Retroactive inhibition is the phenomenon that a delayed recall of the B responses to the A stimuli is worse in the *A-B, A-C* condition than in the control *A-B, D-C* conditon. Positive transfer is another related phenomenon in which learning *A-B'* is facilitated (learned more quickly) than *A-C* or *D-C* when subjects learned *A-B* first (the *B* and *B'* responses are very similar).

Interference and positive transfer have both been obtained in recall of one passage when a second passage has also been studied between its presentation and test. Whether interference or positive transfer is found depends on the nature of the overlap of the two (Anderson & Carter, 1972; Bower, 1974; Myrow & Anderson, 1972; Walker, 1974). Anderson and Carter found retroactive inhibition in subjects' ability to recall the subject of a sentence to the predicate cue. This occurred when a different sentence containing a paraphrase of the predicate and an unrelated subject was presented for study between the original sentence's study and test. Walker obtained retroactive inhibition for recall to a first paragraph after reading a second related one.

Bower (1974) investigated which aspects of passage overlap lead to facilitation and which lead to interference. He found that recall of the macrostructure (i.e., the general organization and topic of the information covered) improved if a different passage with the same conceptual macrostructure were presented between the critical paragraph's presentation and test. Recall of this macrostructure was improved independent of whether the intervening passage with the same conceptual macrostructure had the same microstructure (details) or a different microstructure; recall of the microstructure, however, was inferior if the microstructures differed (and the macrostructures were the same).

Organizational factors have been shown to be of importance to recall of prose just as they have been in free recall of word lists. Not surprisingly, Montague and Carter (1973) found subjects recall more of a passage which maintains a correct syntactic order than one in which words are presented in random order. Even in nonscrambled texts, the input organization of concepts and their associated attributes can affect the amount recalled (Frase, 1969, 1975; Myers, Pezdek, & Coulson, 1973); subjects tend to organize recall in a manner consistent with the organization of input (i.e., by name or by attribute) (Perlmutter & Royer, 1973). Serial position effects have been found with prose passages (Deese & Kaufman, 1957; Frase, 1969; Kirscher, Note 3) while others (Richardson & Voss, 1960) have failed to find the effect. Meyer and McConkie (1973) claim to have resolved the apparent inconsistency. They separated serial position from structural importance, using their representational system (to be described later), and found recall is better predicted by the latter. I suspect, however, that if one controlled structural importance, one would still find an effect of serial position.

The research on prose which extends the work typically associated with word pairs and sentences argues against the criticism that investigations with smaller units of analysis will not generalize to normal text. However, the conclusions one should draw from the results are not clear-cut. Interference, positive transfer, and organizational effects are only achieved with paragraphs when much care is taken in construction of the paragraphs so that they resemble each other in specific respects. Myrow and Anderson (1972) acknowledge that their obtained results demonstrating retroactive inhibition between passages are unlikely to occur in the classroom because

typically one does not encounter sets of passages that match (and mismatch) in such specific ways.

It would be worthwhile to continue investigating the degree to which effects found in verbal learning generalize to prose processing, but only within the framework of a theory of memory and comprehension. A basic complaint can be lodged against much of the research discussed in that it concerns the discovery of the conditions under which interference effects generalize to prose processing, but not the explanation of why and how they generalize. The research would seem more important if memory mechanisms that produce Retroactive Interference (RI) and Proactive Interference (PI) in both verbal learning and prose paradigms were proposed. Whether or not one obtains serial position effects with prose is less interesting than knowing why one should or should not obtain the same effect as that obtained with word lists. Anderson and Bower (1973) propose the only theory that addresses both paradigms.

Discussion

A number of conclusions can be distilled from the preceding studies. The extent to which a passage is comprehended or retained is not solely a function of the text or the reader. Rather, a number of experimental manipulations can interact with text and reader to affect performance. The type of questions asked about the passage, whether background information is presented, how easily subjects can map referents onto familiar concepts, all affect performance. In some circumstances, it does not matter whether the questions are asked before or after reading the passage; in other cases, better performance (ability to answer questions) occurs when questions are asked prior to reading; in still other situations, performance is best if questions are asked after the passage has been read. When passages are sufficiently vague, they can only be understood if a title or picture is given that indicates the setting.

Generalizations concerning effects of context, priming questions, interference, or transfer (e.g., when manipulations will have the greatest effect) are difficult to specify in a precise way. Which manipulations are effective at which times could be predicted by a model for prose comprehension. Apparent inconsistencies in results could perhaps be understood within a theoretical framework.

One of the requirements for such a comprehension model is a good representation of text. The research discussed thus far was not concerned with developing one.

Representations of Text Structure

Many theorists concerned with finding an adequate representation of a prose passage maintain that doing so is a necessary prerequisite to other research on prose comprehension. Meyer (1975) has argued that structural variables can influence the learning and retention of items in a word list and that structure probably also affects retention of prose passages. She points out that one can ameliorate problems such as measuring the similarity and differences among passages and scoring the recall protocol from a passage by the use of a structural analysis of prose. Others (e.g., Crothers, 1972; Frederiksen, 1975a) have argued that theorists will be able to induce the processes involved in text comprehension by comparing memory protocols of a passage with a representation of it. Whether or not these theories of representation are useful for all aspects of research on text understanding remains to be seen. For