

Phonology as human behavior: Applying theory to the clinic

Yishai Tobin (Ben-Gurion University of the Negev)

The theory of Phonology as Human Behavior (PHB) (Diver 1979, Tobin 1997) has been taught in and applied to the speech and hearing clinic in Israel for close to thirty years. The theory of PHB was developed by William Diver of Columbia University and his students and combines and expands theoretical and methodological principles found in:

- (1) Saussure's (1916/1968) concepts of sign and system;
- (2) the "communication factor" (the distinctive marked/unmarked articulatory and acoustic features associated with Prague School phonology); and
- (3) the "human factor" (the asymmetry of phonological systems related to the concept of "ease of articulation" associated with Martinet's (1955) functional diachronic phonology).

The theory of PHB is based on:

- (1) the definition that language is a symbolic tool whose structure is shaped both by its communication function and by the characteristics of its users; and
- (2) the principle that language represents a compromise in the struggle to achieve maximum communication through minimal effort (Tobin 1990.).

The major contribution of PHB is that it provides a motivation for and an explanation of the distribution of sounds within the speech signal: i.e. it tells us why the distribution of segments of speech or phonemes within language in general, and within developmental and clinical phonology in particular, is non-random. This paper will show how these principles have further been applied by speech and hearing clinicians to diverse speech disorders and various degrees of hearing-impairment in a wide variety of languages including Israeli Hebrew, Palestinian Arabic, English, Finnish, Spanish, Polish, Russian, and Japanese. The theory has also recently been applied to Israeli Sign Language (Fuks and Tobin 2008, Tobin 2008).

In addition, the theory of PHB has been applied to the suprasegmental realm of prosody in both typical and atypical speech in Israeli Hebrew and Buenos Aires Spanish in both children and adult populations. We will also present our findings regarding prosody – both typical and atypical and developmental and clinical –for these diverse populations as well.

Bibliography

- Diver, W. 1979. "Phonology as human behavior". In *Psycholinguistic Research: Implications and Applications*, D. Aaronson and P. Reiber (eds.), 161-186. Hillside NJ: L. Erlbaum.
- Fuks, Orit and Yishai Tobin. "The Signs b- and b-bent in Israeli Sign Language According to the Theory of Phonology as Human Behavior." *International Journal of Clinical and Phonetics and Linguistics* 22 (4-5): 391-400.
- Martinet, André. 1955. *Économie des changements phonétiques: traité de phonologie diachronique*. Berne: Editions A. Franke.
- Saussure, Ferdinand de. 1968/1916. *Cours de linguistique générale* (édition critique R. Engler). Wiesbaden: Otto Harrassowitz.
- Tobin, Yishai. 1990. *Semiotics and Linguistics*, London/New York: Longman.
- _____. 1997. *Phonology as Human Behavior: Theoretical implications and clinical applications*. Durham, NC/London: Duke University Press.
- _____. 2008. "Looking at Sign Language as a Visual and Gestural Short Hand." *Poznań Studies in Contemporary Linguistics*. 41(1): 103-119.