

A COMPARISON OF THE VERBAL TRANSFORMATION EFFECT
IN NORMAL AND LEARNING DISABLED CHILDREN

BY

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THESIS

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Introduction and Rationale

Locke (1894) set down a principle for perception in which continued stimulation with an unchanging pattern will lead to illusory changes, or under some conditions to perceptual fading and disappearance. This principle applies to auditory stimuli as well as to visual stimuli (Warren and Warren, 1966). If a person repeats a word over and over, he will generally experience a lapse of meaning called semantic or verbal satiation. When a person repeats a word aloud such as "ace" without pausing, the stimulus should be acoustically equivalent to "say" repeated.

Warren and Gregory (1958) concluded in their preliminary studies that passive listening to repeated words produces both phonetic and semantic lability whereas repeating words to one's self produces only semantic effects without illusory change to other phonemes. Warren (1961a) termed his auditory illusion, based on listening to recorded repetition, "the verbal transformation effect". The "verbal transformation effect" is a means of studying factors underlying perceptual organization of speech sounds (Warren, 1971). It is suggested that verbal transformations reflect skilled reorganizational mechanisms employed during connected discourse as an aid to comprehension (Warren, 1968).

Verbal transformations are illusory effects which occur while one

is listening to recorded repetitions of clearly pronounced single words (Warren, 1966a). Warren presented single utterances (words and non-sense syllables) two times per second for a period of three minutes. Subjects were instructed to call out the word they heard initially, and then to call out each change as it occurred. Warren (1966a) concluded from these studies that verbal transformations occur with all syllables and words, that they usually involve considerable distortion of clear auditory stimuli, that they vary greatly with individuals, and that they usually invoke more than four different responses.

Numerous researchers (Locke, 1894; Bryan and Harter, 1897; Lashley, 1951; Brain, 1962; Taylor and Henning, 1963; Feder and Bever, 1965; Fay, 1966; Fenelon and Blyden, 1968; Huey, 1968; Warren, Obusek, Farmer and Warren, 1969; Green, 1971; Obusek, 1971; Warren and Warren, 1971; Harper, 1972; Naiser, 1972; Warren, 1972a; Warren, 1972b; Wilcox, Neisser and Roberts, 1972; Warren and Obusek, 1972; Obusek and Warren, 1973a; Warren and Ackroff, 1974) have investigated the relationships between verbal transformations and cognitive factors, neurophysiological factors (Bryan and Harter, 1899; Brain, 1962; Paul, 1964; Feder and Bever, 1965; Warren and Warren, 1966; Savin and Bever, 1970; Obusek, 1971; Harper, 1972; Naiser, 1972; Warren and Obusek, 1972; Obusek and Warren, 1973a; Warren and Ackroff, 1974), phonetics (Miller and Kicklizer, 1950; Warren, 1961a; Evans and Kitson, 1967; Evans, Longdon, Newan, and Pay, 1967;

