Stages in Language Acquisition: A Case Study

Jamal Azmi Salim1 & Momammad Mehawesh2

1 Associate Professor of Linguistics, Department of English, Zarqa University, Jordan
2 Assistant Professor of translation, Department of Translation, Zarqa University, Jordan

Correspondence: Jamal Azmi Salim, Associate Professor of Linguistics, Department of English, Zarqa University, Jordan. E-mail: jamalazmi1964@yahoo.com

Received: August 27, 2014 Accepted: October 10, 2014 Online Published: November 25, 2014
doi:10.5539/ells.v4n4p16 URL: http://dx.doi.org/10.5539/ells.v4n4p16

This research is funded by the Deanship of graduate studies and Scientific Research

Abstract
The main objective of this study is to trace the language development of the child Anwar from a Jordanian Arabic-speaking home, starting from her first vocal sounds to the first sentences. The present study which is based on “naturalistic observations” covers the acquisition of Arabic during her pre-school age. The study was carried out by maintaining the proper records of the child utterances in the form of a ‘diary’ and the traditional method of phonetic transcription was used to record utterances. It was found that she had acquired Arabic by the time she was five. The same year she was admitted to kindergarten. The whole study will be confined to different stages of language acquisition.

Keywords: psycholinguistics, first language acquisition, second language learning, stages in language acquisition

1. Introduction

1.1 Psycholinguistics
Psycholinguistics is an interdisciplinary field of specialization which developed in the early 1950s. ‘Psycholinguistics’ per se is a hybrid term combining psych- (from psychology) with linguistics. Theoretically, psycholinguistics combines “techniques of psychology” with “techniques of linguistics”. In simplest words, psycholinguistics may be defined as the study of the relation of the linguistics to psychology. It studies “the correlation between linguistic behavior and the psychological processes thought to underlie that behavior” (Crystal 1985:251). The primary aim of psycholinguistics, as Lehmann (1976:27) points out, “is the study of the relation of language and behavior”, Traugott and Pratt (1983:407) however, define psycholinguistics as “the study of the relation between language and mind, especially of how language is learned and remembered”.

The concepts of “mind” and “behavior” represent two schools of thought in psychology, viz., “mentalism” and “behaviorism”. Mentalism as advanced by Wilhelm Wundt (1832-1920) was a dominant trend in the early history of psychology. Wundt defined psychology as “the study of the mind”. Behaviorism was founded by J.B. Watson (1878-1958) who argued that “the mind, or the consciousness, was a “myth”. He believed that “psycholinguists should focus on observable behavior”. Behaviorists considered language as a mode of human behavior called” verbal behavior”. These concepts occupy an extremely significant position in the development of psycholinguistic studies in the United States. The American linguist, Leonard Bloomfield (1887-1949) was under the deep influence of mentalist psychology of Wundt when he published An Introduction to the Study of Language in 1914. But he became a behaviorist when he wrote Language (1933). In later periods, there was a strong reaction in Noam Chomsky against behaviorism. His view of B.F. Skinner’s book, Verbal Behavior (1957) is a testimony to this.

Finally, one can hardly overestimate the close relationship between linguistics and psychology. Different schools of thought in the psychology have influenced the linguistic studies and many linguistic theories and concepts are permeated by psychological thinking.

1.2 Objectives of the Study
The main objective of the study is to trace the language development of the child Anwar from a Jordanian Arabic-speaking home, starting from the production of her first vocal sounds to the first sentences. The study aims
at identifying the most important factors that influence the child’s process of acquisition of her mother tongue which is based on “naturalistic observations” covers the acquisition of Arabic during her pre-school age.

1.3 Scope of the Study

Language acquisition means acquiring a language as a mother tongue or the first language. According to Corder (1973:109), “Language acquisition takes place during the period when the infant is maturing physically and mentally”. Language acquisition comes quite naturally. A child acquiring his mother tongue is exposed to a different kind of data which are unrecognized, ungraded and unsystematic. These are not “carefully planned or logically ordered set of data (Corder 1973:110). The whole study will be confined to the stages in language acquisition: early vocalization, holophrastic, and the first sentences. The present study is divided into five sections: section 1: introduction, section 2: emergence of psycholinguistics, section 3: studies on language acquisition, section 4: distinction between first language acquisition and second language learning, and section 5: stages in language acquisition.

1.4 Methodology

The study was carried out by maintaining the proper records of the child utterances in the form of a ‘diary’ and the traditional method of phonetic transcription was used to record utterances.

2. The Emergence of Psycholinguistics

Psycholinguistic as a branch of linguistics and as an interdisciplinary field of specialization emerged only after 1950, though the term psycholinguistics had been occasionally used before this date. The earlier studies and investigations relating to psychology and language lacked in linguistic orientation as psychologists were not adequately familiar with the conceptual framework of modern linguistics. Moreover, they had the secondary interest in language. By the middle of the twentieth century, the situation had remarkably changed. By then “psychologists had become increasingly aware of the fact that the linguistic concepts they had previously used in their investigations were simply common sense notions of language with which they were familiar as educated persons. They were conscious of the fact that they had not adequately taken into account the more systematic thought on language that had meanwhile been developed by the growing science of linguistics. Linguists for their part, also wanted to co-operate their linguistic studies with those of psychologists. The intention of these exchanges was to establish a common basis of discussion on language, to develop a body of common theory, and to study research issues (Stern, 1983:295). Such efforts of psychologists and linguists and the interchange of ideas between them in the early 1950s led to the emergence of a new interdisciplinary field which began to be called “psycholinguistics”.

According to Blumenthal (1970), the appearance of this hybrid expression in the early 1950s was “sudden”. Its “formal adoption” took place in 1951 at an interdisciplinary conference organized by the Social Science Research Council of the United States. As Blumenthal (1970:174) states, by about 1950, interest in language among psychologists had considerably increased. Besides, the involvement of psychologists in communication research during the war in Europe, development of mathematical models of communication, the appearance of computers, the rediscovery of psychologists and linguists of each other and the each other’s similar theoretical models, and increased efforts to analyze verbal learning, word associations, and speech pathologists were some other factors which contributed to the development of psycholinguistics.

In the development of psycholinguistics, the Social Science Research Council of the United States has played a very significant role, under the auspices of this Council an interdisciplinary conference on psychology and linguistics was held at the Cornell University in 1951. This brought a group of psychologists and linguists together to discuss some common points and problems relating to psychology and language. The collaboration between psychologists and linguists proved to be fruitful and in the following year a “National Committee on linguistics and psychology” was formed by the council. In 1953, another interdisciplinary conference on language was organized on a large scale by the same council at Indiana University. After the term “psycholinguistics” was formally adopted in these conferences, efforts were made to popularize the subject. There has been increasingly frequent use of the term (psycholinguistics) since then.

Today, psycholinguistics is no more an amorphous field of study. Over the last three and a half decades, psycholinguistics has grown enormously. The most important area of psycholinguistics is the investigation of how a child learns a language system as his mother tongue. This is called “language acquisition”. Various theories and principles of learning are involved in the acquisition of language by children. Psycholinguistics is also concerned with the study of how people use the language they acquire. This refers to the question of ‘performance’, as
3. Previous Studies on Language Acquisition

Studies on language acquisition or child language, in a strict manner, began at the end of the nineteenth century, i.e., about well over one hundred years ago, and those who carried out these studies were mostly parents observing the language development in their children and maintain “diaries” of their utterances. In addition, language is considered by many psychologists as an important mode of behavior and they feel that “the study of the process whereby children learn to speak and understand language holds the key to many fundamental problems of behavior” (Carrol, 1961:331). The acquisition of language by children has also attracted the attention of linguists and psychologists who have made great contribution to the field. Fortunately, a very large body of literature is found on language acquisition or child Language right from the period of “parental diaries” to the present time. Parental diaries are also known as “baby biographies”. Baby biographies were more generally on everything from motor development to musical awareness” (Ingram, 1989:7).

David Ingram has divided the history of child language studies into three major periods:

1. The period diary studies (1876-1926)
2. The period of large sample studies (1926-1957)
3. The period of longitudinal studies (1957- present)

In the absent of appropriate names, we would call these periods as old, middle and modern periods old child language studies respectively. The old period is characterized by the language studies of single children whereas the middle period is marked by the language studies of large number of children or subjects. In the modern period the focus of attention was shifted towards the “rule based description” of child language.

3.1 Old Period of Child Language Studies

Studies on language acquisition were carried out in the second half of nineteenth century. According to Ingram (1989:7), “the first studies on language acquisition began to appear over one hundred years ago. These were a part of a general interest in child development that occurred at that time”.

At the beginning of the twentieth century, there appeared Clara and Wilhelm Stern’s German work Die Kindersprache (1907) which has been described as “the first classic work devoted exclusively to child language” (Ingram 1989:8). Studies on language acquisition, in the form of diaries were also taken up in the USA. The American psychologist and educationalist G. Staley Hall (1846-1924) of Clark University was the main focus behind such studies. Further he encouraged people to publish articles on language acquisition in the Pedagogical Seminary of which he was the editor. Consequently, a large number of studies on various aspects of language acquisition appeared in the journal. Of these, Bateman (1916), Brandenburg (1915), Chamberlain and Chamberlain (1904, 1905), Pelsma (1910) and Nice (1917, 1920) are worth-mentioning.

3.2 Middle Period of Child Language Studies

The first study was made by Madorah Smith (1926) who concentrated on vocabulary growth, sentence length and correctness of articulation. Similar studies were made by McCarthy (1926). Like Smith, McCarthy also dealt with normal children. Following these studies, Day (1932) and Davis (1937) analyzed twins, Fisher (1934) studied the gifted children and Young (1941) made the comparison of lower and middle class children. The best of these studies, i.e., large sample studies that of Templin (1957) which “marks the end of these studies as conducted over 31-year period” (Ingram, 1989:15).

3.3 Modern Period of Child Language Studies

This period is characterized by “longitudinal language sampling”. It is a method of collecting data on language acquisition in which as Ingram (1989:21) states, “the child is visited at predetermined intervals for a reasonable length of time with the purpose of collecting a representative sample”. The longitudinal studies began in the late 1950s and the investigators like Martin Braine (Walter Reed Hospital in Bethesda, Mary Land), Susan Ervin and Wick Miller (University of California) and Lois Bloom (Colombia University) developed their interests in theses studies. Braine investigated three children Andrew, Gregory and Steven for “two-word” utterance produced. In case of Steven, he also used tape-recorder for systematic collection of the data. Miller and Ervin (1964), Bloom (1970) and Brown (1973) all investigated their subjects on the basis of systematic visits-by visiting them on “a regular schedule at predetermined times for the predetermined amount of time”.

18
4. Language Acquisition and Language Learning

According to Crystal (1985:5), “Language acquisition refers to the learning of a linguistic rule”, i.e., the rule of grammar, phonology or semantics, and language development implies the further use of this rule in an increasingly wide range of linguistic and social situations.

Many scholars, theorists and researchers make distinction between “language acquisition” and “language learning”. Language acquisition means acquiring a language as a mother tongue or the first language. According to Corder (1973:109), “Language acquisition takes place during the period when the infant is maturing physically and mentally”.

Language learning, on the other hand, refers to learning a second language which “normally starts at a later stage, when language performance has already become established and when many other physical and mental processes of maturation are complete or near completion” (Corder, 1973:107).

Learning a second language differs in many respects from the acquisition of the mother tongue. Firstly, the conditions under which acquisition and learning take place are different. Language acquisition takes place in childhood when a child grows physically and mentally and language learning occurs at a later stage after the first language or mother tongue has been mastered. Secondly, the motivation for the processes of acquisition and learning also differ. Language acquisition comes quite “naturally”, whereas language learning takes place, “as a result of the discovery of its practical utility” (Corder, 1973:110). Thirdly, the language learning also differs from language acquisition on the basis of data. A child acquiring his mother tongue is exposed to a different kind of data which are unorganized, ungraded and unsystematic. These are not “carefully planned or logically ordered set of data” (Corder, 1973:110). Moreover, these cannot be treated as “teaching syllabus” in any sense of the word. Fourthly, the second language learning in most cases takes place formally, i.e., through formal instructions for which the instructional materials are “carefully planned and logically ordered”. These are also highly graded, systematized and need based.

5. Stages of Language Acquisition

Language acquisition is one of the most fascinating facets of human development. Children acquire knowledge of the language or languages around them in a relatively brief time, and with little apparent efforts. This could not be possible without two crucial ingredients: a biologically based predisposition to acquire language, and experience with language in the environment” (Frenandez & Cairns, 2011:97).

“Studies of linguistic development have revealed that children pass through a series of recognizable stages as they master their native language. Although the age at which children will pass through a given stage can vary significantly from child to child, the particular sequence of stages seems to be the same for all children acquiring a given language” (Akmajian, 1995:456).

The case reported traces the language development of the child Anwar from an Arabic-speaking home, from her first vocal sounds to the first sentences. Since her birth, the study was carried out in the form of “diary” and the traditional method of phonetic transcription was used to record utterances. It was found that she had acquired Arabic by the time she was age five.

5.1 Early Vocalizations

5.1.1 Crying

“Birth cry” was the first vocal response the child Anwar made. In later period, crying was used to convey the basic physiological needs, such as hunger and thirst. Crying sounds were also produced when she was in pain, discomfort, or when frightened. After a couple of months, the crying started diminishing and developed “cooing”.

5.1.2 Cooing

Cooing is the next stage of vocalization. It refers to the production of non crying sounds. In case of Anwar, the period of cooing continued up to the seventh month. During this period her vocalization mainly consisted of the following:

(1) Long vowels, such as a:, u:, i:. (she went on lengthening these vowels).

(2) Short vowels /a/ and /u/ (combined with /m/, such as “am”. At this stage, she also used to make gurgling sounds. Cooing normally conveyed her being comfortable and contended.

5.1.3 Babbling

When she became around seven months, the quality of her vocalization changed and she started babbling. Babbling, compared with cooing, included a wider variety of sounds richer in both consonants and vowels. The
voiced bilabial plosive /b/ was the first consonant uttered by Anwar. It is worth mentioning that the voiceless counterpart is missing from Arabic. Then acquired another consonant /m/, the bilabial nasal. After these two consonants, she also acquired the alveolar nasal /n/. During the babbling period, she acquired the front consonants /t/ and /d/. These consonants were uttered forming syllables, such as, “ba”, “ma”, “ima”, “mama”, “ta”, “da”, “ida”, “iba”, “ita”, “taa”, etc.

This actually started around the eighth month of her age. It was found that though these were meaningless utterances and seemed to serve no communicative function, but resembled her first meaningful words of the holophrastic stage.

Janda and Hamel (1982:169), regarded babbling as “a necessary step in language development”. Ingram (1989: 39) is of the view that “babbling occurs because the child is innately disposed or programmed to babbling”.

5.2 The Holophrastic Stage

The term “holophrastic” comes from the “holophrase” which is defined as “When a single word stands for a phrase in a sentence, it is referred to as a holophrase” (Janda and Hamel 1982:170). In case of Anwar, the meaningful word she uttered, at the age of 11 months, was “imbu:” (water). This word served a communicative function and was used in holophrastic sense. i.e., ‘I want water’ or ‘give me water’. Her mother used to produce this word “imbu” when the child Anwar showed signs of being thirsty. The expressions like “bidik mai”, ‘tishrabi mai’, ‘bidik hali:b’ (Do you want water or milk?) were used by the mother and by her sisters while addressing Anwar or simply talking to her. During this period, the socialization of the child Anwar started the moment she uttered “imbu” meaningfully. The next word Anwar uttered was “mama” ‘mother’. At this point in time she was at the age of one year. Some other words were uttered by Anwar in the next few months with meaning in appropriate situations were: “bi:da” (an egg), “hali:b” (milk), “bay” (goodbye), “bi:b” (bus), “na:m” (sleep), “dadeh” (hen),”bata” (duck), “bidi” (I want), “hama:mih” (pigeon),”u:h” (go), “a:l” (come),”wawa” (hurt, or pain). Some of these words were constantly repeated by the mother and Anwar’s sisters and brothers.

When her production of words with her comprehension skill, it was found that she comprehended more than she produced. Anwar had around 50 word items in her comprehension while she could produce only 10 words at the age of 1.8. The following points are worth mentioning:

(A) Anwar used to respond correctly to the following utterances produced by her mother and/or sisters:
1. Where is mother?, /wayn mama?/ (points out to the kitchen).
2. Where are Anwar’s teeth?, / wain sna:n Anwar? (opens her mouth and puts her finger on teeth).
3. Where is father?, / wein baba ?, (pions at the bedroom).
4. Where is your hair?, / wein sha3aarik/, (points at her hair).
5. Where is Anwar?, / wein Anwar?/, (points at herself).
6. Where is Noor?, / wein Noor?/, (points at her brother).
7. Where has father gone?, / wein ra:h baba?, (points at the car).
8. Where is the milk bottle?, / wein el hali:b?/, (points at the table where the bottle is kept).
9. Where is your eye, stomach, nose, finger, cheek, mouth, leg, head, hand, etc.?, / wein 3aynik, batnik, munkharik, isba3ik, khadik, ijrik, i:dik, ra:sik, etc.? (She points at these body parts correctly).
10. Where is the bird, hen, or pigeon? /wei il 3asfu:r, jajih, or ilhamameh ? (She points at each of them correctly).

(B) Anwar used to obey the following verbs:
1. / ta3a:li/,’ come’.
2. / salmi, / ‘shake hand’.
3. / na:mi/ ‘sleep’.
4. / idhaki/, ‘laugh’.
5. /kuli/, ‘eat’.
6. /ishrabi hali:b/, ‘take milk’.
7. /waqfi/, ‘stand up’.
8. / u3di/, ‘sit down’.
9. / ru:hi/, ‘go out’.
10. /jiːbi italafuːn/, ‘bring the mobile’.
11. /uskuti/, ‘keep mum’.
12. /khudi/, ‘take’.
13. /bas, khalaːs/, ‘finish’.
14. /ʔa3tiːni busiː/, ‘give me a kiss’.
15. /naːdi uxtik Zaynab/, ‘ask your sister Zaynab to come’.

(C) Anwar used to understand the following words:
1. /munxhaːr/, ‘nose’
2. /dæ:n/, ‘ear’
3. /khaːd/, ‘cheek’
4. /snaːn/, ‘teeth’
5. /ʃaː3ar/, ‘hair’
6. /iːd/, ‘hand’
7. /isbaː/, ‘finger’
8. /wardeh/, ‘rose’
9. /kaːsiː/, ‘glass’
10. /ʔaːyn/, ‘eye’
11. /batin/, ‘belly’
12. /tim/, ‘mouth’
13. /kalb/, ‘dog’
14. /bisaː/, ‘cat’
15. /kuːrzi/, ‘chair’
16. /ihrəːm/, ‘blanket’
17. /tılfiːzuːn/, ‘television’
18. /3ammu, xaːlu/, ‘uncle’
19. /siːdu/, ‘grand pa’
20. /tayta/, ‘grand ma’
21. /tufaːha/, ‘an apple’
22. /sayaːraː/, ‘car’
23. /cambutə/, ‘computer’
24. /3amtu/, ‘aunt’
25. /namliː/, ‘ant’
26. /hammam/, ‘bathroom’
27. /tawleː/, ‘table’
28. /kalam/, ‘pencil’
29. /duxaːn/, ‘cigarette’
30. /daː/, ‘clothes’
31. /khubiz/, ‘bread’
32. /3aːsiː/, ‘juice’
33. /imxadiː/, ‘pillow’
34. /baːb/, ‘door’
35. /shagarah/, ‘tree’
Anwar kept increasing her vocabulary in the next few months and at the age of 18 months, the size of her vocabulary had increased to more than 60 including the following new word items.

1. /shu:kih/ ‘fork’
2. /thala:jih/ ‘refrigerator’
3. /ku:lir/ ‘cooler’
4. /marwahah/ ‘fan’
5. /mawzih/ ‘banana’
6. /sa:3h/ ‘watch’
7. /daftar/ ‘copybook’
8. /kadda:hah/ ‘lighter’
9. /na:r/ ‘fire’
10. /naza:rah/ ‘spectacles’
11. /duka:nih/ ‘shop’
12. /daw/ ‘light’
13. /sa:hin/ ‘plate’
14. /mifta:h/ ‘key’
15. /walad/ ‘boy’
18. /Azmi, Rahaf, Zaynab, Noor, Dunia, etc./ ‘names of her sisters, brothers, nephew, and nice’
19. /Ami:nih and Anwar/ ‘her parents’ names’
20. /‘ana, ‘inta, inti/ ‘I, you (masculine and feminine)
21. /suxin/ ‘hot’
22. /lu3bih/ ‘doll’
23. /thalj/ ‘ice’
24. /ba:rid/ ‘cool’
25. /la]/ ‘no’

The above mentioned words developed by Anwar were of different variety, i.e., name of persons, animals, objects, action words, modifiers, pronouns, and adverb of negation.

The findings show substantial increase in the vocabulary of Anwar from the age of 18 months. These findings also show that it is not only comprehension precedes production but there is also a substantial difference between comprehension and production. This fully supports the assumption that children comprehend language before they actually produce the language.

Many studies of language development suggest that a child first word appears at the age of one year. Some other studies show that gifted children are advanced in speech, whereas retarded children are slow in developing it (Johnson & Medinnus, 1969). The available data suggests that Anwar was somehow less advanced in developing her speech habits compared with gifted children.

Furthermore, according to the available data, Anwar at the age 11 months produced very few words and comprehend less than 20 words. After five months her vocabulary increased. At this age she produced few words and comprehend thirty words. When she reached 18 months, she was able to produce 15 words and comprehend about 80 words. Around the age of two years, she could produce at least 75 words and had the capacity of comprehending more than 300 words.
Anwar’s vocabulary at this stage formed her holophrastic speech in which she utilized single word utterances to express her intentions and needs. The following meanings can be attributed to her single word utterances:
1. / bah/ ‘when the milk-bottle or something is finished’
2. / wawa/ ‘when expresses pain or injury’
3. /?ana/ ‘when she wants to do or handle thing’
4. / baba/ ‘when sees or hears her father’s voice’
5. /hali:b/ ‘when she wants milk’
6. /imbu:/ ‘when she wants to have water’
7. / nani/ ‘when she wants to go to bed’
8. / nun/ ‘when food or milk is hot’
9. / 3aw/ ‘when she hears or sees a dog’
10. / mu:/ ‘when she wants or sees a cat’
11. / ru:h/ ‘when she wants someone to get away’
12. / la’a/ ‘when she refuses a thing or a person’
13. /bidi:sh/ ‘when she is angry with a thing or a person’

5.3 The First Sentences

This is the next stage in the process of language acquisition when she attained the age of two years and began to put two words together. This stage is a brief period between one-word utterance and two word-utterances in which the child produces strings of single words in succession. Janda and Hamel (1982:170) agree that “although the child’s first word sentences are quite simple, they are novel and creative and not merely a copy of the speech the child hears”. The following are some of two-word utterances produced by Anwar:
1. / inta la’a/ “you do not do this or do not touch”
2. / hali:b bah/,” The milk is finished”
3. / bidi:sh/, “She refuses to have bath, take food or go for sleep”.
4. / mama imbu:/, “she requests her mother to get her some water”

Later, she began combining three or more words in a single utterance, without being aware of the sentence construction. She had also the habit of imitating adults, particularly, her elder brothers and sisters. By doing so she used to omit certain function words reducing the sentence into two or three-words. Children at the age of two generally handle two or three- word units. “Being able to hold only few things in the mind at any one time probably leads to the telegraphic sentences that children emit”(Jonson and Medinnus 1969:156).

6. Findings and Conclusion

The present study, which covers the different stages of Arabic language acquisition by the child Anwar during her pre-school age, has revealed the following facts;
1) It was found that she had acquired Arabic by the time she was four, the very same year she was admitted to kindergarten.
2) The social and linguistic environments of the child had helped her a lot in acquiring the different language utterances more rapidly.
3) The available data, however, suggests that Anwar was somehow less advanced in developing her speech habits, compared with other children of her age.

The above cited findings may clearly indicate the extreme importance of the environment in the enhancement of language acquisition. This factor must be taken into consideration in the language learning process of a second tongue. The presence, or even the creation of an environment that uses the target language in question or at least encourages its use on the part of the learner/s may prove vital. Besides, the findings also show that normal children are quite ready to grasp linguistic habits at such an early age as four.

Finally, individual differences are not only to be found among different children or language learners, but also within the different linguistic skills of the one and same child or learner, as with regard to Anwar’s speech habits.
The researchers maintain that all the above points do not only shed more light on language acquisition, but may also turn out quite helpful in dealing with second language learning processes.

**References**


**Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/3.0/).