SYNTAX

Introduction

Syntax is the study of the way in which words are put together to form phrases, clauses, and sentences. In even the simplest of sentences, word order matters, as meaning can change when words are rearranged. Consider the difference between "The Yankees beat the Red Sox." and "The Red Sox beat the Yankees.", as well as between "Did they win?" and "They did win."

Sentences are constructs that are familiar to everyone. How did we arrive at a sense of sentence structure that seems accessible to all? It is astonishing that most children develop a "sentence sense" without formal training. The linguist Noam Chomsky argues that the human brain is wired to string words together in a systematic way. Chomsky's contribution is described well by Pinker (2000):

> In this century, the most famous argument that language is like an instinct comes from Noam Chomsky, the linguist who first unmasked the intricacy of the system and perhaps the person most responsible for the modern revolution in language and cognitive science.

Two-year-olds use short, simple sentences. Between ages three and four, children begin joining these sentences with "and." Before long, they add morphological endings, auxiliary verbs, articles, and even adverbial endings (e.g., quickly). They might produce sentences containing "because" in the early years but not understand that they are joining two clauses until later. At ages five and six, sentence embeddings begin to appear, such as relative clauses.

In the early elementary years, children expand upon the forms they know (e.g., noun plus verb plus object) as well as acquire new forms. Most eight-year-olds produce passive sentences that require them to transform the role of the noun from subject to object (Shames, Wiig, and Secord 1994).

Between first and seventh grades, students experience major development in their ability to use sentence embeddings. Students learn about embedding clauses and phrases and conjoining; that is, they begin composing compound and complex sentences.

The school-age child does not learn to use more complex sentences in a vacuum. By the third or fourth grade, reading to learn and writing to ex-

press thoughts are major activities in the school day. Students also receive direct instruction in sentence formulation.

For the educator, the biggest difference between the linguists like Chomsky, Pinker, and Crystal and the grammarians like Warriner and Schwegler is that linguists report what humans *do* with grammar (e.g., "He's the one we bought the tickets from.") and grammarians report what they *think* humans should do (e.g., "He's the one from whom we bought the tickets."). Of course, both schools of thought acknowledge the difference in standards between less formal oral language and more formal written language.

In Landmark's population of students with language-based learning disabilities, deficits in sentence formulation seem to have several causes.

- Students have limited auditory working memory. When asked to generate complex sentences aloud, they frequently forget the wording of their main clauses before composing the rest of their sentences.

- Students have rule-learning deficits or delays. In middle-school years, students lag behind normally achieving peers in their ability to acquire and apply rules for complex sentence structures (e.g., main clauses plus adverbial clauses). Many Landmark students do not interpret passive voice accurately.

- Students lack exposure to the written word, which is a situation that cannot be underestimated. Written expression differs in many respects from oral expression. Consider the disparity between the language in the average television program and the language in a well-crafted novel by Katherine Paterson. Children who hear or read fine literature are immersed in the richness of our language in both form and content.

English sentences are single or multiple. Study of syntax progresses from word strings in simple sentences to word strings in compound, complex, and compound-complex sentences. Simple sentences consist of one independent or main clause and no subordinate clauses. A compound sentence consists of two or more independent clauses, but no subordinate clauses. A complex sentence consists of one independent clause and at least one subordinate clause. A compound-complex sentence consists of two or more independent clauses and at least one subordinate clause.

Multiple sentence structures predominate in literature and other written texts. These structures are common in everyday conversation as well. Students with language-based learning disabilities face a triple challenge: first and foremost, to grasp the meanings of these sentences; second, to iden-

tify the grammatical elements of main and subordinating clauses; and third, to generate compound and complex sentences themselves.

According to Paul (2000), the course of development for children with language-based learning disorders parallels that of normal language development, but at a slower rate. Therefore, the sequence for remediation that follows generally adheres to the sequence of normal language development. By listening carefully to students' utterances, teachers can develop a descriptive-developmental curriculum. By analyzing students' receptive and expressive language behavior, teachers can identify the linguistic elements that require intervention. Teachers' knowledge of normal language development provides some guidance in determining appropriate targets for intervention.

Receptive and Expressive Errors

Landmark students not only have difficulty formulating complete sentences, they also have difficulty processing certain sentence structures. These include sentences that contain:

- passive voice

- embedded clauses

- participial phrases

- subordinate clauses and phrases that precede main clauses

Examples of Receptive (Processing) Errors

What Teacher Said or Read	What Student Said	Student's Processing Error
The Trans Am was passed by the Corvette. Which car did the passing?	The Trans Am.	Interpreted active voice; gave greater weight to the first noun in the sentence
The boy who spotted the whale was only four years old.	The whale was four years old?	Linked part of the embedded clause to the predicate
Carving knife in hand, he crept up.	Why would he carve in his hand?	Misinterpreted the participial phrase: added the words "with a" before "knife," then interpreted "carving" as a gerund
Before they ate breakfast, he rang the bell. Which happened first?	They ate breakfast.	Followed normal noun-plus-verb order in simple sentences, giving priority to the first clause heard

Examples of Expressive (Sentence Formulation) Errors

What Student Said	What Student Meant to Say	Type of Error
I don't know where *is it*.	I don't know where it is.	Word order
You don't cut a *saw* with a *cake*!	You don't cut a cake with a saw!	Word order

What Student Said	What Student Meant to Say	Type of Error
They were three *bucks for twenty-five*.	They were three for twenty-five bucks.	Word order
You *both walk up them*.	You walk up both of them.	Word order, omitted preposition
It lost all interest *in me*.	I lost all interest in it.	Word order
When I didn't be there . . .	Before I was here . . .	Confused adverbs, substituted incorrect infinitive for "be"
It was covered sand.	It was covered with sand.	Omitted preposition
I *was a'knowing it*.	I already knew that.	Substituted progressive verb form for irregular past tense
I know a person *just looks like you*.	I know a person who looks just like you.	Omitted relative pronoun; incorrect word order
I don't know *what* she ate one of those.	I don't know whether she ate one of those.	Substituted pronoun for correlative conjunction
I haven't had one *since* about three years.	I haven't had one for about three years.	Used incorrect preposition
I forgot she looks like.	I forgot what she looks like.	Omitted head of noun clause
I forget *this one I got*.	I forget who gave me this one.	Omitted pronoun as head of clause
An apple is *alike from* the orange.	An apple is like the orange.	Substituted an adjective, "alike," for a preposition, "like"
I *broken* the dish.	I broke the dish. I have broken the dish.	Omitted auxiliary verb
I was diverse to the neighborhood.	I was in a diverse neighborhood.	Modified the subject instead of the object

The rest of this chapter presents specific goals and objectives for syntactical development. The goals are idealized, inferring mastery, though most students probably will not attain mastery. The objectives, on the other hand, are largely presented in developmental order (in order of difficulty). This way, the teacher can identify an objective along the spectrum of difficulty as a realistic target for a given student. For example, the goal for "Complex Sentences with Subordinate Adverbial Clauses" is for the student to use selected subordinating conjunctions to formulate complex sentences, while demonstrating comprehension of the underlying rules. One of the objectives under this goal is for the student to select the correct subordinating conjunctions to complete a sentence in a cloze task. This objective might be used as a realistic goal for a student who is not likely to master complex sentences with subordinate adverbial clauses within the school year.