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The Case of the Missing Piece: Using Language Structure to Decipher Delay v. Disorder in ESL Children

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Abstract
When working with ESL children lagging behind their peers, a question that often arises is whether a child is simply language delayed in his/her English acquisition or whether a child has an underlying language learning disability. As the first language provides the foundational cornerstone upon which a second language is built, a language learning disability can have long-ranging effects on a learner’s ESL development and literacy acquisition. Using a longitudinal case study approach of two preschoolers, this research study seeks to explore this issue by analyzing the acquisition of semantics (e.g., comprehension of quantity, negation, cause/effect), grammatical morphemes (Brown, 1973), and syntax (with a focus on wh- interrogatives) to determine whether there are any “warning flags” that not only might solve the mystery, but which could also be used as clues to help in deciphering the puzzle of language delay v. language disorder in other second language learners.

Introduction
Increasing numbers of limited English proficient (LEP) children are in the schools, often from populations that are at higher risk for language learning disabilities (LLD) due to multiple factors (e.g., lack of adequate maternal prenatal nutrition and medical care). As a guiding principle of education in general, and second language learning specifically, is to move from the known to the unknown (Ausubel, 1963; Brown, 2000; Freeman & Freeman, 1998; Tattershall, 2002), from a linguistic perspective, this would indicate building the second language (L2) upon the foundation of the first language (L1). However, if the child has problems with the L1, it is difficult to use it as a scaffold for acquiring the L2; that is, the foundational cornerstone is missing. The problem increases because diagnosis is difficult, if not impossible, due to the complexity of the situation that often includes attrition of the L1 along with developmental issues. Further exacerbating the problem is the paucity of research specifically investigating the language processing of special needs ESL children. Therefore, as a first step, this study investigates the language development of two preschool-aged, internationally adopted (IA), special needs children in order to determine what particular “piece” of language might hold a clue as to delay versus disorder. This study is unique in that information on both children, fifteen years later, will be used to determine whether the original conclusions (Pearson, 1992) reached in the study were accurate.

Review of Literature
Second language acquisition, by itself, is a complex process. When it is combined with language learning disabilities and the issues inherent in international adoptions, it becomes exponentially so. Therefore, because of the multifarious nature of the process, this review of the literature will be broken down into subcomponents where a cursory overview of pertinent issues to each area will be covered.
First language acquisition

A key issue in studies of first language acquisition has involved the rate of development versus the sequence of acquisition of key structures, especially those involved with grammatical morphemes and syntax. Similarities in sequence have been found across languages (Bowerman, 1973; Slobin, 1968), in children learning to sign (Newport & Meier, 1985), and in children with developmental delay (Leonard, 1998). In other words, the rate of acquisition may vary, but the ordering of major milestones appears invariant.

The classic study in child language morphology and syntax is that of Brown (1973). In a longitudinal study of three children, fourteen morphemes crucial for English syntax were chosen for analysis of acquisition, with the resulting order—based on correct usage in 90% of obligatory contexts—being: progressive, in, on, regular plural, irregular past, possessive, uncontractable copula, articles (a/an, the), regular past, regular 3rd person, irregular 3rd person, uncontractable auxiliary, contractable copula, and contractable auxiliary. Brown found that the sequence of acquisition approaches invariance despite variation in rate of development. Another area of syntax that a child must acquire involves interrogatives, including wh-questions and the use of auxiliaries in such structures. Brown (1973) and Ingram (1989) both found identical orders of acquisition for the first five developmental stages: rising intonation, what, when, addition of auxiliaries, and inversion. Once again, though the rate of acquisition varied, the sequence of acquisition did not (see also Berko Gleason, 2005; Radford, 1994).

Language learning disabilities

While the above studies addressed normal acquisition, they rarely addressed the child who appears normal yet experiences language delay. Tomblin (1996), in a large study of the general population, has conservatively cited prevalence figures of five percent, whereas Leonard (1998) cites a figure of seven percent language learning disabilities in the preschool population. When looking at studies on atypical language acquisition, a key issue that has evolved is delay versus disorder/disability. Early on, the term delay indicated permanence, that is, something that did not “catch up.” Yet currently, the terms delay and disorder have been differentiated, delay meaning an area where slower than typical development occurs, but which over time resolves; disorder indicating a delay or deviance that does not resolve over time (see de Villiers, 2003 and Rice, 2003 for further definitions). It is important to note that with a delay, the rate of acquisition is slower, yet the sequence of acquisition remains the same. In a disorder, though, not only is the rate different, the sequential order of structures is also different.

One type of language learning disability, termed Specific Language Impairment (SLI), exhibits a deficiency in the use of grammatical morphemes as the key defining characteristic. While other areas of delay may exist, tending to resolve over time, comprehension and production problems with morphemes continue throughout the school years, causing problems with literacy acquisition (Catts, Fey, Tomblin, & Zhang, 2002; Catts, Hu, Larrivee, & Swank, 1994; Johnson, et al., 1999). Some children with SLI also experience difficulties involving short-term memory, sequential memory, and word retrieval. (For in-depth discussions of SLI in general, see Adamson & Romski, 1997; Levy & Schaeffer, 2003; Watkins & Rice,
Adoption issues

Issues affecting second language acquisition in internationally adopted (IA) children include medical factors (e.g., prematurity/low birth weight, maternal drug/alcohol use, pre- and post-natal infections, and environmental toxins), socio-emotional issues (e.g., deprivation, abuse, and institutionalization), and first language development (Miller, 2005; Pearson, 2003, 2005a). Pearson (2004a, 2004b, 2005b) has also found a differential effect of these variables in the acquisition of basic interpersonal communication skills (BICS) and cognitive/academic language proficiency (CALP) in those children adopted at age three years and older (for BICS vs. CALP, see Cummins, 1980). More typical second language issues, such as the affective filter, personality types, and motivation also play significant roles in older IA children (for these variables in SLA in general, see works by Krashen, 1981, 1985; Lambert, 1972; and Skehan 1989; for these variables specifically in IA children, see Pearson 2003, 2005a). (For additional current work with IA children in language and other areas, see Federici, 1998; Gindis, n.d., 1999; Glennen, 2002, 2005; Mason & Narad, 2005; Miller, 2005; among others.)

In summary, the above cursory review of literature has addressed the issues of first language acquisition (most notably, rate vs. sequence of acquisition, especially in regards to grammatical morphemes), issues of delay vs. disorder in language learning (with a focus on SLI), and issues of particular concern with IA children across the realms of medical, socio-emotional, and language. With the above foundation in place, attention can now be turned to the specifics of this study.

Research questions

This study addresses the following questions: First, is there a delay or disorder in the language processing of each of the children in the study? And second, which component of language provides the missing piece—the clue—to unlock the puzzle of problematic second language acquisition in each child?

Method

Participants

Two special needs children constitute the main focus of this case study. Both children were adopted from overseas and exposed to English as a “second first language” (Glennen, 2002) or English as a second language (ESL). B, a female, was adopted at age seven months from a stable country with a good foster care system in place. Her development appeared normal, though slightly delayed. By the age of three years and ten months (3;10), significant delays were noted in language. At that point, she underwent a full evaluation through the special education department in a Midwestern U.S. school district and was subsequently placed in an unlabeled special education early childhood program. During the two years of this study that she was in the program, she received class instruction plus individual pull-out speech and physical therapies. L, a male, was adopted from the same country at the age of 2;6. Language, fine and gross motor, and social development were significantly delayed with major problems noted (e.g., cerebral palsy and megalencephaly). Upon arrival into his adoptive home, marked improvement was noted, though significant delays remained.
At age 3;1, a full evaluation through the same district special education department was made which resulted in placement in the same program as B. During the two years he was in the program, he received classroom instruction plus individual pull-out physical, occupational, and speech therapies. At the conclusion of this study, both children had made marked improvement, yet both also continued to exhibit delays in language and gross motor skills.

In order to more fully understand the constellation of patterns each child exhibited, it is necessary to first provide some additional background information. Following B’s birth, she was hospitalized for six weeks due to low birth weight, jaundice, and gastroenteritis. Upon discharge, she was placed in a foster home for six months where she was well-cared for and consequently physically thrived. At seven months, B was brought to the U.S. and immediately placed with her adoptive family. This was her first exposure to the English language. The first few nights she cried for her “Eoma” (mother in her L1), but otherwise adapted well. As time passed, she continued to thrive, although some skills were delayed and she exhibited no further expressive language. Finally, at age 3;0, she began to use a few isolated words. Almost a year later, she was taken for the aforementioned evaluation, at which point it was reported that she had average mental ability with significant subtest scatter and poor short-term memory; fine-motor and social skills were both in the near-normal to normal range; gross-motor and speech/language were each found to be significantly delayed.

The situation of L was different. Records indicate that he was born in a hospital, having a greater than typical weight and excellent Apgar scores. Upon discharge, he was placed in the care of an orphanage. Information on development during his first year is sketchy and does not follow what one would expect based on his healthy weight and condition at birth. At four months, he could not control his head, nor could he sit unsupported at thirteen months. He had also experienced pneumonia twice, measles, and enterocolitis. Upon examination at sixteen months, he was found to have an enlarged head, a physically weak condition, and bilateral otitis media with blood clots and perforations of both eardrums. It was at this point that he was placed in a foster home and subsequently diagnosed with cerebral palsy affecting the lower extremities and probable mental retardation. Social reports indicated a range of both normal and abnormal behaviors. In regards to gross motor development, he was significantly delayed, though making slow progress. In language, at 1;9, his comprehension was good and he was using words for mommy and daddy in his L1. He continued to understand what was said to him, could point to different body parts when verbally directed, and was now producing four words. At age 2;6, L arrived in the U.S. and was placed in his adoptive home; this marked his first exposure to English. Within a few months, he was taken to a children’s hospital in a large Midwestern city for medical evaluation, where it was determined that he had mild cerebral palsy affecting the lower extremities and behaviors indicative of maternal deprivation syndrome. Six months after his arrival, L was taken for an evaluation through the local school district, at which time he was unresponsive for all testing. He then entered the previously noted special education preschool program the following fall.
Procedure

Linguistic analyses of the two children’s language development were conducted over a two-year period using data collected from this researcher and special education personnel working with the children on a regular basis. Both standardized tests as well as elicited responses and naturalistic observation were used. Language performance tests can be problematic due to their limited content validity, i.e., only limited areas of language skills are possible to assess, and these do not represent real-world communicative situations (Bernstein Ratner, 2005). Because of these potential problems, structured tests of language comprehension and production should be supplemented by structural and pragmatic analyses of spontaneous language samples. Further, Brown (1973) suggests that the combination of both spontaneous and elicited measures, when taken together, give a better chance of accurately discovering the child’s state of linguistic knowledge. Therefore, in order to address these concerns, results of standard measures of testing were obtained on each child and then compared with the collected language samples. However, in order to provide a composite picture of each child’s linguistic knowledge, within the constraints of this paper, data will be reported in aggregate terms.

Specific data bearing on the children’s comprehension and production capacities were also collected through both elicited information gathering as well as from spontaneous language samples. First, comprehension of the following semantic areas were tested: active/passive, time, amount/quantity, cause/effect, interrogatives, wh-questions, negation, and plurality. Second, production of fourteen grammatical morphemes (based on Brown’s 1973 classic work), both order of emergence and order of criterion (established at 90%) were obtained from monthly natural language samples. These morphemes, in order of normal child acquisition, include: progressive –ing, in, on, regular plural, irregular past, possessive, uncontractable copula, articles, regular past, regular 3rd person, irregular 3rd person, uncontractable auxiliary, contractable copula, and contractable auxiliary. This order can be explained by linguistic complexity, with the earlier acquired morphemes being weighted heavier in semantic content and the later occurring morphemes weighted heavier in syntactic coding (Tager-Flusberg, 2005). Finally, emergence of wh-word interrogatives in productive language were also analyzed for each child using the natural language samples which were then compared to data by Ingram (1989) and Brown (1973).

Baselines were established using data from the early childhood evaluations and initial Individualized Education Plans (IEPs). Further data was then collected on a monthly basis, over a two year period, though occasional months were missed due to child illness. Additionally, monthly conferences were held with the children’s teacher and/or speech therapist in order to assess their progress in the classroom situation. All collected data and observations by the researcher were done in the familiar surroundings of the children’s home using their own toys in the following manner: spontaneous language samples were recorded for approximately one hour each month during a typical daytime activity; interactive language was tape-recorded for one-half hour, every two to three months, again during a different typical daytime activity; and an hour of specific situations designed to elicit responses to ascertain comprehension of the above semantic areas were also conducted on a monthly basis. (Details of the full
study, with specific elicitations and accompanying charts, can be found in Pearson, 1992.)

Results

Results for each child will be presented individually. The following order will be used: comprehension of semantic areas, production of Brown’s (1973) grammatical morphemes, and production of wh-interrogatives which involve the syntactic transformation of wh-fronting.

Language development in B

Over the time of data collection, B’s age was 4;3 to 5;10, an age period during which the language structures under study here should either have been in place or well into stable development. In B, the following semantic areas were either firmly in place or showing a steady development to target levels: comprehension of quantity; cause/effect; yes/no interrogatives; wh-questions, except for the time element of when; and negation. Problematic areas where comprehension was sporadic or just beginning to emerge include: time elements; active/passive; and singular/plural.

Brown’s (1973) rules for assessing 14 grammatical morphemes were used along with his accuracy criterion of 90%. Additionally, order of emergence was also tracked using naturalistic language samples. Compared to Brown’s data, the order of emergence of B’s grammatical morphemes was widely scattered. The order of criterion, though, is more closely matched. If the rankings of the 14 morphemes are divided into a top half and a bottom half, B is acquiring the top half first, as would be expected. The later occurring, bottom half, however, are not emerging and/or reaching criterion. In fact, only four of Brown’s morphemes are in place at age 5;10 — in, on, progressive –ing, and possessive –s.

The order of acquisition for wh- interrogatives in B’s productive language shows substantial scatter effect when compared to established norms. At age 5;11, rising intonation indicative of questions remains limited and there is an almost complete lack of inversions, modals, and tag questions. Classic studies by Brown (1973) and Ingram (1989) show identical acquisition orders: rising intonation, what, where, inclusion of auxiliary verb, and inversions. B’s order to date is: what, when, which, how, and whose, an order which includes later developing interrogatives at the same time as lacking three of the earliest five interrogatives.

In sum, at nearly six years of age, B’s language is problematic in several areas. First, she lacks comprehension of earlier developing time elements and singular/plural, both of which involve the decoding of grammatical morphemes (e.g., past tense –ed, plural –s). Second, her production of grammatical morphemes is very limited, involving only four of the fourteen in Brown’s (1973) study, at an age when all should be in place. Third, she is only producing two of the five earlier developing wh-interrogatives; and notably, rising intonation, the first to develop in very young children, has not appeared in B’s production. Further, additional problems involving sequencing are noted in question formation, as evidenced by a lack of auxiliaries as well as subject-verb inversion. Finally, acquisition in each area shows scatter compared to established data on normal child language acquisition.
Language development in L

L was age 3;6 to 5;1 during the time of this study, and, as noted under B’s development, the language structures under investigation should be in place or well on their way to being developed during this age span. At the time the study began, L had been exposed to English on a full time basis for twelve full months; however, data was often difficult to collect due to his failure to respond. Regarding semantic development, L shows little comprehension of basic concepts, including active/passive, time, quantity, cause/effect, and negation. Comprehension of wh- questions and plurals appear to be emerging but are sporadic.

Emergence of grammatical morphemes in B’s language shows a similar but variant pattern when compared to Brown’s (1973) data as well as additional data from de Villiers and de Villiers (1973), especially regarding the top half/bottom half view discussed regarding B’s language. However, there is one major difference—that of the very early emergence of the contractible copula. By the end of the study, though, B is only exhibiting three of the morphemes at criterion level: articles, on, and in. In this area of language, the data show considerable delay in rate of acquisition, though exhibiting a typical sequence in order of acquisition.

Regarding the one area of syntax investigated, order for productive use of interrogatives, L’s pattern is almost identical to the classic works by Brown (1973) and Ingram (1989). Once again, the early patterns found by these researchers are: rising intonation, what, where, auxiliaries, and inversion. L’s acquisition order is: rising intonation, what, where, do (as an auxiliary used for inversion), and why (the 6th interrogative in Brown’s data). Again, though exhibiting considerable delay, L’s sequence of development is following a normal pattern.

In sum, at just over five years, L’s language is delayed, yet in areas that would be predicted. That is, earlier developing areas are in place with the later emerging structures still under development, indicating that errors are simply developmental. Productive acquisition of grammatical morphemes is fairly consistent with the cited research and productive use of wh-interrogatives consistently follows norms, though, again, considerable delays remain. It must be remembered, however, that in contrast to B, L had only been exposed to English for one year when this study began.

Discussion

B: Delay or disorder?

Based on the general background history of B, one would predict that her language would develop normally. Her birth-based medical problems were quickly resolved, she was carefully nurtured in her foster and adoptive families, and she was always in a language-rich environment. Learning English as a second language, used as explanation for her language difficulties, is arguably problematic as she arrived in an English-speaking environment at age seven months. Since she was producing one word in her L1 at this age, it could be taken to mean that comprehension of her L1 was definitely underway. However, even if one allows for a seven month differential in what her English skills should be—that is, at age 5;10 she would have English exposure comparative to a child age 5;3—there is considerable delay with her language skills being closer to that of a three year old.
A stronger argument would be a brain-based hypothesis for several reasons. First, it must be remembered that B was of low birth weight; therefore, she is at higher risk for brain damage and learning disabilities. As B has very limited use of grammatical markers at an age when those targeted by this study should all have been firmly in place, she fits the pattern of SLI with the key characteristic of deficits in grammatical morphology. Additionally, her concept of time has not developed, an area that is marked in English by verbal morphology. There are also B’s marked delays in syntax to consider, especially in wh- transformations and the use of auxiliaries. Multiple researchers have noted that children with SLI appear to learn language in a different way, that their verbal sequencing ability is compromised, and that difficulties are encountered in manipulating syntactical transformations along with auxiliary verb use (Dale & Ingram, 1981; Levy & Schaeffer, 2003; Slobin, 1973; Watkins & Rice, 1994). There is also information in B’s records that she has temporal sequencing problems in both the aural and visual realms, thus lending further credence to a brain-based hypothesis.

In sum, due to delays in comprehension of semantic areas, considerable delay in the acquisition of grammatical morphemes, and delays in sequencing skills needed to manipulate syntactical transformations, it is likely that B is challenged by SLI. When one adds in evidence of scatter across multiple domains of assessment, scatter being a key trait of learning disabilities in general, the argument for a language learning disability is strengthened.

The question at this point is: why has the hypothesized SLI not been considered to date? First, there has been the “wait and see” approach with an inappropriate explanation of ESL issues. Second, this study narrowly focused on linguistic structures without fully exploring non-language information. Though this study has, in fact, discovered two key areas of language difficulty—lack of morphological markers and sequencing difficulties in syntactical transformations—both of which provide important clues to language disorder, an important point was not seriously noted in B’s history, that of her low birth weight, a problem that puts children at higher risk in the language realm.

**L: Delay or disorder?**

Based on L’s background history, one would predict the potential for extensive language impairment due to documented brain damage along with maternal deprivation syndrome (an effect of having been institutionalized during the critical first-year period). This study found considerable delay in all aspects of language assessed: delay in comprehension of semantic concepts, delay in production of grammatical morphemes, and delay in production of syntactic transformations. Note, however, that although there are considerable delays in all areas, the same acquisition sequence is followed as that of normal children, albeit at a much slower rate. Compare this to B where not only was her language developing at a much slower rate, but structures were falling into place in a different sequence than normal. Because of L’s normal sequence of acquisition, it is hypothesized that additional issues are at play beyond brain damage to language centers.

Other possible causal explanations for the considerable delay in L’s language development include: ESL issues, personality traits, history of ear infections, maternal deprivation syndrome, emotional issues, and interactions among all of these areas.
Looking at each of these in turn, ESL issues at first might provide the most plausible explanation. However, it is well-established that BICS is in place within 6-24 months in children who speak their L1 in the home (Ellis, 1994). One would assume that this time frame would be shorter in children who are totally immersed in the L2 without any access to the L1. Since L did not start saying his first words in English for almost two years post-arrival, other variables are thought to play a role. Personality traits, as an area of individual differences, have been found to play a role in rate of second language acquisition (Pearson, 2005a; Skehan, 1989; Wong Fillmore, 1979). Family members and teachers indicate that L’s personality includes perfectionism and non-risk-taking. Both of these traits are known to detract from the ease of learning an L2.

Another area that could impact the rate of language acquisition is a history of frequent ear infections. L’s history, as noted earlier, included not only ear infections, but also perforations of the eardrums, indicating chronic infections that either were not treated or were not responsive to medication. Since chronic ear infections are notorious in the literature for affecting language acquisition (Fahey, 2000; Hall, Oyer, & Haas, 2001), it is hypothesized that L’s ear problems at least partially contributed to his weak L1 skills. This is an important point, as it has been found that L1 proficiency in internationally adopted children is the single best predictor of ease/difficulty of L2 acquisition in internationally adopted children (Pearson, 2003, 2004a, 2005a, 2005b).

Further contributing variables include the documented maternal deprivation syndrome and emotional issues. In looking at the development of comprehension of interrogatives, it is interesting to note that L frequently produces when, e.g., When we eat? and When we have lunch? In the data, however, it is thought that L’s use of when is not so much as a time element, but rather as a marker seeking reassurance that he will definitely be eating again. In other words, this use seems to be a manifestation of earlier deprivation and emotional problems, as any reassuring answer will suffice (no time element needed). Further “food for thought,” both figuratively and literally, is that L’s typically limited and sporadic production of plural morphology improves when food is an issue—quantity of food being important enough to him to force the marking of plurality grammatically. The pervasiveness of this issue can be exemplified by his response to the question When will we go? to which he replied Buy food. For L, even after two-and-a-half years, most of life still revolves around making sure there is always food to eat. If physical survival is one’s main goal, little energy remains for other development. (For those not familiar with characteristics of post-institutionalized children, a focus on food, to the extent of hoarding, is a common problem; see Miller, 2005.)

In sum, it is hypothesized that L’s chronic hearing problems, combined with institutionalization during a critical period, delayed his L1 acquisition, which in turn has provided a weaker foundation upon which his L2 could be built. Additionally, emotional issues due to maternal deprivation syndrome and institutionalization early in life have also exerted a considerable effect upon his overall development, including language.

The foremost question at this point is: what has this child gone through in his earliest years and how might it all have impacted his personality, his emotional state, and his language acquisition? Once again, in focusing so intensely on one component
of the problem, namely language, clues evident in the larger picture have been missed. Language-wise, the most important clue, perhaps, is that although the development of language structures was considerably delayed, the sequencing of their development across the realms of semantics, grammatical morphemes, and *wh-* interrogatives is all in a normal pattern. In looking at the larger picture, however, the effect of institutionalization during the critical period of infancy and toddlerhood, with its effect on L1 acquisition, personality formation, and emotional state, is key to the problems this child is facing.

**Fifteen years later…**

An interesting aspect to this study is that information on both children has been made available fifteen years post-data collection. Thus, hypotheses made at the study’s conclusion can be tested over time as to their accuracy. At the conclusion of this study, the family of the children moved to another state, where the children were deemed not to be eligible for services. B continued to struggle and at the end of her elementary school years, she was privately tested and found to have problems with both short-term and sequential memory, along with residual language issues. Significant scatter across all areas of testing continued to be evident, again indicative of learning disabilities. When non-verbal cognitive assessment measures were used, it was found that she was highly intelligent, well beyond normal; verbal measures pulled her score down to the average range. Thus, anything having to do with language involved considerable effort which resulted in motivation issues. At the time of this writing, she has graduated from high school, but is not interested in any further schooling. It appears that learning disabilities, including language, may have kept her from achieving her potential.

L also continued to struggle through the school years with emotional and motivation issues, though not with language. In areas that interested him, he excelled; in other areas, his lack of motivation resulted in a poorer performance than what he was potentially capable. There is a particular area of interest in L’s history that underscores the original hypothesis of this study. When L finally did begin talking, his first words were the unanalyzed chunks of *pepperoni-pizza* and *chocolate-chip-cookies*. Food for survival was still a focus of his life. More recently, after having graduated from high school, L has been very successful in his community college coursework—the field of culinary arts. Twenty years later, the pervasive influence of those early years of deprivation are still exerting their influence.

**Conclusion**

Educators often find themselves in the role of detective, sleuthing through files and conducting interviews for that elusive piece of the puzzle that will pull everything together, thus showing them the bigger picture and addressing the question of language delay or language disorder. In the two case studies reported above, detailed investigation of the development of language structures across the realms of semantics, morphology, and syntax did, indeed, provide key information for each of the children. However, in the quest for such information, other clues of a more global nature (low birth weight in the first child, emotional issues in the second) were overlooked. Thus, it is important, as educators and ESL specialists, to look both narrowly and broadly, to investigate not only the specifics of language but also all of the medical-social-
emotional variables that are known to impact second language learners. Only in so doing will the missing pieces emerge which fully address the question of language delay versus language disorder.

Author Note
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