First Language Acquisition, Developmental Errors in Vocabulary:
A Case Study of a Four-Year-Old Iranian Child

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Abstract

This case study aims to discover the process of first language acquisition of a 4-year-old Iranian child. The focus of the research is on developmental errors the child has created in his language development, i.e. the words which are not correct. To do so, the researcher, during four months, observed and recorded the subject's produced strange words. The recording was done in two ways, Interval recording strategy and event sampling.

Developmental errors or strange words are part of the learning process. These words are created due to different reasons. The research shows that during four months and in thirty three records, eleven strange words and expressions were produced. These eleven errors were investigated in this study in details. A table was presented by the researcher in which those errors were thoroughly described.

Keywords: acquiring Persian language, case study, developmental errors, first language acquisition, stages of language acquisition, strange words.

1. Introduction

Developmental errors are the errors children usually produce while learning first language. Language acquisition is considered as a notable cognitive success achieved by humans. In the first early years of life, children show a general knowledge and understanding of basic patterns in their language. Exposing to novel situations, children extend their vocabulary. (Gentner & Namy 2006). Children commit many mistakes during the improvement of their knowledge of the language, even though they have a powerful ability for acquisition and comprehension of their language in early life. Basically, the three main groups of mistakes in early language acquisition comprise overgeneralization, overextension and underextension.

Most words children usually learn first are used properly. Anyhow, researches show that about one-third of the first fifty words which children acquire are sometimes used improperly. In the first stages of language acquisition, children infrequently make errors for naming the objects. Though, as vocabulary advances and language progress speeds up, the frequency of mistakes rises. The number of errors drops again when the vocabulary progress. (Gershkoff- Stowe, 2001).

Investigators debate on the related developmental reasons for --producing these errors. Semantic Feature Hypothesis states that children commit these errors because first they acquire the basic features of word's meaning and then they learn its more specific features. For instance, a child primarily uses the word "basketball" in reference to any round thing, but then changes its meaning to a round, orange ball which bounces. In fact, children overextend the meaning of "basketball" to any round object and they will correct it when they learn the more specific features of word's meaning. Some theories state that mistakes occurred early in the word use phase are due to failure of a child to recover the proper word. Perhaps the child can recognize the word correctly, but they are unable to retrieve the word or its meaning actively from their vocabulary which is in progress. (Gershkoff-Stowe 2001).

According to theories in language acquisition, another question is whether children of different backgrounds and cultures worldwide go through the same pattern or stages of language acquisition. Based on Innateness Theory, everybody is armed with a language acquisition device (LAD) in charge of language functions (Brown, 2007; Orillos, 1998; O'Grady, 2008). These parts include Broca's area which is for speech mechanisms, Wernicke's area, responsible for reception, selection, and comprehension of words, and the Angular gyrus which is in charge of reading and writing. These parts help
a person to acquire a language at certain phases and designs (Orillos, 1998). According to Piaget (in Orillos, 1998), the stages of cognitive development in childhood are linked to stages of language development. These include the sensorimotor stage, i.e. from 0 to 2 years old, pre-operational stage, from 2 to 7 years old and operational stage, between 7 to 17 years old.

Fromkin, Rodman, and Hyams (2010) believed that first language acquisition happens rapid but not sudden. Typically, babbling is the first stage of this pattern, next step is acquiring primary words, and the last phase is arranging the words in sentences until they meet the virtual adult competence, this stage takes about three to five years. Observing the acquisition of different languages by children show that the mentioned stages are common in all children, and probably universal.

Based on Suwandi (2010), the age between 0 to 3 years is the most remarkable stage of language acquisition. One of the notable points about first language acquisition is the high degree of commonality observed in the early language of children, which comprises cooing, gurgling, and crying. Children discriminate differences of subtle sounds like "ma' and "pa." By the end of the first year, they recognize familiar or repeated words and they are able to pronounce words. In two years old, most children produce about 50 different words and try to producing telegraphic sentences (Lightbown in Suwandi, 2010). The Linguistic Period of a child which is usually from 1 to 5 years shows distinguished cognitive and language development. By the end of 4th and 5th year, most children will acquire basic grammatical structures, adult-like articulation, morphological construction, and show a range of pragmatic intentions (syntax and semantics) and understand adult's statements. During these ages, a child regularly attains the linguistic competences, i.e. phonology, morphology, syntax, and discourse (Suwandi, 2010). Salim and Mehawesh (2014), in the case study of observing the language development of a Jordanian Arabic-speaking child, found out that the child acquired the Arabic language at the age of five. Moreover, they have mentioned that the linguistic development phases found in their issue as the following: 1) Early Vocalizations; 2) The Holophrastic Stage, and 3) the First Sentences.

According to Chomsky (2009), language acquisition and the use of the acquired language basically are determined by internal factors; it is due to the fundamental correspondence of all human languages, “human beings are the same, wherever they may be”, and that a child can learn any language” (Chomsky, 2009, pp. 101-102). Moreover, the function of the language capacity is optimal at a certain critical period of intellectual development.

It is worthwhile to mention that the acquisition of a foreign language may be learned systematically at school or not, proceeds in quite a different way. Indeed, as we have noted, "the acquisition of one's native language after the alleged 'critical age' for language acquisition may differ, for neurophysiologic reasons, from the normal child's acquisition of his native language". (Lyons, 1981, p. 252)

2. Methodology

2.1 Research Design

This study aims to discover the developmental errors which are produced by a child while acquiring his first language due to the language development. The most appropriate design is a case study. A case study is an "in-depth study of a particular condition rather than a performing statistical survey." It is a method used to narrow down a very broad field of research into one easily researchable topic” (Shuttleworth, 2008).

2.2 The Subject of the Study

The subject of this study, Hootan, a four -year Iranian boy, born to a middle-class Persian speaking family. He is the only child of a couple who is both educated. His father who is a business man, has a bachelor degree in Industrial Management. He used to be a journalist either. His mother who is a Ph.D. student of TEFL, is a translator of books from English to Persian, mostly children storybooks.

Hootan is mentally, physically and socially healthy. He loves music and books. He enjoys watching cartoons, playing puzzles, running and playing in playgrounds and He is interested in playing with other children. He is a talkative person. Usually, He loves explaining the stories and cartoons as well as singing songs. He is friendly, happy and has a good sense of humor. He is exposed to movies and books from the very beginning, due to his parents' jobs.

When he was two and a half, he started going to an English-speaking kindergarten in Iran. He started to speak about two and eight months. In other words, he had pronounced just few words, when he entered the kindergarten. Therefore, he had been exposed to English before he started to speak Persian. At the time of research, he could utter many expressions, words and songs in English. He could speak Persian but not fluently and He was not able to pronounce all words correctly at that time. He had difficulty in pronouncing some sounds such as /q/, /h/, /tf/ and /r/.

It should be noted that although the subject has started learning English very early, he is not regarded as a bilingual person. Because except spending eight hours in the English kindergarten and some English cartoons, he is not exposed to English
anywhere else. His first language is Persian and English is considered as a foreign language for Hootan.

2.3 Data Gathering Procedure

The researcher mainly gathered the data through observations, and recording. The recording was done in two types. Interval recording strategy and Event sampling recording. Based on Dorney (2007), an interval recording strategy involves observing whether a behavior occurs or does not occur during specified time periods. For this case study, recordings were done routinely every ten days for the recording, mostly he was asked to explain his favorite storybook or explain the cartoon in which he was interested or explain the daily tasks.

Event sampling, also called frequency counts, involves observation of targeted behaviors or specific events. There is no recording of antecedents or consequences. Event sampling is used to determine how often a specified event or behavior occurs (Dorney 2007).

The researcher, in this case study, observed how Hootan talked and whenever she heard a strange word, she recorded it. During observations, the researcher had always with her some outlines or checklist - the points she should focus on, based on the theories and principles of language acquisition. Furthermore, when a strange word is pronounced, the researcher asked the child to repeat it for the recording. The researcher has to make a situation in which Hootan repeats the word. It is worth mentioning that the child was unaware of the errors he committed, even though he was asked for repetition.

For proofreading and reducing the mistakes happened during the data gathering phase, another researcher, a student of TEFL reviewed the recording and transcription.

3. Results

The research presents that during four months (research period) and in thirty-three records, eleven strange words and expressions (developmental errors) were produced. After four months, and by the end of this research, these errors were not eliminated. These errors mostly are due to improper use of some collocations.

The developmental errors which were recorded in this research, are illustrated in details in the following table.

Table 1.

| Recording date | Error in Persian | Phonetics representation of error | Phonetics representation | Meaning | Reason |
|----------------|------------------|-----------------------------------|--------------------------|---------|--------|
| 1 4.4.2018     | آقایونا          | /ɑqɑʎunɑ/                         | /ɑqɑʎun/                 | sirs    | Overextension, make a plural noun plural again |
| 2 29.4.2018    | سبز خاموش      | /sæbze xɑmuš/                     | /sæbze tire/             | Dark green | Use of wrong adjective for a color due to another collocation /čerɑgh rošæne/ vs. /čerɑgh xɑmuše/ |
| 3 26.5.2018    | سبز تاریک       | /sæbze tɑrik/                     | /sæbze tire/             | Dark green | Use of wrong adjective for the same color due to another collocation/čerɑgh rošæne/ vs. /čerɑgh tarike/ |
| 4 1.6.2018     | بدنم رو کردهای کردم | /bædænæm ro kærei kæræm/ | /bædænæm ro sabuni kæræm/ | I soaped my body | Use of wrong word due to the similarity with another word |
| 5 1.6.2018     | دلم کافیه       | /delæm kɑfie/                     | /šekæmæm por sode/       | I’m full | Use of wrong collocation |
| 6 1.6.2018     | موهاتو پف میکم   | /muhɑto pof mikonæm/             | /muhɑto pof midæm/       | I make your hair puffy | Use of wrong verb |
| 7 12.6.2018    | آدم دهنی        | /adæm diahæni/                    | /adæm ahaeni/             | a robot | Use of wrong name due to the shape of the object |
| 8 16.6.2018    | اگه میتوستی     | /ege mitunessti/                  | /ege mituni/             | If you can | Use of wrong tense |
| 9 22.6.2007    | بمرم            | /bemoræm/                         | /mimiræm/                | I die | Use of wrong tense and pronunciation |
| 10 28.6.2007   | حسابت          | /hesabeto/                        | /hesabeto/                | I teach you | Wrong use of tense due to word |
Error No. 1 occurred due to incorrect noun pluralization, when the child made a plural noun plural again. Because there are more than one rule for making a noun plural in Persian but he knew only one.

Error No. 2 happens when the child didn't know the proper adjective for the mentioned color, due to the confusion of adjectives in other collocations. He knew /rošæn/ (= on) is opposite of /xɑmuš/ (= off) in /čerɑgh rošæne/ (= the light is on) vs. /čerɑgh xɑmuše/ (= the light is off), therefore when the child heard /sæbze rošæn /, he thought the opposite is /sæbze xɑmuš/.

Error No. 3 appeared due to child's lack of knowledge because of confusion of adjectives in other collocations. He knew /tɑrik/ (= dark) is opposite of /rošæn / (= light) in /hævɑ rošæne/ (= it is light) vs /hævɑ tɑrike/ (= it is dark), therefore when the child heard /sæbze rošæn /, he thought the opposite is /sæbze tɑrik/.

Error No. 4: /Bædænæm ro kærei kærdæm/ emerges because in his opinion "soap on a body" works like "butter on bread". Therefore the child supposed to use "butter" instead of "soap".

Error No. 5 occurred because in his opinion always /kɑfi/ is equivalent of "enough", therefore in his opinion he can use it for his "stomach" when "he is full".

Error No. 6 is incorrect usage of verb for a sentence, /muhɑto pof mikonæm/ instead of /muhɑto pof midæm/

Error No. 7 /adæm dehæni/ is produced on the basis of /adæm ahæni/ (= a robot). In fact, the child has produced because he is affected by the shape of a robot (because of his mouth). Therefore he changed the word by himself.

Error No. 8 is incorrect usage of tense of a verb when he had to use present tense /æge mitun/, he used the past tense /æge mitunesti/ by mistake.

Error No. 9 is incorrect usage of tense as well as the pronunciation due to the confusion of verbs /bemiræm/, /mimiræm/ and /mordæm/ (different tenses for the verb "die")

Error No. 10 is incorrect usage of tense due to the similarity of two different verbs, using /hesæbeto miresunæm/ instead of /hesæbeto miresæm/.

Error No. 11 is incorrect usage of tense of a verb, using /eʎ xodɑ rahmaem kone/ instead of /xoda ræhmæm kærd/ by mistake.

The period of study is so limited (four months) and only in the first language acquisition of the subject. However, the researcher have found some patterns of development in the subject's language acquisition and learning. The characteristics of Piaget's (in Orillos, 1960) stages of cognitive and language development has been seen in subject's acquisition. Further, he also demonstrated that as he grows older, the more complex his language becomes. It also shows that mastery or proficiency of a language depends on his maturity and extensive exposure with the language.

4. Conclusion

It goes without saying that these researches are so helpful for teachers of 1st language acquisition. They need to notice these errors and consider them as developmental errors and give an opportunity to children to try and discover the language by themselves.

Furthermore, these researches are useful for other studies as well. It is recommended to researchers to do further studies on 1st language acquisition especially in the Persian language, unfortunately, these kinds of case studies are so limited in Persian in Iran.

References

Bagaric, V., & Djigunovic, J. M. (2007). Defining communicative competence. Metodika, 8(1), 94-103.

Blommaert, J. (2014). From mobility to complexity in sociolinguistic theory and method. Sociolinguistics: Theoretical Debates. Cambridge: Cambridge University Press.

Brown, H. D. (2000). Principles of language learning & teaching. New York: Pearson Education.

Brown, H. D. (2007). Principles of language learning and teaching. New York: Pearson Education.

Dörnyei, Z. (2007). Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies. Oxford: Oxford University Press.
Erneling, E. E. (1993). *Understanding language acquisition: The framework of learning*. Albany: State University of New York Press.

Fromkin, V., Rodman, Rodman, R., & Hyams, N. (2010). *Introduction to Linguistics*. Philippines: Cengage Learning Asia.

Gentner, D., & Namy, L. L. (2016). Analogical processes in language learning. *Current Directions in Psychological Science, 15*(6), 297-301. https://doi.org/10.1111/j.1467-8721.2006.00456.x

Gershkoff Stowe, L. (2001). The Course of Children's Naming Errors in Early Word Learning. *Journal of Cognition and Development, 2*(2), 131–155. https://doi.org/10.1207/S15327647JCD0202_2

Gruendel, J. M. (1977). Referential Extension in Early Language Development. *Child Development, 48*, 1567–1576. https://doi.org/10.2307/1128520

Goldstein, H. (1984). Effects of modeling and corrected practice in generative language learning of preschool children. *Journal of Speech and Hearing Disorders, 49*, 389- 398. https://doi.org/10.1044/jshd.4904.389

Green, M., & Piel, J. (2016). *Theories of human development: A comparative approach*. New York: Routledge.

Heidar, D. M. (2012). First language acquisition: Psychological considerations and epistemology. *Theory and Practice in Language Studies, 2*(2), 411-416. https://doi.org/10.4304/tpls.2.2.411-416

Ingram, D. (1989). *First Language Acquisition: Method, Description, and Explanation*. Cambridge: Cambridge University Press.

Ipek, H. (2009). Comparing and contrasting first and second language acquisition: Implications for language teachers. *English Language Teaching, 2*(2), 155-163. https://doi.org/10.5539/elt.v2n2p155

Islam, M. T. (2013). First language acquisition theories and transition to SLA. In Ali, S., et al. (Eds.), *Paper presented at the Asian Conference on Language Learning 2013 Official Conference Proceedings, Osaka, Japan (499-510)*. Aichi, Japan: The International Academic Forum (IAFOR).

Johnson, M. (2004). *A Philosophy of second language acquisition*. New Haven: Yale University Press.

Ma, T. (2009). On communicative language teaching – theoretical foundations and principles. *Asian Social Science, 5*(4), 40-45. https://doi.org/10.5539/ass.v5n4p40

Meniado, J. C (2016). First language acquisition: a case study of a three year old Lebanese child. *Journal of child language acquisition and development, 4*(3), 98-112.

O’Grady, W. (2008). Innateness, universal grammar, and Emergentism. *Lingua, 118*, 620-631. https://doi.org/10.1016/j.lingua.2007.03.005

Orillos, L. Q. (1998). *Language acquisition theories, principles and research*. Quezon City: UPOU.

Salim, J. A., & Mehawesh, M. (2014). Stages in language acquisition: A case study. *English Language and Literature Studies, 4*(4), 16-24. https://doi.org/10.5539/ells.v4n4p16

Suwandi, S. (2010). A Thorough study on a child learning her first language: A Case study on a three-year old child. *Eternal, 1*(2), 1-15. https://doi.org/10.26877/eternal.v1i2.178

Tahriri, A. (2013). Revisiting first language acquisition through empirical and rational perspectives. *International Journal of Social Science & Education, 3*(3), 677-682.

Wardhaugh, R. (2006). *An introduction to sociolinguistics*. Massachusetts: Blackwell Publishing.

Whitehurst, G. J., & Valdez-Menchaca, M. C. (1988). What is the role of reinforcement in early language acquisition? *Child Development, 59*(2), 430-440. https://doi.org/10.1111/j.1467-8624.1988.tb01478.x

Whyatt, B. (1994). Baby talk – The language addressed to language acquiring children: a review of the problem. *Studio Anglica Posnaniensis, 29*, 126-135.

Young, R. (1999). Sociolinguistic approaches to SLA. *Annual Review of Applied Linguistics, 19*, 105-132. https://doi.org/10.1017/S0267190599190068

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