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Language Disorders

22
Language Delay in the Child
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THE ROLE OF LANGUAGE IN DEVELOPMENT

In the section on theories of language acquisition, we discussed various ways in which social factors, cognition, and innate endowments might affect language development. In this section, we wish to consider the opposite side of the coin -- how language affects other domains of development. Specifically, we will consider the role of language in developing and maintaining social relationships, developing self-concept, and achieving academic success. These areas in which language delayed children might experience problems secondary to their language problems. At times, work in these areas constitutes goals of therapy. At other times, such problems might be avoided altogether by direct work on facilitating language development.

The issue of how language affects other aspects of development is often alluded to in the literature that discusses the various functions of language. Indeed, a look at some of the major taxonomies of language function reveals that the three categories listed previously are often addressed in three lists. Halliday, for example, considers the following functions of language: (1) instrumental: to get things done; (2) regulatory: to regulate the behavior of others; (3) interactive: interaction between self and others; (4) imaginative: to create reality; (5) personal: expression of identity, of self; (6) heuristic: to explore the environment and to learn; and (7) representational: to express propositions (convey information).

The first three functions listed obviously relate to the role of language in developing and maintaining social relationships. We suggest that the imaginative function would be included here as well, because of its importance in the development of peer relationships. Halliday's personal function corresponds to our "development of self-concept" category, and he argues that language plays an essential role in the development of personality. The heuristic function, or using language to learn, is one of the ways in which language impacts upon academic success.

Unlike Halliday and many others, we have chosen not to list functions of language in this section, but rather to focus on the role of language in other domains of development. The reason for this is that most people tend to think of communicative functions only when they think of the functions of language. As Halliday notes, "We tend to underestimate both the total extent and the functional diversity of the part played by language in the life of the child. His interaction with others, which begins at birth, is gradually given form by language, through the process whereby at a very early age language already begins to mediate in every aspect of his experience. It is not only as the child comes to act on and to learn about his environment that language comes in, it is there from the start in his achievements of intimacy and in the expression of his individuality."44

Furthermore, focusing on the role of language in other domains of development provides us with a better conceptual framework for guiding assessment and intervention by emphasizing the rationale for doing so than does a list of language functions. It somehow seems less urgent and compelling if we say a child completely lacks the "personal" function of language than if we say a child is experiencing severe self-esteem problems due to her or his language delay.

Development and Maintenance of Social Relationships

From birth, communicative ability influences and shapes social relationships. In this section, we consider the impact of a language delay on parent-child and peer interaction. We have chosen their particular social relationships because the former has been extensively studied with language delayed children and because the latter has been studied with normal children, but is all too rarely considered in our work with language delayed children.

Parent-Child Interaction

A body of literature now exists that documents the impact of impaired communicative ability upon parent-child, particularly mother-child, interaction from birth onward. Elicitors of parental responses in infancy include the communicative behaviors of crying, smiling and laughter, looking, and non-distressed vocalizations. A growing body of literature documents that numerous populations of infants who are at high risk for later communication disorders e.g., Down's syndrome, developmentally disabled, brain damaged, malnourished, blind and high risk; exhibit communicative behaviors in infancy that are more difficult to detect than in normal infants. For example, cries may be of lower intensity, sustained for shorter periods of time, less differentiated, and arrhythmic, making them less apparent to parents.

The probable effect of a less "readable" infant on the parent-infant interaction has been discussed by Dunst, Goldberg, and Harbr. According to Goldberg, the chain of events is as follows: "When the infant is unpredictable and difficult to read, decisions (on the parents' part) require a longer time, are difficult to make, and are less likely to be appropriate."46 The interaction leaves both parties feeling ineffective -- the infant because she or he cannot predictably influence the environment and the parent because he or she cannot figure out an appropriate response. Eventually these feelings of helplessness and inefficacy make both parties less likely to initiate or respond to communicative bids. The decreased motivation to communicate leads to less opportunity for the infant to practice communicative skills and hence leads to a further lowering of skill level and of self-concept as a communicator.

As children with communicative impairments mature, parent-child interaction continues to be characterized by withdrawal. This is, significantly less overall interaction occurs between parents and their
language delayed children than between parents and normally developing children. The interaction that does take place between parents and their language delayed children is often characterized as controlling and intrusive, containing (1) attempts to elicit rather than respond to behavior, (2) a preponderance of parent initiated interactions, and (3) a large amount of parental directiveness. These patterns of interaction have been documented in numerous studies of children with language delay, mental retardation, and hearing impairments and their mothers. It seems that mothers attempt to compensate for the child's passivity by attempting to get the child to respond more and by initiating more themselves.

The high frequency of directives in maternal speech to these children may have a different explanation. Parents are highly motivated to socialize their babies successfully, that is, to get them to act in socially acceptable ways. As well, babies learn a lot by simply observing socially appropriate behavior. Much behavior seems to be taught by overt direction - the child hears a lot of "Do this" and "Don't do that." Indeed, many research studies have documented the directive nature of early adult-child interaction. Most infants become increasingly self-regulatory, and mothers of normally developing children correspondingly decrease the amount of directiveness in the language that they address to their children. However, self-regulation is mediated primarily through language. Children who may not adequately develop the ability to self-regulate because they have language deficits, may be more regulated by their parents in a compensatory fashion.

The previous discussion clearly indicates that the basic interaction patterns of the extremely important mother-child relationship can fall into a negative cycle early on with communicatively impaired children, thereby leading to a decreased desire to communicate on the part of both participants. Without intervention, this cycle develops into a continued low frequency of interaction for the children who most desperately need practice and success with communication. When interaction does occur, parents may be controlling and intrusive, unknowingly reinforcing the communicative passivity they are working so hard to draw the children out of.

The parent-child interaction lens is evidently a critical one for viewing the language impaired child, and clinicians need to address the parent-child interaction in their intervention efforts. It is the foundation, the crucial platform, on which the success of all other intervention goals depends. The earlier we can intervene, the less entrenched a negative interaction pattern will be, and the easier it will be to successfully teach alternate interaction patterns.

Assessing parent-child interaction at an intra system level can be accomplished by coding both parent and child behaviors in a spontaneous language sample or by an observational checklist such as the "Home Observation for Measurement of the Environment" by Caldwell and Bradley. In coding a spontaneous language sample, the clinician might first of all indicate the range and frequency of communicative intentions used by the parent. This indication would highlight an excessive use of directives and questions, both considered controlling interaction devices. In addition, on a discourse level, the clinician could code the parent's type and frequency of responsiveness to any communicative attempts on the child's part, either verbal or nonverbal. This encoding would reveal how often and in what ways the adult follows the child's lead, consequently providing the child with a sense of the power of communication to affect the environment.

Once the pattern of parent-child interaction is determined, the clinician must examine that interaction in relation to the child's language development and life needs. When the interaction is facilitatory for language growth and the parents' own personal needs have been assessed, the parents' role in the overall intervention program should be considered. Many parents can play an active and important role in building their child's language skills. This role may range from carrying out home assignments to implementing a full program with direction from the interventionist. Assuming a maximally supportive environment, to in effect train the parents to be the language facilitators is often more efficacious, especially for very young children. Certainly they spend much more time with their children than the therapist and have many more opportunities to facilitate language in natural contexts.

When assessment indicates a less than ideal parent-child interaction and the parent is a viable candidate for becoming involved in intervention, (see "Why Parent Programs Fail" by Nygard and Adair), improving the parent-child interaction becomes a most appropriate goal for intervention. This goal is especially appropriate for infants and preschoolers who spend a great deal of time interacting with one or both parents.

If parents' behaviors are targeted, an essential first step involves a careful and convincing explanation that their current interaction patterns are a completely natural adaptation to interacting with a communicatively handicapped child. Although a natural adaptation, clinicians need to explain that it may not be the best for facilitating language development. Because these children are already experiencing difficulty learning language, clinicians want to provide the maximal environmental support possible. The point that must be made manifestly clear is that the parents are not to blame for the child's language problems (except in the rare instances when this may indeed be the case). We often explain to parents that we have to work long and hard in training clinicians to repress the same natural reaction to "taking over" for the child who has difficulty communicating.

*The HOME manual is available from the Center for Child Development and Education, University of Arkansas, Little Rock, Arkansas 72204
Some structured parent training programs such as the Hanen program. "It Takes Two to Talk," focus on the parent-child interaction. This particular program trains parents to systematically (1) observe the child's attempts to communicate, (2) follow the child's lead, (3) respond so that the child learns, (4) keep the conversation going, and (5) prompt for better turns. Although the Hanen program was designed for the parents of prelinguistic and very early-language-level children, the same principles can guide intervention in the parent-child relationship regardless of the child's level of communicative ability.

**Peer Interactions**

From another point on the age continuum, the social problems of older children with language disorders and learning disabilities provide further evidence of the detrimental effect a language delay can have on development. In a review of the communication skills and peer relations of learning disabled adolescents, Donahue and Bryan describe the kinds of social interaction difficulties older language impaired children may encounter. Included are problems with making and keeping friends, interacting cooperatively with others in the classroom, fitting into cliques, and learning the slang that is currently popular. These problems may persist into adulthood; Blalock found that 50 percent of the adults she studied with residual language and learning disabilities had few friends, made inappropriate social comments, or showed inappropriate use of personal space.

There are several reasons why children with delayed language development may have peer interaction problems. First, some children with language delays also have problems in social perception. They have difficulty perceiving and interpreting the non-verbal cues of social communication, such as facial expression, intonation, social space, and gesture. Second, language delayed children sometimes also have motor problems that may interfere with their mastery of social activities such as sports and learning dance steps. A third and major reason language delayed children may have peer interaction problems relates specifically to the language impairment. Gottman and Parker identified several conversational processes that are highly related to children hitting it off with each other in the first steps of friendship building. In order of importance, these processes are communication clarity and connectedness (especially the provision of clarification following a request), the successful exchange of information, exploration of interpersonal similarities and differences, the establishment of joint play activities, the amicable resolution of conflicts, and disclosure of private thoughts and information. Language delayed children may have considerable difficulty with many of these communicative exchange processes. In addition, numerous other communication problems of language delayed children can influence their peer relationships: they frequently have difficulty understanding verbal humour; they have trouble learning ritual insults; they take teasing very literally; they are slow to master slang; their problems understanding rapid speech and following topic shifts may make it hard to keep up with conversations; they may have problems learning the rules of games, especially word games; they may not know the rules for when and how to initiate and terminate conversations; or they may be excluded because they "sound different." And fourth, language delayed children may develop poor peer interaction skills because they have more limited opportunities to learn them. Children who are socially and linguistically less mature than their age mates may become social isolates, thereby further decreasing their opportunities to learn appropriate peer interaction skills. Educational settings can contribute to this problem as well. Children who are served in special education classrooms may have little opportunity to learn appropriate peer interaction skills from normal peers.

Awareness of the probabilities of peer interaction problems among children with delayed language development alerts clinicians to the need to assess peer interaction as a subsystem of the social domain. Clinicians have several techniques available for such as assessment at an intrasystem level. These include observing the frequency and type of social interaction the child engages in within the classroom, on the playground, and in small group situations; interviewing parents and teachers about the child's activities, including friendships, groups the child participates in, and special interests; and sociograms of the relationship dynamics in groups. At an intrasystem interactions level, the clinician can pay particular attention to the role language plays in each of these situations. If the child is found to be at risk for peer interaction problems, several methods of intervention are available. First, the child's environment can be structured so that more opportunities arise for successful social interaction. These opportunities may include having a parent arrange small playgroups, finding a few potential friends and arranging for more frequent contact with them, mainstreaming the child to increase opportunities to learn social behaviour from normal peers, and having the teacher arrange peer tutoring opportunities. Helping the child develop special interests in which she or he can excel is useful for boosting the child's self-concept and can also afford opportunities to interact with peers who have similar interests. Teachers can be encouraged to reinforce cooperative group performance on tasks, rather than rewarding individual competition. For children who do not interact successfully with normal peers, opportunities can be arranged for the child to interact with younger normal children, who may be more comparable in language age and social maturity to the language delayed child.

A second approach to intervention for language delayed children with peer interaction problems
involves direct teaching of social interaction skills. The techniques used for direct teaching include using films for modelling prosocial behaviour, applying programs for social training (such as magic circle or personal effectiveness training) and training specific social communication skills. Researchers at the University of Karasas are developing a strategies training approach for use with learning disabled adolescents. Students are taught specific strategies for resisting peer pressure, giving positive and negative feedback, negotiating, and personal problem solving.

Development of Self-Concept

Two aspects of self-concept were distinguished by William James -- the social self and the private self. The social self consists of the many social roles we play, which expand and change throughout development. The toddler soon adds to the roles of child, daughter, and sibling those of playmate, pupil and so forth. The private self is one's inner essence -- those thoughts, feelings, intentions, and memories of a unique set of experiences that are hidden from the purview of others. Although anthropologists such as Rosaldo have recently suggested that this dichotomy may be culturally shaped and not a universal characteristic of human beings everywhere, it is a helpful framework for considering the self-concept of the language delayed child. On the one hand, one needs to consider how well a child has absorbed the role attributes and relationships that are required in various social contexts. This consideration requires a social view of the child in myriad social contexts. On the other hand, one should be attuned to the inner emotional world of the child.

The self-esteem of language and learning disabled children often becomes a glaring clinical problem by the time the children reach adolescence. We would hope that a conscious consideration of the role of language in the development of self-concept would alert clinicians to pay attention to this dimension of the child's development from the earliest stages of intervention and to intervene when problems are evidenced.

In order to consider the impact of a language delay upon a child's developing self-concept, consideration of the process of development is helpful. In the following, we will consider two possible avenues of development of self-concept -- the "looking glass self" and learning social roles -- and how a language delay might interfere in both of these processes.

The Looking Glass Self

Mead stresses the impact of the child's experiences with others on her or his developing self-concept. He discusses the "looking glass self" wherein children's developing understanding of their own identity represents a reflection of how others see and respond to them. Mead distinguished between the "I" -- the personality -- and the "me" -- which is built on attitudes of others. We tend to agree with the anthropologist Rosaldo, who recently suggested that undoubtedly both aspects are socially created, not just the "public" self. Indeed, in the following discussion, we consider how others' opinions might shape the innermost emotional landscape of the language delayed child.

We might extend Mead's "looking glass" metaphor and consider factors that might cause others to give the language delayed child a poor reflection of himself, an image eventually internalized to form the child's own poor "self-image." First of all, from Mead's perspective the development of the self-concept is inextricably bound to social interaction. As such, the issues discussed earlier in the section on the development of social relationships point out potential problems in the development of self-concept as well. The parent who cannot "read" the infant and who eventually feels helpless because of this inability probably initially reflects any number of negative emotions back onto the child, such as frustration and anger. Later, the parent protects himself from these less than satisfactory interactions by simply avoiding them altogether. Meanwhile, the child is internalizing these negative feelings in the initial formation of his self-concept. The lack of interaction that ensues may also have a disintegrative effect on the emotional health of the child (e.g., Bowlby and Spitz both have studied the extremely deleterious effects of extreme social deprivation on all aspects of infant development).

In addition to the day to day frustrations of interacting with a child who is difficult to interact with, the parents' emotional "reflections" may stem from the broader impact of dealing with the extreme disappointment of having a handicapped child at all. An emotionally healthy adjustment to such disappointment often requires months, or even years, of moving through the grieving process, with its stages of denial, anger, guilt, and depression that may precede acceptance of the handicap. These emotions are undoubtedly also "reflected" back onto the child. In addition, siblings may naturally become jealous of the special attention given to the handicapped child, leading to yet another source of negative reflections on the "looking glass" that serves as the basis of the child's self-concept.

Negative reflections are not restricted to family members alone. The "different" child is also exposed to the reflections of a society at large in which attitudes toward handicaps may be manifested in ridicule, scorn, revulsion, pity, overprotection, and so forth. One mother we worked with relayed a heart-rending story of the appalled reaction of a woman in a neighbouring car at a red light to the behaviour of her autistic son. The mother felt so humiliated by the other woman's reaction that she followed her for blocks to give her a card she carried for just such occasions. It said, "Please excuse my child's unusual behaviour. He is autistic. For more information on autism, call ______."

(here she provided the phone number of the state society for autistic citizens)
The notion of the "looking glass self" reminds the clinician doing the initial inter- and intrasystem analyses to look closely at the child's emotional self-concept, at the reflections of self she or he is receiving from significant others, and at the needs of those others as well. We must sensitize ourselves to the many ways in which the child might allow us glimpses of the state of her or his own inner emotional world that has developed as a result of many of these experiences. Children sometimes provide such glimpses by fleeting comments they make. More often, we are able to discern their feelings by reading the sometimes subtle and sometimes poignantly direct symbols manifested in their play, drawings and fantasy stories.

Interviewing the parents and siblings and examining parent-child and sibling-child interactions aid the clinician in identifying the child's mirrors in the immediate environment. In addition, the clinician might specifically assess the parents' feelings and attitudes about having a handicapped child as well as their resources for coping with these problems. Too often clinicians react to parents' expressions of guilt, anger, fear, denial, or depression without understanding the functions these feelings serve in helping the parents cope with having a handicapped child. Moses has provided helpful explanations of the functions of these feelings and suggestions for how clinicians might deal with them productively rather than reactively. 104

At the developmental level, Greenspan's work provides a framework for discerning the normal emotional concerns of children at different developmental stages. 107 This framework provides a backdrop to use in determining whether a language delayed child is having emotional problems above and beyond the normal unconscious struggles toward growth.

When self-concept problems are suspected or identified through analysis of the "looking glass self," clinical intervention aimed at either preventing or remediating the language delayed child's poor self-concept might include a number of approaches. These include (1) improving the parent-child interaction, (2) connecting the parents with resources (such as counselling, support groups, and financial assistance) for coping with the added stress of having a handicapped child, (3) helping parents through the grieving process, and (4) being alert to signals from the handicapped child regarding her or his inner emotional world. In addition, involving siblings in the intervention process can serve to abate the natural and potentially destructive rivalries that often attend having a handicapped sibling.

Learning Social Roles

Much of our identity is defined by the various social roles we play. During development, a child learns the norms or prescriptions for behaviour associated with various roles. Language is related to this process in several ways. First, at the most global level, a child's mastery of the language of her or his community is a prerequisite to full participation in that society. Second, language is the principal avenue for conveying attitudes and social beliefs to the child. Third, knowing the language of cultural subgroups is essential to a sense of belonging to those groups. 108

Language delayed children are clearly at a disadvantage in learning the variety of social roles that provide access to social groups and to society in general. Because these children have less skill with language, they are deprived of the most important channel for learning about social roles. This undoubtedly leads to an experiential deficit, since the language delayed child does not learn the many roles that the normal child can pick up incidentally by observing others converse in various roles. In addition, normal children often practice roles such as mother, father, doctor, or teacher by role playing them in their dramatic play. We have already mentioned that some language delayed children appear to have deficits in their ability to engage in such symbolic play. Here again, the language delayed child, because of a lack of skill, would be deprived of practice in learning social roles.

For older children, being a member of the childhood culture in part requires the rather advanced linguistic skills involved in playground chants, jump rope rhymes, handclap songs, punning, ritualized insults, and secret languages. These types of language play are transmitted by children to children. Bernstein notes that such play with language makes the child "sensitive to roles and status and also to the customary relationships connecting and legitimizing the social positions within his peer group." 109 Regarding secret languages specifically, Sherzer notes that "a common function of play languages is concealment and a corresponding delineation of social groups and subgroups." 110 Not surprisingly, these various forms of language play are beyond the capacity of many language disordered children. They are unable to use such language skills to reinforce group solidarity and achieve access to important aspects of the childhood culture.

The preceding discussion offers some guidelines for the assessment of a child's knowledge of social roles at an intrasystem analysis level. One may want to observe the child interacting in a variety of social roles -- as a daughter or son, student, playmate, sibling, and so forth -- in an attempt to determine the child's role attribute knowledge. If the child engages in role play during dramatic play, one is provided with yet another window into such competencies. For the older child, one would need to assess the ability to engage in language play.

At an interaction level, the notion of social roles suggests that the interventionist consider potential language goals for their usefulness in the various social roles the child must function in. In addition, children may need to be taught to recognize the different social roles of others and to adjust their language accordingly. As was discussed when we addressed peer interaction,
particular types of language required for some roles
might need to be taught directly. Many language
delayed children must be taught to understand and
ever really learn to actually decode print. van Kleeck and Schuele summarize the
cultural phenomenon have documented the vast knowledge about literacy that
enjoy jokes; slang and the rituals of their peer groups.
clairvoyance raising the issue of who is the
best agents to teach different social roles. Peers may
be the best agents for teaching play group roles; parents may be best for son or
teachers may be best for student roles. Often
clinicians want to engage others in the clinician's intervention to increase carryover effects. However,
many times clinicians ask others to play a clinician role.
The social role learning perspective suggests that
these others may be more naturally equipped to teach
the language related to roles they already engage in
with the child. The most successful clinician may be
the one who can convey critical information about
the way the child learns and what language the child
needs to learn for particular roles and may also be the
one who can guide others to assist in the teaching.

**Academic Success**

In the preschool years, children's dual task of both
learning language and deriving meaning in social
contexts is bolstered by the fact that the language
they hear is usually embedded in concrete, daily life
experiences. The nonlinguistic context and numerous
nonverbal devices provide cues to meaning. As the
child enters school, there are increasing demands to
derive meaning from the linguistic code alone in both
reading and following classroom discussions. In our
culture, language is the primary medium of formal
education. It is not surprising then that language
delayed children are at risk for academic failure.

Language plays a crucial role in nearly all the
academic tasks children encounter. Many kinds of
language skills interact to influence classroom success,
including (1) literacy knowledge, (2) metalinguistic
skills, (3) comprehension monitoring, (4) classroom
pragmatic and discourse skills, (5) the role of
language in concept formation, (6) the role of
language in reasoning, (7) using language to plan,
(8) strategies for learning and study skills, and (9)
language necessary for specific academic content areas. Entire books have been written about many
of these areas. We shall briefly discuss only the first
two areas listed and refer readers to the references
listed after each of the other areas for comprehensive
coverage of the issues involved.

**Literacy Knowledge**

In recent years, anthropologists who have become
interested in literacy as a cultural phenomenon have
documented the vast knowledge about literacy that
children acquire before they ever learn to actually
decode print. van Kleeck and Schuele summarize the
domains of literacy knowledge possessed by
preschoolers that are indicated in this research. Some
of these areas of knowledge include (1) the

**SUMMARY**

In this chapter, we have reviewed the theories and
models upon which much current language
intervention practice is based. We have suggested that
the variety of available theoretic perspectives provide
a set of lenses through which the clinician might view
individual children who present with the symptom of
language delay. There are two final considerations we
must address before leaving the clinician to use these
lenses to explore language delayed children's individual
differences.

The first consideration involves the problem of
fragmentation. There is a danger in the artificiality of
viewing the child as a series of separate systems.
Damic has discussed the strong reliance on
fragmentation in language assessment and the fallacy of
breaking "the elements of language apart and trying
to test them with little or no attention to the way
those elements interact in the larger context of communication. Neither language nor children function this way; both are complex, synergistic systems in which the whole is significantly different from the sum of the parts. Unfortunately, as Schacter et al have pointed out, interventionists have tended to take either a fragmented view and attempted to "fix" one part of the system or a whole child view and attempted to provide general stimulation. Neither approach is successful in meeting all of the individual needs of language delayed children.

We would suggest that the nature of the problem lies not so much in the initial fragmentation, but in the failure to put the parts back together again. The complexity of language and its social, cognitive, and physical bases requires the careful scrutiny of its parts if the clinician hopes to examine the child's strengths and weaknesses in sufficient depth to understand them. What speech-language pathology has spent less time doing is examining the inter and intrasystem interactions in order to understand the reciprocal relationships among the specific language problems, the contexts in which they occur, the other systems involved, and the whole child. We hope that more careful attention to levels four and five in our intervention planning model will remedy many of our former oversights.

The final consideration is the potential theoretical incompatibility that can arise from clinicians viewing children through lenses of different and possibly conflicting theoretical perspective. One type of problem that may arise is a mismatch between assumptions about language and actual intervention practices. For example: Rice has discussed the mismatch between the premises of most language intervention that the problem resides within the child, that the focus of treatment should be on discrete skills, that language skills can be hierarchically organized) and the premises of the communication competence model, which takes into account the complex interactions among language, cultural expectations, and the context of communication. Another type of problem springs from the clinician's lack of awareness of and commitment to her or his own theoretical assumptions. In order to adapt to the individual needs of language delayed children, the clinician may switch assumptions with each child. As Johnston quips, "If this is Elmer, I must provide reinforcing consequent events."

The necessity to draw upon numerous theoretical perspectives in assessing and planning for the language delayed child should be obvious by this point. None of the theoretical orientations we have reviewed is comprehensive enough to yield an adequately broad view of the whole child. Few models account for the heterogeneity we find among children with delayed language. And no one perspective addresses all of the levels that need to be considered in intervention planning, even within the primary domain it focuses on. So how can the interventionist integrate many simultaneously held beliefs into one theoretically consistent perspective for dealing with children's individual differences? We agree with Johnston that the solution lies in taking theory seriously and in making explicit one's basic beliefs. The clinician who is sensitive to individual differences expects children to differ in the etiology and pathogenesis of the language difficulties, in the effects of context and the environment, in the interactions that occur within and among systems, in the goals selected for intervention, and in the optimal intervention agents and procedures. However, despite viewing the child through many different lenses, it is unlikely that the clinician can switch basic beliefs on the following questions without considerable soulsearching:

1. What is the nature of language?
2. What is language intervention?
3. What makes children's language behavior change?

The clinician must make explicit her or his answers to these questions and then must test the assessment and intervention practices selected to be sure that they are compatible with these basic assumptions.

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