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Preface

In June 1972, I graduated from the University of California Los Angeles (UCLA) with a B.A. degree in philosophy, having also studied psychology. That autumn, instead of reading the works of Plato and Piaget, I began working as a teacher's assistant in a preschool program for low income families in Southern California. Whenever the speech-language pathologist came into the classroom to evaluate the children who spoke very little or whose speech was unclear or disfluent, I observed with great interest as I continued my duties of setting up for snack, cleaning paint brushes, organizing bookshelves, and creating seasonal bulletin boards. By the end of the school year, having had the opportunity to observe individual and small-group therapy sessions, I knew that I had found my calling—to become a speech-language pathologist and work with children.

Thus, I spent the summer of 1973 taking classes in communicative disorders at nearby California State University Long Beach (CSULB) where I read the works of scholars such as Roger Brown (1973), Noam Chomsky (1965), Mildred Berry (1969), and Mildred Templin (1957). Upon learning about the concept of spontaneous language sampling, I began tape-recording conversations with neighborhood children as they happily talked about story books, pets, and favorite activities. I then transcribed their samples by hand, laboriously calculating mean length of utterance (MLU) in words, and attempting to analyze their speech with an emerging program called *Developmental Sentence Scoring*, or DSS (Lee & Canter, 1971). After that summer, I entered the master's degree program at CSULB, confident in my choice of career.

After earning my M.A. degree in 1976, I began working as a speech-language pathologist in Southern California, first in a private clinic with preschool children, and later in a public school with young adolescents. During those years, I continued to learn about language development and disorders, reading books and articles and attending conferences. I also continued to record, transcribe, and analyze my clients' conversations. At the time, it was easy to find information on how to analyze the spoken language of young children. However, I was hard pressed to find solid guidance from textbooks, journals, or conferences that would help me to evaluate the spoken language of children over the age of 7 years. Although it was obvious to me that language development continued well beyond that point, little research had been published on later language development or on language disorders in older children. My work as a speech-language pathologist with adolescents was particularly heartbreaking.

For those young people, the years of struggling with a language disorder had taken their toll, negatively impacting their self-esteem, social development, and school success. Unfortunately, none of my students could read or write at grade level or speak with clarity, precision, or confidence. However, I believed that much could be done to help the students succeed, if more information were available from research on later language development.

In the spring of 1978, I was accepted into the doctoral program in speech-language pathology at Purdue University in West Lafayette, Indiana. As a doctoral student, my goal was to learn as much as possible about language development and language disorders in school-age children and adolescents. Since graduating from Purdue in 1982, I have been on the faculty in Communication Disorders and Sciences at the University of Oregon, where I have continued to learn about later language development and disorders, by conducting research projects in areas such as figurative language understanding, word learning, verbal reasoning, and spoken and written discourse.

This book on language sampling with adolescents is an effort to pull together some of my recent projects on discourse development, in an applied format. Its major purpose is to provide guidance for eliciting, transcribing, and analyzing conversational, narrative, expository, and persuasive discourse samples with students in grades 5 through 12 (ages 10–18 years). Suggestions are offered on how to use that information to promote students' language development. The book is written for speech-language pathologists who struggle, as I have, to make intervention relevant and effective for older students.

Speech-language pathologists who work in the schools often are called upon to evaluate the spoken and written language skills of adolescents, an activity that should include language sampling in order to learn how young people communicate in natural settings. This information then can be used to design intervention activities to assist students in meeting statewide academic standards and in helping them to excel at formal speaking and writing assignments in the classroom. Speech-language pathologists are ideally suited for conducting these activities because of the extensive training they receive in language development and disorders. However, language sampling with adolescents can be challenging. For example, speech-language pathologists often report that they are unfamiliar with language sampling tasks that are appropriate for adolescents; that they are unsure of how to encourage adolescents to talk; and that they have little understanding of how to analyze a sample, not knowing what to expect or what to do with the findings. In addition, they often report that they have difficulty performing linguistic analyses, such as identifying different types of words (e.g., particles versus prepositions; participles versus gerunds; finite versus nonfinite verbs), sentences (e.g., simple versus complex; complex versus compound), and clauses (e.g., main, relative, adverbial, nominal) and in calculating various units of measurement (e.g., clausal density, mean length of utterance, mean length of C-unit, mean length of T-unit).

This book addresses these and other issues and provides sets of exercises to enhance learning or review. It also offers suggestions for designing intervention goals and activities to promote adolescents' use of complex language. After reading this book and completing the exercises, speech-language pathologists should be able to elicit, transcribe, and analyze language samples with adolescents quite successfully. They should also know what to do with that information to plan meaningful, relevant, and engaging intervention activities for adolescents.

A Note to Instructors

When this book is used as a text for university courses in language assessment and intervention, it is suggested that students be assigned to read chapters from Part II: Grammar Review and Exercises, while they are reading chapters from Part I: Working with Adolescents. This would provide students the opportunity to review grammar in manageable chunks before they are expected to apply the information to analyze a language sample. Note that the chapters in Part II build upon each other. For example, by covering word types (e.g., noun, verbs, adjectives in Chapter 9) before clause types (e.g., nominal, adverbial, relative in Chapter 10), students will understand how different types of words are similar to different types of clauses (e.g., nouns and nominal clauses; adjectives and relative clauses). Moreover, by covering clause types (main, coordinate, subordinate) before sentence types (simple, compound, complex) in Chapter 11, they will understand how the type of sentence is determined by the type(s) of clause(s) it contains. Finally, by covering sentence types before units of measurement (Chapter 12), students will be able to distinguish between complete and incomplete C-units and T-units and to determine whether a "run on" sentence is actually one, two, or three C-units or T-units.

Thus, it is suggested that during the first half of a semester, students be assigned to read the chapters in this sequence: 1 and 9, 2 and 10, 3 and 11, and 4 and 12. It is also recommended that class time be spent discussing their answers to the grammar review exercises. Then, during the second half of the semester, they could read the following chapters: 5, 6, 7, and 8. Following this sequence, students would be prepared to elicit, transcribe, and analyze language samples from adolescents with typical or impaired language development during the second half of the course. The experience of conducting a language sample then will help to prepare them to apply their findings as they read and discuss the three chapters on language intervention (Chapters 6, 7, and 8).

Marilyn A. Nippold

CHAPTER 4

Language Sampling Guidelines

When evaluating the language skills of an adolescent, a well-designed norm-referenced test such as the *Clinical Evaluation of Language Fundamentals-Fourth Edition* (*CELF-4*) (Semel, Wiig, & Secord, 2003) should be used to identify the presence of a language disorder. After a disorder has been documented, language sampling should be used to determine how well the adolescent speaks in a variety of natural communication settings. Importantly, language sampling should be used as a supplement to norm-referenced testing, not as a substitute for it. This is because well-designed norm-referenced tests have greater reliability and validity than language-sampling tasks. Factors that affect the reliability and validity of language samples are discussed in this chapter.

Listed in Table 4–1 are a number of challenges associated with language sampling in adolescents. One concern is that a speaker's performance is influenced greatly by psychosocial factors. These include the speaker's knowledge of the topic, motivation to talk about it, and the degree to which the interviewer's questions stimulate complex thought. When speakers are well informed about the topic, interested in discussing it, and presented with stimulating prompts, their performance is likely to be quite strong. Genre is another factor that influences performance with studies showing that greater syntactic complexity occurs during expository discourse compared to narrative or conversational discourse (Berman & Verhoeven, 2002; Nippold, 2009a, 2009b; Nippold, Hesketh, Duthie, & Mansfield, 2005; Scott & Windsor, 2000). Another concern is the paucity of normative data for language sampling tasks with adolescents. Until this latter problem is addressed through large-scale research, language sampling should be used informally to obtain naturalistic information about how an adolescent communicates and to establish relevant goals for intervention, as discussed later in this book. Some key factors to analyze are listed in

TABLE 4–1. Some Challenges Associated with Language Sampling in Adolescents

- Performance is influenced by psychosocial factors.
  - Is the adolescent knowledgeable of the topic?
  - Is the adolescent motivated to talk?
  - Do the interviewer's questions stimulate complex thought?
  - Performance varies with genre, with greater syntactic complexity in
    - expository than in narrative discourse.
    - expository than in conversational discourse.
    - persuasive than in narrative discourse.
    - narrative than in conversational discourse.
- Normative data for adolescents is quite limited.
  - New tasks (narrative, expository, and persuasive) must be designed.
  - Large-scale studies to develop normative databases are needed.
    - Mean length of C-unit/T-unit
    - Types of subordinate clauses
    - Clausal density
    - Productivity (total utterances, total words)
    - Use of literate words (abstract nouns, metacognitive verbs, morphologically complex words, adverbial conjuncts)

Table 4–2. Language productivity and syntactic complexity are emphasized; these areas are often problematic for adolescents with language disorders.

The ultimate goal of language intervention with adolescents is to improve their ability to communicate in meaningful contexts beyond the borders of the therapy room. This includes, for example, the diverse social, academic, and vocational settings that they encounter today as adolescents and will encounter tomorrow as adults. Given these expectations, it is reasonable to focus on intervention activities that will generalize to those settings, emphasizing the need for adolescents to use spoken and written language in a way that is clear, precise, and efficient. By eliciting, transcribing, and analyzing language samples, SLPs can gain insight into the unique strengths and weaknesses that an adolescent exhibits in different situations. Although language sampling is not a perfect process, the information obtained can be used to establish relevant goals for intervention and to monitor change as the adolescent achieves greater accuracy, precision, efficiency, and confidence when communicating with others for genuine purposes.

Before presenting specific tasks that can be used to elicit language samples with adolescents (see Chapter 5), some general guidelines are presented for eliciting, transcribing, and analyzing language samples, especially when spoken language is being examined.

TABLE 4–2. Key Factors to Analyze in Adolescent Language Samples

- Total utterances produced, a measure of language productivity
- Total words produced, a measure of language productivity
- Mean length of C-unit/T-unit, a measure of syntactic complexity
- Clausal density, a measure of syntactic complexity
- Specific types of subordinate clauses produced
  - Nominal [NOM]
    - Capture the King is where *you don't have to say 'check.'*
    - I believe *Topalov will win the tournament*.
  - Relative [REL]
    - He just beat Topalov, *who was the best in the world.*
    - The rider *who won the Tour de France that year* was from Italy.
  - Adverbial [ADV]
    - I learned chess *when I was three years old*.
    - The rook can move horizontally or vertically *as much as it wants*.
- Instances of subordinate clauses embedded within other subordinate clauses (hierarchical complexity):
  - If a piece takes [ADV] out the piece that has [REL] the king in check, I can take out that piece. (Here, the REL is embedded within the ADV.)
  - So if I had [ADV] like a castle and a bishop up here, which is [REL] the one that can move [REL] on a diagonal, I can kind of like protect it. (Here, the second REL is embedded within the first REL, which in turn, is embedded within the ADV.)

GENERAL SUGGESTIONS

During the language sampling interview, the SLP should encourage the adolescent's best performance in order to reveal both strengths and weaknesses. This can be accomplished by attending to **confidentiality** and **interaction style** (Table 4–3).

Regarding **confidentiality**, the SLP should explain that the purpose of the activity is to learn about the adolescent in order to obtain information that will be useful in planning intervention. The SLP should obtain the adolescent's written permission to conduct the session and to audio-record the interview, asking him or her to sign a consent form. The adolescent should be assured that whatever is discussed during the interview will not be shared with others. Questions should be encouraged and answered honestly.

TABLE 4–3. Guidelines for Eliciting Spoken Language Samples with Adolescents

Confidentiality

- Conduct the interview in a quiet, private area, free of distractions.
- Explain the purpose of the activity.
- Explain how the information will be used.
- Obtain the adolescent's permission (in writing).
  - To be interviewed
  - To be audio-recorded
- Assure discretion in what the adolescent says.
- Encourage questions from the adolescent.
- Answer questions honestly.

Interaction Style

- Convey respect and genuine interest in the adolescent.
- Listen patiently through lengthy or confusing discourse.
- Remain calm, attentive, and upbeat.
- Avoid arguments with the adolescent.
- Avoid interruptions and overlaps of speech.
- Use appropriate eye contact and body language.
- Make supportive and positive comments.
- Ask open-ended questions.
- Ask one question at a time.
- Pause after asking a question (count to four silently).
- Repeat or rephrase a question, as necessary.
- Feel free to "go with the flow" to encourage spontaneity.
- Use humor, as appropriate (good natured, kind, nonoffensive).

During the interview, the importance of the SLP's **interaction style** cannot be overemphasized. To reveal the adolescent's strengths, the SLP must show genuine respect for the adolescent and his or her feelings, attitudes, and beliefs. This can be accomplished by taking time to listen patiently; to remain calm, attentive, and upbeat; to avoid arguments, interruptions, and overlaps of speech; and to show interest through appropriate eye contact, body language (e.g., smiling, nodding), and supportive comments (e.g., "Uh-huh,"

"I know what you mean," "Tell me more"). It is critical also to pause (e.g., count to four silently) after asking a question to allow the adolescent time to formulate a reply. Although verbal interaction in today's world is often fast-paced and competitive, with speakers and listeners quick to fill the silence, SLPs need to use a more relaxed style of interaction with adolescents, one that is kind, puts the young person at ease, and shows that the speaker's comments matter. Interjecting a bit of humor into the session also may help the adolescent feel more comfortable speaking with the SLP.

Regarding the interaction, it is important for the SLP to follow a structured protocol that includes questions that were designed to elicit certain types of information in a particular genre (e.g., conversational or expository). However, in addition to following the protocol, the SLP should feel free to "go with the flow" and to ask follow-up questions that will encourage the adolescent to continue speaking, to elaborate on an idea, and to communicate freely and confidently. In other words, the interviewer should attempt to promote a more natural interaction style with the adolescent.

Speech-language pathologists frequently ask how many utterances they should attempt to elicit when interviewing an adolescent. Research has not yet determined an ideal number of utterances. The best rule of thumb may be, "the more the better" in order to obtain a representative sample. Realistically, however, this is not always practical, and meaningful results can be obtained with fewer than the standard 50–100 utterances that are often recommended (e.g., Miller, 1981). Rather than attempting to reach a certain minimum, it is more important to encourage the adolescent to talk by bringing up stimulating topics, asking open-ended questions, showing genuine interest, and following the other suggestions for interacting with adolescents, as described previously.

In addition to issues of confidentiality and interaction style, some important points regarding the use of **technology** and the **transcription** of the interview must be addressed so that the language sampling activity is maximally productive. These points are listed in Table 4–4. Although many of them may seem obvious, too often they are forgotten, leading to frustration and wasted time and effort.

For example, regarding **technology**, the SLP should practice using the recording equipment in advance and making sure that everything is working properly before starting the interview. To illustrate this point, an SLP recently set up an interview with an adolescent at his high school, after having gone through a lengthy process of gaining permission from the school district, the boys' parents, and the boy himself in order to obtain a language sample for a research project. She arrived at the school well before the appointment, checked in with the head secretary, and set up the audio recorder in a quiet room near the main office. The interview with the adolescent went extremely well, with the SLP eliciting a lively, detailed, and intriguing sample of expository discourse. However, upon returning home and attempting to transcribe the sample, she discovered that she had pushed the wrong button on the

TABLE 4–4. Key Points Regarding the Spoken Language Sampling Session

Using Technology

- Ensure that the environment is quiet and free of distractions.
- Use a good quality audio recorder (digital or analog).
- If using an analog tape recorder, employ a high-quality audio tape.
- Adjust the volume of the audio recorder before starting the interview.
- Turn on the recorder and ask the adolescent speaker to count to 10.
- Immediately replay the recorder to ensure proper volume and clarity.
- If necessary, adjust the distance between the speaker's mouth and the microphone.
- Restart the audio recorder before beginning the formal interview.

Transcribing the Sample

- Transcribe the sample as soon as possible after eliciting it. When the sample is fresh in mind, it is easier to transcribe accurately.
- Transcribe the sample verbatim, with all mazes and errors included.
- Enter each new utterance on its own line.
- Go back later and parenthesize all that constitutes maze behavior.
- If using SALT, all mazes will automatically be disregarded.
- Run-on sentences should be broken up so that main clauses linked by coordinate conjunctions such as *and*, *but*, and *or* each begin a new utterance. The following utterance, even though spoken continuously would be broken at the slashes:

    My parents went to Portland for the weekend / but I stayed with my cousin in Creswell / and my brother went camping with a friend.

- Two or more main clauses spoken continuously without a pause and without a conjunction (e.g., "I don't know how to braid hair my friend did this," "It's a potluck bring your favorite dish") are broken into multiple utterances as follows:

    I don't know how to braid hair.
    My friend did this.
    It's a potluck.
    Bring your favorite dish.

Using SALT

- Place each new utterance on its own line.
- Put parentheses around all mazes, allowing the final reformulation to stand.
- To code clause types, place the code type in brackets, one space after its verb, using codes such as MC (main clause), ADV (adverbial clause), REL (relative clause), or NOM (nominal clause).
- To code word types, place the code in brackets with no space after the word, using codes such as [ABN] (abstract noun) or [MCV] (metacognitive verb).
- This will enable SALT to create separate lists for clauses and words.

audio cassette and that nothing had been recorded, to her great dismay! Unfortunately, it was impossible to return to the school and redo the interview. I share this story, hoping it will help others attend to important details, knowing that it is the little things in life that often make a big difference.

Language samples with adolescents can be analyzed effectively after they have been transcribed and entered into the software program, *Systematic Analysis of Language Transcripts* (SALT) (http://www.languageanalysis lab.com/). SALT can be adapted to allow the user to code various types of clauses (e.g., main and subordinate). In addition, SALT will automatically calculate Mean Length of C-unit (MLCU), Mean Length of T-unit (MLTU), or Mean Length of Utterance (MLU), as discussed. Regarding the **transcription**, it is important to listen to the recording carefully and to type the adolescent's utterances exactly as they were produced, with all mazes (i.e., false starts, repetitions, and revisions) included. Parentheses should be placed around mazes, allowing the final reformulation to stand. Any words included within parentheses will not be counted when SALT calculates the mean number of words per utterance (C-unit/ T-unit) for the sample. With practice, the SLP will be able to transcribe directly into SALT, placing each new utterance on its own line. Some professionals prefer initially to transcribe the sample into Microsoft Word and then to transfer it to SALT. However, this is an extra step that can be avoided with further practice.

After entering a sample, the SLP can go back over it and identify instances of main and subordinate clauses, using codes such as [MC] (main clause), [ADV] (adverbial clause), and [NOM] (nominal clause). All codes should be enclosed in brackets. When clauses are coded, the code should follow the verb and be separated by one space. Table 4–5 contains portions of a language sample that was entered into SALT and coded in this manner. When coding words, such as abstract nouns or metacognitive verbs, the code (e.g., [ABN], [MCV]) should immediately follow the word, with no space. By using these conventions, SALT will automatically tabulate the number of times that each type of clause or word occurred in the sample and will create separate lists of clause types (e.g., MC, REL, ADV, NOM) and word types (e.g., ABN, MCV). It is important to know that SALT can be adapted to perform any type of coding function, depending on the interests of the SLP. The codes discussed in this book are those that were used in several recent research projects. Part II of this book contains exercises for identifying various types of words, clauses, sentences, and units of measurement that are important for analyzing adolescent language. To obtain a copy of SALT and to learn more about using it, the reader is referred to their website at the University of Wisconsin, Madison: http://www.languageanalysislab.com.

TABLE 4–5. Excerpt from an Expository Language Sample That Has Been Entered into SALT and Coded for Main and Subordinate Clauses

All mazes are enclosed in parentheses. The speaker (C), a 17-year-old girl, is explaining how to play baseball.

MC = main clause

ADV = adverbial clause

NOM = nominal clause

C (or if you just) As soon as you hit [ADV] the ball, you have [MC] to run to first.

C And if the ball gets [ADV] to first before you do [ADV], then you're [MC] out.

C And (there's the pitch for) when you're pitching [ADV], there's [MC] four balls and three strikes.

C If you get three strikes on you [ADV], (you) you're [MC] out.

C If you get [ADV] four balls, you get [MC] to walk to first base.

C And (for each for third base) for first base, there's [MC] dropped third strike.

C Like if the pitcher pitches [ADV] it and you screen [ADV] but the first base doesn't catch [ADV] it, the person batting can run [MC] to first.

C But if you fouled [ADV] it like (if it) if the batter hits [ADV] it and it goes [ADV] (like) out of where you're playing [NOM], then that's [MC] a foul ball.

CHAPTER 11

Types of Sentences

A sentence is a grammatical construction that can stand by itself and make sense (Crystal, 1996). By definition, every sentence contains a subject and a main verb (finite verb) and expresses a complete thought. There are four basic types of sentences: **Simple**, **complex**, **compound**, and **compound-complex**.

A **simple** sentence consists of one main clause (e.g., a duckbill platypus *lays* eggs; it is a mammal; there was a tornado watch). A **complex** sentence, however, contains one or more subordinate clauses in addition to the main clause (e.g., because the duckbill platypus *produces* milk for its young, scientists *call* it a mammal.) A sentence that contains an infinitive verb in addition to a main clause is also complex:

> Because of the tornado watch, the teachers required all students *to stay* inside.
>
> The students and their teachers wanted *to go* home.
>
> *To prepare* for the tornado, families stored dry foods.

Sentences that contain participles (that act like truncated relative clauses) and gerunds (that act like truncated nominal clauses), in addition to a main clause, also are complex:

> Complaining [PRT] about the service, Mary wrote a letter to the manager.
>
> Building [GER] strong customer relationships was the manager's primary goal.

A **compound** sentence contains at least two main clauses that are joined by coordinate conjunctions that include *but*, *and*, *so*, and *or*:

Ice cream contains lots of fat, *but* it sure tastes good!

Cherries are fruit, *and* artichokes are flowers.

We enjoy cakes, *so* we bake them every week.

Fluffy will stay home, *or* he will go to the park.

Compound sentences with ellipsis: Sometimes a compound sentence will delete one of the subjects, usually the second one, because it is redundant. This is called **ellipsis**. In the following sentence, the subject of the second main clause, *they*, is deleted:

The family packed [MC] up their car and drove [MC] to the mountains.

A **compound-complex** sentence contains two main clauses and one or more subordinate clauses:

Today, the major environmental concern *is* [MC] global warming, and many scientists *believe* [MC] that excess carbon dioxide *is raising* [NOM] the temperature of the atmosphere.

SUBJECTLESS SENTENCES: COMMAND AND ELLIPSIS

Although every sentence has a subject, **command** sentences (or imperatives) do not explicitly state the subject, which is understood by the listener. Command sentences commonly occur when someone is giving directions (e.g., eat your soup; be patient; try your best.) In the following paragraph, all sentences except one ("Sauce should be fairly thick.") are commands, and the subject is "you." The finite verbs have been italicized:

Soak mushrooms in warm water for 30 minutes. *Squeeze* dry and *cut* into thin strips. In a large non-stick frying pan, *heat* oil and gently *sauté* the chicken. *Add* garlic and onion. *Discard* garlic as it *begins* to brown. *Continue* cooking until onion *is* limp. *Add* remaining ingredients. *Season* with salt and pepper if desired. *Simmer* 30 minutes, or until chicken *is* tender. Sauce should *be* fairly thick. *Add* water to thin if necessary. (Oliva-Rasbach & Schmidt, 1994, p. 364)

Sentences with **ellipsis** also omit the subject, as in the following examples:

Wish you were here.

Had a great time yesterday.

Told you so.

Looks like rain today.

Want a sandwich?

Hafta go now.

For the preceding sentences, respectively, the subjects are I, I, I, it, you, and I.

Ellipsis also can occur when answering a question:

Q: Do you like baseball?

A: Depends on who's playing.

Q: What else happened at the party?

A: Can't remember.

Q: Where'd you go?

A: To the track meet.

Q: Who shall help bake this bread?

A: Don't look at me!

SENTENCE FRAGMENTS

Sentence fragments do not meet the definition of a sentence because they lack a subject and/or a main verb. However, they are acceptable in spoken and written contexts when they make a statement, express meaning, function as if they were complete, and are free of grammatical errors, as with the following examples:

And now for the star of our show . . . Bob Hope!

One for all and all for one. (English proverb)

Far from the eye, far from the heart. (Maltese proverb)

To sleep . . . perchance to dream. (Shakespeare)

Sentence fragments also occur in the context of notes such as those presented in field guides. In the following examples of sentence fragments, note the many adjectives used to describe these native birds of Oregon (Tekiela, 2001):

Brewer's blackbird: An *overall grayish brown* bird (female)

Great Horned owl: A *robust brown "horned"* owl with *bright yellow* eyes and *V-shaped white* bib (male)

Northern pintail: A *slender, elegant* duck with a *brown* head, *white* neck, *gray* body, and extremely *long, narrow, black* tail (male); *mottled brown* body with a *paler* head and neck, *long* tail, *gray* bill (female)

Red-winged blackbird: Jet *black* bird with *red* and *yellow* patches on *upper* wings (male); heavily *streaked brown* bird with *white* eyebrows (female)

Another type of sentence fragment is one in which a subordinate clause occurs in isolation:

When I am fit

However hard we tried

So that I arrived with no fuss, never a minute too soon or too late

Sometimes this type of fragment occurs in natural communication to answer a question or to make a comment. However, to turn them into complete sentences, they must be attached to a main clause as in the following examples (Bannister, 2004):

When I am fit, my running feels effortless.

However hard we tried, it did not seem possible to meet our target of 60 seconds.

They often drove me to athletics meetings so that I arrived with no fuss, never a minute too soon or too late.

HIERARCHICAL COMPLEXITY

Complex sentences often contain more than one subordinate clause. When one subordinate clause is embedded into another subordinate clause, which is embedded into the main clause, a complex hierarchy of clauses occurs (Quirk & Greenbaum, 1973; Scott, 2009). This can be seen in the following sentence:

I think [MC] you will succeed [NOM] if you try [ADV].

With this sentence, the ADV is embedded into the NOM, which is embedded into the MC. With these types of sentences, it is possible to count the levels of embedding that occur. The following sentence contains only one subordinate clause:

Earthworms are [MC] shredders that can break [REL] large pieces of dead material into smaller pieces.

Because it has only one subordinate clause, the sentence has only one level of embedding (or complexity); the relative clause modifies the noun, *shredders*.

In contrast, the following sentence has two levels of embedding, in which the second relative clause modifies the second instance of the noun *pieces*.

> Earthworms are [MC] shredders
>
> > that can break [REL] large pieces of dead material into smaller pieces,
> >
> > > which are [REL] processed by fungi and bacteria

In determining levels of embedding, all verbs in a sentence represent a clause, at least in the deep structure of the sentence. Now consider a quote from Oprah Winfrey:

> Books were [MC] my pass to personal freedom. I learned [MC] to read [INF] at age three, and I soon discovered [MC] there was [NOM] a whole world to conquer [INF] that went [REL] beyond our farm in Mississippi.

The first sentence does not contain any embedding; it is a simple sentence. However, the second sentence, which is compound-complex, contains two levels of embedding:

> I learned
>
> > to read at age three, (level one)
>
> and I soon discovered
>
> > there was a whole world (level one)
> >
> > > to conquer (level two)
> > >
> > > that went beyond our farm in Mississippi (level two)

For another interesting example, consider the following complex sentence:

> If you are complaining [ADV] about a service you received [REL], describe [MC] the service and who performed [NOM] it.

How many levels of embedding do you think it has? __________. To determine this, answer the following questions:

1. What is the main clause? (describe the service)*
2. What nominal clause completes it? (and who performed it)**

---

*Note that the subject of this imperative main clause is the unstated *you*.
**Note that the metalinguistic verb *describe* calls for a nominal clause.

3. What adverbial clause introduces the main clause? (if you are complaining about a service)
4. What relative clause modifies the adverbial clause? (you received)

In this sentence, the main clause has two subordinate clauses, the adverbial and the nominal, which are on equal footing. Together, they create one level of complexity. However, the adverbial clause is modified by a relative clause. This adds another level of complexity, so the entire sentence has two levels of embedding.

For an even more interesting example, consider the following complex sentence of 44 words, written by Henry David Thoreau (2004, p. 88):

> I went [MC] to the woods because I wished [ADV] to live [INF] deliberately, to front [INF] only the essential facts of life, and see [INF] if I could not learn [NOM] what it had [NOM] to teach [INF], and not, when I came [ADV] to die [INF], discover [INF] that I had not lived [NOM].

I went to the woods

- because I wished (level one)
  - to live deliberately (level two)
  - to front only the essential facts of life (level two)
  - and see (level two)
    - if I could not learn (level three)
      - what it had (level four)
        - to teach (level five)
    - and not, when I came (level three)
      - to die (level four)
  - discover (level two)
    - that I had not lived (level three)

EXERCISES: IDENTIFYING TYPES OF SENTENCES

Exercise 11.1

For each quotation, indicate whether the sentence is:

A. Simple C. Compound
B. Complex D. Compound-complex

1. _____ All philosophers must soar with unwearied passion until they grasp the true nature of things as they really are. (Plato)
2. _____ Education is not filling a pail but the lighting of a fire. (William Butler Yeats)
3. _____ If you bungle raising your children, I don't think whatever else you do well matters very much. (Jacqueline Kennedy Onassis)
4. _____ A little learning is a dangerous thing. (Alexander Pope)
5. _____ Never give up and never give in. (Hubert H. Humphrey)
6. _____ Life is a festival only to the wise. (Ralph Waldo Emerson)
7. _____ No one can make you feel inferior without your consent. (Eleanor Roosevelt)
8. _____ To talk in public, to think in solitude, to read and to hear, to inquire and answer inquiries, is the business of the scholar. (Samuel Johnson)
9. _____ My teacher is special because she never yells at me. (Rebecca, age 8)
10. _____ There's something about taking a plow and breaking new ground. (Ken Kesey)
11. _____ The more we study, the more we discover our ignorance. (Percy Bysshe Shelley)
12. _____ My teacher helps me out a lot and she is nice to me and she teaches me about stuff and when I first came to her classroom, I was afraid of bugs but now I'm not. (Krysten, age 8)
13. _____ Education is what survives when what has been learned has been forgotten. (B. F. Skinner)
14. _____ My karate teacher can break 12 bats over his head and 10 bricks with his bare hands. (Billy, age 7)

15. _____ My teacher is fun and hard-working and never forgets to take time to talk to her students, unlike some teachers who only teach and never talk. (Sarah, age 11)

16. _____ Mix with your sage counsels some brief folly. (Cicero)

17. _____ I remember when my second-grade teacher pushed me and pushed me to read and when I finally started to read, I liked it so much I couldn't stop! (Chris, age 8)

18. _____ The art of teaching is the art of assisting discovery. (Mark Van Doren)

19. _____ Leave it longer on top, so I can have spikes. (David, age 13)

20. _____ My mom wrote on the form, "no Mohawk," so I can't get that. (David, age 13)

Exercise 11.2. Hierarchical Complexity

For each of the following sentences, indicate the number of levels of embedding it contains. Begin by coding each sentence for each type of clause it contains:

MC = main clause
ADV = adverbial clause
NOM = nominal clause
REL = relative clause
INF = infinitive clause
PRT = participial clause
GER = gerund clause

1. Even if you're [_____] on the right track, you'll get [_____] run over if you just sit [_____] there. Levels: _____

2. With every good deed, you are sowing [_____] a seed, though the harvest you may not see [_____]. Levels: _____

3. Use [_____] a small paintbrush and a paper cup with the smaller beetles because you can damage [_____] them if you pick [_____] them up in your hand. Levels: _____

4. Jason's little sister Amanda has [_____] an ear infection for which her pediatrician prescribed [_____] a liquid antibiotic that must be [_____] kept refrigerated. Levels: _____

5. Every miler knows [_____], in the way a sailor knows [_____] the middle of the ocean, that it is [_____] not the first lap but the third that is [_____] farthest from the finish line. (Parker, 2009, p.246)
   Levels: _____

6. As Jim and I went [_____] over to see [_____] what was going [_____] on, someone crawled [_____] out of the closet. (Boy, age 13)
   Levels: _____

7. Before you take [_____] a piece, like if there was [_____] a rook right here, you kind of make [_____] sure because there is [_____] a strategy that you can do [_____] to try [_____] to get [_____] a king in checkmate with two rooks. (Boy, age 11) Levels: _____

8. I hated [_____] him on sight and sound and would be [_____] about to put [_____] my dog whistle to my lips and blow [_____] him off the face of Christmas when suddenly he, with a violet wink, put [_____] *his* whistle to *his* lips and blew [_____] so stridently, so high, so exquisitely loud, that gobbling faces, their cheeks bulged [_____] with goose, would press [_____] against their tinseled windows, the whole length of the white echoing street. (Thomas, 1954, p. 22) Levels: _____