Chapter 85
Learning Words from Experience:
An Integrated Framework

Annette M. E. Henderson
University of Auckland, New Zealand

Mark A. Sabbagh
Queen's University, Canada

ABSTRACT

How does experience influence children's acquisition of word meanings? In this chapter, the authors discuss the evidence from two bodies of literature that take different perspectives to answer this question. First, they review evidence from the "experience" literature, which has demonstrated that different experiential factors (e.g., differences in the quantity and quality of maternal speech) are related to individual differences in children's early vocabularies. Although the results of the studies within this literature are interesting, the authors argue that they do not clarify how experience influences children's vocabulary development. They posit that this question can best be answered by marrying the "experience" literature and the "cognitive" literature, which has identified the skills and knowledge that children possess that help them determine the meanings of words. The authors demonstrate how integrating both literatures will provide a valuable framework from which research can be designed and hypotheses tested. In doing so, their framework will provide a comprehensive understanding of how experience influences children's lexical development.

INTRODUCTION

To learn a new word, a child must parse the word from the ongoing speech stream, identify the intended referent of the word (e.g., object, person, or place), and then make an inference about the meaning of the word (e.g., the object's name, function, colour, etc.). Despite the apparent

difficulty of the word-learning task, children's vocabulary development proceeds at an impressive pace (Anglin, 1993; Carey, 1978). Children show signs of understanding words at approximately 8 months of age. By 11 months, children understand approximately 50 words and have produced their first intelligible word. At 14 months, children understand over 150 words and produce approxi-

mately 28. By their second birthdays, children produce approximately 50 words and typically experience a 'vocabulary spurt' in which there is a marked shift in the rate at which children produce new words. By 30 months, children's productive vocabularies may contain over 500 words. While it is true that many typically developing children progress through these milestones, a large body of research has documented significant individual differences in language development. In particular, broad carefully conducted studies have shown that lexical development–typically measured as vocabulary size and composition–is affected by experiential factors, such as the amount of speech children hear or socio-economic status (see Hoff, 2006). Though convincing in their demonstration that experience affects language development, these studies are rarely able to speculate on *how* experience shapes the processes through which children acquire their vocabulary.

Growing in parallel with the "experience" literature is research that has made substantial strides in understanding how children learn the meanings of new words (see Bloom, 2000; Hall & Waxman, 2004). This "cognitive" perspective entails characterizing the skills and knowledge that children have that might help them solve key parts of the word learning process, such as identifying the specific aspect of the environment that is the intended referent of a new word. Within this research, healthy and vibrant debates have arisen on multiple theoretical levels (see Golinkoff & Hirsh-Pasek, 2000). One such debate concerns the extent to which experience shapes the development of children's word-learning tools.

We believe that the "experience" literature and the "cognitive" literature, though largely conceptualized as being separate, have much to offer one another. For instance, the cognitive mechanisms that affect word learning can be better understood by investigating the experiences that might support their use or acquisition. Likewise, understanding the specific experiences that play a role in language development may help adjudicate among various theoretical debates concerning the classes of mechanisms that are important for cognitive development, and their detailed characterizations.

We begin by describing three individual differences in children's vocabulary development that have received particular attention within the experience perspective. We then highlight the key experiential factors that this perspective has identified as contributing to the observed individual differences. The findings within this literature clearly demonstrate that children whose input contains more words and/or different types of words, are more likely to learn more words and/or different types of words (e.g., Goldfield, 1993; Hart & Risley, 1995; Hoff-Ginsberg, 1991; Huttenlocher, Haight, Bryk, Seltzer, & Lyons, 1991; Huttenlocher, Waterfall, Vasilyeva, Vevea, & Hedges, 2010). However, the findings do not demonstrate *how* experience influences the variability in children's lexical development. We posit that the input that children hear during conversations with their caregivers functions to shape the strategies children use to learn new words. In turn it is the presence, or absence, of a particular strategy influences a child's vocabulary growth and composition. We present some recent findings within the cognitive perspective, which we believe provide valuable insight into the question of how experience shapes children's vocabulary development. Lastly, we argue that integrating the experience and cognitive literatures will provide a valuable framework from which research questions can be designed and hypotheses tested to gain a comprehensive understanding of how experience influences children's lexical development.

WHAT VARIES IN CHILDREN'S LEXICAL DEVELOPMENT?

Among same-aged children, there are substantial individual differences in both quantitative and qualitative aspects of lexical development. Before we describe this variability, it is worth acknowledging

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