How is the Mother Tongue Acquired

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Part one

Abstract:

The ability of children to communicate, especially at the early stage of their lives, is quite remarkable. When they are very young, they start crying, cooing, babbling and gradually begin to send a great number of messages, either vocally or nonvocally, and at the same time they receive even more messages.

When they are about 12 months old, they begin to produce some of the speech sounds and even words they hear in their environment. They produce one word for one sentence which is known as "Holophrastic" utterances.

The number of words produced by children, by about 17 to 18 months, have remarkably multiplied, and they make specific attempts to make combination of their produced words in order to form two-word and even three-word "sentences".
This new combination of words are commonly referred to as "telegraphic" utterances.

From the age of 20 months onward the child will gradually increase the production of more and more words on the one hand, and combine his two-and-three-word sentences on the other hand. When the child is about 3 years old, s/he can easily understand a surprising quantity of linguistic behavior. Her/his speech capacity grows so rapidly that s/he can have continual conversation as s/he generates a lot of new structures, though s/he does not know the real meaning of the expressions s/he produces.

Since the subject matter is somehow rather comprehensive, the article has to be submitted in two parts. the first part finishes at the end of "Stage Three" - Early Multi-Word production period (18-24 months of age), and the second part starts from "Stage Four" - Later Multi-word production period (24-30 months of age).

"The gift of language is the gift of life "(O’harra 1984)

Significance of this Research Study

Since the universal aspects of language are concerned, many languages must be examined all over the world so as to find more pieces of evidence for "Language Universals".

To the time of this research study (1995), as far as I had investigated, no systematic major research on the acquisition of
Farsi had been conducted. This fact is also supported by personal report obtained from Julia S. Falk (Michigan State University) who writes: "...I know of no major studies on children's acquisition of this (i.e. Farsi, M.F.) language, and therefore, your study could provide an important contribution to knowledge..."

Thus, I decided to study the language developmental processes of my own child. Following the theory that "as soon as there are meaningful expressions we may say there is language", I paid a close attention to the subject's cognitive development from the earlier days of her life. But my careful studies, i.e. precise observation, tape-recordings, and writing notes on her behaviors, started when she was only seven months old and I went on up to 34 months of her age.

Statement of the problem

In this case study, I have focused on my subject's cognitive development to see:

1. at what stages she relates the sounds to meaning;
2. to trace the processes of her phonological, morphological, and syntactic development at different stages.

Theories of First Language Acquisition

The rapid growth of children in acquiring a language is dramatically amazing. And theories of first language acquisition try to find out how this rapid change takes place. Rationalists emphasize on intrinsic or innate principles in mental operations.
and learning. They believe that organizing principles either
directly or, at least, indirectly guide man’s perception and learning
by predisposing man to operate in a certain way.

Empiricists

on the other hand, believe that experience and environmental
factors shape the organism, and the result is the creation of social
modes of behavior. They do not believe in innate organizing
structure. They believe that the innate ideas of man are actually
the product of environment which are somehow transmitted by
the senses. This view of modern behavioral science is relevant to
the problem of language acquisition.

Rationalism, in this sense, would attribute language to the
store of common notions and innate organizational universals that
guide much of human activity. The point is that the specific
knowledge itself is not there, but organizational principles for
perceiving, organizing, and using such knowledge are. These
innate universals are present not because of specific experience
but because of the nature of mind. (Kess 1980).

The first language is acquired through gradual differentiation
in phonological, morphological, syntactic, and semantic aspects.
At first a child starts with undifferentiated categories and then
gradually extends and changes his classifications. He starts with
concepts of sounds and goes on to make patterns by a series of
differentiations, this making and remaking of new patterns
continues until he establishes a system based on oppositions and
functional contrast, but this system is not similar to the system of adult speakers yet. Later on this constant continuation of making and remaking of new patterns will help the child’s language to approximate that of the adult speaker. (Garman 1987, Radford 1992)

Chomsky distinguishes I-language from E-language. He maintains that E-language linguistics aims to collect samples of language and then to describe their properties. E-language is a collection of sentences understood independently of the properties of the mind. I-language linguistics is concerned with what a speaker knows about language and where this knowledge comes from; it treats language as an internal property of the human mind rather than something external. Thus, the grammar consists of principles and parameters. Chomsky believes in a sort of movement from an E-language to an I-language approach that shows language as a system represented in the mind/brain of a particular individual. (Knowledge of language, Chomsky 1988)

Methodology

This research study benefited from a naturalistic approach; naturalistic approach suggests the E-language method of study of the acquisition of a language. In naturalistic approach you are dealing with countless pieces of evidence, whereas in experimental approach you have to conduct many experiments to find certain pieces of evidence.

Researchers believe that the strategies for acquiring language
are quite similar, thus the sequence of the developmental stages and what the children acquire at different stages must somehow be highly the same for all children all over the world. Children do not simply imitate the adult speech, they speak a separate language of their own.

Analysis of the gathered data lead to keeping a good track of the phonomorphosyntactic development of the subject as well as her cognitive development. Her daily productions—divided up into five stages—were sorted into the following lists:

a monthly list of new sounds;

a monthly list of new sound combinations;

and a monthly list of new words and word combinations. Each stage is also provided with its related table(s), chart(s), and list(s) of word combinations.

A comparison between any of the two successive months would clearly demonstrate the developmental processes of her language in different areas.

**Stages of Developmental processes**

The 27-month productions of the subject have been divided up into the following five main stages:

*0 -12 months: Prelinguistic period*

*12-18 months: Single-word production period*

*18-24 months: Early multi-word production period*

*24-30 months: Later multi-word production period*

*30-36 months: Early adult-like production period*
stage one = 0 – 12 months (prelinguistic period)

The prelinguistic stage is the period before the development of the child's first words. Because of the lack of words and word combinations in this period, the division goes under weekly divisions instead of the monthly divisions of other periods. The weekly divisions roughly include the following periods:

- 0-8 weeks
- 8-20 weeks
- 20-30 weeks
- 30-50 weeks

0-8 weeks, we usually witness reflexive crying. Children cry, fuss and produce vegetative sounds like burping, swallowing, and spitting up.

8-20 weeks for cooing, babbling and laughter.

20-30 weeks for sound segments which are longer than in cooing stage, and the last weekly stage is from 30-50 weeks. This period is exactly equal to 7-12 months of age in my case study. At this period, vowels and consonants appeared. Sound combinations were going towards the production of a few words.

In prelinguistic period, a researcher should pay a close attention to every single sound which is produced; the produced sounds can resemble vowels, consonants, or vowel-consonant, consonant-vowel or other combinations.

This stage is also referred to as the stage of reduplicated babbling. In reduplicated babbling stage, sounds are combined
with the repetition of certain consonants, for instance, the /d/ sound is repeatedly produced in combinations such as /dæ/, /dæ/, /dæ/ and /da/, /da/, /da/, or the /m/ sound is repeatedly produced in /ma/, /ma/, /ma/ and /ma/, /ma/, /ma/ combinations. Reduplicated babbling has been defined as the production of consonant-vowel syllables in which the consonant is the same in every syllable (Fletcher and Garman, 1988).

The significant point of this period is her overextension. First she learned to produce a kind of /bæ/ sound, then she began to relate her produced sound to certain somehow similar entities in her environment. Every single face on T.V. screen or any new person was /bæ/, /bæ/ for her. She kept producing her /bæ/, /bæ/ sound until the picture went away or the person was gone.

At this stage, a child, I believe, does not realize her physical being within her own environment and that is why she comes to recognise items and objects before recognising the members of her own body. She would immediately look at the clock, a picture on the wall, the T.V. set, the radio, and some other objects when she was asked where they were. Several times I had tried to teach her that: "this is your hand."

But when we asked her: "where is your hand?" she couldn't discover that it was her hand and she would look around herself as if she was trying to find something. Therefore, I concluded that a child learns about things in the environment before learning about the members of her own body.
In her prelinguistic period when my subject was about eleven months old, she produced her first question word for question form structures. She produced a sort of /bu/, /bu/ sound for /ku/ meaning "where is ...?".

Typical vowels and consonants she produced in her prelinguistic period (7-12 months of age in my subject’s case) are introduced in Table (6) below:

<table>
<thead>
<tr>
<th>7-8 months</th>
<th>8-9 months</th>
<th>9-10 months</th>
<th>10-11 months</th>
<th>11-12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>vowels</td>
<td>consonants</td>
<td>vowels</td>
<td>consonants</td>
<td>vowels</td>
</tr>
<tr>
<td>/e/</td>
<td>/d/-/t/</td>
<td>----</td>
<td>* /p/</td>
<td>----</td>
</tr>
<tr>
<td>/u/</td>
<td>/x/-/h/</td>
<td></td>
<td></td>
<td>/k/</td>
</tr>
<tr>
<td>/œ/</td>
<td>/m/-/n/</td>
<td></td>
<td></td>
<td>/g/</td>
</tr>
<tr>
<td>/p/-/f/</td>
<td></td>
<td></td>
<td></td>
<td>* /β/</td>
</tr>
<tr>
<td>/b/-/θ/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>/o/</td>
<td>/h/</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* /p/ = bilabial fricative (voiceless)  
* /β/ = bilabial fricative voiced

Table (6) - Phonological system: the production of vowels and consonants between 7-12 months of age
Stage Two = 12 - 18 months
(Single-word production period)

This stage is also referred to as non-reduplicated babbling. Reduplicated babbling is replaced by babbling in which vowels, consonant-vowels and consonant-vowel-consonant syllables may all appear in a series. Within this series the consonant(s) as well as vowel(s) may differ from one syllable to another.

The rate of production, comparing this stage with stage one, dramatically sped up, therefore, we had to prepare ten tables and six summaries for the production of vowels and consonants. At this stage, for months, she produced only /ɛ/ as a new vowel, but the production of combinations were numerous! In order to provide a better defintion for these combinations which are getting meaningful, they are referred to as "nomenclatures" from this stage onward.

Negation started at this stage

When my subject was about 14 months old, for the first time, she produced the /næ?/ sound for /næ/meaning "no". She was not always correct on giving an appropriate negative answer to the question requiring a negative answer, but almost always she was right. For example, when we asked her:/xābet miyād/, meaning "are you sleepy?", most of the time the answer was /næ?/ and sometimes she didn’t answer at all. When she was hungry and we showed her something to eat, she would try to get it, but when she
was not hungry she would say /næ?/ to reject it.

It seems that in rare cases children prefer to produce a word with a more difficult pronunciation rather than the real and easier pronunciation of it. The word /næ/ for example, in the above case is made more difficult by the child when she produces it as /næ?/ for /næ/ meaning "no".

Experiments to check cognitive development

At this stage four experiments were conducted to see her cognition:

Experiment One

Asking her where any members of the family were, and hearing the name of that member she would look at him or her. When we, for example, asked her: "where is Mummy?" she looked at her mother, or "where is your brother?" she looked at her brother. But when we asked her :"where is Ali?" she looked around herself as if she was looking for someone.

This proves that she is aware of the meaning of brother, mother, and father, but not the strangers, i.e. When the name is not known to her, she looks around to find someone to match for the name, someone out of the family circle.

Experiment Two

The second experiment proved that she could also recognize
the member of the family by their pictures, several pictures were shown to her – showing the pictures of her father, mother, or her brothers, she would produce the words for them in her own way of production, e.g. /baba/ for /bābā/ meaning "Daddy", /mamā/ for /māmān/ meaning "Mummy", /dāda/ for /dādās/ which is a title that stands for "brother". But for all other pictures, she would just look at them, then gaze and nothing was produced. This proves that the child, at this stage, is able to recognize the members of the family through their pictures, whereas if she sees the picture of a stranger, she may not show any reactions.

Experiment Three

This experiment also proved her recognition of the members of the family. We used to give her a book or another object and without pointing to or looking at anyone, we told her: "give this to your brother." or "give this to your mother". Without giving any other information, she would directly go to her brother or her mother or any other members of the family whose names were mentioned.

Experiment Four

This experiment proved that she never confused to bring things she didn’t know their names for the things she knew their names. She is actually developing her ability of "word association" which is the very basis of all human learning, word association refers to
the case that the child recognizes that every entity within her environment has got a name for itself. Conducting this experiment, without giving her any hints or pointing to the objects, we told her to bring them to us, e.g. we asked her: "bring us a book." or "bring us a (toy)car." or "take the pen to your room." If she knew the name of the object, in other words, if she knew how to associate the entity with its name, she would take the errand properly. When we gave her a strange name, she didn't even show any reactions. So we may conclude that word association is actually shaping at this stage.

As it was mentioned before, at this stage negation started by saying /næʔ/ for /næ/ meaning "no". Now she learned how to produce the /næ/ sound for a negative answer, there seemed to have a sort of confusion for the usage of /næ/ meaning "no" and /bæːlə/ meaning "yes"; that is she would say /bæː/ for /næ/, then, after a short pause she would change it to /bæː/ for /bæːlə/ meaning "yes" for a positive answer. This confusion didn't last long; after a few days she was able to use both productions properly.

The words she produced at her single-word production period could convey certain ideas; e.g. /pʌp/ for /tʌp/ meaning "ball", /bæː/ for /bæːr/ meaning "snow", /ˈæbæː/ for /ˈæb/ meaning "water", and some of the other productions of this period could have different interpretations by adults, each of which could resemble sentences
containing specific meanings. When she says /pup/, it could have different interpretations such as: "I like the ball." , "give me the ball." , "throw the ball." , "take the ball." or some other possible meanings. This stage is technically known as the *Holophrastic* production period.

At the earlier months of this stage, she had learned the name of some people, things and objects in her environment – a list of about 25 items, but she did not know the name of any members of her own body. Now that she was about 15 months old, she was gradually getting to know what "hand", "foot" and "hair" meant. When we asked her: /dæset ku/ meaning "where is your hand?", she would raise her arm and produce /dæ/ for /dæst/ meaning "hand". For her foot she would only raise her leg and for her hair she kept pulling on her hair without producing any sounds.

At this stage, when she was about 15 months old, she was able to produce the following animal sounds when we mentioned the name of "dog", "cat", "donky", "crow", and "sparrow". It is worth mentioning that she had not heard these animal sounds directly from the animals themselves, but she was imitating what she had been told. The chart below introduces the way we asked her questions and how she responded.
<table>
<thead>
<tr>
<th>Questions</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- What does a dog say?</td>
<td>/hâp hâp hâp/ the bark of dogs.</td>
</tr>
<tr>
<td>2- What does a cat say?</td>
<td>/mæu mæu mæu/ the mew sound of a cat.</td>
</tr>
<tr>
<td>3- What does a donkey say?</td>
<td>/æy æy æy/ for /ær ær ær/ the bray of a donky. (she was not able to produce /r/)</td>
</tr>
<tr>
<td>4- What does a crow say?</td>
<td>/ɡo ɡo ɡo/ for /ɡar,ɡar,ɡar/ the cawing of a crow.</td>
</tr>
<tr>
<td>5- What does a sparrow say?</td>
<td>/Jis Jis Jis/ for /Jik, Jik, Jik/ the chirp of a sparrow.</td>
</tr>
</tbody>
</table>

This chart proves that children can imitate animal sounds at the level of single-word production. That is namely because of single syllable form of these sounds.

**Fewer Sound Productions, but more Sound Combinations**

At this stage (12-18 months), although she produced only two vowels and five consonants, her ability of making sound combinations showed a remarkable progress. Her nomenclatures also demonstrate some evidence of very early multi-word utterances which prove her developmental processes in different areas.

This decrease in sound productions may give way to the increase of making and remaking of sound combinations in order
to produce many new meaningful words — about 25 quite meaningful words — by the end of this stage.

**Stage Three — Early Multi-Word Production Period (18-24 months)**

In the acquisition literature, various names have been given to this stage such as: Telegraphic Speech, Early Pattern Speech, Early Grammatical Speech, Early Multi-Word Speech and so on. This is when children can put words together in systematic patterns to produce elementary phrases and clauses for the first time. Children typically enter this phase of grammatical development at around 20 months of age and progress to a more advanced and more adult-like stage of development at around 24 months of age (Goodluck, 1989).

It is traditionally believed that at one-word production stage children’s speech has no syntactic feature. Bühler (1992) believes that there is no syntactic structure at single-word production period and he calls it "asyntactic"—without syntax—period. At stage two, my subject produced only a limited number of words—about 24 or 25 words— but at this stage she produced more than 212 new meaningful words and word combinations, and for the very same reason I couldn’t go on with those little charts I had at previous stages; by no means they were sufficient, so I had to have six summaries, eight charts, and six long lists for new words and word combinations. They all demonstrated the phonomorphosyntatic and at the same time cognitive
development of my subject at this stage.

This period of about six months might seem so short in the child's linguistic life, but this certain period in the child's grammatical development is of a supreme importance for any attempt to build a theory of language acquisition. This is the period when we can clearly find evidence that the child has begun to develop a grammar of the language being acquired. During this period any theory of language acquisition must study:

a) the extent to which children's initial grammars are shaped by innate linguistic principles.

b) the point that different principles become operative.

c) the ways in which the relevant principles interact with the child's linguistic experience.

The data used as the empirical basis of this study comprise a corpus of more than 100,000 utterances of spontaneous speech of young children between One-and-a half and three years of age. (Radford 1990).

So we can say that at the stage of one-word speech, children have both phonological and semantic properties, but have no syntactic properties yet. And this is why they cannot produce structural units - phrases or clauses - in any productive way. Between the ages of 18 and 24 months, children start to combine words together in systematic patterns; in other words, they have started to build up their basic principles of grammar - making phrases, clauses, and sentences - in the language they are
acquiring.

**Pivotal Structures:**

Pivotal structures refer to the juxtaposition of words in two-word utterances. By looking at the position of each word (first or second) and at words it occurred with, they are often classified in two groups of "pivots" and "open class" words. The first group is called pivots, because the utterance appears to pivot round them. The other class contains many more words which occur less frequently (Clark and Clark, 1977; Aitchison 1995).

At this stage children get to their pivotal structures. My subject began with the following pivots:

/áma/ for /amæd/ meaning "came"
/dææ/for /ræft/ meaning "went" (away)
/bâ/ for /biyâ/ meaning "come" (here), or "take this"
/bu/ for /ku/ meaning "where is ...?"

Putting each pivot word along with a number of the words she had already learned, she created new structures shown in the following chart:

**Pivotal Structures (pivot grammars)**

<table>
<thead>
<tr>
<th>second-class words</th>
<th>pivots</th>
</tr>
</thead>
<tbody>
<tr>
<td>/bəba/</td>
<td>/ámâ/</td>
</tr>
<tr>
<td>/mămă/</td>
<td>/dææ/</td>
</tr>
<tr>
<td>/dədə/</td>
<td>/bâ/</td>
</tr>
<tr>
<td>/æmu/</td>
<td>/bu/</td>
</tr>
<tr>
<td>/ânnâ/</td>
<td></td>
</tr>
<tr>
<td>/piši/</td>
<td></td>
</tr>
<tr>
<td>/.../</td>
<td></td>
</tr>
</tbody>
</table>
A note on cognitive development:

I believe that the child’s cognitive development is quite far ahead of her language development; i.e. my subject understood a lot more than what she was able to produce sounds for them! This is not a point being discovered at this stage, even before starting to produce one-word utterances, she was able to express herself by means of signs and pointing to objects and persons. Now that she could produce two-word utterances and could even combine them, you could easily and clearly see that she did a lot of different things that she was not able to speak them all. If she spilt water or tea on the carpet, she would immediately fetch a piece of cloth and start cleaning it. This is directly related to her mental development that proves her cognitive development.

A single sound for different objects

It seems that children use a simple sound combination for more than one object which their initial sounds are similar. My subject was using a single sound combination of /mā/ for four different entities that they all start with /m/ sound and three of them share the same sound combination of /mā/ sound at the beginning. Look at the following diagram:

/māh/ meaning "moon"
/māhi/meaning "fish"
/māšin/meaning "car"
/mu/meaning "hair"
In this diagram the words /māh/, /māhi/, and /māšin/ have got the /mā/ sound combination at the beginning, but /mu/ is different, it only shares the /m/ sound with the other words. Possibly that is why she changed /mā/ for /mu/ to its real pronunciation of /mu/earlier than the other three words. However, for the other three words it remained the same for a long time.

**Generalization Started**

When she was about 20 months old, she learned the names of the members of the family rather than their titles. Instead of saying /dādā/ for /dādāš/, she would call her brothers by their names; /āemid/ for "Omid"—her older brother—and /šāyid/or /yāyid/ for "Farid"—her younger brother. She also learned to produce /āgā/ for /āqā/ meaning "sir".

Then she started to generalize her /dada/ sound combination for all young boys; either the same age as her brothers, or a little younger or older than them. Then she generalized her /āgā/ sound combination for all men and /mow/ sound for big animals such as cows, elephants, etc. The moment she saw the big animals on T.V. screen or their pictures in books, she kept producing her /mow, mow/ sound for them.

**Self-correction**

Comparing their productions with the adults’, children try to correct their utterances by themselves. My subject began to
change her /mā/ sound for /mu/ meaning "hair" to its real pronunciation, i.e./mu/. And this was, somehow, the first sign of self-correction at this stage, then she started to change many of her other productions through her own self-correction. The following chart introduces some of these corrections:

<table>
<thead>
<tr>
<th>No</th>
<th>At single-word stage</th>
<th>At Early Multi-word stage</th>
<th>Real pronunciation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>/mā/</td>
<td>/mu/</td>
<td>/mu/</td>
<td>&quot;hair&quot;</td>
</tr>
<tr>
<td>2</td>
<td>/mā/</td>
<td>/mohe/</td>
<td>/māhi/</td>
<td>&quot;fish&quot;</td>
</tr>
<tr>
<td>3</td>
<td>/mā/</td>
<td>/mešin/</td>
<td>/mešin/</td>
<td>&quot;car&quot;</td>
</tr>
<tr>
<td>4</td>
<td>/ābe/</td>
<td>/eb/</td>
<td>/āb/</td>
<td>&quot;water&quot;</td>
</tr>
<tr>
<td>5</td>
<td>/deš/</td>
<td>/ces/</td>
<td>/ceš(m)/</td>
<td>&quot;eye&quot;</td>
</tr>
<tr>
<td>6</td>
<td>/æwæ/</td>
<td>/yæyəm/ or /sæyəm/</td>
<td>/sæləm/</td>
<td>&quot;hello&quot;</td>
</tr>
<tr>
<td>7</td>
<td>/bā/</td>
<td>/biye/</td>
<td>/biyā/</td>
<td>&quot;come (here)&quot;</td>
</tr>
<tr>
<td>8</td>
<td>/bā/</td>
<td>/pa/</td>
<td>/pā/</td>
<td>&quot;foot&quot;,&quot;leg&quot;</td>
</tr>
<tr>
<td>9</td>
<td>/bu/</td>
<td>/ku/</td>
<td>/ku/</td>
<td>&quot;where is ...?&quot;</td>
</tr>
<tr>
<td>10</td>
<td>/giye/</td>
<td>/kiye/</td>
<td>/kiye/</td>
<td>&quot;who is it?&quot;</td>
</tr>
</tbody>
</table>

**Self-expansion**

At this stage children, usually, expand their use of pivot words. Adding reduplication to her pivotal structures, my subject started her self-expansion. The following chart shows how the child is expanding her production by means of repeating her second-class words more than twice and then adds her pivot words to them:
<table>
<thead>
<tr>
<th>No</th>
<th>Self-expansion through reduplication</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>/bəbə bəbə bəbə biyā/ for</td>
<td>&quot;Daddy, Daddy, Daddy, come.&quot;</td>
</tr>
<tr>
<td>2</td>
<td>/piʃi piʃi piʃi nəyā/</td>
<td>&quot;cat, cat, cat, don't come.&quot;</td>
</tr>
<tr>
<td>3</td>
<td>/dəda dəda dəda dææe / for</td>
<td>&quot;brother, brother, brother, went (away).&quot;</td>
</tr>
<tr>
<td>4</td>
<td>/məmə məmə məmə əmə/ for</td>
<td>&quot;Mummy, Mummy, Mummy, came.&quot;</td>
</tr>
<tr>
<td></td>
<td>/məmən məmən məmən əməd/</td>
<td></td>
</tr>
</tbody>
</table>

Note: /biyā/ as a pivot word meaning "come here" was used for everybody and everything but the "cat" i.e. for the "cat" she preferred to say /piʃi piʃi piʃi nəyā/ meaning "cat, cat, cat, don't come here." This proves her cognitive development; she did not like the cat, therefore, the cat shouldn't come.

**Pluralization**

At about 21 months of age, she was able to produce words such as: up, down, more, again, to, this, some of, what, yet, and so on. Then, the signs of pluralization appeared. The following chart introduces some of her plural form productions:
More Phonomorphosyntactic Development

We witnessed more changes in her sound productions, sound combinations, and lexical categories. She used to produce /s/ for /x/, then she changed it to /h/ and learned to say /hābe/ for /xābe/ meaning "s/he is asleep". This phonological development took place only in initial position. In mid and final position it remained the same. She began to use this new morpheme as her new pivot word to construct many pivotal structures such as: /dāda hābe/ for /dādāš xābe/ meaning "brother is asleep.", /māmā hābe/ for /māman xābe/ meaning "Mummy is asleep.", /bāba hābe/ for /bābā xābe/ meaning "Daddy is asleep" and making many other phrases.
structures with things and persons she knew their names.

At about 22 months of age, she produced a "dental/alveolar implosive" sound [n?]. This is the only ingressive sound used in Farsi which functions as a morpheme. Commonly speaking, it is called /noč/ meaning "no" which is used for /næ/ in a friendly, informal conversation. Considering her cognitive development, she was quite aware of the function of her production, that is, she knew how properly to use her /noč/ — [n?] sound when she wanted to give a negative answer.

**Imperative mood**

At the earlier months of this stage, she produced two imperative forms: 1- /biyā/ meaning "come (here)", and 2- /næyā/ meaning "don’t come (here)". Now at the age of 22 she was producing positive and negative imperative structures in more developed and expanded forms as shown in the following chart:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. /bād næsæn/ for /bād næzæn/ meaning &quot;don’t fan (me).&quot;</td>
<td></td>
</tr>
<tr>
<td>2. /piši biyā, kāyet nædāyæm/ for /piši biyā kāret nædāræm / meaning &quot;cat come (here), I won’t hurt you &quot;.</td>
<td></td>
</tr>
<tr>
<td>3. /bešoy, dæsæm bešoy/ for /bešur, dæsæmo bešur/ meaning &quot;wash, wash my hand&quot;.</td>
<td></td>
</tr>
<tr>
<td>4. /biyā pišæm/ for /biyā pišæm/ meaning &quot;come to me&quot;.</td>
<td></td>
</tr>
<tr>
<td>5. /mæn bešoyæm/ for /mæn bešuræm/ meaning &quot;let me wash &quot;.</td>
<td></td>
</tr>
</tbody>
</table>
At 23 months of age, she was not only producing many new combinations, but also she was able – through her self-correction – to produce most of her previous sounds quite smoother and closer to the adults’ productions. Improvement in her word combinations helped to produce longer utterances which proved her gradual progress from her "early multi-word" stage towards her "later multi-word" stage.

"Animation"

She was asking the following questions from a chick kept in a cage:

- /išet čiye bæbuše/ for /esmet čiye færnuše/ meaning "what is your name? is it Farnoosh?"

- /iše bābāt čiye mæsuyе/ for /esme bābāt čiye mænsure/ meaning "what is your Daddy's name? is it Mansoor?"

- /iše māmāyet čiyе hæzæme/ for /esme māmāнет čiye hæzæme/ meaning "what is your Mummy's name? is it Azam?"

This one-way conversation was interrupted by her brother and I could not get more of her productions. Some points are worth mentioning here:

1. Using a "wh" question, she is producing a complete question form sentence. (what’s your name?)

2. She is easily using the connected possessive pronoun /et/ meaning your..." when she asks the chick :/išet čiye/ meaning "what is your name?"
3. She has discovered that every entity has got a name to be called with.

4. She imagines that the names of other beings are like her own name when she asks the chick: "Is your name Farnoosh?"

5. She also imagines that every entity has got father and mother when she asks: "What is your father's name? or what is your mother's name?"

6. She also imagines that the names of other entities are the same names as her father's and mother's names. And that's why she checks to see if the chick has got the name of her father's and/or her mother's name.

At this stage she produces different pronouns such as "I", "me", "you", "mine", and "my". Her final and mid /x/s are still /š/s, but her initial /x/s, which used to be /š/, too, changed to /h/ and is now changing to /x/ which is pretty close to the /x/ sound. Examples:

/mišām/ for /mixām/ meaning "I want"
/yæš/ for /yæx/ meaning "ice"
/hune/ for /xune/ meaning "home, house"
/hābide/ for /xābide/ meaning "...is asleep"
/hune/ and /hābide/ gradually changed to /xune/ and /xābide/ which were closer to the adult's pronunciation.

And finally by the end of stage three, when she was about 24 months old, she had produced about 212 new words only for this stage.