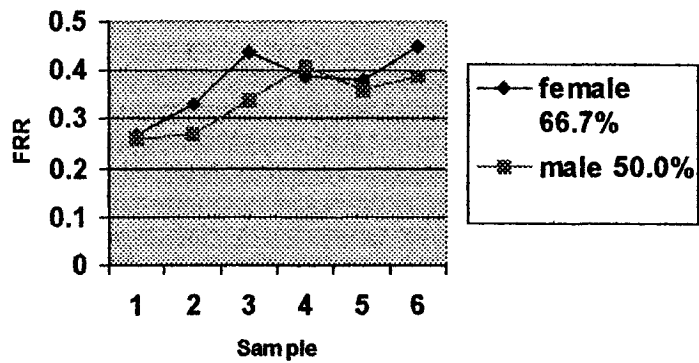
PTR by Gender



MLR by Gender



FRR by Gender



### Discussion

Two-way ANOVA showed no main effect of gender and no interactive effect between gender and time for any of the temporal variables over the six months. As evidenced by the graphs and tables in figure 5:11, the trends for all variables show a high degree of similarity, although the means for the female participants are consistently lower than those of the males. This is likely a result of a slightly lower initial mean score on each variable for females and not a gender effect per se. The only differences in the trends over the six samples for females compared to males is a slight decrease in the female AR mean compared to an increase for male participants, and generally higher FRR means for females across the six samples. In both cases, the differences are slight and do not affect the overall similarity of development for the two gender groups. It may be concluded that no gender effect was observed in the development of fluency as measured by temporal variables in this group of learners.

### Social and Cultural Factors

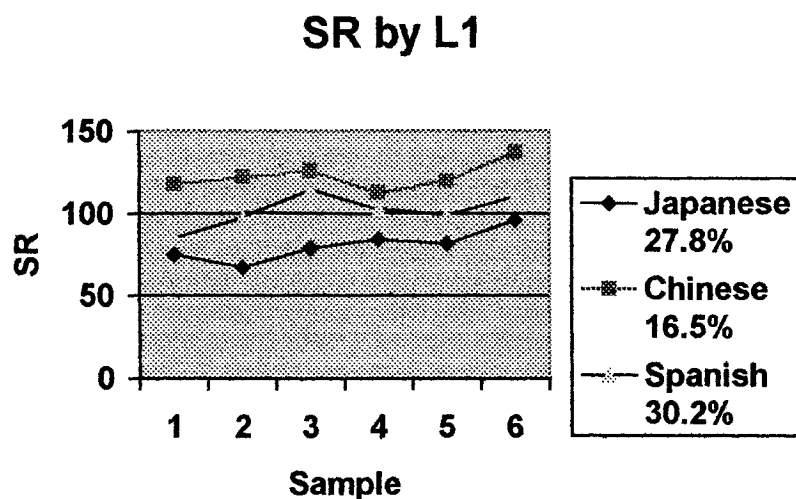
There is little quantitative evidence here of an effect of gender-related issues of voice, self-efficacy, or other social or cultural aspects of communication. If such factors played a role in the performances in this study, it could be expected that the two gender groups would show measurable differences in development of fluency. However, two important qualifications need to be made about the possible influence of gender-related social and cultural factors: first, it may be that the effect of such factors is not reflected in the development of temporal variables, but more on the nature or content of speech produced by male or female participants; second, the nature of the task here, narrative retell, may make individual performance less reflective of underlying social and cultural

issues than would discussion or interview tasks involving interlocutors and more open expression. Gender may also interact with other variables not measured here, such as social class, level of education, social mobility. It is conceivable that examination of individual speech samples can reveal more tangible evidence of the effect of social and cultural factors than comparisons of group means on temporal variables. This will be explored later in this chapter within the context of individual participant results.

#### Language Groups Data

The means by L1 group for each temporal variable by speech sample are shown in figure 5:12.

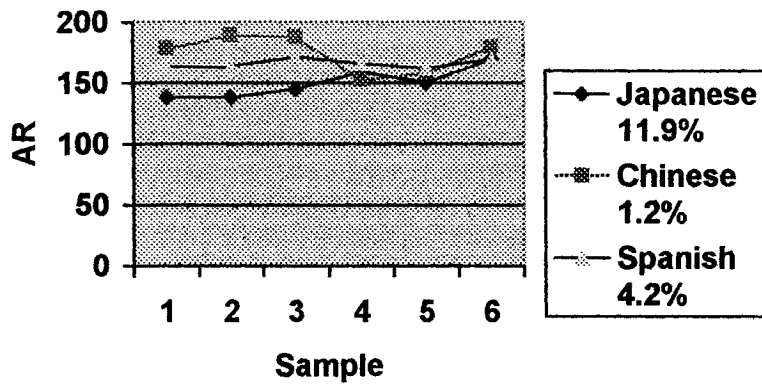
**Figure 5:12: Temporal Variables by L1**



#### SR by L1

Sample	Japanese	Chinese	Spanish
1	75.0	117.8	84.9
2	67.1	122	97.4
3	78.9	125.4	114.4
4	84.4	112.5	102.4
5	81.5	119.5	99.2
6	95.8	137.2	110.5
	27.8%	16.5%	30.2%

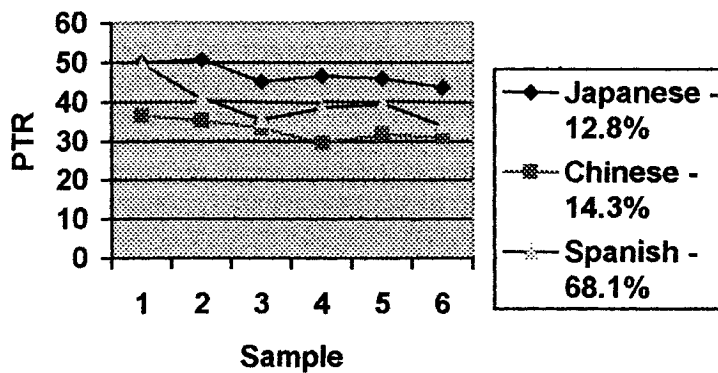
AR by L1



AR by L1

Sample	Japanese	Chinese	Spanish
1	152	177.7	163.5
2	138.7	189	188.2
3	145.6	188.2	172.2
4	159.5	152.8	166.3
5	150.9	157.9	162.8
6	170	179.8	170.3
	11.9%	1.2%	4.2%

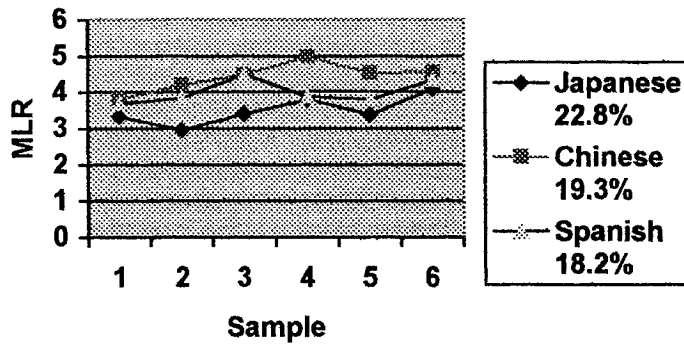
PTR by L1



## PTR by L1

Sample	Japanese	Chinese	Spanish
1	50.2	36.3	49.6
2	50.8	35.2	40.7
3	45.2	33.4	35.3
4	46.7	29.6	38.5
5	46	31.7	39.5
6	43.8	31.07	33.8
	-12.8%	-14.3%	-68.1%

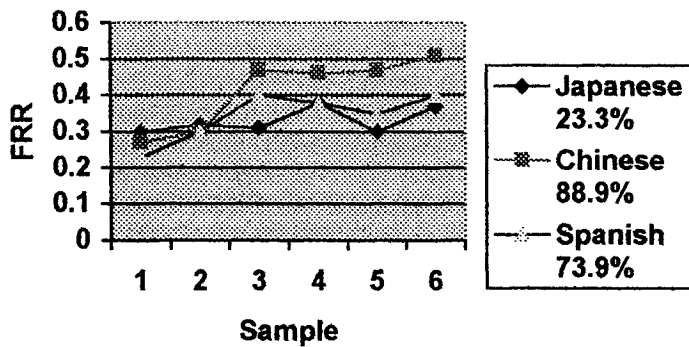
## MLR by L1



## MLR by L1

Sample	Japanese	Chinese	Spanish
1	3.3	3.8	3.7
2	3.0	4.2	3.9
3	3.4	4.5	4.5
4	3.8	5.0	3.9
5	3.4	4.5	3.8
6	4.1	4.6	4.4
	22.8%	19.3%	18.2%

FRR by L1



FRR by L1

Sample	Japanese	Chinese	Spanish
1	.30	.27	.23
2	.32	.30	.30
3	.31	.47	.40
4	.38	.46	.38
5	.30	.47	.35
6	.37	.51	.40
	23.3%	88.9%	73.9%

### Discussion

Two-way ANOVA showed no main effect for L1 and no interactive effect of L1 and time for any of the temporal variables over the six speech samples.

As was the case with gender, there appears to be little evidence of an effect of L1 on fluency development patterns in this group of learners. As evidenced by the tables and graphs in figure 5:12, the general pattern for all variables appears to be that the Chinese

L1 group are generally at higher levels across the six samples, followed by the Spanish L1 group, with the Japanese L1 group generally at lower means for all variables.

For the speed variables SR and AR, there are some differences in the patterns of development for the three groups over the six samples. For SR, the overall trends among the three L1 groups are similar, although the Japanese L1 group shows a somewhat greater rise in mean SR than the other two groups. For AR the Japanese also show a stronger upward trend across the six samples. At the beginning of the study, in sample one, the Chinese group is higher, followed by the Spanish group, with the Japanese group mean lowest of the three. Over the six samples, the Chinese group mean drops while the Spanish group mean stays relatively steady, and the Japanese group mean rises. In the end, all three trends converge so that in sample six they are roughly at the same level. Interestingly, the Japanese group mean shows the steadiest and most substantial overall increase for this variable, as was the case with SR means.

Pause time as a percentage of total speech time shows a similar trend for all three L1 groups. The Spanish L1 group showed a greater drop in PTR over the six samples.

Mean length of runs increased for all three L1 groups over the six samples, but each group took a different route. All three groups show similar means for this variable for sample one, and a similar higher mean for sample six. Between these two samples, the Chinese L1 group increased to peak at sample four, then dropped. The Spanish L1 group rose in MLR for the first three samples, dropped for samples four and five, then increased again for sample six. The Japanese L1 group dropped in sample two, rose for samples three and four, dropped for sample five, then rose for sample six. FRR L1 group means show a complex picture over the six samples. Chinese L1 participants showed great

increases in the first three samples but this increase leveled off thereafter. Japanese and Spanish L1 groups showed different trends for this variable, as Spanish participants showed an increase for the first three samples then dropped for the rest, while Japanese learners were little changed for the first three samples, increased for sample four, dropped for sample five, then increased for sample six.

As discussed in Chapter Two and earlier in the present chapter, there are differences in the spoken discourse styles of the three first languages, and this may have transferred somewhat or influenced the speech style in English for some participants. Chinese participants may have transferred some of the rapid speech and tendency to false starts and repairs from their L1, Japanese participants may have transferred the varying speed of speech and high frequency of pauses from their L1, while Spanish participants may have attempted to produce speech at a higher rate of speed as in their L1. Overall, however, comparing group means for the three L1 groups or looking at L1 discourse styles gives little information that might be helpful in understanding how English learners from typologically different L1s acquire fluency as measured quantitatively. The Japanese learners showed strong steady increases in speed variables over the six samples, unlike the other two groups, but this may be a result of their learning circumstances or individual effort in participating in the study, or related to the fact that as a group they were at the lowest initial rate of fluency as measured by the temporal variables. Furthermore, they had no particular cultural or linguistic similarities to English to give them any advantage as learners. PTR declined for all three groups as expected, although the Spanish group mean declined more than the other two. However, in light of the more erratic changes in the speed variables for the Spanish L1 group, this PTR decline alone

tells us little. MLR changes in L1 group means are complex, with all groups increasing MLR over the six months, but showing group-specific declines and rises from sample to sample. Formula-run ratios increased for all three groups, with the Spanish and Chinese groups increasing for the first three samples and leveling off or dropping for the last four samples, while Japanese participants showed large increases for samples four and six only. These are complex but not systematic changes for each L1 group on the variables over the course of the study.

It is likely that many of the differences among the groups are attributable to the circumstances surrounding individual performance on each sample, combined with initial fluency ability. The Japanese group means generally indicate lower fluency from the beginning of the study and this appears to have affected the performance of the group over the six months of the study. On some variables, the Chinese group means generally indicate higher fluency at the beginning, which may largely explain the more modest and non-linear trend in their data over the course of the study in comparison with the Japanese group. For the Spanish speaking group, initial proficiency on these variables generally lies somewhere between the Japanese and Chinese groups, but they may have been able to progress more rapidly on certain measures as speakers of a language more closely related to English.

### Individual Results

As far as gender, L1, and sociocultural influences are concerned, it may be more informative to look at individual participant performance to see evidence of L1-related social and cultural factors at play. However, a full examination of the role of such factors in fluency development would require a more qualitative research design which is outside of the scope of the present study. The following is an analysis of the data for each participant, organized by language group and gender.

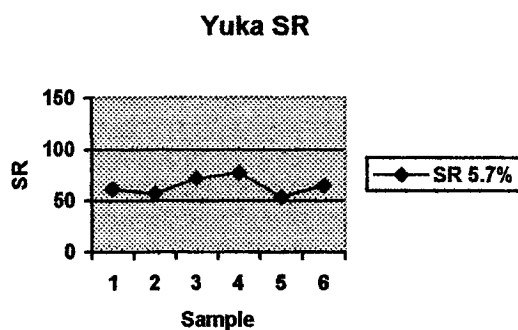
#### Japanese Females

#### Yuka

**Figure 5:13: Temporal Variable Scores for Yuka**

#### **SR**

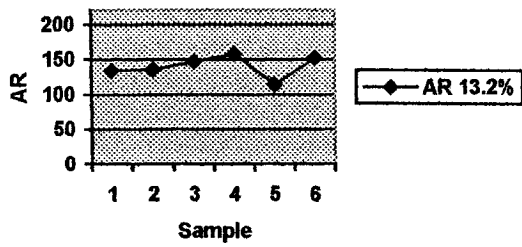
1	2	3	4	5	6	% change 1 to 6
61.5	56.6	72	77.8	53.9	65	5.7%



#### **AR**

1	2	3	4	5	6	% change 1 to 6
134.9	136.9	147.3	158.5	114.9	152.7	13.2%

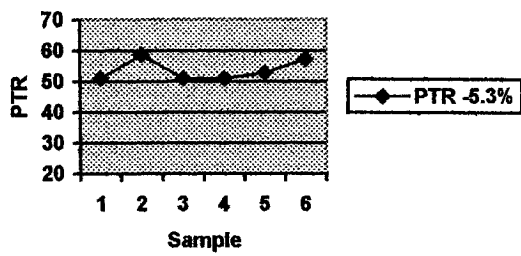
Yuka AR



**PTR**

1	2	3	4	5	6	% change 1 to 6
54.4	58.7	51	51.1	53	57.3	-5.3%

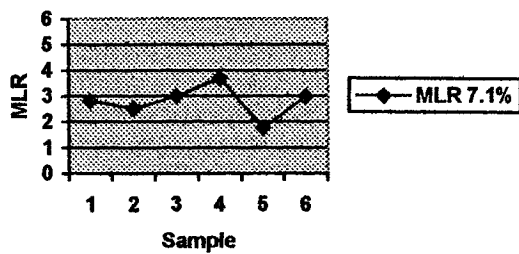
Yuka PTR



**MLR**

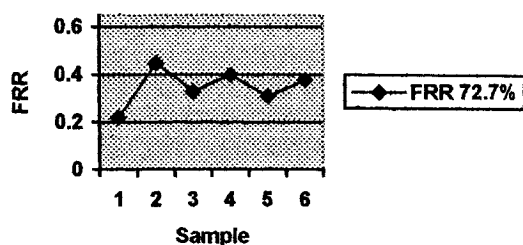
1	2	3	4	5	6	% change 1 to 6
2.83	2.52	3	3.7	1.78	3	7.1%

Yuka MLR



**FRR**

1	2	3	4	5	6	% change 1 to 6
.22	.45	.33	.40	.31	.38	72.7%

**Yuka FRR**Discussion

Yuka's profile on all variables is complex. Clearly, she performed poorest on sample five on all variables, and her PTR scores show increased rates of pausing over time. However, she managed a strong increase in formula-run ratio over time. While her data are not a model of the pattern of variables which shows steady development of fluency, she did demonstrate improvement in some aspects.

It is interesting that she digressed from straightforward narrative retell at times to comment on other issues, for example in sample four she makes lengthy reference to the September 11th terrorist attacks in New York. Sample four is brief and she focuses on the actual retell for less than half of the speech time. In sample two she comments several times that she doesn't understand. This may account for her decrease in fluency for that sample, but also, it may account for the fact that she shows a large increase in FRR for sample two. Formulas such as "I don't understand," "I don't know," and "I'm sorry" add to the number of formulas but do not facilitate the actual retell of the narrative itself.

Social and cultural factors.

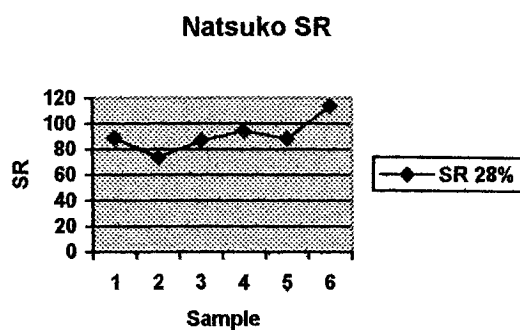
The somewhat uneven pattern of development in Yuka's speech samples here may be a result of issues of self-efficacy, voice, and language anxiety. Yuka was among the lowest performers at the beginning of the research project and, as she struggled with the task of each retelling, she may have been less invested in the process and lacked a sense of voice or power in performing.

### Natsuko

**Figure 5:14: Temporal Variable Scores for Natsuko**

#### **SR**

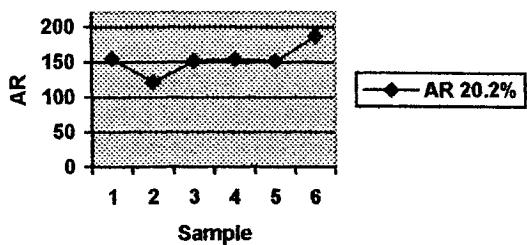
1	2	3	4	5	6	% change 1 to 6
89	73.3	86.9	94.4	88.5	113.9	28%



#### **AR**

1	2	3	4	5	6	% change 1 to 6
155.8	121.7	152.1	154.7	152.3	187.3	20.2%

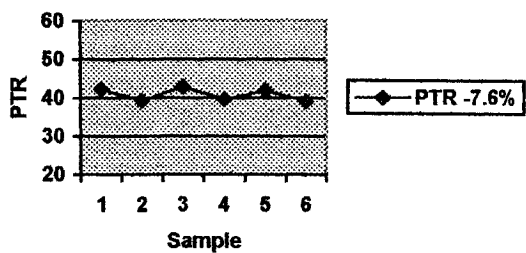
**Natsuko AR**



**PTR**

1	2	3	4	5	6	% change 1 to 6
42.3	39.3	43	39.7	42	39.1	-7.6%

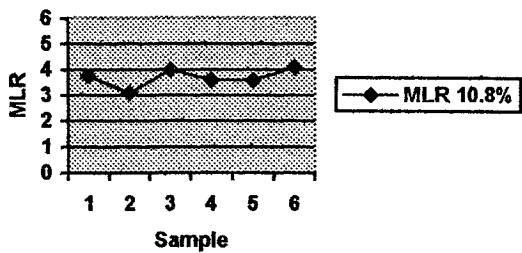
**Natsuko PTR**



**MLR**

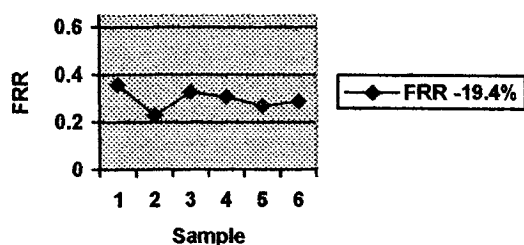
1	2	3	4	5	6	% change 1 to 6
3.74	3.1	4	3.6	3.6	4.1	10.8%

**Natsuko MLR**



**FRR**

1	2	3	4	5	6	% change 1 to 6
.36	.23	.33	.31	.27	.29	-19.4%

**Natsuko FRR**Discussion

Natsuko also shows a complex pattern of development. Her speed scores, SR and AR increase steadily, and her mean length of runs also increases, although not particularly strongly. Her PTR scores are up and down from sample to sample, to show a slight decrease overall. Her FRR actually declines over time, indicating perhaps that any increases in her fluency profile in the six months was not due to automatization of formulas, but to other factors such as automatization of syntax or strategies for fluency which involve lexical devices or other language features. Her MLR increase is quite modest, and her PTR erratic, which would seem to show that automatization of formulas does not account for the increase in speed variables.

It is important to note that Natsuko's speech samples were usually the longest and most detailed of the group, and that she began the research project at a relatively high level of fluency as measured by the temporal variables. By exploring details of the narratives and making an effort to address some of the complexities of the retell task

directly, it is possible that she overextended her language and fluency ability somewhat. This would mean that she did not avoid difficult parts of the narrative or events which might have been difficult for her to express comfortably, leaving her to struggle and reformulate, repair, and so on, resulting in clusters of dysfluencies in places. Furthermore, her FRR declined over the six samples, which may mean that she lacked the appropriate formulas to express what she wanted to express, or that she became cognitively overloaded by the task of recalling what she had seen and could not use automatized chunks which she might otherwise have retrieved with more ease.

#### Social and cultural factors.

Natsuko's enthusiasm for detailed retelling, combined with her relative lack of progress in developing fluency, may tell us something about investment and voice. If it is true that her desire to do a complete job of retelling made her overstep the boundaries of her fluency abilities, this could be a case of how a sense of voice and investment in speech tasks can actually be a disadvantage. The fact that she produced lengthy and detailed speech samples may be evidence of strong investment in the process and a certain level of self-efficacy. But, by trying so hard, she may have pushed herself into dealing with language and concepts which were beyond her actual ability.

#### Japanese Males

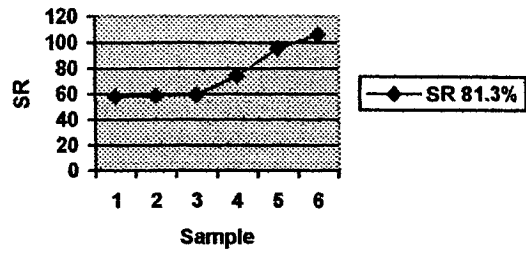
##### Isamu

**Figure 5:15: Temporal Variable Scores for Isamu**

#### SR

1	2	3	4	5	6	% change 1 to 6
58.4	59	59.5	74.4	96.2	105.9	81.3%

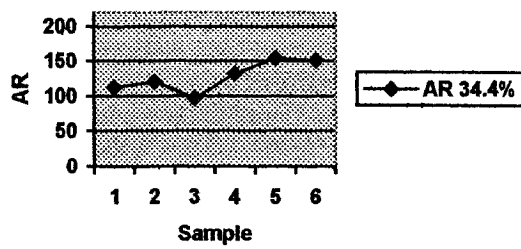
Isamu SR



AR

1	2	3	4	5	6	% change 1 to 6
112.3	121	97.6	132.6	154.8	150.9	34.4%

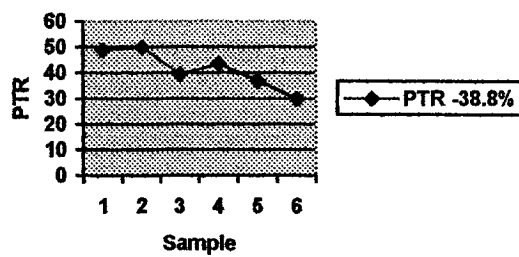
Isamu AR



PTR

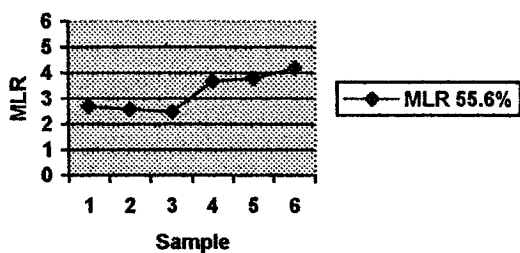
1	2	3	4	5	6	% change 1 to 6
49	49.9	39.4	43.5	37	30	-38.8%

Isamu PTR

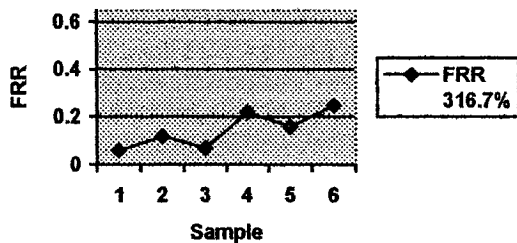


**MLR**

1	2	3	4	5	6	% change 1 to 6
2.7	2.6	2.5	3.7	3.8	4.2	55.6%

**Isamu MLR****FRR**

1	2	3	4	5	6	% change 1 to 6
.06	.12	.07	.22	.16	.25	316.7%

**Isamu FRR****Discussion**

Isamu shows development in all variables to fit the profile of increased fluency and formula automatization. His speed scores and PTR show good development, especially in the last three samples. However, his MLR scores level off for those same last three samples. His FRR development shows rises and drops over the samples but more than tripled from sample one to sample six.

Like Yuka, Isamu shows a tendency to talk about issues related to the topic or themes of the film prompts in addition to direct retelling of the narratives. For example, in sample four he reflects on the September 11<sup>th</sup> terrorist attacks at length, and in sample five he comments at length on the unusual floor plans of the apartments depicted in the film and how they are unlike Japanese apartment layouts. Unlike Yuka, however, he manages to progress on all temporal aspects of fluent speech over all six samples. His speech samples are all relatively brief, and he is generally cautious to retell only the main narrative moves without detail.

#### Social and cultural factors.

Isamu may be an example of an L2 speaker who has limited language ability but enough investment in the process of trying to speak that he uses discourse strategies to do his best to be fluent. He avoids conceptually or linguistically challenging content and injects his own opinions and observations into the task. While he was clearly among the least fluent participants at the start of the research project, he showed steady improvement as time passed. Unlike Yuka, he was able to perform the task without being overwhelmed each time, and unlike Natsuko, he chose what to express most efficiently. It may be that he lacked language anxiety and had a sense of investment and self-efficacy which helped him overcome his language limitations.

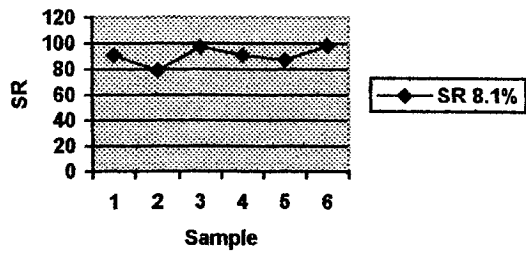
#### Jun

**Figure 5:16: Temporal Variable Scores for Jun**

#### **SR**

1	2	3	4	5	6	% change 1 to 6
91.1	79.5	97.3	91.1	87.4	98.5	8.1%

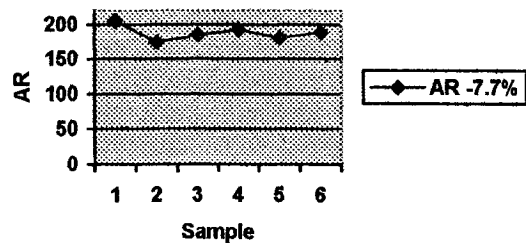
## Jun SR



## AR

1	2	3	4	5	6	% change 1 to 6
205	175	185.2	192.2	181.5	189.2	-7.7%

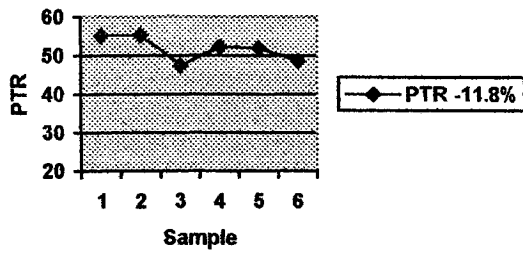
## Jun AR



## PTR

1	2	3	4	5	6	% change 1 to 6
55.1	55.3	47.5	52.4	52	48.6	-11.8

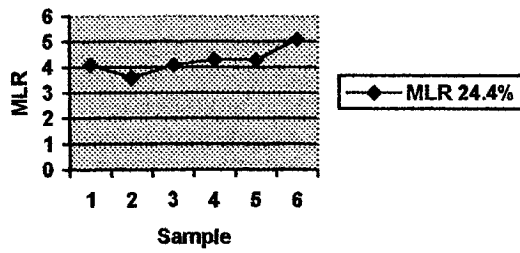
**Jun PTR**



**MLR**

1	2	3	4	5	6	% change 1 to 6
4.1	3.6	4.1	4.3	4.3	5.1	24.4%

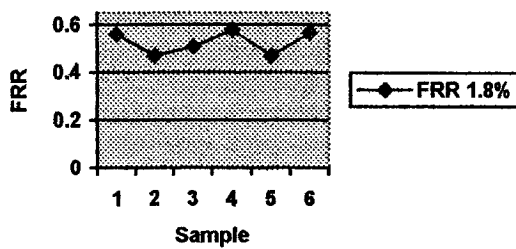
**Jun MLR**



**FRR**

1	2	3	4	5	6	% change 1 to 6
.56	.47	.51	.58	.47	.57	1.8%

**Jun FRR**



## Discussion

Jun shows a complex and contradictory profile on the five variables. His SR scores are relatively steady over the six months, while his AR scores actually drop, especially in samples two and five. The film prompt for those samples was *Strings*, and it may be that he articulated more slowly while retelling that particular narrative. His PTR scores, however, drop over time, especially in sample three, but rise for sample four. In this case, the film prompt would not have had any influence on the pause times. His MLR grows fairly steadily over the samples, dropping for sample two and staying level for sample five, which were based on the film prompt *Strings*. His FRR increases modestly and again we see the possible effect of the film *Strings* in his drop in FRR for samples two and five. Overall, Jun may show a film prompt effect, which makes his general fluency profile a weak fit with the goal of increased SR, AR, MLR, and FRR, with reduced PTR.

It may be that Jun showed a reduction in AR because he articulated more slowly to allow himself to plan ahead or retrieve formulas, concepts, and creatively constructed language in the retells. He shows reduced pause time over the course of the study but little increase in length of runs. It could be the case that he used slower articulation instead of hesitation as a strategy to create an illusion of fluency.

Social and cultural factors.

There is little evidence of social or cultural factors at work in his speech performances. He stays on the topic of narrative retell and does not tend to use self-talk formulas such as "I don't know," or "I think." He does not show much evidence of

avoiding potentially difficult aspects of the narratives, except in the first two samples, which are brief and cursory general descriptions of the main thrust of the stories.

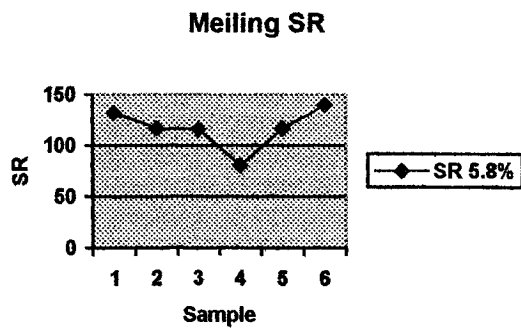
### Chinese Female

#### Meiling

**Figure 5:17: Temporal Variable Scores for Meiling**

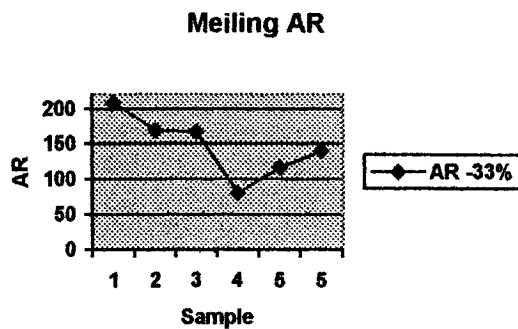
#### SR

1	2	3	4	5	6	% change 1 to 6
132.2	116.6	116.5	80.7	116.6	140	5.82%



#### AR

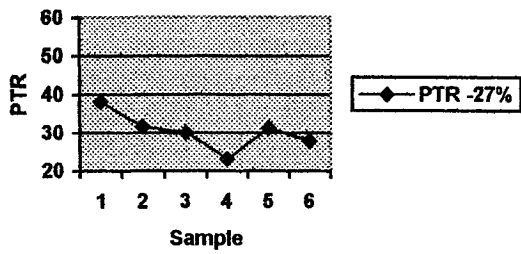
1	2	3	4	5	6	% change 1 to 6
208.9	169.5	167.5	80.7	116.6	140	-33%



**PTR**

1	2	3	4	5	6	% change 1 to 6
38.2	31.7	30.1	23.1	31.3	27.9	-27%

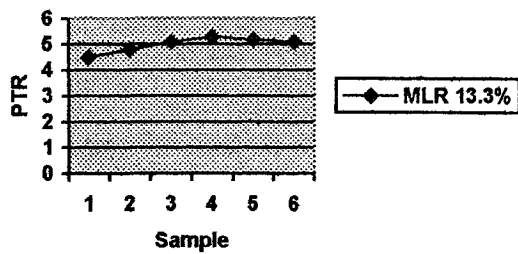
**Meiling PTR**



**MLR**

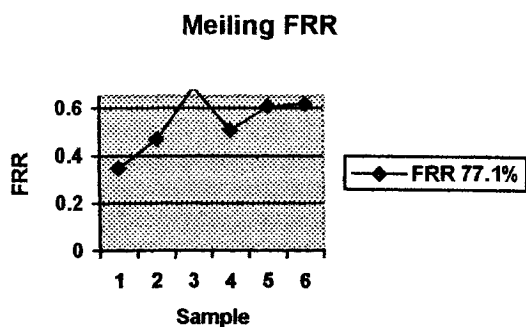
1	2	3	4	5	6	% change 1 to 6
4.5	4.8	5.1	5.3	5.2	5.1	13.3%

**Meiling MLR**



**FRR**

1	2	3	4	5	6	% change 1 to 6
.35	.47	.69	.51	.61	.62	77.1%



### Discussion

Meiling shows a complex pattern of change in the variables over the six samples, influenced perhaps in part by two changes in her acquisition environment: she returned to China for several weeks in the summer, between samples two and three, and she entered Carleton University's credit EAP program just before sample four, and therefore was studying in an environment focused much more on reading and writing skills than on spoken language. Meiling's SR scores drop after sample three, and her AR declines over the six months but the decline accelerates after sample three. She articulated more slowly over time. However, her PTR declined steadily over the six months, with a surprising drop in sample four, where we would expect an increase. Her MLR increased sharply over the first four samples and declined thereafter, and her FRR increased for the first three samples and dropped and leveled off thereafter. It is likely that changing circumstances and reduced spoken input and practice caused Meiling's fluency development to change in the second part of the study. Perhaps she hesitated less and articulated more slowly over time, and used more formulaic sequences but also relied more on filled pauses or lexical repetition strategies to fill silence in her retelling during the second half of the study.

In terms of content, Meiling's retells of the stories differ from those of other participants markedly in several instances. In sample one she spends the last third of the speech focusing on the theme of the story as she sees it and comparing it to a Chinese proverb. In sample two she sees the theme as having to do with water conservation, and announces her upcoming trip home to China. In sample three she spends time at the end thanking the researcher for waiting for her return from China. In sample four she spends time at the end saying what she would do if she were in a situation like that of the protagonists in the film. In sample five she again spends time at the end identifying the theme of the film *Strings* as having to do with water conservation.

#### Social and cultural factors.

These apparent digressions from the task of retell may tell us something about Meiling's investment in speaking English and her cultural fluency or culturally conditioned expectations of the task, although it is impossible to identify whether social and cultural issues influenced her performance in any particular way without hearing her own perspective on it. It seems that she was invested in the task enough to relate it to her own beliefs and ideas, but she seems to interpret the content of one film, *Strings*, as more didactic than the filmmaker might have intended. Her overall sense of the speaking task in this research seems to be that she should comment on the moral themes of the films and agree with them, which may be a cultural or social value she has learned in her educational background. This could relate to cultural fluency in that she interprets narrative retelling as more than just storytelling. However, this also shows a high level of investment in speaking and a sense of voice, especially as she chats fairly comfortably about her travel plans and her own cultural values as related to the film themes.

Unfortunately, none of this helps her to show consistent gains in fluency over the six months as measured by the temporal variables.

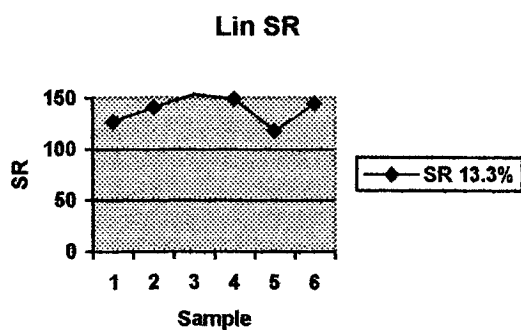
### Chinese Males

#### Lin

**Figure 5:18: Temporal Variable Scores for Lin**

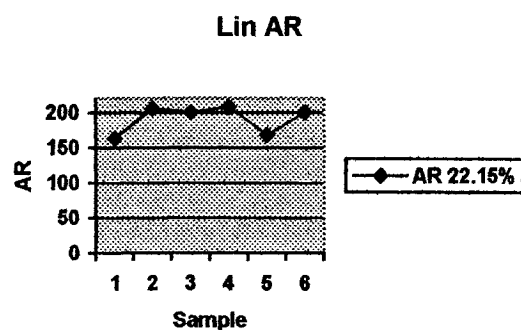
#### **SR**

1	2	3	4	5	6	% change 1 to 6
127.8	141.1	153.6	149.4	118	144.8	13.3%



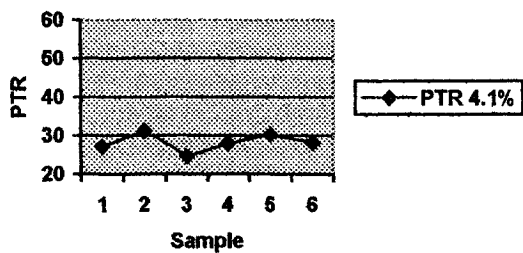
#### **AR**

1	2	3	4	5	6	% change 1 to 6
164.3	206.2	200.6	207.8	168.6	200.7	22.15%

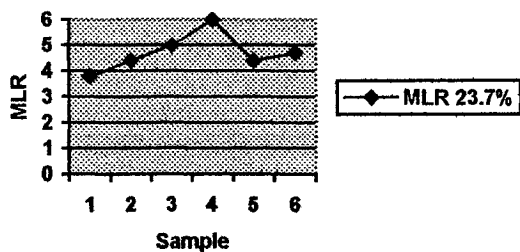


**PTR**

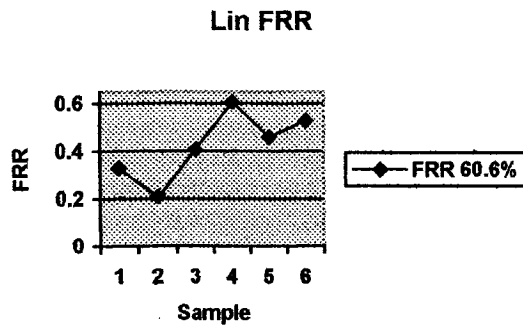
1	2	3	4	5	6	% change 1 to 6
27.1	31.3	24.6	28	30.3	28.2	4.1%

**Lin PTR****MLR**

1	2	3	4	5	6	% change 1 to 6
3.8	4.4	5	6	4.4	4.7	23.7%

**Lin MLR****FRR**

1	2	3	4	5	6	% change 1 to 6
.33	.21	.41	.61	.46	.53	60.6%



### Discussion

Lin shows development in some variables but not in others. His SR and AR scores increased modestly over the six samples with a drop for sample five. In PTR, however, there is almost no development, the trend line is flat. For MLR, Lin shows steady growth for the first four samples but drops for the last two to manage an overall increase of 23.7%. His FRR scores show growth, although samples two and five show drops, perhaps, like Jun, a result of the effect of the film prompt for these two samples, *Strings*. Overall, it appears that Lin may have increased fluency in some temporal variables in the early part of the study but lost momentum for some reason thereafter.

Social and cultural factors.

Although Lin began the study at a relatively high rate of fluency as measured by temporal variables, he shows a loss of momentum in development in the last half of the study. This may be a result of individual circumstances related to social or cultural values. It might be that he lost a sense of self-efficacy or voice for some reason, or that he had experiences or feelings which contributed to development of language anxiety. It would perhaps have been useful in the context of a more qualitative research methodology to hear from him what occurred to cause the changes in his fluency development. Also, like

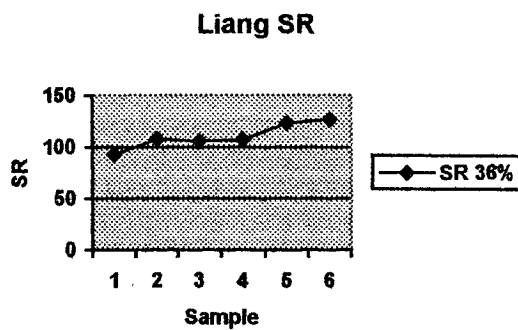
Natsuko, Lin produced consistently long and detailed retellings of the films. He may have pushed his conceptualizing and formulating abilities beyond the comfort level and tried to express ideas which were challenging for him. If this was the case, he showed investment but compromised his speech fluency in the process as measured by the temporal variables in this study. His speech overall seems to become less fragmented as time passed, as he shows improvements in PTR, MLR, and FRR. This may indicate a move away from a Chinese L1 style of speech, with a high degree of fragmentation and strings of loosely connected short sequences, to a pattern which fits more with English speech styles.

### Liang

**Figure 5:19: Temporal Variable Scores for Liang**

#### SR

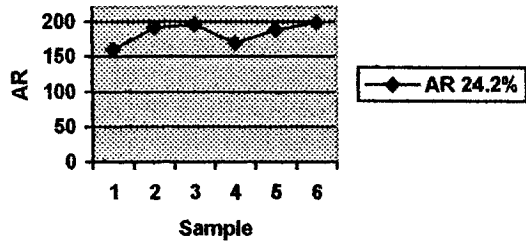
1	2	3	4	5	6	% change 1 to 6
93.3	108.3	106.2	107.4	123.9	126.8	36%



#### AR

1	2	3	4	5	6	% change 1 to 6
160	191.2	196.5	170	188.4	198.7	24.2%

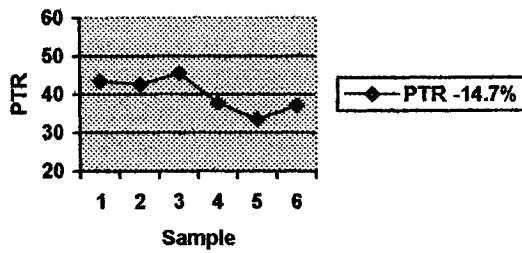
**Liang AR**



**PTR**

1	2	3	4	5	6	% change 1 to 6
43.5	42.6	45.5	37.8	33.5	37.1	-14.7%

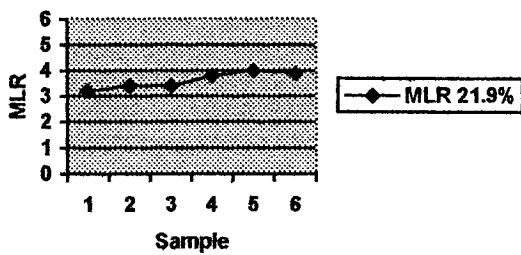
**Liang PTR**



**MLR**

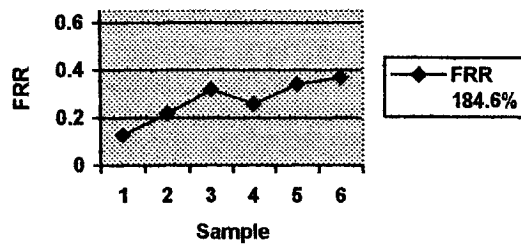
1	2	3	4	5	6	% change 1 to 6
3.2	3.4	3.4	3.8	4	3.9	21.9%

**Liang MLR**



**FRR**

1	2	3	4	5	6	% change 1 to 6
.13	.22	.32	.26	.34	.37	184.6%

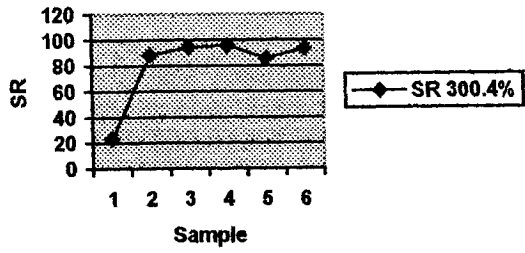
**Liang FRR**Discussion

Liang has a profile in all five variables which shows steady fluency development. His SR and AR scores developed over the six samples, his PTR declined, MLR and FRR increased. In several samples there were reversals for one or more variables, but in general he appears to have been a participant who fit the quantitative profile of development well.

Spanish FemalesSally**Figure 5:20: Temporal Variable Scores for Sally****SR**

1	2	3	4	5	6	% change 1 to 6
23.3	88.3	94.3	96.1	85.8	93.3	300.4%

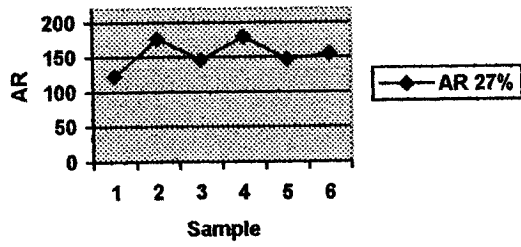
**Sally SR**



**AR**

1	2	3	4	5	6	% change 1 to 6
122.5	176.7	146.7	179.3	147.8	155.6	27%

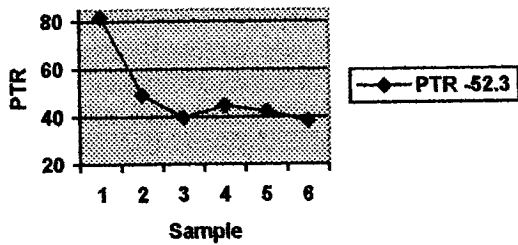
**Sally AR**



**PTR**

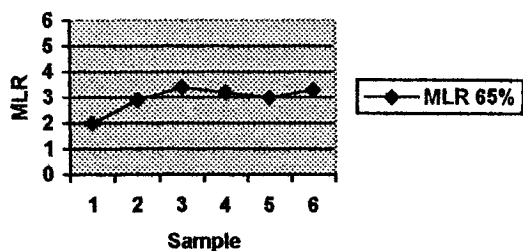
1	2	3	4	5	6	% change 1 to 6
82	49.2	39.9	45	42.5	38.3	-52.3%

**Sally PTR**

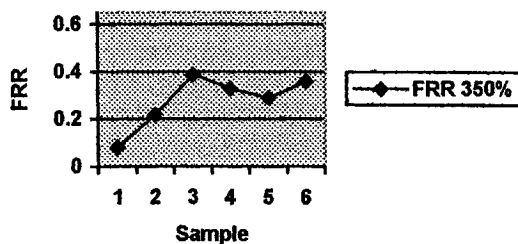


**MLR**

1	2	3	4	5	6	% change 1 to 6
2	2.9	3.4	3.2	3	3.3	65%

**Sally MLR****FRR**

1	2	3	4	5	6	% change 1 to 6
.08	.22	.39	.33	.29	.36	350%

**Sally FRR****Discussion**

Sally's case is complex and unique in this study. Her first speech sample was extremely disfluent on all measures and she improved strikingly on the second sample, but then shows little development after that. Her SR scores from samples two through six are generally stable, and she shows erratic and declining AR scores on the same five samples. Her PTR drops over almost all samples, though, and her MLR and FRR increase for the first three samples but not the last three. It may be that she was not a particularly

fluent speaker at first and was challenged by the retell task, but was more comfortable with it after sample two. In any event, her profile shows dramatic improvement after a very difficult first performance, but with weak quantitative evidence of fluency development after that except for several samples.

#### Social and cultural factors.

It may be the case that Sally was shocked by the nature of the task at the beginning of the research process and had a strong sense of language anxiety and little sense of voice or self-efficacy as a result. It is conceivable that this effect remained throughout the course of the six months, in spite of a growth in fluency in some aspects as measured by the temporal variables. Possibly, she invested little in the tasks and did the minimum necessary; in most cases her retells are general summaries of the narratives and she appears not inclined to explore details or step beyond her comfort level. As a result, she may have put as little strain as possible on her speaking ability by using a sort of avoidance strategy. This might explain her development, albeit weak and wavering, in quantitative fluency measures over the six months. However, it might also be the case that her discomfort with the nature of the task made these speech samples weak examples of her actual speaking ability.

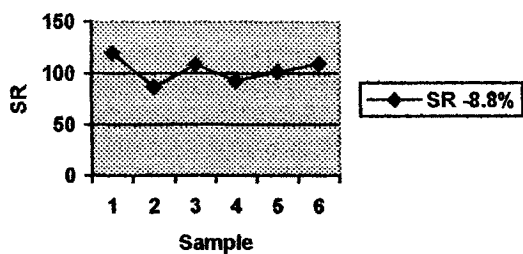
#### Lilia

**Figure 5:21: Temporal Variable Scores for Lilia**

#### **SR**

1	2	3	4	5	6	% change 1 to 6
120	87	108.9	93.1	101.6	109.4	-8.85%

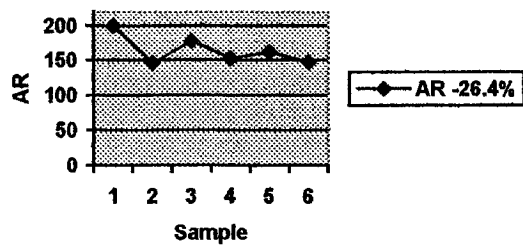
**Lilia SR**



**AR**

1	2	3	4	5	6	% change 1 to 6
200	146.7	178.2	153.2	162.1	147.3	-26.4%

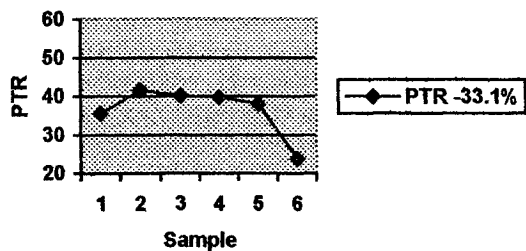
**Lilia AR**



**PTR**

1	2	3	4	5	6	% change 1 to 6
35.7	41.7	40.2	39.8	38.1	23.9	-33.1%

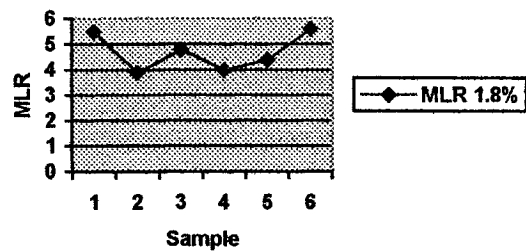
**Lilia PTR**



**MLR**

1	2	3	4	5	6	% change 1 to 6
5.5	3.9	4.8	4	4.4	5.6	1.8%

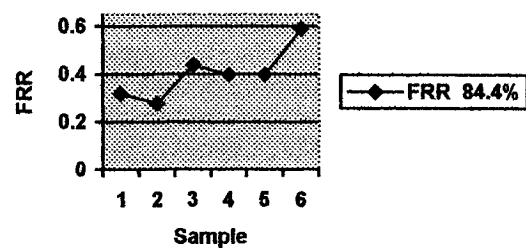
**Lilia MLR**



**FRR**

1	2	3	4	5	6	% change 1 to 6
.32	.28	.44	.4	.4	.59	84.4%

**Lilia FRR**



## Discussion

Lilia also shows a complicated profile of change in all variables over the six samples. Her speed scores show fluctuating SR for the first three samples, gentle growth in the last three and her AR scores actually decline over the six samples. Her PTR scores are level for the first three samples then drop for the last three. Her MLR scores fluctuate for the first three samples, then drop and increase for the last three, while her FRR scores rise by 84.4% over the six months but show little development for samples three, four, and five. Lilia actually shows her best fluency performance in the very first sample as measured by SR and AR, and modest improvement in the last three samples, although she does show improvement in MLR, PTR, and FRR in the last three samples. This is not a profile which matches the ideal for increased fluency over time, as some variables show positive change and others show declining ability. A possible reason for this is that Lilia left homestay to live with a Spanish-speaking friend over the time of the study, reducing her exposure to input in English and stalling her fluency development. Her level of investment and sense of social identity might have negatively affected her performance on these tasks, or she had put herself into a situation in which she had less opportunity for exposure to input in spoken English and had less chance to produce L2 output on a daily basis.

### Social and cultural factors.

Lilia, like Yuka, Isamu, and Meiling, tended to expand her retells away from direct description of what happened in the films toward an interpretation of the themes involved. For example, in samples one and two she makes the theme clear at the end. In sample four she devotes roughly the last quarter of the speech time to a discussion of the

theme of the film, using many formulas such as “I think,” and “this is the message.” In sample five she also devotes a long stretch of speech time to exploring the theme of the film and its implications. This may relate in some way to cultural fluency, in that she was interpreting the nature of the retelling task to mean infusing it with her own identity and beliefs. Is this was the case, she was showing a sense of voice and social identity.

However, none of this translated into improved scores on temporal aspects of fluency, perhaps because the task of narrative retell and monologic samples did not allow her to show her true underlying speech ability at its best or most genuine.

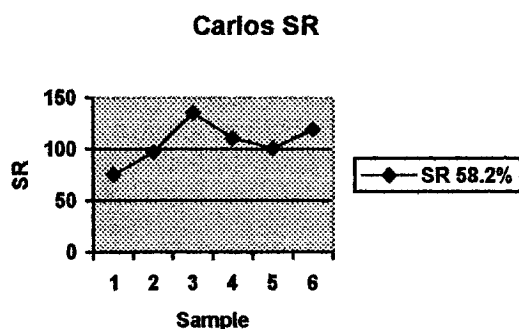
### Spanish Males

#### Carlos

**Figure 5:22: Temporal Variable Scores for Carlos**

#### **SR**

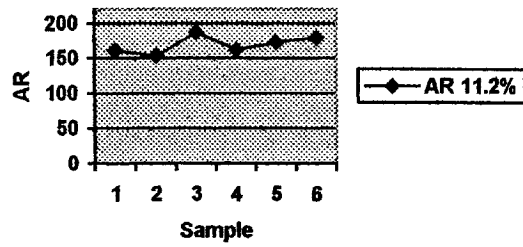
1	2	3	4	5	6	% change 1 to 6
75.6	97.7	135.6	110.4	101.1	119.6	58.2%



#### **AR**

1	2	3	4	5	6	% change 1 to 6
161.3	153.6	187.7	162.6	173.3	179.4	11.2%

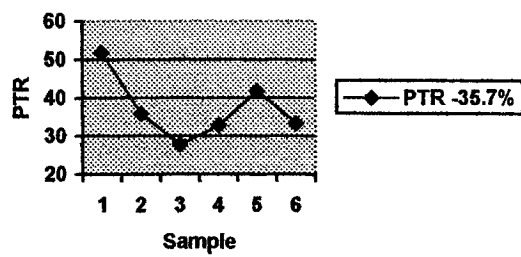
## Carlos AR



## PTR

1	2	3	4	5	6	% change 1 to 6
51.8	35.9	27.9	32.8	41.9	33.3	-35.7%

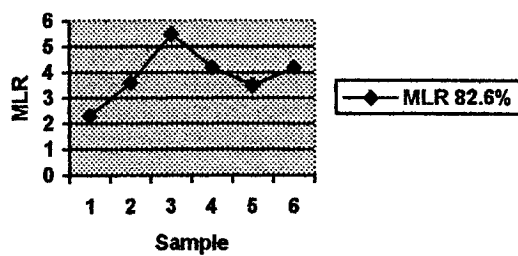
## Carlos PTR



## MLR

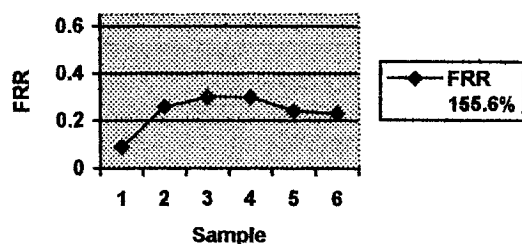
1	2	3	4	5	6	% change 1 to 6
2.3	3.6	5.5	4.2	3.5	4.2	82.6%

## Carlos MLR



**FRR**

1	2	3	4	5	6	% change 1 to 6
.09	.26	.3	.3	.24	.23	155.6%

**Carlos FRR**Discussion

While not a perfect fit with the ideal quantitative profile of increased fluency, Carlos's performance over the six samples shows development in a non-linear fashion. His SR scores show strong increase over the first three samples then show a U-shaped profile for the last three. His AR increase is a modest 11.2% overall, with steady increases over the first three samples and weaker increases in the last three. PTR shows a strong overall decrease, with sharp declines in the first three samples, but more erratic changes over the last three. Similarly, MLR increased a great deal over the first three samples, and a U-shaped curve for the last three. And FRR increases steadily for the first three samples and declines somewhat over the last three. Sample five appears his weakest on most variables, although the reason for this is not clear.

Social and cultural factors.

It may be that Carlos had an attitude toward the narrative retell process that affected his performance somewhat. He produced short samples in most cases, staying

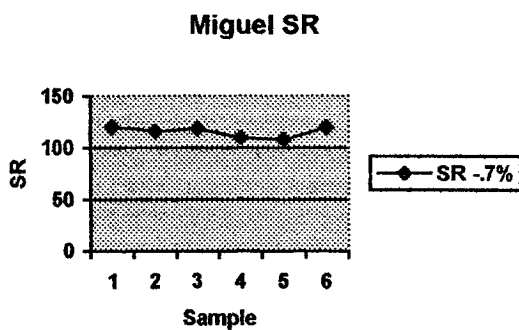
fairly close to a summary of the main movement of the narratives. However, he frequently commented at the beginning about having seen the film earlier in the course of the research, or that the film was “interesting” or “funny.” Perhaps, like Lilia, this was a function of cultural fluency, in that he interpreted the nature of the task to mean introducing his opinions and self into the retell, showing a certain level of sense of voice. So, on one hand he produced simple and fast summaries of the film contents, but, on the other hand, he made his attitudes about the films clear. In any case, he showed progress in development of fluency.

### Miguel

**Figure 5:23: Temporal Variable Scores for Miguel**

#### SR

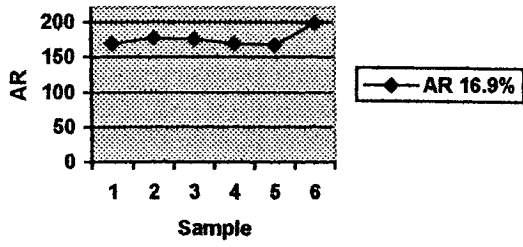
1	2	3	4	5	6	% change 1 to 6
120.6	116.5	118.6	110	108.4	119.8	-.7%



#### AR

1	2	3	4	5	6	% change 1 to 6
170	178.2	176.1	170	168	198.7	16.9%

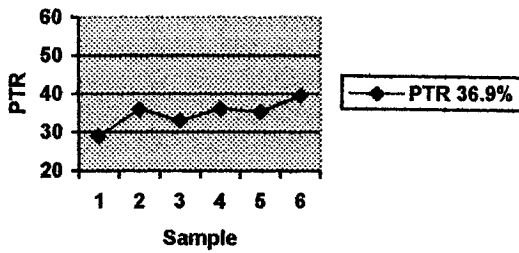
**Miguel AR**



**PTR**

1	2	3	4	5	6	% change 1 to 6
29	36	33	36.2	35.4	39.7	36.9%

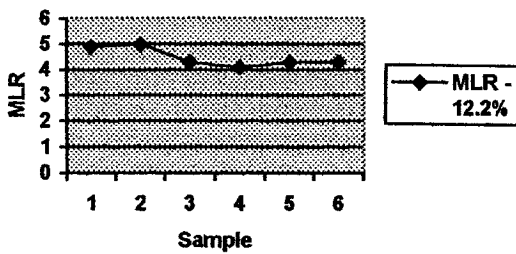
**Miguel PTR**



**MLR**

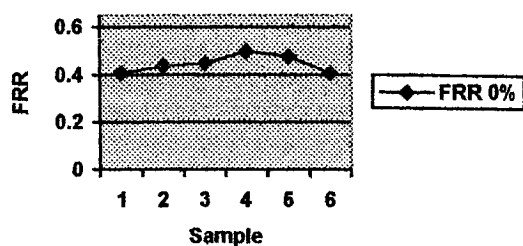
1	2	3	4	5	6	% change 1 to 6
4.9	5	4.3	4.1	4.3	4.3	-12.2

**Miguel MLR**



**FRR**

1	2	3	4	5	6	% change 1 to 6
.41	.44	.45	.5	.48	.41	0%

**Miguel FRR**Discussion

Of all participants, Miguel is the one with the least evidence of fluency improvement over the six samples, despite, or perhaps because of, his high initial performance as measured by the five variables. His speed scores show declines over the course of the study, although he shows large increases in the last three samples. His PTR and MLR show reduced fluency, and his FRR scores remain level throughout. It may be that Miguel invested less energy in the retellings than did some others, or the fact that he left homestay to live with a Spanish-speaking friend during the time of the study limited his exposure to English language input and caused his fluency development to stall.

Social and cultural factors.

Miguel produced consistently lengthy and detailed retells of the film narratives and shows little sign of having anxiety or low self-efficacy at any point. Furthermore, there is nothing in his speech samples to indicate that he was overreaching his ability or using any particular strategy to compensate for overloading his memory or ability to

formulate language or retrieve formulas. He displays a confident and competent attitude, with a calm expressive voice and conversational tone in all samples. He stays at a high level of ability over the six months, showing little further development of fluency.

### Conclusion

In summary, the data presented here show an increase in fluency over the course of the study for most of the participants on most of the measures. There is no evidence of a clear effect of gender or L1 on the speech fluency development of the participants. According to their speech samples, individual participants took different paths to improvement over the six samples, and only one, Miguel, demonstrated no overall improvement. The increase in the ratio of formulas to length of runs in the data for all but two participants is notable, indicating that it is related to increasing overall proficiency and fluency development. Some of the participants may have attempted to describe the film narratives in detail and ended up in a situation in which they were challenged by the task and unable to demonstrate their underlying abilities. On the other hand, it appears that some participants were anxious as a result of the task involved and produced very general and simple summaries of the film content, also not demonstrating their real underlying abilities.

The influence of social and cultural issues on the performances of the participants is difficult to identify in this study. The purpose of the study is to look at the effect of formulaic sequences on the development of L2 fluency in terms of established temporal measures, and the methodology used does not involve interview or introspection, so it is left to speculation whether or how identity, voice, anxiety, self-efficacy or cultural fluency played an active role in any of the speech samples of the participants. The

methodology, including the narrative retell procedure used here, apparently did not provide a vehicle for the effect of such factors to be observable. However, particularly in the analysis of individual participant performance, these data do yield some suggestive findings whose nature and significance will require further research with a different design.

In order to observe how formulas might have facilitated more fluent speech over time, it is useful to compare use of formulas in the performances of the participants on earlier and later retells of the same film prompt. These comparisons are presented in the next chapter.

## Chapter 6

### Qualitative Analysis: The Search for Evidence of a Facilitating Role of Formulaic Sequences

While the statistical analyses show fluency development for the group as a whole over the six speech samples on all temporal variables, supporting the hypotheses of this study, examination of formula use to further fluency can only be effective when the same film prompt is used. In other words, comparing the data qualitatively across samples using different film prompts is problematic. The events in the three films and the language needed to describe them are considerably different and meaningful comparative analysis of participant speech in such cases is doubtful.

Rather, it seems preferable to compare the speech samples which show development of all temporal variables for the same prompt. This can ensure isolating instances where later samples show how formulas were used to facilitate the development of the temporal aspects of fluency.

Figure 6:1 shows which participants show patterns of temporal variables corresponding to the hypotheses for the same film prompt when the second viewing is compared to the first. The temporal pattern which is selected for this is increased speech rate, reduced phonation/time ratio, longer MLR. In addition to this, increased ratio of formulas to runs is used as a criterion.

**Figure 6:1: Same-film Improvement in Fluency Measures****Samples 1 and 4: *Neighbours***

	Yuka	Isamu	Liang	Sally	Carlos
SR %	26.5	27.4	15.1	312.4	46
AR %	17.4	18.1	6.3	46.4	.8
PTR %	6.1	11.2	13.1	4.1	36.7
MLR %	32.1	37	18.8	60	82.6
FRR %	81.8	266.7	100	312.5	233.3

**Samples 2 and 5: *Strings***

	Isamu	Jun	Liang	Lilia
SR %	63.1	9.9	14.4	16.8
AR %	27.9	3.7	No increase	10.5
PTR %	25.9	6	21.4	8.6
MLR %	46.2	19.4	17.6	12.8
FRR %	33.3	No increase	54.4	42.9

**Samples 3 and 6: *The Cat Came Back***

	Natsuko	Isamu	Liang	Lilia
SR %	31.1	78	19.4	.5
AR %	23.1	54.6	1.1	No increase
PTR %	9.9	23.9	18.5	40.5
MLR %	2.5	68	11.8	16.7
FRR %	No increase	257	15.6	34.1

After this quantitative analysis of the data was completed, a more qualitative, discourse-focused analysis was undertaken with the objective of determining how formula use might have facilitated improvements in temporal variables. It was hypothesized that, since the temporal variables showed significant increases in fluency and that length of runs and formula/run ratios increased, it would be possible to isolate the role of formulas in the changes over time in the narrative retells. It was expected that, especially given that participants retold the same story twice over the course of the data collection, it would be clear where dysfluency in expressing ideas in an earlier retelling was cleared up by using formulas in the later retelling. The qualitative analysis was meant to be a search for exemplars of the facilitating role of formulas in increased fluency over time in this study.

Initially, it had been envisioned that clusters of dysfluencies might be reduced by use of formulas. Freed (1995: 131) defines clusters of dysfluencies as “the presence of two or more interruptions to the flow of speech. Examples include filled pauses which occurred in combination with other speech markers such as repairs and/or unfilled pauses

of more than .4 seconds.” However, that type of cluster occurred frequently in both earlier and later retellings of the same film prompt, and in the comparisons for individuals it was difficult to locate exactly whether such a cluster was cleared up by use of formulas in the later retelling due to other aspects of discourse and the overall different approach to retelling used in a later instance.

In addition to the issue of isolating instances where formula use helped clear up clusters of dysfluencies, a second expectation was proven wrong by the reality of the data. It had been expected that the clause-by-clause or clause chaining principle of narrative oral discourse described by Pawley and Syder (1993) would become apparent in later retells of the same prompt, facilitated by use of formulas. Again, the variation in approach to retelling over time by participants made it difficult to determine whether the same ideas were being retold using clause chaining and use of formulas.

These initial expectations were too simplistic; analysis of the transcripts revealed a much more complex picture than first supposed. It became apparent that rather than simply retelling the stories in a linear fashion move by move, the participants often took different approaches to the retelling of the same story two times. They began their narratives in different ways, they focused on different aspects of the stories each time, and they elaborated more on different parts of the stories. In most cases they produced quite different retells of the same film prompt two times, at a conceptual level as well as at discourse and linguistic levels. In short, it was virtually impossible in any particular case to simply set the transcripts side by side and compare how particular ideas were expressed each time. In no case did a participant attempt to express exactly the same idea or piece of content twice. Therefore, the search for features of fluency and the role of

formulas had to take place in a quite different conceptual, discourse, and linguistic context for each narrative retell, making a simple side-by-side or linear search for exemplars a great challenge.

In light of this, a different approach was taken. Two types of broader analysis were conducted, one focusing on the ways different narrative moves were expressed, the other focusing on how formulas were used to facilitate fluency in a broader sense than simply at the level comparison of expression of particular ideas. For the latter analysis, instances in which MLR and FRR showed improvement from the first retell of a film to the second were isolated, and particular uses and effects of formulaic sequences were identified and classified.

#### Analysis by Narrative Moves

The first part of the qualitative analysis involved examining how each narrative move in the film stories was expressed by each participant. The first retelling of a given film prompt was compared to the second retell, which occurred three months later, and they were examined move by move for improvements in total pause lengths, the number of formulas used in each, and an increase in MLR. Some clear examples of a facilitating role for formulas were identified in this way. The following is a presentation of the clearest examples. The name of the participant is followed by the speech samples; 1 and 4 are the retells of *Neighbours*, 2 and 5 are the retells of *Strings*, 3 and 6 are retells of *The Cat Came Back*. After each segment of transcript are presented the total seconds of pause time in the segment and the total number of formulas and the MLR in the segment. In each case, a clear pattern exists in that total pause time is reduced as the number of formulas increases along with MLR.

In these retells of segments of the films, several themes emerge. Participants used formulas to extend the length of runs and give concise expression to events in the narratives. By doing so, they were in some cases able to eliminate all or part of the dysfluency evident in earlier retells of the same film. As well, pause times and frequencies are reduced in most instances in the second retell, as use of automatized formulas made expression smoother. In some instances, the second retell of a film segment included extra content but nevertheless the participants were able to navigate the more complex terrain more efficiently by making use of formulas. In several cases retrieval of a key lexical item in retell number two is followed by a brief pause and a formula containing the key item, uttered coherently and quickly; this may be an indicator of automatic retrieval as the lexical item may have triggered retrieval of the whole formula.

#### **Samples 1 and 4: *Neighbours***

##### **Yuka**

Due to the fact that Yuka's retells of the story differ so greatly in content and theme, no comparison is possible.

##### **Isamu**

#### **The beginning of competition over the flower**

- **First Attempt:**

first purpose (1.5) a flower (2.0) um (3.0) beautiful (1.9) um by (1.3) his (1.0) mine (1.0)  
their's mine (1.0) their (1.6) get

14.3 sec. 0 formulas

MLR 1.8

- **Second Attempt**

*this case* is just flower (2.0) they (0.5) are (0.7) they are their *mind change* (1.2) *very bad*

4.4 sec. 3 formulas

MLR 3.2

The first attempt is one large cluster of dysfluency with long and frequent pauses, no evidence of using formulas.

The second attempt contains one short dysfluency cluster in runs 2 and 3, but a formula is retrieved to extend and complete run 4. This is followed by a pause and another formula completes the thought efficiently.

## **Liang**

### **Setting the scene**

- **First Attempt**

And a little boy (0.7) but ah (0.6) neighbour (0.9) um (0.7) two homes two chair and two men (0.6) two men (0.5) sitting the two chair (1.4) um (0.5) *with the newspaper* ah (0.3) and ah (1.6) smoke (1.3) and they (0.3) they don't take a fire (0.5) ah a man may give me fire (0.7) so they (0.5) is *very friendly*

11.1 sec. 2 formulas

MLR 3.44

- **Second Attempt**

This *in this movie* is (0.5) about two guys (0.9) so ah neighbour (0.3) they *live together* (0.7) *sit together* on the (0.4) grass *smoke together*

2.8 sec. 4 formulas

MLR 5.0

The first attempt is quite fragmented, it is difficult to find the language to describe the scene. It is almost a long cluster of dysfluency.

Attempt number 2 shows how use of formulas can allow a more concise and accurate description using less time and with shorter pauses and longer runs. Three simple formulas all containing the word *together* allow Liang to efficiently express what he saw without searching for the language to do so. It may be that these three similar formulas were retrieved in a linked fashion, as the first one was retrieved the other two followed with relative ease based on the shared lexical component *together*.

### **Sally**

#### **Conclusion and moral of the story**

- **First Attempt**

the things (2.6) aren't (6.5) ah (0.6) other (14.0) important (16.3) how (4.5) love (0.4) your (4.5) said (4.5) *more important* (8.5) important (11.0) I think

73.4 sec. 1 formula

MLR 1.83

- **Second Attempt**

this is *the reason of this history* (0.3) *about the neighbours* (0.7) and (1.0) we *know that* (0.8) we *need to* (0.9) to have (0.3) to (0.9) have a good neighbours (1.8) and *this is the end of the story* (0.9) bye

7.6 sec. 5 formulas

MLR 4.0

The first attempt is extremely dysfluent with many single word or single syllable runs and very long pauses.

The second attempt is much smoother and shorter but with added content. Sally still has a slight cluster of dysfluency in runs 6 to 8 but otherwise it is quite formulaic and with much shorter pauses. The length of runs shows a large increase, due to the use of formulas. The longest run in the first retell is a mere four syllables. The second last run contains a long rhetorical device which closes the narrative effectively and allows for a long run of nine syllables. The lengthy 1.8 second pause preceding it is likely a function of the speaker having run out of things to say and may not be a sign of struggle to formulate the following run, which is uttered quickly and with considerable phonological coherence compared to other parts of the narrative.

## **Carlos**

### **Mutual destruction**

- **First Attempt**

yeah fin final (1.0) finally (0.5) ah (0.8) and and (0.5) any anybody (0.7) ah have (0.5)

two flowers ah

4.0 sec. 0 formulas

MLR 3.14

- **Second Attempt**

*the end of history* (0.8) everybody's (0.7) died (1.0) but (0.5) um (0.5) *each man* has the

rose in your in your (0.9) funeral you

4.4 sec. 2 formulas

MLR 3.70

The first attempt is difficult to understand, fragmented and with repairs and repetitions.

The second attempt is started by a 6-syllable run with a rhetorical formula. A cluster of

dysfluency follows that but the use of the formula *each man* seems to help stretch the 6<sup>th</sup> run somewhat. There is greater overall pausing but better MLR and evidence of some use of formulas.

### **Samples 2 and 5: *Strings***

#### **Isamu**

#### **Preamble to setting the scene**

- **First Attempt**

um no speaking (0.5) ah very very (0.4) difficult (0.6) but (0.4) very fine (0.3) I like (0.5) this (1.0) video

3.7 sec. 0 formulas

MLR 3.14

- **Second Attempt**

um before *I don't know* this ship ah this ship name (0.5) *but now* I (0.3) know because I found Titanic this movie is Titanic (0.8) so (0.8) maybe *I guess*

2.4 sec. 3 formulas

MLR 7.0

The first attempt is simple and consists largely of one or two-word runs separated by substantial pauses.

The second attempt deals with different content. Several formulas help to extend the length of runs and the pauses are shorter overall. One of the longest runs, the third one, is non-formulaic. Using the self-talk formula *I don't know* in the first run allows the speaker to produce a fairly lengthy run which may have given him mental energy to deal with the subsequent talk with relative ease. The following two or three runs are not

particularly long or formulaic but are uttered comfortably and quickly. This effect appears to die out after the end of this segment. As well, at this point he is dealing with his personal interpretation of the film and not retelling the narrative per se, which may allow for more relaxed speaking which is reflected in overall fluency features.

## **Jun**

### **Guests arrive and begin to play music**

- **First Attempt**

came (0.3) his house (1.4) *to make music* (2.5) and they *played music* (0.7) with (1.1) guitar (0.4) violin contrabass

6.4 sec. 2 formulas

MLR 3.0

- **Second Attempt**

some people will *come to his house / to play music* (1.5) their instruments *are also* strings

1.5 sec. 3 formulas

MLR 10.0

The second attempt deals more concisely with the content, probably because Jun avoids trying to recall the names of the particular instruments. The first run is extended by linking two formulas.

**Liang**

**The old woman takes a bath**

- **First Attempt**

prepare (0.9) to wash (1.5) he (1.5) he spend (1.7) many wash in the (1.2) bath (0.6)  
bathtub (0.8) in the bathtub

8.2 sec. 0 formulas

MLR 2.38 -

- **Second Attempt**

*and then* the old woman (0.4) is (0.6) washing (0.5) *in the washroom* and just ah (0.4)  
close (0.6) ah *close her eyes* (0.3) *make a dream*

2.8 sec. 4 formulas

MLR 3.43

The first attempt is characterized by repairs, repetitions, and short runs with many pauses.

It is virtually one large cluster of dysfluency.

The second attempt contains several useful simple formulas which make the runs longer and the expression more exact. Only two dysfluent pause phenomena occur in the second attempt, between runs 2 and 3, and between runs 5 and 6. The second instance is interesting in that Liang appears to start to describe the old woman closing her eyes and retrieves the lexical item *close*, which leads to the formula *close her eyes* after a brief pause and a non-lexical filler *ah*. This formula was uttered at high speed, perhaps indicating automatic retrieval triggered by the initial retrieval of the verb *close*.

### The old woman returns to her bath

- **First Attempt**

the the woman (1.0) do (0.6) wa (0.3) wash (0.3) wash *in the bath* (0.3) bathtub (0.5) and  
ah dream again

3.0 sec. 1 formula

MLR 2.57

- **Second Attempt**

the old woman (0.6) washing (0.5) ah *keep washing* (0.8) and the (0.4) make her dream  
*by herself*

2.3 sec. 2 formulas

MLR 3.60

Similar to the above, here Liang struggles in the first attempt and produces a cluster of dysfluency in runs 2 to 4 while trying to describe the return to the bathtub. He produces one-word runs and many pauses throughout.

The second attempt is shorter and much more efficient in expressing basically the same content. He produces a more sophisticated formula to describe her actions, *keep washing*, possibly triggered by the retrieval of the verb *washing* in the previous run, followed by a short pause and a non-lexical filler, *ah*. Again, this formula was uttered very quickly, perhaps indicating automatic retrieval after the uttering of the core verb *washing* a moment earlier.

## Lilia

### Setting the scene

- **First Attempt**

Today we (0.8) show a film ah (0.4) about two neighbour (1.3) they *living in / the same building*

2.5 sec. 2 formulas

MLR 5.0

- **Second Attempt**

this film *is about* two neighbours (0.8) they *are living in the same building* but (1.0) they are *living alone / each other* (0.4) alone *each ah of them*

2.2 sec. 5 formulas

MLR 8.25

In this case, the second attempt deals with more content, the notion that the two people are living separately and alone. In spite of this, Lilia manages to use more formulas and reduce pausing and lengthen runs. She uses multiple formulas which are uttered rapidly and coherently in runs 2 and 3.

### The old man goes upstairs to fix the leak

- **First Attempt**

he (0.3) *has to* (2.1) *go to* the (0.5) third floor to (0.7) *talk with* the neighbour (1.4) um (0.8) she's (1.3) she was (0.4) she repaired the (1.0) ah problem *in the bathroom*

8.5 sec. 4 formulas

MLR 2.90

- **Second Attempt**

and he *decided to* (0.4) *go to* the (1.0) neighbour's the old (0.4) woman house (0.4) and (0.7) she leave to (0.8) she *leave him to enter* (0.5) *to fix* the problem in the

4.2 sec. 4 formulas

MLR 4.13

In this case, Lilia produces a cluster of dysfluency in the first attempt in runs 6 to 9. In the second attempt, she deals with the situation somewhat differently in terms of content, stating that the woman allowed the old man to enter. She uses an idiosyncratic formula *she leave him to enter*, preceded by a pause of .8 seconds duration. Interestingly, this formula follows an initial attempt, a short run consisting of *she leave to*. As was the case with Liang, discussed earlier, it may be that the retrieval of the verb *leave* triggered the automatic retrieval of the formula, following a short pause.

### **The message of the film**

- **First Attempt**

but he (1.3) *live alone* (0.8) and she *live alone* (2.8) maybe this is the message of this ah (1.7) ah short (0.7) film (0.9) they are very alone but (1.2) they don't

9.4 sec. 2 formulas

MLR 4.0

- **Second Attempt**

*I don't know* maybe (0.3) is ridiculous but is (0.4) *very common situation in the world of today* (1.0) of today *in the world* (0.3) everybody (0.3) thought their own (1.0) way and (0.3) for (1.5) one (2.0) maybe we forgot (0.4) that the people (0.8) *need to share with us* and we have many (0.7) *many things to share with the other people* (1.2) *to*

*learn* (1.0) *to share* (3.4) *to stay* (0.6) *with other* (0.3) *with another person* (1.2) I don't (0.8) *is a good example of the* (3.0) *reality of this of the reality* (0.7) *I think so* (2.0) *is no good being alone*

23.2 sec. 20 formulas

MLR 5.22

Here, Lilia goes into much greater detail in her second attempt, producing a lengthy and, at the same time, more fluent reflection on the perceived message of the story of the film. She uses multiple formulas to create quite lengthy runs and she runs into dysfluency only in runs 7 to 9. Because of this her MLR score for the segment increases greatly, from 4 to 5.22.

### **Samples 3 and 6: *The Cat Came Back***

**Natsuko**

#### **Taking the cat to the forest**

- **First Attempt**

and (1.0) first he (1.0) um (1.5) took the cat *tried to* (0.5) out the cat (0.4) *in the forest* (1.2) *by car* (0.3) but the cat (0.5) um returned the house (2.2) *came back* the house (2.6) *faster than* him

11.2 sec. 5 formulas

MLR 3.09

- **Second Attempt**

*I forget / I forget* the order *but maybe* the f he *went to the forest* first (0.6) and ah (0.3) to put it (0.4) put it (0.3) *in the forest*, leave it (0.7) but (0.6) ah (1.0) he *couldn't make it*

(0.3) cause the (0.9) um (2.8) before he (0.6) he *went back* to his car (0.4) the cat already *came back to* his car and ah

8.9 sec. 8 formulas

MLR 5.0

In this case, Natsuko produces a much more fluent description of the episode in the second attempt while adding a comment about her difficulty recalling it. While she still is rather dysfluent in runs 2 to 4 and 6 and 7 and 9 to 11, she uses formulas to good effect to extend runs and express more efficiently. Pausing is reduced and MLR increased. The formulas used are simple and the last two are similar in that they contain a common lexical element *back*. This is necessary to effectively relate the events and is perhaps triggered by the title of the film, *The Cat Came Back*.

**Isamu**

**Accidental suicide and pursuit by 9 souls of the cat**

- **First Attempt**

she dead (1.0) and (0.5) then (0.5) they happy because (0.3) they (0.5) separate (0.7) ah (1.0) by (1.0) cat (0.7) cat (1.0) die dead (0.9) and she unhappy (2.5) ah (0.5) then (0.5) many cat (1.0) she go (1.5) he (0.5) go to (1.3) heaven with (0.5) many cat (0.4) she very cry

16.8 sec. 0 formulas

MLR 2.10

- **Second Attempt**

*and then* he dead (1.0) yeah (0.5) *and then* but ah (0.8) next nonsense (0.5) why cat (1.0)  
 cat dead but (0.8) cat spirit is (0.5) just nine (0.5) ah *a lot of* ni it's ah nine (0.5) spirits  
 (1.0) so (1.0) terrible he *grow up*

8.1 sec. 4 formulas

MLR 3.33

Here, Isamu's initial attempt to describe the events consists of one or two-word runs and many lengthy hesitations, almost one large cluster of dysfluency. In the second attempt, however, he is able to improve fluency by use of several simple formulas and more direct and concise description. This helps him to increase MLR and reduce pausing significantly. He makes effective use of the rhetorical device *and then* to lengthen runs and mark the sequence of events and it appears to help him to buy time in articulation because the formula is repeated after a long pause and he may be using it to create an illusion of fluency as he tries to recall the next event or formulate the next stretch of language.

### **Liang**

#### **Taking the cat to the sea by boat**

- **First Attempt**

ah *in the sea* (2.2) and (0.5) at (0.4) he lo'he (0.4) ah he's *in the sea*

3.5 sec. 2 formulas

MLR 2.80

- **Second Attempt**

*go to sea* (0.7) he he *drive his boat* (0.9) *in the sea* (0.3) and ah want *put down* (0.5) the cat (0.5) *on the sea*

2.9 sec. 5 formulas

MLR 3.50

In the second attempt Liang adds the idea that the man wanted to lose the cat in the sea. He uses simple formulas to express the incident concisely and he reduces pausing. In the first attempt he appears to get lost in runs 2 to 4, a cluster of dysfluency following a long 2.2 second pause, perhaps due to trouble recalling the events in order or due to lack of language to express what he recalls. In the second attempt, however, he manages to avoid this problem by using formulas like *drive his boat* and *in the sea*.

**Lilia**

**Taking the cat to the sea by boat**

- **First Attempt**

he *tried to* (0.4) lose it (0.8) but ah have *many problems* he tried for *many way* (0.7) to lose the cat (0.3) and is (0.9) always (0.3) almost impossible for he

3.4 sec. 3 formulas

MLR 4.86

- **Second Attempt**

*try to / far away / in the ocean* in the in um (0.6) for *many ways* (0.6) *throw away* the cat *of his life*

1.2 sec. 6 formulas

MLR 8.33

Lilia is more exact in her second rendering of the event, using three consecutive formulas in the first run to extend it and several others in subsequent runs. Pausing is reduced and runs lengthened in the process.

#### Particular Uses and Effects of Formulaic Sequences

In a further attempt to locate instances of use of formulas facilitating fluency, retells of the same film prompt by each participant were examined to determine categories of formula use. For this analysis, there was a particular focus on transcripts in which mean length of runs (MLR) and formula/run ratio (FRR) showed improvement from the first retell to the second. In most cases, it was clear that the increased use of formulas facilitated the increase in MLR, and a pattern of categories of formula use emerged.

In most transcripts it is clear that there are also features of discourse which facilitate effective speaking that are unrelated to the use of formulaic sequences. For instance, participants in some cases went into much more detail in their narration in the second attempt, rendering any comparison between two retellings moot. As well, in several cases participants moved away from straightforward narration in their second attempt, instead including comments on the events in the narrative, reflection on the theme of the film, and even connection to world events such as the September 11, 2001 terrorist attack on the World trade Center in New York, which occurred the day before the data collection number four. In addition to this, some longer runs in later transcripts are not formula-based, but rather, involve more complex language and vocabulary. Two further non-formula-based features of more fluent later retells are the repetition of non-formulaic pieces of language and the repetition of single words in longer runs.

Overall, however, it is clear that five broad categories of formula use contributed to increased length of runs in later retellings of a film prompt:

1. Use of self-talk and fillers
2. Repetition of formulas in a run
3. Use of multiple formulas to extend a run
4. Use of formulas as rhetorical devices
5. Reliance on one formula or filler repeatedly

#### **Use of self-talk and fillers**

A particularly noticeable feature of the speech samples in this data set is the increased use over the six samples of self-talk and filler formulas by participants. Such formulas include self-referential collocations as “I know,” or “I think” or “I guess.” Also included in this category are long strings used for self-talk or circumlocution such as “I don’t know,” or “I don’t know the thing’s name.”

The following are some examples of how participants used self-talk and filler formulas to lengthen runs:

#### **Samples 1 and 4 *Neighbours***

**Yuka**

In sample 1 Yuka uses few formulaic sequences, and uses the sequence “I guess” only once. In sample 4 she uses “I think” a total of four times, lengthening the runs by several syllables in the process.

**Isamu**

In sample 1 Isamu uses very few formulaic sequences of any type, but uses many self-talk sequences in sample 4, for example “I don’t believe,” “I don’t know,” “I don’t

understand.” By doing so he lengthens the runs or produces fluent two to five-syllable runs.

Carlos

Like Isamu, Carlos tends not to use any formulaic sequences in his first quite dysfluent sample. However, in sample 4 he uses “I think” and “I don’t know,” lengthening runs by several syllables or creating runs of that length.

### **Samples 2 and 5 *Strings***

Isamu

In sample 2 Isamu tends not to use many formulas of any type but in sample 5 he produces some substantial runs partly with the help of using self-talk and filler formulas such as “*I forgot* this word so but it’s OK.” Similarly, “um before *I don’t know* this ship ah this ship name.”

Liang

Liang produces a full-clause long self-talk formula which is a self-contained run in sample 5:

***I don’t know how to say the machine***

Lilia

While discussing the moral of the story in depth and at great length in sample 5, Lilia uses a large number of formulaic sequences not present in her sample 2. Among these are the self-talk sequences “I don’t know,” and “I think so.” The latter is particularly noteworthy as a formulaic sequence because she means to say “I think (it is...)” but produces “I think so (it is...)” This is likely a sign that she has acquired the three-word “I

think so” sequence as a whole and is not using “I think that,” or “I think,” as syntactic rules would require.

### **Samples 3 and 6 *The Cat Came Back***

Liang

As was the case in other later samples, Liang uses the self-talk formulaic sequence “I think” to his fluency advantage in sample six as compared to sample three. In fact, he uses it twice in two adjacent runs at one point, extending both runs by two syllables likely with minimal effort:

because all of the souls follow his ah souls *I think* (1.2) *I think* a cat’s souls always to follow

It may be that the 1.2-second pause between these runs is a reflection of the need to formulate the last part of the second run, perhaps Liang has difficulty with this and has a syntax error in it. The 1.2 second pause combined with the formula “I think” before and after the pause may have given him enough time in real-time speech to compose the last part of the second run.

#### **Repetition of formulas in a run**

In some cases, participants were able to extend the length of runs by simply repeating a particular formula consecutively within one run. For example, in one case the formula “go upstairs” was repeated consecutively several times in one run by a participant in the second retelling of a film narrative. This increased the length of a run considerably and gave an impression of increased fluency as measured by temporal variables such as MLR.

### Samples 3 and 6 *The Cat Came Back*

Natsuko

Natsuko is more fluent in sample six than in sample three on all measures except formula-run ratio. This may be evidence that she produced longer runs and increased other temporal measures of fluency by means other than use of formulaic sequences. However, she does show some use of a strategy of repeating a formulaic sequence within a run to extend it. For example, when describing one of the cat's many returns to the house in the film she uses the formula "came back" two times in one run:

And he *came back* the cat *came back* to the his house and ah

This results in a run of thirteen syllables, only one of which is a filler nonlexical item "ah."

She also repeats a self-talk formula later:

*I forget I forget* the order but maybe the f he *went to the forest*

Here she appears to be thinking aloud while buying time to recall the next event in the narrative and uses a very simple subject + verb formula to repeat her lack of clear recall. It helps her to produce a 19-syllable run.

Lilia

In sample three, when describing the man's unintended suicide by dynamite, Lilia only manages to produce two short non-formulaic runs:

finally he (2.3) he died

In sample six, however, she extends the description considerably and helps to extend one run and create a third one by repeating an adverb/adjective formula:

the dynamite ah (0.8) ah caused a (0.5) motion where the man died (0.4) and when he's *really happy* he's hysteric he's *really happy* because (0.5) he's *really happy*

Perhaps it is the nature of formulaic sequence retrieval that a single short formula can be uttered several times in sequence more or less effortlessly, allowing a large string of discourse to be produced with minimal strain on formulating capacity.

### **Use of multiple formulas to extend a run**

A typical feature of many of the longer runs in later narrative retells in the data was the linking of formulas to create a longer run. Generally, these were two-word, shorter collocations strung together or used mixed with non-formulaic talk to lengthen runs by several syllables. For instance, in the film *Strings* several participants described the old man in the story “making music by himself in his room,” a combination of three short two-word formulas “making music,” “by himself,” and “in his room.” This produces a very convenient and fluent ten-syllable run.

### **Samples 2 and 5 *Strings***

Jun

When describing the old man going upstairs to investigate the water leak in sample five, Jun strings together two short formulaic sequences and produces a 10-syllable run:

... found (1.2) some water and *went upstairs to her house*

In sample two he also uses formulaic sequences to describe this situation but separates them with substantial pauses:

Water (0.3) spoiled from the (1.2) upper stairs (3.7) the old man was angry and *went to* the (0.4) upstairs (2.6) he *rang the ring* (1.2) and went into (0.4) the old woman's (0.5) room

In the second sample he explored the situation in greater depth and perhaps was struggling to recall exactly the sequence of events, and was engaged in a search for appropriate vocabulary to express the events. In sample five he chose a much simpler way of summarizing the action and produced a brief and much more fluent description.

Liang

Liang manages to produce a long run using two connected formulas in sample five, while to describe the same event in sample two he uses two formulas but needs to separate them with a short pause:

Sample 2: *cross the floor* (0.5) *to second floor*

Sample 5: *from her room to his room*

It is not clear why the hesitation occurs in sample two, but it may be that he was caught trying to recall the destination of the water crossing the floor ... the old man's room? The other floor, which number was it? In sample five he avoids the dilemma by simply stating the water moved from one place to another and he utters one long and fluent run.

**Samples 3 and 6: *The Cat Came Back***

Natsuko

Natsuko strings two formulaic sequences back to back in a run in her sample six which helps to extend a run rather effortlessly while describing one of the cat's many returns to the house in the film:

And the cat *came back to the house*

This is an efficient way to express what occurred and she is able to then link that with the fact that the owner came back after and discovered the cat already there, while avoiding a cluster of dysfluency.

Liang

Liang makes productive use of the practice of stringing multiple formulas in a single run. When describing the solitary music making of the man in the film, in sample three he remarks only:

And *make a music*

Instead of this very simple and syntactically flawed single formula run, in sample six he expands the picture and manages an 11-syllable run of considerably greater sophistication:

He's *make music by himself in his room*

It appears that after three months Liang was sufficiently more fluent and/or confident to take a risk and describe in a richer way, using formulaic sequences to produce longer runs.

Lilia

Lilia also was able to use several formulas in a single run more effectively in sample six:

He *put outside* and ah *close the door*

Always *try to far away* the cat but he *couldn't do it*

In both cases, Lilia is able to keep the discourse flowing in more complete units and avoid pausing, while producing runs of nine and fourteen syllables in these cases.

### Use of rhetorical devices

In some cases, participants were able to organize the information in later retellings by using rhetorical marker formulas. They used beginning formulas such as “at the beginning,” narrative move markers such as “when the story is go ahead,” and endings such as “that is the end of the story.” All of these add greatly to the length of runs as well as to the effectiveness of the storytelling.

#### Samples 1 and 4 *Neighbours*

##### Sally

In sample one Sally produces quite dysfluent speech with few formulaic sequences of any type. However, in sample four she uses two common rhetorical formulas to mark the movement of the narrative effectively, “beginning of the ...,” and “and this is the end of the story.” She may have had greater control of the task and the speech requires and was able to retrieve these rhetorical formulas to frame the beginning and end of the narrative.

##### Carlos

Like Sally, Carlos used few formulas in sample one and produced choppy text of very short runs. Three months later in sample four, however, he uses a starter formula “the start the history,” and later:

when the history (.3) go ahead

As was the case with Sally, Carlos appears to have begun to acquire a repertoire of formulaic sequences to mark the progress of the narrative. They are simple and, in the first case, syntactically inaccurate, and in the second case preceded by a short pause, but they show the beginning of an ability to use such units of speech with some effectiveness.

### *Samples 3 and 6 The Cat Came Back*

#### Reliance on one formula

In some instances participants created an illusion of increased fluency by relying heavily on one simple formula throughout a later narrative retell. To introduce the next action in the story, for example, it was common to use “and then,” or “and next.”

#### Conclusion

Clearly, a qualitative analysis of the film narrative retells yields a complex and somewhat irregular picture. Participants did use formulaic sequences more frequently in later retells, and they used them to facilitate more fluent speech. However, the nature of the retell task makes direct comparison of the earlier and later film viewings difficult.

From the exemplars presented here we have seen that participants used formulaic sequences in a variety of ways and to several effects related to increased fluency of speech. They used formulas to more concisely express aspects of the narratives. They used them to reduce hesitation and to lengthen the runs. They altered their focus in the retells and used correspondingly appropriate formulas to describe and explain, similar to Dechert's (1980: 240) observation that more fluent speakers tend to retell narratives more fluently by establishing “islands of reliability” where they are confident and pausing or being dysfluent outside or between these fluent stretches. In the present study, participants may have also recalled formulas in some cases based on single lexical trigger items. Furthermore, there is some evidence here that formulas were used as fillers to buy time to formulate the next stretch of speech or to recall events in the narratives. They were also used strung together at times based on a common lexical element, perhaps as

the first formula was retrieved, subsequent ones containing a similar lexical item were triggered. In these cases the articulation was markedly coherent and rapid.

In addition to the fluency effects of using formulaic sequences, participants used particular categories of formulas to allow for more appropriate expression. They used formulas in self talk and as fillers to create an illusion of fluency. They repeated formulas within runs and used multiple formulas within the same run to lengthen runs. They used formulas as rhetorical devices to piece together and mark segments of the narratives. In some cases, they relied heavily on one or several formulas throughout a retell to add to an illusion of fluency, in a sense establishing lexical “islands of reliability”.

## Chapter 7

### Conclusion

The present study has shown that speech fluency development in English as a second language is related to and facilitated by the use of formulaic language. This study has dealt with some basic questions hitherto unasked or unanswered, and the richness of the speech data analyzed here has provided a valuable source of information about the development of fluency over time as measured quantitatively and by discourse analysis. Furthermore, analysis of this data has yielded a wealth of information about how formulaic language is used by L2 learners to create more fluent narrative discourse.

At the same time, the complex and shifting nature of the development tracked in this study has highlighted issues around the analysis of spontaneous spoken language data. This study has made it clear that such development is by no means linear, nor is it readily captured and examined in empirical research. Indeed, it has raised some important questions about the nature of formulaicity, the complexity of language in discourse, and the difficulty of applying cognitive science theory to the study of extended language performance.

### Quantitative Results

The research was framed by four main hypotheses. The hypotheses were focused mainly on quantitative aspects of speech fluency development previously established in empirical research:

Over time, with continued learning and experience:

1. L2 speech will exhibit a faster rate of production.

2. L2 speech will exhibit a greater amount of production time spent speaking as opposed to pausing.
3. L2 speech will exhibit longer runs between pauses.
4. Formulaic sequences will appear more frequently in the longer runs between pauses.

Hypotheses one to three relate directly to previous research on fluency. Increased speed, less hesitation, and longer runs are hallmarks of speech fluency. Moreover, increased speed and reduced pausing indicate faster language processing and can be taken as indicative of increased automaticity of production.

As the first three hypotheses establish fluency development at a surface, observable level, the fourth hypothesis is at the heart of this research, a quantitative measure of a facilitating role of formulaic sequences in fluency development. As the speed and hesitation and run length develop over time and show increased automaticity, it is expected that more formulaic sequences will be used in the longer speech runs.

Indeed, all four hypotheses were supported by the data in this study, as evidenced by the analyses presented in Chapter 5. The whole group of participants improved on all measures to a statistically significant degree. Especially relevant to this study were the results for mean length of runs and the formula/run ratio, in which a high degree of development was shown. Taken together, the quantitative results in this study clearly confirm the hypotheses and indicate a role for formulaic sequences in the development of fluent L2 speech.

Results by gender group and L1 group showed no significant effect or interaction of either factor on fluency development. While it had been anticipated that gender might,

in conjunction with other sociocultural factors, influence fluency development in some way, the actual numbers here do not indicate that that was the case. Similarly, it had been conjectured that cultural issues or the nature of the L1 might influence fluency development in some ways, but again, the quantitative data analysis does not bear that out. The very small cohort of participants here also set a high bar for statistical analyses in terms of between-subjects factors such as gender or L1. There were only four subjects in each language group, three in the Chinese group, while there were six subjects in the male gender group and five in the female group. Even if effects exist, these small numbers make it unlikely that they would be statistically significant.

On the other hand, an examination of the development of individual participants for each dependent variable showed some evidence of possible influence of gender, L1, and sociocultural factors. Several participants appeared to take a particular approach to storytelling and narrative which could be based on L1 or cross-cultural factors. The fluctuations in performance on some variables over time for some participants seemed to indicate an effect of issues of self efficacy, voice, anxiety, or cultural fluency. The structure and methodology of this study made it impossible to draw definite conclusions about such interactions and effects, however. With narrative retell procedures and no interview or self revelatory discussions with participants, one is left to rely on supposition and conjecture in an attempt to determine why some subjects may have performed in certain ways at certain times.

### Qualitative Results

As the measurable and quantitative analyses in this study yielded clear evidence of a possible facilitating role for formulaic sequences in L2 fluency development, so the

qualitative discourse analyses provided a rich view of the workings of the interrelationships between fluency and formulaic language. In fact, the analysis of how formulaic sequences furthered fluent speech and the ways the participants used them is the greatest contribution of this study. The development of L2 fluency as measured by change in temporal aspects of speech over time had been well established prior to the present study. The evidence that increased use of formulaic sequences paralleled the changes in temporal measures in this study is a new contribution to knowledge about fluency. The qualitative analysis in this study serves to deepen and enrich this knowledge with evidence of how and for what purposes formulas were used.

The analysis was conducted on speech samples based on the same film prompt and produced by participants who showed strong improvement in temporal measures between the first and second viewings. A direct comparison between the samples was impossible due to the fact that the participants often took quite different approaches to the retells at different times. However, comparison between chunks of the narratives, or the moves in the stories, yielded clear and abundant evidence of how use of formulaic sequences reduced pause times and increased length of runs.

The use of formulaic sequences appeared to occur in certain classifiable ways in these data. Participants used formulas in some instances for self-talk or fillers in the discourse, perhaps showing what McCafferty (1994) calls a tendency to convert outer or social speech to inner speech. As well, participants often repeated formulaic sequences to extend the length of runs, or they strung together multiple formulas to extend runs. In some cases it may be that recall of one lexical item at the beginning of a sequence triggered the recall of several more sequences beginning with the same lexical item,

perhaps evidence of a cohort effect in lexical retrieval, in which retrieval or exposure to the initial phoneme of a word activates words in the lexicon with that initial phoneme (Ellis, 2002). Formulas were often used by participants as rhetorical devices to organize the discourse of their narrative retells, perhaps sometimes serving as anchors for the subsequent language and content of the following chunk of the story, similar to Chafe's (1980) notion of "islands of reliability." A final category of formula use involved the use of one particular formula repeatedly, perhaps to allow for some controlled processing or conceptualizing or recall of film content while continuing to speak. These categories of formula use expand somewhat on those of Wray (2002). Wray's summary of the value of formulaic sequences in speech production focuses mainly on their roles in controlling the flow of information, allowing time for mental processing of other aspects of speech and signalling the organization of speech. The analysis in the present study adds to this the functions of self-talk and extending the length of runs of fluent speech.

#### Methodological Implications

The methodology used in the present study was distinctive to the examination of the evolution of spontaneous speech data over time, and to the investigation of formulaic language use as it links with quantitative measurement of fluency development. It also included participants from three typologically different language groups, a shift from the types of L1 groups used to study fluency development in English L2 in the past.

Since the participants in the study were learning English in a naturalistic context, it was important to use a method of speech sampling which would allow the researcher to capture their speaking ability in a way which was both standardized and flexible, and which would capture a type of discourse which would be representative of real-life

performance. The use of silent film prompts to elicit narrative was highly effective in striking this balance. For one, the lack of a soundtrack for the films ensured that no other language proficiency-related factors could interfere with the sampling of speaking ability. Using films with spoken dialogue or voice-over narration could have produced different results for different participants depending on their listening comprehension ability. Furthermore, since narrative is such a common genre of speech in everyday spontaneous speech, eliciting narrative speech allowed for stronger data with relevance to real-life daily performance. On the other hand, selection of such film prompts has to be made carefully, with a standard number of characters, narrative moves, overall length, and degree of repetition of actions.

The use of the two quantitative measures of mean length of run (MLR) and formula run ratio (FRR) in this study helped produce rich data. MLR had been used in previous studies of temporal aspects of fluency, and in the present study it yielded findings which were more complex and informative than the rougher speed measures of speech rate (SR) and articulation rate (AR). The FRR was unique to the present study and was intended as a quantitative measure of the link between formula use and MLR, and, by implication, fluency. The FRR results by group and individual showed complex patterns and led to a deeper and more sophisticated analysis of the link between formula use and fluency than could have been done otherwise. The FRR data also led to the qualitative analysis in this study, which in turn produced a comprehensive picture of the ways in which formula use facilitated more fluent speech production. Therefore, the FRR is a contribution to the methodology of studies of fluency and formulaic language, and

bridges the gap between quantitative analysis of temporal aspects of speech and discourse analysis of how formulas are used in speech.

The inclusion of L1 speakers of three typologically different languages makes this study distinctive in comparison to the tradition in English L2 fluency research. It has been much more common in such research to use participants from one L1 background or of European language L1 groups. Lennon's studies (1984, 1989, 1990) used single participants or small groups of the same European L1. Möhle (1984), Möhle and Raupach (1989), and other European researchers also used single participants or small cohorts of a shared European L1 background. Freed (1995) used a group of English L1 learners of French as a second language, and Riggerbach (1991) a group of Chinese L1 learners of English. The present study goes beyond this narrow tradition to include participants from three L1 backgrounds, which enriches the data in that it allows for insight into how L1 may have influenced fluency development in English.

#### Formulaic Sequences and Language Teaching

Various researchers have addressed the issue of how to incorporate formulaic sequences into classroom pedagogy. Nattinger and DeCarrico (1992) devote half of a book to classroom applications of knowledge of formulaic language, and Lewis (1997) and Willis (1990) advocate syllabuses and methodologies based on lexis, with a strong focus on collocations and other types of formulaic sequences. Still, there is work to be done to integrate our knowledge about formulaic language with state-of-the-art language teaching methodology. A starting point might be to attend to formulaic language when dealing with input and interaction in the classroom.

If formulaic sequences are a key element of natural language production, it would seem that a large amount of exposure to natural, native-like discourse, be it written or oral, would be an important part of a pedagogy designed to promote their acquisition. Years of classroom research and second language acquisition research have shown the importance of input and interaction for the development of second language competence and ability (Krashen, 1981; Chaudron, 1988). The evidence that formulaic sequences are of great importance in accomplishing pragmatic goals and with the production of fluent language leads us to a realization that exposure to authentic native-like input is key to acquisition of formulaic language. Since it is necessary that formulaic sequences be retained in long term memory as single units, they must be observed in use in real-time, spontaneous communication, and practiced extensively. The link between formulaic sequence use and pragmatic competence is further support for the notion that extensive exposure to spontaneous input is important. It is only in spontaneous communication that the immediate and flexible selection of formulaic sequences becomes apparent. Repeated exposure to such input over time would encourage learners to achieve a certain level of comfort with natural expression in English.

In dealing with the spoken language, interaction would seem to be key to facilitating acquisition of formulaic sequences. Tasks need to be structured in such a way that a great deal of negotiation is required. In these interactions, learners are able to help each other negotiate their way through some complex or unfamiliar linguistic and pragmatic ground, and formulaic sequences play a key role in enabling the participants to accomplish communicative goals together. As well, they can aid each other in finding the appropriate sequences to fit with

particular needs. The classroom research which shows a benefit of information gap student-to-student interaction for fine tuning of output (Pica, 1994) may have relevance for the acquisition and appropriate use of formulaic sequences, but it is important to bear in mind that formulaic sequences carry sociocultural and personal weight, and so are best acquired in learning situations in which learners are motivated and personally invested.

Bygate (1988) encourages small group interactive tasks to facilitate use and flexibility with formulaic sequences on the part of learners. Bygate notes that subclausal units or fragments make up a great deal of spontaneous conversational interaction in English. Through an analysis of learner language production in small group communication, Bygate found that the learners actually worked together and tacitly encouraged each other to use formulas to move the conversations ahead efficiently. He found a great deal of production and monitoring of language at level of subclausal fragments, and that one can control oneself in conversation through their use. He found that student-to-student interaction helps by encouraging flexibility in choosing efficient syntactic units and activates mechanisms for communication to occur. He also concludes that use of formulas and subclausal units helps to smooth the progression of discourse as a response to the demands required in the actual spontaneous production of speech. It seems probable, then, that small group and pair student-to-student interaction can facilitate ease and flexibility in using formulas in spontaneous speech.

#### Complexity of Development

One overarching theme which has emerged from the present study is the complexity of human speech and the varying routes which can be taken to arrive at the

same speech goal. In these data the developments in terms of quantitative measures are not linear, but show a varying and changing route to improved fluency for the whole group and for individual participants. Similarly, the discourse itself displays a wide range of approaches and methods to achieve a common goal: to retell the stories seen in the films. The variability seen in the results for both types of data analysis likely have to do with the fact that the actual data here are samples of real-time, real-life performance under the constraints of cognitive load, external situational factors, and sociocultural issues.

The nature of the speech task in this study, and the circumstances under which the speech was produced, likely influenced the results. A certain amount of cognitive load no doubt occurred as participants attempted or struggled with the task of recall of the events in the films, while retelling the narratives at the same time. As well, producing spontaneous speech under the pressure of being recorded must have influenced the quality of the results in both quantitative and qualitative terms. In some cases, participants appeared to differ on their interpretation of what was expected of them, which influenced their performance.

Circumstances such as the time of day, the season, and events in the lives of the participants probably also played a role in the complex picture which these data produce. Participants may have felt anxiety, frustration, strength, confidence, and a host of other emotions and affective dispositions to varying degrees over the six months of this study. Some may have experienced homesickness, the stress of moving, changes in class and teachers, the abrupt and rapid changes of weather in Ottawa, and more. All of these

things may have had an effect, either positive or negative, on their performance at the time of a given speech sample.

The sociocultural variables introduced in Chapter Two may have influenced the route and level of development of the participants. Language anxiety, especially for the least proficient participants, may have influenced their earlier performances at least. Similarly, self efficacy and a sense of voice may have developed over time for some participants more than others, depending on their experiences in the class and the world outside of the study. Given the integral roles that gender and culture play in most aspects of life and especially in patterns of communication, it is likely that gender, culture, and L1 all influenced the types of speech samples produced here. However, it remains unknown how and to what degree.

#### Formulaicity and Automatization

The body of research on formulaic sequences and the mental processing involved in fluent speech production shaped the present study. Formulaic sequences and their nature and functions are the subject of growing interest in applied linguistics, and the present study takes the state of knowledge a step ahead on one front. As for the large area of knowledge centering around cognitive processing in language learning and use, this study explores notions of automaticity in new ways.

It is in the area of formulaic language and language production that this research contributes most strongly. Until now, the research on formulaic sequences and their relation to language production, particularly fluency, has been largely speculative and theoretical in nature. While the nature of fluency as measured by temporal variables has been established, the role of formulaic language in fluency has not been empirically

tested to any great extent. The present study is an effort to conduct that empirical testing, and the results here are encouraging. It appears from this research that formulaic sequences indeed do facilitate fluent language production and development in a variety of ways.

The present study was framed in terms of cognitive theory, as it relates to language production and acquisition. Most previous research on automatic processing, short and long term memory, frequency effects in language acquisition, and other key notions, was conducted in controlled laboratory-style experimental circumstances. The present study attempts to apply some of these notions to the study of fluency in real discourse. While it remains unclear how the speech phenomena studied in this research link to automaticity, or whether the development of fluency here is due to frequency effects, instance development, and so on, the use of such concepts as a theoretical underpinning for the research has been important in the research design and the interpretation of findings. However, it is not possible to show evidence of the workings of such concepts in fluency development in a study with such a large corpus of language produced under such naturalistic circumstances. This style of research does not fit closely with the type of methodology required to examine the effects of specific mental processes on fluency development, so that any conclusions about automatization or memory or frequency effects can be speculative at best.

#### Suggestions for Future Research

The present study takes the body of knowledge about speech fluency development a step ahead. The role of formulaic sequences in L2 fluency development has been noted and the ways in which that role is executed have been seen. For the future, both broader

and more specific data and analysis are necessary to consolidate and build on this initial step.

One important aspect of fluency development which needs examination is the role of sociocultural and other language-external factors in speech production and acquisition. A more qualitative type of research is necessary for this.

As for cognitive science issues in speech study, it appears that perhaps more experimental, controlled studies are needed. It is complex and difficult to apply cognitive science concepts to large corpora of language produced in real time communication. However, in order to understand fluency and formulaic language and their development and relationship it is necessary to take a cognitive science stance at least in part. For future research smaller corpora than the one used in the present study, with more constrained task conditions, may yield firmer results.

Future research on formulaic sequences and fluency development needs to establish as clearly as possible what constitutes a formulaic sequence. The current state of knowledge about this is still in early stages. Corpus analysis software can assist in the case of written corpora or when dealing with native speaker data. For formulas in spoken data we have the criteria set forth over the years by Coulmas (1979), Peters (1983), Nattinger and DeCarrico (1992), Wray and Perkins (2000), and others, but they still lack precision and we are left dependent on listener judgement rather than a firm set of standards. Future research needs to address this important issue head on and insist on a clear definition and set of criteria for identifying particular subsets of formulaic sequences in speech, especially speech produced by non-native speakers.

In sum, then, the present study has confirmed several important hypotheses about formulaic language and fluency development in L2 speech. In addition, it explores how and to what purposes formulaic language may be used by non-native speakers of English to create more fluent narrative monologic discourse. The complexity and richness of human spoken communication are very present in these data, creating some challenging issues around data analysis and interpretation. The exact roles of cognitive processes and sociocultural issues in fluency development and performance remain uncertain, but the heart of the research has been confirmed: as fluency in L2 speech develops over time, the use of formulaic language sequences also develops, playing a facilitative role.

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## Appendix: Transcripts

### Yuka 1

Two people and (0.3) house (1.5) each house (3.5) suddenly (0.5) the seem (1.4) the cross (1.2) them (0.7) and (1.0) them (2.0) they be they realize (0.3) happening (0.3) they let for (1.0) **look at** (1.0) the (0.9) their (1.5) flower (3.0) and (1.3) they smelled (2.0) the smell is very good 0.8) so um they love (0.8) the flower (1.0) and **I guess** um and they (2.3) each (4.5) o\_ **each man want to** smell (0.7) ah as (1.5) **long as they want to** (0.5) **each man** (1.5) fight (1.5) fight (4.5) and just flower and (2.3) th and (0.8) there is a flower in um (1.8) between (0.8) each (0.7) man house **middle of** the (0.8) it (4.0) so the man **began to** (0.4) um line **their own** (1.0) position (1.3) um (0.5) **each other** and fight (2.2) but they want (2.5) the flower one flower (0.8) so (0.7) they fight **each other** (0.3) and (0.7) finally (0.6) they ran (2.0) out the flower and (1.0) fight (1.0) and fight (1.4) **and next** (1.2) um (2.0) **but finally** (0.4) **at last** (1.0) they broken their house (2.0) and (1.4) ah baby and wife (2.2) killed the baby and (2.5) wife and um (3.0) s **more and more** (0.3) fight and fight (4.0) finally (1.0) everything (1.5) there's nothing (2.0) and they fight (0.5) and fight so (1.0) their clothes (3.0) clothes are (2.0) destroyed (2.0) the house is destroyed (1.0) and family is destroyed (4.5) **but last** (2.5) they are (0.8) died (1.2) **there is nothing** (1.5) th (2.0) **after the fight** (2.5) they can't (1.5) gain (0.5) anything (1.5) without died.

### Yuka 2

Picture **I love this picture** ah (3.0) this ah (0.3) this (0.3) um drama uh drama (0.7) this picture (2.0) like (0.7) ah first **I can't understand** the (0.8) story of (2.5) this ah story

(0.7) um (0.6) first old woman (1.3) and ah (1.3) old (0.9) man (1.7) **get on** the elevator and (2.7) **in their apartment** and ah (1.8) woman **live in** (1.2) upstairs and (1.5) man (1.5) **live in** downstairs (1.5) and the (4.2) **each person** (2.0) **come home** (0.7) and old woman (4.5) prepared (0.4) the (1.2) bath (2.0) and ah (1.9) old man (0.6) **make a dinner** (2.5) **and then** (0.8) old man woman (1.0) **take a bath** (2.2) while (0.8) old man (2.0) finish the **making dinner** (1.5) and ah (0.8) someone (1.0) come (0.4) call (2.0) the old man's friends (2.3) **come home** and (0.8) **began to play guitar** (1.5) during the (0.7) guitar (0.6) **during playing** guitar (3.5) from upstairs (2.2) um a few (2.5) one or (0.5) three **a few water** (0.7) **drop off** (0.3) off (0.7) drop (4.05) and (4.5) but (0.8) **for awhile** (1.2) anybody (0.7) did not (1.6) did not (1.5) s is not **are not aware of that** (1.2) but (1.2) **one of** (0.7) friends (0.7) **one of** his friends (1.2) aware (0.8) be was **is aware of that about that** and (0.3) he (0.3) called his (0.5) his room(5.0) and **get on** the elevator and **come up** (2.5) and (0.4) **go in** the (0.3) old woman's house (4.5) and he (0.5) beared the (1.8) **part of** destroyed (6.7) um **I can't understand the meaning** (1.3) but ah (1.0) about the the thing but (1.0) maybe chandelier downstairs (0.7) room's chandelier drop off (1.8) **at last drop off** and (5.0) the music stop (2.5) and (1.0) ah old woman (2.0) **during taking bath** old woman (0.5) listen the (3.5) their **playing guitar** (2.0) that is very (0.3) comfortable **for her** (2.5) um but (0.7) ah (3.5) maybe chandel maybe chandler **drop off** and (1.0) people (2.0) **stop the music** (1.0) and (0.5) and (1.0) come **in the past** (3.0) **playing guitar** (2.3) again (2.0) maybe one person play (1.5) **I don't know** the meaning (1.0) **I can't understand** this movie (1.5) **I'm sorry** (1.0) but I like this picture.

### Yuka 3

A small (0.5) fox visit (1.2) one man's house (4.0) the fox destroy (0.4) his house (1.0) **all the curtain, clothes** (1.2) mat (0.8) so he dis (1.0) dislike (0.5) the (0.5) fox and he's **want to throw out** (1.7) the fox (0.3) so (1.4) **at first** he (1.0) **throw out** (1.7) only outside (1.0) but the fox **come back** (0.7) so (0.5) he (0.5) next he **drive a car** and (1.2) far **go far** (0.5) away (0.5) the house and then **throw out** (0.5) but (0.5) again (0.6) the fox **come back** (0.6) so he (1.4) also (0.4) go (0.3) to **more and more** far (0.3) from house (1.7) and **throw out** (1.2) but he and the fox (2.2) again **come back** again (5.5) he **tried to** (1.0) **throw out** the fox (1.2) the fox never (2.0) the (0.3) the (0.3) fox (0.3) always **come back** so (1.0) this story (0.8) is about (0.5) um (1.8) competition about (0.8) fox and he the man (7.0) um **I forget** the (1.0) detail but (2.0) so (5.0) he (2.5) **at last** he (0.5) for **I'm sorry I forget** the (0.3) detail (0.3) but (1.0) he **try and try** (1.0) **throw out** the (0.6) m the (1.3) **at last** (0.4) he (1.6) dies **by themselves** (3.2) um by (1.5) bomb (1.0) **and then** he become (0.7) his body (0.8) and his mind is separate and (1.0) how um (2.4) he will (1.3) will be he is (0.5) become ghost but (4.3) he **saw that** his body (5.4) as a (1.5) um at (1.2) last (1.0) so he fall he fall (1.0) the fox (4.2) **I'm sorry** I (0.3) can't (0.3) speak very well because (0.3) my I (0.4) my (0.7) brain is confused (0.5) so (0.3) sorry.

### Yuka 4

Hello David I saw this (2.0) **two times** (3.0) it's so strong (1.2) **I think** so funny (2.5) they fighting (1.5) um flower (2.8) after flower (3.0) **I think** (0.7) they might (1.0) um mind (2.3) because (2.0) they um he (0.5) mother and child (1.0) **each other** (3.0) **I think** the

flower is (0.4) so (1.0) small accident (2.0) but it's *really big* accident (0.8) *it's like it's like* new York's accident (1.5) but it's first is big accident but (0.6) after it's (1.0) um (0.7) um will be world war (0.5) third (0.7) *I'm so sad* (2.5) *I think* world (0.3) war is biggest (1.0) accident in the (1.3) world (0.7) or *in the earth* (2.5) but *I don't know* how should I do (1.2) but we *have to* (0.3) stop (0.7) that things (5.0) *thank you*.

### Yuka 5

Woman *live in* (0.3) upstairs and man (0.3) *live in* (0.3) downstairs (2.5) and (0.3) *one day* (2.5) woman (1.0) *came back home* and (1.0) make (0.3) ah she *like to* make (1.5) ship Titanic (0.6) and (0.4) she (2.0) then (1.0) she took (0.3) bath (2.3) *to take* bath (0.5) she (1.0) put (0.4) the water *in the bathtub* and (1.2) but the bathtub (0.6) is *a little bit* broken so (0.5) *from the bathtub* the water (0.7) but (0.6) *a few* (0.6) no *a little* water *come out* (1.5) *came out* and (1.0) so (0.7) the (0.3) the floor *from the floor* to (1.2) the downstairs (1.7) the water (1.3) go (0.3) *go out* (0.7) *went out* (0.8) and (0.6) the downstairs man (2.5) make (1.0) *at that time in the downstairs* man (0.5) made cook (0.8) to invite his the friends (0.8) *to play violin* (1.0) together (1.3) so the friends (1.0) came (1.0) his house (0.4) and (1.0) they (0.4) played (0.4) violin together (0.3) but (1.6) they (1.7) they knew (0.5) that (0.8) the water (2.0) *come out* (0.3) *came out from* upstairs (1.2) so men (3.0) o the men (1.8) *went to* (2.4) upstairs to (1.2) fix (1.0) up (1.5) the (1.7) the room (1.3) and (0.6) the men (0.6) push do that (2.4) upstairs (0.5) house (1.8) and she he enter (1.5) her room (2.5) and she (0.4) he *try to* (0.5) *try to* (0.5) fix (2.7) but (1.5) suddenly (1.0) *it's too late* (2.0) *in the downstairs* his (1.0) room (0.5) the chandelier (1.0) flew (1.5) *come down* (1.0) and (2.0) *fall down* (0.4) *fall down* (1.7) and

(1.2) man (1.5) was *aware of* that (0.3) so man *came back* (0.3) his hou (0.8) his room woman (0.7) was(0.6) wonder (0.7) still wonder (1.0) but (1.0) *time is passed* (2.5) um woman (0.5) heard (0.7) the guitar again (1.7) *sound of guitar* again so (1.5) she thought (1.0) maybe there's *no problem* (0.4) so (1.0) she (1.4) *took bath* again (1.0) and relaxed (1.2) and (0.6) actually (0.5) man (0.3) *play guitar* (1.3) *played guitar* alone.

### Yuka 6

A house (1.0) *one day* (2.0) there is ring *ranging the bell* (1.5) *in front of* the door (0.7) there's a cat (1.5) the cat *seems very cute* so (0.5) man (0.7) was happy (0.4) become happy (0.6) *and then* (1.5) that (0.5) the cat (3.0) *into his* house (2.5) he *tried to play with* (0.4) the cat (0.7) and (3.8) but (1.5) he use (0.3) he use (0.3) things (0.3) that he once (0.3) used (4.0) toy (2.3) he *play with cat* with toy which (0.7) he once used (3.0) but ah the cat (1.5) broke (0.7) the toy (1.0) so man (0.7) *little bit* become angry (1.5) so man (3.5) *tried to throw away* (0.6) the cat (2.0) but (0.6) still (2.0) the cat (0.6) *come back* (0.7) *came back* again (2.5) *come back* again (0.7) *comes back* again (4.6) *and then* next (1.3) um cat (1.2) *tried to* destroy his house *for example* (0.5) in the coats and his coat (1.0) ah the cat (1.0) *tried to* broken (0.5) his coats (5.5) so man (3.0) *tried to throw away* tries (0.7) to *throw away* cat (1.6) *but again* the cat *come back* (0.5) *comes back* (2.2) they repeat *again again* (1.0) *same things* (3.0) *I think maybe* the cat is more intelligent (1.0) than the man (1.6) always (0.3) the cat (1.0) cat *coming back* his house (0.8) and do *same things* (1.3) such (0.5) mean (0.3) that (0.3) *try to* (1.0) dro destroy his house (3.5) *even though* he (2.5) bring (0.5) the cat (2.0) to (1.5) leave a forest (2.2) which is there (2.0) *by car* (2.5) *and then but still* the cat's *coming back* (3.5) finally

(2.0) he (1.5) get (12.0) bomb (6.5) and (0.5) he (1.2) *come out* (1.0) the fire (2.0) but he (1.5) mistakes he *make mistake* (2.5) to *and then* he (0.3) took (1.2) fire (1.0) with (0.3) his (1.5) hair (3.0) so (3.0) as *you know* he (2.0) he the fire (1.0) throw (1.0) throw him (0.4) the fire (1.5) put on (0.6) the bomb (1.5) *and then* (1.5) *he die he was die he is die* (1.5) cat's still alive sure (8.5) *and then* (0.8) he *was died* (1.5) *he's died* (2.0) ah become (1.5) *just only* he have (0.6) mind but he (0.5) don't have (0.5) body (2.0) and he said he thinks (1.0) oh *I'm win* (3.0) *I'm winner* (2.0) because I (1.0) I'm ghost I become ghost (0.5) I can do (0.3) anything everything (0.6) that I want that he wants (1.5) but (3.3) when he (0.3) saw (0.5) he sees he's (1.5) that bodies (1.2) because the body is separate (0.3) from his mind (2.0) he ah (2.0) he was (1.2) he was he's (0.4) fear (0.4) he become fear (8.7) anyway *and then* (1.5) cat's also (1.8) died (2.5) and (1.0) *even though* (0.4) heaven (4.8) cat's follow him (1.8) forever.

### Natsuko 1

Ah *this is a* (0.4) *this is a* short movie (0.5) about the (0.4) ah (3.5) ah (1.0) to love to love the neighbours (0.7) and ah *this is a* (0.5) *kind of* silent movie (0.7) but it's very short (0.3) and ah (0.5) *first of all* (0.3) and ah two guys (0.8) ah *coming up* and ah (2.0) ah they are very (0.8) um they are getting *getting along with each other* (0.5) and ah they *sat down* (0.4) on the *on the chair* (0.5) and ah (0.9) enjoy the smoking (0.7) and ah *reading newspapers* (0.8) and but ah (1.2) suddenly behind them (1.0) ah (0.7) a small dandelion comin (0.3) *comes up came up* (0.6) *came out* (0.4) and ah (0.4) there's (0.3) there are (0.5) they had curiosity (0.3) with it and ah (0.8) ah (1.0) they (0.5) they were (1.0) they were *looking at* the dandelion (0.4) and ah smell it many times (0.3) *again and again* (0.4) and ah (1.3) ah *after that* (1.5) *both of them* were really *wanted to get* the dandelion (2.3) and and ah (1.5) they *started to argue* (1.5) to be *to get* the dandelion (1.5) as a as a (1.5) as a (0.7) um (0.4) to own the dandelion (0.5) and ah they (0.8) ah they (2.4) made a fence (2.0) um (2.5) *between each between them* (0.5) *between their houses* (1.0) and ah (2.2) wanted (0.4) they *wanted to* wanted the dandelion (0.7) into in (0.5) inside (1.2) *their own* (8.0) yard (1.5) and ah (1.0) that ah (1.0) um (5.5) ah ah finally they (1.5) ah they *started to* argue but they escalated (1.2) and ah to fight (0.3) fought they fight (0.8) began to fight (0.6) and ah hit to *each other* (0.3) hit on *each other* and ah (1.3) um (2.0) finally (1.2) ah (1.0) they killed (0.4) they killed (0.6) their (1.1) ah other s others wives and child (0.5) and ah (0.9) lastly they killed (0.8) to *each other* (2.0) um (0.6) and ah also they (1.5) ah (3.3) um spoiled ah spoiled the yard and ah (0.3) houses and ah (1.0) even even the dandelion (0.5) they loved (1.6) and ah *last part*

(0.5) is a is a scene of a grave (0.7) of ah (0.3) their graves (1.0) and ah (0.5) on the grave  
 (0.7) there ah (0.4) um (0.5) the new a new dandelion (1.0) **comes up** (0.6) on the each  
 (0.8) grave (2.8) **that's all.**

## Natsuko 2

Ah (0.8) this film is a more complicated than (0.5) before (0.8) ah **I think** it (2.0) this film  
 is use (0.5) used more effective sound (0.8) real sound (0.5) for (0.5) each (1.2) for each  
 (0.6) ah actions (1.5) and ah story is ah about strings cords and (0.8) ah two (1.0) two  
 people live (0.3) live in the **in the same apartment** (0.5) and **one is a** woman (1.0) who  
**lives in** the (0.4) third floor and (0.3) the other **other one** is a (0.7) man who **lives in the**  
 second floor (0.6) and they (1.5) um (1.0) they came they came (0.8) and use (0.3) used  
 (0.3) the elevator (1.0) to **go home** (0.5) and um ah after the woman **came home** (0.5)  
 she (1.2) she use she poured the hot water (0.8) into the (0.5) ho ah bathtub (0.5) and  
 (1.2) and ah (2.0) she (2.0) ah (0.5) she made a (1.2) she made a she was making a some  
 (0.6) small model of the ship big ship (1.0) um (2.5) she used a glue (2.0) to (0.5) **to put**  
**together** (0.3) a string (1.0) ah **I don't know** how (1.5) how the string is for (0.3) **what**  
**the string is for** but (1.2) um (1.5) anyway she used a glue **to put together** the film (0.3)  
 the ring s ah string (0.7) for some ah somehow some for something (0.3) and (1.5)and  
 (1.5) and (1.0) **on the other hand** the man (1.5) ah (2.0) ah he had a he had a cat (0.8)  
 and ah (0.4) when he (0.3) when he **came back home** (0.3) the cat (1.2) was ah (0.6) was  
 very (1.2) **happy to see** him and (1.0) he (1.2) he cooked (1.0) he cooked ah (1.8) fishes  
 (0.6) fish he cooked fish with lem lemon (0.5) and ah (1.7) he put the fishes (0.3) fish (0.3)  
 on the table (0.5) and the cat (0.8) followed him no (0.3) followed the fish (0.4) and ah  
 (0.8) **at that time** the bell (0.8) as ringing (0.5) and he left the room (0.8) to meet (0.5) to

meet somebody (1.3) and the cat (0.5) was watching the fish (0.8) and ah (1.3) but the cat  
 (0.5) noticed (1.2) ah some drops (1.0) **fell down** (0.4) on the cei from the cei ceiling  
**from the ceiling** (1.3) it (0.5) um (1.5) the drops (1.0) **fell down** from (0.3) from the (1.5)  
 third floor (1.0) bathroom um it was it was a hole (0.6) there was a hole (0.8) in (1.3) in  
 then (2.2) ah (1.5) they (4.5) was the three friends three friends came from (0.6) three  
 friends (1.0) made made ah **came to see** (0.3) him (0.3) **came to see** the guy (0.3) man  
 (2.5) and (2.0) um (1.2) they had (0.5) they had ah (0.3) music instrument (0.5) some  
 (0.5) string instrument (0.8) and (3.0) they practices they practiced to (2.5) **play the**  
**instrument** (0.7) together (0.3) and (0.6) and (2.0) they sat (1.0) they **sat around the**  
**table** (0.8) and **began to** practice (0.8) together (1.2) and (1.2) the (0.7) **on the third floor**  
 the woman (0.5) **began to take** her (0.4) **take a bath** (0.5) um **listening to** the (1.0) um  
 (2.0) violins violins (0.5) sound (0.5) **from the second floor** (1.0) through the **through**  
**the hole** (1.0) um (0.3) during the practicing (0.5) practicing (1.5) the man noticed (0.7)  
 the drops (1.0) **fell down** (0.8) was (0.4) drops (0.5) were felling down **falling down** from  
 the cei from the ceiling (1.2) and he **went up** (1.0) to the woman's (0.3) room (1.5) and  
 (2.0) and ah (2.0) and he **tried to fix** the ceiling (1.0) no from (0.4) fix to fix the (1.0)  
 floor of the woman 's room (0.4) woman's bathroom (0.5) but (0.3) but (0.3) um **it's too**  
**late** (0.7) the (1.5) the floor and the (0.5) ceiling of the man's (0.5) man's room (1.2) was  
 soaked (0.6) and the right (1.2) light light of the man man's room (2.8) **fell down** (3.0)  
 and **after that** (1.0) ah (3.5) ah the man (0.7) **went back home** (1.5) and ah (1.0) woman  
 the woman (2.0) um the woman (1.5) **took a shower took a bath** again (6.5) she (0.5) she  
 maybe she likes (1.0) travelling (1.0) and dreamed dreamed travelling (1.5) **by ship** (0.8)

and she imagined the music she imagined travelling (1.5) in a (1.0) huge (1.0) gorgeous ship *by listening* to the (2.0) violin music.

### Natsuko 3

This ah the (0.3) *title of this story* is ah (0.3) the cat *came back* (1.0) ah *what I remember* is ah (2.5) *first of all* um (1.5) a man (1.0) was practicing (1.0) um music instrument *in the room* (0.8) and somebody *knocked on the door* and it's really *bothered him* and (1.2) he hated it (1.0) and when he went *to the door* (0.3) and he looked looked *looked outside* (1.0) he found ah (0.5) a small cat (0.3) in a pretty basket (1.2) and (1.5) *at first time* (0.3) he *looked at* the cat (0.8) he really (1.2) um he thought it's very pretty and he liked it (0.3) he liked the cat (1.3) so he (1.0) took the cat (0.4) *into his room* (1.0) but ah (0.7) um the cat (1.0) ah whenever he (0.5) did *something else* um something (1.2) the cat always (1.3) bothered him or spoiled his room (1.0) *for example* first (0.3) um (2.0) so he (1.0) he tried to (1.8) ah take the cat (1.3) outside and but the cat (0.7) *came back* (1.0) home (0.5) *again and again* (1.3) and (1.0) first he (1.0) um (1.5) took the cat tried to (0.5) out the cat (0.4) *in the forest* (1.2) *by car* (0.3) but the cat (0.5) um returned the house (2.2) *came back* the house (2.6) faster than him (1.0) so (1.0) and ah (2.5) ah (1.6) he (2.5) um (1.0) *what did he do* (1.5) he went (1.0) yeah (0.6) he he took the cat to the (2.3) ah ocean and tried to the cat sink (0.5) the cat sink sank (1.2) but he failed again (0.5) and the cat (0.4) *came back home* before he he *came back* (1.0) and ah (2.0) the cat (4.4) um spoiled the bed his bed or (1.4) his (0.4) wall and pictures or (0.3) everything (1.1) in the room (1.0) and he *got mad* and he *was very upset* and ah (1.3) he (3.0) *tried to take* the cat (0.8) he put he *put the cat into* the (1.4) ah hot air (0.4) hot air

balloon (1.7) and (1.8) but (1.0) he failed again (1.2) and (2.0) at *at last* (2.5) he *decided* to (1.0) use (1.5) ah use ah (2.2) bombs (3.2) but (0.7) um (3.0) he *made mistake* (1.6) and ah (1.4) he light (1.0) he lit (0.4) *his own hair* (0.9) and he was dead (1.7) he was killed um *by himself* and (1.5) and (1.0) his ghost (0.5) *look at looked at* (0.7) the cat and ah (4.2) oh his ghost looked at found his body dead body and he was very sorry (0.7) he was very sad and ah (1.2) cried and (1.4) but his dead body (0.4) drop (1.0) *dropped on* (1.0) on the cat (0.6) and the cat also dead died but ah *after that* the cat the many ah many many cats ghost *come out from* the cat's dead body and ah and chased him so he he he was sad and upset and cried *that's all*.

#### Natsuko 4

Um *I'm not sure* I can speak *I can talk about* (1.0) details (0.8) but I'm (1.0) OK *what I saw* in the film first (1.3) is um (0.3) there is (1.8) there is a hill and ah (1.7) on the ground (0.4) there are two chairs (1.7) and ah neighbours (0.3) *come out* and (1.7) they *sat on* the chairs and ah (0.8) very friendly (0.5) and ah (1.2) they were piping and (0.6) and read the papers (0.4) and they talked to *each other* very friendly and (2.2) ah *after a while* (1.2) one dandelion (0.9) *came out* (1.0) behind them (1.4) but it also *in the middle of* them but behind (1.1) and (1.0) the the dandelion was dancing and moving (1.7) so (0.7) they (0.3) they realized it was a (0.6) it was (2.4) very unique a unique dandelion (0.8) and they *tried to* (0.5) ah they approached (0.5) the dandelion (1.0) ah (0.5) they were very *curious about* that (0.6) so (0.4) *one of the guy one of they* (0.6) smelled the dandelion and maybe it ah (0.4) it's nice very good (0.6) because he (1.1) look he looked (0.3) ah (1.0) ah very (0.7) happy and (1.2) and almost faint (0.7) fainted (0.8) *and then other guy*

*tried to* (0.5) smell the (1.0) and ah (1.8) but ah (0.3) *after that* (1.0) *both of them*  
 wanted to have the dandelion (1.2) *as their own* (0.6) property (1.4) and (2.0) so (cough)  
 (1.2) ah (1.0) one guy (0.7) um (3.2) built a fence (0.6) (cough) (1.2) um *in the middle of*  
 their garden (1.4) and ah (1.0) that he (2.6) to (1.2) keep the dandelion in (0.6) *in his own*  
 (1.3) but *the other one* (0.3) the guy (0.8) were *against it of course* (0.6) he he remade  
 (0.3) rebuilt (0.6) the fence (1.5) um (1.3) um to (1.7) to keep the dandelion (1.0) um  
 (0.5) inside (2.0) *inside of* his room and (0.5) they tried (0.4) they *started to argue* (0.5)  
 to *each other* (0.5) and (0.6) *started fighting* (1.5) um ah (0.4) they hit (0.8) hit *each*  
*other* (0.8) and kicked *each other* (0.6) and (1.7) and (2.5) ah (1.0) *I don't remember*  
*exactly* but (0.7) anyway they fought (0.3) very hardly (0.3) and very roughly (0.6) and  
 (1.7) and they were very violent (0.5) um (0.6) aggressively (0.7) aggressive (0.5) and  
 (1.0) while (0.3) while they were fighting (0.8) they (0.5) *stepped on* the dandelion so the  
 dandelion were was ah (0.4) spoiled (1.0) and ah (1.2) and (0.6) finally one guy (0.8) went  
 (0.8) went *went to the other guy's house* and ah (0.8) um (0.6) hit (1.2) hit his ah (0.4)  
 wife (0.5) and ah (0.6) baby (0.6) *so maybe* (0.5) the baby and the (0.7) baby and ah wife  
 (0.6) were killed (1.0) and ah so *other one other one of course* did revenge (0.8) and  
 (0.4) doing *the same way* (0.7) and (1.2) and *after that* (0.8) ah (2.5) um they got (0.5)  
 all *each of them* got (0.8) bruise (0.6) and many scratches (0.6) and ah (1.0) they tore  
 (0.3) their (0.6) clothes of *each other* (0.6) and *after that* (0.6) finally (1.0) they killed  
 (0.3) *each other* (1.4) they died (1.5) and (1.2) the last scene (0.7) was ah (1.3) um (1.3) I  
 saw (0.8) two graves (0.8) *on the grass* (0.6) and on *on each grave* (1.2) um (0.3) a  
 dandelion (0.6) a new dandelion (0.5) *came out* (1.6) and (0.7) this is a story of (1.8) *love*  
*your neighbours* (1.2) *that's all*.

## Natsuko 5

There about *the title of the movie is* ah strings and (0.6) cords (1.0) so *it's about* ah (1.3) many *kinds of* strings (0.4) and there (0.8) ah there (1.0) there (0.4) two people *one is a* old man and a *the other one* is a (0.6) lady (0.4) and ah they are live *in the same apartment* (0.8) and the woman (0.4) the woman *lives in the* (0.6) ah (0.7) on the third floor (0.6) and the guy (0.3) the man *lives on the second floor* just bes *just under* (0.9) her apartment her apartment room (0.6) and ah (1.1) ah (1.9) ah (2.2) when they *came back to* the apartment (0.5) they met they *took the same* (0.8) um they met (0.5) in the (0.6) um (1.7) elevator (1.0) and ah (1.7) ah (1.5) *what else* yeah when she *got home* (1.0) she (2.0) ah she turned um (1.0) she turned the (0.4) fawcet of the (0.3) um (1.7) yeah (1.0) pour *started to pour* water hot water (1.8) *to fill the bathtub* (0.6) and ah (2.0) and ah (2.5) while she was *preparing for* the bath (1.1) she she (1.5) made (0.5) she opened some package (0.9) which is ah *one of the* (0.8) um (1.0) *one part of* the model (1.2) of ah (1.1) um (0.3) Titanic (0.9) big (0.7) big gorgeous (1.0) gorgeous (2.2) ferry ferry (0.7) boat (0.5) and she was making um (2.4) *model of* the ship (0.3) and (0.3) maybe she is a she loves (1.2) ah (1.2) ships or (0.4) cruising (1.0) and (2.5) and (0.6) yeah to make it she used (0.5) str strings (0.8) and the (1.6) and (1.5) oh (2.0) ah (3.2) yeah while she is a making (0.5) str ah making a (0.3) model (2.6) um the man the guy (1.3) who lives under the under her (0.6) room is *preparing for* the dinner (0.7) ah for four people (0.3) she he (0.3) he cooked (0.3) fished with lemon (0.5) and ah (1.5) prepare glasses four glasses for wine (0.5) wine glasses and ah (1.1) and ah (1.2) yeah and *after that* (0.7) the three (1.7) three (0.4) friends (4.2) with instrument (1.2) *came to* his

room (1.1) because they (0.3) they (0.6) practice (1.3) um (3.2) practice their (0.6) music (0.5) music (2.5) *I don't know what is what called* but it's a (2.4) string instrument they play string instruments like viola or violin or (1.4) contrabass and they practiced (2.0) together (0.8) for for *all of four* (0.6) and ah (2.2) and ah he got he had ah (0.9) he had a cat (1.8) and (2.2) anyway (0.8) but OK (4.2) ah and (2.1) um (2.5) now *when they started* (0.7) *playing music playing their string instrument* (1.1) um upstairs (0.3) she (0.7) she started (0.4) *taking a bath* (0.5) and ah (3.5) ah (0.8) they another another (1.4) model (0.5) ship (0.8) was floating on the bathtub (1.1) in the bathtub and ah (1.2) and ah (1.6) she was she took (0.5) the bath (2.7) imagine (0.4) imagine (1.0) um (1.2) the gorgeous (0.3) night nightlife (0.5) in on (0.6) the Titanic (1.5) because ah (1.2) she she could heard she *could hear* (0.6) the g instrument the good music (0.7) *from the downstairs* (0.5) they (1.0) they played (0.4) and ah (0.5) but there (1.2) her (1.2) um their floor the floor of her bathroom (0.3) had a big (0.3) hole (0.7) and ah (0.3) the water (1.0) *goes down* (1.0) and the wat the drops of ah water (1.0) *went down* (0.4) to the to downstairs (0.8) and ah (1.0) and ah (1.8) ah (3.2) um the holes (1.3) just *just under* the hole (0.3) the (0.7) *on the other side of* the hole (0.3) was a (0.7) the cei ceiling of ah his room (0.4) where they are playing (0.7) the music instrument (1.2) and ah (0.4) the ho (0.3) um (0.4) and ah (0.7) the ceiling has a the light (0.3) the light (0.5) and ah (1.1) so the hole is getting *bigger and bigger* (0.8) and the light (0.3) um *around the light* (0.5) around (0.9) around (0.5) the light (0.3) so the (2.8) um (0.4) um (0.5) the man (1.0) noticed (0.6) the hole is getting bigger (0.4) and the (4.0) the light could (0.7) *fall down* (1.2) and he *stopped playing music* and ah (1.0) went to the *to upstairs to her room to fix it* (0.3) *to fix the hole* (0.7) and ah (3.8) and but ah (0.6) when he (0.8) *went to her*

bath bathroom (0.6) he he was ah *kind of* ah (0.4) very (0.5) um he's not so hurry (1.0) he didn't hurry so the hole hole is getting *bigger and bigger* (0.6) and ah (0.3) *while he was preparing* to fix it (0.5) like ah (0.4) *rolling up* his ah (0.3) shirt or (1.2) *picking up* some tools or (1.0) *something like that* (0.5) ah (0.7) *during that* (1.0) ah (2.2) ah the hole was (2.2) so big (1.0) to (1.4) to hold (0.3) the light (0.5) and ah (0.3) the light (1.0) had (0.6) had got (0.5) *fallen down* (2.0) so (0.6) it was (0.4) *too late* (0.8) and (2.2) *and so* (1.2) he just *gave up* and *went back* (0.3) to her room (0.5) *to his room* (1.4) and ah so the (0.5) light has gone so (0.4) they couldn't (1.2) um (1.1) ex couldn't (0.5) *practice playing* (0.6) anymore (0.4) and the friends (1.4) *went home* (5.0) and (0.8) *at the end of* the (1.0) ah *end of the* (1.2) film (2.0) she (1.5) yeah after she (0.6) she thought (2.0) his (0.6) his friends (1.4) *went back* (0.7) left his home (1.8) she (0.5) *went back* to the bathtub and ah (3.0) he *started playing* practicing *by himself* (0.8) so she could (0.3) *listen to* him his music (1.2) and (0.6) started started imagining (1.5) their (0.6) um (1.0) the wonderful n the wonderful life (0.6) on the (0.3) *on the ship* (0.6) ocean again (2.0) *that's all.*

### Natsuko 6

Oh *the title of this film ah is* ah is the cat *came back* (0.8) and ah *one day* one guy was playing the instrument music instrument and ah (0.6) and ah (0.6) he he he heard some noise (1.0) um (1.2) somebody somebody knocking (0.5) *knocked on the door* (0.4) and ah (0.6) and it really (0.7) it really bugged him (0.5) and the (1.2) firs first he just ah (1.0) he just ah (0.5) just kep (0.5) *kept practicing* the instrument but he he *couldn't stand for the noise* and he (1.0) he *went to the door* (0.6) and ah (0.5) but nobody nobody was

there (0.5) and he found a (0.5) cat in the small basket (0.3) and (0.5) it was so cute (0.9)  
 and so (0.7) he was happy and he (0.7) *brought it back* (0.3) *brought it in the house*  
 (0.8) and he *tried to* (0.7) tease him and tease the (0.3) cat (0.8) and ah (0.9) and he  
 played it (0.5) *played with* (0.7) with the cat (0.7) but the cat (0.6) maybe (1.1) ah (0.6)  
 the cat (0.8) ah (1.5) um (3.5) didn't play (1.1) as a as a as the guy wants to do and ah  
 (1.5) so (0.8) he doesn't like him (0.4) he doesn't like the cat (0.5) so he *gave up* to keep  
 the do keep the cat and and he so (0.5) he he (2.5) *put the cat outside* (0.4) of the house  
 and ah (1.3) and he *shut the door* and ah (0.4) and but the cat *came back* (0.4) through  
 through the post (0.6) and small small space *at the door* like ah (0.7) for the (0.6) um  
 (1.2) like ah maybe (0.7) post and ah (0.8) and he *came back* the cat *came back to* the to  
 his house and ah (0.8) and ah spoiled the (0.4) bed and ah scratch (0.3) scratch (0.7)  
 scratched (0.5) ah walls and ah (1.3) yeah he broke (0.5) the cat broke many things (0.6)  
 and ah (0.7) the (0.8) the guy (2.0) um got upset and ah (1.0) and he (2.1) ah he pick  
 picked the cat up and ah (1.0) went to the (1.3) forest (1.7) ah (0.4) *I forget I forget the*  
*order* but maybe the f he *went to the forest* first (0.6) and ah (0.3) to put it (0.4) put it  
 (0.3) *in the forest* leave it (0.7) but (0.6) ah (1.0) he *couldn't make it* (0.3) cause the  
 (0.9) um (2.8) before he (0.6) he *went back* to his car (0.4) the cat already *came back* to  
 his car and ah (0.5) he *tried to* put the cat very far (0.4) in the (0.8) deep (0.7) *in the deep*  
 the forest but ah (0.7) but the cat (0.3) um (0.8) he *got lost* (0.7) and the cat *came back to*  
*the house* (1.3) before he *came back* (0.3) so (0.4) he felt it (0.8) and the *next time* (0.3)  
 he *tried to* sink (0.5) the cat (1.1) um the deep (1.0) deep sea (2.2) but (0.4) *instead of*  
 sinking the cat (0.7) he sank and ah so f he failed it again (0.8) um (1.1) and ah (0.8) next  
 ah (0.8) ah (1.0) and (0.7) finally (0.5) um (1.2) he (1.3) was ah (0.3) he *went to the*

*mountain* and ah (1.3) ah with a s lie a s um (0.6) yeah he (1.8) yeah he (0.7) *tried to* fly  
the cat (0.6) *with a hot balloon* hot air balloon (1.0) but (0.7) *instead of* (0.9) flying him  
flying the cat (1.0) he flew and ah (1.6) the cat the cat (2.0) again the cat survived (0.8)  
and ah (0.3) yeah finally (0.3) he *went to* the (0.6) mountain (0.4) *to leave the cat there*  
(0.6) and ah he used a (1.3) small cart (1.0) and ah *climbed up* the mountain (0.5) and but  
ah (0.5) ah *on the way to the top* (0.4) he fell (1.8) because the cat cart (1.2) um (0.7) *fell*  
*down* (1.4) *from the mountain* (0.5) and ah he went (0.3) he went on the um (1.0) he  
(0.4) he fell (0.7) into the (0.5) uh (0.5) well (1.0) *at the at the bottom of the mountain*  
(0.5) there (0.3) there there were (0.3) many (0.5) mice (1.2) and (2.5) and ah (0.5) the  
cat *came back to the house* again (0.8) *and finally* (1.6) he w (1.2) he (0.5) he *tried to*  
kill kill the cat (0.5) with a with a dynamite (0.5) he (0.5) piled up the dyna many *lots of* p  
dynamites (0.5) and ah put the cat on the (0.4) on the (0.5) *top of the pile* (0.7) and he l  
but he lit (0.7) on his hair *instead of* the b dynamite (0.8) so (0.8) he killed (0.7) ah he he  
was dead (0.7) and ah (0.4) ah (1.6) yeah he (1.6) the (0.6) uh (0.3) the spirit of him (0.9)  
*came down* (0.5) and ah he saw the (0.4) his own dead body (1.1) and ah he was very  
shocked and ah (0.9) and ah but the dead body that his dead body (4.0) um (0.6) um what  
um fell fell *on the top* on the (0.3) *on the cat* (0.5) so the cat was also dead (0.6) and but  
the (0.7) um (0.4) and ah (1.0) (cough) (0.6) the ghost ghost of he (0.4) his ghost (1.3)  
*laughed at* the cat was because the cat was dead (0.8) but also *after that* the (0.7) many  
(0.6) many (1.4) ghost (1.3) of cat of the cat (0.5) *came out* (0.8) *showed up* (0.3) and ah  
um (1.6) so the (0.6) his ghost um (3.3) ah was *afraid of* the (0.7) cat ghost (0.6) because  
the cat *came back* again (4.0) *that's all*.

**Isamu 1**

Hello David (0.6) *my name is* Isamuhiro (0.3) *I think* (1.5) ah (3.0) human evolution (0.5) ah this (0.5) tape is (0.5) human evolution evolution ah (0.8) no revolution step up (0.5) sorry (0.3) ah ah (1.0) first (1.5) a flower (1.8) ah first music and (0.4) modern music (1.4) I like (0.8) modern music and ah ah first (1.8) flower ah (0.9) in (1.5) interesting (3.0) ah next ah (6.0) next (2.0) a war (1.5) and (1.2) dead (2.0) finish end finish (0.3) dead (1.6) um (1.2) human is cheap (1.3) *I think* ah (0.8) first purpose (1.5) a flower (2.0) um (3.0) beautiful (1.9) um by (1.3) his (1.0) mine (1.0) their's mine (1.0) their (1.6) get (1.7) but (0.8) in (1.2) next story ah (3.8) his self (0.7) were no (0.8) and (0.3) family dead (1.5) and my dead (0.5) mm all dead (4.5) flower (1.5) sick (0.5) oh no (0.4) sorry (0.5) finish

**Isamu 2**

Um(0.3) *my name* ah Isamu (0.4) ah (1.8) ah this (0.7) ah (1.3) *I think* (0.4) ah (1.6) this tape (0.6) this (0.3) video *is very difficult* (1.0) because *very sure* (1.3) and ah (1.5) um no speaking (0.5) ah very very (0.4) difficult (0.6) but (0.4) very fine (0.3) I like (0.5) this (1.0) video (1.3) because (3.0) ah falling chandelier (2.0) mm I (0.3) funny (1.8) mm mm (0.8) ah (2.0) oh (1.5) he ah (1.8) old man (2.1) old man he is ah no (4.0) old man (0.8) ah where did you (1.8) he (1.3) go (1.5) by taxi (2.4) and ah (2.0) um um (2.0) she (0.7) like (0.6) ship (1.0) very large ship (1.2) oh yeah mm (2.0) found she ah (1.8) have a bath (1.5) room she (2.0) she (2.0) dreaming in bath (1.8) tub (1.5) very good dream dream is (1.6) ah party dream (2.5) ah she (1.6) ah (1.5) watching (0.8) dream (1.4) in (1.5) bathtub (0.5) mm (0.4) *very fine* (0.6) but ah old man (0.7) is so bad (1.2) because ah (0.6) his

chandelier (1.0) his light (1.0) ah broken ah now (0.3) ah water fall (2.0) ah (4.0) yeah  
 water fall (0.8) mm (1.5) but ah (1.5) mm oh no ah (0.4) well (1.5) musician (1.5) they  
 (0.6) are they was (1.0) oh no (3.0) ah musician why ah (0.8) no ss um (1.5) um very sure  
 (1.8) very sure video (2.0) but (1.5) *a little* (0.5) tricky (2.5) mm (1.5) mm (1.5) ss (0.5)  
 ah (2.0) English very difficult (1.2) mm (2.5) th th th mm sorry *no idea* (1.0) ah (2.0) ah  
 yes *no idea* (0.3) *good bye bye bye*

### Isamu 3

*I think* this cartoon is very funny (2.0) ah because (1.7) ah last scene (2.0) he is (1.8) I  
 like (0.6) this (1.4) case and (1.2) *I think* he crying (1.5) because (0.5) ah (1.0) she dead  
 (1.0) and (0.5) then (0.5) they happy because (0.3) they (0.5) separate (0.7) ah (1.0) by  
 (1.0) cat (0.7) cat (1.0) die dead (0.9) and she unhappy (2.5) ah (0.5) then (0.5) many cat  
 (1.0) she go (1.5) he (0.5) go to (1.3) heaven with (0.5) many cat (0.4) she very cry (1.5)  
 and ah (0.7) music is (1.2) ah very (1.0) I like (0.3) this music (0.4) because ah very (0.7)  
 ah (1.0) ah temp (0.6) very good tempo (1.0) ah (0.5) I like sound um (0.3) ah (1.5) but I  
 ah ah (1.5) heard I wish (2.0) more (0.5) ah (0.5) mouth (0.5) use (1.0) make used a new  
 (1.0) story (0.5) yeah (0.5) ah (1.0) ah (0.6) she (1.0) he (0.5) meet (0.6) mouse (0.5) he  
 met mouse (2.0) then s ah she and ah (0.5) mouse go to house (1.0) his house (1.2) then  
 she met the cat (1.0) but ah (0.8) cat (0.5) no work (1.2) usually cat (0.3) eat mouse (1.2)  
 but (1.4) ah before cat ah mouse (0.6) ross (0.6) don't see (1.2) mm (2.5) *I think* ah (2.2)  
 cat and (0.3) mouse (1.5) fighting I (1.4) say (1.0) cat and mouse are fight I say (0.4) to  
 fight cat to mouse (0.6) yeah um (0.6) yeah (1.5) this ah (3.0) cartoon is (1.5) best (1.0)  
 first second (0.5) this this (0.5) this time is *I think* best best cartoon (1.0) it easy story it

easy (1.0) easy (1.0) ah character (1.0) easy situation (1.0) um usually (1.0) ah understand  
*I like* (1.2) but ah (2.0) yeah ah (1.0) finish sorry (0.5) *bye bye*

#### Isamu 4

*I think* is same stupid guy (0.3) ah because (1.8) just flower (1.2) just a flower why (1.0)  
 they are (3.0) *I don't know I don't understand* (1.0) but (0.7) this video is *very bad*  
*timing* (1.0) because yesterday (3.0) American (1.5) US (1.2) ah yeah maybe (2.0) yeah  
 oh (1.8) begin (1.6) very friendly (2.0) beside house (1.0) very friendly maybe (0.8) ah  
 (0.5) *each family* is very friendly (2.0) but ah ah ah border (1.1) borderline (1.3) just (0.7)  
 flower but very very bad time (1.5) ah begin not borderline *but after* (1.0) each ah he (0.7)  
 they are make borderline (2.0) it's all (1.5) *I think* (0.3) ah sorry (2.0) yesterday (0.8) I  
 looking for a *I watching TV* (0.4) about (1.0) three hours (1.0) on then (1.0) ah contents  
 is (0.8) *of course* (0.7) attack New York (3.0) yeah (0.8) ah *very bad* ah (1.5) coca.. um  
 (3.5) they believe ah no they believed (1.0) what (2.5) did they believe (2.0) of usually god  
 or (1.0) ah moral (0.5) but (1.0) yeah one (1.0) one (0.3) one (0.3) ah (3.5) one ah just  
 treasure (1.8) *a lot of* jury just (1.5) *this case* is just flower (2.0) they (0.5) are (0.7) they  
 are their *mind change* (1.2) *very bad* (2.0) ah oh (3.5) mm oh they are die (1.5) after  
 (2.0) share flower (1.0) and same next (0.3) are they (0.5) sorry next (1.5) ah beside ah  
 (1.8) beside (0.4) same gravestone (3.5) this pronunciation (0.5) drade (1.0)-stone e or sts  
 stone same (1.5) always (1.0) people (0.6) are dead (0.5) after same level (0.7) no (0.4)  
 battle just (2.0) ... um yeah (1.0) *I believe it* (0.7) ah no *I don't believe* (0.5) ah *how to*  
*say* ah yeah (1.2) it's *I think* (1.0) *very bad timing* (0.4) sorry *bye bye*

### Isamu 5

Hi ah (3.0) this film is enjoy (1.0) um before *I don't know* this ship ah this ship name (0.5) *but now* I (0.3) know because I found Titanic this movie is Titanic (0.8) so (0.8) maybe *I guess* (0.3) he ah old man like music and she (0.8) speak or (0.8) psychology the mind is very (1.3) perfectly (0.7) completely (1.0) so he don't like ah (1.5) he like fix or perfect (1.0) so perfect he make perfect the situation (0.4) perfect ah something yeah (1.0) so and he like music so maybe (0.5) *very much* (1.2) so he (0.7) found (0.3) ah found (1.8) broken (0.3) how to say (1.0) broken point (1.4) yeah *and then* he go (1.2) ah (1.5) ups upstairs (0.5) up floor (1.2) so (0.3) but (0.5) maybe he meet her (1.2) maybe they are *don't know each other* (0.5) just ah (0.8) ah apartment (0.4) ah Niagara Fall (1.0) ah Niagara Fall forgot this word (1.2) *I forgot this word* so *but it's OK* (0.5) just he (0.3) fix (1.2) yeah but (0.8) he heard (1.2) he will hear (0.6) that ah (1.0) ah floor (0.7) felt (1.2) ah felt light chandelier (1.5) yeah (0.5) maybe he don't fix (0.3) some thing (1.2) because *I guess* (1.0) ah his friend (0.7) is (1.0) take a a (1.0) just accident so they go to (0.8) ah they went they go to (1.2) ah they (0.8) they are gonna to (2.5) ah hospital (0.5) maybe (0.3) but (0.8) he (1.0) playing violin (1.5) so (1.5) ha but this apartment very very (0.7) ah particular because (0.7) ah almost ah (1.5) ah bath (0.5) bathroom (1.0) bathroom (1.0) downfloor same same (0.8) same location one room (0.8) one floor *is same* (1.0) position (0.8) ah (1.0) bathroom (0.8) ah four floor (0.3) no no no (1.2) bathroom (0.8) and the bathroom (0.8) same position *each floor* each (0.4) *each model* (0.4) but this (0.7) ah (0.4) this mansion apartment is different (0.8) ah bathroom (0.7) but (0.4) under floor (1.0) just room (0.4) yeah *very interesting* (1.0) and (1.5) ah (1.5) yeah (2.0) finish finish.

### Isamu 6

Ah *I think* ah no no no(0.3) this film (0.3) is I like this film (0.4) ah yeah before I say maybe *same word* and ah (1.2) ah but ah (0.3) he (0.3) ah (1.5) a house owner he (0.3) had a big (1.0) mistake (0.7) because maybe he like cat but (0.5) this cat is very very terrible cat (0.5) but he *pick up* (0.5) this cat (0.7) this cat is *looks like* very very *I think* (0.4) cute (1.0) but very very (0.5) terrible man terrible cat (1.2) so he (0.4) yeah he (1.0) gone (1.5) yeah she found a cat and then she *pick up* (0.8) and she give ah his (0.5) toy but ah (1.0) this cat is broken this toy (0.4) so he angry (0.8) s s o he (1.0) ah (1.2) he (1.5) take (1.0) cat *and then* (0.7) out (1.5) go (0.3) ah *how to say* (0.3) but (1.0) ah cat *came again* (0.8) again again again (1.2) so he *go outside* (0.7) yeah again again again (0.3) continue continue but (1.0) he (0.7) *and then* (0.6) he used (0.8) dynamite so (0.3) but ah (0.8) yeah this story *a little* (0.6) nonsense because he had (0.5) he had *a lot of* dynamite (0.5) so usually (0.3) normal people (0.3) generally (0.5) don't have dynamite but (0.5) he had (1.5) *and then* he dead (1.0) yeah (0.5) *and then* but ah (0.8) next nonsense (0.5) why cat (1.0) cat dead but (0.8) cat spirit is (0.5) just nine (0.5) ah *a lot of* ni it's ah nine (0.5) spirits (1.0) so (1.0) terrible he *grow up* (1.2) he never ah (0.5) this that man (0.5) never (0.7) ah (0.5) never (0.5) *kind of* comfortable yeah (0.5) he go heaven maybe he everytime everyday meet cat together (1.0) yeah *I like this* ah story (0.6) *very funny but very terrible* (1.3) yeah *thank you*.

**Jun 1**

*There are there were* two person (1.0) *at first* (0.7) *they looks* very good friend (2.5) they were smoking (0.5) and *reading newspaper* (2.0) and *sitting a chair* (3.3) and ah they found (1.2) a flower (2.4) and they *started to* conflict (0.7) *to get* the flower (2.8) they hit *the other person* (2.2) and they broke (0.6) their houses (0.8) and hit (0.5) their spouses (2.5) *and finally* (1.4) they *lost everything* (1.6) and they died (3.0) nothing (0.6) left.

**Jun 2**

The old man and old woman (0.4) are *in the elevator* (1.6) they went (0.3) their home (1.5) the old woman (0.3) put some food *on the desk* (1.1) and make (0.8) the ship (2.8) she put (0.5) hot water (1.6) *in the bathtub* (4.0) the old man (4.5) mm put the food (0.3) *on the desk* (2.1) and the and he prepared (1.9) some meal (4.2) and the and the friends of *old man* (0.5) came (0.3) his house (1.4) *to make music* (2.5) and they *played music* (0.7) with (1.1) guitar (0.4) violin contrabass (1.2) *but then* (3.0) water (0.3) spoiled from the (1.2) upper stairs (3.7) the old man was angry and *went to* the (0.4) upstairs (2.6) he *rang the ring* (1.2) and *went into* (0.4) the old woman's (0.5) room (3.3) he *tried to* fix (2.0) the bathtub (1.7) but while he tried he was *trying to fix* (4.5) the floor was broken (0.8) and chandelier (0.7) *fallen down* (3.0) *and finally* (0.7) he *gave up* to fix (1.1) and (0.3) *went back to his home* (1.5) *and also* (1.6) his friends (1.4) *went back* (1.7) away.

**Jun 3**

*There was* a small house (0.8) and a old man (0.5) was *living there alone* (2.5) when he was *playing the horn* (0.4) someone *knocked the door* (2.5) he *opened the door* (0.3)

but nobody (1.1) was there (2.6) finally he found only a small cat (2.5) *at first* (1.0) um  
 (4.0) he liked (0.5) he liked the cat (1.6) but (0.8) he broke (0.4) ah his toy (1.6) of  
 memory memory (0.8) so he was angry (0.6) and he (1.5) he (0.7) take this cat (0.8) out  
 (0.8) but the cat *came back* (1.5) *next time he tried to* (0.4) bring bring this cat *far away*  
*with car* (2.7) but (1.0) ah finally (1.6) the cat (0.3) came back (1.9) he bring them (0.4)  
 (cough) he bring this cat (0.7) *in the forest* (2.0) *many time* but he finally ah couldn't  
 (0.3) *couldn't do that* (3.0) so *next time* (1.4) he *tried to* ah (2.0) put (0.5) this cat *in the*  
*sea* (1.5) so he went *to the sea by boat* (0.5) and he *tried to* (1.5) *tried to* (0.6) put this cat  
*in the sea* (0.8) but he failed and ah (1.0) he (0.7) *fell down to the sea* (3.1) when he  
*came back to home* (0.8) the cat (0.3) broke his chairs and the (0.6) carpet curtains and  
 everything his furniture (1.1) he was angry (0.4) and he *next time tried to* (1.5) *tried to*  
*take this cat away with balloon* (1.4) but he couldn't (5.6) finally (1.2) he *tried to* (1.0)  
 explode with dynamite (1.7) and ah *bring to* (1.2) bring many many dynamite (0.4)  
*around this cat* (1.4) and put fire (1.5) but he's he mistake (0.8) and he put fire (0.4) *on*  
*his hair* (0.8) he *was upset* and ah (0.4) *run around* the (0.9) house (1.2) and the fire  
 (1.5) fire spread *to the dynamite* (1.0) and the dynamite explode (0.4) exploded (2.7)  
*because of* this explosion (0.8) this old man (2.1) um died (3.0) um but *at first* (0.4) he  
 didn't recognize (0.8) so he teased his cat (1.5) um but (1.4) later (0.3) his body (0.3) *fell*  
*down* (0.7) so he know he knew (1.0) he *was dead* (0.9) he *was upset* (1.0) *but also* (0.5)  
 the cat (2.2) cat *was killed* (0.8) *by his body* (1.8) *and finally* (0.8) he *go up to the sky*  
 (1.7) but many (1.3) um many souls of cat (0.6) also (1.2) still following (0.7) him.

**Jun 4**

*At first* (1.5) *there were* two men (2.0) they were very friendly (2.1) ah they smoke (0.3) *each other* and (0.3) *reading newspapers* (1.5) *and then* (0.6) ah they found (1.3) one beautiful flower (3.2) and they start they *started fighting* (4.1) *for a while* (1.0) they were engaged (0.4) by this flower (0.8) they smelled this flower (2.3) but ah they *want to* (0.5) *try to* keep (0.6) only *by themselves* (3.0) they conflict *each other* (1.0) (cough) (1.5) ah they built a fence (0.6) ah *between the houses* (3.5) but *another man* (1.0) doesn't agree (4.0) and they (0.6) use (0.5) ah they use one fence (0.8) and fighting (1.3) he hit many times (1.2) they hit many times *each other* and they broke (2.2) their houses (0.7) *each other* (0.7) and they hit (1.0) um (1.5) *another man's* (0.5) wife and child (1.7) but (0.8) *during fighting* they also broke (0.7) this beautiful flower (1.5) *and finally* they broke everything (0.7) *and also* they died (5.3) *nothing remain.*

**Jun 5**

Old man and old woman *in the elevator* (2.2) this story is (0.7) *relevant to* string (3.2) elevator was holding (0.8) *by the strings* (1.2) and old man and old woman (0.5) *went back to their house* (1.7) old man preparing (1.2) ah dinner (3.5) because (1.0) some people will come *to his house to play music* (1.5) their instruments are also strings (1.0) old woman (0.6) preparing (0.6) to *taking a bath* (2.2) and ah she has a model *of Titanic* the ship (2.1) ship she put (0.3) ah new strings on her (0.8) on her ship (5.0) she is *taking a bath* (1.2) and ah (0.7) downstairs (1.5) four people (0.3) were *playing the music* (2.0) but (0.6) her bath (0.5) was broken (0.9) and some water (1.0) ah (1.5) spoiled *down to* the (0.4) downstairs (4.0) his *to his room* (6.5) a old the old woman (0.4) found (1.2)

some water and *went upstairs to her house* (2.0) he *tried to* fix (0.3) her bath (1.2) but *and then* (0.3) then the bath was broken (0.8) and the (1.1) chandelier *in his room* (0.8) *fell down* (3.5) the strings (0.3) were cut (2.0) and chandelier was broken (2.8) and the people (0.8) *went back* (2.7) *went out* his house (6.5) after he *went out* (0.7) *from her house* (1.5) she *took bath* again (1.0) and ah the old man (0.8) was playing (0.7) music (2.0) again alone.

### Jun 6

A man (0.5) was playing (1.0) the horn (1.6) suddenly someone *knocked the door* (1.5) he neglected it (1.2) but (1.0) the knock (0.8) didn't stop (1.3) the man was angry and *opened the door* (0.6) but nobody was there (3.0) finally he found a small cat (1.8) the cat (0.5) was very pretty and cute (0.8) so he liked it (0.7) and brought it (0.5) *to his house* (3.6) ah the cat broke (0.3) ah (2.5) his favourite toy (2.2) which he had *since his childhood* (1.5) he was very angry (0.8) and her *tried to* (1.1) let (0.3) let the cat out (1.1) first (0.7) he put the cat (1.2) um *out of* the door (0.8) and he *shut the door* but the cat was in house *in the house* (1.5) *second time* he put the cat in ah *in his car* and he brought (0.3) brought it *to the forest* (0.7) *far from* the house (2.5) he *tried to* put the cat *in the forest* (0.3) but the cat *came back again and again* (1.0) he brought it to *further and further* (0.7) *but finally* he couldn't (2.0) and he *gave up* and *come back* (0.5) and ah *next time* (0.7) he *tried to* use a (0.6) boat (3.8) but (0.4) again he failed (2.0) ah (1.3) not the cat but he (0.5) *fell down into the sea* (0.7) and almost died (3.5) when he *came back to his house* (0.7) the cat (0.3) was there (3.5) *next time* he *tried to* use hot air balloon (2.8) *but again* he failed (3.0) the cat was (3.7) ah *how to say* (0.6) the cat wasn't (0.7)

*going up* (1.5) but the man (1.0) *go up to the sky* (2.7) finally (0.5) he put ah (0.4) he put  
 the cat (0.3) *in a truckle* (2.0) and he ride (0.6) the truckle *to the mountain* (3.0) but  
 when he (3.2) when he hit the small insect (0.8) he *fell down into the hole* (1.5) and ah  
 cat (1.6) cat wasn't cat didn't (5.7) *in the hole* (1.0) there was (1.2) there were many  
 mice and snakes and very dangerous animals (2.6) when his light when his light (0.9)  
 became dark (1.3) he *was attacked by them* (2.3) he *ran away* and he came (1.8) back  
 now already the cat (0.8) broke everything *in his house* (4.5) *at last* he used dynamite like  
 bomb (1.2) to kill this cat (1.6) but he put fire (0.9) not *on the strings* for the dynamite  
 but his hair (2.5) so (1.0) he *ran around* (0.6) in the house (2.2) and he (0.5) he was killed  
 (1.5) not the cat (1.1) but he is pleased because he can he could *run away from* the cat  
 (2.5) (cough) (2.5) but his body (1.3) also killed the cat (2.5) so again (0.7) he *run away*  
*to the sky* (1.5) and many (1.4) many soul of cats (1.3) are still following him.

## Meiling 1

The title *may be* (0.7) love your neighbour (0.8) ah today I saw a movie (1.0) and the movie ah show (2.3) that (0.4) two guys (0.4) and they're neighbour (0.5) but before they don't ah have (0.9) ah (2.1) nothing *in the ground* (0.3) just the two house *and then* (0.4) ah everyday (0.6) they ah *go outside* (0.4) to *read the newspaper* (0.4) they *sit together* (1.1) and they chat (0.4) they are very happy but behind (1.5) but *in the middle of* their (0.4) house (0.6) ah there flower (0.7) everybody (0.6) want to (0.7) ah (1.0) *want to be* the owner of the flower (0.9) so (0.7) two (0.3) guy *was fighting* (0.5) with ah for the flower (1.0) and (1.0) ah (1.0) two stupid (0.6) they are two stupid guys (0.3) they fighting (0.3) just *want to* (0.8) ah just want the flower my flower (1.3) although the flower is nice but (1.7) *before that* are very *kind to each other* (0.4) but when the flower *was come out* (0.8) the are fight *for the flower* (0.8) and then (0.4) they fighting fighting (1.0) um (1.0) *at the end* (0.5) um (0.9) each guy uh the frinedly (0.3) lost the friendly (0.6) the house (1.0) ah they lost their children (0.8) ah (1.0) *at the end* nothing they left (1.2) just the (0.5) um (0.5) they have (0.6) the ah two bury (0.4) *I don't know* (0.6) bury (1.0) ah ha (0.4) and together they are together (1.4) so (0.8) this angry *tell us* maybe *in my opinion* (0.6) *I will say* (1.1) um (0.6) your neighbour is very important for you (0.8) ah your neighbour (0.7) *love your neighbour* (0.7) ah to *kind to* your neighbour (3.3) your neighbour ah *just like* your family (0.6) China (0.3) in China *people always say* (1.1) um (1.1) ah is a far (0.8) ah (0.3) relation (0.8) no good at (0.7) your neighbour (0.8) means your neighbour is ah (0.9) very important (0.3) your life you if you sick your neighbour can (0.3) *see you visit you* (0.8) *take you to the doctor* (0.3) but ah although your reaction (0.7) relative (0.7) was ah (0.8) came to you but they live *far from you* they

can't come here (0.6) so (0.6) *I will say love your neighbour* forever (2.0) *that's all*

David (0.7) *thank you*.

## Meiling 2

And ah (0.4) ah (0.5) love the water (2.2) ah there was a man and a woman (0.6) they *live in the same apartment one day* (0.5) they bought *a lot of* food (0.8) ah (1.1) *back to home* (1.3) then (0.7) after they cook (1.2) ah (0.9) the woman was *live in* ah (0.5) upstairs and ah (0.8) the man *live in* (0.6) ah (0.9) one floor downstairs ah (0.4) so (1.8) ah the man wa' invite many friend (0.8) to (0.5) his house (0.9) and to eat (0.7) *have a party* maybe (0.6) and the woman was ah (0.5) ah (1.0) *alone at home* (0.6) he ah she *wash the dish* she *use the water* (0.7) ah but she (0.4) ah she *want to go shower* (0.8) ah she use ah the water ah (0.8) *very long time* (1.1) but she when she ah (0.8) use of the water (0.7) she didn't *turn off* the (1.0) um lamp (1.2) *just a little* water is (0.3) ah *just a little water down from the tap* is ah (0.7) was a *serious problem* (0.7) and the man (0.5) the house was (0.4) ah (1.2) the roof maybe (2.0) ah *was appear* little water (0.4) because the water is from (0.4) ah upstairs the woman (0.9) and um (1.0) ah *after a second* minute (0.4) the water *more and more* (0.7) the water was *more and more* (0.6) and (0.8) *and then* the man *went to* to the (0.6) woman's house (1.2) also the woman the water (0.5) *from the bath* (0.7) ah (0.5) ah (0.4) down (0.3) *to the man's* (0.6) house (0.7) so (0.8) ah little water became *a serious problem* (0.9) the little water destroy the man's house (4.4) (sneeze) and *at the end* (1.0) the the woman *live in upstairs* ah (0.3) live a (0.3) a heavy life (0.3) also (0.5) the man was ah so mad (0.5) the house was so poor and ah (0.5) ah (0.5) the roof was ah (0.7) the water (0.5) is ah (1.2) so *I think this story tell us* (0.7)

*love your neighbour* and saving the water (0.8) and ah (0.8) is maybe (0.4) um (1.0) ah *serious problem* (0.6) from a little water *from little things* (1.2) *so that's OK* (0.5) ah (0.5) OK ah David I'm Meiling Chin ah tomorrow I will *back to China* so maybe I'm come back *in August* twenty maybe 18 maybe maybe 18 *I think* I book the 18 but ah the airplane can ah land can *change the date* so I can't come here *in next story* sure *sorry about that* I will meet you *on another day that's OK thank you*.

### Meiling 3

About the cat *came back* (1.5) the re the cat is ah belong of a owner (0.8) they *live together in the house* (0.7) but the cat is ah very bad (0.8) ah the owner (0.5) *try to ah drop off* the cat (0.7) ah ha (0.5) the cat ah (1.0) the cat ah *tried to* make many troubles *for the owner* (0.9) the cat ah (0.3) ah destroy the house (0.8) and ah (1.1) ah and the sofa (1.0) um (1.0) the cat *try to make* ah (0.6) a troubles *for the owner* (0.7) and ah the owner try use (0.4) many ways *try to* (0.6) *drop off* the cat (0.8) he *put the cat in the sea* (0.7) and (0.3) he try use the balloon (0.6) ah *pick up* (0.3) *pick out* the cat *out of the house* (1.3) anyway ah he try use *many ways to* (0.7) ah (0.4) *take out of* the cat (0.3) but the cat (0.3) is a very (0.3) con (1.0) ah but the cat ah tr' also can *come back* (0.9) to go in the house (0.8) do some *make troubles for the owner* (1.3) um (1.8) anyway (0.5) ah the cat ah (1.4) ah is ah (0.3) difficult to (1.5) to be (0.5) dropped (2.5) *at the end* (0.8) um (0.8) well the (0.5) owner *try to* (1.0) ah *take off* the cat (0.5) no not *take off* (0.4) *take out* of the cat (2.2) and ah *kick out* some troubles ah *from the cat* (0.8) *from the animal* (0.5) and romand of the cat (1.5) ah the is a bad cat (0.3) and *I think* is a bad owner (1.0) ah *thank you David for waiting for me* to do this research *I know* this story I

tell I told is ah so bad because I *just came back* ah my listening my speaking also is *so bad* anyway *thank you*.

#### Meiling 4

I hear the story (0.4) *love your neighbour* (0.4) and show *in the first time* (2.0) too (1.4) um (3.3) *love your neighbour* (1.7) what (0.6) there are two neighbour (1.0) between they like ... *read newspaper* ... yesterdays (0.7) they smoking together (1.5) ... *one day* (0.3) there was a flower *came out* (0.3) *between their two house* everyone want to .. beautiful flower (0.3) and ah (1.8) a flower (1.0) so ..everyone want (0.5) to be the owner (2.4) and they (0.7) fighting other (0.7) *for this* for winning this flower (2.6) though sometimes they fighting *at the end* (0.3) they *at the end* (0.7) they lost ah (0.7) the house and lost their family there only have *two them* (0.8) together ah not (0.5) *each one* has one (1.0) so from the story *I think love your neighbour* (0.6) mm don't (0.5) ah um oh um is trouble your neighbour (0.3) for for what not valuable *you know* (0.3) if you *love your neighbour* you love you (0.5) so I ..life don't *like this* (0.8) I don't their (0.6) if the flower is (1.2) belong me (0.5) I will (0.7) if my neighbour *like this* I will (0.4) give it *as a gift* (0.3) to my neighbour (2.0) *in a word* (0.6) *love your neighbour* (0.6) forever (1.0) *thank you*.

#### Meiling 5

Ok this was this story ...ah we need water (0.7) but ah (0.8) *in our life* (0.4) people always (1.0) waste the water (1.0) and *waste our life* (2.8) there are 90.3) neighbours (0.5) they live upstairs (1.0) *there are* two person (0.8) *one is a woman one is guys* (1.5) the woman live ah (0.8) upstairs and the man *live downstairs* (1.6) *one day* the man

invited (0.3) his friends to (0.6) his home and *have a big party* (0.9) but and the woman was upstairs *do some washing* she is *go shower* (0.8) and ah (0.6) she *didn't care* the water (2.2) ah the water (0.3) ah is down (0.3) ah (1.0) *to the downstairs* roof roof (1.0) so the man (0.3) ah upstairs ah the downstairs man know it (0.7) ah he *went to upstairs* (0.4) ah (0.4) he *look at* the (0.7) washroom (0.7) ah (0.5) see *what was the problem* there (1.0) and ah (1.0) he *tried to fix* (0.5) it up (0.6) but is ah (1.1) *you know is too late* because (0.3) the problem is serious (0.7) is really serious problem (0.6) he tried to do some but is re' (0.3) is really bad (0.9) *you know* (0.4) the water and some stuffs (1.0) the machine (0.3) *fell out* (0.9) *on the downstairs* (1.2) so the man um (1.8) have *nothing to do you know* and ah he *came home* and ah his friends um (0.5) when the *went to town* (0.6) cause the water *you know* is ah (2.6) is affect the party (1.0) and ah when he (0.7) was *go home* (0.3) the the man the woman (0.6) still to *go shower* (0.3) she *didn't care what's happened* (0.8) ah didn't check his washroom the problem (0.8) ah she *continued to go shower with the water* (1.8) is is *that's not nice that's not nice* (1.8) um (0.7) *from this story I know* (0.8) love (0.4) ah you must (0.3) care your neighbour and ah (0.8) water is *very important for us* (0.5) so please (1.0) don't waste your water (1.7) *thank you.*

### Meiling 6

Bank (0.9) *there is a family* and the family has a cat is a very cute cat (1.4) but the family (0.5) but the cat is (0.6) so cute and (1.0) naughty (0.5) and (1.5) so is not lovely *you know* is not kind cat (0.6) *when the family when the guy* (0.5) but the guy is love the cat so *when the guy tried to* (1.1) *play with the cat* (0.5) but the cat *you know* (0.6) doesn't

*make sense* (1.7) and so the guy *don't like doesn't like* the cat anymore so he want the cat (0.4) go (0.3) *out of the* (0.4) *out of the family* (0.3) and the guy *try to put the cat out there* (0.5) and (0.6) *don't let him* (0.3) *don't let the cat* (0.4) back but the cat (0.4) tried (0.8) is very clever cat is cute (0.5) and the cat (0.4) yeah (0.6) and *back again* (0.4) and the cat now is angry (0.8) and the cat (0.6) destroyed (0.3) ah the o the guy's (0.5) stuff (0.5) like bite (0.4) a pillow (0.3) he *put in he take out the inside of the pillow* (0.9) and bite (0.5) and (0.5) the guy now is angry t is angry too (1.1) the guy use ah (0.6) *try to use* (0.4) ah (0.5) um many way to (0.3) put the cat (0.5) *out of the family* (0.5) but the cat is *you know* is (0.3) very (0.5) intelligent (0.3) yeah (0.7) and the cat *came back again* (0.3) and (0.5) do many bad things for *for the guy* (1.0) now they are fighting (0.4) fighting (0.5) *many times* (1.5) *at the end* (0.4) the cat (0.7) *you know* (0.3) yeah also can *came back again* (0.3) the man have *nothing to do about the cat* (0.5) that's so angry (1.0) *at the end I don't know* is bad cat and (1.0) anyway (0.5) if you like cat *buy a cat* (0.3) bought a cat (0.5) don't *do like them* treating them (0.5) *don't let the cat destroy many stuffs* (1.7) Ok (0.3) so *the story is the cat came back* is good story (0.5) *thank you.*

## Lin 1

... a beautiful place they *get along with each other very well* ... well (0.5) they find a flower (0.3) a flower (0.3) which very beautiful (1.5) mm mm and uh (0.8) have a (0.9) uh have a mm good smell uh so (0.5) they ah so they smell (0.3) is good (0.5) *they both* (0.4) uh *they both* ah (0.3) love this flowers so they *want to* (0.6) mm (0.3) flower (0.4) *belongs to* who (0.4) uh so they fighting (0.5) fighting badly (0.3) and *a lot* (0.5) the two men mm died (0.5) mm they (0.4) their (0.3) baby and theirs wife (0.5) uh (1.2) uh (0.6) is sended (0.3) is sent (0.4) is *sent away* ah (0.3) from (0.4) is *sent away* (0.8) uh

## Lin 2

uh one people is er (0.4) one people is uh *lived on* (0.3) s' second floor one people is *lived on* third floor (0.4) the people who *lived on* (0.4) a third floor is a woman (0.5) she like her she like her (0.7) Titanic er (0.3) *very much* (0.5) ah so she buyers (0.4) a for filler boat ah for the Titanic (0.5) er um model (0.8) um and er he *want to* (0.5) uh he (0.5) uh she uh (0.7) she opens her (0.4) tie (0.5) and er zer (1.1) uh the water (0.4) ah he want to bath (0.6) uh (0.8) and her (1.0) zer on zer (0.7) second floor (0.5) the *people who live the second floor* is the man (0.4) ah (0.6) the man (0.5) uh the man (1.2) uh anyway teachers uh he will tea he wait ah (0.3) he waiter he watch (0.8) his stu... his friends (0.7) ah to *came to came to* (0.4) b' his food (0.4) and a poo ay pouring (0.8) nn ah (0.6) other (1.1) when they preboarding (0.3) ah they found a water er *came from* er (0.4) the ceiling (0.7) ah there (0.7) so there (0.3) the man *who lived* (0.5) er ah the second floor she *who lived on second floor* (0.5) ah (0.4) upstairs and ah (0.4) *want to* repair the (0.5) repair the (1.3) ah pipe oh (0.9) pipe oh pipe oh (0.5) the (0.3) th third floor (1.0) uh the woman see

(0.3) the father (0.9) but she uh he come the (0.6) um (0.5) repair the (0.6) pipe (0.5) and the (0.7) and the an he's (0.5) uh in his room his light (0.4) fall (0.6) drop ah **drop down** the earth floor um

### Lin 3

is er the (0.3) er cat ah (0.4) came (0.3) um (0.3) **came back** the cat **came back** (0.3) um (0.4) ah (0.7) the cat ah is terrible ah the terrible ah (0.3) story and (0.5) er um there is a man (0.3) live (0.4) er living er (0.3) living in a small hill (0.5) and ah **one day** (0.3) uh when he was (0.3) uh **doing something** and er **I don't know** (0.4) he plays er (0.5) ah the thing er **I don't know eh the thing's name** (0.5) so he play the **play the music** (0.3) ah things (0.3) eh (1.0) eh then (0.4) he heard (0.4) eh and then he heard he heard uh of (0.3) there is a (0.3) uh said someone (0.3) **knock at** (0.3) ah **knocking at** (0.3) eh his door (0.7) uh then he **opened the door** and uh (0.3) he found uh he found a small cat (1.1) um (0.5) um **at first** uh he (0.3) think he thinks the small cat **may be** very (0.3) uh lovely (0.4) uh but uh when he um (0.8) he **doing something want to make** the (0.3) uh (0.7) make the small small cat uh love better (0.3) um but he fall (0.7) um so (0.3) they feel uh very ha very angry (0.5) he f' he feel very angry and er (1.1) and then he threw the (0.3) cat out (1.0) but er when he when he **close the door** (0.3) uh the cat ah **come back** (0.8) uh (0.6) s and uh (0.3) destroy something (0.7) ah (0.5) then (0.8) uh (0.5) then the man feel very ang er very angry (0.4) ah er buy a car and er (0.5) um t' t' carries carry the small cat uh to er forest (0.6) um (0.4) **to the forest** and er (0.5) um (1.0) and they want er **I know he want to** throw the small cat (1.6) **time and time again** (0.6) um he threw (0.4) he um **want to throw** (0.3) the cat er but er (0.3) the cat always er (0.4) but er the cat (0.4) uh

always er (0.6) *go back to her to his car* (1.0) um then um (1.3) *and then* uh (2.0) and  
*the second time* (0.4) u *the second time* (0.3) the man uh uh (0.5) the man uh the man  
 (0.4) boating boating *on the sea* (0.3) and uh and uh uh and uh *want to* and uh *want to*  
 (0.7) put the put the small cat (0.3) *into the water* uh but er (0.5) final *but finally* um  
 (0.4) the man (0.3) uh f (0.3) *fell in the water* (0.8) and *the third time* us er (0.3) this  
 man *want to* (0.3) *want to* uh send send the small cat fly with (0.4) er the with er the  
 thing (0.3) *I don't know the thing's name* (0.4) and er *but finally* (0.3) the final (0.4) uh  
 but *in final* uh (0.3) the man the man fly with the (0.3) thing and ah the fourth (0.6) ah the  
 (0.8) ah er *the fourth time* (0.3) uh the man want to send uh the small cat into ah the er  
 high mountain (0.4) but er ah but ah *in fact* uh uh he *fell down* the mountain (0.4) fell *off*  
*the mountain* (0.6) uh the *the last time* (0.5) uh (0.6) the man *want to want to* make er  
 (1.0) some ah tnt want to fire (0.3) tnt under (0.3) uh *want to* made (0.4) er (0.4) *want to*  
 make (0.3) er the small cat er die (0.4) but er (0.5) uh but he fall ah (0.6) he he ah he died  
 (0.8) uh then (0.3) uh he uh his soul *came out* ah of (0.3) uh his body (0.6) um (0.3) *and*  
*then* he feel very happy (0.3) uh because (0.5) uh he is uh not er (0.6) not er he is uh not  
 er human (0.5) he soul (0.7) his soul *came out of* ah his body (0.5) ah they wan er he  
*want to* make eh (0.4) to make the (0.4) small ca the small cat angry but er (0.6) ah (0.5)  
 then (0.4) his body his body eh down (0.4) *fell down* (0.3) *fell down on the floor* (0.5)  
 and er and ah he ah and ah kill the (0.3) small cat (0.7) uh then the small cat (0.3) er soul  
*came out* uh (0.6) not one not one soul (0.7) um nine (0.3) nine souls (0.4) *and then* (0.5)  
 then the man feel (0.4) very ah feel afraid (0.6) and ah (0.5) they fly to (0.5) er he fly *to*  
*the sun* and er the (0.4) small cat er soul fly *to the sun* also too (0.5) *that's all* (0.5)  
*thank you*

## Lin 4

in the *for first time* (0.6) um the story tell me (0.3) the story the tell us (0.4) that's where two men *get along well* (0.5) um very well (0.5) the uh uh (1.0) when ah when he *I think* the two men ah when they (0.5) ah when they *read newspaper* (0.3) there (0.8) all (0.8) uh the (0.3) *one man* have a fire stick the (0.8) *another one* need a fire (0.6) n' needs the fire stick the they use er use it and uh (0.6) they share the share the (0.5) fire stick (0.6) they *get along very well* (0.5) but uh (1.5) ah *one day* the (0.5) uh between the (0.3) between their (0.5) *between their house* there (0.6) uh there is uh there is uh a flower a beautiful flower *come out* (0.8) ah when the beautiful flower *come out* (0.3) ah *come out* the beautiful flower (0.5) dance ah *you know* and ah and ah then uh (0.5) uh (0.3) then the two men uh go (0.4) and ah come *come to* the (0.6) *come for* the to the er (1.2) flower and uh smell smell it yeah it *look really good smell* (1.2) uh (0.8) and eh (0.5) and eh one man love (0.4) ah *they both* love it (0.4) and uh (0.3) they *want to* get it er um to uh they *want to* get it on (1.6) um but (0.4) uh flower *only one* (1.0) um it's *only one* (0.6) and there are two men (0.7) fight (0.3) fight ah *because of the flower* (0.8) and ah they fight eh (0.4) fight a *very badly* (0.4) and and (2.8) the um and *one man came came to another man's house* and eh (0.4) beat beat her wife and uh beat his wife and (0.3) his baby (1.0) um and *the other man* (0.3) *also do this* (0.7) and ah they fight *again and again* (0.6) and *at last* er (0.4) the man uh (0.8) the two men er (0.4) both died (0.8) um (1.2) when the er when the when the two men died (0.7) um (1.8) ah they are they are enter *I don't know the name I don't know* the (0.4) stone *the thing's name* (0.5) and *you know* (0.5) the the people are (0.4) who died they must go to *go into* the (0.7) um

(1.5) boil yeah **I don't know** is (0.7) uh yeah the *I don't know the name* so (3.0) um then then the then the and they the uh men wood ah become ah (0.7) become the things (0.5) and there's a flower *divide to* (0.8) and the flower *divide to* (0.6) to and ah the flower become two flower (0.4) uh (1.2) there are two flower (0.3) they *come out* and ah one (0.3) *go to* one person (0.4) one *go to other person you know* ha (0.5) *I remember it all very clearly* (1.0) so *just this* (0.5) *that's all*

#### Lin 5

there there is an old building (0.8) there is an old building (0.9) and ah ah (1.0) there *in the beginning* (0.4) ah *in the elevator* (1.0) elevator (0.5) there is (0.5) two men there is two people *one's a woman* one's (0.6) a man (0.7) *the other* is man (0.6) and um and uh the man (0.8) *lives on the second floor* and the woman *lives on* er um (0.5) third floor (0.5) and when the when the man come (0.5) *come at home* (0.4) and ah (0.7) preparing for the (0.9) for the dinner (0.5) the do some cook (0.5) and the the (0.3) and the (0.5) woman ah the woman *bring at home* (0.5) and ah (1.0) see her see her boat (0.6) boat model the (0.8) today (1.0) um she buy she buy one (1.8) um *I don't know the name* (0.3) ah (0.5) *one for the* (0.6) um (0.3) one bow and tie for the (0.3) um (0.8) boat boat model (0.6) and then um sh she began (0.4) *began open* the towel and ah *want to* uh *want to have a bath* and ah *want to* (0.8) have a (0.4) bath (0.5) the the man *back home* and uh (0.9) make *a moment later* (0.4) *a moment later* his friends (0.3) his friends come (0.4) *come here* and (1.3) want and *have a dinner* (0.8) ah (0.3) then um then (1.0) the friends um came (1.0) *go into the go into his his room* (0.8) um and *begin to begin to* the the the man putting ... and *begin to* have their ah *begin to* their program and ah (0.6) they *want*

*to make* (0.3) ah music program (0.5) but (1.2) um (0.6) but *when they begin* (0.6) *when they began* (0.3) um (0.8) the man found there's (0.5) sad (2.0) um there some there are ah (0.9) there is some (0.5) um water they *drop on* the (1.1) um dishes (2.2) then (0.3) um he know (0.3) um is (0.3) is upstairs upstairs (0.4) maybe there is a (0.4) there is a dust (0.3) but (1.7) the (1.0) *because of* the old (0.4) building and uh (0.3) *a long time* (0.3) maybe some (0.7) uh maybe the tile is not good (1.0) um some some water drop (0.3) drop drop on the (0.4) drop *on his dishes* (0.5) so they they *go upstairs* (1.2) to repair the (1.0) dust and uh (0.6) *and then* (1.0) um (0.5) when he he *came in* when he *go into* the (0.8) men's woman's room (0.5) ah (0.5) the as they *began to repair* (0.6) um (0.7) and uh (0.7) but eh (0.5) downstairs (0.8) um his friends (0.5) they is er his friends had ah (0.4) um begin *begin to* ah *start to* (0.4) *start to have dinner* and ah eat ah eat (0.9) ah fish and eh (1.0) the fish which um *which the man prepared* (1.2) eh (1.1) the (0.4) what the man *want to* ah *want to* repair the (0.5) *want to* repair the (0.3) tile (1.1) then um (0.6) his light (0.4) *on the ceiling* (0.5) drop (1.0) *drop down* (0.6) *go down on* the (0.8) *drop down on the floor* (0.5) then they *can't see nothing* (0.7) they *can see nothing* (0.3) uh (2.1) um the man back (0.4) the man um *go to downstairs* (0.4) and the woman (0.3) um (0.4) and the woman (0.3) go *goes down* (1.2) and then the woman (0.5) found beside her (0.4) beside her (0.5) bath (0.3) there is a (1.2) there is a (0.8) there is a ma.. (0.4) I uh *I don't know this thing's name* (0.5) um (0.8) the thing (1.3) then (0.5) the story (0.9) is over (0.9) *that is the end of the story* (0.5) so *thank you* (0.5) maybe meet you *next time* (0.6) *next time* yeah.

## Lin 6

OK *let's begin* (0.5) um *at first* there is a hill um and there is a man live *on the hill* (0.3) um OK (0.5) at *at first of all* (0.3) that um (0.3) first (0.5) *talk about* the man (0.5) the man's um maybe just ah (0.9) there ah there is a *just one* hair (0.5) *on his head* (0.5) ah (0.3) and ah (0.4) maybe sh (0.3) he is the he is musician (0.9) *you know* (0.4) um she he like *make music I don't know* the (0.5) ah *you know the thing's name* but ah maybe (0.5) *you know* (0.3) he *can play it* and ah (0.5) *one day* um *when he play* the (0.4) ah (0.7) *that thing* the music thing *you know* (0.4) um and ah the (0.6) the (0.6) he heard he heard um there there is ah maybe somebody *knock at the door* (0.6) um then (0.3) they go *go forward* to the (0.5) *go forward* to the (0.3) door and ah (0.3) when when he (0.4) *opened the door* (0.6) he *found that* (0.3) um he found *there is* (0.4) the small cat (0.3) baby cat *you know* baby cat um (0.3) *out of all* sad (1.3) so *you know* he like he like (0.5) maybe (0.3) he feel oh the (0.7) the small cat baby cat (0.5) is very lovely so (0.5) um (0.3) he *want to you know* (0.9) ah make the *make the small cat hap happy* (0.5) but ah but ah (0.3) whatever (0.3) whatever ah he use (0.4) um (0.4) he use any any any ways (0.3) and (0.5) um but he can't he can't make the ah *make the small cat habits* and (0.7) maybe (0.3) he feel he *feel boring* (0.4) so (0.3) um this w this was a small cat ah he threw the small cat (0.4) um out out (0.2) um but (0.4) but after he after (0.3) he threw the threw the *threw the small cat out* (0.6) um (0.4) the small cat is very good again (0.5) ah (1.0) so the cat *go back again* and ah *you know* (0.3) destroy destroy um his bed sheet (0.5) um (1.0) um *and then* (0.4) and then the man *of course* (0.5) um he feel (0.4) angry so (0.4) so ah (0.4) he *want to* hel he *want to* (0.3) *threw it out* (0.8) *threw it away threw the small cat away* (0.4) *and then* (0.4) um he drives he drives (0.3) *with the cat* (0.3) to

*a forest* (0.6) um (0.7) and once (0.5) *once again* (0.5) uh she want he *want to* out the small cat *in the forest* but *at last* (0.5) ah (0.4) he *lost his way* um (0.4) um (0.4) but ah when he *when he go* (0.4) when he *when he go back* (0.3) *when he go back to his home* (0.6) um he found (0.5) ah (0.5) there's ah (0.3) the small cat also *came back* (0.5) so (1.0) um so he so he *want to* (0.6) so (0.7) *maybe I have a little confused* maybe (0.4) *second again* (0.5) he (0.9) he boat he boating on the *on the sea* and ah he boating *on the sea* (0.5) and ah put put *want to* (1.0) use a heavy things (0.5) um to ah *to kill* the small cat but (0.4) he can't *you know* (0.3) *at last* he failed (0.6) um (1.3) then (0.7) um (0.8) ha ha (0.9) *instead of instead of* the baby cat (0.3) um *drop in* the (0.6) *drop into* the water (1.7) um (0.5) he (0.7) he *drop in* the water (0.9) ah the man met fish very funny *you know* (0.5) and (0.3) *and after and after* after ah ho (0.4) he *went back* (0.3) his home (1.0) and he found (0.5) this cat stay at *stay at his home* (0.6) so (0.6) she *want to* use ah (0.5) the (0.8) bomb um maybe maybe is *you know* jus just the things *you know* like ah like ah he's *not very good* (0.8) and so ah so ah (0.7) she *want to* (0.6) he *want to* fly (0.4) fly the fly the fly the baby cat *you know* but (1.0) ah but ah *that time* (0.6) he also failed he also failed (0.6) um (0.4) and the (1.0) the four time *fourth time* (0.4) um he *want to* (0.5) he *want to* send the (1.0) send the baby cat ah (0.3) on a (0.3) high mountain high hill (0.8) ah but ah (0.4) when when he (0.5) when he go on the go on the (1.6) ah go *on the road* when he *go on the road* (0.3) he was go *on the road* (0.5) um (0.8) ah maybe there (0.3) ah (0.4) *like the train* (0.8) ah (0.4) the small the small train is a (0.3) *you know* (2.0) ah hai ah (0.6) ater hater (0.4) small (0.3) nick *you know* (0.5) small nick and ah (0.8) ah small things and ah (0.3) he drop (0.3) he drop (0.6) he *drop off* the (0.8) ah small train there (0.6) ah *drop into* a (0.5) hole (0.5) very deep hole (0.6) ah

(0.3) there are many (0.5) there are many mouses (0.3) and ah (0.7) and ah (0.6) maybe snakes (0.3) yeah and *at last* (0.4) he *want to* (0.5) he *want to you know* put some TNT *you know* like (0.6) ah *want to* (0.5) a bomb like bomb ah *want to* kill the small cat (1.0) ah but ah when he when he fight (0.3) when he fights the (0.3) ah (0.4) when he fights the TNT but (1.0) ah (0.5) him him *made a mistake* (0.5) he fight his hair (0.6) and ah then (0.5) *you know* the bomb (0.7) ah *broke out* (0.3) and ah (0.8) and he (1.5) he died (1.8) he's died (0.7) then the then the soul (0.4) *go out of* (0.4) um his body (0.5) um (0.8) and ha ha he feel happy *you know* (0.3) he's a so (0.3) he don't he don't need *afraid about* anything ever *worry about* anything (0.8) ah (0.5) but when he's but when he *you know* (0.4) when the bomb *broke out* (0.4) *you know* his body (0.3) is ah (0.8) ha (1.5) *go outside* (0.6) go *go out of* his (0.6) um go (0.5) *go out* of um *go up* (1.5) *you know* (0.6) *go up* (0.5) and um when his body *drop down* (0.4) ah ha (0.4) then (0.5) maybe *you know* (0.5) very funny *a little bit* funny (0.6) the his body (0.3) killed (0.3) killed the (0.5) small cat (0.5) ah many people said ah (0.4) *you know* ah cat have ah (1.0) cat have nine lives (0.7) so (0.5) ah when the when the n when the small cat (0.8) died (0.5) um there are maybe nine nat souls (0.4) ah *go out of* his (0.6) um like *go out of* the (0.7) um cat's body (0.6) so (0.8) ha ha the the man oh feel (0.4) he feel (0.4) afraid *you know* afraid of (0.5) ha that very funny *you know* (0.7) ah *other thing* (0.7) maybe during this (0.5) I have many (0.4) vocabulary *you know* (0.6) my vocabulary amount (0.3) is not big (0.5) so (0.3) some something maybe *I can't tell* (0.4) *you know very clear* so (0.3) I just can maybe (0.7) tell you the point but *not very clear* (0.3) ha.

**Liang 1**

and a little boy (0.7) but ah (0.6) neighbour (0.9) um (0.7) two homes two chair and two men (0.6) two men (0.5) sitting the two chair (1.4) um (0.5) *with the newspaper* ah (0.3) and ah (1.6) smoke (1.3) and they (0.3) they don't take a fire (0.5) ah a man may give me fire (0.7) so they (0.5) is *very friendly* (0.5) ah (0.9) sudden (0.5) a flower (0.8) was ah (0.9) out (1.1) *out from* the (2.7) plain (0.9) ah (1.7) plain (1.0) the flower is dancing (0.8) um (0.5) two men are see (0.3) it (0.7) um (0.6) two men two men (0.7) smell that flower (1.0) then was very enjoy very (0.7) happy the dancing (0.5) and everyone want (0.9) ah want this flower (0.7) give *by himself* (1.8) so (0.3) they in fight (1.1) so them fi (0.5) so them fight (1.3) and (1.7) one man (0.8) use the (0.6) fencerboar use group (0.7) hit *another man another man* hit that man (1.1) and (1.8) two men was ah (0.5) broken (1.7) was broken them (0.3) another' (0.5)s house (0.5) and kill his (0.5) kill the (1.3) them children (0.5) kill them (1.7) wife (1.4) ah (0.3) so (1.1) it's very dangerous (0.6) the two men was (0.3) fight *a long time* (0.7) then was dead (0.7) ah (1.0) at ah the (1.0) dead (0.8) that all two (1.0) two men was (3.4) ah another the two flowers was (0.7) *go out* (0.8) sitting in the *on the bed*.

**Liang 2**

Live ah (0.6) two floor (0.9) the woman live three floor (0.5) they take together usual (1.2) they take together one elevator (0.6) *one day* they together *come back* to (0.8) go (0.4) *come back* to home (1.5) um (0.5) the man take some food (0.3) go home (0.8) the (0.4) the woman take a jar (0.8) *go home* (0.6) um (0.9) the man (0.8) ah do his food *in ah home* (0.8) and ah wait this friend (0.7) the woman (0.7) the woman (0.5) use the jar

(0.7) do ah (0.3) beautiful boat (0.9) ah (2.7) ah men (0.4) some many friends three friends three friends come (0.6) *to his home* (1.0) *and then* (1.0) have a (0.3) big house (0.3) they have a *have a party in his room* (0.8) so they (0.9) *play music* (0.7) and they eat (0.7) *eat at table* (0.5) eat some food (1.4) *do a party do a music in his room* (0.6) and the woman (0.8) ah *live on* three floor (0.8) he *come back* (0.6) um (0.5) um do ah his (0.7) do his (1.0) boat (0.6) and ah (0.7) prepare (0.9) to wash (1.5) he (1.5) he spend (1.7) many wash in the (1.2) bath (0.6) bathtub (0.8) in the bathtub (1.6) but (0.3) the three floor is broken (0.7) the water (0.3) *cross the floor* (0.5) *to second floor* (3.1) so (0.7) ah the water (0.8) ah (0.4) throw the (0.3) light (1.8) up the (2.1) up the floor ah (1.0) the the the old man see there (0.5) there water (0.3) is (0.3) three floor wa' (0.5) floor so he up (0.6) *go upstairs* ah (0.7) *to the man's room* the woman's room (0.4) and ah (0.8) prepare and fill (0.6) the (0.4) bathtub (0.8) but when when he fill the bathtub (1.3) the (0.3) he his room's (0.4) his room's (1.0) light (0.3) is broke (1.1) ah his friend is leave (0.6) ah leave his room (4.3) and (1.3) his friend leave a room so he just ah wan (0.3) want himself (0.6) *play music in his room* (0.6) and ah (0.8) the the woman (1.0) do (0.6) wa (0.3) wash (0.3) wash in the bath (0.3) bathtub (0.5) and ah dream again.

### Liang 3

ah *this cartoon's name is* (1.5) the cat (1.4) get *come back* (0.7) ah (0.3) a man in he in in stay his room (0.5) and *make a music* (0.6) ah (1.6) now um (0.8) the (0.3) other (0.5) ah (0.5) have someone (0.9) *at the door* (0.4) and this man (1.3) this man *open the door* see a cat (0.6) it's a funny cat (0.6) he take it *in his home* (1.3) um he take (0.5) this *in his room* (0.7) but this cat is very (1.0) bad (0.8) and (0.3) he use his feet (0.8) and (0.7)

his feet take anything (0.4) and that the problem (0.8) picture (1.2) and ah (1.0) mattress (0.5) and any carpet (0.7) so (1.2) the man *don't like* this cat this cat (0.7) ah useful (0.5) ah (0.3) *in his car* (0.9) *in his car* (0.3) *take the cat* (2.0) *take the cat* (0.6) *go to the forest* (1.9) but the cat always *come back* to (0.4) always *come back to his room* (0.5) um (1.0) ah (0.4) so the man take the (1.2) take the balloon (0.5) but the man *lost the way* (0.9) and when he *come back* to (0.5) room (0.5) his room is very (1.7) dirty (1.0) and (1.2) and and the (0.4) the man (0.4) take jog the dike take (0.9) no no (1.1) um *take the cat* (0.3) go to (1.0) *go to sea* (1.0) he take the he *grab a boat* (0.9) ah *in the sea* (2.2) and (0.5) at (0.4) he lo' he (0.4) ah he's *in the sea* (0.6) the cat will *come back* (0.5) *to his room* (0.6) and ah when he *come back to home* (0.8) ah he get (1.0) always (0.5) *in this room* now he take a (0.6) drive a drive (0.3) a (0.8) *drive a bike* (2.1) *drive a bike take the cat* (0.9) go to ah (0.6) *another place* (0.6) *I forgot it* (0.4) ah (0.8) every *every time* the man *take a cat* (0.3) out (0.5) but the cat is *come back to his room* (0.8) and he's very (1.0) ah he (0.9) he (2.8) he's too bad (1.2) and (1.0) so he (0.3) take a (0.5) many tnt (0.9) *in his room* (0.6) but he *looks as if* (3.2) he he failed (0.4) just one (1.1) rope (1.1) there is (3.7) all tnt is bomb (1.2) and he's dead (0.8) he's dead when he's dead always *in his room* (1.2) and but his (0.6) body (1.0) his body (0.7) fall the (0.8) sky (1.2) *to the room* (0.6) the cat was (0.4) dead too (0.7) the cat (0.3) many (0.3) have many (3.0) ah (2.0) ah (0.5) no (0.4) and this cat always (0.5) follow the man (0.3) the man (0.3) feel too bad (2.0) and *that's all*.

#### Liang 4

This *in this movie* is (0.5) about two guys (0.9) so ah neighbour (0.3) they *live together* (0.7) *sit together* on the (0.4) grass smoke together (0.7) then (0.9) there a magic flower

(1.2) see a magic flower (0.8) ma' the flower can da' (0.8) *go this way* and see that flower and smell (1.2) they will (0.3) the two guys feel is too (2.2) ah when they smell (0.9) he fell (0.7) *rolling around* the (0.5) ground (1.8) so (1.0) so they (1.5) good (0.4) too good (0.6) um so it (0.7) *each other* one handing (1.2) *each other* one handing that flower (0.7) them ah (0.5) them put ah (1.0) put the foot (0.8) between the (1.5) *between the house* (0.4) *on the grass* (0.9) and ah then ah they fight (1.2) they fighting *each other* (0.4) um two guys (0.9) beat wives and (0.7) kills them (1.2) um ther family all dead (0.5) *and finally* (0.8) two (0.6) ah (0.4) the (0.4) we' (0.5) tell me (0.7) *tell me something* (1.5) neighbour should ah friendly should ah friendship (0.9) and ah can't because anythings others (0.3) can't be (1.5) so *other things* (0.3) *I think* you (0.5) *I think* is good for (0.9) neighbour (0.9) has little space (0.5) space (2.2) the no attack.

### Liang 5

Make the old man and a old woman both live in a old building the old man *live in* a (0.8) two floor (0.3) and ah second floor (0.7) the old woman (0.6) *live in* (0.3) third floor (0.7) ah *one day* (0.7) *one day* (0.3) the old man and a woman (0.3) were both in *come back to home* and (0.3) um (0.3) use a (0.3) electricity (0.8) at elevator (1.6) then the (0.3) the old man take *a lot of* food (0.7) because *have a music party in his room* (0.3) his room (1.0) and (0.3) the old woman (0.8) fell ah (0.3) big box (0.6) he can make a (0.3) because (0.4) he (0.7) he he do ah (0.4) Titanic ah (0.8) machine (0.5) and *I don't know how to say* the machine (0.5) um the old (0.5) the old man friend is come (1.1) ah the old man (0.5) make some food and fish (0.3) ah olives and so the (0.8) wine *and so on* (0.7) his ah (0.3) friend are *come on* (0.5) the old woman (1.2) the old woman (0.4) just

ah (0.6) ah (0.7) take *a lot of* water in the (0.7) in ah (0.3) *went to washing* (1.0) wash  
 (1.8) ah the old man's fool friends is coming (0.6) they *make ah music* (0.8) they *make a  
 music* (0.6) *and then* the old woman (0.4) is (0.6) washing (0.5) *in the washroom* and  
 just ah (0.4) close (0.6) ah *close her eyes* (0.3) *make a dream* (0.3) like ah (0.3) the boat  
 (0.3) *on the sea* (0.7) like a dancing (0.4) and ah *listen music* (0.8) very romantic (1.3)  
 but ah it's tha' (1.0) this is a (0.3) old building (0.7) so it's not very not good (0.5) and the  
 (1.2) the (0.3) water flows (0.5) ah *a little a few* water (0.6) *cross the floor* (1.0) it was  
*cross the floor* (0.7) um (0.8) and the and the old wall old floor (0.7) can't (0.6) it's a all *a  
 lot of* water (1.8) cross (1.4) so (1.3) the old (0.4) the old man found this (0.4) he upstairs  
 (0.6) he take a tool (2.4) he take a box (0.8) *go to upstairs* see a old (0.3) see a old woman  
 (0.6) he (0.3) tell (0.3) tell a old woman (0.7) her water (0.8) from (0.4) he (0.3) *from her  
 room* was leak *to his room* (0.8) so (0.3) he *go to the washroom* (0.5) and ah (0.5) and  
 ah (1.0) check ah check ah where have (0.3) have a problem (0.3) when he (0.4) when he  
 check he (0.3) hear (0.4) his light (0.4) is down (1.0) the light is downstairs (2.0) is *go  
 down* (0.9) so he the old man *come back to home* (0.3) um (0.5) the (0.5) music party *is  
 stop* (0.5) his friend is *go out* (1.5) is *go away* (1.0) leave him (0.4) his friend leave him  
 (1.0) so the old woman just ah stay *in the chair* (0.4) and ah *make music by himself*  
 (0.5) the old woman (0.6) washing (0.5) ah *keep washing* (0.8) and the (0.4) make her  
 dream *by herself*.

### Liang 6

Ah I will *tell about* movie (0.5) movie's name is cat *came back* (0.5) cat *come back* (0.4)  
 and (0.3) ah (0.8) here a man live (0.3) in ah (0.5) his room (0.9) a hill *one day* (0.6) he's  
 he *make music by himself in his room* (0.7) but he he feel somebody (0.9) hit (0.4) his ah

her his door (1.0) he's very nervous (0.4) ah he's angry (0.8) when he *open the door* he  
 saw a cat (0.5) sitting (0.3) sitting his door (0.7) doorfront (1.5) this (0.9) ah this cat  
 looks very cute (0.9) he love this cat (0.3) and ah hand the cat inside (0.9) he put the cat  
 ah *on a table* (1.0) he use the some toys (0.5) to let (0.5) let the cat (0.6) happy (0.4) but  
 this cat (0.5) is very (0.5) naughty (2.2) he *put down* the toys (1.1) so the man very angry  
 (1.1) he take a ca (0.4) he take the cat (0.3) ah (0.3) to *drive a car* (0.3) go *to a forest*  
 (0.4) he put (0.4) he put *inside of a fo forest* (0.9) and *want to leave* (0.4) but the cat  
*come back* (0.6) so he (0.4) put he hand ah (0.5) cat again (0.5) *in the forest* (1.0) when  
 he *come back* he saw the cat (0.6) was sit (0.3) *in his car* (0.7) he's very very angry (0.5)  
 he (0.4) take (0.4) he (0.7) take a cat (0.7) *in the forest* again (0.3) and again but the cat  
 always *come back* (0.5) until he lost (0.3) he *lost the way* (0.7) *in the forest* (0.8) he's  
 very nervous (1.8) when he *came back* (0.3) he see (0.5) the cat the cat is *in his room*  
 (1.2) and he (0.4) tear up everything (1.2) the man is very (1.0) angry (0.5) and (0.5) use a  
 (0.4) fish (0.8) put in a bag (0.7) the cat see the fish (0.6) and (0.4) *jump in the bag* (0.4)  
 he *take a bag* (0.6) go to (0.3) *go to sea* (0.3) and ah (1.0) and ah *in a trip* (1.4) in a a  
 (0.3) ship (1.4) go to sea (0.7) he he drive his boat (0.9) *in the sea* (0.3) and ah want *put*  
*down* (0.5) the cat (0.5) *on the sea* (1.5) but he (0.7) he down (0.5) he *fall down* (0.4) *in*  
*a sea in a water* (1.1) the cat is come *back* (0.7) so (0.5) when he *come back* (0.4) he his  
 body is very wet wet (1.6) ah (0.5) he (0.3) again so see he see (1.7) he see the cat again  
*in his room* (1.2) so he want he (0.9) *take again* cat (0.5) ah ri (1.2) *ride a bike* (1.6) and  
 am *on a hill* (1.2) he want to use a (1.3) airport (0.6) airboat (1.0) to let the c the cat  
 leave he (1.2) but he *can't do it* (1.3) the cat always *come back* (0.6) ah last (0.4) he b  
 (0.3) buy some bomb (1.6) he *want to* let (0.3) he *want to* kill the cat (0.3) because that

cat's very very naughty (0.6) he *don't like* (0.4) so (0.5) when he (0.5) use the (0.6) use  
 the fire (0.8) to (0.3) lit a lit the bomb (1.1) to bomb (1.6) but (1.0) the bomb hurt his self  
 (0.5) he attack his self (0.5) he's died (0.3) so (0.7) he's dead (0.3) his soul (1.3) is out  
 (0.3) because shot (0.6) so he's very happy (0.4) because he *don't like* the dead (0.9) he  
 see his body (0.5) *fall down* (0.5) *on the sky* (1.7) his body kill the cat (0.6) but the cat  
 (0.3) have all *a lot of* souls out (0.7) the cat follow (1.0) he his souls (0.8) so he's very  
 angry (0.3) and afraid (0.6) because all the souls follow his ah souls *I think* (1.2) *I think* a  
 cat's souls always to follow 90.7) his souls (0.6) cat always follow he he (0.8) so the cat's  
 (0.3) always *come back*.

### Sally 1

...that flower (1.2) *is very important* (0.5) because (1.6) that flower represent (3.0) ah (1.0) em (5.0) the life (4.4) mm (0.6) it's not (4.4) em (0.3) a (1.5) is (4.7) the things (2.6) aren't (6.5) ah (0.6) other (14.0) important (16.3) how (4.5) love (0.4) your (4.5) said (4.5) *more important* (8.5) important (11.0) I think

### Sally 2

*if you have a problem in one moment* then neighbours are main people that you (0.7) need call (0.5) because is (2.9) the neighbours (1.0) live (0.6) near (0.3) you (1.0) is (2.6) *all the time* (0.3) your (1.0) friends (1.0) and (0.4) all the time (0.4) is your friends and *all the time* you can (0.4) help (0.4) them (2.6) too (1.8) is

### Sally 3

*The name* of the history is (0.5) the cat *came back* (1.0) *is about* a man (0.9) that lived *in a house located in the in the mountains* (0.8) and (1.2) the cat *came back* (0.5) *to his house* (0.9) but the cat is (0.3) very bad awful (0.9) is (1.4) he like ah the cat like to (0.9) break (0.3) her (1.2) *all the things in his house* (0.6) and he can't to (0.8) to (2.3) I' live (1.5) his him (0.4) am (0.8) he *tried to* (0.8) to (1.7) to (0.6) go (0.5) to the cat (0.5) *left out* (3.0) his house (0.7) but (0.4) *all the time* the cat (0.8) followed him (0.5) and (1.7) he is very (0.4) *he don't like* the cat (1.4) *for this reason* because (0.5) he is very bad the cat um (0.5) he continued (0.4) follow (0.6) followed him (0.5) *all the time* (1.4) finish

### Sally 4

... about two men (1.0) they are neighbours (1.1) and (0.4) *one day* (0.6) they were *sitting on the chair* (0.3) but *outside of* (1.3) each houses (1.0) of their houses (2.0) *the*

*same day* they saw (0.5) the (0.9) one flower to *grow up* (0.7) and (1.0) this is (0.5) this is the (0.4) *beginning of* the (0.4) battle (1.9) I (1.5) they (1.6) wanted to (0.8) to get a flower (0.9) but (0.7) this flower is (0.4) *in the middle of* (0.5) the land (0.9) *in the middle* or between (1.1) each houses (1.0) um (0.8) they *begin to* (0.5) they (0.5) *start to* um (1.0) to hit or or punch (0.5) *each other* (0.8) and (0.3) they (1.3) they wanted to (1.2) to have (0.3) the (1.5) the flower (0.9) this flower (0.8) continues *in the middle* (1.1) *the middle of* their houses (0.8) *and then* (1.9) *each family* (0.9) have in (0.3) their houses (0.7) but (0.8) they (2.0) *wanted to* (1.1) to hit (1.2) to their families (0.3) *each other* (0.8) because (0.3) they *wanted to get* a (0.3) a flower (0.3) the flower (0.9) the flower (0.8) was the problem into (1.6) *between the neighbours* (0.5) *in this case* (0.5) um (1.7) *at the end* (1.4) after (0.6) they (0.6) hit (0.6) *each other again and again* (1.3) they died (1.6) and (2.7) they the families planted (0.6) the a (0.7) flower in each (1.0) *in each lands* (3.3) because they *wanted to have* a (0.3) a flower (0.8) this is *the reason of this history* (0.3) *about the neighbours* (0.7) and (1.0) we know that (0.8) we *need to* (0.9) to have (0.3) to (0.9) have a good neighbours (1.8) and *this is the end of the story* (0.9) bye

### Sally 5

*This story is about* a woman that lived in (0.6) an apartment (1.2) *at the beginning* (0.7) she bought a food *in the supermarket* (0.8) then (0.3) she (1.6) *went back* to (0.6) her house because (0.8) she (1.2) *wanted to* (0.7) *take a shower* (1.6) in that (0.4) time (2.0) she drunk (1.5) the water (0.9) then at the (0.3) when (1.1) it was (1.8) it was full (1.8) she took (0.3) *took off* (0.3) the water (1.5) cause she *wanted to* take a (0.6) relax (1.5)

shower (1.2) because maybe she (0.3) she (0.9) was (0.8) very tired (1.7) OK (0.3) then (0.4) while (0.8) she (0.7) was *in her apartment* (1.0) the (1.5) there are people (0.3) *in another apartment* under (0.4) her apartment (1.7) they (0.9) were a party (0.5) *in there* (0.5) but uh (0.3) with the music (0.3) and (0.8) with *a lot of* people (1.1) with (0.3) maybe it was a dinner (0.3) there (0.9) *and then* (0.7) the water (0.7) drops (0.7) to (0.3) the shower (1.0) but she (1.2) didn't *know about* (0.7) that (2.5) after (0.5) took (1.1) her door (0.8) a man (0.6) because they (0.5) he *wanted to fix* (1.0) the drop (1.7) but he *can't do anything* (0.8) because (0.5) ee it was (2.0) it was *too late* (0.3) to fix (0.6) it (1.1) *and then* (0.6) she he (0.4) um (2.8) *go out* (1.7) after (0.8) she mm (2.7) continued (1.2) *taking a shower* (0.8) because eh it no (0.3) it (0.5) *not was a problem for her* (0.4) *it was a problem for* the (1.0) the family (0.4) *that live in the* (0.5) under (0.3) apartment (0.7) for a live (0.8) and (1.0) is *the end of this story* (0.3). *Thank you.*

### Sally 6

*This story is about* a man (0.4) that receive (0.8) a gift that is (0.4) *his own* cat (1.2) his cat (1.8) it was a *beginning of* his problems (1.0) because (0.5) the cat (0.8) *start to* (2.5) to destroyed (0.5) and hurt (0.7) everything *in his house* (0.8) *for example* (0.3) his bed (0.7) his furniture (0.8) his (3.0) his floor (0.7) his curtain (1.0) everything and (0.6) he tried (1.0) the man (0.4) *tried to* (1.0) to (0.8) *leave from* hi (0.4) from the cat but *is impossible because* the cat is stronger (0.6) or is *very bad* from (0.4) with him (0.6) and (0.7) he (0.3) he always try (0.4) to (0.7) *to leave from him* (0.4) but (0.8) but *the end* (1.2) the cat won (0.6) and (1.0) he was (1.2) he died (1.1) because the cat is (0.3) *too bad with him* (0.5) and (0.5) *this is the end of this story* (0.3). *Thank you.*

### Lilia 1

The tape *is about* two mans they are neighbourhood (0.6) they have a good relation (1.0) ah (0.8) until (0.5) to have ah (0.8) a *motive to fight* (0.6) *in this case* is the flower (0.5) um they are (1.4) they (0.6) were (1.0) fight ah for the flower about *what is it* (0.9) who is the owner of the flower (0.3) and they forget (0.6) his families (0.5) ah they families they brothers they sisters and (4.2) ah after they (0.3) died and the message of this tape is (1.0) that ah (0.7) *is important to love to the neighbour* (1.3) *to the other people* (0.7) and forget the fight (2.6) that is.

### Lilia 2

Today we (0.8) show a film ah (0.4) about two neighbour (1.3) they *living in the same building* (0.3) and (1.0) the man old man (0.9) *living in the second floor* and the old woman in the (0.8) third floor (0.5) ah (0.3) they are alone 91.8) but ah (2.2) she (0.5) *likes much* the (1.5) boats big boats (0.4) and he 90.7) when she's ah (0.3) taking a (2.0) a bath (2.4) she's (1.0) she's dreaming with the (0.6) boat she's travelling the boat *in the ocean* (0.9) and (0.4) while the old man *in the second floor* have a (1.2) a friends to practice ah (1.5) a music with ah (1.2) violins and other classic instrument um (2.6) while he while while they are practicing (1.1) ah the woman (1.2) there are a water (1.8) *by the lamp* (1.1) and they (1.3) he (0.3) *has to* (2.1) *go to* the (0.5) third floor to (0.7) *talk with the neighbour* (1.4) um (0.8) she's (1.3) she was (0.4) she repaired the (1.0) ah problem *in the bathroom* (0.5) and he *come back* to (0.9) his house (0.5) but he (1.3) *live alone* (0.8) and she *live alone* (2.8) maybe this is the message of this ah (1.7) ah short (0.7) film (0.9) they are very alone but (1.2) they don't (1.0) they (0.6) don't (3.1) *take the*

*opportunity* to meet (2.2) *each other* (1.2) um (0.8) they *live alone* to others (2.0) that (0.5) that is (0.7) *that's it* (1.0) thanks.

### Lilia 3

This history *is very funny* (0.5) it's about the old man that *he's alone in his house* (0.5) his house suddenly a cat *enter in his life* (0.8) *one night* (0.5) then he heard *another thing knocking the door* (0.7) his house *open the door* and the cat enter his life (0.5) when he say (0.5) that the cat (0.7) *will be a problem* for he (0.6) because the cat (0.5) is very (1.1) very (2.7) young and he broke *many thing* (0.6) he *tried to* (0.4) lose it (0.8) but ah have *many problems* he tried for *many way* (0.7) to lose the cat (0.3) and is (0.9) always (0.3) almost impossible for he (0.4) um (0.8) when (1.2) finally he (2.3) he died (1.2) ah (2.2) because the cat (1.4) because he (0.6) was trying tried (0.8) *to lose* the cat and (0.7) he died in (2.7) ah (2.8) the cat died too (0.3) and both (0.5) go to *to the sky* but (0.6) the really really funny is (0.4) that the (0.3) nine life of the cat (1.3) go *with him* to the (0.3) sky (7.3) *that's it* (0.7) *thank you* (1.4) ah his body physical body.

### Lilia 4

Well this film *is about* (0.6) ah the neighbours (1.6) they (0.9) share many things and (0.6) they like *the same* (0.5) the same things (0.4) and (0.4) um they are (1.2) they share (0.5) when they are *reading an newspaper* (0.5) and suddenly (0.5) one flower really (0.5) beautiful flower (0.6) born (0.6) *in middle of* the (0.3) um (0.8) of the (1.1) houses (0.6) *between the houses* (1.2) and (0.8) they are really *fascinated with* the flower (0.7) um (1.0) they (0.5) *start to* (2.6) *to fight* (0.7) by the who is the (1.9) because they *want to* decide (1.0) *who is the owner* (0.3) *of the flower* (1.5) um (1.2) they (1.0) *begin to* to

fight (0.4) ah (2.1) one (0.5) with *each others* (0.7) and they (1.2) one of (0.3) they put  
 (0.6) first the (0.6) the fence (0.5) *between the house* (0.7) and *the other* (0.6) ah put th  
 other the fence and they (0.3) really (0.3) started violence (1.4) fights ah (1.8) they (2.8)  
*start to* fight really really (0.6) hard (0.7) *by the flower* (0.8) and um until they are (2.2)  
 they are really really (0.6) bad (0.7) they hit (1.2) tpo *each other* and they hit (0.7) their  
 (0.6) wife (0.3) wives and they sons they forget everything that *in the past tense* (0.9) ah  
 (3.1) was the motive to stay (0.5) together and to share (1.7) just by the flower because  
 each (2.7) *each of they* (1.2) *want to be* the owner *of the flower* (0.5) and (0.5) *at the*  
*end* (1.4) both ah die (3.7) and (0.9) born two flowers for each tomb (1.1) and the  
 message (0.6) now *the final message* (0.8) ah is ah (0.6) to love (0.5) to *each other* (0.7)  
 and (0.5) to love your neighbour (1.1) and (2.0) *I think it's important* because sometimes  
 the people forget (1.0) the things what they (0.6) situations that in (1.1) *any moment*  
 (1.7) was the (2.0) the motive *to stay together* um (1.4) the beautiful thing (1.8) is  
 converting in (0.8) *a bad thing* (0.4) is converting in a *motive to fight* (0.7) *between the*  
*men* the (0.4) mens and (1.6) this is *I think* the problem of our (0.8) our world (1.3) ah  
 (0.7) *for example* yesterday what's ah (3.8) um (3.5) um bad day (0.7) and (0.8) the  
 motive was was ah (1.8) *to fight* (0.6) *to fight by the power to fight by* who is the owner  
 (0.9) *I don't know* (0.6) *I think* is ah (1.2) *this is the reason why* (0.7) our world (0.8) is  
 ah (1.2) is isn't (0.8) the best (1.0) place (0.6) to live (0.8) well (0.8) *this is the message*  
 (0.4) the *message of this film* (1.5) ah (0.6) that when you see *by first time* this thing  
 (0.7) oh is really funny but when you (1.5) see again (0.5) you understand *many things*  
 (1.6) and the (1.2) *real message* (2.9) thanks.

## Lilia 5

This film *is about* two neighbours (0.8) they *are living in the same building* but (1.0) they are *living alone each other* (0.4) alone *each ah of them* (0.6) and (1.4) is an old man and a (0.3) old woman (1.0) ah (1.3) she *have a passion* for the boats big boats like ah Titanic (0.8) and (2.9) with the sea (0.8) and ocean (0.3) things (0.9) um (1.8) *one day* (2.1) they arrive *at the same time to the building* (0.8) and (0.8) he's ah (2.5) the neighbour (0.6) his neighbour (0.6) come to (0.4) his house (0.6) and (0.4) he (0.3) was prepared preparing ah (0.8) a some (1.2) ah snack for a friends (1.4) whose ah (2.1) *come to the* (0.4) neighbour's house (1.5) the old man's house (0.9) to play (0.8) the different instruments (1.0) like ah violin and (0.9) anothers (1.7) this night and the same night (0.4) the woman the old woman (1.2) ah is (0.5) when arrive (0.6) to her house (1.3) she (2.3) fixed the (1.7) Titanic dummy (0.5) or (1.6) little boat that (0.3) *similar than* the Titanic real Titanic (0.6) and she *decided to take* a (0.5) shower (1.0) a bath (0.5) and she open the (3.4) the tub (0.3) the shower (1.2) and (1.6) she never (0.3) know (1.0) that (0.3) ah (2.1) she can (1.5) cause disturb *to the neighbour* because (0.5) to the old man because he he's *in the floor* (0.7) above (0.6) she (3.5) and (6.0) and he she (1.5) when she's taking (0.8) her bathroom (0.6) her bath (0.4) she's dreaming with a (2.3) good time (0.4) with the Titanic and big dance (0.7) big room (0.5) with many people and *very romantic* *it's a scene in the Titanic* (0.4) um the old man (2.0) in in her *in his house in this moment in the same moment* (1.0) he (0.6) saw that (0.5) here are (0.9) ah *problem with the water* (0.5) and he *decided to* (0.4) *go to* the (1.0) neighbour's the old (0.4) woman house (0.4) and (0.7) she leave to (0.8) she *leave him to enter* (0.5) *to fix the problem* in the (0.5) washroom (0.7) *when she enter* (0.5) and (0.6) *when he enter* (0.4)

he *looked at* (0.3) she have ah she has a (1.3) boat *like the Titanic* and (1.5) she (0.3) saw (0.3) in his neighbour (0.5) in her neighbour that (0.4) he has (1.0) um button (0.8) with a motive or design (0.5) *about the boats* and (2.0) and (1.3) both (0.5) to share (1.6) both sharing *the same passion about* the (0.8) music and the ocean (0.7) and and they are (0.7) think that *maybe could be* (1.1) combined but (2.5) they *prefer to* continue alone (2.8) and maybe they want they can to *share many things* because they have (0.5) *many things to share* (1.0) but they are (2.1) ah each and (1.8) him (1.0) in their (0.7) poor and forgotten (0.8) *nobody want to be lonely* (1.0) um (0.3) the world is to share (0.5) beautiful things *like the music that are the passion* you can (0.4) to *share with* other (0.4) with *another person* because maybe (0.8) *the other person* need you (1.0) *I don't know* maybe (0.3) is ridiculous but is (0.4) *very common situation in the world of today* (1.0) of today *in the world* (0.3) everybody (0.3) thought their own (1.0) way and (0.3) for (1.5) one (2.0) maybe we forgot (0.4) that the people (0.8) *need to share with us* and we have many (0.7) *many things to share with the other people* (1.2) *to learn* (1.0) *to share* (3.4) *to stay* (0.6) *with other* (0.3) *with another person* (1.2) I don't (0.8) *is a good example of* the (3.0) *reality of this of the reality* (0.7) *I think so* (2.0) is *no good being alone* (0.4) and the old woman alone (0.4) with the same passion but with (0.7) two passion (0.7) then (1.0) could be (0.6) sharing (1.0) *between them*.

### Lilia 6

Ok this this st this story *is about* (0.4) the (2.8) *it is about* then old man that he's *alone in his house* (0.5) is the some instrument musical instrument (0.7) when knock the (1.0) the door *of his house* (1.0) he find a little cat *in the door* (0.6) he is *really pleased* and (0.5) is a little cat (1.6) he brought the cat *into the house* (0.6) and he be he start to in *with the*

*cat* (0.7) with a (0.5) something and (1.3) he destroy the thing (0.6) and he (0.5) put (1.0) a griev with the cat (0.5) and he *don't want to see* (0.8) he *put outside* and ah *close the door* (0.8) but for (0.5) all *in the house* he *can see* the cat (0.3) again (0.8) the house (0.3) he's playing (0.5) destroying everything (0.9) and he is really angry now he *go to the forest* (0.8) *throw away* the cat (0.5) but ah when he arrive again *at house* (0.6) the cat is again *in the house* (1.1) already the cat *back to the house* he (0.6) *try to far away in the ocean* in the in um (0.6) *for many ways* (0.6) *throw away* the cat *of his life* (0.4) but he can't (1.2) his goal (0.5) finally he was (1.4) prepared (0.3) and put some dynamite (0.3) around the cat and (0.5) and (1.2) some fire (0.7) but is (1.0) in his (0.3) hair (1.4) the dynamite ah (0.8) ah caused a (0.5) motion where the man died (0.4) and when he's *really happy* he's hysteric he's *really happy* because (0.5) he's *really happy* (0.8) put (0.5) *far away* the cat but ah (0.7) the cat (2.3) his body (0.7) but the cat ah (0.4) ah (1.2) of the man (0.4) ah (0.4) *come down* to and the cat hap and the cat died too (0.5) and ah nine spirits (0.5) ah go (0.5) follow the spirit *of the man* following the man ah the man never can (0.5) *put far away* the cat (0.8) really funny in (0.7) *in this way* cause in my (0.4) always try *far away* the cat but he *couldn't do it* (0.7) um well this is (0.6) ah (0.6) *that's it* (0.8) *thank you* bye.

**Carlos 1**

Ok (0.8) this is a good video (0.8) ah (0.6) *very interesting* (0.9) because (0.9) explain (1.3) to to people (1.1) in in (1.2) *in the life* (0.7) in (1.0) in (1.0) ah (0.8) it it (1.0) is friends (0.7) but but (1.5) little (0.7) difference (0.5) tell (1.0) um (1.8) position (1.2) in (1.0) in (0.6) of the legs (0.6) um (1.3) li' li' little difference (0.7) but (0.3) but (0.8) ah *the more important* (0.6) is (0.7) the flower (1.0) um um (0.5) in (1.3) *in the the middle* the (0.6) of of (1.9) um the two persons (0.7) um (1.2) um (2.0) OK get (0.3) that (0.9) ah this this (3.5) *Ok that* (0.3) that (0.4) is between (0.5) they (0.4) um (1.8) little little (1.1) differences (1.0) or problems (0.7) but (1.8) um (0.8) um oh (0.3) together (1.1) they (1.0) mm (1.2) init' (0.7) begin (0.6) ah ah (0.9) ah (1.2) mm (8.5) OK (0.8) ah they (0.7) they begin (1.0) mm (0.7) in in (0.3) interments (0.6) these difference (0.3) um (1.0) um the (0.9) um (1.1) with (0.6) with finality (0.7) uh (2.7) when (0.9) and (0.6) and (0.4) some (1.0) somebody (1.2) mm (1.8) all at the flower (0.8) but but (0.7) ah they (0.7) kill ah (0.3) the flower (0.9) yeah fin final (1.0) finally (0.5) ah (0.8) and and (0.5) any anybody (0.7) ah have (0.5) two flowers ah (0.7) the message (0.5) is very important (0.8) because (0.4) ah (1.7) um (0.3) kay (0.3) s' s' everybody (0.5) um (1.4) *have to* (0.5) to love ah (0.8) together (0.7) OK (1.2) *is very important* this message.

**Carlos 2**

This history is um (1.4) ah good history is (0.7) about the (1.0) the (0.5) um *in the starting* the history is (0.4) two persons one man and one woman (0.7) *in the elevator* (0.7) this man (0.6) live in the floor two (0.6) and um this woman (0.3) *live in* the (0.5) floor three (0.5) *and then* um OK (0.9) he (0.7) um (1.6) he wait (1.2) *another persons*

and other (0.6) persons friends (0.3) he (0.5) ah she *prepare to* to (0.3) *take a shower* (0.7) um she is (0.7) um she like ah (0.8) um the Titanic (0.8) cause (0.5) she have the um um um model of (0.6) Titanic (0.6) in the (0.8) dining room (1.0) and little (0.5) model of Titanic in the (1.0) bathroom (1.0) in (0.3) and then she *take a shower* (0.5) and listen (0.5) the music of (1.2) in the f<sup>2</sup> (1.0) floor two (0.5) well (0.3) he ah (0.8) *with another friends* (1.9) cello (0.5) and (1.3) um violin (1.0) um music (0.5) very *same to* music you *know* of the Titanic (0.7) when the Titanic (0.7) the (1.0) the crashing in *in the sea* (1.2) ah she remember (1.2) um the Titanic and the (0.5) music and people dancing (0.8) um (0.3) *and then* in (0.4) in the floor two (0.7) they are (0.8) water (0.7) *I don't know this name in English* (1.2) *little bit* (0.5) of water (0.7) and (0.3) lock (0.5) lock in (1.0) in (1.2) ah over the plate which fix (0.7) *in the floor two* in this (0.5) his his room (0.8) *and then* (0.8) the (0.8) the old man (2.0) *up the floor three* (1.2) with no no (0.4) bad (1.0) he (0.7) he repairing the the (0.5) the (1.7) *I don't know in English* again (0.9) um (2.0) the little (0.5) *bit of* the water (1.0) but (0.3) in your his apartment (0.9) the lamp (0.7) no (1.0) is crash the lamp cause (0.5) many water in he in this (0.8) *and then* (0.8) she (0.7) she ah he (0.8) um (1.3) they (0.4) see (0.4) one (0.3) or (0.8) the (0.5) um (1.2) um (1.2) he (0.7) he *think and think* and she *think and think* (0.9) but (1.1) um after he (1.6) take of of the apartment take the elevator (0.6) ah *come back to* apartment (0.3) um (0.5) *and then* this (0.4) the (0.7) the music people (0.5) the musics (1.0) persons ah (0.8) *let's go* (0.8) think so *I think so* just just (0.8) apartment (1.2) but (0.3) he continue (2.3) wait your music (0.7) and she continue *take a shower* (0.9) is is (1.2) beautiful history I like (0.8) I like *OK*.

### Carlos 3

It have funny history very very funny (0.7) in English the cat *came back* (0.9) *I don't know* the message but is very funny history maybe (0.4) the message (1.1) but is the history *is about* the (0.5) um one man (0.6) that is very (0.6) bad because he (1.1) um *I don't know* is saxon *I don't know* one thing the (0.6) the instrument the musical instrument (0.8) but he is very annoying for (0.5) *the other people* maybe (1.0) um in in (0.3) his door (0.8) this (0.3) little cat very very annoying (1.0) because he is try again again again make (1.0) um (0.5) um lost the cat but the (0.3) lost the cat the cat (0.8) but (0.5) the cat *come back* again (0.9) again *come back* (0.5) until he (0.8) is dead (0.7) the man is dead (0.7) and the (0.6) soul is (0.8) very funny because (0.8) he *think that* (0.9) with his dea (1.2) dhete cat no annoy him anymore (1.0) but he (0.5) cat is dead too (0.4) and (1.0) the (0.8) bad is the the cat have nine souls (0.9) *very bad for him* (1.2) Ok this I like this history (0.5) um very funny the cat (1.0) but *I don't understand* the message but (0.8) very funny history (0.3) OK (0.3) *thank you*.

### Carlos 4

Ok this history is very nice um (0.5) he's he is about the (1.2) history between two people (0.7) two men (1.5) ah (1.0) *the start the history* (0.8) is there there are the friends (0.5) but (0.4) um in (0.3) when the history is *go ahead* (0.5) *go ahead* (1.0) *in a minute* the (0.5) they *have to* (0.3) his house (0.7) but is (0.4) *no problem* is (0.8) everything is *so nice* (0.5) but (0.8) is (0.8) the born the (0.7) one rose (0.6) *in the middle* the (0.4) the yard (0.8) and (0.9) *each one* (1.8) want a rose for for him (0.4) but (1.0) um this is starting the problems between mens (0.3) and start the fighting and (0.3) um (0.3) *so*

*many problems between them* (1.5) because (1.2) um the two men (0.7) want the rose for him (1.8) because he it is beautiful and (0.5) the rose have nice smell (0.5) *I don't know* (1.1) *something more else* (0.7) but the problems is (0.6) the (1.0) the friendly (0.7) is finished between the men and between the family because (0.6) the families is (0.6) affected (2.0) because (0.7) because impatient (0.8) um (1.0) *in the middle* fighting this rose is (0.3) died (0.8) um (1.5) and (0.7) the fighting continue continue continue (1.0) and (0.5) *the end of history* (0.8) everybody's (0.7) died (1.0) but (0.5) um (0.5) *each man* has the rose in your in your (0.9) funeral you (1.2) in (0.3) in the cemetery maybe (0.6) Ok the the *I think* the the history is (0.8) is nice be (0.3) because (0.5) *each person* in in the (0.3) in his life (1.0) ah (2.0) ah is good that (0.5) *love of for another people* (0.7) friend (0.9) is is good is good (0.7) OK *thank you*.

### Carlos 5

Ah (0.5) this video is (0.6) about maybe the love history no (1.8) is the the starting video is ah (0.5) two peoples *in the elevators* (0.6) *on the elevator* (1.0) um (1.0) one is lady and the other (1.2) is a man (0.7) and the man *live in the* (0.6) second floor and the lady *live in the* third (0.5) floor (1.0) um he's (0.9) coming (0.5) *on the building* together but (0.8) um man is go to (0.3) his apartment (1.0) um (1.5) he have a bag (0.5) with (0.3) food for (0.8) because he *have an appointment with* (1.0) his friends (1.0) the friends is (0.9) ah his friends taking a (1.9) ah a instruments musical instruments (0.7) ah he he he *playing the* (0.3) violin violin (1.1) violin (1.2) um (1.7) um while (1.1) she (0.5) is (0.3) love ah (0.6) she love the Titanic history (1.0) um (0.4) she have ten big boat (0.3) like (0.3) Titanic (1.0) in his (1.5) in dining room (0.9) ah (0.8) to play that (0.7) she complete

the (0.5) the (2.0) boat (1.0) **and then** she went (0.5) to take (1.1) a shower **in the bath** (0.9) no (1.5) but (0.3) um (1.0) while the (0.7) man and his friends (0.5) **playing music** (1.0) like (0.9) Titanic music like romantic music um (0.6) but the place the water (0.3) the water (1.7) coming to (0.8) the bath (1.6) um (1.0) is down (1.1) is **down to the** (1.3) the diningroom (0.5) his man's dining room (1.1) **and when** (0.3) when (1.0) he see it (1.4) um see that (0.6) the (0.8) water (0.7) is go to (1.0) the (0.3) third floor (0.9) when the (1.0) she live (0.6) and (0.7) he he take (1.2) repair to **to the bath** (2.1) um (0.6) she she (2.5) **look her look him** (0.6) he **look her** (0.9) um (1.0) maybe (0.4) **think about the other I don't know** (1.0) um (0.5) and (0.6) is the (1.3) ah nice history no (0.8) maybe (0.5) she **want to say** (0.8) something to him but (1.3) she (0.8) **say nothing** and (0.3) he (0.8) he **the same** (0.6) and the finish is he (0.6) **play the violin** (0.3) um she (0.6) **take a shower** (1.0) on (0.9) his bath (0.8) her bath.

### Carlos 6

Ah the best funny history about the (1.6) um about the ah (0.5) **I know** the histories (0.3) that I saw (1.4) um is the man at um (0.5) big trump a big trump big saxon (0.5) ah but maybe the neighbours is **very boring for** (0.8) his neighbours (0.9) and somebody (0.6) leave (0.3) a little cat (0.6) in his door (1.6) um (0.8) ah he he (1.1) he come the cat (0.8) **inside the the house** (0.8) but maybe no maybe no (0.5) because is very very annoying (0.7) very boring very annoying and (0.5) he plays (0.6) many **many times** that (0.3) leave the the cat (0.6) in the globe **in the jungle in the box** in (0.5) **in the sea** (0.3) but (0.7) never he can out the the cat (1.2) because he because is **come back** no (0.7) and (0.5) he try he try he try he try (0.5) many many times but (0.7) he can't **come back** (0.3) the

teacher (0.7) that (0.9) the (0.7) comic (0.8) and (1.0) the the last try for him **is that** (0.6)  
 he put many many (0.7) bombs (1.1) and (1.0) but he (0.6) he he fire (1.0) the um (0.3)  
 bombs ah (0.3) but he (0.4) he bomb (1.0) to ah (1.0) **he's died** (0.6) and separate the soul  
 (0.4) his soul (1.0) and he is very funny because (0.4) he he think that (0.7) now is  
 separate no the (0.4) annoying cat (0.7) but (0.9) the body the body is (0.7) n is (0.8) the  
 body is **on and on** (0.3) the cat and (0.5) the cat **is died** (1.0) I forget (0.5) the the body is  
 (0.3) mm (0.3) inside (0.4) yeah the body is (0.5) on the cat (0.7) and the cat **is died** (2.0)  
 is the (0.5) now is no is **only one** boring cat (1.0) is the (0.7) nine (1.0) cat souls (1.0) um  
**(0.4) annoying cat (0.5) and he's crazy in this moment** (0.6) OK (1.0) **that's it.**

## Miguel 1

Hi David *it's Miguel* the film is (0.4) very old (0.6) um they shown (0.3) show us the (1.5) there are two people there (0.3) *are suppose* the people is friend (0.4) uh they are (0.5) outside the houses (0.6) *reading the newspaper* (0.3) and *smoking a pipe I think* (1.0) um (0.6) then (0.6) uh suddenly (0.4) ap *grows up* (0.3) *from the garden* a (0.4) flower (0.7) and *after that* they (0.3) both (0.5) get amazing (0.7) for (1.0) that ah (0.3) flower and approach the flower *and then* ah (1.1) one first smell the flower and (1.5) ah *the second* smell it and (1.4) *after that* both are *begin to* (0.6) to make ah crazy things right (1.0) *after that* both (0.5) ah (1.0) the (0.5) um (0.8) *looks like* ah are *in love with* the flower (0.4) um (0.6) they *begin to* fight (2.0) for the flower and both (1.2) *start to* (0.7) do things that are (0.6) ah offensive *each other* right (0.5) then they *begin to* fight (0.6) ah (0.5) big fight and destroy *each other* (0.7) *after that* they (0.6) go to the own houses and (0.9) kick the (0.4) the babies and (0.4) hit the (0.8) the bo the wife both (1.0) and (0.8) both finish the fighting and continue fighting but they don't when (0.4) both are fighting (1.4) they *don't know that* both are (0.5) hitting with his foot the flower and destroy all the flower (0.7) and *after that* both (0.9) *fall down* to the ah garden and they dead (1.1) *after that* uh (1.2) with the fences that (0.5) both built (0.7) to separate the ah (0.3) the limits of the houses (0.5) ah (1.0) they con construct they build a s (0.4) ah lie a (0.5) cemetery (0.6) *after that* (0.8) both get one flower (1.7) like ah (0.8) they produce the their died right (0.9) *and finally* (0.4) the massage of the mo of the film (0.4) say that *love your neighbour* (0.3) but (1.1) it *depend of* the neighbour right (0.4) because you can (0.3) be nice with a nice neighbour but (0.8) if you don't have a nice neighbour you can't be nice (0.7) *that depend* (1.8) bye David.

## Miguel 2

Ok David is (1.7) two person that live in ah *the same building* (1.5) it *looks like* they hate *each other* (0.5) but (0.8) its (1.6) *in fact* normal fact between the people (0.7) who are neighbour that never talk (1.1) *between them* but they *want to* to do it (1.6) we can see *these kind* of attitude (1.1) when (0.6) we *get in* elevator (0.8) and nobody talks (0.9) to (0.3) anybody (0.5) and this is ah very normal ah the people do that (1.2) but they (0.4) always (0.5) have (0.6) or they are always are looking (1.0) for small things (0.3) and objects to (0.9) *to talk with the other person* (1.5) ah is like they (0.7) are looking (1.7) ah (1.8) excuse to *to talk with each other* (0.6) but they never do (1.2) *it's like* in the film (0.4) when (1.7) they (1.6) ah the water is falling to the table (1.0) of the another *the other person* um (1.2) they go up (0.3) *to fix it* (1.2) but they he doesn't (1.1) say any (0.3) any word (1.2) um (1.7) *the other person* (0.5) is always (0.5) looking (0.6) *what happen* with *the other* with the (0.5) *the other person* (0.5) he's looking (1.0) in the window (1.0) looking always *coming to* the other house (1.0) and (0.7) also they she build ah (1.2) *a kind of* ship (0.5) is *like a* music box (2.1) in (1.1) when they they receive all the music that *the other person* (0.3) is playing (0.8) and (0.5) she enjoy (0.4) when *the other person* is *playing the music* (1.1) but (2.0) they both *both of them* (1.1) never (1.2) say that they feel about *each other*.

## Miguel 3

Hi David *my name is* Miguel um (0.7) this story was very fun (0.5) was a (0.7) man who was practicing (0.5) music (0.3) and suddenly (1.3) the (0.8) somebody was *knocking in the door* (0.3) he *don't want to* (0.3) *to open it* (0.7) but (0.4) then (0.3) finally (0.5) he

*opened the door* he find a little (0.7) cat (1.3) ah he feel (0.4) bad because the cat was  
 (0.3) the cat was (1.0) lonely (0.3) outside (0.5) he take the cat (0.5) *into the house* (1.1)  
 and *start to* (0.3) *to play with* the cat (0.6) *but then* (1.0) he *throw away* the cat (0.7)  
*outside of the house* (0.8) and the cat (1.8) he (0.8) coming alone (0.5) and *begin to* (1.0)  
*start to* destroy the (0.4) furnitures (0.4) *the all stuff* in the house (0.9) so the the man  
 take the the cat (0.8) um (0.4) *go out with the cat in the car* (0.4) uh (0.6) *try to lose*  
 them in the um (0.4) *in a forest* (1.0) but the cat uh (1.2) be is *start to* (0.3) *to came back*  
 (0.6) and the man *take the car* the cat again (1.2) and put ah (1.1) more *deep in the forest*  
 (1.0) but *the end* the man was lost (1.1) then when the man *came back to* the (0.5) to  
 (1.5) his house (0.3) the cat was *inside the house* (0.5) was destroying (1.0) *all the stuff*  
*in the house* again (0.6) then (0.6) he *take the cat again* um (1.5) take the cat *into a bag*  
 (0.4) ah *take a boat* in (0.6) the ocean (1.2) but (0.7) the (0.5) the man (0.5) *deep in* the  
 (0.3) to *the bottom of the ocean* (0.3) and the cat was *in the house* the man *go back* and  
 the the cat *was in the house* again (0.6) then he take the cat (1.4) *once more* (0.6) and  
 (1.4) take the cat *into a balloon* (0.5) but (1.9) the balloon (1.5) ah exploded (0.5) and  
 the man was *taking the rope* and (0.7) he f (0.7) he *go down* (0.5) and *near to* the house  
 (1.2) then (0.6) the man *go back to the house* (0.6) and the cat was *in the house*  
 destroying (1.0) *the last that was* in (0.5) *into the house* (0.4) then (0.5) the man (1.2)  
*take the the cat again* (0.3) and (0.4) *take a railroad* (2.3) and (0.3) *went to* the (0.3) to  
 th mountain to the (0.3) *top of the mountain* (1.2) but (1.1) the cat was safe and he *fell*  
*down into* a hole (1.0) *down the ground* (1.0) with the rats (0.5) some (0.4) snakes (0.3)  
 um all (0.3) animals that are *down the drain* (1.1) then the man *go back to the house*  
 (0.4) and (0.5) also (0.8) there was very angry because the cat (0.6) was killing him (1.0)

so they *decide to* (0.5) to take some (0.6) dynamite um (0.4) explode the cat (0.6) *into the house* (1.2) so (1.0) he tried to (0.8) to explode the cat but (0.4) *the end* (0.3) he explode to the house (0.7) and the cat was live he dead (1.2) um (1.0) they was laughing because he was dead and the cat (0.4) *don't want to* uh (0.3) the cat um (0.9) couldn't (1.0) funnel him again (1.1) but when the the body of the (0.8) of the man (0.4) *fall down* (2.3) kill the cat (0.4) and (0.8) the cat (0.8) ah *let out* (0.3) the nine souls (0.3) that (0.4) *the people said* the cat-have nine live (1.6) and the souls of the man was (0.4) afraid again and (0.5) he *go out* (0.5) but the nine souls the cat was foll (0.3) folling him (0.3) *that's all* (0.8) thanks Dave.

#### Miguel 4

Hi David its Miguel ah (0.8) *the story is about* (0.5) two neighbours (0.3) *are supposed to* share everything and *both to be friends* (1.4) and they are sharing (0.5) *reading the newspaper outside of the house* (0.5) *after that* (0.4) suddenly they (1.3) both watch a flower (0.4) to grows (0.7) up (0.3) *in the garden* they *start to* smell it (1.2) and *after that* (1.2) they (1.2) smell and (0.3) it *looks like* the flower was (1.7) give them *like a poison or something* (0.6) *after then* (1.0) both (0.6) *start to* (1.0) to do crazy things (1.1) and *after that* (0.8) both *start to decide* (1.7) uh (0.5) each (0.8) the the flower (0.8) was (1.0) so they *start to fight* (0.5) for (0.4) ah discuss (0.8) *to get* the flower (1.0) and (0.4) *start to find* then (0.4) ah they put a fence (0.5) *to separate* the two (0.5) garden (1.2) and see *in which garden* was the flower (0.6) so (1.0) they *start to move* the fences (1.0) *after that* they *start to fight* (1.0) both (0.8) punch *each other* (0.5) um (2.0) *start to fight for a long time* (1.2) then *after that* they destroy (0.4) the fence (0.3) destroy the

flower too (1.0) so (1.4) after they (0.5) *one of them* go to the (0.3) house *of the other* (0.6) destroy the house (0.6) then (1.1) they punch the (0.6) the wife *of the other person* (0.8) and (0.6) kill the wife and the baby (0.3) so *the other* (1.0) watching that (0.6) they *did the same* (1.0) and (1.6) they *start to fight again* (1.0) until (1.0) *both of them* (0.3) they kill *each other* (0.8) so after they kill (1.8) the (0.6) um they (0.4) ah *I don't know how to say* (1.0) uh the place where are the (0.7) kill people (0.7) but (1.6) the in (0.5) *each side of the garden* (0.6) both stay there (0.3) kill (0.4) killed (0.6) or dead (1.1) and (0.5) one *at the end one of them* (0.6) gets a flower (0.8) in (1.7) *in his place* (1.1) so the (0.9) *the meaning of* the (1.5) of the video is (0.9) um *even though* (0.3) what happen or what do you want (0.3) *you have to think first* (2.0) no thinking yourself (0.3) thinking are *all the people* uh (0.6) and also *with your neighbour*.

### Miguel 5

Hi David (0.5) *this is Miguel* the video *is about* two person (0.6) neighbour (0.4) ah *living in the same building* (1.1) so (0.3) they *looks like* they hate *each other* (0.5) so (0.5) they *keep going* (0.5) *they find* they've (0.5) they *meet together* (0.8) *arriving to* the building (0.5) um *after that* they continue (0.9) like (1.4) long (1.0) *to each house* (0.6) so (0.8) *after that* (1.1) ah (0.8) they *continue with* (0.3) is normal (1.0) things to do in (0.6) her houses (0.4) so the man (0.6) *is preparing some fish* (1.5) because he's *waiting some* friends to (0.3) to practice melody (0.5) and the music (0.9) and the lady is (1.0) preparing a hot bath (1.2) so he first (1.0) he she finish to (1.3) to build a (0.5) a model a small *model of the Titanic* (1.3) that (0.3) *looks like* the (0.6) it catch the (0.4) sounds (0.7) um (2.5) through the cordless (0.7) they play *in a small box* (1.6) the

woman *introduce to the* (1.2) bath *to listen to* the classical music (0.8) so (1.0) when the she's the wo the lady is waiting (0.4) until the (0.9) the friends of the *of her neighbour* arrives (0.9) and *start to play the music* (1.2) and *at the moment* (1.3) she *introduce to take a shower* (1.0) so (1.2) suddenly (0.5) meanwhile the the (0.8) the men (1.0) he's *playing with* (2.0) he's *playing with* his friends (0.4) the (0.6) music (0.9) he is um (2.0) she's *taking a bath* (0.6) so (1.2) the uh a little (2.0) a little (2.1) ah water (0.5) *start to* (0.5) *fell out* (1.2) to the men and his friend (1.2) so (0.6) he *is watching* the (1.2) the split of water (1.5) and (0.4) he *looks angry* ah (0.3) he (0.4) stop (0.6) *to play the music* (1.3) take a *box of tools* (0.8) and *go up to* (0.4) *to knock on* (0.3) the door (0.5) of her his neighbour (0.8) so he *start to knocking the door* (0.3) very anxious (1.0) and the lady's (0.7) like (0.6) she is not waiting s noth anybody (0.9) so she *open the door* (0.3) and *looks him* (0.5) and (0.6) he is very (2.0) he feels very strange because (0.7) what are (1.0) she think ah *what are he doing* (0.7) *in his house* (1.0) so (1.5) she *open the door* (0.5) he *comes in* (1.0) he stops (0.6) looking the (1.2) the small (1.8) small um (1.7) *model of the Titanic* (0.8) and *continue to the bath* because (0.6) he know *what happen* (1.1) so he (0.5) *try to fix* the (0.5) the pipe (0.6) *in the same moment* (0.5) he *start to listen* (1.2) the music of (1.4) his friends (0.7) so (0.4) he *decide to stop* the (0.3) split but is *too late* the (1.0) the lamp (0.8) on his house (0.4) *fell down* (0.6) the (1.1) their friends eat (1.0) and drink *all the food* (0.8) and the wine (1.0) and (0.5) take their stuff and they *get out of the house* (0.5) he repair the the pipe of the *of his neighbour* (1.2) s um (1.0) *go down* to his house (1.1) when (1.5) the person leave the house *of his neighbour* (1.8) (cough) the (0.3) um the woman (0.5) *go to the bath to continue* (0.5) *taking the bath* so (0.5) he felt something in (0.5) her feet (0.8) so he saw a little (0.7) *I don't know* what

stuff to *put in the shirt* (0.3) the sleeves *of shirt* (0.8) so they taken (1.0) ah *put away* (1.2) he still *taking a bath* and (1.0) the neighbour *start to play the violin* again (0.7) and (0.8) all (0.4) *looks like* (1.8) they ah the (0.4) the man (1.1) leave *the small thing for shirt* (1.0) in the *in her house* (0.7) like a excuse to she (0.8) take it and (0.5) *go down* to (0.5) take her to *give it* (0.9) back him (1.3) but nothing happened (0.4) she stay *in her house* and the man (0.5) *stay in her house playing the music* (0.7) so all (1.1) *still the same* (0.5) bye David *see you*.

### Miguel 6

Hi David *it's Miguel* (0.6) so this video *is about* (0.5) ah (1.4) a man who is in (0.8) his house (0.4) playing (0.5) an air instrument so (0.7) suddenly (0.3) ah (0.8) somebody *knocks the door* and (0.3) left s a (0.3) little cat in his door (0.5) so (1.2) he *listen the door* and *stopped to play* (0.7) and *go to the door* to (1.1) *to check what's happening* (0.5) so he finds the little cat (1.0) then he *picked up introduce the cat to the into the his house* (0.9) and (0.8) he *looks like* he like s the cat and (1.0) *start to play with* the cat (0.4) maybe (0.8) *I think that* he thought the (0.6) the ha (0.3) the cat was a (0.3) little baby so (0.9) he *start to play with* the cat and (0.5) the cat destroy yhr (0.7) the toy (0.9) and the man gets angry and take the cat and (1.3) take the cat (0.3) *out of the of his house* (0.6) so (0.5) hm the cat (1.7) introduce again (0.3) *l by itself* (0.7) *into the house* (0.5) so the man's (0.7) *take the car take the cat* and (1.4) drive (0.8) to *leave the cat away* (1.3) *from his house* (1.1) when he return to (0.7) his house he find the cat (0.5) *in the house* and (1.3) was destroying all the furnitures curtains and (0.5) *all stuff in the house* (0.4) so (0.5) he (0.3) *take the cat again* (1.4) and (1.5) try to (cough) to lose (0.4)

the cat into ah (1.2) a forest (1.8) he left the cat and *start running* (0.4) and when he (0.6) he *came back* to do he house (0.5) his house (0.9) the cat was (0.6) in his house again (0.9) and destroy *another stuff* (0.7) so (0.7) he *take the cat again* (0.7) he (1.0) *introduce him into* a bag (0.8) and *try to* (1.3) to throw it (0.4) *into the ocean* (0.7) but the cat (1.3) get safe and (0.7) the man (0.6) *go to the bottom of the ocean* (0.4) and when (1.0) the man *get back to the house* (0.5) the cat was (0.3) *in the house again* (0.4) so the man was exasperated so (cough) *take the cat again* (1.2) and (0.6) try to (1.5) to *put the cat into* a balloon (0.3) so when he was cutting (0.8) the (0.3) the rope (0.4) he cut the (0.3) the wrong rope and (0.3) the cat *stayed on the* (0.3) earth and (0.6) he *go away* with the balloon (1.1) and (0.7) when he *get back* to his house (0.3) the cat *was already there* (0.6) so (0.9) finally he (0.4) *take the cat* (1.0) ah again ah (0.6) try ah (0.8) *try to go* (0.3) very very far into (1.0) following the railroads (0.5) um (0.4) go *in the top of the mountain* (1.6) but (0.7) ah with the (1.0) small bug *on the railroad* (0.3) he *fall down* (1.0) um the cat *kept safe* and (0.6) the man (0.3) *get into a* into the drain (1.0) and when he (1.1) he start a match (0.4) so he was (1.6) *into the drain* with many many rat (0.4) so the rats attack him (1.5) *but finally* when (0.8) he *came back* (0.5) to his house the cat *was already there* (1.0) *so finally* (0.3) the man was (1.2) very very (0.9) *in bad humour* about the cat (0.8) so he find (0.6) a dynamite (0.9) or explosive (0.9) and (0.4) get all the explosive *into his house* (0.7) and um (1.5) *try to start* the (0.7) the fire for the (0.8) for the explosive (0.7) but (0.3) he *get confused* and (0.7) he *start fire* on (0.3) the only hair that the man (0.3) has (0.7) so (0.5) the star um (0.3) the man (0.3) *try to run away* (0.5) but (0.9) he stay (0.4) he *fall down on the floor* (0.8) between all the explosive and start the explosive (0.3) so (0.6) all explode (0.8) the man died (0.5) when

the man died ah (0.3) the body (0.7) gets *separate from* (0.6) his soul (1.2) and (0.9) he  
*go to the earth* to laugh (0.6) laughing (0.8) *with the cat* (0.3) um (1.0) *star to celebrate*  
but (0.3) when (0.3) his body (1.5) get *fell into* the earth (0.7) ah (0.6) kill the cat (0.7) o  
(0.3) the (0.3) the souls of the cat (0.6) separated the body (0.8) so (0.6) they the cat (0.9)  
has (0.8) nine souls (*cough*) *when the man saw (0.4) that souls (1.3) he gets crazy and*  
*starts* to run away (0.4) and all the nine souls of the cat (0.6) was following him (1.4) ah  
*into the sky* (1.1) well (0.3) bye Dave.