LANGUAGE SAMPLING AND SEMANTICS IN DYNAMIC ASSESSMENT: VALUE, BIASES, SOLUTIONS

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Introduction

Dynamic approaches to assessment of child language have provided direction for reducing cultural, linguistic, and racial biases in the practice of speech-language pathology. As Guttierez-McLellan and Peña (2001) wrote:

 "A child's limited test performance may reflect different learning experiences or a lack of educational opportunity, and not necessarily language deficits. Children from culturally and linguistically diverse (CLD) backgrounds may exhibit depressed test performance, yet their performance may not reflect their true abilities or learning potential. On the other hand, CLD children with language impairment may be at risk for under-referral if language difficulties are believed to be language differences. For these children, clinicians must be able to use appropriate methods to differentiate children with a language difference from those with a language disorder (p. 212)."

Dynamic assessments consider the potential influence of cultural and linguistic history on children's responses to tasks; for example, whether dialect differences contributed to an African-American child's response "He run" to a 'third-person singular /s/ item on a standardized test (non-obligatory in African-American English). Dynamic assessments also engage the learning process as another control for potentially biased judgements about performance on standardized tests. The purpose of this paper is to highlight the role that spontaneous language sampling, children's own ideas and intentionality can play in assuring unbiased assessments of language competence.

Spontaneous Language Sampling

Spontaneous language sampling in contexts that support the child's free expression of intentionality, ideation, and affect, the core functions of language is relevant to dynamic assessment (Bloom, 1995). The utility of this principle is best captured by Duckworth (2006), who explained that "the having of wonderful ideas" (p.1) is, universally, the primary motivating factor for learning. This should be kept in mind when creating contexts in which language competence is observed, and learning potential is evaluated. For example, fast-mapping of vocabulary items would best be facilitated in contexts in which targeted vocabulary corresponds to the child's concomitant content of mind.

Contexts designed to support the child's optimal language performance and learning should be designed with sensitivity to the child's interests, as well as the child's cultural, linguistic, and developmental characteristics (i.e., their 'zone of proximal development'). Standardized tests do not typically access children's intentionality or probe responses. Thus, after evaluating performance of dual language learners on the CELF-4, Spanish (Wiig, Semel, & Secord, 2006). Barragan, Castilla-Earls, Martinez-Nieto, Restrepo, & Grey (2018) concluded that spontaneous language sampling remains the gold standard for language assessment.

Analyze Developmental Components of Ideation

No better contexts exist to observe developmental processes than those giving children opportunities to express their perspectives and intentionality based on their interests and experiences. Developmental processes include features of reasoning, which contribute to the child's awareness of specific events and their influence on one another. Consider the explana-

tions for a cat jumping into a bowl of mashed potatoes on a table. One child notices a bee, and comments on its action, "a bee flew by," while her older sister thinks about the cat's feeling state and comments that "she's frightened by a scary bee" (Kupersmitt, 2016).

Developmental processes also include the kinds of semantic relationships that children make among mental representations of objects, actions, and states that they reference linguistically (Bloom, 1995). Examples include "existence" relations between a specific object and the category of objects it belongs to (e.g., "Keegan [specific object] is a cat [category of animals to which ‹Keegan' belongs]"), "action" relations between an actor and object (e.g., "Keegan chased the mouse"), causal relations between events (e.g., "Keegan chased the mouse because he was hungry"), epistemic relations between a cognitive act (e.g., knowing, thinking) and the content of that act ("I know that Keegan loves me"; See Bloom & Lahey's [1978], content categories; Brown's [1973] semantic functions; and causal motivations of actions in narratives, Kupersmitt [2016]).

Once children can make such relationships, they can express or comprehend an endless number of utterances that code such relationships, given experience with (or imagination of) the specific objects, actions, states, events being spoken about. As such, relational content represents a barometer of the developmental status of language. Categories of relational content are believed to be shared by children universally and develop in the same sequence in children, regardless of language spoken (Brown, 1973). In other words, children express the same kinds of ideas, but with words and grammatical constructions specific to their own languages. Information about developmental aspects of the linguistic expression of content of mind, however, comes primarily from English, European, and to lesser extent Asian speaking sources. Consequently, studies of development in children who speak African languages, Caribbean dialects, Central or South American forms of Spanish, or in children who are bilingual do not exist and this is a problem.

Different languages and dialects vary in terms of how semantic relationship-making is encoded morphologically and syntactically. Consider the English approach to talking about Keegan chasing the mouse with Filipino: "Hinabol ni Keegan ang mouse" ("Chased by Keegan the mouse" [actor/subject-action-object becomes action-actor/subject signaled by "ni"-object]). Such aspects of language form influence the expression of relational content in daily discourse, and perhaps even the developmental sequence in which relational content might appear across languages (see Kupersmitt, 2016, for examples).

Let's Get to Work

As a profession, we need cross-cultural, cross-linguistic research yielding data about semantic relations that children express, and the linguistic, cognitive, and experiential factors that influence their expression. We require this information to make informed and non-biased decisions about children's language competence; institutional research, however, takes time. The children who need our services cannot wait. We have a responsibility to take steps to avoid biases in our assessments of children who may not share our cultural and linguistic heritage. We must invest time and effort to learn about the phonology, morphology, and syntax of languages spoken by the diversity of clients that we treat. More importantly, one should keep in mind that language form functions primarily to express ideation and intent. As such, to evaluate linguistic competence accurately and without bias, one must consider characteristics of a child's ideation and productive reasoning strategies within contexts in which that child is observed.

Some in the profession might interpret the paucity of cross-cultural, cross language research on semantics as evidence of bias, and as a consequence, reject all Eurocentric research in an endeavor to create a more global, unbiased assessment framework. We suggest that despite its narrow centricity (and age), historic developmental research (e.g., Leopold, 1949/1970; Bloom & Lahey, 1978; Brown, 1973) has value for our current efforts to address bias. Much of this research incorporates methodology borrowed from cultural anthropology in an effort to minimize adult-centric bias in analyses of child language (e.g. Meade, 1930). This research is also explicitly designed to avoid cultural bias in behavioral analysis. These techniques include observations of spontaneous behavior in naturalistic contexts, and 'etic to emic' procedures for identifying rules of behavior intrinsic to research participants. This methodology provides guidance for creating clinical contexts in which the developmental and cultural characteristics of a child's ideation and linguistic expression may be identified, free from observer bias. Until institutional research is designed to address these assessment issues, clinicians will be left without clear guidance. Consequently, they will be required to address these issues via clinical research involving our own clients to ensure that cultural and linguistic fairness and equity is achieved.

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