Book Reviews

LANGUAGE AND MENTAL DEVELOPMENT by Pierre Oléron. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977. xii + 182 pp. \$16.50.

Language always is a focal issue in discussions of intelligence. What is its role in thought? Can mental life thrive in its absence? What is the impact for the developing child of acquiring language? Thoughtful people have reflected on these issues for as long as anyone cares to record. There are, as with any broad issue such as this, a limited set of fundamentally different answers to such questions, though obviously the details of the answers are often complex and subtle.

Pierre Oléron of the Université Réné Descartes de Paris is one of the thoughtful people who has reflected upon these issues, and this book presents us with the fruits of his reflection. The theme of the book is the role of language in mental development. It attempts to pull together existing theory and data and draw general conclusions about the nature of the relationship. Oléron's thesis is that "the link between man's development and the use of articulated language is probably not insignificant (p. 144)." This modest claim is approached in a variety of ways. The book begins with a survey of research methods used in the study of language and thought, particularly those methods that are developmental. Next, the views of the Soviets and the American behaviorists are reviewed and evaluated. The third and fourth chapters, by far the most interesting in the book, review work on language and cognition and on the diversity of language, including much of Oléron's own research with deaf subjects. The final chapter is a cursory review of Piaget. In general, the dreariest parts of the book are those in which Oléron is reviewing the positions of others, particularly his reviews of Russian psychology, American S-R psychology, Piaget, and Whorf. The reasons for reviewing this particular collection of theorists is never made clear, though presumably these were influential in Oléron's own thinking. The sections that review these theories seem almost divorced from the remainder of the book.

However, in the portions of the book that Oléron is "on his own" there is much that is of interest. He develops various theoretical ideas, but one that is particularly exciting is his contrast between the instrumental and the indirect effects of language on thought. Instrumental effects are those most of us probably think of first. These are the uses of language as tools in thought. Language is used to name objects or relations, to state general principles, and to describe past, present, or future states of affairs. Put another way, language serves as a medium of representation in thought. Most investigations of the effects of language as labels or mediators have been studies of these instrumental effects. However,

language could influence thought in other ways. Language might initially serve as a mediator of thought, but through repeated use of such mediation new patterns of thought that do not depend upon language could evolve. Presumably the kinds of influences described by Whorf are of this type. Further, the use of language as a mediator of thought could introduce a general attitude of abstraction. Oléron describes these indirect effects as follows:

Since the use of language, in some sense, establishes distance between the perceiver and the object perceived, its regular use accustoms one to this distance.... This distance between stimulus and response occurs even though nothing explicit about it has been said.... It is a by-product of language use and generalizes even to situations in which no language is necessary. The regular use of language can make an individual more cautious and guarded about his immediate impressions. [p. 82]

The idea of indirect effects is that the possession of language introduces a whole new range of attitudes toward experience. This is a very attractive idea. However, as might be guessed, it is difficult to evaluate. It is not clear what would count as evidence of such indirect effects. Presumably, we would expect to see a wider range of abstractive skills in the linguistically sophisticated organism, particularly in cases where language would seem to play a minor role. However, it is difficult to know how to identify such cases. Oléron's discussion of indirect effects suggests we ought to be more imaginative in our conceptual analyses of the potential roles of language in thought.

Oléron's research on the relation of language and thought has focused on comparisons of deaf and hearing children. Most of his research has been published in French, and thus is less accessible to the English-speaking reader. Unfortunately, the research is not presented in any detail in this volume. Only the general conclusions are described. Little information about the designs, methods, or data are given. Thus, the book is not a useful summary of Oléron's work. The original articles would need to be examined before the conclusions he draws could be evaluated critically.

Research with deaf children is certainly relevant to the issue of the relation between language and thought. The inability to *hear* speech disrupts or even prevents the development of competence in language. One of various sign languages is often learned but Oléron points out that these are different in many ways from the spoken languages (he calls them "articulated" languages) that most of us acquire. Further, even if a sign language is learned, it is usually acquired much later in development than oral language. Thus, throughout a substantial portion of early development the deaf child does not possess linguistic competence. Like Hans Furth in this country, Oléron has studied deaf children's capacities in an effort to determine the role that language plays in normal development. The logic is that if deaf and hearing children show similar patterns of performance on a cognitive task, then language is probably not necessary. On the other hand, if different patterns are found, then language may play an important

role. Oléron, on the basis of his own investigations and an evaluation of related findings, cautiously concludes that language is important for normal intellectual development.

Of course, the data from deaf children cannot be conclusive, since differences in performance between deaf and hearing subjects could arise for many reasons. Oléron is aware of this, and discusses many of the limitations in the first chapter. Let us briefly review some examples of potential difficulties. First, because they have no language, it is more difficult to study deaf children. It is hard to give instructions and verify that they understand the nature of the task. It is more difficult to establish rapport. Second, the performance of deaf children could be influenced by affective problems, masking their cognitive competences. Growing up with any sensory deficit could introduce all kinds of emotional difficulties. Third, because they are deaf, such children are treated differently by people. Thus, their range of experiences is different from those of a normal child. Social interactions are much more difficult, and are of a different character. Normal schooling experiences are usually precluded. Finally, there is the possibility that deafness is connected with other organic problems. Extreme cases of this can usually be detected, but we can never be sure. In sum, inferences about the role of language in intellectual development from data with deaf subjects must be interpreted cautiously.

Though Oléron reviews these inferential problems, it is difficult to evaluate their significance when he discusses his research. In all fairness, Oléron is exceedingly cautious in drawing general conclusions, almost annoyingly so. Thus, we must credit him with the requisite circumspection. However, we as readers are left in a very uncertain state. Because so little is said about the details of the studies, and because the inferential problems of working with data from the deaf arc not discussed in relation to any specific findings, we cannot draw clear conclusions. The results of his research are suggestive, and if your theoretical bias is to believe that language is important you will find little here that makes you uncomfortable. But we could have hoped for much more than we are actually presented. This book will probably not be as influential as Furth's (1966) earlier monograph because of the superficial presentation of the research.

A minor comment. The book is hard to read. It is difficult to judge whether the author or the translator is at fault. The wording is often clumsy, and it is hard to get a clear idea of the intended meaning from many passages.

In conclusion, we could wish that Oléron had written a different kind of book. Its strength is the author's thoughtful, analytical approach to this most fundamental of issues, the role of language in thought. It is a personal view, but not a comprehensive one, and thus is quite uneven. If less had been written about the Russians, the behaviorists, and Piaget, and more about Oléron's own ideas and research, we would come away much more enthused. There are genuine insights in the book, and many of the parts that are not reviews of other positions are well

worth reading. But if you are going to read it from cover to cover, be prepared to be frustrated by many parts too.

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REFERENCE

Furth, H. G. Thinking without language: Psychological implications of deafness. New York: Free Press, 1966.