Stating

Stating is saying something is so. Like a phrase, a statement relates concepts, but a statement does more. It *predicates*. By means of a predicate, the speaker asserts a proposition. So verbs are the key, and the nature of the predicate determines the kind of statement. Grammatically, a statement corresponds to a clause, not to a sentence necessarily, since a sentence may contain many clauses. The independent clause corresponds in language to a proposition in logic. It is the fundamental arena of grammar, which is the sum of ways that words and phrases may be related to make statements.

The first issue of growth in stating is whether speakers can parcel their thought out into at least a subject and a predicate and perhaps some modifiers of each. If they make a statement through a single word or through a phrase, they are obviously leaving out elements and therefore making their statement implicitly. As we said, immature speakers let a part stand egocentrically for the whole they have in mind—by default—whereas poets compress thought into figures of speech that—by design—imply whole statements.

Modification

Once capable of stating in clauses, learners face a second and very long-range issue of whether their clauses explicitly elaborate in language forms—to the extent they think they do and to the extent their receiver needs—just what they have in mind. Consider language as a kind of adjustable rack to fit thought onto. The more people spell out just what they mean, the more they do what we earlier called elaborating. The way to make ideas explicit is to put into words enough details about the subject and the predicate to connect up with shared assumptions in the receiver. This means adding modifiers—qualification, quantification, time, place, manner. This is the function of determiners, adjectives, and adverbs—whether in the form of a word or a word cluster.

The amount of modification is the key to innumerable composition and comprehension matters. Overgeneralizing, for example, results from failing to quantify (to say how many people or things are covered by one's statement) or to qualify (to limit the subject or object by more detailed description and limit the conditions under which the statement is true). Both narrative and generalization may suffer if the time and space are indicated too vaguely. Paucity of vivifying detail and unclear concepts require more, or more precise, modification. Above all, the predicate itself must become as com-

plex as the thought is complex. For example, compare these two sentences:

> The middle child in the family has the best deal.
>
> A middle child may enjoy the advantages of having the elder fray a path for her and shoulder the most responsibility and yet not be treated as the baby of the family.

The first statement may imply the second, but does the receiver know that? At the grammatical level, explicitness entails more words and more interaction of words—verbal complexity.

Growth Sequence 14: Toward increasing modification as required by the complexity of ideas and the needs of the receiver.

The Special case of to be

The verb *to be* requires special attention. It means several different things logically and hence tends to be widely used and ambiguous. It is the most important predicate. The notation of symbolic logic differentiates the various logical meanings of *to be,* by assigning to each its own symbol. For the best explanation of this important problem of translating thought into speech, we quote from logician Suzanne Langer:

> Few people are aware that they use so common and important a word as *is* in half a dozen different senses. Consider, for instance the following propositions:
>
> **1.** The rose is red.
>
> **2.** Rome is greater than Athens.
>
> **3.** Barbarossa is Frederick I.
>
> **4.** Barbarossa is a legendary hero.
>
> **5.** To sleep is to dream.
>
> **6.** God is.
>
> In each of these sentences we find the verb "is." But each sentence expresses a differently constructed proposition: (1) ascribes a *property* to a term; in (2) "is" has logically only an auxiliary value of *asserting* the dyadic relation, "greater than"; in (3) "is" expresses *identity;* in (4) "is" indicates *membership* in a class (the class of legendary heroes); (5) "is" means *entailment* (sleeping entails dreaming); in (6) "is" equals *existence.*

> So we see that in (1) and (2) it is only part of the logical verb—it serves only to assert the relation, which is otherwise expressed—and in the remaining four cases, where "is" does function as the whole logical verb, it expresses a different relation in every case. It has at least four different meanings besides its use as auxiliary. Our linguistic means of conveying relations are highly ambiguous. But the expression of relations is the chief purpose of language. If we were interested only in *things* and not in their arrangement and connection, we could express ourselves with our forefingers. . . . the study of relations is necessarily bound up with a study of discourse. But if the latter obscures and disguises relations, as it often does, there is no escape from error, except by adopting another sort of discourse altogether. Such a new medium of expression is the symbolism of logic. In this ideography, the four propositions wherein "is" really names a relation would not appear to have a common form, but would wear the badge of their distinctions plainly in view:
>
> 3. Barbarossa = Frederick I
> 4. Barbarossa $\in$ legendary hero
> 5. To sleep $\subset$ to dream
> 6. E! God*

Growth Sequence 15: Toward increasing ability to differentiate, as sender and receiver, the various meanings of *to be*.

Tense as abstraction level

If modifying *elaborates* statements, what *generalizes* them? The answer is, the tense of the verb that predicates the statement. What people generally call time differences are really degrees of abstraction. Distances between sender, receiver, and message amount to differences in levels of abstraction.** Tenses describe when events occurred in relation to when the speaker is referring to them. Hence they denote point of view or the distance between the speaker and the original raw material that she has abstracted from. Besides, it is clear that people predicate about a lot besides events and that time is not an issue except in narrative.

One way learners grow in the skill of stating is to assert explicitly more general statements. They may learn how to form all the tenses fairly early, but they will actually compose and comprehend state-

* Susanne Langer, *Introduction to Symbolic Logic,* Dover Publications, Inc., New York, 1953. pp. 56-57. Reprinted by permission of the publisher

**For development of this idea see *Teaching the Universe of Discourse,* 1983. James Moffett (Boynton/Cook, Portsmouth, NH).

ments in certain ones only as they grow into the abstraction levels the tenses exist to convey.

The present tense of generalization predicates explicitly, as its name says, the analogizing of experiences of different times. It is an utterly different tense from the present progressive. *What happens* can only be recurring—that is, mental—events. "He eats catsup on his scrambled eggs" expresses a higher generalization than "He is eating catsup on his eggs," "He was eating catsup on his eggs," "He ate catsup on his eggs," or "He will eat catsup on his eggs." "He *eats* catsup on his eggs" *summarizes* all the other statements. Each statement in order summarizes, in fact, a bit more than the preceding one. Each tense applies more broadly over time and space until the sequence culminates in that tense that specializes in stating generalities as such.

Growth Sequence 16: Toward increasingly general statement as indicated by the tense sequence below:

what is happening—progressive present

what has happened—perfect

what happened—past

what will happen—future

what happens—present tense of generalization

what might or could happen or be true—conditional

The boxed tenses here show most clearly the main expansion from present to past to timeless, the other tenses fitting between these. Further generalizing the past leads to *what will happen.* The future is only an extrapolation of the past. Extrapolation is a mental extension over time and space of existing circumstances. Convinced by their analogies between past events that life has stability and consistency, learners predict that certain objects will reappear or events recur. But *nothing* ever recurs, of course. Establishing parallels between *what has happened* and *what will happen* is a matter of generalizing experience further: "The sun has always risen, and the sun will continue to rise." The next logical step is to generalize that "The sun always rises."

The shift from past to potential truth is a shift from fact in the Latin sense of *factus*—the "done," the deed or event—toward opinion. The growth sequence is that people record experience via perception, then report it via memory, then generalize it via reflection. Not only are these stages by which anyone processes experience all the time, they are stages of growth accumulated by all youngsters. As perception, memory, and reason successively develop, youngsters make and understand increasingly more statements in the corresponding tense.

Growth Sequence 17: From emphasis on the present (sensorimotor abstracting) to past (memory abstracting) to timelessness (abstracting by reason).

If we look at the conditional tenses, we can see that further reasoning will take us beyond statement to the *relations among* statements. "If this happens, that will happen" (or will have happened). "If this happened, that would happen." "If this had happened, that would have happened." These tenses are coordinated as a function of each other. The reasoning resides not in one tense but in the relation of tenses. The truth of one statement is conditional on the other statement being true. The conditional tense breaks the bounds of the clause and forces us to consider how statements are connected to each other.