Chaining

The clause, not the sentence, is the basic verbal form of statement. When teachers define a sentence as subject plus predicate, they are really defining a clause, and when they say a sentence expresses a complete thought, they mean an independent clause asserts a proposition. They are thinking of a single clause as a sentence, whereas a sentence may comprise several clauses. Indeed, a sentence is the main way clauses are chained.

Sentences

A set of clause-statements may be connected in three ways:

1. By making each a separate sentence and stringing them:
   I saw Bobby's hat. It was in a tree. The wind blew it there. Then it rained.
2. By joining several into one sentence by conjunctions, relative pronouns, or punctuation:
   I saw Bobby's hat and it was in a tree, and the wind blew it there, and then it rained. (The famous run-on sentence of the immature speaker.)
   I saw Bobby's hat, which was in a tree, where the wind blew it before it rained.
3. By reducing some clauses to phrases and embedding them in others:
   In a tree I saw Bobby's hat, blown there by the wind before the rain came.

First, learners predicate ideas separately; then they join them with the easier conjunctions; then sometimes they join them with more difficult conjunctions and relative pronouns, and sometimes they embed some within others. So 1, 2, and 3 above represent a growth order if you keep in mind that the difficulty of conjoining (2) depends on the difficulty of the connector word (its concept, that is), and that the difficulty of embedding (3) varies considerably with the kind of clause reduction.

To demonstrate further the issue of 2 and 3, let's take another series having a more abstract topic:

1. Goodsayer was elected. He adopted the policies advocated by his opponent. He had harshly criticized them when he was running for office.

Notice the repetition of subject and object so clangingly present in children's clause strings but muted here by the pronouns. Strings are

uneconomical because they keep predicating the same nominals. Personal pronouns disguise this, but of pronouns only the relative can solve this, not the personal (*he* above). The next sentence represents maturer development by conjoining the clauses:

2. After he was elected, Goodsayer adopted the policies that his opponent was advocating, which he had harshly criticized when he was running for office.

But the following version, which reduces and embeds four clauses from the first, requires substantially more development:

3. Once elected, Goodsayer adopted the policies advocated by his opponent—the very policies he had harshly criticized during the campaign.

It is worth the trouble to study these three sentences and compare the changes, because the differences exemplify a great deal about growth in sentence development. Though shorter, the last sentence is harder than the second because students have to develop clauses first before they can learn to reduce them. Of course, a speaker or writer does not normally compare alternatives, as we are doing here. Most composition is more spontaneous than that, and even hard revision would not produce the shorter version until the author had logged considerable composing experience. Compactness comes harder, and when length is a sign of looseness, as in run-on sentences, it shows immaturity.

This is not to say the compacter version is always better. It has a different emphasis, partly because it leaves more implicit. It might not therefore suit as well a given intent. The point here is that to be *able* to reduce clauses and embed them in each other, when this relates concepts appropriately, indicates fairly advanced growth. Of course, "reducing and embedding clauses" is only a manner of speaking since no one sees people do this except occasionally perhaps in written revision, but to infer some such inner process gradually occurring seems reasonable since language users of different maturity levels differ by just such sample sentences. Inserting links between clauses is easier than reducing and fusing clauses, but the conceptual difficulty of individual linking words—spatial-temporal versus logical conjunctions, for example—must be allowed for.

As clauses are conjoined and embedded, they require certain meta-communicative words—conjunctions like *but, or, although, because, unless* or relative pronouns like *who, which,* and *where.* The statements are the communication, and these connectors metacommunicate about how to take and relate the statements. As we said,

such words are harder just as concepts, but they are also hard because they relate statements to form more complex ideas. Conjunctions name explicitly the relation, whereas relative pronouns merely plug one nominal into two predicates, naming nothing and relating implicitly instead. See preceding examples.

Growth Sequence 18: Expanding the repertory of clause-connecting options as follows:

- **String of separate independent clauses, each a sentence**
- **Clauses conjoined by coordinating conjunctions (*and, but, or*) and time-space conjunctions**
- **Clauses conjoined by logical subordinating conjunctions and fused by relative pronouns**
- **Clauses reduced and embedded in each other**

Two things are important to the formulation above. One is to emphasize that mature learners not only can do these things but do them *appropriately,* according to the place of the statements in a total discourse. Complexity for its own sake is no mark of maturity. Complexity is necessary but not sufficient for fullest growth. A string of single-clause sentences can be very effective for making an image or idea dawn gradually on the receiver. It understates and it also stretches out the reader's assimilation time. Mature students would for these reasons employ such a string even though they were capable of fashioning very intricate sentence structures.

The second matter is the critical one of subordinating concepts one to another so that they are related with the proper emphasis. Stringing makes all statements equal, besides not making explicit the relations among them. The only connection is the primitive one of first-to-last, which says nothing unless the statements are about events, in which case the order of stringing is assumed to be the order of their occurrence. Coordinating conjunctions say that the statements are equal in rank (*co*-ordinate) in addition to being, say alternative (or) or adversative (but). More properly speaking, the statements are equal and the conjunctions are coordinating because equality is in the nature of the logical relationships *and, or,* and *but,* if you think about it, whereas the subordinating conjunctions, such as proviso (unless), concessions (*although*), condition (*if*), and the time-space conjunctions require that the clause they introduce be subordinate to the one to which it is conjoined. (Time-space clauses

are always adverbial modifiers of course, and hence subordinated to the sentence predicate.)

Now let's bring in the conventional terms:

- Single-clause sentence—"simple sentence"
- Clauses conjoined by coordinating conjunctions—"compound sentence"
- Clauses conjoined by subordinating conjunctions—"complex sentence"
- Clauses conjoined by both coordinating and subordinating conjunctions—"compound-complex sentence"

Although this progression roughly parallels our growth sequence, it allows neither for the embedding of reduced clauses nor for the variation in the difficulty among conjunctions and between conjunctions and relative pronouns. This old classification of sentences does bring out, however, subordination and emphasis, two critical factors of growth in making sentences and sentence sequences out of basic statements.

From his research with children's writing Kellogg Hunt concluded that sentence growth is marked by (1) increasing modification of nouns by large clusters of adjectives, relative clauses, and reduced relative clauses; (2) increasing use of nominalizations other than nouns and pronouns for subjects and objects (clauses, infinitival and gerundive constructions), and (3) embedding of sentences to an increasing depth (entailed by 1 and 2).* A sentence having a single word or phrase for a subject ("*Such an idea* never occurred to her.") is easier to formulate than one having a clause for a subject ("*What other people might think of her actions* doesn't concern her."). In the second example, the nominalization, in italics, is a clause embedded in the clause of the whole sentence and containing, as its own subject, a nominal phrase ("other people") like that serving in the first example as subject of the whole sentence ("Such an idea").

Growth Sequence 19: Toward increasing versatility in constructing sentences, exploiting more nearly the total resources inherent in *modifying, conjoining, reducing,* and *embedding* clauses; and toward increasing comprehension of sentences of such range.

* Kellogg Hunt, *Grammatical Structures Written at Three Grade Levels,* National Council of Teachers of English, Champaign, IL, 1965

Syllogisms

A special case of conjoining clauses was touched on when we spoke of conditional tenses joined by *if*. When two or more conditional clauses are linked to each other and to a conclusion clause, a syllogism is created. "If high spending contributes to inflation, and if advertising and credit stimulate high spending, then advertising and credit contribute to inflation."

At the material level, such a conjunction of conditions may be stated in a sentence like this: "*If* heavy rain falls a long time on loose dirt, and *if* the terrain is steeply tilted, a mudslide will occur." Note that this logical relationship may be expressed by other conjunctions and by adverbs: "A mudslide occurs *because* heavy rain falls a long time on loose dirt and *because* the terrain is steeply tilted." Or: "The rain falls a long time on loose dirt, and the terrain is steeply tilted; so [*therefore*] a mudslide occurs." The point is that underneath these various conjunctions and adverbs there lies a single logical relationship. This relationship is called entailment—certain things being so entail other things being so. (See on page 43 Susanne Langer's mention of entailment.) It is important to realize that what is the same at the conceptual level—entailment—may be expressed at the verbal level as causality, conditionality, or something else.

Syllogizing may be, first of all, implicit or explicit and, second, may take several forms. It is an important sort of logical growth to look for, but the teacher can expect it to be revealed in more than one verbal way, if made explicit at all. A syllogism may perfectly well exist in a discourse without being verbalized in a single sentence. It may be embodied in another kind of linguistic linking than conjoined clauses—in one of the other kinds of chaining discussed next.

Transitional words

Besides conjunctions and relative pronouns, certain adverbs connect clauses and do so explicitly as conjunctions (*moreover, however, nevertheless, so, therefore, accordingly,* and others referring to ideas in previous clauses), but these differ in being situated *within* a clause, not between clauses, so that they tie clauses together only by throwing an idea bridge, not by connecting grammatically. These are what we might call transition words, because they are added to a clause to relate statements explicitly in the same way that whole sentences may be stuck into a discourse to effect transitions from one main idea or part of the organization to another ("Leaving aside for the moment the objections to this idea, let's now turn to . . . .").

Transitions, too, constitute meta-communication and hence do not occur to speakers or writers too egocentric to realize that an audience might not know how to connect their clauses unless guided. On the other hand, mature communicators may choose to omit some transitions as being unnecessary, heavy, or verbose for the ideas and the audience involved, or may wish to speak implicitly to make their audience think more and work out connections for itself—obviously a sophisticated stance, indeed a very confident one. And once again, the presence of the words—*hence* or *so,* say—does not guarantee the presence of the concepts they stand for. A trick of weak writers is to plaster their composition together with *therefores* and *moreovers* in *lieu* of thought.

Punctuation

Colons, semicolons, and sometimes commas also connect statements. They are much less explicit than word connectors, but they have some meaning. A colon tends to act as an equation mark and hence assumes one meaning of *to be* (identity), and a semicolon or comma implies unusual closeness between clause-statements. Without indicating the nature of the relation, this binding nevertheless invites readers to supply for themselves a conjunction of time, causality, contradiction, and so on, according to context.

Paragraphing

Paragraphing is another way of implying relations between statements. A paragraph break, for example, between one statement and another means that the thought takes a bigger jump than is usual between sentences or that thought is shifting to another time or plane or domain. Placing one statement at the beginning of a paragraph and another within may mean that the first is superordinate or more general and that the next one is subordinate or more concrete. The first sentence might state a generality and the second state an instance or consequence of it. The relative positioning may obviate the need of "for example" or "so." The sheer order in which statements are chained means something of course, since juggling the order would usually make considerable difference in the intelligibility of the message. Paragraphing imposes upon this sequence other patterns of significance by clumping together statements so that distance, salience, and subordination vary among them and hence imply certain interrelations. The ways of chaining sentences that comprise paragraphs can comprise the organization of an entire discourse.

Organization

The possibilities of paragraphing are the possibilities of organizing a whole discourse. The continuity may vary in length, but once beyond the sentence (with its special grammatical rules of relating) the ways of chaining statements are the same as for composing the units of any other linear medium—serial order, juxtaposition, and pattern. These are universal factors of form and constitute what English teachers mean by "organization" in a composition. Form establishes relations by sheer selection and arrangement, without naming relations. Form speaks—but implicitly. So clause-connecting throughout an entire continuity of statements is nothing less than the overall form of a complete discourse, and the forms with which people compose discourses are general forms common to many other media.

Ascending and descending forms In music, we speak of the first statement of a theme and of its later variations. This form compares to an opening statement of the main idea of a discourse followed by the elaborating of its implication in substatements. Either a whole discourse, a subdivision of it, a paragraph, or even a sentence could be organized this way—from higher to lower abstraction. It is the deductive form exemplified by the famous "topic sentence," which sets a frame within which details, implications, consequences, evidence, and so on are then expounded. Within a sentence this works out as a main clause followed by subordinate clauses and by modifiers:

> They just had to peer over the rim, although the canyon terrified them, leaning far forward over planted feet, heads tipped back for balance, eyes turned down their cheeks.

Within a whole discourse, paragraphs would so descend.

The opposite form may be equally right, depending on intent and content. It is the inductive order, by which a theme is gradually built up through partial statements until arrived at climactically. Within a sentence, modifiers and subordinate clauses would prepare for the main clause, which would come at the end as climax (the so-called periodic sentence).

> Whenever someone asked her to sing once again, perhaps at tea time in the old sunroom, perhaps at a garden gathering in the morning, imploring, saying she had no right to withhold that gift, her plump hand would go to her throat, and her head would slowly wag no.

Following the same model on larger scales, a paragraph or a whole discourse would start low and build high, suspensefully, revealing only enough per statement to carry the receiver to the next, broader

view, whether the increments are physical details of a complex object, causes of some effect, or arguments leading toward a conclusion.

Various orders The direction that the chaining moves between low and high abstraction, whole and part, generality and instance, is of great significance for composition and comprehension, for the opposed approaches orient the receiver very differently. The growing learner has to understand that these options exist and what effects they have. Chaining need not follow the order in which events, images, or thoughts originally or logically occur, because rhetorical ends must be served. A reader may see a scene more clearly if the writer starts with a panoramic shot and then zooms in on details, but like William Faulkner and Stephen Crane on occasion, the writer may want the reader to experience with the character the feeling, precisely, of *not* being on top of a situation. An effect of dawning, produced in many poems, comes from forcing the receivers to orient themselves by minimal cues that imply perhaps several possibilities that must be considered and checked out as the statement continuity proceeds. A logical conclusion might go either at the beginning or at the end of a discourse, depending on whether the reader's knowing the conclusion first makes following the arguments much easier or on whether the writer wishes readers to work through in their own minds the steps by which the conclusion was reached.

It may be better to derange the order in which events occurred and start in the middle, as Homer did with the *Iliad,* then flash back to the beginning, or to cut back and forth among different periods, as Marcel Proust and Kurt Vonnegut do, in order to juxtapose events in a new, mental relation. Inductive and deductive orders may be combined as when a main statement is built up by evidence then, once established and warranted, applied to various domains to see what it will turn up. Repetition is also an important formal device common to both writing and music as the "motif."

Growth Sequence 20: Toward using and responding to the full rhetorical possibilities for chaining statements by grammar, transitional words, punctuation, paragraphing, and organizational form, according to the commitment of the whole discourse.

Emphasis must be on good judgment in playing options. No particular sentence construction, paragraph structure, or organizational form is better than another except relative to the communication needs of the content and intent. Growth does not consist of merely acquiring the tools of metacommunication to name or state connections explicitly. These tools constitute the technical prereq-

uisite but alone are not enough. Always, the learner must learn to judge, as either sender or receiver, if metacommunication is desirable. Too often teachers incline to value only the explicit, because they can see it and thereby *know* what a student's thought is, but explicitness is definitely only half of the matter. Since not all can ever be said, discoursing is always a matter of ascertaining how much will do the trick properly.

A concept may play different roles in a complex of concepts, may be more or less conscious in the speaker, may be more or less explicit in a discourse, and so may for these reasons be conveyed by a single word, a phrase, a simple sentence, a complex sentence, a continuity of sentences, a metaphor, a motif, or a formal pattern in the organization of the total work. A learner grows in mastery of composing and comprehending these alternatives for matching thought with speech.