

## ANALYSIS OF FUNCTIONS OF DELAYED ECHOLALIA IN AUTISTIC CHILDREN

BARRY M. PRIZANT

*Emma Pendleton Bradley Hospital; Brown University, East Providence, Rhode Island*

PATRICK J. RYDELL

*Area Education Agency #12, Sioux City, Iowa*

This study was a preliminary attempt to determine how autistic children used delayed echolalia in naturalistic interactions with familiar people. Fourteen functional categories of delayed echolalia were derived based on videotape analyses of linguistic, extralinguistic, and paralinguistic features. Individual differences in functional usage were apparent across the three subjects. Delayed echolalia was found to vary along the dimensions of interactivity, comprehension of the utterance produced, and relevance to linguistic or situational context. The diversity of delayed echolalic behavior is discussed in reference to its conventionality, the presence or absence of communicative intent, and its status as symbolic communicative activity.

Language delay and deviant language characteristics are criterial features of the autistic syndrome (Rutter, 1978). One frequently cited form of so-called deviant language is echolalia, which, in general, refers to the repetition of utterances produced by others. What makes echolalic behavior in autism truly distinct from repetition in the language of normal children is the fact that it often remains a significant part of the verbal behavior of autistic children for extended periods of time (Fay, 1969). In addition, echoic utterances often are rigidly reproduced with no clear evidence of communicative intent.

Two general categories of echolalia have been identified in the language of autistic individuals. *Immediate echolalia* refers to repetitions that are produced either following immediately or a brief time after the production of a model utterance. *Delayed echolalia* refers to utterances repeated at a significantly later time. Problems concerning definitional criteria for echolalic behaviors are abundant. Such problems are most apparent when considering the dimensions of exactness of repetition, degree of comprehension of the utterance repeated, and the presence or absence of communicative intent underlying the production of echoic utterances. The lack of operationally defined criteria for echolalic behavior cannot be attributed solely to oversights of theorists and researchers. Echolalic behaviors, both immediate and delayed, are best described as a continuum of behaviors in regard to exactness of repetition, degree of comprehension, and underlying communicative intent (Prizant, 1983a; Schuler, 1979). The decision as to whether an utterance may or may not be called echolalic depends on one's theoretical orientation and involves a judgment which has to be based on criteria that are somewhat arbitrary in nature. [See Fay and Schuler (1980) and Schuler (1979) for in depth discussions of definitional problems.]

Immediate echolalia has received the greatest amount of attention from researchers, probably because it is easily identified. Research on immediate echolalia has

focused on structural linguistic considerations as well as functional issues. Some researchers have considered it to be a meaningless parroting that serves no apparent purpose (Lovaas, 1977; Schreibman & Carr, 1978), whereas others have discussed immediate echolalia as a primitive attempt to maintain social contact when an individual is confronted with language beyond his/her linguistic competence (Fay, 1973; Shapiro, 1977). Prizant and Duchan (1981) conducted the first systematic study which attempted to discover specific functions of immediate echolalia by analyzing the utterances of four highly echolalic autistic children. Seven functional categories of immediate echolalia were derived based on videotape analyses of 1,009 utterances produced by the children in interactions with familiar adults in school and at home during an 8-month period. Segmental, suprasegmental, nonverbal, and situational features were taken into account in deriving the categories. The children in the study produced echoic utterances which were interactive as well as non-interactive and which were produced with and without evidence of comprehension. The specific functional categories derived included *nonfocused*, *turn-taking*, *declarative*, *yes-answer*, *request*, *rehearsal*, and *self-regulatory*.

Delayed echolalia, which has been defined as "echoing of a phrase after some delay or lapse of time" (Simon, 1975, p. 1440) or as unstructured old forms used in new situations (Shapiro, 1977), has received considerably less attention from researchers. Sources of information about delayed echolalia in autism have been limited to a few studies and reports. Lovaas, Varni, Koegel, and Lorsch (1977) collected utterances from three autistic children who had frequently produced "self-stimulatory" delayed echolalia. The researchers, arguing within an operant framework, claimed that their subjects' delayed echolalia was under control of intrinsic rather than extrinsic reinforcement. They used their findings to explain why certain types of "psychotic speech" could not be extinguished, but they did not consider what functions the utterances may have served. Baltaxe and Simmons (1977,

