Phonological awareness is part of a more general awareness of language, called metalinguistic awareness, which refers to the ability to think about the form of language as distinct from its content. A person who has metalinguistic awareness knows that talk can be broken down into utterances which follow grammatical and pragmatic rules, that utterances can be broken into words, and that words can be broken into their component sounds (Tunmer & Bowey, 1984; see Tunmer’s review in Volume 2). In Piagetian terms, metalinguistic awareness coincides with the emergence of concrete operational thinking, where the child is able to think about problems from two different perspectives.

Phonological awareness is a metalinguistic skill. The word “phonological” is derived from ancient Greek (“phone” means “voice”; “logos” means “word”). It refers to the ability to reflect on and manipulate the sound components of spoken words. Some researchers distinguish phonological awareness and phonemic awareness. Phonemic awareness refers to a focus on the phoneme, but phonological awareness has a wider applicability (Share, 1995). It can refer to the syllabic structure of words (e.g., “catnap”), and to the onset-rhyme structure of the syllable (e.g., c-at). The onset is the beginning consonant(s) and the rime is the remainder of the syllable, including the vowel and optional consonants. Thus, the onset of “cat” is “c” and the rime is “-at”.

Phonological awareness is the ability to think about the sounds of words separately from their spellings. Tests of phonological awareness usually involve looking at pictures of objects, or else listening to spoken words. The assessment of phonological awareness can range from tests of simple awareness (e.g., “What is the first sound in cat?”), through to tests of more complex awareness (e.g., “what are the sounds in cat?”). It seems that phonological awareness is something that emerges gradually in the child. To be aware of sounds in words, the child has to ignore the meaning of a word and focus on its form (Gough, Larson & Yopp, 1993). Thus, the child has to think about words in a different way, and this can be difficult. An illustration of this difficulty is when a 5-year-old is asked to say the sounds in cat, and she says “meow”.

EARLY DEVELOPMENTS

Historically, teaching children about sounds in words dates back to the sixteenth century (see Thompson’s review in Volume 2). However, research on phonological awareness and reading is much more recent (see Leong, 1991). Researchers in Russia in the 1960’s were aware that preschool children lacked phonological awareness. Several Russian psychologists (e.g., Zhurova, 1973) were studying this problem. However, the work of these Russian researchers was not translated into English until the 1970’s. In their writing it is clear that they were aware of the problem of phonological awareness and learning to read. Zaporozhets & Elkonin (1971) mentioned “glass theory” (p. 139). In this theory, children were not aware of the form of words. It was as if words were a glass through which the child looked at the world. They also noted that “the ability to analyze word sound composition is a very important precondition for the correct training in literacy” (p. 169). Elkonin (1973) described the written word as “a model of the spoken word – a model of the word’s structure and its principle of construction” (p. 561).

While interesting work was being done in Moscow in the 1960’s, United States researchers Alvin and Isabelle Liberman were also tackling the phonological awareness problem. Liberman, Cooper, Shankweiler and Studdert-Kennedy (1967) had published a paper in “Psychological Review” reporting results which showed that phonemes in words, though psychologically real in the sense that we think we can hear them separately, are in fact overlapping. The overlap from one sound to another made it impossible to isolate each sound separately. It was hypothesised that the listener had a special device or module that enabled him/her to reconstruct the phonological sound structure of words. Liberman, according to Bertelson & de Gelder (1991), may have been thinking of the relationship between phonological awareness and reading in a paper published in 1968, where Liberman wrote that if phonemes “are real they are not necessarily real at a high level of awareness. That is to say, it does not follow from anything I have said that the man in the street can tell you about phonemes, or that he can even tell you how many phonemes there are in particular utterances.” (cited in Bertelson & de Gelder, p. 394). According to Mann (1991), Isabelle Liberman in 1970 presented a paper in which she also linked phonological awareness with the task of learning to read. Much of her later research was also focused on this topic. This work, and the psycholinguistic rationale which underpinned it, is described in Liberman (1997).

Looking back, it seems that the Russian and United States researchers were both on the same path. They realized that the stumbling block in learning to read was the phoneme.