Recent psycholinguistic investigations have advanced our understanding of the acquired dyslexias. Developmental analogues have been described to some of these disorders. A new case of developmental phonological dyslexia is described here. A.H. is an intelligent 10-year-old boy with no neurological abnormality. Reading and spelling are below age level. A.H. is poorer at reading words than nonwords. The majority of his errors are paralexias: visual, derivations, or visuosemantic. Spelling-to-sound regularity does not affect the ability to read aloud. A.H.'s reading performance is significantly impaired when words are presented typed in reverse order, thereby prohibiting global strategies. Spelling of nonwords is no better than reading of nonwords. Only one-fifth of spelling errors are phonologically valid. A.H. has imperfect development of both the phonological route to reading and the phonological route to spelling.

INTRODUCTION

Two distinct types of dyslexia have been of interest to psychologists and linguists. Acquired dyslexia is a reading disorder that is manifested after brain damage in a previously literate adult. In contrast, developmental dyslexia is a disorder first manifested in childhood, for which there has been no known preceding head injury. The precise definition of developmental dyslexia is still debated and discussed (e.g., Eisenberg,
1978), but it is widely agreed that the discrepancy between predicted reading ability on the basis of intellectual level and observed reading level on formal tests should be the crucial diagnostic indication of the disorder.

In recent years there have been substantial shifts from the traditional approaches to both the study of acquired dyslexia and the study of developmental dyslexia. Acquired dyslexia was traditionally classified on the basis of the presence or absence of concurrent dysgraphia or aphasia, or on whether letters, words, or sentences were most severely affected (Newcombe & Marshall, 1981). In developmental dyslexia the early analyses of individual patterns of reading performance carried out by Hinshelwood (1917) and Orton (1925, 1926, 1928) were superseded by a prevalent group study methodology. Many of these studies were motivated by a quest to establish causal factors for the disorder but many others outlined the cognitive characteristics frequently seen in children with developmental dyslexia. A substantial number of these studies have been summarized and discussed by Benton and Pearl (1978).

It is of relevance to the current study that group differences have been found between dyslexics and normals on tasks requiring phonological skills and competence. In particular, it has been proposed that dyslexics are not sufficiently aware of the phonetic structure of spoken language and have difficulty in the "phonemic segmentation" of both written and spoken words (e.g., Mattingly, 1972; Shankweiler & Liberman, 1972; Elkonin, 1973; Downing, 1973; Liberman, Shankweiler, Fischer, & Carter, 1974; Liberman, Shankweiler, Liberman, Fowler, & Fischer, 1976; Liberman, Shankweiler, Camp, Blackman, & Werfelman, 1980; Liberman, 1982). However, one difficulty in the interpretation of these group studies is that they assume that developmental dyslexics form a more or less homogenous group. Although dyslexics may be impaired as a group relative to controls on a given task, it is nevertheless possible to find dyslexics who perform at normal levels (for examples see Ellis, 1985).

Many investigators have pointed out that dyslexics appear to fall into subtypes (e.g., Birch, 1982; Ingram, Mason, & Blackburn, 1970; Johnston & Mykelbust, 1967; Mattis, French, & Rapin, 1975). If these categories are justifiable, then it is surely of interest to establish the cognitive capacities of each subgroup rather than for all subgroups averaged together. Marshall (1984) and Ellis (1985) have recently discussed the advantages of basing subtyping on "intrinsic" features of reading and spelling rather than associated symptomatology. The previous work of Boder (1970, 1971) is notable in this connection. She extended and enriched the earlier subtyping of dyslexics by Kinsbourne and Warrington (1963), drawing particular attention to the qualitative nature and differential patterns of the errors made by dyslexic children.