SENTENTIAL SUBORDINATION IN NORMAL AND SPECIFIC

LANGUAGE IMPAIRED ADOLESCENTS: A

COMPARISON OF CONTRIVED AND

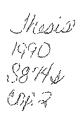SPONTANEOUS ELICITATION

By

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INTRODUCTION

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Standardized tests are widely used by speech-language pathologists to quickly determine a child's language skills. Tests developed for school-age children typically have several subtests, each with a different task format requiring the child to perform a particular word or sentence level manipulation. The child might be asked (a) to repeat sentences that are presented orally by the examiner; (b) to combine two or more sentences to produce one, more complex sentence; or (c) to make decisions of grammaticality, among other tasks. Few of the widely used school age language tests require discourse level text production.

Theoretical frameworks of these tests are predominantly based on process or domain oriented models. Thus, the Detroit Tests of Learning Aptitude-II (DTLA-II) (Hammill, 1985) examines the linguistic, cognitive, attentional and motoric domains, each with two dichotomous composites. The linguistic domain, for example, consists of the verbal and the nonverbal composites. The Test of Language Development-2 (TOLD-2) (Hammill & Newcomer, 1988) is based on a linguistic components and systems model. Linguistic components

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include syntax and semantics while the linguistic systems are listening and speaking. Each subtest attempts to explore one component and one system of language, allowing the examiner to identify strengths and weaknesses in a subject's language skills. In addition to the component/system dimensions of the TOLD, the Test of Adolescent Language (TOAL) (Hammill, Brown, Larsen & Wiederholt, 1980) includes the channel dimensions of writing and speaking. The Clinical Evaluation of Language Fundamentals-Revised (CELF-R) (Semel, Wiig & Secord, 1987) purports to evaluate the language components of form (syntax) and content (semantics) that are required as a basis for mature language.

For many years, the use and interpretation of these test measures have been a matter of some debate (McCauley & Swisher 1984; Muma, 1973; Leonard, Prutting, Perozzi & Berkley, 1978; Stephens & Montgomery, 1985). Most standardized tests provide the clinician with a quantitative summary of results, and a limited amount of qualitative information. This makes the progression from test to treatment problematic as the clinician is left with little information directly applicable to intervention (Fujiki & Willbrand, 1982; Leonard et al., 1978). Unfortunately, individual standardized test items may be the only source of information available to the clinician with limited time resources. Seeking particular target grammatical structures for therapy purposes, the clinician may analyze test items that were difficult for the child, assume that these items contain structures the child cannot comprehend or produce, and target these structures during therapy. According to

McCauley and Swisher (1984), "the use of this kind of analysis may lead the clinician to miss important deficits while focusing therapy objectives on less important or even falsely identified deficits" (p. 343).

One specific issue in the interpretation debate regarding standardized tests centers on the linguistic requirements of various task formats and how such requirements differ from spontaneous language processing (Leonard et al., 1978; McCauley & Swisher, 1984; Muma, 1973). Some of the most frequently used task formats include elicited imitation, judgements of grammaticality, sentence combining and scrambled sentences. These formats are decontextualized and contrived, in comparison to spontaneous language production. They require the subject to comprehend and manipulate a range of syntactic and semantic relationships including word choice, morphological rules and complex subordination. In order to carry out these tasks, the subject must be able to manipulate structures with a degree of conscious awareness presumably not required in more spontaneous language. Thus, the metalinguistic requirements of these task formats are thought to be considerable. The two task formats of interest in this study are elicited imitation and sentence combining.

The Linguistic Requirements of Task
Formats and Available Research

Requirements of elicited imitation. During elicited imitation tasks, the child is usually asked to listen carefully to the

examiner's presentation of a sentence, and then repeat that
sentence. The theory behind this testing method is that "the
child's repetitions will be indicative of his/her productive
language abilities, provided that the sentence to be repeated
exceeds immediate memory span (Fujiki & Brinton, 1987, p. 301).
In order for the child to repeat the sentence, he/she must first
process it, and then reproduce it. The repetition will reflect the
child's present level of syntactic ability. The child is
required to store the sentence in his/her working memory, comprehend
or extract meaning from a sentence that is most often presented out
of context, then produce the sentence using his/her own linguistic
system.

Requirements of sentence combining. Sentence combining tasks
are presented either orally or in written form. On the TOLD-2
(oral) and the TOAL (written) the child is presented with between
two and six sentences and is asked to combine all of the ideas of
the shorter sentences into one longer sentence. The oral task
requires the child to store all of the sentences in his/her working
memory, comprehend or extract meaning, and perform the important
grammatical transforms necessary for presenting meaning in a
different form. The written task would be similar but presumably
the working memory demands would decrease given the permanence of
the medium (writing).

Research comparing contrived task formats with spontaneous
samples. The extent to which these and other highly metalinguistic

task formats reveal a child's language ability has been explored in
several recent studies. Comparisons have been made between
children's spontaneous verbal productions and the results of norm
and criterion referenced testing measures. Generally, results
indicate that the ability of task formats such as elicited
imitation, sentence combining, and grammatical judgement to predict
spontaneous language productions is both subject specific and, in
some cases, structure specific.

Fujiki and Willbrand (1982) compared the criterion-referenced
language evaluation methods of spontaneous language sampling with
elicited imitation, sentence completion and grammatical judgment
formats in 30 language disordered children age 4 to 5, and 6 to 7
years. Five syntactic structures including verbal auxiliaries is
and are, prepositions, regular past tense ed, and articles were
evaluated using each procedure. Comparisons of evaluation methods
revealed significant correlations between sentence completion,
elicited imitation, and spontaneous language sampling, but no
significant correlations with grammatical judgment. In addition,
structure specific differences (comparing performance on each
elicitation task for each subject) were highly variable, with the
auxiliaries is and are reaching the highest significant correlation.
Correlations were not significant with prepositions and articles and
past tense structures only reached significance for the older of the
two subject groups. Lahey, Launer and Schiff-Myers (1983) examined
the predictive value of elicited imitation tasks to reveal language
disordered children's (mean age 7;4) production of a group of

semantic and syntactic language behaviors. Results indicated that correlations within and across subjects varied, depending on the specific language structure being considered.

Fujiki and Brinton (1987) reported that significant correlations did not appear to be primarily influenced by structure type in a study with 13 language disordered children between 5;6 and 6;6 years. Subject-specific results revealed significant correlations (percentages correct) between results of elicited imitation tasks and spontaneous samples for some children and not for others (6 out of 13 were significant). The authors discuss these subject specific results in terms of the heterogeneity of the language disordered population. For example, a child with auditory perceptual problems would most likely have more difficulty with elicited imitation tasks, and the child who is studying auxiliary "are" in therapy might produce that form better in elicited imitation tasks. Commenting on the accumulating research on elicited imitation-spontaneous speech relations, Fujiki and Brinton (1987) conclude that variables which produce significant correlation have yet to be identified.

Age-Appropriate Items

Adolescent language characteristics. Although much information is available concerning the efficacy of these task formats with preschool and early school age children, research is limited with older school-age children and adolescents. In fact, the use of task formats for probing language skills in older school-age children may

prove even more problematic than with preschool and early school age children. The issue of the similarities and differences in language processing requirements continues, but in addition, a different set of grammatical structures must be probed since language growth continues well into the school years. Language deficits of adolescents may be indicated not through a blatant absence of structure as with younger children, but through a lack or limited occurrence of higher level, lower frequency types within a structural class.

Scott (1988) discusses adolescent syntactic development on the phrasal and clausal levels, as well as subordination in sentences. At the phrasal level, noun phrase post-modification increases with the use of prepositional phrases, relative clauses, appositive constructions, and nonfinite clauses. Complex noun phrases which function as subjects (as opposed to objects) also become more apparent. In addition, modal auxiliaries (especially will, would, shall, should, may, might) double in frequency between the 4th and 12th grades. Progressive verb aspect decreases in frequency while the perfect aspect and passive voice increase three fold between 4th and 12th grade.

In subordination, there is a steady increase of relative clauses through 12th grade. Moreover, the types of relative clauses expand to include non-restrictive and nonfinite clauses, and clauses which postmodify the main clause subject. Subtle changes in the nature of adverbial and nominal clauses also occur. While early developing adverbials (when, because, so, to) still occur frequently

in the language of older children, later developing adverbials (e.g. although, even though, unless, even if, and nonfinite forms) emerge through the school years.

Scott (1988) refers to the subtle, multifunctional growth of structures during adolescence, presenting the comparison of the preschooler's and adolescent's use of the adverbial "if." The preschooler would encode a real situation saying "If I bring my bat, do you want to play?" while the older school age child encodes a hypothetical situation: "If we were spacemen, we could fix this." These examples illustrate that although both age groups use the adverbial "if" clause, the subtle functional difference between the two sentences determines the more language mature child.

Development of nominal clauses appears in the form of a changing grammatical function. There is a slight increase in the occurrence of nominals as grammatical subjects, primarily in written language (Scott, 1988).

Developmental trends in adolescent language coincide with the expansion of the contexts in which older children are required to use language. Scott (1988) describes the continuum of contexts in which older school age children must use language at school. Unplanned spoken chat, at one end of the continuum, is chronologically based. In this discourse context nominal clauses and early developing adverbial clauses would occur more frequently than relative and logical adverbial clauses, complex noun phrases and passive voice. Nonchronological, impersonal planned written language is at the other end of the continuum. This would include

reports and essay tests. Nonfinite relatives, later developing adverbial clauses, relatives, nominals, and passive voice would occur more frequently in this type of discourse (Biber, 1986; Scott, 1988). Therefore, in order to obtain an all encompassing sample of the possible syntactic complexities used by an adolescent or preadolescent child, it is necessary to sample spontaneous language, both written and spoken, in a variety of contexts.

Testing needs. To evaluate the subtle changes we expect to occur through the preadolescent and adolescent years, it is apparent that a need exists for "finer grained methods of analysis" (Scott, 1988, p. 88). It is necessary to consider the differences between earlier and later developing subordination types and the differences between spontaneous and contrived sampling of these subordination types. As mentioned above, widely used standardized test measures for this age group (e.g. TOLD-2, TOAL, DTLA-II, CELF-R) use a variety of decontextualized task formats. The DTLA-II, TOLD-2, and CELF-R specifically use an elicited imitation task, while the TOAL and TOLD use a sentence combining format.

Research. Studies involving the value of elicited imitation tasks for predicting spontaneous production in preschool and early school age children have been discussed. However, information concerning the same comparison with structures of interest in preadolescents and adolescents is limited. Although Lahey et al. (1983) compared contrived and spontaneous use of structures in 32

SLI subjects between 3;6 and 17;6 years of age, the
syntactic structures in question were of a developmentally low
level. Further research with the desired age group was not found by
this experimenter.

Sentence combining is well known as an effecitve technique to
expand the (pre) adolescent's writing strategy repertoire "by
making various elements of the [writing] process routine, in order
to decrease the processing space (attention) they require" (Lawlor,
1983, p. 54). Hunt (1977) describes an effective sentence
combining task at the discourse level that has been used to study
the developmental growth of children's writing skills.
Brown and Brown (1983) also discuss the use of sentence combining
as a diagnostic tool at the college level. However, Brown and Brown
(1983) emphasize that sentence combining is useful under the
following conditions. The task must be open and on the "whole
discourse" level "so that students have a concept around which to
fit the given kernels as well as a context in which to understand
each kernel" (Brown & Brown, 1983, p. 10). Information concerning
the value of sentence combining, at the sentence level, as a
diagnostic tool was not found by this experimenter. The rationale
for using a sentence combining task in the TOAL (Hammill et al.,
1980) and the TOLD (Hammill and Newcomer, 1988) is not stated
clearly by the authors.

In addition to evaluating the utility of elicited imitation and
sentence combining as diagnostic tools, this investigator questions
the grammatical content of the individual items included on

standardized tests for adolescents. Are these items sensitive to what we know about adolescent language?

Purpose of the Current Study

The purposes of the current study are:

1. To examine the syntactic content of complex sentences (2+ clauses) on adolescent language standardized test measures in order to determine developmental relevance to preadolescent and adolescent language testing;

2. to determine whether adolescent performance with complex sentences (2+ clauses) on contrived tasks is influenced by type (relative, nominal, adverbial) and developmental level (early/late, first/second degree) of subordination;

3. to determine frequency of occurrence and well formedness of complex sentences (2+ clauses) by type (relative, nominal, and adverbial) and developmental level (early/late, first/second degree) of subordination, in a variety of discourse types produced by adolescents;

4. to determine whether performance on contrived tasks is related to frequency measures in spontaneous tasks;

5. and thereby, to shed light on the value of elicited imitation and sentence combining tasks as predictive measures of the sentential subordination in spontaneous spoken and written language produced by adolescents.

CHAPTER II

METHODS

Subjects

Subjects were 6 children between the ages of 12;7 and 13;6 years, from a small, midwestern city. They were of normal intelligence, as determined by parental report of school performance and a nonverbal cognitive screening test administered by the experimenter. Three of the six subjects had an educational history of reading and writing difficulties as indicated by school placement in Learning Disability classes and/or clinic enrollment for Specific Language Impairment (SLI). The remaining three subjects had normal language (NL) skills as indicated by average or above average performance in school language arts classes. SLI and NL subjects were matched by age (plus or minus three months) and sex. All subjects were contacted through acquaintances of the experimenter.

The cognitive screening test administered by the experimenter consisted of the Letter Sequences (LS) and Symbolic Relations (SR) subtests of the <u>Detroit Test of Learning Aptitude-II</u> (DTLA-II) (Hammill, 1985). The Symbolic Relations subtest was chosen because of its similarity to the <u>Test of Nonverbal Intelligence</u> (Brown, Sherbenou, & Johnsen, 1990) as reported by Nippold (1989). The Letter Sequences subtest was chosen because of its nonverbal design and considerable memory requirements. Criterion for inclusion in

this study required average subtest scores within one standard deviation below the mean. Table 1 shows sex, age, and DTLA subtest standard scores of each subject.

Materials and Procedures

Test Item Analysis

In order to devise contrived materials that resembled actual test items, it was first necessary to analyze sentential subordination items on standardized tests. The elicited imitation and sentence combining subtests from the following tests were analyzed: The Test of Language Development - 2 (TOLD-2) (Hammill & Newcomer, 1988), The Test of Adolescent Language (TOAL) (Hammill et al., 1980), the Detroit Test of Learning Aptitude-II (DTLA-II) (Hammill, 1985), the Clinical Evaluation of Language Functions-Revised (CELF-R) (Semel et al., 1987) and the Test of Syntactic Abilities (TSA) (Quigley, Steinkamp, Power, & Jones, 1978). These particular testing measures were chosen because they require processing and manipulation of complex sentences containing a variety of types of subordination. Additionally, these tests are reported as being frequently used by speech-language pathologists in clinical settings and in the public schools (Stephens & Montgomery, 1985).

Although the TSA (Quigley et al., 1978) was designed to provide diagnostic information on the syntactic abilities of deaf individuals (Quigley & King, 1980), its abundance of relative subordination items warrants its use this study.

Table 1

Sex, Age, and DTLA-II Subtest Scores for Each Subject

SLI Subjects					NL Subjects				
Subject	Sex	Age	SR	LS	Subject	Sex	Age	SR	LS
S1	F	13;1	8	8	N1	F	13;3	12	17
S2	F	13;6	9	9	N2	F	13;5	11	9
S3	M	12;7	14	11	N3	M	12;9	14	11

Specifically, the Relativization 3 (Embedding) subtest of the TSA was analyzed.

The items from the aforementioned standardized tests were analyzed in terms of the frequency of occurrence and nature of subordination. Table 2 shows the number of items containing subordination, and the type, developmental level and degree of each structure.

As Table 2 indicates, the number of items containing developmentally less common structures (second degrees, nonrestrictives, late developing connectives etc.) is limited, except for those on the written sentence combining subtest of the TOAL. In fact, none of the relative clause sentence combining items of the TSA contained second degree or nonrestrictive structures.

General Experimental Procedures

All subject data were gathered in a clinic room free of distractions. All responses were elicited by the experimenter (a graduate student in Speech-Language Pathology). Testing took place over two sessions, each 2 1/2 to 3 hours. Subjects were offered a 10 minute break every 30 minutes, or as needed. There were no time limits during these procedures. All orally produced, spontaneous sampling procedures were audio taped.

Contrived Subordination Materials

Sentence items from the sentence combining subtests on the TOLD and TOAL, and elicited imitation subtests of the DTLA-II, TOLD-2,

Table 2

Standardized Test Item Analysis

TEST: TOLD-2-I (Spoken Sentence Combining)
AGE RANGE: 8;6 to 12;11
SYNTACTIC BREAKDOWN:
 45 acceptable responses
   -21 with 2 clauses (all first degree)
      -11 coordination
      -8 adverbial clauses
         -5 early
         -3 late
      -1 Nominal other clause
      -1 Relative, preverbal, restrictive

TEST: TOAL (Written Sentence Combining)
AGE RANGE: 11;0 to 18;5
SYNTACTIC BREAKDOWN:
 52 acceptable responses
   -35 with 2 or more clauses
      -3 coordination
      -26 adverbial clauses
         -20 first degree, early
         - 4 first degree, late
         - 1 second degree, early
         - 1 second degree, late
      - 7 nominal clauses
         - 2 first degree, to-infinitive
         - 3 second degree, to-infinitive
         - 2 second degree, other
      - 8 relative clauses
         - 3 first degree, preverbal, restrictive
         - 2 first degree, postverbal, restrictive
         - 1 first degree, postverbal, nonrestrictive
         - 1 second degree, preverbal, restrictive
         - 1 second degree, postverbal, nonrestrictive

TEST: DTLA-2 (Sentence Imitation)
AGE RANGE: 6;0 to 17;11
SYNTACTIC BREAKDOWN:
 30 responses
   -19 with 2 or more clauses
      -8 with coordination
      -7 adverbial clauses, all first degree, early
      -4 nominal clauses
         -3 first degree, to-infinitive
         -1 second degree

(Table 2 Continues)

-4 relative clauses, all first degree, nonrestrictive
  -2 postverbal
  -2 preverbal

TEST: CELF-R (Recalling Sentences)
AGE RANGE: 5 to 16 years
SYNTACTIC BREAKDOWN:
 26 responses
   -13 with 2 or more clauses
      -3 with coordination
      -4 adverbial clauses, all first degree, late
      -3 nominal clauses, first degree, to-inf
      -5 relative clauses, first degree
        -3 preverbal, restrictive
        -2 postverbal, restrictive

TEST: TSA (Relativization, embedding, sentence combining)
SYNTACTIC BREAKDOWN:
 44 responses
   -all relative clause, first degree
     -12 preverbal, restrictive
     -32 postverbal, restrictive

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that contained nominal, relative, and adverbial subordination were
used as items for the experimental testing with the subjects.
Selected items from the TSA were also used. Sentences composed by
the experimenter, that contained the target grammatical structures
not found in the standardized test measures were added to the norm-
standardized test items to complete the list of experimental testing
items, so that there were five items in each grammatical category
listed in Table 3. Of the sentence combining items, 37% were from
the tests mentioned above. Thirty percent of the elicited imitation
items were from the tests of interest. Some of the standardized
test items were altered slightly in length or word choice to add
uniformity to the testing sample. For example, the desired
response The letter that Loma typed to Steve was sent back (TOAL),
was altered, to alleviate unfamiliar vocabulary, to The letter that
Linda typed to Steve was sent back. Tom got a hit when he went to
bat (TOLD-2) was altered, to increase sentence length, to Tom got a
home run when he went to bat.

The structures of interest were organized, according to the
reference grammar of Quirk and Greenbaum (1985), in the following
way (see Table 3). Sentences of all three subordination types were
divided into two sections, first and second degree. Sentences
containing relative clauses were further divided into preverbal (in
main and subordinate clauses) and postverbal (in subordinate
clause), and further to restrictive and nonrestrictive types.
Sentences containing nominal clauses were further divided into to-
infinitive and other verb forms. Other nominals include that, bare-

Table 3

Structures of Interest for Each Task Format

	Elicited imitation	Sentence combining
I. RELATIVE CLAUSES		
A. 1st Degree		
1. Preverbal		
a. restrictive	(5 items)	(5 items)
b. nonrestrictive	(5 items)	(5 items)
2. Postverbal		
a. restrictive	(5 items)	(5 items)
b. nonrestrictive	(5 items)	(5 items)
B. 2nd Degree		
1. Preverbal		
a. restrictive	(5 items)	(5 items)
b. nonrestrictive	(5 items)	(5 items)
2. Postverbal		
a. restrictive	(5 items)	(5 items)
b. nonrestrictive	(5 items)	(5 items)
II. NOMINAL CLAUSES		
A. 1st Degree		
1. To-infinitive	(5 items)	
2. Other	(5 items)	
B. 2nd Degree		
1. To-infinitive	(5 items)	
2. Other	(5 items)	
III. ADVERBIAL CLAUSES		
A. 1st Degree		
1. Early developing	(5 items)	(5 items)
2. Late developing	(5 items)	(5 items)
B. 2nd Degree		
1. Early developing	(5 items)	(5 items)
2. Late developing	(5 items)	(5 items)

infinitives, non-finite and wh- interrogative forms. Sentences containing adverbial clauses were further divided into those containing early (e.g. <u>when</u>, <u>because</u>, <u>so</u>, <u>if</u>) and late (e.g. <u>unless</u>, <u>even though</u>, <u>as soon as</u>, <u>although</u>) developing connectives. All stimulus sentences appear in Appendix A.

First degree refers to a clause that is immediately subordinate to the main clause of a sentence, e.g., <u>The boat **that had been in the accident** was wrecked completely</u>. Second degree refers to a clause that is subordinate to another subordinate clause, which itself is subordinate to the main clause, e.g. <u>They were startled when a young man **who asked for work** appeared at their door</u>.

First degree elicited imitation stimulus sentences were 15 words in length, plus or minus two words. Second degree elicited imitation items were not as carefully controlled for length due to variation in length from structure to structure. The average length of second degree nominals was 16.5 words with a range of 14 to 24; adverbial second degree sentences averaged 18.1 words with a range of 15 to 25. Relative second degree sentences averaged 17.2 words with a range of 15 to 22. Second degree items were, on average, two words longer than first degree items.

Sentence combining tasks on the TOLD-2 and the TOAL typically supply the subject with more than two base sentences to be combined. In order to increase the possibility of the subject creating the target sentence, all sentence combining items in this study supplied the subject with only two base sentences.

Contrived Subordination Procedures

Procedures for the elicited imitation and sentence combining tasks are discussed below.

1. Elicited imitation: Each subject was instructed to accurately repeat sentences that were presented orally by the experimenter. Two simple training items were presented before the experimental sentences were presented, to insure that the subject understood the nature of the task. Sentences were presented in a random order.

2. Sentence combining: Only the relative and adverbial subordination items were used for this task. It was found that nominal subordination items were unsuitable for sentence combining tasks due to structural characteristics inherent in the several nominal varieties. For example, a sentence like <u>The team of skilled firemen tried to keep the raging fire under control</u> does not reduce to clauses which can be easily reconstructed as the target item.

Prior to the administration of each sentence combining section (relative and adverbial) of experimental items, subjects were given a short training session in which the target structures were discussed. Four examples of each structure were presented and performed by each subject with help from the experimenter if needed, to insure the subject's understanding of the nature of the task. Subjects were told that relative clauses usually require words like <u>who</u>, <u>which</u>, <u>that</u>, and <u>whose</u>, and adverbial clauses require a variety of "connective" words like <u>because</u>, <u>even though</u>, <u>if</u>, <u>although</u>, <u>unless</u>, etc.

Sentence combining items were produced in both spoken and written form. In the spoken version, subjects listened to the experimenter input and gave an oral response. He/she was asked to make one sentence that included both the important ideas from each sentence and the structure of interest. In the written version, the subject was presented with the same set of sentence combining tasks in written form, and was instructed to combine each sentence pair in writing. During this task, the experimenter was available to help each subject if they had difficulty reading the base sentences. Although channel (written vs. spoken) comparisons were not a primary focus in this study, this experimenter anticipated that subjects might perform better on written sentence combining, due to a hypothesized reduced load on working memory. The relative clause sentences were randomly presented first, followed by the adverbial sentences.

Additionally, subjects were given a second trial on relative and adverbial sentence combining items when the structure of interest, using the appropriate connective word (that, who, whom, which for relative items; because, even though, etc. for adverbial items) was not used in the first trial. A second trial was not given when the connective word or structure of interest was used but was used inappropriately.

With this second trial, the subjects were given multiple choice clues to more fully clarify the target response for each item. For example, subjects were given the following two base sentences:

<u>The girls loaded the gear into the car</u>.

<u>They were going on a fishing trip</u>.

The subject's first response may have been <u>The girls loaded the gear into the car although they were going on a fishing trip</u>. During the second try, performed at least 40 to 50 minutes after the first, the subject would be given the choice of three or four key words such as <u>if</u>, <u>because</u>, <u>so</u>. The multiple choice clues were designed so that only one of the clues would be suitable for combining the given base sentences into the target e.g., <u>The girls loaded the gear into the car because they were going on a fishing trip</u>.

Contrived Subordination Analysis

Spoken elicited imitation and sentence combining productions for each subject were transcribed verbatim. All contrived task productions were then grammatically analyzed in comparison to the target response. Responses were scored on a five point scale, from most to least accurate. The scoring system devised for the elicited imitation task is illustrated below:

Target sentence: <u>Even though the girl who lives next door was sick, her mother made her walk to school</u>.

<u>4</u> = Subjects's response matches target verbatim

<u>3</u> = Subordination of interest preserved, meaning preserved

　　Ex.　<u>Even though the girl who lives next door was ill, her mother made her walk to school</u>.

2 = Subordination not preserved, meaning preserved

    Ex.   Even though the girl next door was sick, her mother

        made her walk to school.

1 = Subordination preserved, meaning not preserved

    Ex.   Even though the girl **who lives next door** was at

        school, her mother made her come home.

0 = Neither subordination nor meaning preserved

    Ex.   The girl who lives next door was sick and her

        mother made her come home.

Responses on the sentence combining task were also scored on a five point scale, illustrated with the following examples. The base sentences given were:

Even though the dog looks friendly, he may be dangerous.

The dog lives across the street.

Target sentence: Even though the dog **that lives across the street** looks friendly, he may be dangerous.

4 = Subordination preserved, meaning preserved

    Ex. see above; minor word changes are permitted such

        as appears for looks

3 = Subordination not preserved, meaning preserved

    Ex.   Even though the dog across the street looks

        friendly, he may be dangerous.

2 = Subordination preserved, meaning not preserved

    Ex.   Even though the dog looks friendly, he may be

        dangerous **who lives across the street.**

OR   <u>Even though the dog **that lives across the street**

won't bite, he may not be nice</u>.

<u>1</u> = Neither subordination nor meaning preserved

   Ex.   <u>The friendly dog that we found may live across the

   street</u>.

<u>0</u> = Item not attempted

<u>Spontaneous Subordination Materials</u>

As discussed earlier, adolescents are required to use language in an increasing variety of contexts. Some subordination types may rarely occur in a spoken narrative, but occur more frequently in a written opinion piece. For this reason, samples covering a range of contexts in written and spoken form were obtained to ensure that the subordination types of interest were adequately sampled.

For the written and spoken samples, the subjects viewed two short films. <u>The Desert</u> (Casden, 1980) is a 15 minute, informative film concerning the North American deserts of the Southwest. The audio text is a descriptive expository piece. <u>Amira's Choice</u> (Amatai, 1982) is a 20 minute story about a 15 year old Druze girl who must choose between the strict traditions of her family and culture and becoming a doctor. The audio text for this film is a classic narrative. The films were viewed using an Elmo 16mm Projector. The spoken samples and contrived tasks were audio taped using a Marantz, Model PMD 360 cassette tape recorder with a high fidelity microphone. Fidelity was subjectively judged to be good.

Spontaneous Subordination Procedures

Procedures for the spontaneous written and spoken samples are discussed below.

1. Spoken samples: Three spoken language samples were obtained in the following ways.

a. Oral opinion sample: Each subject was asked to read a short passage (see Appendix B) concerning the problems of caring for the growing elderly population in the United States, and to discuss his/her opinions concerning what the government and/or families might do.

b. Oral narrative: Each subject viewed the video Amira's Choice (Amatai, 1982), and was asked to retell that story as if he/she were telling it to someone who had never heard the story. In addition, subjects were informed that the makers of the film were interested in discovering how much information children comprehended from it. This encouraged subjects to be thorough in their renditions of the film content.

c. Descriptive oral sample: Each subject viewed the video The Desert (Casden, 1980), and was then asked to summarize the information contained in the video, orally, given the same instructions as those discussed for the oral narrative sampling procedure.

2. Written samples: Subjects produced all written samples immediately after each spoken sample was produced. Three written samples were obtained. Subjects were given 5 minutes to plan, then as much time as needed to write. The average time for each written

sample was approximately 20 minutes. Subjects were instructed to do their best writing, but not to be concerned about spelling accuracy. The three written samples included the following.

a. Written opinion: Each subject was presented with a paragraph concerning the social issue of how to care for the growing elderly population in America (see Appendix B). He/She was then asked to express his/her opinion on the issue. A minimum of 1 full page of written text was required.

b. Narrative written sample: The subject was required to retell the story <u>Amira's Choice</u> (Amatai, 1982) in writing.

c. Informative written sample: The subject was asked to summarize, in writing, <u>The Desert</u> (Camden, 1980) film.

Spontaneous Subordination Analysis

The three spoken samples were transcribed verbatim. Written and spoken samples were then grammatically analyzed with attention to the following features.

All texts were divided into T-units, according to the guidelines of Hunt (1965). A T-unit is defined as a single main clause plus whatever other subordinated clauses are attached to, or embedded within, that one main clause.

Next, all garbles, occurring in the spoken samples, were separated from the rest of the text with brackets [ ]. Garbles were eliminated from the word count for each T-unit. Garbles, as described by Hubbell (1988), are parts of a text that "don't make

sense, either grammatically or semantically" (p. 135). Hubbell
(1988) identifies four types of garbles:

A. False starts: [I would like] here they come.

B. Abnormal redundancy: repetitions of a word, phrase,
   etc.: [there were these] there were these funny rocks.

C. Audible pauses and nonlinguistic vocalizations: [Uh,
   um.]

D. Word tangles: it's a story about a bear [this bear uh
   well there were these uh in a wood she had a lotta mm]
   . . I don't remember.

After analyzing the current samples, it was necessary to compile a
list of additional guidelines for identifying garbles (see Appendix
C).

Following this, the mean sentence length (total number of words
divided by the number of T-units in the text), and subordination
index (total number of clauses divided by the total number of T-
units) were computed for each spoken and written text.

Each sentence was then syntactically analyzed. Sentences
containing subordination were classified by degree and type of
subordination (relative, nominal or adverbial clause). Each type
of subordination was further analyzed according to the subtypes
outlined in Table 3. For instance, relative clauses, at each degree
level, were identified as preverbal or postverbal, and restrictive
or nonrestrictive. Nominal clauses were labeled to-infinitive or
other clauses, and adverbial clauses as early or late. Subordinate
clauses greater than second degree were noted to be third degree or

greater.

Analysis focused on the subordination types used by each subject and their frequency of occurrence. Performance on spontaneous tasks was then compared to performance on contrived tasks both within and between subjects.

Reliability

To evaluate the reliability of spoken spontaneous sample transcription a second examiner, with identical educational experience to the first, transcribed 25% of the data. Percentage of word for word agreement between examiners was 94%. Additionally, another examiner grammatically analyzed 17% of the spontaneous samples. The percentage of agreement between the two examiners regarding the presence of particular structures was 92%.

CHAPTER III

RESULTS

Results will be reported and initial discussion will be carried out according to the outline below.

I. Contrived Task Results

    A. Elicited Imitation

        1. Results of each type of subordination (relatives, nominals, adverbials) which includes

            a. First vs. Second degree comparisons

            b. Any other additional interesting observations

        2. Language ability comparison (SLI vs. NL)

    B. Sentence Combining - spoken and written

        1. Results of each type of subordination (relatives, adverbials) which includes

            a. First vs. Second degree comparisons

            b. Any other additional interesting observations

        2. Language ability comparison (SLI vs. NL)

II. Spontaneous Task Results - spoken and written

    A. Overall length and complexity which includes overall length in words, number and length of sentences and subordination index. Effects of genre.

    B. Subordination frequencies

        1. Relatives

        2. Nominals

      3.   Adverbials

      4.   Genre effects

   C.   Language ability comparison (SLI vs. NL)

III. Comparison of results from contrived and spontaneous tasks

Contrived Task Results

Performance on each subordination type of the contrived tasks was computed into an average performance level for each subject, according to the 5-level scoring system used to evaluate individual items (see Methods, Chapter II). For example, on the five second degree, post verbal, restrictive, relative clause sentences, N1 obtained scores of 2, 4, 3, 3, and 0. The sum of these scores was divided by 5 to obtain an average performance level of 2.4. Scores were then compared, both within and between subjects. A 1.0 criterion was used to identify substantial score differences, considering that a difference of 1.0 or greater indicates an entirely different level of performance.

In addition, a percentage correct is included for each grammatical section, indicating the percentage of responses containing no errors.

Elicited Imitation

Results for the elicited imitation task are presented in Tables 4 through 9. Tables 4 through 8 show each subjects performance according to the 5-level scoring system, and a corresponding number in parenthesis that indicates the percentage correct for each

subordination type.

Elicited imitation, relatives. Scores for the four subtypes of
first degree items were averaged together, as were those of the
second degree items (see Table 4). Five of the six subjects
(all except N2) scored higher on first degree relatives than on
second degree. However, score differences were small, ranging from
.16 to .6, and none met the 1.0 standard for a substantial
difference.

Comparisons were made between preverbal and postverbal, and
restrictive and nonrestrictive items in first and second degree (see
Table 5). Overall, subjects more accurately imitated preverbal
than postverbal items in both first and second degree (8 out of 12
comparisons). Only S2 performed consistently better on postverbal
items in both first and second degree. It should be noted, however,
that only one subject (N2) showed differences (preverbal performance
greater than postverbal) greater than 1.0. Additionally, in 11 out
of 12 comparisons subjects performed better on restrictive than
nonrestrictive items, with 4 of those 11 comparisons exceeding 1.0.

In summary, substantial performance differences were noted only
in comparison of restrictive vs. nonrestrictive structures in first
degree items. In this case, most subjects performed higher on
restrictive items. This is to be expected, developmentally. In

Table 4

<u>Performance on Relative Clause Elicited Imitation Tasks:</u>

<u>1st vs. 2nd Degree and Overall Results</u>

	SI	N1	S2	N2	S3	N3	Avg
Rel.							
1st deg.	2.81	2.99	1.36	2.72	3.31	2.78	2.66
2nd deg.	2.63	2.83	.92	2.81	3.06	2.18	2.32
1st							
pre res	3.4(40)	3.4(40)	1.6(0)	3.6(60)	3.4(80)	2.8(20)	2.90
pre non	2.75(50)	2.75(40)	.75(0)	2.75(50)	3.75(75)	2.75(25)	2.58
pst res	3.4(40)	3.8(80)	2.6(20)	3.2(60)	3.4(40)	3.4(60)	3.30
pst non	1.67(17)	2.0(0)	.5(0)	1.33(17)	2.67(0)	2.17(17)	1.72
2nd							
pre res	3.0(20)	3.4(40)	.5(0)	3.2(40)	3.6(60)	2.8(20)	2.75
pre non	2.5(17)	2.5(33)	.67(0)	2.17(17)	3.0(17)	1.67(0)	2.09
pst res	2.0(20)	2.4(20)	2.0(0)	2.6(40)	3.4(40)	2.0(0)	2.40
pst non	3.0(0)	3.0(0)	.5(0)	3.25(25)	2.25(0)	2.25(25)	2.38

Table 5

Performance on Relative Clause Elicited Imitation Tasks:

Preverbal vs. Postverbal, and Restrictive vs. Nonrestrictive

Comparisons

	S1	N1	S2	N2	S3	N3	Avg
			Preverbal vs. Postverbal				
1st pre	3.08	3.08	1.18	3.18	3.58	2.78	2.81
post	2.5	2.9	1.55	1.77	3.04	2.79	2.43
2nd pre	2.75	2.95	.59	2.69	3.3	2.24	2.42
post	2.5	2.7	1.25	2.93	2.83	2.13	2.39
		Restrictive vs. Nonrestrictive					
1st res	3.4	3.6	2.1	3.4	3.4	3.1	3.17
non	2.21	2.38	.63	2.04	3.21	2.46	2.16
2nd res	2.5	2.9	1.25	2.9	3.5	2.4	2.58
non	2.75	2.75	.59	2.71	2.63	1.96	2.23

addition, a trend for higher performance on first degree than second
degree items and higher performance on preverbal than postverbal
items was noted, however few of these comparisons were greater than
1.0.

Elicited imitation, nominals. As Table 6 indicates,
differences within and between subjects were limited. All subjects
except S2 performed better on first than second degree nominal
clause items. However, none of the differences were
substantial.

Comparisons of performance on to-infinitive vs. other
structures revealed better performance for earlier developing to-
infinitive nominals in 8 of 12 comparisons. For first degree items,
four subjects (N1, S2, N2, and N3) scored higher on to-infinitive
items. Only S2 met the 1.0 score difference standard.

For second degree items, four subjects (S1, S2, N2, and N3)
scored higher on to-infinitive items. However, only N2 and N3 met
the 1.0 score difference standard.

Elicited imitation, adverbials. As Table 7 shows, differences
between first and second degree productions were notable for all
subjects, with four out of six subjects exhibiting substantial
differences.

Recall that early developing adverbials include use of
connectives such as if, when, because, after, before, so, while
late developing adverbials include connectives like regardless of,
in spite of, even though, although, etc. It is interesting to note

Table 6

Performance on Nominal Clause Elicited Imitation Tasks:

1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3	Avg
Nom.							
1st deg.	3.0	3.13	1.37	2.97	3.23	3.02	2.79
2nd deg.	2.4	3.0	1.6	2.4	3.0	2.4	2.47
1st							
to-inf.	3.0(40)	3.4(40)	1.8(20)	2.8(40)	3.2(20)	2.8(20)	2.83
other	3.0(0)	3.0(50)	.5(0)	2.5(0)	3.5(50)	2.67(17)	2.53
2nd							
to-inf.	3.0(40)	3.0(40)	1.8(0)	3.6(60)	3.0(40)	3.6(60)	3.00
other	2.4(0)	3.0(0)	1.6(0)	2.4(0)	3.0(20)	2.4(0)	2.46

Table 7

Performance on Adverbial Clause Elicited Imitation Tasks:

1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3	Avg
Adv.							
1st deg.	3.8	4.0	2.8	3.9	3.7	3.5	3.62
2nd deg.	3.2	2.9	1.5	2.6	3.2	2.3	2.62
1st							
early	3.8(80)	4.0(100)	3.0(20)	4.0(100)	3.6(60)	3.6(60)	3.67
late	3.8(80)	4.0(100)	2.6(40)	3.8(80)	3.8(80)	3.4(80)	3.57
2nd							
early	2.8(40)	2.4(60)	1.6(0)	2.6(40)	2.8(40)	2.2(0)	2.40
late	3.6(60)	3.4(60)	1.4(0)	2.6(20)	3.6(60)	2.4(20)	2.83

that there was no substantial advantage for early developing adverbials. In fact, in some cases, performance was slightly better on sentences containing late adverbial connectives (5 out of 12 comparisons).

In summary, the first vs. second degree comparison revealed the most notable differences in performance for adverbial elicited imitation items.

Elicited imitation, language ability comparison. Overall performance levels between subjects on the elicited imitation relative, nominal and adverbial subordination items are presented in Table 8. Results for the subtypes of each syntactic category were averaged together to obtain an overall performance score for each subject on each subordination type (relative, nominal and adverbial). The percentage scores in parentheses represent the percentage of items that contained no errors. In addition, Table 9 shows the relative subject performance (from highest to lowest) rankings on each subordination type.

For each subordination type, an SLI subject presented the highest and lowest scores (Table 8). If the scores of S2, which were substantially below all others, are removed, the ranges of scores among the other five subjects were .7, .36, and .6 for relatives, nominals and adverbials respectively. Somewhat surprisingly, in light of such small between subject differences, two subjects had the same performance rank across the three subordination types (N1 and S2) and three more subjects maintained

Table 8

Overall Performance Levels for Elicited Imitation:

Relatives, Nominals, and Adverbials

Relatives		Nominals		Adverbials	
Avg	Subject	Avg	Subject	Avg	Subject
3.18 (39%)	S3	3.18 (32.5%)	S3	3.5 (65%)	S1
2.91 (31.6%)	N1	3.10 (32.5%)	N1	3.45 (80%)	N1
2.76 (38.6%)	N2	2.90 (24.3%)	N3	3.45 (60%)	S3
2.72 (25.5%)	S1	2.85 (20%)	S1	3.25 (60%)	N2
2.48 (33%)	N3	2.82 (25%)	N2	2.9 (40%)	N3
1.14 (2.5%)	S2	1.43 (5%)	S2	2.15 (15%)	S2

performance rank for two subordination types (Table 9). It appears
that only in the extreme case of S2 did this elicited imitation task
differentiate between SLI and NL adolescents, however.

   Summary of elicited imitation task. In summary, the following
findings are worthy of noting. First, for all subjects, adverbial
subordination tasks were slightly easier than relative and nominal
subordination tasks. Second, as predicted, several developmentally
significant subtypes of subordination affected performance. These
included first vs. second degree comparisons (relative, nominal, and
adverbial), restrictive vs. nonrestrictive relatives, and infinite
vs. other types of nominals. There was an effect for preverbal vs.
postverbal relatives, but not in the expected direction for first
degree relatives. Contrary to expectations, early vs. late
adverbial conjunctions did not affect performance. Third,
individual subject performance was fairly consistent across
subordination types in spite of the small between subject
differences. Adolescents were less accurate repeating second degree
relative and nonrestrictive structures. And finally, this elicited
imitation task did not predict group (language ability) membership.

Sentence Combining

   Performance on spoken sentence combining tasks will be
presented first, followed by results from written sentence
combining tasks. When the second trial with cues made a marked
difference in performance, this will be reported. As on the
elicited imitation tasks, first and second degree comparisons are

Table 9

Subject Ranking on Elicited Imitation Tasks

Subject	Rankings		
	Rel	Nom	Adv
N1	2	2	2
N2	3	5	4
N3	5	3	5
S1	4	4	1
S2	6	6	6
S3	1	1	3

discussed first, followed by other grammatical subtypes.

Results for the spoken sentence combining task are presented in Tables 10 through 14, showing performance according to the 5-level scoring system and, in parenthesis, performance after the cued, second trials. Table 13 shows the performance levels for each subject and a corresponding overall percentage correct. Tables showing the corresponding percentage correct for each subordination type in written and spoken sentence combining are found in Appendix D. Tables 15 through 19 are arranged in the same way as those for the spoken sentence combining, but correspond to the written sentence combining results.

Spoken sentence combining, relatives. All subjects performed substantially better (greater than 1.0 difference) on first degree items than second degree (see Table 10). Only one subject, S2, showed significant change in results after being supplied with cues. S2's change in second degree relative performance made her first and second degree results identical. It is interesting to note that, in percentage terms, no change occurred in the number of correct items (See Appendix D). In other words, S2's productions got closer to the target, but all still contained syntactic or semantic errors.

First degree postverbal performance was better than preverbal performance for five subjects (all except N1), although only one difference (S2) was greater than 1.0 (see Table 11). For second degree items, five subjects (S1, S2, N2) scored higher on preverbal items, with 1 difference (S2) greater than 1.0.

Table 10

<u>Performance on Relative Clause Spoken Sentence Combining Tasks:</u>

<u>1st vs. 2nd Degree and Overall Results</u>

	S1	N1	S2	N2	S3	N3	Avg
Rel.	(3.75)	(4.0)	(2.85)	(3.9)	(3.9)	(4.0)	(3.73)
1st	3.35	3.8	2.7	3.7	3.65	3.7	3.48
	(1.25)	(2.8)	(2.85)	(2.3)	(2.3)	(1.75)	(2.21)
2nd	.95	2.8	1.1	2.05	2.05	1.75	1.78
1st	(4.0)		(1.8)	(3.6)	(4.0)		(3.57)
pre res	3.6	4.0	1.6	3.0	3.6	4.0	3.30
	(3.6)		(2.0)	(4.0)	(4.0)	(4.0)	(3.6)
pre non	2.4	4.0	2.0	3.8	3.6	2.6	3.07
		(4.0)	(3.6)		(4.0)	(4.0)	(3.93)
pst res	4.0	3.2	3.2	4.0	3.8	3.4	3.60
pst non	3.4	4.0	4.0	4.0	3.6	4.0	3.83
2nd	(1.4)	(2.4)	(1.4)	(2.6)	(2.8)	(2.0)	(2.1)
pre res	1.2	2.4	1.4	2.4	2.4	2.0	1.97
	(0.8)		(1.4)	(2.0)		(1.4)	(1.67)
pre non	1.2	2.8	1.6	1.8	1.6	1.4	1.73
	(2.0)		(1.0)	(2.2)	(3.0)	(1.8)	(2.27)
pst res	.8	3.6	.4	2.2	2.0	1.8	1.80
	(.8)	(2.4)	(1.2)	(2.4)	(2.8)	(1.8)	(1.9)
pst non	.6	2.4	1.0	1.8	2.2	1.8	1.63

Table 11

<u>Performance on Relative Clause Spoken Sentence Combining Task:</u>

<u>Preverbal vs. Postverbal and Restrictive vs. Nonrestrictive</u>

<u>Comparisons</u>

	S1	N1	S2	N2	S3	N3	Avg
Preverbal vs. Postverbal							
1st							
pre	3.0	4.0	1.8	3.4	3.6	3.3	3.18
post	3.7	3.6	3.6	4.0	3.7	3.7	3.72
2nd							
pre	1.2	2.6	1.5	2.1	2.0	1.7	1.85
post	.7	3.0	.7	2.0	2.1	1.8	1.72
Restrictive vs. Nonrestrictive							
1st							
res	3.8	3.6	2.4	3.5	3.7	3.7	3.45
non	2.9	4.0	3.0	3.9	3.6	3.3	3.45
2nd							
res	1.0	3.0	.9	2.3	2.2	1.9	1.88
non	.9	2.6	1.3	1.8	1.9	1.6	1.68

Table 11 also shows the restrictive vs. nonrestrictive results for each subject. In 8 out of 12 comparisons, scores were higher for restrictive items. None of these differences were substantial, however.

Generally speaking, cued responses were only slightly higher than first trial responses. In only 4 of 34 comparisons were scores substantially higher for cued responses.

In summary, all subjects performed substantially better on first degree than second degree items. Few (3 of 12) preverbal vs. postverbal comparisons were greater than 1.0, but a slight trend toward higher postverbal scores for first degree items and higher preverbal scores for second degree items was apparent. There was also a trend toward higher restrictive than nonrestrictive scores, although not substantial.

Spoken sentence combining, adverbials: First vs. second degree performance averages are presented in Table 12. All subjects performed better on first than second degree adverbial items; for three subjects (S1, N2, and N3) the difference was substantial. Results for cued responses were higher for all subjects, and for 5 of 12 (first vs. second degree) comparisons the difference was substantial.

Cued responses were, in 22 of 23 comparisons higher, than first trial responses, particularly for late developing adverbial connectives. Of these, nine comparisons were substantially higher for second trials. Examining Table 12, N1, S2 and S3 appeared to benefit most from the cued second trial. S1 and N2 only improved

Table 12

Performance on Adverbial Clause Spoken Sentence Combining Tasks:

1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3	Avg
Adv.	(3.3)	(3.4)	(3.5)	(4.0)	(4.0)	(4.0)	(3.7)
1st	3.0	1.9	2.4	3.9	3.2	3.6	3.0
	(3.1)	(2.8)	(2.7)	(3.0)	(3.3)	(2.7)	(2.93)
2nd	1.8	1.5	1.5	2.1	2.4	2.1	1.9
1st	(3.2)	(4.0)	(3.6)		(4.0)	(4.0)	(3.8)
early	3.4	1.6	2.4	4.0	3.4	3.4	3.03
	(3.4)	(2.8)	(3.4)	(4.0)	(4.0)	(4.0)	(3.6)
late	2.6	2.2	2.4	3.8	3.0	3.8	2.97)
2nd	(3.2)	(2.8)	(2.0)	(2.6)	(3.4)	(2.0)	(2.67)
early	2.4	1.0	1.6	2.6	2.6	1.4	1.93
	(3.0)	(2.8)	(3.4)	(3.4)	(3.2)	(3.4)	(3.2)
late	1.2	2.0	1.4	1.6	2.2	2.8	1.87

performance substantially on items containing second degree, late developing adverbial connectives, while N3 did not substantially benefit from any cued adverbial items.

It was expected that performance on early developing adverbials would be better than the performance on later developing adverbials. As indicated in Table 12, results varied across subjects, with two subjects (N1 and N3) performing considerably better on late developing adverbials, especially for second degree adverbials. One explanation for this unexpected difference may concern the nature of the practice items that were supplied to each subject before beginning the sentence combining task. The practice items contained late connectives such as even though, and although that were required in some of the items in the sentence combining task. Perhaps, these subjects remembered the connectives from the practice items and were able to use them more efficiently than the other subjects.

In summary, a substantial difference between first and second degree scores was found, in the expected direction. No trends were noted for the early vs. late developing connective comparison. However, for cued, second trial responses, a strong trend toward higher scores, especially in those items containing late developing connectives was present.

Spoken sentence combining, language ability comparisons.
Overall performance levels for each subject on the adverbial and relative task items are presented in Table 13. Across subjects, the range of scores for performance on the spoken sentence combining

Table 13

Overall Performance Levels for Spoken Sentence Combining:

Relatives and Adverbials

Relative			Adverbials	
Avg	Subject		Avg	Subject
3.3 (77.5%)	N1		3.0 (60%)	N2
2.88 (50%)	N2		2.85 (55%)	N3
2.85 (47.5%)	S3		2.8 (45%)	S3
2.63 (47.5%)	N3		2.4 (40%)	S1
2.15 (40%)	S1		1.95 (25%)	S2
1.9 (25%)	S2		1.7 (35%)	N1
Avg 2.61(48%)			2.45 (43%)	

task was 1.4 for relatives and 1.3 for adverbials. Except for N1, whose performance was highest on relative and lowest on adverbial items, all subjects had close performance rankings (Tables 13 and 14) across subordination types (relative and adverbial). SLI scores were, in general, lower than NL on this task. When the performance scores of NL and SL1 subjects from Table 13 are totaled, language ability differences were more obvious for relative than adverbial subordination types (NL=8.81, SLI=6.55). These results (higher range of performance coupled with language ability group differences) contrast with the elicited imitation results, where range was small and there were no group differences.

Written sentence combining, relatives. Due to a withdrawal from this study, S1 did not perform the written sentence combining task. First vs. second degree results are presented on Table 15. All of the five remaining subjects performed better on first degree items. Unlike the results of spoken sentence combining, which revealed substantial differences between first and second degree performance for all subjects, only three subjects (S2, S3 and N3) performed substantially better on first degree items,

Average performance on the written sentence combining task (3.05), was better than that of spoken sentence combining (2.6) but it should be noted that only NL subjects contributed to this difference (2.6) (See Tables 13 and 18). Preverbal vs. postverbal and restrictive vs. nonrestrictive results revealed trends similar to spoken sentence combining (Table 16), with higher postverbal performance on first degree and higher preverbal performance on

Table 14

Subject Ranking on Spoken Sentence Combining Tasks

Subject	Rankings	
	Rel	Adv
N1	1	6
N2	2	1
N3	4	2
S1	5	4
S2	6	5
S3	3	3

Table 15

<u>Performance on Relative Clause Written Sentence Combining Tasks</u>:

<u>1st vs. 2nd Degree and Overall Results</u>

	S1	N1	S2	N2	S3	N3	Avg
Rel.			(2.85)	(3.85)			(3.66)
1st	****	4.0	2.5	3.75	3.7	3.9	3.57
			(1.4)	(3.8)	(2.45)	(2.65)	(2.85)
2nd	****	3.95	1.3	3.2	1.85	2.3	2.52
1st			(2.0)				(3.48)
pre res	****	4.0	1.8	3.4	4.0	4.0	3.44
			(2.0)	(4.0)			(3.36)
pre non	****	4.0	1.8	3.8	3.2	3.6	3.28
			(4.0)				(4.0)
pst res	****	4.0	3.4	4.0	4.0	4.0	3.88
			(3.4)	(4.0)			(3.8)
pst non	****	4.0	3.0	3.8	3.6	4.0	3.68
2nd			(1.2)	(3.4)			(2.72)
pre res	****	4.0	1.2	3.4	1.6	3.4	2.72
			(1.8)	(3.8)		(1.8)	(2.76)
pre non	****	4.0	1.8	3.2	2.4	2.0	2.68
			(1.4)	(4.0)	(2.8)	(2.6)	(2.92)
pst res	****	3.8	1.2	3.4	1.6	2.4	2.48
			(1.2)	(4.0)	(3.0)	(2.8)	(3.0)
pst non	****	4.0	1.0	2.8	1.8	1.4	2.2

Table 16

Performance on Relative Clause Written Sentence Combining Tasks:

Preverbal vs. Postverbal and Restrictive vs. Nonrestrictive

Comparisons

	S1	N1	S2	N2	S3	N3	Avg
Preverbal vs. Postverbal							
1st							
pre	****	4.0	1.8	3.6	3.6	3.8	3.36
post	****	4.0	3.2	3.9	3.8	4.0	3.78
2nd							
pre	****	4.0	1.5	3.3	2.0	2.7	2.7
post	****	3.9	1.1	3.1	1.7	1.9	2.34
Restrictive vs. Non-restrictive							
1st							
res	****	4.0	2.6	3.8	4.0	4.0	3.68
non	****	4.0	2.4	3.8	3.4	3.8	3.48
2nd							
res	****	3.9	1.2	3.4	1.6	2.9	2.6
non	****	4.0	1.4	3.0	2.1	1.7	2.44

second degree, and slightly better restrictive than nonrestrictive performance. The effect of cues was also similar to spoken sentence combining results.

Written sentence combining, adverbials. First vs. second degree performance averages are presented in Table 17. Results are similar to those for spoken sentence combining.

Average performance on written sentence combining (2.8) was slightly higher than spoken (2.45) (Tables 12 and 17). Other trends are also similar to spoken sentence combining. However, a slightly stronger trend toward better performance on early vs. late adverbial was noted. In six of ten comparisons early adverbial performance was higher, with three of those six being substantial.

Written sentence combining, language ability comparisons. Overall performance levels for each subject on the adverbial and relative task items are presented in Table 18. The range of scores for relative structures was 2.08. When S2's score is eliminated, the range is considerably smaller at 1.2. The adverbial scores exhibited a range of .85. Table 19 compares the performance rankings of subjects on each subordination type. Unlike all other tasks to this point, this task consistently differentiated SLI from NL subjects.

Summary of sentence combining task. In summary, the following results are noteworthy. Performance on written sentence combining was better than on spoken. Similar to the elicited imitation task, developmental levels of subordination (first/second degree,

Table 17

Performance on Adverbial Clause Written Sentence Combining Tasks:

1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3	Avg
Adv.		(4.0)	(3.2)	(4.0)	(4.0)	(4.0)	(3.84)
1st	****	3.4	3.0	3.7	3.2	3.4	3.34
		(3.7)	(3.1)	(3.1)	(2.7)	(3.5)	(3.22)
2nd	****	2.9	1.6	2.5	1.6	2.4	2.2
1st			(3.6)	(4.0)	(4.0)	(4.0)	(3.92)
early	****	4.0	3.2	3.8	3.2	3.4	3.52
		(4.0)	(2.8)	(4.0)	(4.0)	(4.0)	(3.76)
late	****	2.8	2.8	3.6	3.2	3.4	3.16
2nd		(4.0)	(2.4)	(2.8)	(2.2)	(3.0)	(2.88)
early	****	3.2	1.0	2.6	2.2	2.2	2.24
		(3.4)	(3.8)	(3.4)	(3.2)	(4.0)	(3.56)
late	****	2.6	2.2	2.4	1.0	2.6	2.16

Table 18

Overall Performance Levels for Written Sentence Combining:

Relatives and Adverbials

	Relatives			Adverbials	
	Avg	Subject		Avg	Subject
	3.98 (97.5%)	N1		3.15 (70%)	N1
	3.48 (77.5%)	N2		3.1 (50%)	N2
	3.1 (57.5%)	N3		2.9 (40%)	N3
	2.78 (50%)	S3		2.4 (35%)	S3
	1.9 (17.5%)	S2		2.3 (40%)	S2
Avg	3.05 (60%)			2.77 (47%)	

Table 19

Subject Ranking on Written Sentence Combining Tasks

Subject	Ranking	
	Rel	Adv
N1	1	1
N2	2	2
N3	3	3
S2	5	5
S3	4	4

restrictive/nonrestrictive) did influence performance on sentence
combining tasks. Second trials with cuing improved performance
slightly, primarily for late degree adverbial items. And finally,
the written sentence combining task clearly predicted group
membership (language ability); prediction was moderate for spoken
sentence combining.

Spontaneous Task Results

Length and Complexity

Overall results. Table 20 presents the overall number of
words, number of sentences (where sentence is operationally defined
as a T-unit), mean sentence length, and subordination index for each
subject, for spoken and written spontaneous samples, averaged across
narrative, expository, and opinion genres. The mean sentence length
and subordination index were the areas of interest for this study.

Sentence length and subordination for all subjects were within
the expected ranges for normal adolescents (Scott, 1988). Sentence
lengths averaged 12.36 words in written discourse, and 11.01 words
in spoken discourse. Subordination averaged 2.25 in written
discourse, and 1.91 in written discourse. For five
of the six subjects, sentence length and subordination were greater
in written than in spoken samples. N3 demonstrated the opposite.

It was anticipated that comparisons between each age/sex
matched pair would reveal higher sentence length and subordination
for NL subjects than for SLI subjects. However, sentence length was

Table 20

<u>Average Length and Complexity for Written and Spoken Spontaneous</u>

<u>Samples</u>

	WRITTEN					
	S1	N1	S2	N2	S3	N3
# of words	264	302	273	220	235	228
# of sent	26	24	21	19	18	22
ML of sent	10.43	13.67	13.16	11.63	13.65	11.61
Sub Index	1.93	2.23	2.58	2.12	2.33	2.33

	SPOKEN					
# of words	309	238	333	265	270	295
# of sent	31	20	33	26	29	21
ML of sent	10.13	12.05	10.41	10.22	9.18	14.07
Sub. Index	1.63	1.95	1.82	1.84	1.75	2.45

higher in only three comparisons, one written (N1/S1) and two spoken (N1/S1 and N3/S3). The amount of subordination was higher in three comparisons, two spoken (N1/S1 and N3/S3) and one written (N1/S1).

Tables 21 and 22 present overall length and complexity data separately for each subject in opinion, descriptive and narrative samples, spoken and written versions respectively. Note that language differences were considerably more noticeable when length and complexity results were examined in this way, prior to averaging across the three genres.

Genre comparisons, spoken samples. For spoken samples, sentence length and subordination were generally determined to be within expected ranges for normal adolescents (Scott, 1988). All subjects produced their longest sentences in either the opinion or descriptive samples. The sample with the most subordination varied between subjects. Three subjects (S1, S2, and N3) produced their most subordination in the opinion sample. N1, N2 and S3 produced their most subordination in the narrative sample. Between matched subjects, NL subjects produced higher subordination indexes than their SLI pairs in six of nine comparisons. Sentence lengths of NL subjects were higher than their matched pairs in seven of nine comparisons.

Genre comparisons, written samples. For written samples, sentence length and subordination were within expected ranges (Scott, 1988). The opinion samples revealed the longest sentence

Table 21

Overall Length and Complexity for Spoken Spontaneous Samples

by Genre

	S1	N1	S2	N2	S3	N3	Avg
			OPINION				
# of words	158	82	415	338	219	182	163
# of sent	15	7	36	33	25	12	21
ML of sent	10.53	11.7	11.5	10.24	8.76	15.17	11.32
Sub. Index	1.87	2.0	2.19	1.85	1.68	3.25	2.14
			DESCRIPTIVE				
# of words	317	249	144	224	317	332	264
# of sent	33	20	13	21	31	26	24
ML of sent	9.6	12.45	11.08	10.67	10.23	12.76	11.13
Sub. Index	1.48	1.80	1.61	1.62	1.74	1.69	1.66
			NARRATIVE				
# of words	451	384	440	234	274	371	359
# of sent	44	32	51	24	32	26	34.83
ML of sent	10.25	12.0	8.63	9.75	8.56	14.27	10.58
Sub. Index	1.55	2.06	1.65	2.04	1.84	2.42	1.93

Table 22

Overall Length and Complexity for Written Spontaneous Samples

by Genre

	OPINION						
	S1	N1	S2	N2	S3	N3	Avg
# of words	355	222	263	161	243	137	230
# of sents	25	12	18	17	15	9	16
ML of sents	14.2	18.5	14.6	9.47	16.20	15.2	14.20
Sub. Index	2.5	3.48	3.08	1.65	2.93	3.11	2.71

	DESCRIPTIVE						
# of words	161	319	267	188	251	289	246
# of sents	17	27	20	14	17	31	21
ML of sents	9.47	11.81	13.35	13.43	14.76	9.32	12.02
Sub. Index	1.7	1.7	2.45	2.21	2.29	1.68	2.01

	NARRATIVE						
# of words	275	364	288	312	210	257	284
# of sents	36	34	25	26	21	25	28
ML of sents	7.63	10.71	11.52	12.0	10.0	10.28	10.36
Sub. Index	1.61	1.91	2.28	2.5	1.81	1.92	2.1

length and subordination, by a wide margin, for all but one subject
(N2). Sentence length was lowest in the narrative samples (except
N3); narrative subordination indexes, however, were not consistently
lower across subjects. Between matched subjects, NL subjects
produced higher subordination indexes in five of nine comparisons.
Sentence lengths of NL subjects were higher in six of nine
comparisons.

In summary, length and complexity results for all subjects
were within expected limits for normal adolescents (Scott, 1988).
Discourse genre affected sentence length and subordination for both
NL and SLI subjects. Spoken opinion and descriptive, and written
opinion samples contained the longest sentences. Spoken opinion and
narrative and written opinion samples contained the highest
subordination. In addition, when spoken and written results were
examined separately, by genre, NL subjects produced slightly higher
subordination and moderately higher sentence length than their SL1
matched subjects.

Subordination Results

Tables 23 and 24 report frequencies of subordination in spoken
and written samples respectively. Production is reported in terms
of normalized frequencies (number of subordinations divided by the
total number of sentences in the samples). Numbers in parentheses
represent the token productions of each subject. All subordination
types will first be discussed in terms of their overall frequency of
occurrence and variety. Any pertinent information concerning the

Table 23

Frequency of Subordination In Combined Spoken Spontaneous

Samples

	S1	N1	S2	N2	S3	N3
Rel.						
1st						
pre res	.0110(1)	.0169(1)			.0114(1)	.0156(1)
pre non			.0100(1)			.0156(1)
pst res	.0659(6)	.0678(4)	.0500(5)	.0769(6)	.0795(7)	.1406(9)
pst non					.0114(1)	.0156(1)
2nd						
pre res						
pre non						
pst res			.0100(1)	.0128(1)		
pst non						
Total	.0769(7)	.0847(5)	.0700(7)	.0897(7)	.1023(9)	.1874(12)
Nom 1st						
to inf	.0220(2)	.0508(3)	.0300(3)	.0513(4)	.0568(5)	.0781(5)
other	.2637(24)	.1864(11)	.2600(26)	.2179(17)	.1477(13)	.3281(21)
2nd						
to inf	.0330(3)	.1017(6)	.0500(5)	.0513(4)	.0568(5)	.1406(9)
other	.0330(3)	.0339(2)	.0700(7)	.0769(6)	.0568(5)	.0156(1)
3rd						
to inf		.0339(2)			.0114(1)	.0469(3)
other	.0110(1)		.0100(1)		.0114(1)	.0156(1)
Total	.3627(33)	.4067(24)	.4200(42)	.3974(31)	.3409(30)	.6429(40)

(Table 23 Continues)

	S1	N1	S2	N2	S3	N3
Adv. 1st						
early	.0769(7)	.2712(24)	.1300(13)	.1154(9)	.2273(20)	.2344(15)
late	.0549(5)		.0300(3)	.0877(6)	.0455(4)	.0469(3)
2nd						
early	.0110(1)	.0847(5)	.0300(3)	.0385(3)	.0114(1)	.0781(5)
late				.0128(1)		.0156(1)
3rd						
early		.0508(3)		.0256(2)		.0156(1)
late						
Total	.1428(13)	.4067(24)	.1900(19)	.2800(21)	.2842(25)	.3906(25)

Table 24

Frequency of Subordination in Combined Written Spontaneous Samples

	S1	N1	S2	N2	S3	N2
Rel.						
1st						
pre res	.0128(1)	.0274		.0175(1)	.0377(2)	.0154(1)
pre non				.0351(2)		
pst res	.0641(5)	.1644(12)	.0952(6)	.1228(7)	.1509(8)	.0769(5)
pst non					.0189(1)	
2nd						
pre res			.0159(1)			
pre non		.0137(1)				
pst res		.0274(2)	.0159(1)			
pst non						
3rd+						
pre res		.0137(1)		.0175(1)		
pre non						
pst res		.0274(2)	.0159(1)			
pst non						
Total	.0769(6)	.2740(20)	.1429(9)	.1929(11)	.2075(11)	.0923(6)
Nom 1st						
to inf	.0385(3)	.0411(3)	.1429(9)	.0877(5)	.1321(7)	.0308(2)
other	.3205(25)	.1507(11)	.3333(21)	.1228(7)	.0566(3)	.1846(12)
2nd						
to inf	.0513(4)	.0137(1)	.0476(3)	.0877(5)	.1509(8)	.0615(4)
other	.0256(2)	.0274(2)	.1111(7)	.0702(4)	.0755(4)	.0308(2)

(Table 24 Continues)

	S1	N1	S2	N2	S3	N2
3rd+						
to inf	.0128(1)	.0137(1)	.0159(1)	.0175(2)	.0377(2)	.0308(2)
other	.0256(2)		.0159(1)		.0189(1)	.0308(2)
Total	.4735(37)	.2466(18)	.6667(42)	.3859(22)	.4717(25)	.3693(24)
1st Adv.						
early	.1154(9)	.2466(18)	.2381(15)	.1754(10)	.3962(21)	.2462(16)
late	.0385(3)	.0685(5)	.0635(4)	.0877(5)	.0189(1)	.0462(3)
2nd						
early	.0897(7)	.0822(6)	.0635(4)		.0943(5)	.0769(5)
late						
3rd+						
early		.0274(2)	.0159(1)		.0189(1)	.0308(2)
Total	.2436(19)	.4247(31)	.3810(24)	.2631(15)	.5284(28)	.4001(26

effects of genre on frequency of occurrence and variety of structure will then be discussed.

Relative subordination results. The most frequently produced relatives for all subjects, in both spoken and written samples, were first degree, postverbal, restrictive. More specifically, 66% of all written relatives and 77% of all spoken relatives were this one type. An overall wider variety of relative types was apparent in the written samples. N3 produced the widest variety of spoken relative clauses, while N1 produced the widest variety of relative types in the written samples.

Between NL and SLI subjects, differences in performance were more apparent for written than spoken samples. Specifically, there was a greater difference between SLI and NL subjects' frequencies of production of relative clauses for written samples. N1 and N2 produced considerably more relatives when written and spoken totals were combined, (.3587 and .3129) than their SLI counterparts (.1538 and .2288). N3 produced a greater number and variety of relatives on the spoken sample than S3, while S3 produced a greater number and variety of relatives on written samples.

Relative clause production for all subjects was so limited that it is difficult to discern any definitive trends between genres. However, in general, it seems that the written opinion and spoken and written descriptive samples contained the greatest number and variety of relative clause types.

Nominal subordination results. The most frequently produced

nominals were first degree that and to-infinitive clauses. SLI

subjects produced considerably more nominals in written (.5139)

than in spoken (.3598) samples. In contrast, NL subjects produce

far more nominals in spoken (.4711) than written (.3279) samples.

The most prominent genre difference was that nominals

occurred most frequently in narrative and opinion samples and least

frequently in descriptive samples.

Adverbial subordination results. First degree early adverbials

were the most frequently produced clauses. In percentage terms, 64%

of written and 63% of spoken adverbials were of this type. Spoken

and written samples were very similar in terms of frequency of

occurrence and variety of structures. For instance, the occurrence

of late adverbials was almost identical in written (15%) and spoken

(15.5%) samples. Between subjects, NL subjects produced more

adverbials (ave = .3494) than SLI (ave = .2136) and a slightly

larger variety.

Comparison of Contrived and Spontaneous Results

Relative Subordination

In general, subjects had more success on contrived tasks with

varieties of relative clauses that occurred most frequently in their

spontaneous language. They were able to more accurately repeat back

and combine sentences which contained first degree, postverbal and

restrictive relative clauses. The only exception to the

predictability pattern was the unexpected finding that postverbal relatives were slightly more difficult in elicited imitation, and in second degree sentence combining tasks.

Nominal Subordination

Notable trends for elicited imitation tasks included better performance for first degree nominal items and better performance for to-infinitive items. These results correspond with the frequency of occurrence in the spontaneous samples of these same structures.

Adverbial Subordination

In all contrived subordination tasks the higher first degree performance was apparent for adverbials. This corresponds closely with spontaneous results. In the spontaneous samples, frequency of production for early developing adverbials was higher in both spoken and written results. The only contrived task that predicted this trend was written sentence combining.

Language Ability Comparisons

As stated previously, elicited imitation tasks did not differentiate SLI from NL subjects, while sentence combining task results (especially written sentence combining) more closely parallelled language ability grouping. Group differences in spontaneous samples were most apparent for relative clauses in terms of the range and frequency of uncommon subordination subtypes.

Table 25 compares the frequency of common to uncommon relative and adverbial subordination types produced by subjects in spontaneous samples. The frequencies of common (first degree, postverbal, restrictive) relative and adverbial (first degree, early) clauses were compared to the frequency other, less common relative and adverbial types. The numbers in parentheses, next to the written results, represent the spoken results. When the common and uncommon frequencies are separately totaled for each language ability group, spoken results for relatives are not noticeably different (SL1 common 18; NL common 19, SL1 uncommon 5; NL uncommon 5). However, written results indicate a small language ability difference for common relatives (SLI 19; NL 24) and a large language ability difference for uncommon relatives (SLI 7; NL 13). The same comparison for adverbials revealed no noticeable language ability difference for written items (SL1 common 45; NL common 44; SLI uncommon 26; NL uncommon 28). For abverbials, only the spoken uncommon totals revealed a substantial language ability difference (SLI 17; NI 30).

When the combined frequencies for relatives were totaled for each language ability group SLI (written 26; spoken 23) and NL (written 37; spoken 24) results clearly differentiated SLI from NL in written samples only. When the same comparison is made for adverbials SLI (written 71; spoken 57) and NL (written 72; spoken 70) results only differentiated SLI from NL subjects in spoken samples. Nominals were not compared in this way due to the less distinct common/uncommon relationships between to-infinitive and

Table 25

Spontaneous Samples: Comparison of Common to Uncommon Relative
and Adverbial Subordination Types

	Relatives					
	S1	N1	S2	N2	S3	N3
freq of common types	5 (6)	12 (4)	6 (5)	7 (6)	8 (7)	5 (9)
# of other types	1 (1)	5 (1)	4 (2)	4 (2)	2 (2)	1 (3)
freq of other types	1 (1)	8 (1)	3 (2)	4 (2)	3 (2)	1 (3)
combined freq.	6 (7)	20 (5)	9 (7)	11 (7)	11 (9)	6 (12)

	Adverbials					
freq of common types	9 (7)	18 (16)	15 (13)	10 (9)	21 (20)	16 (15)
# of other types	2 (2)	3 (2)	3 (2)	1 (4)	3 (2)	2 (4)
freq of other types	10 (6)	13 (8)	9 (6)	5 (12)	7 (5)	10 (10)
combined freq	19 (13)	31 (24)	24 (19)	15 (21)	28 (25)	26 (25)

other types.

If the combined frequencies from Table 25 are ranked according to individual subject performance, comparisons between spontaneous and contrived rankings can be made between subjects. Table 26 shows the spontaneous frequency rankings for relative and adverbial subordination. Frequency rankings for uncommon subordination subtypes are shown in the top portion of the chart, while overall performance (common and uncommon) rankings appear in the bottom portion. Comparing overall frequency rankings in Table 26 to Tables 9, 14 and 19, it appears that written (both uncommon alone, and overall) spontaneous frequency rankings were closest to those of written and spoken sentence combining for the relative subordination type, and did not correspond closely with elicited imitation rankings. One subject, S2, ranked substantially higher on spontaneous performance than contrived.

In summary, the language ability (SLI vs. NL) difference was most apparent when the written relative subordination productions were examined. Adverbial group differences were apparent in spoken samples. In other words, when the frequency of relative subordination types was compared between groups, the NL group performed considerably better on written relative and spoken adverbial clause productions. Performance rank comparisons between contrived and spontaneous tasks revealed that the written and spoken sentence combining rankings most closely resembled the rankings for spontaneous production. Written and spoken spontaneous transcripts appear in Appendix E.

Table 26

Spontaneous Samples: Subject Frequency Rankings for Relatives

and Adverbials on Uncommon and Overall Subordination Types

Subject	Written Rank			Spoken Rank	
			Uncommon		
	Rel	Adv		Rel	Adv
N1	1	1		5.5	3
N2	2	6		3	1
N3	5	2.5		1	2
S1	6	2.5		5.5	4.5
S2	3.5	4		3	4.5
S3	3.5	5		3	6
			Overall		
N1	1	1		6	3
N2	2.5	6		4	4
N3	5.5	3		1	1.5
S1	5.5	5		4	6
S2	4	4		4	5
S3	2.5	2		2	1.5

CHAPTER IV

DISCUSSION

First, the results of this study will be discussed in terms of

the stated purposes of the study, namely (a) to determine the

influence of types and developmental levels of complex sentences

(subordination) on adolescent performance on contrived tasks, (b) to

determine the frequency of occurrence of complex sentences by type

and developmental level of subordination in a variety of discourse

types produced by adolescents, and, (c) to determine the

relationship between performance on contrived tasks to subordination

frequency measures in spontaneous tasks. This will be followed by

discussion of the implications of these results in terms of language

knowledge, the possible strategies used by each individual subject,

and finally, the clinical implications of this study, specifically

those implications having to do with language assessment.

The Influence of Types and Developmental

Levels of Subordination on Contrived

Task Performance

As results indicate, performance on elicited imitation was

influenced by the type of subordination. Specifically, performance

on adverbials was better than relatives and nominals in the elicited

imitation task. This may be due to the hypotactic nature of

adverbial clauses. That is, in contrast to the other subordination types, adverbials are added on, as opposed to embedded in other clauses. This allows the subject to more easily group parts of a sentence into smaller meaningful units for processing purposes.

The hypotactic nature of adverbials did not have the same advantageous effect on performance for sentence combining, possibly due to the differences in presentation between elicited imitation and sentence combining. Sentence combining adverbial base sentences did not supply subjects with the adverbial connective that defined the relationship between the two sentences. It appeared that most subjects had difficulty finding the relationship between base clauses due to a lack of a supplied connective. Because subjects were required to find the connective that best related the clauses together, and then produce the target sentence, the hypotactic nature of adverbials (which helped group parts of a sentence for processing purposes) did not benefit performance on the sentence combining task.

Performance on both contrived tasks was influenced by the developmental levels within each subordination type. Subjects performed better on first than second degree items in both contrived task formats. On relative clause items, a trend for higher performance on restrictive than nonrestrictive items was apparent.

By their very nature, subordinate clauses which are second degree adds another proposition, and the logical relation connecting that proposition, to those of the first degree subordinate and main clauses. Of necessity, second degree items were also usually longer

than first degree items, challenging working memory more during imitation and sentence combining formats. Both factors—the additional proposition and the additional length in words—could have influenced performance. Sentence stimuli in this study were not constructed to separate out the effects of either factor, but future research might hold one constant while examining the other.

Higher performance on preverbal than postverbal relatives during the elicited imitation task was a developmentally unexpected result. The observations of the experimenter at the time of testing may hold one explanation for this result. It was observed, during the elicited imitation task, that subjects' mistakes frequently entailed difficulty remembering the end of a sentence. This might explain the higher preverbal performance. As the subject reached the end of a postverbal sentence, he/she may have forgotten the crucial, target relative clause.

During sentence combining tasks, a trend for higher postverbal performance in first degree items was noted and there was no preverbal vs. postverbal performance difference in second degree items. Considering that postverbal structures appear earlier than preverbal (center embedded) structures, which occur most frequently in written rather than spoken language, the lack of a preverbal vs. postverbal performance difference in second degree items is unexpected. An examination of the structure of first and second degree, preverbal and postverbal items in this study may explain this discrepancy.

In first degree preverbal items, the relative clause is placed before the main clause verb. A postverbal sentence would have the relative clause after the main clause verb, usually at the end of the sentence. In this way postverbal first degree relative clauses are rather hypotactic in nature. The preverbal vs. postverbal distinction is less straightforward in second degree relative clause items. All second degree items for this study were preverbal to the main clause verb (see Appendix A). Preverbal second degree items were preverbal to both subordinate and main clause verbs, while postverbal clauses were postverbal to the subordinate clause verb but preverbal to the main clause verb. Hence, in the second degree items, none of the postverbal relative clause structures of interest were at the end of the sentence, as in first degree items. Instead, second degree, postverbal, relative clauses were further into the body of the sentence, making them less hypotactic in nature than their first degree postverbals and, perhaps, as difficult to produce as the preverbals, which were also less hypotactic.

Finally, there was an effect for the restrictive vs. nonrestrictive status of relative clauses. Nonrestrictive clauses, by nature, add information which is more or less optional. That is, the proposition in the nonrestrictive clause does not serve to distinguish the base noun from other possible candidates. The distinction between crucial vs. optional information may explain both the later development and the lower frequency of occurrence in child language (Perera, 1984; Scott, 1988) and the processing accuracy effect in this study.

One impressive finding, with such a small number of subjects, was the consistency with which the sentence combining task accurately grouped SLI and NL subjects. The implications of this finding will be discussed later.

Frequency of Occurrence of Complex Sentences
by Type and Developmental Level of
Subordination in Spontaneous Tasks

Results of the spontaneous sampling task were expected, developmentally. The most commonly used subordination types were first degree, postverbal, restrictive relatives, first degree to-infinitive, and that nominals and first degree early adverbials. Overall frequency of occurrence and variety of relative clause subtypes were greatest in written opinion and spoken and written descriptive samples. Nominals occurred most in narrative samples, followed by opinion and descriptive. By far the most revealing spontaneous indicator of ability (SLI vs. NL) was the frequency coupled with the range of uncommon written relative subordination types produced. Relative clause sentences have been used in a number of studies that explore the processing and production capabilities of children (Mann, Shankweiler & Smith, 1984; Romaine, 1984). Such clauses provide several opportunities for syntactic and semantic variation. Results of this study confirm the significance of relative clause use in evaluation of adolescent language.

It is also interesting to note that language ability differences were more noticeable when the length and complexity

results were examined separately, by genre, for written and spoken
samples, than when examined as a simple written and spoken
comparison. With a small number of subjects, averaging obscured the
fact that NL sample sentences were typically longer and more
complex, although differences were sometimes small.

Relationship Between Performance on Contrived
Tasks and Subordination Frequency Measures
in Spontaneous Tasks

Of the two contrived tasks in this study, performance accuracy
on written sentence combining had the highest correspondence with
production frequencies in spontaneous language sampling.
Specifically, performance rankings for relative clause, sentence
combining tasks were most similar to the same rankings in
spontaneous written samples. Developmentally, first vs. second
degree performance on contrived tasks was a key predictor of
spontaneous frequency of production of first and second degree
structures.

Why, then, does elicited imitation not determine, as
accurately, production during spontaneous samples? Perhaps the
difference in the nature of these contrived tasks is the key.
Unlike elicited imitation, which appears to require simply
processing, remembering and repeating back a given sentence,
sentence combining requires the creation of a complex subordinated
sentence. It is well documented that SLI children often have poor

metalinguistic awareness (the ability to think about and use language to talk about language) (Wallach & Miller, 1988). Therefore, it follows that sentence combining measures may more accurately separate NL from SLI adolescents, because of their highly metalinguistic nature. In contrast, a lack of metalinguistic skills probably would not interfere with ability to repeat sentences back.

Discussion of Task Differences From a
Degree of Knowledge Perspective

It appears that in order to produce language in contrived vs. more spontaneous formats, different degrees of knowledge are required. At the outset of this study, it was expected that subjects would have much more difficulty with contrived tasks and would perform better on spontaneous tasks. In other words, they would perform poorly on structures within contrived task formats, but the same structures would be correctly produced in spontaneous situations. In reality, there was some agreement between contrived and spontaneous performance, but prediction was limited to relative clauses in sentence combining and spontaneous writing. Counter examples to predictability were also found. For example, either N1, S2, nor N2 produced any first degree, postverbal, nonrestrictive structures in their spoken or written spontaneous samples (Tables 23 and 24). But to the contrary, in the spoken sentence combining task, all three subjects performed all items of this subordination type with no mistakes (see Table 10). Conversely, N1 produced many first degree adverbial clause types in her spontaneous sample.

However, on the spoken sentence combining task, her performance score was very low (1.6). This serves as a reminder that knowledge is not a dichotomous (presence/absence) distinction. Instead, a continuum of knowledge exists. The adolescent's knowledge of a particular language structure appears to be elaborated as he/she has more exposure to and experience not only with that structure, but with the ways in which he/she will be required to use and manipulate the structure. In other words, subject-specific differences are an important factor in the discussion of performance on contrived vs. spontaneous task (Fujiki & Brinton, 1987).

Discussion of Performance Differences From
an Individual Strategy Perspective

In addition to a continuum of degrees of language knowledge, it is revealing to examine the variety of strategies used by individual subjects. Fujiki and Brinton (1987) discuss three variables which may affect results on elicited imitation tasks. First, if the child has auditory perceptual or attentional problems, he/she might be expected to perform better during spontaneous production. Second, the formulation demands of spontaneous speech could cause some children to perform better on imitation tasks in which many of the formulation demands have been removed. Finally, SLI children that are enrolled in language therapy and/or a writing remediation program may produce particular structures better in imitation than in spontaneous production. Much therapeutic work may involve automatic drill-type techniques in which the child is required to

produce a target structure over and over again with items that are highly decontextualized. Thus, if the auxiliary is and are are the targets of therapy, a less contextual production of auxiliaries is and are may actually be more natural to this subject.

In an attempt to identify subgroups of older language-impaired children, Fletcher (1989) sampled the spontaneous language of normal and language-impaired children from Scotland and England between the 6;2 and 9;11 years. On the surface, no obvious syntactic differences between the groups were noted. However, on closer inspection, SLI subjects fell into one of three subgroups. One group included subjects that exhibited qualitative differences from NL in the types of mazes (garbles) produced. The second group included subjects that had syntactic formulation problems; they made formulation mistakes and made no attempt to repair them. The third group omitted determiners, auxiliaries, and copula verbs, and overgeneralized inflections among other things. Fletcher (1989) stated that the goal of subgrouping is to be able to more efficiently characterize individual problems for remediation.

Subgrouping the subjects in this study would be difficult because of the small sample size. However, some of the subjects in this study exhibited clear differences in the way they coped with the contrived sentence combining task.

For example, N1 developed a sentence combining strategy for relative clause items. She would pause for a considerable time before responding. During this time, she seemed to search for the relative clause insertion point by using referent word clues from

the base sentences. Thus, supplied with the following base
sentences, N1 used the referent word, <u>mother</u>, to correctly determine
how the sentences should combine.

> <u>When my mother went on a trip, she called home every</u>
>
> <u>day</u>.
>
> <u>My mother is a lawyer</u>.

Required Response:

> <u>When my mother, who is a lawyer, went on a trip, she</u>
>
> <u>called home every day</u>.

The success of N1's strategy is evident in her high
performance ranking for spoken sentence combining relative items
(Table 14).

Two subjects, S2, and to a lesser degree, S1, also had an
obvious strategy for handling preverbal, relative items. When
presented with a spoken preverbal, sentence combining task like the
one above, these subjects would almost always place the information
that should be in the relative clause at the end of the sentence.
Given the same base sentences as above, S2's response would be;
<u>When my mother went on a trip she called home every day who was a</u>
<u>lawyer</u>. The adoption of this strategy for S2 was not as successful
as N1's strategy, however, it was a strategy, like N1's, that was
used quite consistently throughout the task.

N3 also displayed a strategy that was not particularly
successful but was used quite consistently. When presented with a
second degree, relative, sentence combining task, in which it was
necessary to place the relative clause within a first degree

adverbial clause, he would respond in the following way.

Base Sentences:

When Mrs. Brown saw us at the store she waved and said
hello.

Mrs. Brown was my first grade teacher.

N3's Response:

Mrs. Brown who was my first grade teacher waved and
said hello at the grocery store.

N3's strategy did, in some situations, flaw the meaning. In all
situations it destroyed the degree of the relative structure.

The aforementioned strategies were the obvious ones that
were noted by the experimenter during the spoken sentence combining
tasks. With closer inspection, strategies for the other subjects
might be found. It is important to note the heterogeneity that
exists within both SLI and NL subjects. If the analysis of
individual differences were taken further with a larger number of
subjects, NL and SLI subjects might fall into subgroups of language
ability along the language ability continuum. Each subject, whether
labeled SLI of NL, has individual strengths and weaknesses in
language ability that must be considered.

Clinical Implications

Speech-language pathologists and other professionals working
with adolescent language must be sensitive to the heterogeneity
existing within adolescent language ability groups. It would be
beneficial to remember that contrived tasks may also lay on a

continuum of knowledge elaboration. The metalinguistic nature of sampling techniques, combined with the subjects degree of knowledge and position on the language continuum will determine the performance.

Therefore, it is crucial, when evaluating adolescent language performance to integrate information from all sampling methods. Responses on contrived tasks found on standardized tests should be thoughtfully viewed in terms of the patterns noted in other sampling methods. It may also be necessary, due to the extremely limited number of standardized test items that are developmentally applicable to adolescents, for the clinician to create his/her own informal test measures. When constructing test items, the following factors would need to be considered. First, relative clauses, particularly second degree nonrestrictive relatives, should be included, because of the finding in this study that these structure types are sensitive to language ability differences. Second, some subordination types may not lend themselves to particular contrived tasks. As previously mentioned, subjects' difficulty producing adverbial sentence combining targets stemmed from their inability to discern the relationship between the base sentences. When the adverbial clause of a sentence is separated from the main clause sentence and made into an independent sentence, the adverbial connective is removed. The extreme example below shows the decontextualization that can occur when sentences containing adverbial subordination are split into two base sentences.

TARGET SENTENCE: We went to the tennis courts where you

get free lessons <u>if you are a beginner.</u>

Base Sentences: We went to the tennis courts where you

can get free lessons.

You must be a beginner to get free lessons.

In contrast, sentence combining tasks requiring the production of relative subordination appeared to be fundamentally different. In the example below, the base sentences share an obvious relationship to one another.

TARGET SENTENCE: When the boy <u>that Jeff met last week</u>

rang the doorbell we were startled.

Base Sentences: When boy rang the door bell we were

startled. Jeff had met the boy last week.

The second sentence refers directly to the first because of the reference to the subject of the dependent clause. The relative clause merely elaborates the dependent clause subject, unlike the adverbial clause sentences in which an adverbial relationship is added to the target sentence through the use of a connective. Most subjects had difficulty performing the decontextualized adverbial clause items until they were supplied with cues (three adverbial connectives), which made the relationship between the base sentences more clear. Therefore, the diagnostician should be warned that, due to the highly decontextualized nature of adverbial sentence combining tasks, subjects may require adverbial connective cues to perform to the best of their ability.

A third factor affecting test construction is sensitivity to appropriate adolescent linguistic targets. Professionals working with adolescents with language problems would benefit from becoming aware of the subtle structural developments of adolescent language. This study showed that performance on contrived tasks was, with some consistency, influenced by these developmental levels. Even with a small subject group, developmentally advanced subordination subtypes were more difficult than lower level subtypes. The subordination subtypes on which subjects performed best corresponded with the structures most frequently produced in spontaneous language sample. This study points to the importance of the use of later developing subordination subtypes, especially relatives, in contrived test formats. Tests for adolescents that do not probe these aspects of language may not be pertinent to the evaluator, especially when dealing with the subtle problems of the SLI individual. Currently, there is an alarming lack of items on standardized tests that contain developmentally pertinent subordination types.

For spontaneous measures, the following factors should be considered. Inclusion of written and spoken sampling is necessary. Additionally, the full extent of an adolescent's syntactic productions will almost certainly not be exposed through only one spontaneous, spoken, narrative sample. Instead, samples from the full range of genre types should be obtained.

Obviously, this served as a pilot study, exploring the performance of a small group of adolescents on contrived and spontaneous language eliciting tasks, in order to gain insight into

the relative findings of each. Further study would use statistical comparisons with a larger number of adolescents.

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APPENDIXES

APPENDIX A

CONTRIVED SENTENCE ITEMS

ELICITED IMITATION

I. Relatives

 A. 1st Degree

   1. Preverbal

     a. Restrictive

1. The boat <u>that had been in the accident</u> was wrecked completely during the next storm. (2cl, TOAL#120A, 15w)
2. The boy <u>who won the last race of the season</u> is a friend of mine.(2cl, TOAL#121A, 15w)
    xtra.The girl <u>that the boy liked so well</u> was the one who'd been nice to everyone that time when we invited the other team to our party. (5cl, TOAL#123, 27w)
3. The puppy that the girl liked so well was black with light grey spots. (2cl,MU, 14w)
4. The circumstances <u>that surrounded the young man's sudden death</u> remained a complete mystery. (2cl, MU, 13w)
5. The air force jet <u>that took off in the storm</u> was never found. (2cl, MU, 13w)

     b. Nonrestrictive

1. Carthage, <u>which was ruled by Queen Dido</u>, treated the visitors with utmost kindness. (2cl, MU, 13w)
2. King George, <u>who was over six feet tall</u>, asked for her hand in marriage. (2cl, MU, 14w)
3. The library, <u>which is only 2 miles away</u>, will probably have your favorite history book. (2cl, MU, 15w)
4. The corner rose bush, <u>which was planted 10 years ago</u>, was full of bright red roses. (2cl, MU, 16w)
5. Downhill skiing, <u>which first became popular in the Alps</u>, is one of the most expensive sports. (2cl, MU, 16w)

   2. Postverbal

     a. Restrictive

1. The three detectives found a skeleton <u>whose skull had a hole near the temple</u>. (2cl, MU, 14w)
2. John spent the night with the boy <u>who had a swimming pool in his yard</u>. (2cl, MU, 15w)
3. I know that quiet girl <u>who left the Christmas party before 10 o'clock</u>. (2cl, MU, 13w)
4. He wants a piece of the chocolate coconut cake <u>that Beth made last night</u>. (2cl, MU, 14w)
5. I shared my ham and lettuce sandwich with a boy <u>who had forgotten his lunch</u>. (2cl, MU, 15w)

     b. Nonrestrictive

1. The scientists found a meteor crater, <u>which was caused by an explosion fifty thousand years before</u>. (2cl, MU, 16w)
2. Nathan has a phone line in his room, <u>which was installed early last month</u>. (2cl,MU,14w)
   xtra.Carol has a copy of their new album <u>which should turn platinum very soon if it proves to be as popular as the last one.4cl,</u> TOAL39, 25w)
3. The quake toppled the china closet, <u>which was filled with all kinds of fragile dishes and glass</u>. (2cl, DTLA12A, 18w)
   xtra.Every two years there is voting <u>that results in many people being placed in office for terms of two years or more.</u>(3cl, DTLA11A, 22w)
4. Every other day we go to the municipal swimming pool, <u>which is only open in the summer</u>. (2cl,MU,17w)
5. The workmen cleaned the windows of the castle, <u>which was built almost 500 years ago</u>. (2cl, MU, 15w)

   B. 2nd Degree
    1. Preverbal(SC)
       a. Restrictive

1. When a young man <u>who asked for work</u> appeared at their door, the girls were startled. (3cl, MU, 16w)adv.
2. Whether the wolf, <u>that lives in the woods,</u> killed our chickens was still not clear. (3cl, MU, 15w)nom. yes-no interr.
3. Even though the girl <u>who lives next door</u> was sick, her mother made her walk to school. (3cl, MU, 17w)adv.
4. If the boy, <u>who has the Babe Ruth cards</u>, will trade with me, then I'll trade with you. (3cl, MU, 18w)adv.
5. Why the movie, <u>that is so popular</u>, has not come out, is a mystery to me. (3cl, MU, 16)nom. wh-interr.

       b. Nonrestrictive (pre MC,pre SC)

1. When my mother, <u>who just turned 40 years old,</u> came home, we surprised her with a birthday cake. (3cl, MU, 20w)adv.
2. Whether the dance, <u>which is an annual affair</u>, is held this year, depends on the student's behavior. (3cl, MU, 17)nom. yes-no interr.
3. Even though the train, <u>which traveled all night</u>, was very noisy, I still got 3 hours sleep. (3cl, MU, 17w)adv.
4. After the party, <u>which lasted until midnight</u> was over we went to McDonalds for a hamburger. (3cl, MU, 16w)adv.
5. When George Washington, <u>who is known as the father of our country,</u> was elected, there were crowds in the streets. (3cl, MU, 22w)adv.

    2. Postverbal (post SC, pre MC)
       a. Restrictive

1. Although the boy liked the girl, <u>who lived next door</u>, she was not his friend. (3cl, MU, 15w)adv.

2. Even though it was his canoe <u>that was found</u>, nobody believed that Thompson had drowned. (4cl, MU, 15w)adv.

3. If the man wanted the horse <u>that was in fourth place</u> to win, he didn't show it. (4cl, MU, 17w)adv.

4. Those silly girls, who entered the beauty contest <u>that I was in</u>, were really disappointed. (3cl, MU, 15w)rel.

5. When the coach asked the players, <u>who were late</u> to come into the gymnasium, I was very surprised. (4cl, MU, 18w)adv.

   b. Nonrestrictive

1. After they lost the game, <u>which was the last in the season</u>, the team was terribly disappointed. (3cl, MU, 17w)adv.

2. Until Jane saw her brother, <u>who is 16 years old</u>, waiting for her outside, she was very worried. (4cl, MU, 16w)adv.

3. While the woman looked at his car, <u>which was green and blue</u>, the man prayed she would buy it. (4cl, MU, 19w)adv.

4. Even though Sara, <u>who is the best on the team</u>, was competing, we didn't win the tournament. (3cl, MU, 16w)adv.

5. After looking a long time for that sweater , <u>which was one of my favorites</u>, I remembered that my sister borrowed it. (4cl, MU, 22w)adv.

II. Nominals
  A. 1st Degree
    1. To-inf

1. The team of skilled firemen tried all night <u>to keep the raging fire under control</u>. (2cl, MU, 15w)

2. It isn't good <u>for those two to eat so much cake and candy</u>. (2cl, TOAL88A, 13w)

3. The Jones family decided <u>to go for a ride in the country</u> after their Thanksgiving Dinner. (3cl, CELF20A, 16w)

4. The man in the house next door promised <u>to water our flowers during our vacation</u>. (2cl, CELF21, 15w)

5. Bob's interest in rock and roll music led him <u>to perform spontaneously just about anywhere</u>. (2cl, MU, 15w)

    2. Other

1. For years, people believed <u>that the body had never been removed from its original grave</u>. (2cl, MU, 15w)that

2. The stranger was told <u>he could chop wood in return for his room and board</u>. (2cl, MU, 15w)that
   xtra.Unless I hear otherwise, I'll assume <u>that you'll be going with us to get the car ready for the trip to Chicago</u>.(4cl, TOAL38, 22w)that

3. The boy with the record time for the hundred yard dash helped
   us coach the younger runners. (2cl, TOAL121A, 16w) bare
   infinitive
4. It really disappointed father that Jim kicked the neighbor's
   old horse so hard. (2cl, TSA61A,13w)nom. rel. extraposition
5. That his son's car was going 85 miles an hour scared Mr.
   Smith. (2cl, TSA69A, 13w)nom.rel.

  B. 2nd Degree
    1. To-inf.

1. After Mr. Jones promised to work on the difficult case, he
   left the meeting in a hurry. (3cl, MU, 17w)adv.
2. Harry went to the homecoming football game, even though he
   had promised to babysit his little sister. (3cl, MU, 17w)adv.
3. The cougar, that started to pace back and forth in his dirty
   cage, was restless. (3cl, MU, 15w)rel.
4. Unless John wants to study with us tonight, he probably won't
   go to the library this afternoon. (3cl, MU, 17w)adv.
5. I went to the show, even though my parents told me to stay
   home all weekend.(3cl, MU, 16w)adv.

    2. Other

1. The lady helped her brother, though he would have
   preferred that she did not.(3cl, MU, 14w)that/adv.
2. The king's tomb had never been opened to determine whether it
   contained a skeleton. (3cl, MU, 14w)yes-no interr./adv.
3. The man hid the chest without telling anyone where he had
   concealed his valuable treasure. (3cl, MU,15w)wh.interr./adv.
4. Even though I know it'll be good for me, the bitter taste of
   the medicine makes it hard for me to swallow it quickly.
   (4cl, TOAL36, 24w)that/adv
5. Why he thought he could borrow my car for the day, is a
   mystery to me (3cl, TOAL91A, 16w)that/wh interr.

III. Adverbials
 A. 1st Degree
    1. Early

1. Every year when summer came the grass on the lawn grew thick
   and green. (2cl, MU, 14w)
2. I had read the book completely, so I took it back to the
   library. (2cl, TOAL30, 14w)
3. They gave the rattle snake to the zoo because it had become
   very dangerous. (2cl, TOAL31A, 14w)
4. Each year, when the big circus comes to town, father takes
   the whole family. (2cl, DTLA6, 14w)
5. If she would have baked some sugar cookies, they would have
   been eaten. (2cl,CELF19A,13w)

2.Late

1. Sally and I are going to the lake <u>regardless of what those two bullies do</u>. (2cl,TOAL28A,15w)
2. <u>In spite of the long waiting time</u>, I was happy with my new glasses. (2cl,TOAL29,15w)
3. <u>Even though Jackie got here on time</u>, they would not let us into the concert. (3cl,TOAL33A,15w)
4. <u>Since it is hot and humid here</u>, we go to northern Minnesota every summer. (2cl,MU,14w)
5. The man stopped at the grocery store on the corner <u>even though he was late for work</u>.(2cl,CELF18A,17w)

B. 2nd Degree
   1. Early

1. The girl that the boy liked so well was the one who'd been nice to everyone <u>when we invited the other team to our party</u>.(4cl,TOAL123,25w)rel. pv
2. The brothers told their friend he could have a share of the gold <u>if he could find it</u>. (3cl,MU,18w)nom.that,pv
3. The largest building that collapsed <u>when the tornado struck last week</u> was 6 stories high. (3cl,MU,15w)rel.pv
4. We noticed that the little boy was about to cry because his mother had just left. (4cl,MU,16w)nom that, pv
5. Because my mom and dad weren't home <u>after school was out</u>, I stayed at my best friend's house (3cl,MU,18w)adv. pv

   2. Late

1. Carol has a copy of their new album which should turn platinum very soon, <u>provided the D.J's play it enough.</u> (3cl,TOAL39A,21w)rel. pv
2. Cathy knows the boy that was your friend <u>until he stole your ten speed bike last year</u>.(3cl,MU,17w)rel post verb
3. Jack told his father that <u>unless he got more money</u> he couldn't stay in school. (3cl,MU,15w)nom.that, post v.
4. Her grandmother said that <u>until they got a new minister</u> she would not go to church anymore. (3cl,MU,17w)nom. that, post v.
5. Jenny, who likes to eat ice cream <u>no matter what the weather is like</u>, did not ask for dessert.(4cl,MU,19w)rel.pre v.

SENTENCE COMBINING
I. Relatives
  A. 1st Degree
    1. Preverbal
      a. Restrictive

1. The man <u>who fell asleep</u> is old and tired.(2cl,124,9w)
   The man is old and tired.
   The man fell asleep.
2. The letter <u>that Linda typed to Steve</u> was sent
   back.(2cl,117a,10w)
   The letter was sent back.
   Linda typed the letter to Steve.
3. The girls <u>who played in the park</u> found a baby
   bird.(2cl,36,11w)
   The girls played in the park.
   The girls found a baby bird.
4. The girl <u>who was crying</u> lost the money.(2cl,51,8w)
   The girl lost the money.
   The girl was crying.
5. The boy <u>who kicked the dog</u> ran away.(2cl,53,8w)
   The boy kicked the dog.
   The boy ran away.

      b. Nonrestrictive

6. The smell of hamburgers, <u>which were sizzling on the grill</u>
   made us hungry.(2cl,116,13w)
   The smell of the hamburgers made us hungry.
   The hamburgers were sizzling on the grill.
7. John, <u>who was very tall</u>, picked apples from the
   tree.(2cl,MU,10w)
   John picked apples from the tree.
   John was very tall.
8. The carpet, <u>which was from Egypt</u>, was very
   expensive.(2cl,MU,9w)
   The carpet was from Egypt.
   The carpet was very expensive.
9. The boy, <u>who was 15 years old</u>, waited in the hot car.
   (2cl,MU,12w)
   The boy was 15 years old.
   The boy waited in the hot car.
10. The fiero, <u>which wasn't very old</u>, was in poor condition.
   (2cl,MU,10w)
   The fiero was in poor condition.
   The Fiero wasn't very old.

    2. Postverbal
      a. Restrictive

11. The puppies played with the girl <u>who wore a red dress</u>.
    (2cl,3,11w)
    The puppies played with the girl.
    The girl wore a red dress.
12. I knew the old man <u>who fed the stray dog</u>.(2cl,1,8w)
    I knew the old man.
    The man fed the stray dog.
13. I helped the boy <u>whose shoes fell in the lake</u>. (2cl,7,10w)
    I helped the boy.
    The boy's shoes fell in the lake.
14. We talked to the new girl <u>whose dog chased cars</u>. (2cl,19,10w)
    We talked to the new girl.
    The girl's dog chased cars.
15. The boys knew the man <u>who the teacher gave the money to</u>.
    (2cl,56,12w)
    The boys knew the man.
    The teacher gave the money to the man.

    b. Nonrestrictive

16. She has a spaniel <u>that performs different duties on the farm</u>.
    (2cl,118,14w)
    She has a spaniel.
    The spaniel performs different duties on the farm.
17. That family lives by the lake <u>which is 3 miles from town</u>.
    (2cl,MU,13w)
    That family lives by the lake.
    The lake is 3 miles from town.
18. The boys moved the piano <u>which was heavier than a horse</u>.
    (2cl,MU,11w)
    The boys moved the piano.
    The piano was heavier than a horse.
19. Mom found my sister <u>who had been playing in the mud at our
    neighbor's house</u>. (2cl,MU,16w)
    Mom found my sister.
    My sister had been playing in the mud at our neighbor's
    house.
20. We bought my jeans at the flea market, <u>which opened at 6:00
    a.m.</u> (2cl,MU,13W)
    We bought my jeans at the flea market.
    The flea market opened at 6:00 a.m.

  B. 2nd Degree
    1. Preverbal
      a. Restrictive

21. When the boy <u>that Jeff had met last week</u> rang the doorbell
    we were startled. (3cl,MU,15w)adv.
    When the boy rang the doorbell we were startled.
    Jeff had met the boy last week.

22. Even though the dog <u>that lives across the street</u> looks friendly, he may be dangerous. (3cl,MU,15w)adv.
    Even though the dog looks friendly he may be dangerous.
    The dog lives across the street.
23. If the girl <u>who wore the pink dress last year</u> goes to the prom, I won't go. (3cl,MU,17w)adv.
    The girl wore the pink dress last year.
    If the girl goes to the prom, I won't go.
24. Why the boy <u>who has the new red bicycle</u> was grounded is unknown. (3cl,MU,13w)nom. wh-interr.
    The boy has a new red bicycle.
    Why the boy was grounded is unknown.
25. Whether the show <u>that is rated PG</u> will come to our theatre next week is questionable. (3cl,MU,16w)
    Whether the show will come to our theatre next week is questionable.
    The show is rated PG.

    b. Nonrestrictive

26. When my mother, <u>who is a lawyer</u>, went on a trip, she called home every day. (3cl,MU,16w)
    When my mother went on a trip, she called home every day.
    My mother is a lawyer.
27. After the Christmas concert <u>which was on December 16th</u> finished, we went caroling. (3cl,MU,14w)adv.
    After the Christmas concert finished we went caroling.
    The Christmas concert was on December 16th.
28. When Mrs. Brown <u>who was my 1st grade teacher</u> saw us at the store she waved and said hello. (3cl,MU,18w)
    When Mrs. Brown saw us at the store she waved and said hello.
    Mrs. Brown was my 1st grade teacher.
29. Even though my car, <u>which I've had for 10 years,</u> is in good condition, I would like a new one. (3cl,MU,20w)
    Even though my car is in good condition I would like a new one.
    I've had my car for 10 years.
30. Whether the fruit trees, <u>which should bloom every year</u>, will die depends on the frost. (3cl,MU,15w)nom yes-no interr.
    Whether the fruit trees die depends on the frost.
    The fruit trees should bloom every year.

  2. Postverbal
     a. Restrictive

31. Although Sara had worn the sweater <u>that she got for Christmas</u> only once, she gave it to her sister, Jill. (3cl,MU,12w)
    Although Sara had worn the sweater only once, she gave it to her sister, Jill.
    Sara got the sweater for Christmas.

32. Because Gary wanted the shoes <u>that were in the store window</u> so much, he waited for the big sale. (3cl,MU,12w)
Because Gary wanted the shoes so much, he waited for the big sale.
The shoes were in the store window.
33. After Miss Jones sent the student <u>who was misbehaving</u> to the principals office, the class calmed down. (3cl,MU,14w)
After Miss Jones sent the student to the principal's office, the class calmed down.
The student was misbehaving.
34. Because my mom wanted the mess <u>that we made last night</u> cleaned up, we did it immediately. (3cl,MU,13w)
Because my mom wanted the mess cleaned up, we did it immediately.
We made the mess last night.
35. If John doesn't like the movie <u>that I chose</u>, we will leave the theatre early. (3cl,MU,15w)adv.
If John doesn't like the movie, we will leave the theatre early.
I chose the movie.

   b. Nonrestrictive

36. After Doug sold his kite, <u>which flew very well</u>, he wished he had kept it. (3cl,MU,13w)
After Doug sold his kite, he wished he had kept it.
The kite flew very well.
37. If he invited Alice <u>who had no boyfriend</u>, to the dance, she would be happy. (3cl,MU,15w)
If he invited Alice to the dance she would be happy.
Alice had no boyfriend.
38. Because she bought the plant <u>which was very healthy</u> at the grocery store, she went back for another one. (3cl,MU,19w)
Because she bought the plant at the grocery store, she went back for another one.
The plant was very healthy.
39. Because father wouldn't go to that restaurant, <u>where he had eaten before</u>, we ate some place else. (3cl,MU,17w)
Because father wouldn't go to that restaurant, we ate someplace else.
My father had eaten there before.
40. When I remembered that the tent, <u>which we use each year for camping</u>, had holes in it, I was disappointed. (4cl,MU,17w)
When I remembered that the tent had holes in it, I was disappointed.
We use the tent each year for camping.

III. <u>Adverbials</u>
  A. 1st Degree
   1. Early

1. John hurt his left knee badly <u>when he fell down</u>. (2cl,63,8w)
   John fell down.
   John hurt his left knee badly.
2. Tom got a home run <u>when he went to bat</u>. (2cl,66a,9w)
   Tom got a home run.
   Tom went to bat.
3. The sheep were hungry, <u>so they ate the green juicy grass</u>.
   (2cl,68,11w)
   The sheep were hungry.
   They ate the green juicy grass.
4. The girls loaded the gear into the car <u>because they were</u>
   <u>going on a fishing trip</u>. (2cl,44,16w)
   The girls loaded the gear into the car.
   They were going on the fishing trip.
5. Betty and her friends will go swimming <u>when the pool opens</u>
   <u>in July</u>. (3cl?,49,13w)
   Betty and her friends will go swimming.
   The pool opens in July.

   b.Late

6. <u>Although the man with the limp looked mean</u>, he was nice.
   (2cl,64a,11w)
   The man with the limp looked mean.
   He was nice.
7. <u>Although she saw the accident</u>, Betty didn't tell the police.
   (2cl,65,10w)
   Betty saw the accident.
   Betty didn't tell the police.
8. <u>Even though he didn't like to go</u>, Jack went to work every
   day. (4cl,56,13w)
   Jack went to work every day.
   Jack didn't like work.
9. The skilled artist is drawing a beautiful landscape <u>as he sits</u>
   <u>under the trees</u> .(3cl,58,14w)
   The skilled artist is drawing a beautiful landscape.
   He sits under the trees.
10. <u>Since the book had an exciting conclusion</u>, I hated to see it
    end. (4cl,52,13w)
    The book had an exciting conclusion.
    I hated to see it end.

  B. 2nd Degree
   1. Early

11. My mother told us that we could go <u>if we cleaned our rooms first</u>. (3cl,MU,14w)
My mother told us that we could go.
We had to clean our rooms first.
12. The dog that was killed <u>when the house burned down</u> was Sally's favorite pet. (3cl,MU,14w)
The dog that was killed was Sally's favorite pet.
The house burned down.
13. We went to the tennis courts where you can get free lessons <u>if you are a beginner</u>. (3cl,MU,17w)
We went to the tennis courts where you can get free lessons.
You must be a beginner to get free lessons.
14. The storm that hit the small town <u>when everyone was sleeping</u> was a disaster. (3cl,MU,14w)
The storm that hit the small town was a disaster.
Everyone was sleeping.
15. The dog that bit the little girl when she teased him was quarantined. (3cl,MU,13w)
The dog that bit the little girl was quarantined.
The little girl teased the dog.

2. Late

16. Jerry wished that he could borrow his dad's car <u>even though he was only 15 years old</u>. (3cl,MU,17w)
Jerry wished that he could borrow his dad's car.
Jerry was only 15 years old.
17. Jill knows the girl that stole the car <u>while she was living at the shelter</u>. (3cl,MU,15w)
Jill knows the girl that stole the car.
The girl was living at the shelter at the time.
18. John knew the boy that had to go home even though the fireworks weren't over. (3cl,MU,15w)
John knew the boy who had to go home.
The fireworks weren't over.
19. Alan wrote to the girl who would win the beauty contest unless she became ill. (3cl,MU,15w)
Alan wrote to the girl who would win the beauty contest.
The girl could become ill.
20. Jim never told anyone that he hadn't learned to read <u>until he had graduated from high school</u>. (4cl,MU,17w)
Jim never told anyone that he hadn't learned to read.
He told someone after he had graduated from high school.

APPENDIX B

HOW WILL WE CARE FOR THE ELDERLY

IN AMERICA

As people get older, they often become less able to care for themselves. When an elderly person can no longer maintain a home, and/or feed, dress and clean himself, he may be in need of care from someone else. In some cases, younger family members can look after their aging parents or grandparents. However, sometimes the family may be unable to provide proper care for their elderly family members. If all adults in a family work outside the home, or if the elderly person needs extended medical care, it may not be practical for the family to care for them. For these reasons, some families put their elderly relatives in nursing homes.

Some families cannot afford to pay the high costs of nursing homes. In these cases, the government often supplies the financial support by paying the nursing home bills for the elderly person. The elderly population (65 years and older) in America is increasing rapidly. As the number of elderly increases, the amount of government money that is needed to care for them also increases. Some people are worried that the government's funds are going to run out. Some people suggest that it would be cheaper for the government to pay families to keep their elderly family members at home. Many families would like to keep their elderly at home, but cannot. What do you think can or should be done about the problem of how to care for our elderly.

APPENDIX C

ADDITIONAL GUIDELINES FOR IDENTIFYING GARBLES

Word(s)	Example	Guidelines
like	"it showed like this snake eating a dead rat"	count only once in a t-unit
and all that	"she went to school and all that"	not a garble
you know	"it showed you know those eagles they call scavenger animals"	not a garble, but not considered a verb phrase
it's like	"it's like you don't have to go every day"	not a garble, but not considered a verb phrase
and stuff	"when it rains and stuff the plants have more moisture"	not a garble
let's see or let me think		counted as garble
I think	"she was supposed to be married to her nephew I think cousin or nephew"	not a garble, not considered a verb phrase
I mean	"I mean what would you do"	not a garble, not considered a verb phrase
and then	"and then she went to school"	not garble when they appear separately, when appear together, one is counted as garble

APPENDIX D

PERCENTAGE CORRECT ON RELATIVE AND ADVERBIAL

CLAUSE SENTENCE COMBINING TASKS

Table 27

Percentage Correct on Relative Clause Spoken Sentence Combining

Tasks: 1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3
Rel.	(90)	(100)	(20)	(95)	(95)	(100)
1st	75	95	50	55	75	90
2nd	(15) 5	(60) 60	(0) 0	(30) 20	(30) 20	(5) 5
1st pre res	(100) 80	100	(0) 0	(80) 40	(100) 80	100
pre non	(80) 40	100	(20) 20	(100) 80	(100) 60	(100) 80
pst res	100	(100) 80	(80) 80	100	(100) 80	(100) 80
pst non	80	100	100	100	80	100
2nd pre res	(20) 20	(60) 60	(0) 0	(40) 20	(20) 20	(20) 20
pre non	(0) 0	60	(0) 0	(20) 0	0	(0) 0
pst res	(20) 0	80	(0) 0	(40) 40	(40) 20	(0) 0
pst non	(20) 0	(40) 40	(0) 0	(20) 20	(60) 40	(0) 0

Table 28

Percentage Correct on Adverbial Clause Spoken Sentence Combining

Tasks: 1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3
Adv.	(70)	(80)	(80)	(100)	(100)	(100)
1st	60	40	40	90	60	80
	(40)	(60)	(30)	(60)	(70)	(50)
2nd	20	30	10	30	30	30
1st	(60)	(100)	(80)		(100)	(100)
early	60	40	40	100	80	80
	(80)	(60)	(80)	(100)	(100)	(100)
late	60	40	40	80	40	80
2nd	(20)	(60)	(0)	(40)	(80)	(20)
early	20	20	0	40	40	0
	(60)	(60)	(60)	(80)	(60)	(80)
late	20	40	20	20	20	60

Table 29

Percentage Correct on Relative Clause Written Sentence Combining

Tasks: 1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3
Rel. 1st	****	100	(45) 35	(95) 85	85	95
2nd	****	95	(0) 0	(90) 70	(40) 15	(30) 20
1st pre res	****	100	(0) 0	80	100	100
pre non	****	100	(0) 0	(100) 80	60	80
pst res	****	100	(100) 80	100	100	100
pst non	****	100	(80) 60	(100) 80	80	100
2nd pre res	****	100	(0) 0	(80) 80	0	(40) 40
pre non	****	100	(0) 0	(80) 60	(60) 20	(20) 20
pst res	****	80	(0) 0	(100) 80	(60) 20	(40) 20
pst non	****	100	(0) 0	(100) 60	(40) 20	(20) 0

Table 30

Percentage Correct on Adverbial Clause Written Sentence Combining

Tasks: 1st vs. 2nd Degree and Overall Results

	S1	N1	S2	N2	S3	N3
Adv.		(100)	(70)	(100)	(100)	(100)
1st	****	70	60	70	50	60
		(90)	(60)	(70)	(50)	(70)
2nd	****	70	20	30	20	20
1st			(80)	(100)	(100)	(100)
early	****	100	60	80	80	60
		(100)	(60)	(100)	(100)	(100)
late	****	40	60	60	20	60
2nd		(100)	(40)	(60)	(40)	(40)
early	****	80	0	40	40	0
		(80)	(80)	(80)	(60)	(100)
late	****	60	40	20	0	40

APPENDIX E

WRITTEN AND SPOKEN SPONTANEOUS

TRANSCRIPTS

S1 SPOKEN DESERT

Um it told it said how like the cactuses cactuses stored the
 water and so they could keep, so they could keep the whatever it
 is

and it told like about the different kinds of animals and that
 live there and what they did

and then it told um it told about the food chain that went on
 through the desert

and it was interesting

lets see and then it said that they get storms

they get one storm, two storms a year, once in the winter and
 once in the summer

and then it it the hard ground doesn't absorb water easy

and it causes flash floods

and um lets see the rest of it it was

it just said about the different animals that live there

there was like a skunk and some pigs and some a badger and lots
 of different kinds of snakes and lizards and stuff like that

so that was it

    [Can you tell me more detail]

and it kind of

and it showed like some different kinds of plants

and it showed like how the insects ate plants and then the plants
 or the insects ate plants

and then the lizards and snakes ate the insects

and the whatever ate the lizards

then whatever ate the lizards then whatever ate whatever ate the
 lizards

and so it just kind of went on

and then the scavengers

and then it all started over again

so and it said that the plants were the base of life or the base
 of life there

and the animals were in place were highly adapted to the the heat
 and stuff that what they had to live like down there

or there where they were

and it said that most of the time in the day they um they stayed
 in dens or in at least in the hotter part of the day they stayed
 in their dens

and during the twilight hours in the like the mornings and the
 evenings they wandered around looking for food and stuff

that was it
     [anything else?]
no

and it said like um that it said how they get storms was they the
 storms come off the ocean

and they moved across the and they moved across the whatever it's
 called the planet or whatever the continent

and the cont.. and usually doesn't the east coast they ro.. off
 down off the mountains

and it said that there was like rivers and stuff flowing through
 there but they were underground or they were they only flowed
 seasonally

     [what else?]

um that was about everything

and then it said that the pollenation it talked about like the
 bees pollenating after the rains and stuff

that was about it

S1 SPOKEN AMIRA

First she she said the what she huh the name of the village is

and then she was 14 and

she had she went to school

she went to a public school I think

and um it she liked all her classes

and she studied ok

then she went she was she got really well really really in
 science and her life science or whatever it is

and her father and her uncle went up and discussed something
 like her engagement or something

and um she decided and then she told her parents that or she got
 like her grades or something

and her parents were very proud of her

and they she said that she wanted to go to she wanted to be she
 got sick

and then so she went to the doctor in the village

and she go and the doctor she wanted to know what she wanted she
 asked some questions

and he explained everything to her

and she she the more she she said on the film the more she wanted
 the more he told her the more she wanted to know

and um she just kept asking questions

and she asked her parents if she could go to

ok first she went and asked her science teacher what she should
 do

and science teacher said that she should um fight for her dream
 or something like that

and so she went and she told her parents that she wanted to
 become a doctor

and her parents said well ok but it's betraying the whatever it
 is the

    [tradition?]

yeah tradition

so but you try

so she went o she went... it took her a while it took her a long

time to get her parents to let her go

her science teacher talked to them

her grandfather said it was hi he highly disagreed with it

he didn't want her to do it

and um so ev she decided she went

and she was a stranger

and all her friends and everybody was kind of like OK you know

and so then she got accepted and by the people her friends

and she went her brother had to take her to school and anyhow
because her

and then it was after that her parents well they said everybody
in the town that disagrees and you shouldn't go up there any
more

so her parents said she couldn't go any more

her parents said it was up to her

but her uncle called off the engagement because he didn't want
that

he had to keep his families name in mind too

so then after that she went ahead and went to school

and a couple of days after she decided she was gonna go ahead and
and go to school a per um she heard these little kids crying out

and he this one little boy had cut his leg really had hurt
hisself really bad

and she knew exactly what to do even though she didn't have much
training

and she took the boy she took that white thing that she had
wrapped around her head and wrapped it around his leg and fixed
his leg where he could take it where she could take him home

and she carried him back to the village back to his house

and um she decided then that she was going to go ahead and be a
 doctor

S1 SPOKEN OPINION

I think . . I don't like nursing homes

my mom used to work in one

and I don't like 'em

they're gross places anyway

I wouldn't put anybody in there

even if I had to I wouldn't

I would find like some I would probably keep them at home and
 like have somebody like come check on them for me

like if I worked or something have somebody come and check on
 them

but if like surely somebody in like your sisters or your brothers
 or your aunts or uncles or cousins or somebody could come ch
 or somebody else related to you could take care of them

like when you're gone or something

and it probably would be cheaper for them because nursing homes
 are very expensive anyway

and it would probably be cheaper for them to pay you

but it you shouldn't you shouldn't um you shouldn't need to be
 payed for taking care of your family I mean you know anyway

     [family is family]

yes no matter what

it's like   I don't know

I just don't like those places

S1 WRITTEN DESERT

The darset movie was vary intersting

The movie talked about the weather

the weather is vary hot in the deaseret

#
it talked about how the stormes caused flash fluds becuse the

 ground is two hard to asorb water

how storms started over the ocean

#
The next thing there movie talked about was plants in the deasret

it said plants was the base two life to keep evething alive

ther aren't maney kinds of plants in the darʉɛ

Mostly caustuses and little treese

#
Another thing is animals

the animals keep the plants alive

They also have to be well adoped to the hot climet

the movie talked about the food chine

it is were sonething eats somethin and gose om down the line

it talked about the deasert wather

There is wather in the cayom and oywayses seomesles rivers and
 under ground rivers

#
I like the deasert

know this makes me want to go stay in the deasert for a wiel

S1 WRITTEN AMIRA

Amira is 14

She starts school

She likes school

Exaspliey science

her uncle and father deuses her engament with Monir

She got sick

So she went to the docter

the docter explaned things to her

the more he told her the more she wanted to know

in her spare time she started to go to the clince

at first she watched the docter and nurse

then she was giving small taks

she desiced she wanted to become a docter

She asked her scince tacher what she should do

her scinece teacher said you should go to the city to go to
 school

She tells her parents this but her parents disagree

She aske a lady that worked with the women

she said fight for your dream

She talked to her parents agem

her since teacher eveven talked to them

thay fimly let her go as long as her brother took and brough her
 back from school

After a will the people disagreed with what she was doing

her uncal and father talked agem

her uncle said if you don't make her stop I will call the
 engament off

the dishem was her's eather get mareed or become a docter

She desided to becone a docter

the uncle called off the weadding

She went to school

her cousen got mared to somelase

She was happy for them

A couple of days after the weading some boys were in the olvie goves

She herd the call for help

a boy was badly hert

She emerdry knew what to do

She bandged him with her head scarfe and took him to his house

right then she knew she had to becom a docter

S1 WRITTEN OPINION

I think the grovement should be more strict on how thay pay for nurseing homes

I'v been in some of them

I don't like them

I think there familys should thoke care of them

it proubly would be cheeper for the grovent to pay for the family to care for them

after all family is family

if one person can't take care of the ealdy I'm shere somone ealse in the family could

if my mom could not take care of herself I would not put her in a nursing home cecuse I hate them

I would find someone elas to take care of her or any of my grandparents

becuse some of the nurses are hateful and down right mean to the
 people in the nurseing homes

I don't think you should pay piople to take care of there earlder
 family members

thay would be like paying you for loveing and caring for you
 family

I wish more people would not put eledly people in nursing homes

I know people how fill the same way

and when I'm unable to take care of myself I would want a
 flamliny member take care of me

if you love and car for them enough you would not put you family
 members in a nursing home no mader how good thay are

if you pay people to take care of them then eveybody will want to
 find someone to take care of and won't use the money to take
 care of the eleadly people

then your going to get drug adices and alcoler wanting money fore
 for the earldy family

and you know what ther going to use it for

then your paying for people's drugs

and that wouldn't be worht it

so you see my pont

if you pay family to take care of them then you never know what
 they will do with the money

then your going to get drugeg and alcholes taking care of old
 people

and in a nursing home you neve know what to expect

so what every you do yore going to have problems

N1 SPOKEN DESERT

the American deserts are in New Mexico Arizona Utah Wyoming and
 California

and see mo most of the time the desert appears to be lifeless or
 dry vast lands

and but it's really not because because there's lots of animals
 and plants and other life forms there

and the most popular desert plant is probably the cactus

and there's it's covered with prickly spines to keep the
 predators away from eating the moist area inside

and but there's a couple animals that can still get inside the
 cactuses

and um let's see and there's lots of food chains in the desert

and most of the plants have a tap root system

and most of the time it doesn't rain alot in the desert

but when it does the rain's usually very heavy

and and let me think and there can there's see every there can
 be a rain shower a real heavy rain shower either in the winter
 or summer or any season

they're really seasonal

and um there's um there's things called rain let's see rain
 shadows

and it's like dry masses of land combining

and most of the animals in the desert dig holes or burrows or
 get under the shade to keep cool 'cause it's really hot

that's it i guess

     [anything else?]

um ....

oh one thing when when it rains a lot the plants soak the
 moisture and then and the animals can capture it I guess and
 drink it up

and and it um and then when it evaporates from the plants they
 need they're praying for more rain so they can get moisture

that's all i can think of

N1 SPOKEN AMIRA

um Amira?

    [uh-huh]

her father had a good education

and he wanted her to get a good education

so and she was a very good student

and and she learned well

and um and her teach and she was the best student in her science
 class i think it was

and and pretty soon oh and then and pretty soon her uncle came
 to her house

and he was talking to her parents about her marriage to her
 uncle's son

and um and she was pretty excited about that i guess

and then pretty soon she got kinda sick though

and so she went to the clinic

and the doctors treated her

and after she became well she liked to go to the clinic to help
 o help out the doctors with the sick kids

and um and then she decided pretty soon she would like to
 become a doctor

and she tol she told her parents

but they are but they um disapproved because because it wouldn't
 follow their traditions

and and her grandfather didn't like it because he ss it would
 bring shame to the family

and and her un her uncle said that pretty well after a while her
 uncle said that um if she did became become a doctor she
 wouldn't be able to marry _____because he didn't want her to

and but anyway she went she went to the school in the city to
 train to become a doctor

and most of the kids there she was the only Druze person or
 whatever there

and most of the people there didn't know her and didn't like
 her at first

but she gained their respect pretty soon

and and um everyone in the village um began turning away from
 her family because because they didn't they didn't feel like it
 was good for her to become a doctor because

but then her dad or her parents said that it was her decision if
 she did become a doctor

that was up to her because they they

they would think it was pretty neat if she was the first woman
 doctor or of the Druze people

and then came her cousin's wedding

and she kind of envied her cousin because she was real happy
 when she got married

and so she and so then she said that she didn't want to be a
 doctor any more because she wanted to get married

and then and then but then she was working in the fields the
 other day

and then she saw some kids that were hurt

and then she decided she wanted to become a doctor again because
 she helped the kids

and then but then she couldn't make up her mind and that's the
 end

N1 SPOKEN OPINION

      [what do you think about that? Any opinions about it?]

well I think um that um..... that there should be like more homes
 or something

I mean not exactly nursing homes but just places where like
 people volunteer to just stay with like stay with

er also like you could have your grandparents or whoever in your
 in your home while your working

and you could like hire people to stay with them or something

well because that's like with my grandparents

that's what they do with my grandparents

and I think that would be easier just to do that

>   [it's hard because i think families want to be with their
>   elderly parents or grandparents but sometimes they just
>   can't do that and that's really hard]

N1 WRITTEN DESERT

Most people think of deserts as being dry hot areas of wasteland

That is partly true

but there are alot of other things that happen in deserts

#
There are many lifeforms such as plants and animals

The most popular plant in the desert would be the cactus

The cactus has long prickly spines that help protect it from
several animals that might come to get to the water inside

There is one exception -

the desert pig can get to the water in the cactus without hurting
himself from the spines

The cactus can be very useful

#
There are a big number of animals that live in the desert

To name a few - there are skunks, turtles, birds, snakes, frogs,
scorpions

There are also many insects: bees, flies, and other creatures,
like tarantulas

The bees pollinate on lots of flowers in the desert

There are many food chains in the desert

For example, the fly gets eaten by the frog, who gets eaten by the weasel, who gets eaten by a big lizard - and on and on

The top members of the food chains are the scavengers, who feed on dead animals

#
There is not always abundant rainfall in the desert

but when it does rain, it rains very heavily

There is usually seasonal showers

Even in the winter, there can be rainshowers

#
It is very hot in the desert

In order for the animals and insects to deep cool, they have to dig holes or burrows or just make their home in the shade

Most insects hide from the heat under rocks

Holes that are dug are usually 20% cooler if you're under there than if you're not

Mostly small animals such as spiders dig these holes

#
The deserts located in North America are mostly in California,

New Mexico, Arizona, Utah, Whoming, and Northern parts of Mexico

There are also a number of deserts in South America and Africa.

N1 WRITTEN AMIRA

Most of the Druze people were very will educated but especially Amira's family

Amira did very well in school

She was the best student in her science class

She also had many friends,

and she wore a scarf around her head that showed she had entered womanhood

#
One day Amira's uncle came over to discuss her marriage to Monir to
her parents

It was a custom that the Druze people married within the family

Amira's father didn't want her to get married yet because she was
too young

But her uncle said girls her age should be married already

Amira liked Monir,

but she wasn't ready to be a wife yet

#
One day later Amira got sick and went to the local clinic

The doctors treated her very well

When Amira got better, she spent her time at the clinic watching the
doctors and helping out the nurses

She was fascinated with the world of medicine

From all the hours helping in the clinic, Amira decided she
wanted to become a doctor

#
She talked to her science teacher

and he told her she could very well become a doctor

He told her to study at the city school

#
Amira talked to her family about it

Her grandfather strongly disapproved

He said it would go against the Druze's traditions

But he finally relented when her father said how proud they'd be
if she was the first woman doctor of the Druze people

#
At first, the people at the city school didn't talk to Amira
because she was different

but then she gained their respect

#
Everyone in the village was turning against Amira and her family

Her uncle said that if Amira becomes a doctor, Monir would not marry her

#
Amira said she would not give up her studies

But at her cousin's wedding, she envied here for her happiness

Amira wanted to get married now

#
When she was working in the corn fields a few days later, she saw a boy that was badly hurt

Amira wrapped her scarf around his bleeding leg and carried him home

She decided she could be a very good doctor

But still she was undecided

N1 WRITTEN OPINION

This is or can be a very serious issue in America at this time

#
If this concerns families where there's kids and their parents trying to care for the elderly members of the family they could do some things

But the kids should be a good enough age to where they can do

stuff to help the elderly

During the day the parents could hire someone to help the elderly relatives if they're staying in their families' home

They could help them with breakfast and lunch and help them take baths, etc.

Then, when the kids got home from school, they could take over and help their grandparents or whoever they were caring for

Their parents could get home from work and make dinner, things like that

If this is too complicated, I think they should make places in hospitals (somewhat like a nursing home, but not exactly) where they could stay

and there could be volunteers that could help them

And this could be convenient if they needed medical care

Then on the weekends or afternoons when the parents aren't working, the elderly people could go home to stay just to get away from the hospital some

#
I also think there should be some kind of a donation to help the nursing homes or businesses that help the elderly

S2 SPOKEN DESERT

it showed different kinds of animals and like a rabbit

and it showed like this snake eating a rat a dead rat

and it showed I forgot what they called it you know those eagles they call like scavenger animal or something that go around looking for dead animals

and they showed what else did they show

[long wait]

and they about the different like the different sh in the middle part of it they said they showed different parts of the water like different water falls different sized water falls

and when it rains and stuff the plants have more moisture

and the grounds they can grow and have water and stuff the cactuses

and what else um I can't remember

it was just mainly um most of the parts they didn't even talk

and let me think

   [what else can you remember specifically?]

oh yeah um where um bird they bird can make a nest in the cactus
 so other animals can't get up into the um get into the nest and
 get her little babies and eggs and stuff

and so it makes 'em secure

and it showed it was really mainly all like just i mean just
 mainly it showed everything over and over but different things

    [any more specific things you can tell me about?]

I can remember the pictures

but I just can't remember what they're saying

[long wait]

I guess that's mainly all

S2 SPOKEN AMIRA

so she went ahead

and she went to school

and she was learning and everything

then she learned she went to school

and then she her she come home begging her parents to go to high
 school come home begging her parents to go to high school

they finally let her

and then all the kids were making fun of her

and they looked at her like they don't like her and all that
 stuff

and then until she finally started meeting them and stuff

and they were real nice to her

and her parents told her um I think they told her that she had to
 quit or something

she um didn't have any mon she needed money or something

so she started working I think it was at a clothing factory or
 something

and she sta she started getting money and stuff

and then she went to doctor school

and um her aunt got married her aunt got married

and um oh yeah her aunt got married and they went to all these
 different dances and stuff

and she sat there and watched her aunt

and then um she was hanging out clothes

and she was reading a book and stuff before that before the
 wedding

and then the wedding

and then she was out hanging clothes up I think it was

no she was picking food or something

and she heard some kids crying for help

so she started running and looking for 'em started running and
 looking for 'em

and um she found this kid goes I can't understand what they're
 saying 'cause they're talking another language

and so the she ran over there and he

and this little boy was full of cuts and stuff

and she took that thing off her head you know that they wear on
 their head

and she took it off

and she put it on his leg

and she carried him I guess um back to the um village or whatev
 whatever they call it

and some guy came up and took him

and she left

and then she got she was trying to decide whether she should get
 married or go to doctor school

but what I couldn't understand is why why couldn't she just go to doctor school and then get married?

     [I don't know why do you think she was worried about getting married how did her family feel about her going to school and]

well her parents are I think her parents really didn't want her to get married

and well she had to earn her money to go to school her money she wanted to go to school

but I don't know I don't know

I just I think her parents da I think her parents wanted her to go to school wanted her to be a doctor but just wanted her to have money or something

and um {wait}

I'm trying to remember. . . .

it seems like she had to do a lot of work

'cause in most of the in most of the movie in most of the film she was always working

and then do you know ok she was she went in there was that big old brown door you know

she looked in it

and people would stare at her

and she would close it

she'd look in there again

why was she doing that?

     [I don't know]

I can't figure it out

I couldn't figure that out

S2 SPOKEN OPINION

I think see my grandpa was 90

and they put him in a nursing home

and I don't think it was right 'cause I would've gone down there

and I would of helped him

I would of fed him and stuff

but he was ge he was like he had cancer in his stomach

and they took it out

they took him to the hospital and he took it they took his
  stomach out and got the cancer out

and then they thought he had it in his brain and die

and they put him in a nursing home and I

nobody wanted him to be in a nursing home because then they
  treated him wrong and everything

I think nursing homes are mean

but I would like I already told my grandma I'd come there

my mom even said she would help when she wasn't working

and me and my cousin she's sixteen now and I'm what thirteen and
  we told my grandma that we'd go there

and we'd help him take baths my grandpa

we'd feed him and make him lunch and stuff

but she went ahead and put him in a nursing home

but I don't think it's right

I don't think you should put 'em in a nursing home because I mean
  they don't treat 'em right there

I mean they make I mean when my grandpa went there they made like
  they made him eat they made sure he ate everything on the plate

and he would like eat it

and then he'd throw it up cause he couldn't digest it cause he
 didn't have a stomach

so it had to go down to his intestine

and he had to have like all liquids

it was really gross

        [say if a family couldn't look after their family member you
know it's a real problem now what other ways do you think we could
work this problem out?]

I think they could I don't know they could have like let 'em live
 at their home and not have to be in a nursing home and make a
 nurse come to the house and fix their lunch and stuff

they don't have to be in a nursing home

        [what other ideas do you have?]

that's really all

        [what if they couldn't afford to have a nurse come how do you
think they could deal with it then?]

maybe they could ask one of the family members that don't work or
 something

or ask them if they would like take time up and help whoever the
 family member is the grandpa

if they could like help the grandpa when they don't work when
 they work when they don't work

and um when the person doesn't work ask the person they could um
 help the grandpa and then

if I was gonna ask somebody I'd ask them while I was working if
 they could help the gr my grandpa

and then when I'm not working they can just they can go and do
 whatever they want to

and then I can help him

S2 WRITTEN DESERT

At the first of it, it showed running water and catuses

It showed the scavenger animals like hawk looking for dead
animals

A snake eating a rat or a mouse or some big animal

Birds and other flying animals how they nest in catus

the make a pretty big nest so no animal can get up there and eat
 there animals

The thorns protect the babies

If an animal was going to try to get up there it would get hurt
because of thorns poking it

When plants start blooming they sort of attrack animals such as
bees or somthing like that

The reason it attracks them is because they have pollen for the
bee's or honey in the flowers

so they want to try to get to the flower and get what ever they
need. (pollen, honey...)

When it rains how plants get moistures the plant such as gets the
water to drink and water to grow and get big

A plant can be fifteen feet tall and only be two years old

Even if its three feet tall it can be thirty years old

It said it dosen't really matter the size or the age

It showed how differnt sizes of water falls can flood a river or
stream or whatever

It showed big water fall small water falls all differnt sizes of
waters falls

It showed little ants on rock

when water flooded the ants were trying not to drownd in the
water

They were barely on a part of the park

there were a few in the water just about to drowned

S2 WRITTEN AMIRA

At first she really couldn't decide to go to school for a doctor or get married

So she went to school

and when she got out she begged and begged her parents let her go

At first she really excited

None of people at school really didn't like her until she started partispating in class

then she meet friends

She would get on the bus and come back to school

Her parents made her work to go to school because she really didn't have a lot of money to go to school

so she worked in a clothing factory and made clothes

She seemed to me she did a lot of work

in most of the story she was either hanging clothes up or she was picking food of some sort

She watched her aunt get married

Her aunt went to watch these guys dance and things

One day she was working

and she heard this kid crying for help

So she went over to were she heard the boy crying

and this boy told her somthing in there language

So she followed the boy to the other boy that was hurt

He had cuts all over his legs

So she took the thing off of her head and put it on the boys leg and picked him up and took him to the village

This guy took the boy and took him to get help or somthing

Sort of at the front her mom and dad and uncle was talking to the guy she wanted to marry

I really not sure what they said

Then at the end of the film she goes should I quit school or go and get married

the end

S2 WRITTEN OPINION

I think that people should not put the grandpa's in nursing homes or whoever

I think the people at the nursing homes who work there some of the are gentle but some of them are mean

I think the family member whoever it is should give there time up to help who ever sort it is

Help them take a bath, change clothes, make there lunch and help them with anything else they need

The eldery really cannot help if they are sick or has cancer

but that does not mean they have to be put in a nursing home

When my grandpa was in the nursing home I went to see him two or three times a day no matter what even if I had a softball game

I would go in the moring and help him eat breakfast

sometimes, somtimes I would go in at lunch and help him or even at supper

I would go and help it

I know my grandpa liked me coming up to see him

Even if he was on the other side of town I still would come and see him

I am his only great grand child that would really take the time to come up and see him

He would give me a kiss and hug everytime before I would leave

The only reason we moved to Stillwater was because my grandpa died and there was no other reason for us to leave there in Okeene

I think the people at the nuring homes are getting paid

So why don't they be nicer

S3 SPOKEN DESERT

it said these uh animals uh had to adapt that way

and that they uh drank lots of water when they could

and that the plants had little leaves

and they protected their water supply

and that when it rained they got a whole bunch of water

and the roots went everywhere

and they were spread far apart

and the roots went way down into the ground at thirty meters

or they went out to the sides

and all these animals would eat other animals

and they'd use home made um they'd use holes to hide in during
the day   cause it may be 25 degrees under ground than it is on
top soil

um that when it rains it washes away a whole bunch cause the uh
soil isn't ready to take in that much water

um let's see

oh um the cactuses they would uh they had those thorns so that
the uh animals wouldn't eat it cause they don't want to get
pricked

but there was the a desert pig that would eat 'em

and a uh tree that would be a uh cactus that could be three or
four inches and be 10 20 years old

and a one that's about a {   } could be 50 years old or
something like that

and the desert dove put his uh um eggs laid its eggs in its nest in
a cactus so the snakes and stuff wouldn't eat it

um i can't remember anything else

it was very boring

oh yeah and it was the third edition

   [is that all you can remember?]

oh yeah and that uh when it rained it would wash away all the
stuff

that's how they got the grand canyon and stuff

and that if it rained it wouldn't just sprinkle

it would rain real hard

and um animals would eat other animals

and then the oh ok

see uh like the uh snakes would eat the uh rats and mice and bugs

and then the uh fox would eat the snake

and then something would kill the fox

and the vulture would come and eat it

and everything would eat everything else if it was smaller than
them

let's ok that's all i can think of

S3 SPOKEN AMIRA

ok this girl she wanted to be a doctor

and it was against there tradition

and her uncle's son was gonna be her husband

and he and the uncle came to the parents

and she said it w and they said it wasn't time yet

and then uh she kept wanting to be a doctor

and she went through high school in this uh small village

and these people were a real bore

and then and then she finally school got out

and she had to a help pick the cotton not cotton wheat

and then she picked the wheat

and then she started begging her parents to send her to the
better school in the big city

and then she goes to work

and then finally her parents say she can go

and she goes

and learns this stuff

and then she gets there

and the first thing she sees is a mercedes

and these people are poor right [sarcastic tone]

and then um uh so then this day she's out working in the field

and she hears these kids crying

so she runs over to see what's going on

and she uh ties this thing around her leg to stop it from
bleeding

then she carries the kid back to town

and then um then before that her uh dad asked her if she wanted
to get married or if she wanted to be a doctor
and she said she wanted to be a doctor

so she uh so her cousin married this other person

and she was happy

and then um and then then she helped that person

then what'd she do next

and then um i don't remember the rest

    [how did it end or was there anything else?]

well when she helped that kid that was it

and um that's all i can remember

[was there any conclusion to it?]

oh yeah the t and the whole town rejected her family cause they went against the tradition

and then so then once she helped that kid they started liking her family

S3 SPOKEN OPINION

[what do you think?]

i don't know

i think that um now they're starting out in like oklahoma city

and it happens here

they're sending people nurses to go visit these people at their homes

and um if they keep that up that'll keep costs down

they see 'em once or twice a day

****

[to check up on 'em]

to check up on 'em

that or maybe somebody's next door neighbor can go over and see how they're doing

[do you have any relatives that are in nursing homes or that need care?]

well not really

[do you have grandparents that are getting old]

[what do you think your parents will do when your grandparents get too old?]

well my um aunt lives with my grandma and my grandpa and her 25
year old maniac kid who's totalled three cars

{   }live in Illinois

my other grandma lives in town

and she's only a 68 years old

        [do you think people could prepare for this problem while
they're still young?]

um get medicare or whatever you call it on TV

        [an insurance?]

yeah get insurance so they can pay their bill

        [ok what do you think about the fear that some people have
about the governments money running out]

Oh the money won't run out

{   }

I mean if they'd if they'd watch what their doing

they're wasting lots of money paying this legistlature going to
special sessions

that's really not worth it

and they'd a get some how to catch these criminals

and they need another prison

but if they can um put prison peoples to work like a making
liscence plates and cleaning up highways

we'd have to a pay people to do that

then they wouldn't be using up their money

and they can save money

and then they can use the money they save

        [so you think if they um save they money other areas more then
they can...ok]

[so you think this is a more important thing than some of those other things]

yeah

S3 WRITTEN DESERT

The deasert is a vido that said animale live in a food chain

The animals eat in the morning and evening and sleep or do house word durning the day

Becouse it is 20 deg colder unde ground they stay in cave or in old animals homes

The animals have to have water to live

So the lived in or nere a nice water suply or it it

like the dove that nested in the cauctics so the animale would not eat the eggs becouse of the cacutises thornes

#
The causetics had big roots that were 30 metter deep or out to get water

they would not have leaves or small ones

becous the sun would dry them out they all ways had a place for water

a small cautics may be only 3-6 inchers and be 5-10 years old

becous of the little rain they get the cauctiics are spreed far apart so the can get water when it rains

only the dessert pig eats the cactus

and when it does you can tell becouse of the teeth marks

the cacutisc use the thorn to protectk the interlayer and water so that they can live with little water for a long time

#
when it rains it pours and floods

becouse the ground can't obsery that much water at one time

So it makes run off and streem and kill animals in the prosess

It doesn't take long to make a canyon in a guvey raine storm

That how we got the grand canyon, platoes, natural brigiss and momunits in monmnet vally

S3 WRITTEN AMIRA

This story was about a girl who wanted to be a docther

But it was aginst the terdition

So when she could go to high-school she did

and her family was know for the smarts

so she was one of the best student in the class

and she start to watch the docter in her spare time

and after a pirid of time she got to help him and his assisted

if she would become a docter it would be aginst there tridition and a new thing becouse there were only male docters

So she started to beg her fater to let her go to a big town high school

So finly she could go

So she went to work in the cloth factory to earn mony for the tewisition

So when she got on the bus to go she was very happy

so later she came home

and he husban to bes fater broke off the engament

So she said fine

and her husban to be got married

and she was glad

she went home after about one year

And the townspeople didn't like her family

And one day when whe was working in the field she herd some kid crying

so she went to help

and her family was now liked by the townspeople

S3 WRITTEN OPINION

When the old people get old and can't mainetain for themselves they schould have a person come ceach on them 1 or 2 a day as needed

and the stores schould have people take food to the eledery people and talk with then

the big problem is that they get lonily

also siniors sitizens schod get a 10-15% off all percies

And the goverment schould give thm more money

But if the goverment is to run out of money its becouse they are keeping so many people alive on death row like Charles Troy

Colaman who was to die on May 12 1986

and he is still in the jail ALIVE

and at $10.00 dollars a day for food is 13600.00 in four years

Plus the outhe 12 people on death row they wont kill

But they kill elarry purson

plus they schold make speeding tickent much higher

And the fine for parking in a handycapt place schould be 100 dollars not 25 dollars becous the cop get to keep 15 of that

Also they schould try to keep old people out of home becouse they

don't get to go out at all

If the have to be place in a home the goverment schould have to try to get volinteers to work theire insted of peopl haveing to get paid

Plus mimimid waige schould go down becous it going up just make
prices go up so the govermen has to pay more

N2 SPOKEN DESERT

ok um water is like really scarce there

and um um one of the plants um was like in tall stalks

and it expands to absorb water

and um sometimes when it when it rains the water comes down so
 heavily that um it can't get soaked up so everybody gets drowned

um and it showed some of the uh animals and stuff

and they were like the reptiles and the badger and skunk and
 stuff and some of the birds

um it showed some waterfalls that were really pretty um

and it it showed that most of our deserts are in the Southwestern
 Oklahoma um United States um

and um that um when the cool the reason there are deserts is
 because of like the mountains

so when the cool stuff comes the mountain sort of blocks it

and going down the mountains the cool air is warmed um

that's just about the basics

     [anything more about anything more about plants?]

um

     [or animals]

um it talked about the food chain

and bigger animals just eat the smaller animals

um and um like the badger and skunks they dig for food

some of the smaller animals they live like underneath rocks that
 are on the ground

um some live in caves natural caves

um um there's a root system in the plants where some of it they
 just try and get the roots down as far as they can go to get
 water

um that's about it

    [ok think for a second and see if there's anything else]
it talked about um like where like the equators are located is
 well most of the desert areas are on the equator

um I can't think of anything

I've said pretty much most of it

that's about it

    [is that it

N2 SPOKEN AMIRA

It was about this girl Amira who wanted to become a doctor

but it was against her tradition

and everybody was against her doing it

and um um but she she kept on

and um she went on to become a doctor

    [ok tell me the story as it goes along like cause I havn't seen
all of it so tell the story from beginning to end]

first she went she she she'd gone to school for a while

but she realized that she really liked it

and then one day and then um then her um uncle came and said that
 she had to get married

and um then she got sick and realized that she really did like
doctoring and that she might want to become a doctor

so she talked to her science teacher who encouraged her and gave her
all these books to study about

and um and then she asked her parents if she could go to the city to
study some more

and um her uncle was against it

and but her parents decided to let her go

and she went

and she really liked it

and um but then the whole village was against her because she had
 decided to become a doctor

and that was against their tradition

and um and and then she lost her fiance because her uncle didn't
 want her his son being married to um a well-educated girl

and um and finally she one day um after her cousins wedding she
 heard this cry for help

and it was a boy who'd cut his leg

and she decided that she really liked wanted to become a doctor

[why did she decide that she wanted to become a doctor?]

because um um she liked medicine and she liked helping other
 people

[uh ok anything else]

no not really

N2 OPINION SPOKEN

[what do you think should be done could be done to help the
problem?]

well I think in a way they're doing ok

I really don't have any family members in a nursing home any more

um I know when my great grandma was there um my grandma always
 came to visit her and did her clothing and stuff

and um I think my grandma did a better job than the nursing home
 itself did

nursing homes are good

and some families they just can't care for 'em

but um I think nursing homes should put better nurses into it

um I know people really don't like cleaning up after people

but it's there job

and they chose it

um it's ok I guess

    [ok so you think nursing homes are ok]
    [what if a family couldn't afford to put there there family

member in a home?]

that's sort of hard

you really can't turn 'em out

um the governments doing a good job paying for it and helping it
 out

um

    [how else do you think people could handle it if they couldn't
have someone in a nursing home?]

hire a nurse

    [uh-huh]

um that's about it

    [if they couldn't afford to hire a nurse then what could they
do?]

there's really no not much of a choice

um there's really only about three hiring a nurse, putting them
 in a nursing home or having the family take care of them

I don't know

    [what do you think about you know some people are saying that
the government's money is going to run out because all the]

how can it run out when we keep on paying them

[social security?]
yea

[um well because the elderly population is getting bigger and bigger and so we're paying money in but our age group there aren't as many of us as there are older people so that's their idea you know that's why people get upset about it that there's not gonna be enough money when we're ready to go on social security]

I mean there will always be money there

there just may not be enough to go all the way around

they'd probably just have to stretch it quite a bit

but I think there will always be money there

[what would you do if when your parents get to where they can't look after themselves?]

I'd try my best to keep them at home

but if there was like medical reasons then that would be the time to send them to a nursing home

and knowing my parents they're pretty much able to care for themselves and stuff

I could they could always live in their own house

I could check on them every week of so

but other I mean they'd be ok by themselves um unless it was medical

and that's when they'd have to go to a nursing home or someplace like a home with you know where they can live by themselves but still have nurses around to help them out

N2 WRITTEN DESERT

When first looking at a desert you think of nothing but harsh land that has no life

But many things, sush as birds, replites, rodents and mammals live their

They are able to eat and survive by a thing knowna\ as a food chain

this is where like a mouse would eat a bug, a snake would eat a mouse and a bird would eat a snake

#
Plants, like aniamals, must adapt to the entence heat and the small amout of rain

cactuses must store water to survive

but to keep other aniamals from taking their mostiure they have sharp like quills

some plants use the root system to find water

they do this by digging their roots in the ground up to 13 meters

#
water is so scarce that a small plant may only be ten years old

when a plant a few feet in hieght may be as old as fifty years.

#
when rain does come it comes in short rapid falls

the rain usually falls so hard that the ground is unable to soak it all up

this causes flash floods, drown out many homes

N2 WRITTEN AMIRA
#
Amira, a girl of a Drew village, who was very acustom to their ways and traditions, was raised to become a wiffe and mother

Her father who had some education wished and wanted his children to have the same benefits

Amira enjoyed her lessons and was a very good student

#
One day her uncle came and said that it would soon be time for Amira to get married

Since Amira was promised to her Uncle;s son, she had no choice

\#
Amira became sick and was taken to the village clinic were she
 became intrested in medicane

When she became better Amira spent all her free time at the
 clinic

At first she only watched the doctor,

but soon she was put to small tasks

\#
She soon talked to her science teacher who encourage her to ask
 her parents to send her to the city for better schooling

\#
Her uncle refused to let her saying that a wife and mother needed
 no education

\#
Amira begged and even her teacher came to talk to father

and when her brother told them she would acompany her back and
 forth, she was able to go

\#
Amira was the only Drew girl in the school and was very frighted
 at first

But soon she was able to have friends and enjoyed her studies
 greatly

\#
Her uncle was shocked along with the rest of the village people

and (she) was given a choice of marrige or doctoring

Amira made her choice
and the engagement was broken

\#
When she atended her cousins wedding she felt juy that she
 haden't felt for a long time and wondered if it would be that
 bad to marry

\#
One day she heard a cry for help

She came running and found that a boy had hurt his leg badly

Even though she had not been trained well, she suprisingly knew
 exactly what to do!

#
Still she was confused

What will she do?

N2 WRITTEN OPINION

#
What could be done about the problem of how to care for the
 elderly?

Will the population encrease of ages 65 or old people worring
 about if the goverment will be able to pay for those who are not
 able and families not able to to care for them

what do we do?

#
Their are some families who are unable to pay for the care of
 there elders

The govermnent does their best,

but what if the money runs out?

Some money will always be there

It may have to be stretged

but it will be there

#
Some families are able to care for the elderly, but just may not
 have time

and they might have medical needs

Nursing homes work well here

But still some workers don't take pride in what their doing

so it make it hard for them to be trusted

#
This problem may never be solved

and there is no perfect solution

But we can help

N3 SPOKEN DESERT

ok well it was carved by rainfall {   }

before it was by water that had been cut

it cut through all the rocks and stuff

so and it has like now it has like rainfall like maybe three
 times a year

and all the animals had to ada have to adapt to most of the heat
 and not very much um and not very much water

and there are um what happens because there's no rainful is
 because the mountains and all the like moisture and stuff cross
 the mountains

mountains cool air and all that you know takes it

and it all falls like right on the mountains or right around the
 mountains

so when the clouds you know get over the mountains and right to
 that desert area there's no water left to rainfall in and stuff

so um there are there and every once in a while you know they'll
 have water holes and stuff where plants'll grow around it

and most of the plants will have roots that go deep in the soil
 or they'll spread out over a wide area

and cactuses there's a bunch of kinds that they have needles so
 that the animals won't like try to get all the moisture out of
 them and stuff

like holl and some cactuses are hollow

and they just have like a skeleton

and they have like um skin around it that so the whole thing
 inside can fill with water and stuff

and um the animals most animals during the day will find they'll
go in holes they'll dig holes or go in caves and um hangover the
hangov the earth hangs over and stuff to get into to the shade
and stuff

and usually the holes will be alot cooler like 20 they could be
20 like a 3 inch hole could be 20 degrees difference down the
bottom of the hole than on the surface

that's a lot

and um and there's like a complete food chain where animals feed
on insects

and then animals feed on the the meat eaters feed on the the
bigger meat eaters feed on like the spiders that eat the insects
and stuff

and then they'll like have wolves or something eat the um thing

and then they'll have scavengers is at the top

and so it produces all over again

and um let's see that's about all I can remember

    [anything else?]

    [think for a second to remember anything else]

nope

N3 SPOKEN AMIRA

well um this girl how do you say her name

    [amira]

Amira wanted she was in school and stuff

and when she went to the the medical center 'cause she was sick
she got interested in medicine and stuff

so when um so when she went back to school she started studying a
little bit more about medicine

she had started going to the ho I want to say hospital but it's
not what it's called I don't remember but it was like hospital
more often

and the doctor'd tell her what's going on

and she would start helping out a little bit like a nurse kinda

so and she was supposed to be married to her nephew I think
 cousin or nephew

and so when it so when she she started asking her parents if she
 could go to the cit the city and learn more about medicine
 'cause she had good grades in the school she ha was going to

so at first her parents wouldn't let her

but finally they said yeah you can

and when she was up there at first she didn't have any friends
 you know because she was like the only druze person up there

so when she went up there you know it took her about a couple of
 days but she finally started getting some friends and stuff

and she got a job in the factory sewing so she could pay for some
 of her um money you know for the school

and so when then she started going then her uncle said that he
 would cancel 'cause a bunch of the townspeople didn't like it
 cause you know she was not doing like her religion cause she was
 going off and doing going to school and trying to be a doctor

so um her uncle said he would cancel the marriage um

so um her family was saying it's up to her

and she said she wanted to go

wait let me think uh

she wanted to go back

but then once it got around town that you know she had cancelled
 the marriage and stuff people almost almost the whole town you
 know didn't like her

so um she at the end she was kinda deciding not to be when she
 was picking um she was out in the forest picking harvesting
 something

     [deciding not to be a doctor]

yeah she decided not to be a doctor

when she was out she was kinda deciding not to be

but when she was out in the field some kid got badly hurt

and she knew exactly what to do and stuff

so at the end she was saying maybe I could be a doctor and stuff

N3 SPOKEN OPINION

[so what do you think?]

well if I think if you wanted to have them in the home the
 government should pay the family to keep them in the home

but if you wanted to put them in the nursing home the government
 should pay the nursing home

so it could be either way you wanted to do

[can you think of any other way there might be to deal with the
problem? cause a lot of people want to look after their elderly
people]

that's what I mean

have the government pay the families have a pay a nurse to come
 stay all day or something instead of paying the nursing home

[ok i want you to think of other ways to take care of this
problem]

cheaper cheaper costs for the um homes nursing homes

the nursing homes could be cheaper

[ok]

or have the government run its own nursing home instead of having
 to pay for one to be I mean pay for people to go in em have

if you can't afford like say a gr um government has its own that

instead of like cause like nursing homes I think they charge a
 lot more than they really need you know for 'em

but the government or if they did it wouldn't be having to pay
 that extra because it'd be running its own

and all the people that couldn't afford to go in another one
 normal one could go to the government nursing home

     [ok]

N3 WRITTEN DESERT

The desert is a land area that has little percepation

It was formed by water that erotated most of the soil

The resen that there is little ran is because the mountains stop
most the rain when it goes over them

What it does is that the cold air hits the clouds and air front

the ran falls

so there's no more rain left

so the land drys out

and that forms a desert

#
The animal's have to adapt to the climate

Some of them dig holes

and others go in caves and under rocks during the hot days

When there is alot of rain fall the soil can't sock it all up

so they can drink that

but most of the time they fight with plants for the water

Some of them build there nests and homes in a prickly plant so
prediters don't atack them

but some can

Some of the animals can eat the cactes even though the thorns are
there

The volters are at the top of the food chain

and the plant are at the bottom

#
The plants are differnt and adapted too

Some of them have thorns

some have flowers

Most of them don't have flowers because they take up to much
neutiens and water to make

and after there made water evaperates from them

There rotes grow differnt to

they can grow realy far down

some have know to grow 30 meters down

and others grow spreading outward

They usly don't grow close togther because they would have to
fight for water

One kind has only like a skeleten and skin

so when there's a lot of rain fall it coltts it all and fills it up.

N3 WRITTEN AMIRA

The story of Amira's Choice is about this Druze girl named Amira

Amira was supost to marry her cussin named Manir

but she was going to school

Then one day when she was sick she got inrested in medicen

When the docter noticed that she was interested, he showed how
some of the stuff worked

and the more she learned the more she wanted to know

So she made good grades in school

and on her free time she helped at the clinec

Finaly she asked her parents if she could go to the city because
she wanted to go to high school there

After a long time they said "yes"

Then she went to the city

and at first she didn't have any friends

then she made a bunch!

She worked in a sowing factory to pay for some of the schooling

When she came home for a little time at home every body ignored her because she had broke their costum

Even the uncle said that he would cansel the weding

So her parents left the disheshon up to her

She said that she wanted to be a doctor

so she went back to school

Finaly her parents said that she better not be a docter and come home

At the end she is picking something in a field thinking she shuoldent be a docter

but she hears sombody yelling

and she finds a kid badly hurt

and she fixes him up

So at the end she thinks she can be a docter

N3 WRITTEN OPINION

The elderly people is a big problem in the U.S.

I think that the government should open it's own nursing home

The people that can aford to go to a normal nursing home can

and if you can't you can go to the government one

#
Another way is to have the government pays you if your family member is going to stay home

or if he/she goes to the nursing home have them pay the nursing home

#

Make the nursing homes lower their coast

#

The government could help pay for a small bullding to be built on

your house were you could deep all the medical suplise and the person

#

You could put money in a savings ackont so if the time comes you will have some money to help pay for the coasts

VITA \

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Candidate for the Degree of

Master of Art

Thesis: SENTENTIAL SUBORDINATION IN NORMAL AND SPECIFIC LANGUAGE IMPAIRED ADOLESCENTS: A COMPARISON OF CONTRIVED AND SPONTANEOUS ELICITATION

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