First Language Acquisition

The rate and style of vocabulary growth in the first years

B.A. Ritgerð

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Janúar 2014
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January 2014
Abstract

Research on first language acquisition has been largely developed in the last sixty years due to more technological improvements and more demand on how first language is acquired. Researchers are still debating on how much of first language acquisition is nature or innate and how much is nurture or imitation. The mystery of how children are so quick to acquire their first language still remains but not all children are as fast as other children to obtain their first language.

This essay is focused on first language development in children and how variant it can be, especially in the early stages. How first language acquisition can vary in style and rate and how environmental factors can influence these variations. The normal development of language acquisition is not difficult to find and a brief overview of first language acquisition with children from birth to two year old is demonstrated early on.

Research on variables in first language development has shown that the utterance of the first word and acquiring a vocabulary of fifty words is highly variable when it comes to age. Young children can also lean towards different linguistic styles where environmental influences can affect their tendencies. Environmental influences such as child-directed speech and cultural values are reviewed from research on how much they can affect the rate and style of the language development in young children.
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1. Introduction

All children around the world learn the immediate language they hear in their environment. When children are very young they have to learn many things that will last them for the rest of their life, such as walking and socializing, and for socializing they need to learn the language that is spoken around them. Language is what distinguishes humans from other life forms on earth and to think how easy it is for such young children to acquire language in all its complexity in such short time, is remarkable. In just a few years, children learn the basic components of their native language, in which they learn the phonology, morphology, semantics and syntax of their native language. The style and rate at which children acquire a language have universal characteristics although there are individual variations in the process of language development. These differences in language development can often be seen between one and three year old children, concerning, for instance, when the first words are uttered, if they are early or late talkers and what kind of words the children are learning. The second year presents the most variability in the early lexicons children acquire according to researchers.

Research on first language acquisition is relatively recent. In the 1960’s, the American linguist, Noam Chomsky, introduced the idea of an innate competence that all children have, in which he argued that the language development of a child is largely based on an innate system. “He argued persuasively that behaviorist learning principles could not account for the rapid acquisition of an infinitely productive language faculty” (Gleason and Ratner 36). He claimed that children could not possibly learn all they need to know about language by only hearing the speech around them, because the linguistic input to young children is very poorly structured. Since then linguistic studies on first language acquisition have mainly focused on the psychological part of the development and much less on the social factors and individuality. First language acquisition still remains a mystery and researchers are still debating on how much of it is innate, or nature, and how much is learned by nurture.

But do all children learn their native language at the same rate and style? Can all parents expect their child to go through the same regularities and continuities in their child’s language development as in other children or are there some variations that can occur? What are the standards or generalizations for children and vocabulary growth
and what factors can influence any variability? And if the child is not meeting the standards of when it should acquire vocabulary or language, then should the parents be concerned?

My focus is on language development and how it emerges from the early stages of linguistic development. Section 2 features a brief overview of key developments in linguistic research for the last sixty years. Sections 2.1 and 2.2 contain an overview of the regular patterns of development in language acquisition of children from birth to two year old. These are the standard regularities and continuities in the first language development according to research. In sections 3, I look into variations from the typical development where different styles in vocabulary acquisition can be found and different rate at which vocabulary is acquired, and even if gender plays a role. Section 4 concerns environmental influences and how they affect the typical development and influence variations. How cultural values and caregivers can influence the first language development. In section 5, I conclude this essay with what parents can expect in their child's language development and how the regular patterns of language development can vary significantly when it comes to rate and style.
2. Studies on child language acquisition

Before the 1950’s studies on child acquisition were mostly diaries by linguist enthusiast studying their own child or children. Since then research and study on child acquisition has rapidly changed, mostly after Chomsky introduced his hypothesis concerning an innate system in every child. Linguists started seeing children as “creators of interesting and systematic language, rather than as imperfect imitators of adult speech” (Gleason and Ratner 304). “At one time, it was believed that children learned language by simply imitating the speech of those around them” (O’Grady, Dobrovolsky and Aronoff). Of course it is true to some extent that children learn some of the language by imitating speech, but that could not be the only source of learning since some utterances of words like *foots* (other examples *doed*) are unique to child language where the child would never have heard an adult say these words. This reflects children's attempts to construct grammatical rules, not the imitation of adult speech.

Due to technological improvements in the last fifty years, linguists gained the ability to both tape-record and/or video-record the sounds that children produced. Today, video-recording is more general because although linguists are interested in hearing what the child is saying, they are also interested in what the child is doing at the same time. The study of first language acquisition is very difficult because the linguists cannot simply go up to young children and ask them questions on what they know and how or why they know it, especially when the children are younger than two. For linguists to test their hypothesis they would either conduct an experiment or make an observational study. "Good experiments are often ingeniously simple, and you don’t have to be a specialist to understand them" (O'Grady 4). Observational studies are often longitudinal or cross-sectional where, for instance, longitudinal observation would include a child or a few children that were being observed over a long period of time but cross-sectional studies included groups of children, often at a larger scale, that were being observed at a certain point in time. The experiments and observational studies can also differ in what is being studied, for instance, style, gender, vocabulary growth and so on.

Linguists had to come up with several metrics for comparing language acquisition in children and one of those is called Mean Length of Utterances, and is abbreviated MLU. MLU is used as an approximate indicator of children’s syntactic
development where the MLU is determined by recording a large number of speech samples from a child, writing down his or her utterances, and finding the average number of words that appear in the utterances (Crain and Lillo-Martin 28). “It is a reliable measure, but much of its popularity probably comes from its being fairly easy to calculate and from the very fact that it is often reported in articles and books on child language” (Trott, Dobbinson and Griffiths 55). This type of measure tends to define stages of very early language development.

After the 1960’s so many surveys were done that the transcripts kept piling up so that by the 1980’s an archive called CHILDES (The Child Language Data Exchange System) was developed by 16 child language researchers with Brian MacWhinney and Catherine Snow as co-directors (Fletcher and MacWhinney 153). “CHILDES collects data in many languages and on normally and atypically developing children” (Gleason and Ratner 306). This database helps linguists and researchers with testing their hypothesis on many subjects where it provides researchers access to a much bigger field of research on children and child acquisition all over the world.

The next subchapters will feature a general overview of the regularities and continuities in language development in children from birth to two years old.

2.1 From birth to twelve months old

After birth infants are looked upon as fragile and delicate little beings. Their head is too big and heavy for their bodies and they have little control over their movement. In the first weeks their eyesight is very blurry but their hearing is very good. In fact their hearing is fully formed when they are halfway through pregnancy which means they are constantly hearing the voices and sounds of their surroundings before they are born (Deans 41). After birth they can therefore feel comfort in hearing and recognizing the voices they heard while in utero. Despite their fully formed hearing other biological parts are far from being as fully developed, for instance the vocal cords. For humans to speak, “it is necessary to master a vocal apparatus . . . to control and coordinate the movement of the larynx, glottis, soft palate, jaw, lips and tongue” (Boysson-Bardies 15). The infants have yet to master these delicate body parts but that will come later with maturation. Until they learn to speak, crying will be generally the only sound communication method. Other sounds that the infants will produce apart from crying
are vegetative sounds (resulting from some physical activity) like burps and yawns (Gleason and Ratner 314).

During their first three months infants will be practicing their vocal chords and making vowel sounds, mostly cooing and laughing. They have gained more control on their face muscles, for instance smiling and also opening and closing their mouths as if trying to speak. They are noticing their caregivers speech and from that they take notice of rhythm and pitch, for their caregivers speech is mostly constructed of sentences. The child would very rarely hear single word utterances from their caregiver or possibly only when the caregiver is directing their speech to them. It is therefore puzzling how infants can single out words when adults normally speak in sentences. Some experiments have shown that stress in words and sentences can help the child single out words.

Experiments on infants are not easy to conduct, because infants cannot answer or take instructions, like pushing a red button when they like something, but they can turn their heads and control their eye movement. One experiment, where researchers experimented with infants and head-turning (in which the infants would turn their heads when something interested or excited them), was about stress patterns in nouns. In the English language, nouns have a very frequent stress pattern that consists of a stressed syllable followed by an unstressed syllable, the so-called “strong-weak” pattern like *BAbY, DOctor, DOGgie* and so on. And the experiment showed that infants did favor the “strong-weak” pattern, where the infants would turn their heads more often when hearing that pattern, rather than for example the “weak-strong” pattern, with words like *guiTAR* and *adVICE* (O'Grady 13).

Another experiment was conducted on infants where the experimenters had the previous knowledge of infant's heart rate and sucking rate changing when an infant was exposed to a new type of stimulus. They wanted to experiment if infants could hear the difference between the consonants "b" and "p" and they used an electronic nipple which made it possible to measure the sucking rate. They then played a series of "b" sounds over a period of several minutes, followed by a "p" sound (ba,ba,ba,ba, pa), and if the sucking rate changed after the "p" sound was introduced, the experimenters knew that infants heard the difference. This experiment showed that infants can hear the difference between these two consonants (O'Grady).
Once infants reach the age of about four to six months old they start to babble according to O’Grady (148) whilst according to Lust babbling starts at six to seven months old (152). “Babbling is the utterance of linguistic sounds without any meaning attached” (Crain and Lillo-Martin 25). Parents can now hear their child uttering not just vowels but also consonants. The most popular first consonants are \( p, d, b, \) and \( m \), and they are all called front stops in phonology. They are also all labial, or formed with both lips, except for \( d \) which is alveolar, or formed when the blade of the tongue touches the alveolar ridge behind the teeth. Infants also start to copy the intonation patterns of their caregivers speech in their babbling.

Not much difference or variations are seen at this stage of the child development at least not in the field of linguistics. In fact babbling in infants does all sound universally the same, (O’Grady, Dobrovolsky and Aronoff 364), which shows that early babbling is independent of the particular language to which children are exposed. They babble different syllables over and over sometimes only changing the syllable by one phoneme, e.g. \( ba, ba, bi, bi, bu, bu \) (Crain and Lillo-Martin 26). These multisyllabic utterances are often categorized as reduplicated babbles but there are also occurrences of variegated babble, which consists of syllable strings with varying consonants and vowels, like \( bagidabu \) (Gleason 74). This continues on until infants reach the age of about ten months old. After that babbling starts to become more and more like the language they are exposed to.

At this stage infants show more comprehension and respond to words like \( mommy, \) \( daddy, \) or \( bottle \). They are just on the verge of starting to utter their own understandable words and grasping a little of what this new world of communication can do for them.

2.2 From babbling to a child’s first understandable words.

A child's first birthday is always an exciting experience for the parents. By that time the child has grown and changed physically, for example some baby teeth have popped out and the child has taken its first steps or is about to. The child's mind is also developing where the child starts paying more attention to what adults are saying or pointing at. The first word is among many things the parents can't wait to hear in the process of their child's development.
On average, the age, at which the child starts to utter their first understandable word, is about twelve months old, give or take a few weeks (O'Grady 7; Garman 183). However Boysson-Bardies argues that “the date of the child's entry into the domain of words is highly variable. The age at which the first words are pronounced, their form, and the rate at which vocabulary develops vary from child to child.” (136). In which case, culture, social environment, the child’s temperament and birth order, all influence the age at which the first words are uttered. Boysson-Bardies broadens the time-frame in which the first word is spoken as “between the eleventh and fourteenth month old” (136-137). Gleason expands it even more where “others wait another six months [after their first birthday] or more before words appear” (305).

The first words spoken by children are very similar in diverse cultures universally, and they are in most cases the names for "mother" and/or "father" in their native tongue. In English, a simplified version of these words are fairly easy to pronounce like mama, papa and dada, where case studies have shown that these utterances occur in the child's babbling months or weeks before the child even learns their meaning (O'Grady 7). Mama and papa are a good example with Gleason and Ratner’s statement that the “first words are more likely to consist of open syllables (a consonant followed by a vowel) rather than closed syllables” (314).

After the child has reached its first birthday and uttered its first words, babbling may continue and overlap the production of actual words but eventually die out. However there is a later stage of babbling called jargon babbling. “Jargon has the intonation patterns of sentences and may be produced so convincingly that adults feel that the child is surely speaking, if they could only understand” (Gleason and Ratner 314). This type of babbling may last well into the second year and overlap with actual speech. Some children, however, never engage in jargon babbling and choose to produce one careful word at a time.

Word learning is quite slow at first where the child would utter new words every other week or so. But after a few months when the child reaches eighteen months, the vocabulary should start growing more rapidly. According to O'Grady, Dobrovolsky and Aronoff (371) the child's vocabulary should have reached fifty words or more, on average, by eighteen months. Over the next few months the vocabulary should start growing even more rapidly, “sometimes by as much as ten or twelve words a day.”
(O'Grady, Dobrovolsky and Aronoff 371). This is often called a “vocabulary spurt” but studies show that not every child goes through these so-called “spurts” or even at the same time period (O'Grady 8).

At this stage the children's comprehension of words may be much greater than their production of words. Although some children have limited output to single word utterances they appear to understand more complex language than they are able to produce. One study done in 1987 by Golinkoff, Hirsh-Pasek, Cauley and Gordon showed this to be true by using an innovative technique to measure comprehension of basic Subject-Verb-Object (SVO) order in English on seventeen month old children. The study was conducted as such:

Children watched simultaneous, competing videotape loops while listening to utterances such as "Cookie Monster tickles Big Bird," or "Big Bird tickles Cookie Monster." Selective looking responses indicated that infants focused on those video segments which matched the word order pattern of the audio message (Gleason and Ratner 315).

This study demonstrates that although some children might not have a vocabulary of fifty words or more by the age of eighteen months old, their comprehension might still be as good as other children with a vocabulary of fifty or more words, or even better.

In English speaking homes, the largest part of the child's early vocabulary are noun-like words, with verb- and adjective-like words being the next most frequent category types. But other “frequent individual words are expressions for displeasure or rejection (such as no) and various types of social interaction such as (give and bye-bye)” (O'Grady, Dobrovolsky, Aronoff 372). The majority of the early vocabulary contains names of objects and animals where these early words tend to refer to things within the child’s immediate environment in which the child could actively interact with e.g. mommy, doggie or teddy (Gleason and Ratner 314). These words are mostly nouns whereas verbs are not as popular as nouns in the early vocabulary. The early vocabulary is also likely to consist of the sounds some animals or vehicles make, like meow or the sound referred to trains: choo-choo.
At this stage the child only produces one understandable word at a time when communicating with adults. This is called the holophrastic stage. The term "holophrastic" is more often used than the term "one-word" because adults interpret two or three words when a child utters stop-it or gimmedat but functionally the child is only using one word. An example of the holophrastic stage would be, for instance, the word “more” where children make themselves understandable by saying just this one word, which also could involve hand gestures like pointing at the thing they want more of.

Of course, not all words are pronounced by young children in the same way as adults pronounce them. Children at this age are still learning all the consonants in their language and will not have fully mastered them until their fourth or fifth year. The liquids r and l are an example of consonants that the children will acquire later than other consonants. The children will then replace them with other consonants without hesitation, for example bread with bweed.

For children, finding the right meanings to words may sometimes be difficult to establish, where children can, for example, use the word "horse" when seeing and pointing at a cow. A use of this is called overextension where words are used to refer to a larger than appropriate set of referents (Gleason and Ratner 315). Other examples are when children will use the word for dad or "daddy" to all men, or dog or "doggie" to all four-legged animals.

Once children reach the age of eighteen months old, or within a few months of their first one-word utterances, children should be heading into the two-word stage where they would put together two successive single words, for example, “Mommy . . . cookie” (Crain and Lillo-Martin 27). Before long they would be putting two-word combinations together to form primitive two-word sentences, such as, “more milk”. Again, at this point there is also a universal outlook on the words the children are producing at this stage, where “an examination of children’s two-word utterances in many different language communities has suggested that everywhere in the world children at this stage are expressing the same kinds of thoughts and intentions in the same kinds of utterances” (Gleason and Ratner 316). The children are expressing themselves with sentences that are limited in meaning and have yet to master the grammatical forms of the language such as number, gender, function words or
inflections. Their style is telegraphic because they sound like a telegram: "Send money
car broke" (Gleason and Ratner 317).

By now children should have reached the age of two and have gone through a
great deal of biological changes and cognitive maturation.

3. Individuality

The previous two chapters focused on the regular patterns of language development in
young children. The next three chapters will focus on how language acquisition is
marked by individual variation, as well as generalized developmental trends. The
irregularities are mainly different styles in vocabulary acquisition and variety in rate of
vocabulary growth during the period of the first two years. The growth of the
vocabulary can vary significantly and may even vary according to gender. According to
Bates, Dale and Thal where they observed perfectly healthy children and found that
these variations were "so much larger than the variations that are usually observed in
other maturational milestones like crawling or walking" (97). Every child has their own
style, whether it is because of their own individuality or experiences of the language
spoken in their environment.

3.1 Style

Some children have their own manner or style of speech. At least two have been noted
in recent researches and mainly in American children (Boysson-Bardies 150; Bates,
Dale and Thal 123). One is called referential style and the other expressive. Referential
style is associated with children that have an early vocabulary composed almost
exclusively of nouns, where their first productions consist of isolated, monosyllabic
words. Opposed to referential style is the expressive style where the children would
“concentrate their attention more on intonation contours and the syllabic rhythm of
words and sentences” (Boysson-Bardies 151). Their early vocabulary would contain
fewer nouns and more predicates as in verbs and adjectives and also words and phrases
that express relations and activities such as no, more, bye-bye, hi and so on. They would
also match two words together and pronounce them as one word which is also known as
the gestalt style of learning, e.g. gimmedat and allgone. These two styles, referential and
expressive, are, in fact, also known as analytic and gestalt. "Gestalt is the German word
for shape. It's used by psychologists to refer to patterns that are perceived as wholes" (O'Grady 11).

A study by Nelson in 1973 on the early lexical development of eighteen children, showed a difference in the group. Ten children tended to go for the referential style in that their early lexicons were dominated by words for objects. This group moved predictably from single words stage to a two-word stage. The other group of eight children chose a more expressive style in that they had fewer object labels but more pronouns and function words than the first group. Nelson also discovered a variation in rate where the referential group, although including both early and late talkers, tended to learn words at a faster rate than the expressive group (Gleason 295).

It is however hard to say whether this is a choice that children make on their own, to lean towards a referential style or an expressive style, or a cause by the environment. Because caregivers can also influence which style their child will lean towards by, for example, naming objects and then waiting for the child to do the same which would make the child lean towards referential style, or having a more personal manner would steer the child toward an expressive style.

The difference between the two styles is much more noticeable in the early vocabulary but as the child begins to produce more words the difference starts to weaken. Of course these two are not the only speech styles that children adopt. For example some mix these two together and then there are those that start speaking language only after “having first noticed its systematic aspect and having organized their lexical entries phonologically” (Boysson-Bardies 152).

3.2 Rate
In the last fifty years, surveys on vocabulary growth were very popular on children between the ages of eight to thirty months old. The largest survey in that field was by Fenson et al. in 1993, where they studied the vocabulary of 1803 babies and toddlers. This study was conducted in San Diego, Seattle and New Haven (Bates, Dale and Thal 99). They gave a prepared list of words to all the parents and asked them to mark off the words their child said. This survey gave good insight into the variability of children’s acquisition of vocabulary. According to Bloom “the most easily studied difference between children of the same age is how many words they know.” (48). Where studies
have shown, that between one and three year olds, the variation in the size of vocabulary can be quite considerable.

This large scale study by Fenson et al. proved that to be true about production of words in infants after the age of thirteen month old where variability dramatically increased. For example, at sixteen months old, children in the top ten percentile had a vocabulary of about 154 words, whereas the lowest ten percentile were still not producing words at all (Bates, Dale and Thal 105). This large gap in word acquisition between these 1803 children continued to grow until the age of two where, at that point, the deviation range was from a low of 89 words to a high of 534 words. The variation in vocabulary growth shows how late talkers are still far behind by the age of two. It is hard to find a particular reason for why this gap occurs because there can be so many reasons, for instance, for the late talkers the reasons could be, later cognitive development, poor input, social class, birth order, gender or even shyness. The reasons could be some of the above, one of the above or even none of the above, (or because of something else entirely). Gleason further illuminates some variations in early and late talkers:

The faster (younger) learners tended to use more nouns and more complex noun phrases. These children also tended to make more grammatical errors. The slower (older) learners used fewer and less elaborate noun phrases but more and more complex verb phrases. These same children, however, were more advanced on comprehension tasks (306).

Though some children are late talkers they can still be very advanced in comprehension of language. Boysson-Bardies further states that “a delay in the production of words is not an indicator of a relative lack of intelligence or failure in school any more than a precocious vocabulary allows the contrary to be predicted” (140).

These studies do show us the normal variation of a child’s acquisition of language words and can therefore be helpful in cases where a child does not meet the normal standards and could predict the early signs of language disorder (Bloom 51).
3.3 Gender

How does gender fit into child acquisition? Is gender relevant when it comes to language development in children? According to Coates, „one of the most well-known and best established generalizations in the area of gender differences is girls’ superiority over boys in the acquisition of speech“ (22). Coates claims that it is a well-known fact that female children are usually quicker than male children to obtain language. Studies have furthermore shown this to be true. Everything from babbling to the timing of first words and speed of vocabulary growth, girls seem to be more ahead than boys. In the past, this distinction in children may have been more exaggerated whereas today with our contemporary society and less sexist modes, one might think that this distinction in children should have diminished. But studies such as the authoritative survey done by Maccoby and Jacklin in 1974 on children in their area showed that the generalization about girls’ superiority in language acquisition still held ground (Coates 22).

Another study proves girls’ superiority in vocabulary growth done by Nelson in 1973. She studied the acquisition of vocabulary by eighteen children between the ages of one and two. Her studies showed that all the boys fell in the group with the slower acquisition rate where the girls would have a vocabulary of fifty words at eighteen months old but the boys at twenty-two months. However there are individual cases that do not fall under this generalization about girls being such fast learners of language. The linguist Susan Curtiss, for instance, tells the readers, about her concerns over her two year old daughter’s lack of grammar. She further explains that “over a period of time she [Curtiss’s daughter] produced many delightful monologues of gibberish which, by the time she was close to two years of age, had evolved into soliloquies of gibberish combined with English words” (Curtiss 96).

Other studies have also shown that adults tend to talk more and make more eye contact to female children rather than male children (Stewart 144), in which, the boys are more often handed toys to play with that stimulate their body movement and are more encouraged in that field.
4. Environmental Influences

The roles of those around young children play a part in children’s language development. The children learn the language that is spoken around them whereas languages differ from one another and so do cultures and cultural values. These differences can mark variations in language development in young children. They can differ in how the children’s caregivers speak to them. Although some languages have common features and historical similarities there are major dissimilarities to be found, for instance in English, children will have to learn that the verb comes before the object in sentence structure but whereas in Germany the verb often comes after the object.

4.1 Caregiver speech, “Motherese” or baby talk.

Language development in children depends on some level upon their linguistic experience. In most cases their only experience is hearing their caregivers speech. Children hear their parents speak to each other and the parents also talk directly to their children almost immediately after they are born. Although parents know that their child cannot yet communicate back through speech they are, today, encouraged to talk as much as they can to their child. This encouragement is fairly recent in light of recent discoveries on the cognitive development in children and that their competence may be much greater than their production. Parents are now encouraged to speak and even read as much as they can to their child from a very early age. However, parents have not always been encouraged as much as they are today to have such active input in their child’s language development. But do adults speak the same way to their children as they do to each other?

Studies have shown that to be otherwise. When an adult or an older sibling talks to a young child they change their register, they make modifications in their language when they address young children, in other words, they simplify their speech to children, where “these modifications are now commonly referred to as caregiver speech or child-directed speech, abbreviated CDS” (Trott, Dobbins and Griffiths 5). These changes in adult speech to young children feature “slow rate, exaggerated intonation, high fundamental frequency, many repetitions, simple syntax and a simple and concrete vocabulary” (Gleason and Ratner 311). The most dramatic characteristics of CDS is its prosodic features, such as higher pitch, more variable pitch, and exaggerated stress,
where these features have even been found in CDS in many different languages (Gleason, 48). The higher pitch is most important when it comes to acquiring the attention of young children. Children seem to pay more attention to adults when they use higher pitch (Clark 55). Caregiver speech also tends to focus on the here and now, whereas adults would make statements on the child’s surroundings, activities and needs for example: *Look at the doggie run! Do you see the doggie?*

Some adults even change their style and register in their speech when it comes to gender. For instance Clarke-Stewart observed American mothers and first-born children for nine months in 1973 and found that “the girls’ mothers differed from the boys’ mothers in that they spent more time in the same room as their daughters, had more eye contact with them, used a higher proportion of directive and restrictive behaviors, and a higher ratio of social to referral speech.” (Trott, Dobbinson and Griffiths 23). But does this change in register help the child in any way to attain language?

Researches on this kind of child-directed speech have shown that it could well heighten its comprehensibility. O’Grady, Dobrovolsky and Aronoff come to the conclusion that “It seems reasonable to suppose that exposure to this type of language makes it easier for children to match forms (morphemes, words and phrases) with meanings, and thereby to acquire the vocabulary and structure of their language” (384). Although this kind of child-directed speech is surely helpful and very typical of middle-class mothers in North American society, it is still not yet clear of how crucial it is to the language acquisition process. Crain and Lillo-Martin, however remark that, in light of studies done on comparing children whose parents used child-directed speech to those whose parents did not use child-directed speech, no difference was found in language development (14). They further state that “by simplifying the linguistic input, a parent is actually making the child’s task harder, not easier.”

### 4.2 Culture and cultural models

Many similarities can be found from culture to culture in language acquisition but also much dissimilarity. Culture and cultural models are features that can also affect the rate and style of how children acquire language where, for instance, learning to talk does not necessarily contain the same meaning from culture to culture. In an American society many parents would consider that their child has started talking when the child has only
started uttering a few understandable words. Whilst in some other cultures children have not started talking, in that particular cultures understanding of the word “talk”, until they have structured a full sentence.

There is also the fact that expectations from parents differ, as do the manners of speech. The Kaluli (Papuans of New Guinea) make the assessment that their child knows how to speak when their child learns how to say no (mother) and bo (breast). The Kaluli discard any other words the child might have said previous to these two words (Boysson-Bardies 177-178). Some cultures do not even consider children “to be potential conversational partners until they are fluent speakers” (O’Grady, Dobrovolsky and Aronoff 384). In that kind of environment little speech is directed towards the children but children are exposed to conversations between adults. Nevertheless, children in such cultures grow up to become fluent speakers of the adult language, which does demonstrate that child-directed speech is not necessarily essential.

Cultures and cultural values can be diverse and I have mainly focused on how English speaking societies, especially American, show their expectations of their child’s cognitive skills or linguistic skills. Boysson-Bardies compares American mothers and their expectations to other cultures, where, in this case he compares them to French mothers. He describes them in this fashion:

American mothers [who use child-directed speech enthusiastically] encourage their child to talk and, above all, to name. They want their child to be early in everything, while French mothers think that the child has plenty of time to learn. French mothers do not watch for linguistic performances, feeling instead that the child ought to be happy and well behaved and should play a great deal. (178)

According to Boysson-Bardies the French mothers are therefore more relaxed than the American mothers when it comes to their child acquiring their native language. The standards of most American parents towards their children becoming fluent speakers of their native language and as fast as possible does seem a bit extreme to other cultures. “The rapid development of vocabulary in American children is connected with the choice of monosyllabic targets as well as the energy that mothers devote to teaching
nouns to their children.” (Boysson-Bardies 157). But languages do vary and although English has a great feature of monosyllabic words, other languages, such as, French and Italian, have word formations that are for the most part disyllabic and trisyllabic.

Going from Europe to Asia, languages such as, Japanese and Korean, use much less production of nouns whereas verbs and adjectives are used to refer to objects. “It is not necessary for a Japanese speaker to mention an object when it is present or when the subject of conversation is understood by the interlocutor” (Boysson-Bardies 178). For an example if someone just received a bouquet of roses they could say “smell delightfully good”.

The methods of Japanese mothers are very different from French or American mothers where they would much less often intervene in the child’s learning attempts or comment less frequently on the child’s surroundings. But the Japanese mothers insist more on the rules of politeness, attention to the feelings of others and communication to others. English-Japanese intercultural studies by Fernald and Morikawa in 1993 found that most Japanese children acquire words late, whereas their first words were systematically longer and corresponded to more varied semantic forms. For the Japanese mothers that counted much higher than knowing a great number of words for objects (Boysson-Bardies 182).

French mothers and Japanese mothers have much more relaxed or personal and poetic expectations towards their children when it comes to early performance with verbal skill than the American mothers. Of course this cannot be generalized over all French, Japanese or American mothers but most studies have shown this to be true about these diverse cultures.
5. Conclusion
Research on child language development continues and many questions have yet to be answered. Research on similarities and the regular patterns of child language development are easy to find but research on the linguistic variations in the early stages are hard to find. Researchers continue to debate on the nature versus nurture issue in which there is still a long way to achieving a full understanding on how children learn language. The problem of how children learn their native language is hard and complex but young children make it seem so easy. But there are variations when it comes to the speed of development in word production and first word combinations.

Typical development in infants seems pretty straight-forward in their first year where their first word should be uttered around their first birthday but after that things become unclear. The next stage is somewhere around eighteen months old where the child should have around fifty words in their vocabulary, but according to research that is not always the case. The age at which young children utter their first words and acquire their first fifty words of vocabulary can vary just as the development of motor skills can vary, such as, crawling and walking. But the time-frame in which children acquire their vocabulary of fifty words can be much broader than the time-frame given with motor skills, such as walking, where the age at which young children acquire a vocabulary of fifty words can range between fourteen months old up to twenty-four months old. The ones that have a vocabulary of fifty words around twenty-four months old are labeled late-talkers. Normally however, by the time they are three years old they should have caught up to their peers.

This gap in vocabulary growth can be the result of many factors, e.g. social class, birth order, input from caregivers, genes and gender, personality and culture and cultural models. Environmental influences can influence the vocabulary growth considerably when keeping in mind that no child has the exact same upbringing. Caregivers can influence the vocabulary growth in their children's language development by using child-directed speech, giving their children and their language development a lot of attention, and also naming objects around their children as frequently as possible. These children, as a result of this, often develop a referential style. They sometimes also fall under the category of being early-talkers whereas the late-talkers tend to lean towards the expressive style. Some cultures lean towards the
referential style while others lean towards the expressive style, such as, Japan and French. Child-directed speech may have influence on children uttering their first words sooner than other children and on the growth of the vocabulary but further research is needed if child-directed speech helps to obtain language in a better way or not. More research like the research Fenson et al. pursued with 1803 children must also take place and investigate even further these factors that influence the vocabulary growth and find out why such gaps can occur in the early stages of language acquisition.

Parents can expect a variety in their children's linguistic development because factors that they cannot control influence their child's linguistic development, such as, birth order, gender and social environment. Birth order influences first language acquisition where older siblings can help younger siblings obtain language sooner. Gender can also influence first language acquisition where girls are generalized as faster learners of the first language than boys are. Social environment can also influence first language acquisition in which no child has the exact same upbringing and the amount of variety in cultures and cultural values. Parents can expect their children to become early-talkers or late-talkers and should not be worried if their children are not meeting the generalized standards of when their children should start to utter their first words or have a vocabulary of fifty words. Young children who become late-talkers are not necessarily at risk of not doing well on their educational path.
References


