



HIGH-FUNCTIONING AUTISM AND SECOND LANGUAGE DEVELOPMENT: A CASE STUDY

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ABSTRACT

Children with autism experience difficulties to develop their first language. Learning a second language (L2) can imply additional challenges even if immersed in a second language environment. The objective of this case study is to describe some of the features of the development of English as L2 in a six-year old child with high-functioning autism recently arrived in the US. The objective is to compare the process with that of typically developing children. Data were obtained from observations of tutorial sessions, which were recorded, transcribed and analyzed following Vygotsky's dialectical method, in which learning is seen as a dynamic and complex process. The analysis shows that though the child experiences most phases as typically developing children do some of the autistic features represent a challenge for L2 learning. However, given a permanent support on a one-to-one basis, some of these features can become an advantage for L2 learning.

Keywords

high functioning autism, second language, sociocultural theory

RESUMEN

Los niños con autismo tienen dificultades para desarrollar su primera lengua. Una segunda lengua puede significar un problema adicional aún en ambientes de inmersión. El objetivo de este estudio es describir algunas características del desarrollo del inglés como segunda lengua en un niño con autismo de alto funcionamiento, al llegar a los Estados Unidos con seis años, y comparar este proceso con el de un niño con desarrollo típico. Los datos fueron obtenidos durante sesiones tutoriales, que fueron grabadas en audio, transcritas en su totalidad, y analizadas siguiendo el método dialéctico de Vygotsky, en el cual el aprendizaje se considera como un proceso dinámico y complejo. El análisis muestra que aunque el niño atraviesa por las mismas fases que un niño típico, algunas características del autismo representan un desafío para el aprendizaje de una segunda lengua. Sin embargo, con apoyo individual permanente, algunas características pueden llegar a convertirse en ventajas.

Palabras claves

autism de alto funcionamiento, segunda lengua, teoría sociocultural

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AUTISMO DE ALTO FUNCIONAMIENTO Y
DESARROLLO DE LA SEGUNDA LENGUA: UN ESTUDIO DE CASO

Learning a second language may seem a sophisticated goal to achieve for autistic children. Actually, parents, teachers and therapists of autistic children may typically be more concerned about other more urgent needs related with inappropriate behaviors, lack of attention or social skills. This explains why there is a dearth of studies dealing with autism syndrome and second language learning or bilingualism. (see however Drysdale, van der Meer & Kagohara, 2015). Nevertheless, learning a second language can become a very important issue for children that find themselves in a second language environment and need the new language to function at school and in other social situations. Additionally, since high-functioning autistic children should be integrated in the regular classroom, making adequate progress in the foreign or second language classroom is part of this integration process and it is essential that these children receive appropriate support to develop their communicative competence as part of the school curriculum goals. That is why it is important to document and examine cases when autistic children go through this process in order to draw some implications that may help teachers, parents and school administrators in general. This study aims at describing some of the features of the process of how a high-functioning autistic child from South America learned English as a second language in the US with the help of a tutor and in what way the process resembles or differs from the one by typically developing children.

Autism and high-functioning autism

Autism is associated with social and communication difficulties as well as with narrow interests and stereotyped behaviors (Baron-Cohen, 2009). According to Lawson, (2003) it has been explained from different perspectives. In the Empathizing-Systemizing model children are seen as having a deficit in empathizing, that is, in identifying feelings and emotions of others and reacting appropriately, and to average or even superior systemizing capacity, or inclination to analyze and build systems. That is why so many autistic children are obsessed with machines and appliances functioning. According to the Executive Dysfunction model, autistic individuals have impaired executive ability to keep their mind on task because they lack functions like high level planning, organizing and impulse control. The Weak Central Coherence model implies that people with autism proficiently, and sometimes exceedingly, focus on local details and fail to grasp the holistic or global view of a picture, a phenomenon, etc. In the cognitive tradition, a number of researchers (Baron-Cohen, Leslie, & Firth, 1985; Baron-Cohen, 1995; 2000) have found that children with autism have deficit in Theory of Mind, that is, the inability to understand that other people think differently, have different plans, points of view, attitudes or emotions (Bauminger & Kasari, 1999; Peterson, Garnett, Kelly & Attwood, 2009, 2009). This explains social, language and imaginative impairments characteristic of children with this disorder.

Along with debilities in Theory of Mind and deficits in joint attention, individuals with autism are now described as lacking ability to use gestures and make eye contact to share the experience of an interesting object or event (Duff & Flattery, 2014).

Within the Autism Spectrum Disorders, high-functioning autism is often called Asperger Syndrome (AS). Usually, AS means “the absence of any significant delay in language or cognitive development” (Lawson, 2003, p.189), though not all scholars agree to this definition. For the sake of this study, however, high functioning autism, whether Asperger or not, will be taken as one possible condition at the most functional end of the Autism Spectrum Disorder.

Second language development

Learning an L2 for the normally developing child requires effort, as shown by research in child language development (Saville-Troike, 1988; Tabors, 1997), and it can be fundamentally different from learning L1 (Nichols, 1980). This difficulty is dramatically increased in the case of children with developmental disabilities, including autism. Since children with autism have language and social deficits, so the availability of optimal input with maximum support should be considered.

From a sociocultural (Vygotsky, 1978) perspective a child learns a second language in a process that is initially regulated by others, and mediated through language. Inter-mental activity becomes intra-mental activity through collaborative or supportive dialogue known as scaffolding (Lantolf, 2000). Instructional conversations for language learners constitute pragmatically rich contexts that capture a wide range of communicative and cognitive functions of talk (Donato, 2000). Verbal and nonverbal interactions do not just facilitate learning, “they *are* (italicized in the original) learning in a fundamental way” (Van Lier, 2000, p.246).

According to activity theory developed by Vygotsky’s followers, learners engage in an activity with a particular goal, so they direct their actions accordingly. It is possible to observe the temporal and special conditions



under which the activities take place, but the goals and motives cannot be determined since one and the same activity can be carried out with different motives and goals, and conversely, one motive can result in a variety of activities. Activities are unstable by nature. “What begins as one activity can reshape itself into another activity in the course of its unfolding” (Lantolf, 2000, p. 11). A concrete action carried out with material artifacts and the help of another person becomes a mental activity and is later performed without apparent external assistance as a result of a process known as internalization.

A metaphor for understanding how this process happens is the zone of proximal development (ZPD), defined by Vygotsky as the difference between what a person can do alone and what s/he can accomplish when acting with the help of someone else. Lantolf (2000) conceives ZPD as “a collaborative construction of opportunities for individuals to develop their mental abilities” (p. 17). It follows then that children acquire an L2 through interaction, engaging in tasks and adjusting activities according to goals with the scaffolding provided by the adult.

Saville–Troike (1988) distinguishes three phases of L2 development in young learners in a second language environment. In Phase I, children use their own language to address speakers of the other language, something she calls *Dilingual discourse* (Saville-Troike, 1987). Communication can nonetheless be successful due to strategic use of contextual features. Once children notice that speakers around them use a different language, they stop addressing others and enter the silent period. This, according to Roberts’ (2014) review, is mostly associated with lack of spontaneous speech, syntactic features or speech addressed at second language speakers. There is, however, private speech going on (Saville-Troike, 1988) and it can have very important learning functions and can differ in quantity and quality from child to child depending on several factors like cognitive development, learning task, and also social orientation and learning style. Saville-Troike argues that the functions of private speech can be hierarchically categorized as self-stimulating language use (early, low level), commentary and descriptive language, and self-guiding language (later, higher-level).

In Phase II, children start verbal interactions with the speakers of the second language by using single words, memorized chunks or imitating other speakers. Clarke (1999) argues that the language that children produce at initial stages consists of what she calls *single-constituent constructions*: noun phrase, verb phrase, preposition phrase, adverbial phrase, adjectival phrase, chunks, repetition and simple constructions. Chunks are considered single-constituent constructions even if they contain more than one word on the assumption that children have no access to the syntactic structure.

In Phase III children generate new utterances, multi-constituent constructions though they are often ungrammatical.

The study presented here aimed at answering two questions: How does a high-functioning autistic child learn English as a second language in interaction with a tutor?

In what way is that development process similar or different from that of typically developing children?

Method

This case study followed Vygotsky’s view of development as “a complex dialectical process characterized by periodicity, unevenness in the development of different functions, metamorphosis, or qualitative transformation of one form into another, intertwining of external and internal factors, and adaptive processes which overcome impediments that the child encounter” (Vygotsky, 1978, p.73). Phenomena are thus examined “as dynamic, contextual, complex entities in a constant state of change” (Mahn, 1999, p.342). Unlike traditional experimental second language acquisition research, which entails an experimental group, this study considers the child as a social entity that exercises agency and interacts with the environment in ways that make sense for them. The study kept track on the mediation provided by an adult in order to help a child develop the ability to use English as a second language over a period of time. The child is a six-year old high functioning autistic monolingual Spanish speaking boy, Sebastian (a fictitious name), who had just arrived in the US from South America and was living with his mother in a Southwestern state. Sebastian had been going to preschool and kindergarten in his country and had learnt to read in Spanish. He was verbal but not fluent. Once in the US he started going to the nearest school but he was soon transferred to a school with a special education program after it became evident that his behavior was atypical and disruptive, and that it corresponded to the autistic spectrum. This condition was confirmed through assessment results brought from his home country. In the new school he attended a self-contained classroom but his parents were strongly advised to provide tutorials to help the child learn English. The tutor was a Colombian female with experience in English language teaching. Data for the study were collected through audio-recordings (with

permission of both parents) during 16 tutorial sessions that took place within two months and which were fully transcribed. A journal was kept by the tutor during a longer period to register the use of English in situations outside the tutorials. Each tutorial lasted approximately 90 minutes and constituted the main object of analysis in this case study. Data were analyzed turn after turn, as the interaction evolved with the aim of identifying features of the development stages proposed by the theory, but also allowing for data-driven features to become evident.

Tutorial sessions

These sessions were carried out in the evenings and would mainly deal with the homework sent from school. It usually consisted of a worksheet whose objective was to develop word discrimination. A different word would be introduced each time. The worksheet would always include four types of exercise: The first exercise required encircling the target word in each row that contained several unrelated words. The second was writing the target word six times on the lines provided for that. The third exercise would usually involve knowing what the word means and using it, at least mentally. The fourth exercise consisted of encircling the target word in given sentences. Besides the discrimination exercise, the tutor read stories to Sebastian in English and tried to teach him vocabulary and get his attention to some of the pictures in the book. In the other sessions, work focused on helping Sebastian understand money in the USA.

Results

Beyond Phase I.

The use of bilingual discourse, that is, “mutually unintelligible languages by interactants who do not comprehend one another” (Saville-Troike, 1988, p. 574) was not heard. Since Sebastian and the tutor could understand each other in Spanish, there was almost no occasion for bilingual discourse, except when he would persist in his own topic, and the tutor would not understand him and just try to make him focus on task.

Sebastian was never heard using his own language to address people who spoke English only. From the very start he was well –aware of the fact that he needed to learn English. Actually, one of his favorite topics at the beginning of his stay in the US was to ask about why he had not been born in the US, why other children spoke English and how long it would take for him to learn English.

[1]
S ¿Por qué uno no nació aquí?(F.18)

[2]
S ¿Por qué será que él (su hermano) aprendió inglés? ¿Por qué será?...¿Y cuándo es que yo voy a aprender inglés? (M.9)

Silent period

It could be inferred from Sebastian’s behavior with other children in the playground or with English –speaking adults in general, that his behavior corresponded to the ‘silent period’, because he would avoid eye-contact, speaking to anyone, and would engage in parallel playing, moving away from English-speaking children playing in the park. However, there was much going on during the tutorial sessions and much of what happens can be considered characteristic of Saville-Troike’s Phase II: verbal interaction with single words, memorized routines, or repetitions. Nevertheless, this kind of language was produced only when he addressed the tutor mainly during the tutorial sessions and sometimes also during other normal daily activities.

Imitation

At the beginning it was difficult to elicit simple repetitions from him and he would do so in a low voice after the tutor’s direct command. In the later tutorials he would repeat longer chunks if the tutor split sentences. More productive imitation was achieved when the task was meaningful or during play. Compare the following situations when tutor and child were dealing with American coins:

[3]
T Mira cómo es el señor del ‘nickel’ y mira cómo es el señor del ‘penny’. ¿Ves que el señor del ‘penny’ tiene el cabello como enredado? ¿Y que el señor del ‘nickel’ tiene como una colita?
Entonces, este se llama ‘nickel’. Repite: nickel.
S Nickel (M. 17)



- [4] *They are playing head or tail*
T This is head. I want tail. You are head, I am tail. OK. Let's play now. (Tutor throws the coin)
Aaaah! ¿Qué salió?
S Ganaste tú.
T: ¡Gané yo, gané yo! Vamos a darte una nueva oportunidad. Veamos. ¿Qué quieres, cara o sello?
Head or tail?
S Tail (M.18)

Sebastian's repetition of 'tail' here is rather spontaneous, and apparently a result of the contingency of the game.

One of the first things Sebastian did in English was singing. And one of the first songs he sang was the ABC song, which, once learnt, he would repeat while playing. Later, when doing a worksheet on writing the letters of the alphabet, he would sing the song with every letter to find the next one. The same happened with numbers. What initially sounded like mere repetition of numbers, perhaps for the mere pleasure of singing or repeating the numbers, later was used as a tool to achieve a complex cognitive task. Here is how he chanted numbers in ways that puzzled the tutor.

- [5]
T Very good. Ahora escribe 'the'. Now write 'the'. Come on. Write 'the'.
S (Stops paying attention)
T Sebastian, look at this.
S (Speaks in a very low voice). ¿Es muy fácil? (He begins sort of singing for himself). One, two, three, four, five six. [xxx], one, two, three...
T Aquí, aquí, aquí (trying to refocus his attention to the place where he had to write)
S (singing) One, two, three, four, five.
T Aquí abajo (showing him where he has to write the word 'the').
S (He sings something with a known music, but it is not understandable. Finally he starts writing while singing)
¿Qué es 'one am er e'? (not understandable)
T No sé.
S Ay, yo sé qué es. mo mo mo. (Tutor stopped paying attention for a while to do something else). (F.16)

The song seems his private 'private speech' because though addressed at the tutor, it does not have anything to do with the situation and it is not meant for the tutor to react. This is a parallel dialogue he has to himself, but at the same time he wants the tutor to notice it. It was impossible for her, however, to make sense of it, and would rather cause frustration. This seems a requisite for future more meaningful use of language. Later, when he is counting nickels and pennies, he can already do it in English without being prompted to do so.

- [6]
T: Look. It's a nickel. How many cents is it?
S: Five.
T: Good. And these (points to the pennies one after one)?
S: Six, seven, eight, nine.
T: Nine. Good. Now write it. ... This one. How many pennies is this one? (pointing to the nickel?)
S: (Silence)
T: Look at it. Míralo bien.
S: Five
T: And this one?
S: Six, seven, eight, nine, ten, eleven. (M. 20)

Here, mere repetition and chanting has turned into meaningful words used to achieve a specific goal.

Single words or fixed combinations

As time passed and Sebastian had more contact with the English speaking world around him, he increasingly incorporated several words into his linguistic repertoire. These words seemed to coincide with objects of his fixed interests: bus driver, autobus, typewriter. He would at times also ask about the meaning of certain phrases he had heard.

[7]

S: ¿Qué es ‘no school tomorrow’?

M: ¿Quién te dijo eso?

S: La bus driver.

At this point it was evident he was paying increasing attention to form and meaning, and he had incorporated a certain amount of symbolic tools to deal with his closest reality.

Attention to meaning

Sebastian seemed not to tolerate ambiguities or being unable to understand what was said to him. He often resorted to directly asking for the English/Spanish translation of words within a sentence or even complete sentences that they came across when doing the home assignment.

[8] *They were working on identifying a specific word in an exercise. Sometimes there would be two or more target words within one line so the tutor wanted him to identify them all*

T: Good, very good. Is that all? Is that all? Or is there another one? Is there another one?

S: Dímelo en español. (F. 16)

On several occasions Sebastian asked the tutor to translate the words that represented objects that interested him a lot even if not apparently related to the task they were working on.

[9] *They were working on a worksheet that contained pictures of toys.*

S: ¿Cómo se dice: él estaba en la casa?

T: He was at home.

S: ¿Cómo se dice helicóptero?

T: Helicopter

S: Como se dice helicóptero de policía?

T: Police helicopter.

S: Volar

T: To fly

S: ¿Qué?

T: To fly.

S: Fly significa también una mosca. (M. 4)

It is very difficult to say why at this moment he would ask about these specific words. Probably the drawings in the worksheet he was working on reminded him of his own toys. What is remarkable here is that his last turn implies that he was not only just hearing, but he was actively trying to learn the words that were meaningful to him by associating them with previous knowledge.

A common pattern of Sebastian's behavior during the tutorials was his permanent digressions from the main focus the tutor wanted to maintain. This was particularly obvious when the task was approached from a formal linguistic angle.



- [10] *The worksheet introduced the target word 'was'. The tutor was trying to make the meaning clear through examples before asking Sebastian to circle the target word. He had visited an airplane exhibition at a local airport in the morning.*
- T: ¿Tú sabes qué significa eso? Yo te digo: today I was at the control tower. ¿Tú entiendes qué significa eso?
- S: Today
- T: Today I was
- S: ¿Qué es eso?
- T: Yo estaba
- S: S: ...
- T: at the control tower
- S: ¿En dónde?
- T: At the control tower.
- S: En la torre de control.
- T: Yeeees! Si yo te digo: today I was cold.
- S: (unintelligible)
- T: Yo tenía frío. Si yo digo: Today...
- S: Today
- T: I was... happy.
- S: ¿Cómo hace uno para girar con la llanta de un avión?
- T: La llanta no gira
- S: ¿Qué tiene que hacer uno para que la llanta gire? ¿Hundir un botón? Eso no sé. (M.13).

Sebastian and the tutor had different goals. Initially, the tutor managed to gain his attention: Sebastian gives feedback on his understanding with a reacting move and deduces the meaning of what he hears. Later, however, they take different paths with Sebastian engaged in his own concerns about planes and wheels. The questions made by the tutor were of no relevance for him, so he preferred to talk to himself.

Noticeable attention to form

The tutorial session gave Sebastian ample opportunity for focusing on forms and going deep into them thus somehow responding to his intensive interest in details.

- [11] *They were working on an exercise that consisted in finding the word 'the' in a worksheet following arrows that finally would lead to a treasure. The instructions ran: Draw a line in the direction of the arrow until you reach the next 'the'. Keep drawing lines following the arrows until all thes are connected. Start with the underlined 'the'*
- S: Dime por que dice 'thes'. ¿Qué es 'thes'?
- T: Aaah! (The tutor realizes what he means). Es que son todas las 'the'.
- S: ¿Todas las...? (with perplexity)
- T: Todas las 'the' que hay. Lo que pasa es que le pusieron una 's' para que sepan que son varias 'the'.
- S: Dime por qué es 'thes'. ¿Por que le pusieron una 's'?
- T: Para que sepas que hay varias. Como cuando dices 'car', es uno. 'Cars' son varios. Si dice 'the' es un solo 'the'. Pero como dice 'thes' son varios 'the'.
- S: Me me me em (he apparently lost interest)
- T: Bueno, hazlo para ver qué dibujo sale.
- S: Es lo mismo que uno dice 'boxes'?
- T: Eeeexactamennte! Qué niño mas inteligente. (She kissed him) (F. 16).

Since there was a new type of action he needed to do, he asked for translation. Then he noticed a salient feature: thes. The initial explanation or a second more abstract one did not seem comprehensible. The explanation with a concrete example (car-cars) apparently satisfied his curiosity. Interestingly, when noticing that he had turned into his usual incomprehensible 'private speech', the tutor thought he had lost interest in the topic, but actually, he was processing the information and he managed to establish relations with previous knowledge thus coming up with

what was apparently a higher level of awareness and an indicator of a move toward the acquisition of the morpheme 's' to indicate plural, which according to Dulay and Burt (1974) is the first one to be acquired by L2 learners.

Sebastian repeatedly demonstrated interest in the semiotic nature of language. He repeated the question "cómo se dice" (how do you say) 23 times during the sessions recorded. Sometimes he was even obsessed with certain words.

- [12] *The tutor was teaching him the concept of a nickel.*
- T: Quiero que me digas cuánto dinero hay aquí
- S: Un nickel.
- T: ¿Pero cuántos centavos son?
- S: Un nickel. Dímelo en español.
- T: (Gets a real nickel).Ay, no , no tiene nombre en español. (pointing at the book)
- S: ¿Por qué?
- T: Este es un nickel
- S: Dime por qué.
- T: Eso no tiene nombre en español. Porque eso nada más lo hay aquí. Y ¿cómo se dice 'peso' en inglés? Peso.
- S: ¿Y nickel?
- T: Tienes que decir 'nickel' también. Porque así es como ellos lo llaman. Es como 'dollar'.
- ¿Cómo dices 'dollar' en español?
- S: ¿Eso es en inglés?
- T: Así es en inglés, pero también es en español.
- S: ¿Por qué será que no lo pueden decir?
- T: Porque no hay más nombre que inventarle. Si le ponen otro nombre, ya no es lo mismo.
- S: (He mumbles something for himself) (M.17)

Creative constructions

Sebastián began making constructions under the guidance of his tutor. The kind of constructions he produced was very simple and just a few, but more often than not his agenda did not coincide with that of the tutor's. Here is an example:

- [13] *They were naming the things around them to make him focus on the article 'the'.*
- T: Hoy vamos a ver la palabra 'the'. This is the word 'the'. Look at the word 'the'. 'The cap is mine', 'Where did the bird go?' (These two sentences are in the worksheet.) This is a car. The car is yellow. The car is a Volkswagen. (pointing at his toy).
- ...
- T: What color is the car?
- S: The car ... a little.
- T: Little? ... The car is yellow? (The tutor was trying to elicit the sentence 'the car is red')
- S: Is little.

In [13] Sebastian refused to produce the target sentence. A couple of weeks later, he was able to make new combinations in a more spontaneous way.

- [14]
- T: ¿Tú qué eres the big boy or the little boy?
- S: The little boy.
- T: Yes.
- S: Y esta es the big nose (pointing at the tutor's nose) (A. 21)

According to Saville-Troike (1988), attention to linguistic form requires a relatively high level of cognitive processing by children, including abstraction of form from its meaning to some extent.



Discussion of results

The data discussed above suggest that Sebastian was exhibiting behaviors that correspond to different phases of development of L2 of typical children). Sebastian had been in the US for four months but his silence applied exclusively to his behavior towards people speaking only English. He did use English with the tutor and did some of what Saville-Troike describes as characteristic of phases II and III. With the tutor he produces single words, memorized routines, or repeats what he hears, all of which characterizes Phase II. However, no rehearsal function as such is evidenced. Perhaps all of what he does loudly in the tutorials is a general rehearsal, a sort of 'shared private speech'. One may hypothesize that typical children would do the same if given the opportunity of having tutorials.

Phase III, following Saville-Troike, begins when children generate novel utterances with the words acquired and they are usually ungrammatical. Sebastian did not produce any ungrammaticality, and from the start he showed an initial thrust towards linguistic manipulation.

This apparent mismatch with the typical sequence of phases could be explained in different ways. First, the fact that he continues to use his L1 to address people that can speak English and understand Spanish seems to produce the beneficial effect that he is not 'silent', but expressing all his concerns about English.

The tutorial provided a unique opportunity for him to focus on the language, to give his incipient English an opportunity to be uttered and proceed in his development process. Other children would use private speech to do this. In the case of Santiago, he was still in his private speech phase in L1. He could very often be heard explaining numerous complex things to himself in Spanish. However, besides singing, there was no evidence that he produced private speech in English. So, one may speculate that without a tutorial session, he would not have had enough opportunity to produce English and focus on it.

The one-to-one setting of the tutorials gave him room to explore his fixations and go almost to the last consequences. In doing so, he developed his ability to negotiate input by providing feedback on its comprehensibility mostly with one device: 'request for definition' (Gaies, 1983 cited by Boulima, 1999)

A second explanation could be, according to the Weak Central Coherence model, his enormous interest in details. Thus, when his attention is focused on language, he demonstrates above-average curiosity for salient linguistic features. This corresponds to what Saville-Troike calls 'inner-directed' learners, that is, learners that are more focused on the code rather than the message. Perhaps autistic children belong to this category by definition and are able to develop metalinguistic awareness at above average level. After all, the presence of metalinguistic comments in the L1, according to Lantolf (2003), as well as overt comparison between the L1 and the L2 is a characteristic of adult learners of an L2.

Considering that autistic children have impaired social interaction skills, L2 use in social situations is expected to be significantly delayed. However, one-to-one interaction with an adult that helps the child focus on language within the zone of proximal development could compensate this difficulty and help him/her go through the process of internalization and satisfy their natural interests in discrete items. The expectation is that in the future this knowledge be reflected in the performance, that is, to be socialized again. For example, though the data indicated that he had knowledge and awareness of how the plural meaning is expressed in English, there was no conclusive evidence that he was able to use the -s suffix productively in meaningful situations.

As in Saville-Troike's study, Sebastian demonstrated interest in meaning and in form, but during the time of the study he did not show special attention to sound, except for the songs which he would sing at the very beginning of the study and which he ended up using as a tool for learning. This was perhaps the result of the type of task carried out or the bias of the tutor that, conscious of her own inability to reproduce native-like sounds, did not emphasize that aspect of the language.

Sebastian did imitate her tutor, but more remarkable was the fact that he repeated pieces of language without the presence of auditory stimuli, as if recalling previous meaningful encounters with the language. It was not possible to establish what exactly would trigger these imitations.

Attention was a key issue with Sebastian, as is perhaps with most autistic children. Keeping them on task is particularly difficult, so special effort should be made to bridge their interests and the language tasks. A tutor who shares with the child only the time of the tutorial sessions may find it difficult to interpret or make sense of the apparent digressions or lack of attention. The more time tutor and child share together apart from the tutorial, the more likely mutual understanding is to take place as well as appreciation of the smaller or bigger achievements.

Conclusion

The process of language development for Sebastian follows a path similar to the one described for typical children. Permanent one-to-one became fundamental in order to facilitate the process. Features that are characteristic of children with autism, may become enabling rather than obstacles, if they are understood and stimulated.

Though the study showed interesting aspects of the development of the language acquisition process of Sebastian, it constitutes a very limited picture of that process. The types of tasks recorded were very few, and the interaction only with the tutor. A more interesting picture would emerge from a closer study in the context of the school in the interaction with teacher, aides and peers. Several questions need to be answered:

How much of the acquisition process evidenced during tutorials can go on during interaction in the classroom?

Would the teacher in a classroom environment provide the necessary scaffolding within his ZPD? Would he do his experimentation with the language in an 'English only' classroom? How long would his silence period last? A longitudinal study is then required to give adequate answer to these questions.



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