

***SOME ASPECTS OF SYNTACTIC DEVELOPMENT IN MARATHI  
SPEAKING CHILDREN AGED 2 ½ - 3 YEARS  
A DESCRIPTIVE STUDY***

To Dada Aai ,

Bapu Tai

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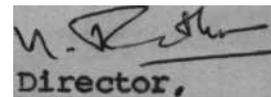
REG. NO: 6

MADHURI GORE

A DISSERTATION SUBMITTED IN PART FULFILMENT  
FOR THE DEGREE OF MASTER OF  
SCIENCE (SPEECH & HEARING)  
UNIVERSITY OF MYSORE, 1982

**C E R T I F I C A T E**

This is to certify that the Dissertation  
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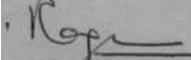


Director,

All India Institute  
of Speech & Hearing  
Mysore-6.

C E R T I F I C A T E

This is to certify that this dissertation  
has been prepared under my supervision and  
guidance.

  
Guide

## DECLARATION

This dissertation is the result of my own study undertaken under the guidance of Dr.K.Rangan, Professor of Linguistics, Tamil University, Thanjavur, and has not been submitted earlier at any University for any other Diploma or Degree.

Mysore:

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Date:17.5.82

## **ACKNOWLEDGEMENTS**

I express my gratitude to Dr.K.Rangan, Professor of Linguistics, Tamil University, Thanjavur, for his guidance at every stage in spite of his busy schedule.

I thank Dr.N.Ratna, Director, All India Institute of Speech and Hearing for providing the facilities to carry-out this study.

I thank my subjects and their parents, Mr & Mrs. Kale, Mr. & Mrs. Joshi, Mr. & Mrs. Bellubi, Mr. & Mrs. Bildikar, who gave their time with enthusiasm and interest and made data collection an enjoyable and satisfying experience.

I acknowledge with a deep sense of gratitude, the unstinting help given by Mr.Vasant Rao Kesarkar, Mrs.Kunte, Ms.Sudha Phatak, Mr.Bhide, Mr. & Mrs.Kale, Mr. & Mrs.Sathe, Mrs.Phadnis, Ms.Joan D'Mello, Mr. & Mrs. Bani, Mr.Tambat, Mr.Dalvi and Mrs. Rao in my search for subjects.

My grateful thanks are due to Dr.Rajashri Subbaiah (C.I.I.L) who clarified many issues, seemingly insolvable in Marathi structure and for her helpful suggestions.

I also thank Dr.A.R.Kelkar, Professor of Linguistics, Deccan college for his suggestions and encouragement.

I thank with a deep sense of gratitude Veena, who put

up with my moods, and encouraged me. I thank Kushal, Maharani, Rashmi and Nandini for their moral support, concern and suggestions and for listening to my monologues-patiently.

I again thank Kushal, Rashmi and Ragini, who helped me sort and correct/typed material and saved me a lot of leg work during the final stages of the dissertation.

My thanks(if they can be called that) are due to Dada, Aai, Bapu, Tai, Manju, Padma, Gowri and Bal, whose enthusiasm, cheerfulness, arguments and complete involvement with my work, helped me do a better job than I would have, alone.

Last, but not the least I thank Mr.Pushpa and Mr.Srikanth who deciphered and typed this material.

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## CHAPTER I

### I N T R O D U C T I O N

As the nature-nature debate over the origins of language continues, we see the development of two main schools of thought.

One school of thought which comprises of the behaviourists believes that language is a learned behaviour. To understand language one must identify the variables that control it, since verbal behaviour is operant behaviour, controlled by its consequences.

As defined by Hockett (1966) "An individual's language at a given moment, is a set of habits - that is, of analogies. When different analogies are in conflict, one may appear as a constraint on the working of another . . . . . in the form of a special habit. Speech actualizes habits . . . . . reflects norms of many sorts, but norms are themselves entirely a matter of analogy. . . . ."

B.F. Skinner made one of the best known attempts to construct a model of verbal behaviour and listed verbal operants as well as the conditions by which they are controlled.

The other school of thought, comprising of the nationalists has a diametrically opposite view. They believe that language is innate and species specific. The

## 1.2

human infants "know in advance what languages are like" and possess "a rich internal structure, a sufficiently restricted theory of universal grammar "or rules by which infinite sentences can be generated. Noam Chomsky, one of the leading exponents of this theory, stresses on the structure dependent operation of language, and at the same time denys the relevance of conditioning experiments to language. He defines language "as that set of infinite sentenoas that the grammar generates."

Jean Piaget's view that language is dependent on cognition, adds a new angle to this debate.

Thus the questions still remain: How is language acquired? What processes does the child use to produce and understand language? What psychological, physiological and neurological processes; underly this acquisition?

This leads us to the more practical and clinically useful questions of - what is acquired by the child at each age? Is there a specific order in the acquisition of language? Is the difference between each stage qualitative or quantitative or both? What conditions are necessary and sufficient for acquisition?

In the words of Chomsky (1959) "There is little point in speculating about the process of acquisition without a much better understanding of what is acquired."

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## CHAPTER I

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### 1.3

A description of what is acquired, is the first step in understanding how language is acquired, and understanding what are the necessary and sufficient conditions for its acquisition.

The innateness of language cannot be denied, just "the fact that a dog can be trained to walk on its hind legs does not prejudice the claim that bipedal gait is genetically coded in humans. . . . ." (Fodor, Bever and Garret 19 ), but it must be recognized that this ability is present only as a "potential" in humans, which only "allows the member of the human species to express the behaviours associated with each succeeding stage, but does not ensure their provision" (Milner 1967) unless the environment is suitable and the organism is "undamaged."

A structural description would thus help to find out what environment is best for language acquisition besides providing the norms.

There is a dearth of norms in language acquisition, against which deviances can be compared. A view that is gaining popularity is that disorders like stuttering, cluttering. Autism, Reading disabilities, etc are language based problems.

For eg: From 3 - 5 years with considerable errors, and false smarts the child accomplishes the task of learning

the transformations of adult language. It is also in this period that the highest number of cases of onset of stuttering are reported (Bloodstein 1974).

Reading Disability is considered to be a milder form of a language disorder (Brown 1980, Stark.J. 1977). This is in accordance with the view that control of syntactic structure might also be an important consideration in reading materials (Quigley 1974, Hatch 1969).

An analysis of the language of children with these problems as well as problems with hearing, children with brain damage, environmental deprivation, will help us find out, how exactly these children differ from normal children, help us understand how to compensate for the "missing" condition necessary for Language as well' as how much to compensate and in how many stages, etc. This is of great help in language rehabilitative programs for the deaf, brain damaged, learning disabled, etc.

Besides being a help in the diagnosis and rehabilitation of a language disorder, norms for language at each age:also makes it possible to compare normal and deviant language which leads to a better understanding of the correlations between language use and the functions which underly it.

The structure of the language is got by describing the features acquired by the child. It is then possible to observe what parameters of the structure of language, the child is capable of using to generate sentences.

The structure of the language at each age lets us understand if there is a definite pattern of acquisition and what that pattern is. It cannot be assumed that the child is like the adult in linguistic performance except for a few trivial differences or that the child has a different grammar. Description of the structure of language has dispelled many notions about language and helps to gain a systematic and precise grammar of the language.

Generally, the syntax of a language is studied and most language tests evaluate the syntactical development of the child.

There are many language tests in the west. For eg.- ITPA (Kirk et al, 1968), North Western Syntax screening test (Lee 1969), Assessment of children's language comprehension (Foster, Giddeon and stark 1969), D.s.s (Lee 1971) and Test of Syntactic abilities (Quigley et al 1978).

In India only two tests 'TASK' (Vijayalakshmi 1981) and A syntax screening test in Tamil (Sudha 1981) have been constructed.

## 1.6

The need for a suitable test in every language has been acutely felt by speech pathologists, but no data exists on what is acquired by the children of most language groups. Thirumalai (1970) has studied Tamil phonology, in a 4+ years old child. Srivastav (1974) studied consonant articulation in Hindi. Venugopal (1981) studied some syntactic aspects in 5 - 6 year old Tamil speaking children, and Roopa (1980) studied syntactic aspects in 4 - 5 year old Hindi speakers.

In Kannada, studies have been conducted on phonology, morphology and syntax.

Kumudavalli (1973) studied the relationship between articulation and discrimination in kannada sounds in 4 - 8 year old children, Tasneem Banu (1977) studied the acquisition of articulation and Subramanya (1978) studied morphology, and Sridevi (1976) and Prema (1979) studied syntax in 2+ and 5 - 6 year old children respectively.

The prevailing stress on linguistic analysis increases the need for a test / norms in each language which in turn causes a need for more descriptive studies and hence the present study.

In the present study, some aspects of syntax namely negation, interrogation, coordination, imperation and

pronomilization were investigated. Four children of 2½ and 3 years were subjects for this study. They belonged to middle class families of Bangalore and Mysore. All the four children are native speakers of Marathi.

Speech samples were collected from each child at his or her home. Approximately three hours of speech samples were collected from each child. The techniques used were interview, stogy telling, games; Spontaneous speech while the child interacted with other family members was also recorded.

Speech recording was done in 3 - 4 consecutive days. A cassette tape recorder with a built in microphone was used for data collection.

Broad phonetic transcription was followed when the materials were collected and the sentences were classified into declarative, imperative, interrogative, and negative for the purpose of analysis. The methodology of transformational generative grammar was followed for the purpose of analyzing the data.

**Limitations of the study:-**

- 1) Number of children used is small.
- 2) Age group studied is restricted.
- 3) only four aspects of syntax are studied.

- 4) The child's complete grammatical structure may not have been manifested.
- 5) Little attention was paid to comprehension.
- 6) The influence of Kannada and English on the acquisition of Marathi cannot be estimated.
- 7) All the children are not from one place. Though Bangalore and Mysore have similar linguistic environments, there may be an influence of this variable, but it was not possible to control it.

**Implications of the Study:-**

- 1) Helps us understand what aspects are developed in the early stages of language acquisition.
- 2) Helps in the construction of suitable tests.
- 3) Early identification of linguistically deviant children including dyslexics.
- 4) Evaluation of children with speech and language disorders.
- 5) A better therapy program for language.
- 6) A better understanding of language behaviour in case of brain damage, for eg.- a better understanding of regression and recovery in aphasics.

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## CHAPTER II

### REVIEW OF LITERATURE

With the appearance of the first word, a child is accepted as a person in his environment, because he has something to say for himself, as a member of the human social organization. It marks the point at which he uses language meaningfully.

Language is so much a part of our lives that no one stops to think how complex it is, and it is only when it is not acquired does do we realize what an achievement it is for the child to have learned it.

Child language, until recently received only marginal consideration from most linguistic scholars.

The first paper on child language was published by Dietrich Tridemann, a German philosopher in 1787. Almost a century later, the modern study of child language, with exact: recording of observations began. Sigismund (1856) Kussmaul (1859), Schleicher (1861), Preyer (1889) and Stern (1907) made some notable contributions to the study of child language.

Jackobson's theory of child language finally integrated all the observations made by earlier authors, (Leopold). Around the same time, Jean Piaget put forward theories of

language acquisition within the frame work of cognition).

These theories gave a new impetus to the study of child language, but the major studies still studied child language within the frame work of adult language.

While Piaget's work clearly demonstrated that the child's perception differs from adults, child language was still considered in the frame work of adult language.

It was not until Chomsky postulated the 'generative grammar' the system of the rules that "specifies the sound meaning correlations and generates the class of structural descriptions (precepts) that constitute the language in question" (Chomsky, 1969) that the child's acquisition of language was viewed as a sort of theory construction.

The child's theory of language is different from the adult theory of language. This theory undergoes changes, during the process of acquisition of language until it approximates adult language.

This view may not be accepted by many authors but it is generally agreed that the rules which govern a child's language are different from the rules which govern adult language.

Most-recent studies on child language (Menyuk 1969),

Brown and Bellugin 1964; Klima and Bellugi 1966; Blobin 1966; Prema, 1979; Roopa, 1980; Venugopal, 1981) have used the principle of generative grammar to describe child language.

The different approaches to the acquisition of language can be differentiated into 3 main approaches (McLaughlin, 1978):-

- 1) Empiricist or Behaviourist approach.
- 2) Transformational generative grammarian approach and
- 3) Process approach.

1. Empiricist / Behaviourist approach stresses the role of experience and control by environmental factors in the acquisition of language. This approach includes language models based on classical, operant conditioning and two major approaches within this frame work are described by Skinner (1957) and Staats (1968).

Skinner attempts to describe acquisition of language solely on the basis of operant conditioning. verbal behaviour has an effect on the environment, which in turn has an effect on the organism emitting the verbal behaviour.

Language is learned by selective reinforcement of verbal behaviour. Thus, certain forms of behaviour are emitted more often than the others. He identified several types of functional relations in verbal behaviour which

include mand, tact, echoic, textual, audience and autoclitic. A word can fall into any of the operants depending on the context / medium in which it occurs. In every day life, a verbal response of a given form passes easily from one type of operant to another, showing the dynamic property of a verbal repertoire.

Skinner acknowledges the distinctive nature of verbal behaviour in humans. His theory however fails to explain language acquisition in its entirety but does touch on those aspects of language that can be brought under experimentation.

Staat's model is based on the s - R mechanism. He considers that an individual's language is composed of repertoires of skills learned according to different principles.

Classical conditioning is the principle by which large number of words elicit emotional responses and speech responses are learned on the basis of instrumental conditioning.

Language is learned in response to the features or principles of the world in which man lives. Since different languages have evolved to be isomorphic with the same world of events, they have commonalities.

He points, also instrumental higher order conditioning so that at discriminative stimulus transfers its control to other potential discriminative stimuli with which it is paired. This is responsible for the child assigning to proper grammatical categories the novel items it encounters.

He also says that the people in the child's environment change their speech while talking to the child and that repeated training helps him acquire words.

Staat's model however does not completely explain novelty in language.

## **2. The Transformational grammarian view:-**

This view was proposed by Noam Chomsky. Language, he considers to be "the infinite set of grammatical sentences in a language" and grammar is a finite set of rules that will generate this infinite set of grammatical sentences; and no non - sentences.

The central emphasis is on the "creative" aspect of the language user's ability to produce novel sentences he has never uttered or heard before. Eg. "colourless green ideas sleep furiously."

The native speaker is not only able to produce new sentences, but also understand them. He distinguishes between competence or the speaker-hearer's knowledge of his language and performance the actual use of the language in concrete situation.

The competence comprises of grammar of a language which refers to the "speaker's internalized, subconscious knowledge" of the language.

The internalized grammar of a person may be said to be a theory of his language. A grammar consists of syntactic, phonological and semantic components\* The syntactic component generates a deep structure and a surface structure for every sentence. The deep structure is the output of base rules and the surface structure is the output of transformational rules which operate on the deep structure.

A transformation may involve any of the following processes:-

a) addition, b) deletion, c) rearrangement and d) substitution.

**Addition:-** By addition it is meant that some element that is not present in the deep structure is added in the surface structure. Only elements semantically empty in meaning may be added since transformation does not bring about any change in meaning.

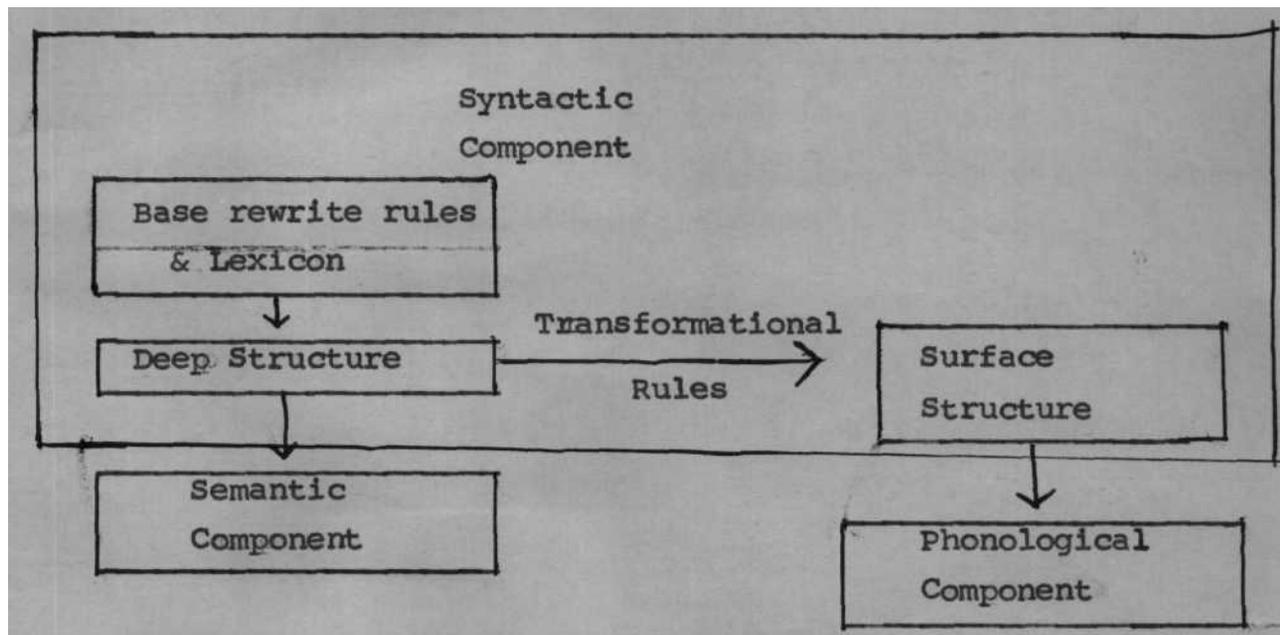
**Deletion:-** Some elements are deleted when the surface structure is derived. Again only semantically empty elements may be deleted.

**Re-arrangement:** The ordering of the phrase markers at the surface structure is changed in relation to the deep structure.

**Substitution:-** This involves replacing an element of the deep structure with another element in the surface structure.

The Chomskian Model views the sentence as the basic unit and the study of syntax is study of grammar.

The relationship of the 3 components of grammar is shown in the schematic diagram below (Rangan, 1972).



According to this theory, the child's acquisition of language is a kind of theory construction. The child's theory has a "predictive scope" which helps him to reject a great deal of data, since normal speech consists of many false starts, fragments, etc.

The child learns the underlying theory by testing his hypotheses, accepting some and rejecting others, without explicit instruction. This is only possible if the child already possesses an innate restriction the form of a grammar.

Chomsky's approach has been criticized as follows:-

1. Syntax is not all of language.
2. Child's communicative behaviour before the age of 18 months is ignored.
3. Meaning is in discourse and not in sentence.
4. Intonation and the broader context of culture and environment is ignored.

### **3. Process Models:-**

They are essentially cognitive models of language. Jean Piaget (1964) gave a theory of language development. Piaget (1971) believed that all mental development including that of language is an extension of biological organization and adaptation. He described the processes of assimilation where reality is modified to match internal organization in the brain and accommodation where the internal structure is modified in accordance with the environmental influence eg. imitation. These two processes are complementary to the process of adaptation, the pre-disposition of all living systems.

Language develops on the cognitive abilities which arise in the first stage of life. At the end of this stage the child realizes that he is an active person distinct from the objects he works upon. Later he transcends immediate space and time.

Piaget believed that language development continued upto 12 - 14 years and that cognition affects language at all stages. Pruthing and Elliot (1979) give another approach towards the model of language based on Fuller's synergistic model. Synergy is defined as "the behaviour of whole systems unpredicted by the behaviour of their parts taken seperately.

Linguists have examined language at 4 levels - pragmatic, semantic, syntactic and phonological levels. The authors feel that the sub parts of the language system may not reflect natural divisions. For eg. tall, thin, noisy are adjectives. But in the sentence 'I am being noisy' it is a verb. They suggest that the four levels of language are not mutually exclusive, but all have relational functions. A child for eg. can communicate intent, but his phonological system is not complete. Thus pragmatic aspects of language interact with and form a reciprocal type of relationship with phonological variables so that the message is conveyed.

The task of learning a language hinges on the task of learning what language is. The system of any language is a vastly complicated affair with its various levels, laws, routines, etc. yet in the space of 5 years most humans convert themselves to "homologueus" (Fry, 1977). How this is achieved is still a matter of debate, but the interaction of "heredity" and "environment" is obviously necessary.

The baby duck is predisposed to follow its mother soon after birth. If neither the mother nor any object pass by during the critical period, it will never learn to follow as normal ducks do. A human child is unlikely to learn to talk in the absence of a favourable environment, but why he talks in a favourable environment is controlled by a number of factors, which 'affect and effect' the language acquisition process.

1. Language is acquired because, and only if, the child has a reason to talk. This in turn, assumes that he has.... learned that he can affect his environments through the process of communication.
2. Language is first acquired as a means of achieving already existing communicative functions....
3. Linguistic structure is initially acquired through the process of decoding and comprehending incoming linguistic stimuli. At later stages of development, the process of

imitation and expansion may serve to help the child refine his emerging language system.

4. Language is learned in dynamic social interactions involving the child and the mature language users in his environment. The mature language users facilitate this process through their tendency to segment and mark the components of the interaction and provide the appropriate linguistic models.

5. The child is an active participant in the process . . . . and must contribute to it a set of behaviours which allow him to benefit from the adults facilitating behaviour.

These factors begin to operate on the child almost as soon as he is born, but the early stages of life seem to be dominated by the "general biological development of the human animal."

The prelinguistic behaviour seems to follow a regular schedule and the development of communicative skills parallels the development of motor abilities. The communication behaviour probably results from growth in the brain and the nervous system. A part of the table given by Lenneberg 1966 is given below:-

Age in months	Vocalization	Motor Development )
4	Coos & chuckles	Head self supported tonic neck reflex submitting.
6 - 9 -	Babbles, produces sounds such as 'ma' or 'da', reduplica- tion of sounds common	Sits alone, pulls himself to standing. fist thumb opposition of grasp.
12 - 18	A small number of words follows simple commands and responds to 'no'.	stands momentarily alone, takes a few steps when held by when held by hands, grasp, prehension and release fully developed.

Cooing and Babbling represent the prelinguistic stage; The linguistic stage starts with the first word. In the first few weeks of life, most babies, are quiet unless they happen to be crying.

**Cooing:** which begins around 4 months, represents sounds of pleasure made in response to the environment. The child responds to the tone of the mother's voices.

**Babbling**: consists of strings of sounds, where the baby gets pleasure simply from repeating the syllables over and over again. The baby does not imitate the adult. With continuous stimulation the baby might begin to babble again, but with own repertoire of sounds.

After this the baby passes with the next stage, the syntactic stage which begins with the first word.

It has been pointed out that prior to the one word utterances, there is evidence of sentences uttered by the children that seem to have intonational properties like later utterances but don't contain any words.

Nazakima (1962) says that after the period of repetitive-babbling, 9 to 12 month old children tend to use intonations as if they were in a conversation, and that speaking was more often addressed to people and dolls. The intonation pattern was also shown up in spectrograms. These utterances may continue even after the child has developed two and three word sentences (Ervin Tripp, 1971). Occasionally a single word from the normal vocabulary of the child occurs, but they seem to be 'quite separate, structurally from the other utterances.'

Thus, it is possible that the child learns to speak by grasping the intonation patterns in the language first. Tervoot found that children were distinguished by their babbling.

Mehler (1931) says that as early as 6 months, there are: clear differences in intonation in babbling; However more research is needed on the subject. Thus the role of babbling in the development of real language is not very clear.

### **Acquisition of Syntax:-**

Most researchers begin their analysis of syntactic structures used by their children when the child begins to string two recognizable morphemes together. But before this period, the child produces sentence like utterances consisting of single morphemes.

This stage is known as the holophrastic stage. Not all children go through a single morpheme utterance stage, and sometimes the stage is fleeting, but this stage may well last for 6 to 12 months (McLean and McLean 1978). Within this period the child's utterances consist of a single word, but sometimes a string of two or three adult words function as a single word. eg. 'pat the Bunny book (Huttenlocher, 1974).

If syntax is thought of primarily as 'the system of rules for ordering words in a sentence' one word utterances would be difficult to analyze.

One - word utterances serve a wide range of communicative functions, ranging from the direct requesting of an action, labelling, location, and signalling initiation or

termination of an interaction. This wide range of functions precludes the exclusion of this stage from analysis.

Single morpheme Utterances may be viewed from two angles. a) that they are stored as a sequence of sounds that are symbols of auditory, visual or tactile images, and b) that they are stored in memory as "the syntactic structure sentence with semantic properties and phonological features to which intonational markers, also stored in memory, are applied as these sequences are generated."

(Menyuk, 1963). The second view is more acceptable. There is evidence that intonational markers are applied. So that the word "tea" could be used interchangeably for "a cup of tea", or an action of drinking. These words must not be assigned to categories, and must be analyzed in the light of their relationships to the immediate contexts in which they occurred.

Through the process of "rich interpretation", Bloom, 1970, identified and defined several "semantic functional" classes of words. The assignment of words to these categories is subjective since it is the adults interpretation of what aspect of context or event is referred by the child. Bloom describes two broad categories of early word forms. Substantive which serve as labels for objects and actions in the child's world. Eg. ball, jump.

and functional relational forms which describe some relationship which could apply to substantive words. Eg. more, there allgone; These forms are predominant in the beginning.

In the first stage it appears as if an utterance is not perceived as a series of distinct words. This is also a period in which the child's expressive lexicon is expanding not only in terms of the number of words, but also the meanings he can convey with those words.

#### **The transition to grammar:-**

Just before the child moves into the syntactic stage where words conform to the grammatical rules, there is a transition stage, where the child uses multiple word utterances that are one word utterances produced in proximity. This stage is referred to as "successive single word utterance" by Bloom. She noted that each word was pronounced in falling intonation, with a slight pause between them. Thus 'Juice drink' would be more accurately written as 'juice. Drink'.

The words are combined in such a way as to provide evidence that the child is aware that the elements of his utterance are related to each other. This stage moves in to the stage where the child combines two words according

to consistent rules of word order and is pronouncing them with an intonation pattern suggesting a single sentence.

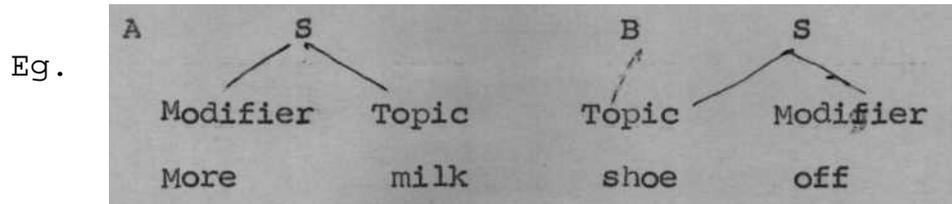
**The grammatical Stage:-**

Around 18 months the child starts using two and three word utterances, it appears that these utterances are not acquired as wholes, with the underlying structure determined at some later stage of development. The child has already acquired structures which allow him to generate sentences.

These early two or three morpheme utterances have been called combinations of 'pivot and open' classes. The child has apparently classified the morpheme in his lexicon by placing them in either the category 'open' or 'closed'. The pivot comprises the small number of words whose positions have been learned. The pivots correspond to the 'closed' category and consist of pronouns, prepositions, auxiliary verbs, etc and serve as frames for the open class Words, (nouns, verbs and adjectives).

Examples of pivotal constructions: want car, want up, it ball, it fall, here bed. These constructions have been used by Russian children also (Globin, 1965) and Hebrew children (Barttdon, 1971) expressed in these utterances as that of subject or topic and a modifier (pivot).

These utterances are sufficiently diverse to suggest a hierarchy of acquisition in terms of traditional classifications of lexical items.



The modifiers can occur any where and serve to express a relationship in these utterances, it is possible that sentences of type A may be predicates and B group sentences-subject + Predicate.

The underlying structure could be

S                    (modifier) Topic + Intonational marker  
 Modifier        (∅)    {phonetic,phonological}    string  
 Topic        {phonetic,    phonological}    String  
 Intonational Marker    (.)    (?)    (!)

Order of modifier and Topic is free (Menyuk, 1969).

Language at this stage appears to be overt primarily. The same utterances are repeated many times and seem to be the first indication of hypothesis testing in language acquisition as the child understands the subject - predicate relationships.

The child who is communicating within the constraints of a two or three word utterance selects only those words essential to convey his meaning. The two word sentences are more common than the three word sentences in the beginning, (though this is not absolutely necessary). The trend in recent years is to analyze these utterances semantically.

McLean and Synder McLean have listed these utterances types (semantic)with a description of their syntactic structures in order by frequency of occurrence from the data presented by Brown (1973) and Mac Donald and Nickols (1974).

**GRAMMATICAL UTTERANCE TYPES**

Utterance Type Semantic structure	Syntactic structure	Example
Two word utterances: 1. Agent action 2. Action object 3. Demonstrative entity. Nomination Notice 4. Possessor - Possession	Noun + Verb Verb + Noun  that/it/etc+ Noun hi/see/etc + Noun Noun + Noun	"We read" "Read book"  "that book" "Hi belt " "Mommy Lipstick"

<b>Semantic</b>	<b>Syntactic</b>	<b>Example</b>
5. Entity-Attribute	verb + more	"Full give"
Recurrence	more + Noun	"More milk"
Non existence	No/all gone +noun	"No doggie"
Attribute	Adjective + Noun	"All gone milk" "Big train"
6. Entity locative	Noun + Noun	"Sweater chair"
7. Action locative	Verb + Noun	"Sit chair"
8. Agent object	Noun + Noun	"Mommy sock"
9. Conjunction	Noun + Noun	"Umbrella boot"
Three word utterances:-		
1. Agent - Action - Object	Noun+Verb+Noun	"Mommy spill juice"
2. Agent-action-location	Noun+Verb+Noun	"Daddy sit chair"
3. Action-object-locative	Verb+Noun+Noun	"Throw ball here"
4. Agent-object-locative	Noun+Noun+Noun	"Daddy ball chair"

A characteristic of child language during this period is that it remains highly immediate and concrete. Most utterances describe specific objects events or relationships salient to the child in the immediate context.

This stage may be described in terms of mean length of utterance MLU. Brown notes that children in this stage have a MLU 1.5 to 2.0 approximately, and the upper limit is 5 morphemes.

As the vocabulary of the child grows, the sentence length and complexity increases and the child moves into the next stage.

**Refinement of grammatical utterances:-**

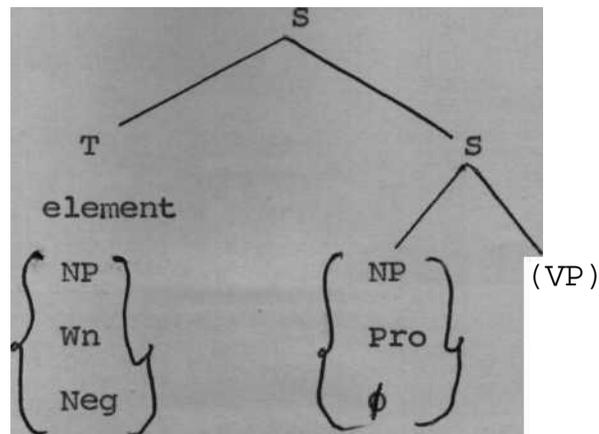
In this stage function words are added to the child's vocabulary, along with descriptive terms to expand the Noun and verb phrases. The child in addition makes distinctions of tense and plurality and uses the inflectional morpheme to mark possession, ie. 's. The MLu is 2.00 to 2.5 approximately (Brown 1973). The utterance is basically of the simple declarative type, though a few interrogative forms may be present.

The gradual build up of base structure rules has occurred, the basic syntactic structures have been acquired and the subject - predicate relationship is more frequently expressed. Predicate structures predominate in the beginning and classes of language are beginning to be defined. The noun phrase expands to determiner + Noun, prepositional phrase and pronoun.

The verb phrase develops in two directions. - The development of morphological markers for tense and number, and the acquisition of auxiliary and modal verbs.

VP can be expanded in to verb + NP S can be expanded into  $S_1 + S_2$  . Mistakes are still made but these decrease with age until by 5 - 6 years of age, the mistakes are negligible.

The sentence may be represented as follows:-



The child begins to use transformational rules at this stage but these rules may be quite different from adult rules, sort of simplified rules. Bellugi (1971) found that (a) these rules occurred in more than one child (b) they occurred with considerable frequency, and (c) the transient hypotheses, ie. they are replaced by more mature forms later and are fully specified semantically.

Though most of the basic tasks are accomplished by 4 years, the child's lexicon and base structure rules

probably expand well beyond 7 years, though at a slower rate as demonstrated by Carol Chomsky. The increasing grammatical competence leads to the gradual elimination of the generation of various transformational structures with incomplete rules and older children apply generalization about rules to the new structures they acquire.

Wood 1976 describes 6 distinct stages of syntactic development in children between the ages of 1 - 10 years. The stages 3 - 6 are described briefly here.

Stage III 2 - 3 years- both a subject and predicate are included in the sentence types.

Stage IV 3 - 4 years- elements are added, embedded and permuted within the sentence.

Stage V 4 - 7 years- categorization - word classes are sub divided.

Stage VI 5 - 10 yrs - complex structural distinctions are made of - eg. ask - tell.

Karmilogg - Smith (1979) say that tagging of general principles with rules for exception, the progressive passage from coordination to subordination and avoidance of redundant marking are acquired completely only after the age of five.

**Competence:-**

The above classifications and rules are mainly derived from spontaneous utterances of children.

Chomsky (1964) points out that "grammar is not a description of the performance of the speaker, but rather of his linguistic competence, and that a description of competence and a description of performance are different things." The idea that the relation between competence and performance is "probabilistic" is implausible.

The linguists usual approach to determine the rules of a language is to obtain language samples and then to ask the informant if the grammatical contrasts he has reconstructed from these samples are significant or not. The problem of eliciting linguistic judgements from the child, especially during the critical period from birth to 4 years is significant.

The value of descriptive studies here would be to indicate what the child can be asked to make linguistic judgements about. Some approaches are:-

1. Having the child identify grammatical contrasts in picture stimuli - subject object relationship.
2. Having the (older) child identify the correct structure in a contrast of two or three sentences.
3. Having child apply rules to unique material eg. Noun + unique verb in various contexts.
4. Having the child answer questions.
5. Having the child reproduce utterances.

Menyuk (1963) found that repetition of sentences is dependent on the rules in the listener's grammar, and is not mere imitation. Older children were better able to repeat, though the oldest children (7 years) continued to modify structures they repeated.

She also found significant correlation between syntactic structures that were used and repeated for all age groups. Developmental changes in reproduction of sentences coincided with developmental changes in spontaneous language indicating that in many instances children used "the same rules to reproduce sentences as they used to generate sentences."

Comprehension develops in many stages, in the first 10 months, the infant progresses from the ability to discriminate speech sounds to respond differentially to specific "phoneme intonation" patterns.

After this stage, he responds to the lexical semantic features. Eg. He responds to adult's No! No!. After 13 months the infant does not depend solely on supra segmental features and begins to respond to individual words.

Hutterlocher (1974) found that the words first comprehended are nouns or words that serve as labels, verb forms apparently emerge a little later, but variation was considerable,

Wetstone and Friedlander (1972) found that children speaking in one and two word sentences do not attend to word order. Eg. They responded by pointing to the appropriate picture whether they were asked "where is the truck?" or "truck the where is?" older children were less apt to respond.

Shiple, Smith and Gleitman compared children between the ages of 15 to 30 months. The children were divided into two groups - 1. Those producing one word sentences, 2. Those producing primarily two word sentences.

The children's responses to comprehension of sentences including the type Noun, VN, telegraphic and imperative was studied. The less advanced group responded more often to word in isolation, especially when noun was stressed, and when telegraphic utterances were said with each word stressed separately. Older children responded most often to grammatical imperative sentences. This indicates that comprehension does not precede production at least in some stages, and may precede production in some stages (older group).

Around 30 months, when the child regularly produces 3 - 4 word grammatical utterances, he begins to respond to the meaning conveyed by the syntax of a sentence.

Active sentences are comprehended before passives. Carrow (1968) found that the ability to identify the subject and object in passive sentences does not develop till almost six years of age. Chomsky (1969) found that sentences of the form "hard to see" are misunderstood by children younger than 8 years of age.

Thus comprehension apparently continues to develop upto late childhood. More data is needed to find out when exactly the child comprehends all the adult forms and to identify the physiological and behavioural processes which seem to affect it.

#### **Development of Specific Transformations:-**

**Negation:-** Negation is acquired quite early in children's speech. A negative sentence may consist only of the negative morpheme 'no' when the underlying structure of the utterance includes only an intonational marker (declarative, emphatic and question) At 2 years, the sentence of the type "No goes us work" present (Menyuk, 1969) In the beginning more sentences contain 'No' than 'Not'. This may indicate that early sentence types are generated by the operation of conjoining elements rather than by expansion of mode. 'No' is an independent element as is a question morpheme, but 'not' can be used only when the negative morpheme is embedded in the sentence.

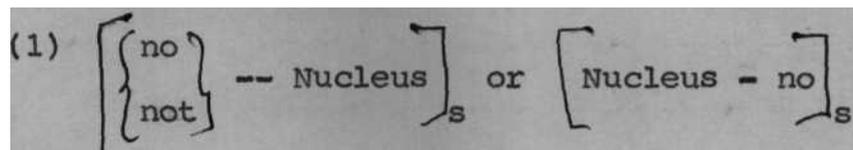
By 2, 10 years, the children begin to produce well formed negative sentences (Menyuk, 1969). Bloom (1970) found that at 22 months 'No' was used for all types of negation, at 24 months 'Not' appears. Sreedevi (1976) found that in 2+ kannada speaking children, negative transformations employing mere addition of 'illa' and 'beda' are acquired. Bloom (1970) also reports that 'cant' 'dont' and 'couldn't' appear between 26 - 28 months. Vijayalakshmi (1980) found at 4 to 4½ years in kannada speaking children. Markers - '\_\_\_\_\_kolde' and '\_\_\_\_\_a:gde:iro:' appeared. Roopa (1980) found 4 and 5 year old Hindi speaking children used 'na' and 'nahi'. Prema (1979) found that negative suffixes were not comprehend by 5 - 6 years, but 'illa', 'alla', 'be:da' are found in kannada speaking children. Venugopal (1981) found, tamil speaking children of 5 - 6 years used negative markers 'ille' and negative affixes -aa- , maatt-, -le and -aad.

Klima and Bellugi Klima (1971 / 1966) describe 3 stages in the acquisition of negation in English speaking child:-

Period-1: The sentences are of the type.

'No heavy', 'No sit there'. There are no negatives within the utterance nor are there auxiliary verbs. The sentences

consist largely of nouns and verbs with out indication of tense, while prepositions, adjectives, articles rarely appear. The negation system can be considered as follows?

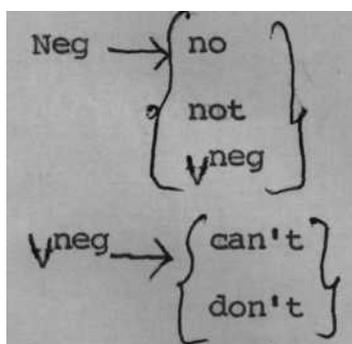


The nucleus refers to elements like "Sit there". The rule for negation serves many negative functions in the child's speech as 'dont want', 'not there', imperation, etc.

**Period - 2:-** The rules present in period 1, coexists with new rules in this period.

The basic can be represented as follows:-

S            NP - (Neg) - VP.



Auxiliary verbs occur in the speech of the children when accompanied by Neg. (they don't occur in declarative utterances or questions). They occur in limited forms. A number of sentences consist of 'No' or 'Not' followed by a predicate. Personal, impersonal, possessive pronouns,

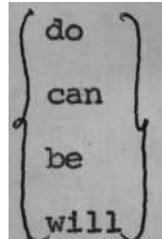
Articles, and adjectives are used now. The negative imperative is also present. Eg. "Don't leave me." The child comprehends the negative embedded in the auxiliary of the sentence.

**Period - 3**:- Modal auxiliaries and 'do' and 'be' appear in the speech of the children. The basic structure is

now S NP - Aux - VP.

Aux T - V<sup>aux</sup> - (Neg)

V<sup>aux</sup>



where be is restricted to predicate and progressive; can and do to non progressive main verbs.

**Transformations:-**

1. Optional 'be' deletion.

NP - b  $\Rightarrow$  NP

2. 'Do' deletion

dot- V  $\Rightarrow$  V.

Since auxiliary verbs occur in declarative utterances as well as questions, they can be considered as separate from the negative element of the sentence. Indeterminates also appear.

Eg. "I didn't see something."

The child is around 3 years.

Bellugi (1971) describes the relationship of negative and indefinite. In children's early utterances with indeterminates (eg. some) the form does not change from affirmative to negative sentences; sentential negation in adult English promotes a change to indeterminate (any) forms. Eg. children use "I don't want some." Later the indeterminate 'some' forms are replaced with negative forms Eg. "I don't want nothing."

Bellugi suggests that the child substitutes one rule for several rules which have "special locational restrictions and optional routes".

Menyuk (1969) describes 5 steps that may occur in the generation of negation sentences:-

1. Conjunction of Neg + s (neg may appear alone, and s may be imperative.
2. Development of subject + predicate sentences.
3. Neg. hopping S NP Neg VP
4. Development of Aux / modal node.
5. Neg. attachment S NP Aux + Neg VP

Wode (1977) also proposed 4 stages for negation in English and German;

### **Interrogation:-**

The questions in a language can be classified into the following basic types. 1. yes / no, 2. wh- type. Yes / no questions are generally the first to be acquired.

Yes / no questions are frequently marked by rising intonation and contains no interrogative word at the beginning of the sentences. Tag questions are a form of yes / no questions in which assertion is always involved. The function of the tag question is to obtain confirmation of the statement to which it is attached, (McGrath & Kurze, 1973). The speaker may feel totally confident about the truth of the statement and may use the tag as a polite way of relating this information to his listener. Bellugi (1967) reports that mothers often use tags "as polite circumlocutions for teaching children."

There are four rules involved in the production of tag questions in English:-

1. The pronoun of the NP is used in the tag. Eg. He can jump, can't he?
2. Auxiliary if present is used in the tag. When there is no auxiliary the correct form of do is used.  
"He jumps, doesn't he?"
3. Adding negation (contracted form) to sentence is positive and vice versa.  
"He can jump, can't he?"
4. Inverting pronoun and auxiliary.  
Eg. He can jump.  
He can jump, can't he?  
He can jump he can?

Wh - questions require the replacement of the element being questioned by the appropriate wh- word who, what, when, etc.

The wh- question requires a pronominal reference system to be well established before they can be comprehended. The wh- words /are pronouns are represent a range of semantic relationship denoting person, object, place and time and child must recognize that the wh-word signals a question as well as stands for another word, (Rogow, 1978).

The development of interrogative sentences is regular. Smith (1933) found around 1½ to 3½ years, yes / no question and tag questions are asked. Menyuk (1964) found that 2 - 3 year old children use yes / no questions of most of the kinds. Sreedevi (1976), Bloom (1970) reports infrequent use of yes / no question.at 25 months. Dale (1979) found that yes / no questions beginning with d' you (do you) were used by 3 years. Miller (1979) reports that the auxiliary should begin to appear in yes / no questions by 3 years. Chapman (1979) and Ervin & Tripp (1970) report that the child by 2 - 2½ years responds appropriately to yes / no questions.

Bellugi (1967) pointed out that children first begin forming questions using the less complex tag such as "huh" or "right" which can be substituted for the more complex form without a change in meaning. The fact that this change occurs easily and without a change in meaning demonstrate that tag questions carry little semantic content despite of apparent grammatical complexity.

McGrath and Kunze (1973) found that tag questions of the type "Birds are hard to catch aren't they?" appear as early as 2½ years of age. By 4½ - 5 years, children produced many tag questions.

Yes / no and tag questions are found in 4 - 5 and 5 - 6 years old children. Roopa (1980), Venugopal (1981), Prema (1981) did not observe tag questions in 5 - 6 year old children. Wh- questions constitute 7\*14% of the children's total samples according to McCarthy, (1930). It has been found that what, where, are used by children up to 2 years. (Ervin Tripp, 1970, Menyuk, 1964, Limber, 1973, Sreedevi, 1976)

Who, Why, How, When, Which are acquired around or after 3 years of age. Roopa found that at 4 years what, where, who, why, how, whose are used.

Chapman (1979) found that children responded appropriately to different types of questions at different ages.

2½ years - where question.

3 years - whose, who, why and how many.

3½ years - How

4 years - How much and how long.

4½ years - How far.

5½ years - when.

Vijayalakshmi (1981) found in contrast 'how much', 'which', 'when' and 'how' was comprehended by 2½ - 3 years. Embedded

questions were also comprehended at this age. Klima and Bellugi Klima describe 3 periods of acquisition of questions in English.

Period - 1:- Yes / no questions with a rising intonation are the most frequently used.

S            Q Yes/no    \_Nucleus

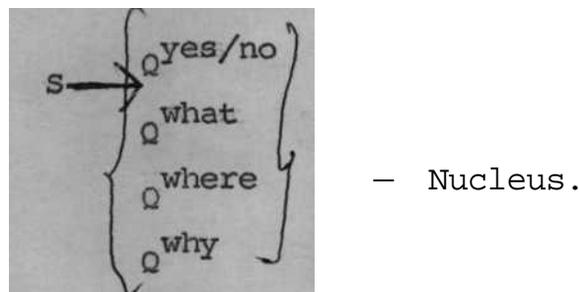
Wh- questions 'what and where' are used as follows:

S    Q<sup>what</sup>    -- NP -(doing)

S    Q<sup>where</sup>-    NP    -(go)

Children however do not understand question in which object of the verb has been questioned. Eg. "what did you do?"

Period - 2:- The child is now around 3 years of age; By this time pronouns have developed, articles, modifiers are present. The child responds appropriately to most questions but there is no inversion of subject and verb in yes/no questions.

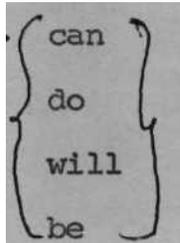
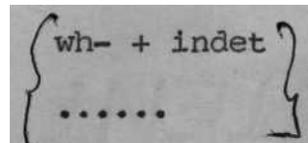


Nucleus    NP - V -(NP)

NP    { $\emptyset$     if the sentence is introduced by Q<sup>what</sup> }

Period 3:- At this stage, children's rules bear a striking resemblance to adult forms, in yes / no questions there is inversion of subject and verbs. This is concurrent with a lack of inversion in wh- questions (Bellugi, 1971). Bellugi (1971) also found that affirmative questions were inverted before negative questions. She suggests that this could be due to a limitation on the number of rules that can be operated by the child in speech, since the operations involved seem to be part of the children's linguistic competence. Thus, rules appear to be as follows:

S (Q (wh-) NP - Aux - VP  
 Aux T - V<sup>aux</sup> (Neg),

Transformations:-

I interrogative word preposing.

Q- X<sup>1</sup> - wh- + indet - X<sup>2</sup> ⇒

0-wh- + indet - X<sup>1</sup> - X<sup>2</sup>

II Interrogative inversion (characterizing only yes/no questions)

Q-wh-NP-Aux-X

Q-wh-Aux-NP-X

## III 'Do' deletion

do - V V.

There thus appears to be a hierarchy involved in the acquisition of questions. Yes / no are followed by wh-type and tag question. Even wh-type affirmative sentences are acquired before negative in the adult form.

Tag questions may be acquired late because they are more complex. Brown and Hanlon (1970) report that tag questions appear only after yes / no questions are well established. The first tags in English are positive, whether the sentence is affirmative or a negative. Cairus and Ryan Hru(1978) found tha wh- forms were of differential difficulty. The age group studied was 3 to 5.6 years. It was found that the younger children used 'what for' and How can' rather than 'why' and 'when; and 'why' occurred before 'when.' This differential difficulty could be due to other factors. Causality is acquired before temporality, which may account for being acquired before when.

**Coordination:-**

Coordination is the process by which two or more sentences are combined into one compound sentence. Wilbur et al (1979) call it a recursive process that enables language to generate an infinite numbers of sentences from a finite number of rules.

All languages have two main types of coordinate structures- a) sentential coordination and b) non-sentential coordination (coordinations of Noun phrases, verb phrases, verbs, etc) (Ardery, 1979). The transformational model of grammar assumes that non-sentential or reduced coordinations are derived from their sentential counterparts, by means of the rule of conjunction reduction which deletes identical elements.

The process of conjoining occurs very early. The very "earliest" sentences types were formed by a conjoining procedure with some restrictions (Menyuk 1967). But the well formed conjunctions used require 1. an elaborate set of restrictions which 2+ carry over longer sequences requiring greater memory capacity.

At two years however, conjunction occurs merely by juxtaposing two words (Bloom, 1970). In contrast Sreedevi (1976) did not find coordinated constructions in 2 years 3 months to 2 years 8 months children. Limber (1973) reports that 'and' was used at 2 years 10 months.

Menyuk (1969) reported that 3 years old children used cause conjunction and the transformation conjunction deletion. And was the common conjunctive.

Vijayalakshmi (1981) found 3½ - 4 year old children used -u and 4½ year old children /- o/.

Roopa (1980) found that r pause, p r and rphir were the coordinators used by (hindi speaking) 4 - 5 year old children. r (and) was commonly used. Prema (1979) found 5 - 6 year old children used matte, pause, /-u/, a:mele as conjunctions and Venugopal (1981) found that children of the same age group used pause, a:na:l, -um, and less frequently -ail, -adana:l, -oo, -avadu.

Bellugi (1967) found that 6 - 7 year old children coordinate with and, but, even though, if and so. Katz and Bunt (1968) report that because, then and therefore were used if they were semantically marked as then and and only later (6th graders) did the children use because, but and although appropriately. When they comprehend but, although and causal relations of because, correct interpretation of because appears after 10 - 11 years (Emerson, 1979). or is often interpreted as and (Neimark and stormick 1970).

Both Lust; (1977) and Ardery (1979) report that sentential coordination occurs before reduced coordination, in reduced coordination , the order of difficulty is as follows:-

- a. Object NP coordination.
- b. Subject NP coordination.
- c. Transitive verb coordination.
- d. gapped verb coordination.
- e. gapped object coordination.

It must be remembered that 3 restrictions operate on conjunctions, a) verb tense, b) pronoun substitution, c) logical restrictions. Thus sentences of the type-  
 "John gets mad and she pushed the boy,"  
 "I'll hurt my brother if I scratched her," and  
 "She is very good, but very pretty." are deviant sentences.

This appears to support Vygotsky who noted that a child may use a linguistic form before he has acquired a full understanding of the meaning expressed in the form. Lust (1977) opines that coordination may be constrained at early stages of child language in two ways.

**1. Constraint on optionality of redundancy reduction:-**

Order of development appeared to be constrained because young children (2 - 3 years) acquire sentential coordination before phrasal coordination.

**2. Constraint on directionality of redundancy reduction or deletion directionality hypothesis:-**

Coordination with forward deletion patterns is acquired before coordination with backward deletion. Ardery (1980) evaluated the two hypothesis by studying the comprehension and production of coordinator 'and' in 60 children 2.5 - 6.0 years of age. 'And' was used to conjoin sentences containing intransitive verb. Object NP, VP, transitive sentence, gapped verb with no particle etc.

He found that sentential order was produced and that elements difficult to comprehend were rarely produced in the form of simple sentences. Sentential coordination was produced more often than comprehended.

Arderly's results thus does not support Lust's hypotheses. He said that they cannot account for the relative difficulty of the reduced coordination and non-redundant sentential coordination nor can they account for the relative difficulty of particular reduced coordinations or for the errors children made. He proposed three hypotheses.

**1. Verb primary:-**

Since the verb is the primary unit of clausal structure in child language, gapped verb coordination would be difficult and accounts for children failing to interpret second conjuncts as independent clauses.

**2. Linear Sequencing hypothesis:-**

In a declarative sentence, the subject is followed by a verb, and a transitive verb followed by an object. This serves as the primary constraint on children processing and allows sentential final coordination to be easily interpreted.

**3. Coordination Strategy:-**

Any sequence of 2 or more elements joined by 'and' with the same constituent structure and function should

be interpreted as a single larger constituent that has the same function as the individual elements joined by 'and'.

Thus, the process of coordination which begins around 3 years may continue to mature well after 5 years, in to the 10th year. As compared with other transformations, it is acquired late (3 years) and it also approximates adult sentence structure rather late.

### **Pronominalization:-**

Pronomilization is the replacement of a fully specified noun phrase by a pronoun which agrees with the referent in person, gender, case and number. It is a means of reducing redundancy by eliminating features of the NP which the speaker has already transmitted to the listener, (Wilber et al 1972).

Pronomilization may be obligatory, relatively obligatory or optional. It is obligatory in sentences with relative clauses and reflexive pronouns. Pronomilization occurs within a sentence (forward or backward) or across sentences. In English, two rules operate.- 1. pronomilization proceeds from left to right and 2. from the main clause to subordinate clause.

### **Acquisition:-**

Not many investigators have studied this aspect. It is one of the last features to be acquired. Loban (1963)

and Chai (1967) report that difficulties with this form persist into the junior high school level.

Vijayalakshmi (1981) found pronomilization of sentences in 3 - 3½ year old children. Roopa (1980) found pronomilization occurring across sentences as well as within the sentence. Prema (1979), Venugopal (1981) found pronomilization (forward and backward) in and across sentences in 5 - 6 year old children.

Chomsky (1969) found that the ability to correctly determine the reference of the pronoun was established in the 5th year. Wilber et al (1976) found that most hearing children have the pronoun system well under control by 10 years. It appears that first / second person or speaker / listener distinction must be made before a third person reference appears, singular pronouns were acquired before plural.

Menyuk (1969) reported that only 1/3 of the nursery school used pronomilized sentences, pronomilization thus is one of the last features to be acquired.

### **Relativization:-**

Relativization is one of the three major ways in which two or more sentences can be combined into a more complex

sentence, the other two being conjunction and complementation. To form a relativized structure, one sentence must be reduced and embedded within another by a series of transformational rules. Each of the original sentences must contain a noun with a common reference.

A relative clause can be classified according to its placement with respect to the main sentence into four types. 1. subject final, 2. subject medial, 3. object final and 4. object medial. Relativization is of considerable importance in the development of mature language.

Menyuk (1969) found 87% of 7 year old children used relative clauses in medial or final positions. Quigley et al (1974) found that 10 year old children were able to respond correctly to the items concerned with relativization. It was also found that relative clauses were more difficult (a) in medial rather than final position and (b) when the pronoun had been in object position in deep structure than when it had been in subject position in deep structure (Quigley et al 1974, Menyuk 1969, Slobin 1971).

Brown (1973) found that at 5 years the embedded wh-question is juxtaposed with a simple sentence to produce a complex sentence and 5½ years relative clauses are embedded

in the sentence. Venugopal (1981) did not find relative clauses in 5 - 6 year old children. Though pre school children do use clauses, they are restricted to a few forms.

Comprehension of the embedded sentence is also present in preschoolers. Brown (1971) found that when children were asked to match in sentence with a picture, three year old children found the task easier with centre embedded sentence, but the four and five year old children found the task easier when right branching sentences were used. By 2½ to 3 years first ordered embedded sentences are comprehended and by 3½ to 4 years, first to fourth ordered embedded sentences were comprehended (Vijayalakshmi 1981). De Villiers (1979) found similarly comprehension of relative clauses increases with age.

### **Reflexivization:-**

Reflexivization occurs when two co-referent noun phrases occur in the same simple sentence. Very few studies report the acquisition of reflexive pronouns.

Menyuk reports that 69% of nursery children used the reflexive structures. The restriction of pronoun object substitution was frequently absent, so that forms like 'himself' and 'themselves' were observed. Bellugi (1971) reports that reflexive pronouns are first found at 3½ years, when MLu is 4.0. The use was some what over extended in the beginning.

Eg. I hope so myself too

One for myself

It's myself

Who broke it? Myself or you?

Reflexivization is acquired rather late. Roopa (1980) reports that 4 - 5 year old children do use reflexive sentences, though rarely.

**Comparison of Syntactic development in linguistically deviant children and Normal children:-**

It is known that some children experience difficulty in acquiring language due to brain damage, hearing loss, psychological problems or no detectable reason and are different from normal children. This "qualitative" difference is now the central focus of investigation.

Menyuk (1964) work represents the first systematic attempt to compare normal and deviant children, using descriptive techniques based on Chomsky's early transformational grammar. She found that the deviant group used fewer transformations and produced more restricted or ungrammatical forms than did the normal group.

The speech of linguistically deviant children could not be termed "infantile" because their grammatical production did not match or closely match the speech of a normal child

at any age level. She suggests that these differences might be present due to differences in the use of the coding processes for the perception and production of language.

Lee (1966) compared syntactic progress in normal and deviant children at 4 levels of ages 3 and 4½ years respectively.

The levels were:-

- I - two word combination.
- II - noun phrase
- III - construction (designative, predicative and actor and action.
- IV - sentences (designative, predictive and stereotyped)

A qualitative difference was found with the deviant child omitting constructions, not omitted by the normal child. Morehead and Ingram (1973) compared the usage of pronouns by normal and deviant children, matched for overall language ability. The deviant (chronologically) older children acquired pronouns at a different rate than the normal younger children though development was comparable for all other measures.

Morehead and Ingram (1973) also found that the major difference between normal and linguistically deviant children was in the onset and acquisition time necessary for learning the basic syntax and the use of aspects of that system.

**Hearing Loss:-**

Most children with a severe to profound pre lingual hearing loss are seriously deficient in language skills because the hearing loss prevents information necessary for normal language development from reaching the brain. The differences are seen at all levels of language.

Goda (1964) found that there is a predominance of nouns and verbs in deaf speech. 75% of the output was composed of nouns and verbs as compared to 60% for the normal hearing children and 69% for the retarded. Adjectives, adverbs and function words are not used often.

Simmons (1962) found that deaf children used an inflexible word order. This is taken as evidence of "rubber stamping" by a teacher. Quigley et al (1974) report that they have a tendency to impose a SVO pattern on sentences. Relativized sentences are thus difficult to comprehend. Brown and Murry (1966) found a general retardation in spoken language among the hearing impaired.

Quigley, Smith and Wilbur (1974) found that the deaf generate the same structures as the hearing individuals but at a retarded rate. Wilbur et al (1976), Power and Quigley (1976) found similar results. Rogow (1978) found that a deaf, partially sighted girl had difficulty in

answering questions without a referent. Language is a reference system, and the hard of hearing have difficulty in perceiving this. For eg. to understand a wh- question, the child must recognize that the wh- word signals a question as well as stands for another word. Brannon and Murry (1966) found a high correlation between the hearing loss and measures of syntax.

### **Reading disabilities:-**

Reading is considered a psycho-linguistic process in which the reader possesses various amounts of 3 basic kinds of information: graphopionic, semantic and syntactic (Wardhaugh 1969).

Rudell (1968) found that the child's control of morphology and syntax correlated significantly with his reading comprehension and vocabulary. The relation between syntax and reading has been assessed by a number of authors. Kass (1966) found that reading disabled children showed a marginal deficit on the grammatic closure subtest of the ITPA when compared to normative data.

Cromer and Weiner (1966) used the cloze procedure to compare good and poor readers and found that the poor reader's responses were less syntactic and consensual than those of good readers.

Vogel (1975) found dyslexics with reading comprehension difficulties were deficient in oral syntax as compared to normal children.

She concludes as follows:-

"Thus it seems that dyslexia is a specific reading disability accompanied in most cases by syntactic deficiencies that contribute to reading comprehension difficulties."

#### **Autism:-**

Shapiro and Kapit (1978) compared young autistic children to a matched group of normal children on negation tasks. They found that autistic children showed poor integrative processing evidenced by fewer and more rigid negation and good imitation. Boncher (1976) reports that language learning is delayed in autists.

#### **Stuttering and Fluttering:-**

Bloodstein (1974) hypothesized that rarely stuttering is related to syntactic structures. Williams and Marks (1972) found 28 elementary school aged stutterers to differ from norms on the Illinois test of psycholinguistic abilities. Westby (1975) found that stuttering and highly disfluent non stuttering children made more grammatical errors than the typical non stuttering children. Tiger et al 1980 report language deviancies in clutterers.

#### **Articulation:-**

Children with articulation problems appear to have some language problems too. Vandemark and Bann (1965)

compared a group of 50 children with defective articulation in grades three through six with a matched group of normal children. They found that children with defective articulation perform "less well in the areas of grammatical completeness and complexity of responses." Shriner, Holiloway and Daniloff (1969) found that children with severe articulatory problems through grades one to three were significantly inferior in grammatical usage and used shorter sentences.

The relationship between articulation and other language related functions, is little understood and more research is necessary.

**Mental Retardation:-**

The mentally retarded have delayed speech and language and the extent of delay depends to some extent on intelligence. Karlin and Strazzula (1952) investigated the age of babbling word use and sentence use in three groups of mentally retarded. The data is given below:

Activity	IQ 15 - 20	IQ 26 - 30	IQ 51 - 70
Babbling	25 months	20.4 months	20.8 months
Word use	54.3 months	43.2 months	34.5 months
sentence use	153 months	93 months	89.4 months.

It is generally agreed that language development follows the normal pattern but is retarded. The comparison of language of the speech and hearing handicapped offers challenging problems in the future. However, more data on the nature of language and language acquisition in normal children is needed if we are to understand the nature of the defect in the linguistically deviant and find the areas of remediation.

India with its large number of languages offers a wide scope for investigations in the acquisition of language and the more immediate problem of establishing norms.

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## CHAPTER III

### M E T H O D O L O G Y

This study attempts to describe some syntactic patterns acquired by Marathi speaking children 2½ and 3 years of age, residing in Bangalore and Mysore.

Four normal children were subjects for this study. All the children were native speakers of Marathi and came from middle class families where members of the household used Marathi as a medium of discourse, of the four children, three were from Bangalore and one was from Mysore, since it was not possible to get children of the required age from one place. The age range of the children at the time of data collection was 2½ to 3 2/12 years.

They were divided into two groups based on the age. Two were 2½ years of age and the other two belonged to the 3 years group. The children were as follows:

Name	Sex	Age	Place
Nitin	M	2½ years	Mysore
Rajashri	F	2½ years	Bangalore
Priya	F	3 years	Bangalore
Darshan	M	3 Yrs 2 Mths.	Bangalore

Rajashri had just begun to attend the nursery school and Darshan went to a creche-cum nursery since both his parents worked. The other two children did not attend any school.

### 3.1

Since they resided in a Kannada speaking environment, all children were exposed to Kannada. They were also exposed to some English and a little Tamil.

The children had normal hearing and had no history of ear discharge or delayed milestones.

By coincidence, both the girls had one elder brother and both the boys had no sisters or brothers. Two of the children belonged to joint families, and two to nuclear families.

The variables present are listed in the tabular column:

Variables	Nitin	Rajashri	Priya	Darshan
Native language	Marathi	Marathi	Marathi	Marathi
Socio Economic Status	Middle class	Middle class	Middle class	Midd&e class
Father's Education	Bachelor of Finearts	Diploma in Electrical Engineering	M.B.B.S .	B.Arch
Mother's Education	S.S.L.C	B.Ed.	Inter-mediate	B.Arch
siblings	—	Brother	Brother	—
Family Joint or Nuclear	Joint	Nuclear	Nuclear	Joint
Nursery school attended				

Speech samples were collected from each child at his or her home. They were recorded on a Phillips tape recorder, (Model N 2218), with a built in microphone.

The recorded samples were approximately of 3 hours duration for each child and were collected on 3 - 4 consecutive days. The parents were also involved and were asked to make a note of anything unusual, funny or peculiar that the child said.

Materials: Two picture books for preschoolers titled "Home" and "My Friends", a toy car, a helicopter, a noise maker and crayons were used. Besides these, the child's own favourite play materials were also made use of as required.

Verbal and tangible reinforcers were used to maintain the child's interest.

Speech was elicited in an informal manner. Generally, one of the family members was present (if intermittently) to set the conversation ball rolling.

The following techniques were used to elicit different aspects of speech from the children.

1. Interview:- Each child was asked simple questions about himself, his school and/or family, about events like Diwali, visits to different places and other high lights.
2. Description:- The children were asked to describe pictures from the two picture books. "My Friends" was especially popular with the children since it contained pictures about children playing, quarrelling, making up, eating, etc, in a story like sequence.

3. Games: Games with dolls and cars were played. The investigator played "house" and "robber - police" with the children. With this technique it was possible to collect more imperative sentence.
4. Story telling: story telling whenever it was possible, stories were generally discontinuous. The three year old children were more coherent.
5. Spontaneous speech: Spontaneous speech where the child interacted with parents, other members of the family, or was engaged in activities like drawing, eating, etc.

The children were curious about the tape recorder and enjoyed listening to themselves.

#### **Analysis and Discussion:-**

The speech sample obtained from each child was transcribed in broad phonetic transcription. The data obtained was analyzed with reference to the kinds of sentences and syntactic patterns used by the child.

The sentence generated by the children were classified into 4 major types:- 1) Declarative, 2) Interrogative, 3) Negative and 4) Imperative. Coordinated and pronominalized sentences were also studied. Particular attention was paid to intonation and the context while classifying sentences since the sentences were ambiguous otherwise; Misarticulations were ignored. Whenever an irregular utterance was made, the investigator confirmed the finding with the parents.



## CHAPTER IV

### Results & Discussion

Samples of spontaneous speech were collected from four children in the age range 2½ - 3 years.2 months. The children comprised of two boys and two girls

The data was classified as a whole into different types of sentences:-

- declarative, negative, interrogative and imperative. Additionally coordinated and pronominalized sentences as well as deviant sentences were analyzed with regard to the acquisition of the four aspects of syntax - negation, interrogation, conjunction and pronominalization.

Misarticulations were ignored. But the structure of the words in terms of morphological inflections were not altered.

Results are presented under the following heads.

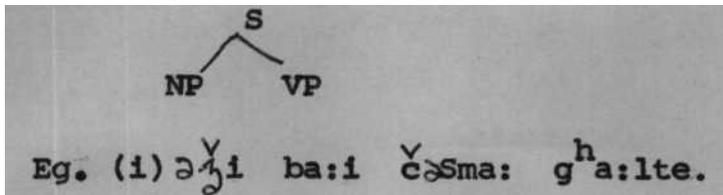
1. Sentence structure and stylistic variations.
2. Developmental order of the four aspects of syntax.
3. Deviant utterances and comparison to adult forms.

#### **I Sentence structure:-**

A sentence is a set of words occurring in a linear sequence but hierarchically structured. It is composed of two major constituents NP (Noun phrase) and PDP (Predicate phrase).

S NP + PDP

Or



'old woman' spectacles wears'

The old woman wears spectacles.

In the above sentence, i ba:i is NP and č̌ Sma: g<sup>h</sup> a:lte is the PDP

The phrase structure rules that derive various types of sentences may be represented as follows.

Rule -I : S { imp } + (Neg) + NP + PDP.

Q

From this basic rule, rules to derive different sentence types can be obtained.

- (A) S NP + PDP (declarative sentence)
- (B) S Neg + NP + PDP (negative sentences)
- (C) S 0 + NP + VP (interrogative sentence)
- (D) S Imp + NP + PDP (Imperative sentence)

The sentence types are taken up one by one in the following discussion.

**Rule A - Declarative sentence:-**

The declarative sentence in the children's speech can be represented as

S NP + PDP

Eg. (2) m: ka:gad deto

'I' 'paper' 'give'

I give paper.

In this case *mi* is the HP and ka:g d deto the PDP. The NP and PDP can be further elaborated.

**Noun phrase:-**

It consists of (1) a noun (2) a determiner and (3) pronoun.

This is represented as

NP { (Det) N }

Pronoun

**Determiner:-**

Determiner can be further expanded as-

Det (Demon) + (Gen) + (Adjective)

and Adjective (Adj N) + (Adj Det)

a) Demonstrative + N The demonstratives may be proximate or remote.

(3) 'hi blu pensil a:he

'This blue pencil is

This is a blue pencil

hi is the proximate demonstrative and pensil the noun.

(4) te ča: gl a:he  
'that' 'nice' 'is'

That is nice,

te is the remote demonstrative.

(b) Genetive + N:

<sup>vh</sup>  
ma.z a: , ba:ba:ni nl

'My' 'father' (by) brought (it).

My father brought this.

ma:z<sup>vh</sup>a: is the genitive and ba:ba: the noun.

(c) Adjectives + Noun:

Adjectives are generally derived from embedded sentences. They are of two types. Adjective of number and Adjective of description.

Adj<sub>N</sub> + N

The numeral is generally followed by a noun. It is also a constituent of the determiner.

Adj<sub>N</sub> + N

(6) ek b nd r hot

'one' 'monkeys' 'was'

There was; one monkey

ek is the numeral and b nd r the noun.

The children also used aggregate numerals.

Adj<sub>N</sub> (aggregate) + N

(7) dogn z n r dta:y t titt<sup>h</sup>e b sun.

'Both of them' 'crying' 'there' 'sitting'

Both of them are sitting there and crying.

Adj(Des) + N.(8) mi c<sup>h</sup>ot kel k<sup>h</sup>a:te

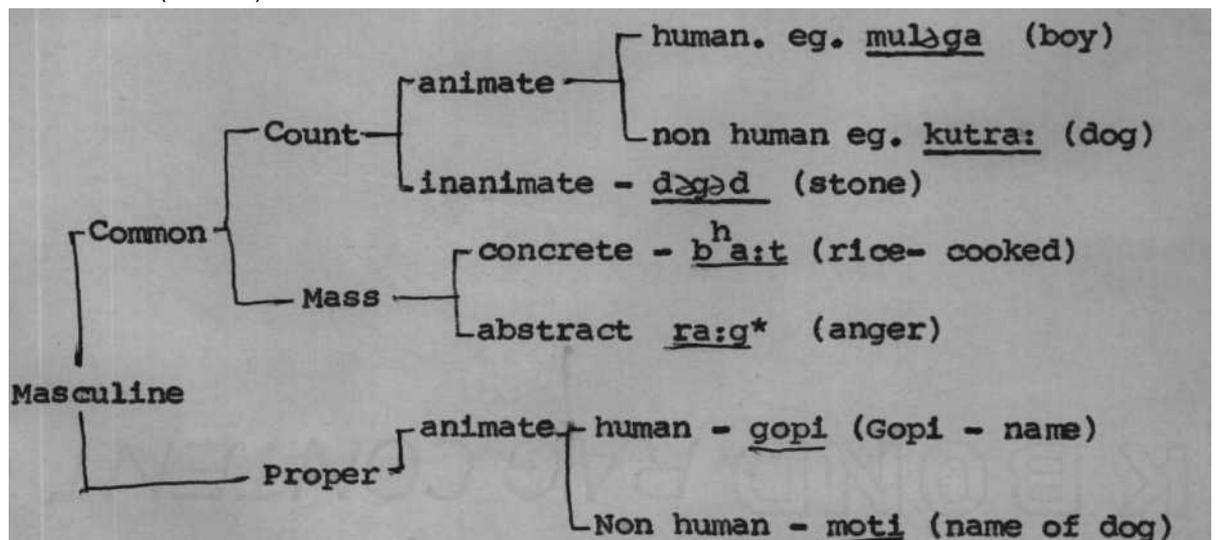
'I' 'small' 'banana' 'eat.'

I eat the small banana.

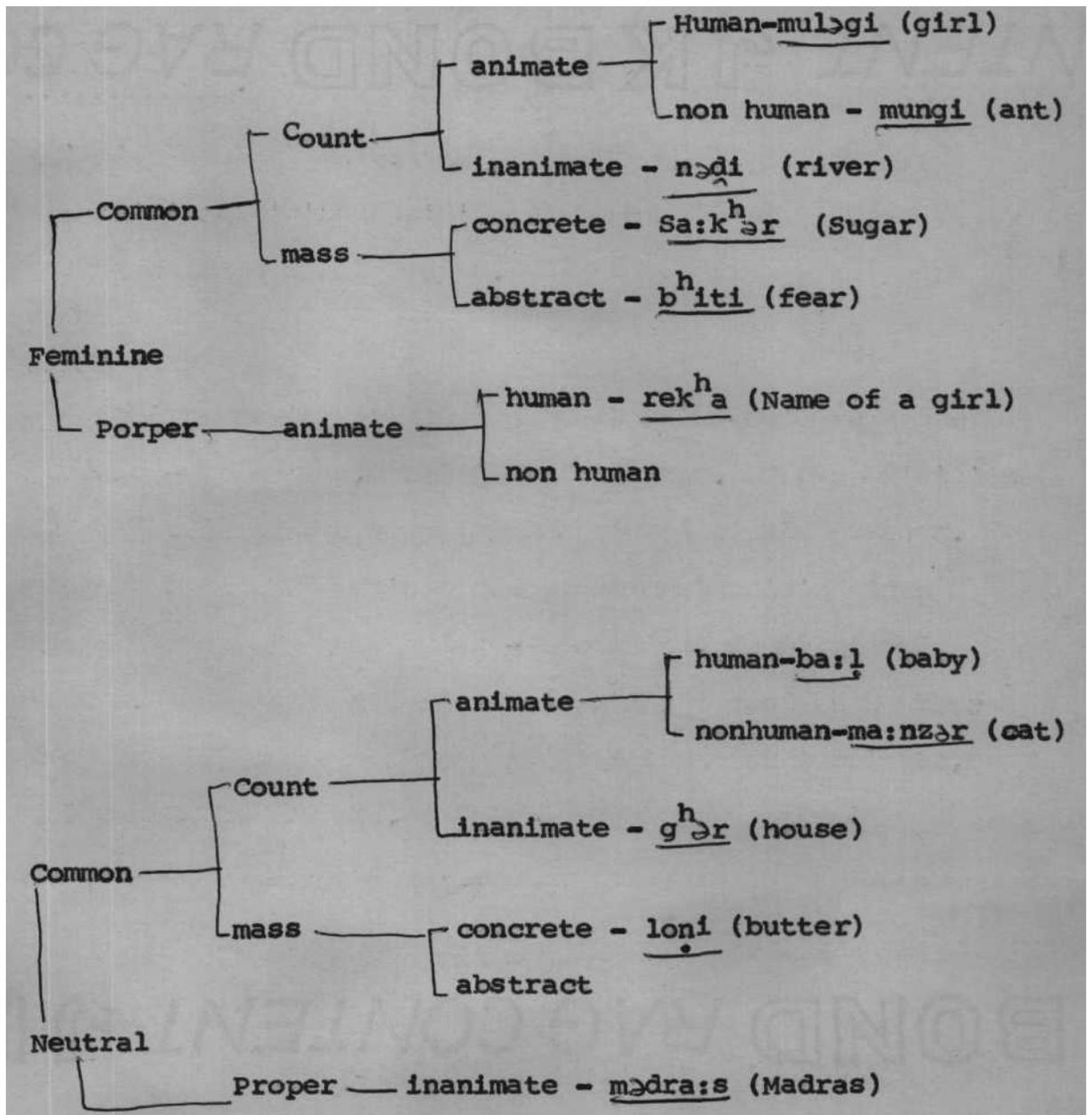
Noun:

All nouns in Marathi can be classified into three genders - Masculine, Feminine and Neuter. The acquisition of gender is thus a very complex and difficult process. The nouns in children's speech can be classified into these three main categories - masculine, feminine and neuter. They can be further classified based on whether they are (1) common or proper (2) animate or inanimate, (3) countable or mass, (4) human or non human and (5) concrete or abstract.

The following categories have been adopted from Kachru (1968)



\* abstract category used only by 3 year old children.



PRONOUN: The pronouns in the children's speech may be classified on the following basis;

- + participant, I speaker, I singular, I human,
- + honorific, + masculine, + feminine, + neuter,
- + proximate.

<u>mi</u> I	<u>əpən/ə<sup>n</sup>i</u> We	<u>tu</u> You
[ + participant + speaker + singular ]	[ + participant + speaker - singular ]	[ + participant - speaker + Sg - Hon ]
<sup>*</sup> <u>tum<sup>h</sup><sub>i</sub></u> You(hon)		
[ + participant - speaker + singular + honorific ]		

\* This honorific form was not found in the Speech samples of 2½ year old children. The other honorific form (you) was not used by either of the groups.

<u>hi</u> She(proximate)	<u>ti</u> She(remote)
[ - participant + human + feminine + proximate + sg - hon ]	[ - participant + human + feminine - proximate + sg - hon ]
<u>ha</u> he(proximate)	<u>to</u> he(remote)
[ - participant + human + masculine + proximate + sg - hon ]	[ - participant + human + masculine - proximate + sg - hon ]

$\frac{\text{he}}{\text{This}}$	$\frac{\text{te}}{\text{That}}$
<ul style="list-style-type: none"> <li>- participant</li> <li>+ human</li> <li>+ Neuter</li> <li>+ proximate</li> <li>+ sg</li> <li>- hon</li> </ul>	<ul style="list-style-type: none"> <li>- participant</li> <li>+ human</li> <li>+ Neuter</li> <li>- proximate</li> <li>+ sg</li> <li>-hon</li> </ul>
$\frac{\text{he}^*}{\text{These}}$	$\frac{\text{te}^*}{\text{Those}}$
<ul style="list-style-type: none"> <li>- participant</li> <li>+ human</li> <li>+ masculine</li> <li>+ proximate</li> <li>- sg</li> <li>- hon</li> </ul>	<ul style="list-style-type: none"> <li>- participant</li> <li>+ human</li> <li>+ masculine</li> <li>- proximate</li> <li>- sg</li> <li>- hon</li> </ul>

\* No differentiation of gender was made in the plural forms of non participant pronouns by the children, which is present in adult speech.

The children did not use many honorific forms either. The 2½ year old children did not use any.

### Predicate Phrase:

The predicate phrase is the other constituent of the sentence of the form

S          NP + PDP

The constituents of the PDP may be represented as follows

$$\begin{array}{l} \text{PDP} \quad (\text{Adv}_T) \quad + \quad (\text{Adv}_P) \quad + \quad \text{VP} \quad + \quad \text{Aux.} \\ \text{VP} \quad (\text{NP}) \quad + \quad (\text{PP}) \quad + \quad \text{Adv}_M \quad + \quad \text{V} \end{array}$$

**ADVERB:** The adverb can occupy any position in the sentence  
in Marathi (Apte 1962)

$\text{Adv}_T$  (Adverb of time)

- (9) a:ta: to b dla:yča: a:he  
'Now' 'it(masculine)' 'changed' 'to be'  
Now it has to be changed.  
a:ta: is the  $\text{Adv}_T$  in this sentence.

- (10)  $\text{Adv}_P$  (Adverb of place)

ti tit<sup>h</sup>e za:te  
'She' 'there' 'goes'  
She goes there.  
tit<sup>h</sup>e is the  $\text{Adv}_P$  here.

- (11)  $\text{Adv}_M$  (Adverb of manner)

haluc b<sup>h</sup>o a wa:zla  
'softly' 'siren' 'sounded.'  
The siren sounded softly.  
haluc is the  $\text{Adv}_M$  in this sentence.

**VERB PHRASE:**

The verb phrase can be re-written as follows:-

$$\text{VP} \quad \text{NP} \quad + \quad \text{PP} \quad + \quad \text{Adv}_M \quad + \quad \text{V}$$

The post positional phrase is another constituent of the VP. The PP can belong to the following categories.

Nominatives - Ø

Accurative - NP + la:  
(to)

Dative (to) - NP + la:

Benefactive

(for) - NP + ča Sa<sup>th</sup>i or NP + la:

Ablative(from) NP + t + un / hun

Instrumental

(by or with) NP + ni

NP + Si

Possessive (of) NP + č

Locative (in  
into) NP + t

Accurative case: NP + la (to)

(12) tital: ba:u zha:la:

'to'her' 'hurt' 'became'

She was hurt.

(13) Dative case (to) NP + la:

mi sitila: za:to

I 'city to go

I go to city.

Benefactive case : NP + č + ša:t<sup>h</sup> i (for)

14) te ma:z<sup>h</sup>a. sa:t<sup>h</sup>i a:he

' that me for is

That is for me.

Ablative case : NP + t + un (from)

- (15) a:i ni ŋl duka: na:tun  
 (a) 'mother' (by) 'brought' 'shop' 'from'  
 Mother brought it from the shop.

- (15) NP + t + hun  
 ma:zti ga:di dillihun nag.pur la:zati  
 'My' 'train' 'Delhi from' 'Nagpur to' 'goes'  
 My train goes from Delhi to Nagpur.

Instrumental case: NP + ni (by)

- (16) b nd rni ma:rl  
 'monkey' (by) hit (was)  
 The monkey hit.

**Possessive Case: NPTc (of)**

- (17) tya:č dok p ŋ kun b sl a:he  
 'His' 'head' 'also' 'struck' 'sitting is'  
 His head is also stuck.

**Locative case**: NP + t in, into

- (18) dog pinrya:t kun b sla:  
 'dog' 'cage' in 'stuck' 'sat'  
 The dog got stuck in the cage.

**Auxiliary: Past-**

- (19) bornvita: p n g<sup>h</sup>a:tl a:he  
 'Bournvita' 'also' 'put' (past) 'has'  
 Bournvita also has been put.

**Present:**

(20) ti r dti a:he

'She' 'Crying' (fun) is

She is crying.

**Future:**

(21) un ekda: s k rayc .

'Again' 'once' 'in this way' Ilets do'

Lets do it this way once again.

**Some general observations:-**

Some observations about the sentence structure were made. during analysis. They are listed out below-

(a) subject HP may be delected.

(22) a:is crim k<sup>h</sup>a:t a:het.

'Ice' 'cream' 'eating' are (they)

(They) are eating ice cream.

The subject NP deleted is te (they). Since the verb has the suffix to denote the subject, the subject Np is deleted.

(b) The subject Np may be transposed at the end of the sentence.

(23) h rsa: a:he to

'Haraha' 'is' 'he' (remote)

That is Harsha.

This type of structure is often used by adults for emphasis of subject NP.

(c) The N + PP may be repeated at the end of the sentence after a pause.

(24) tila: harSa a:is crim det a:he tila:  
 'to her' 'Harsha' 'ice' 'cream' 'giving' is to her.  
 Harsha is giving ice cream to her.

(d) Elliptical sentences are also used. The elliptical sentence is one in which a single NP or a clause is used, the meaning of which is derived from the linguistic and non linguistic environment.

(25) tu:c ki  
 'you' 'only'  
 why you ofcourse.  
 This is the answer to the question "Who did this?"  
 The utterance could have been-  
 tuc kel s ki  
 you did it (emphasis)  
 'you only did it'  
 c & ki are emphasis markers.

### **Negation:-**

The negative sentences may be represented as shown below:-

S Neg + NP + PDP

Negation may be indicated nonverbally or by using negative particles /na:hi/ 'no' or /n ko/ - to not want in the sentence. The other negative markers in Marathi are /n / or / / before the word.

Negative particles have been used in the following ways by children.

(26) (a) na:hi

'no'

No.

The more colloquial way is /n i/ (no) and is used by the children. Here the formal form /na:hi/ has been used. This is the response to yes - no questions.

/h ko/ is also used similarly.

Eg. n ko

'dont want'

I dont want.

The other elements are deleted. This form is also used by adults.

(b) The negative markers are followed by a sentence after a small pause.

(2B) na:hi may<sup>h</sup> a:he

'no' 'mine' 'is'

No, it is mine.

In this case, the sentence following the negative particle is affirmative. The sentence following the negative particle can also be another negative sentence.

(29) n ko t<sup>h</sup> n pa:ni n ko  
 'Dont want' 'cold' 'water' dont want '  
 (I) dont want cold water.

(30) na:hi m g n ko m<sup>h</sup> nta:t  
 'No' 'then' 'dont want' 'they say'  
 No, then they say they dont want.

(c) The negative marker can occur in different positions in the sentence.

(31) t s na:hi b swa.y č  
 'in that way' 'not' 'to be fitted'  
 It is not to be fitted in that way.

(32) b l n ko  
 'Ball' dont want '  
 Dont want ball.

(d) Emphasis in negative sentence is achieved as follows:-

(i) Repeating negative markers-

(33) na:hi na:hi  
 'No' No '  
 No no.

/ka:hi/Something or /nas/ (Isn't it, no) may also be used.

(34) ka:hi na:hi det a:he  
 something no give is  
 Nothing is being given

(35) nahi na: ek ca:k na:hi a:he  
 'No' 'No' 'one' 'wheel' 'not is'  
 No, one wheel is not there.

(e) Imperative Negative sentences are also used.

(36) priya: c ga:n la:u n kos  
 'Priyas' 'song' 'play' 'dont'  
 Dont play priya's song.

(f) The negative prefix /n / before a word was used only by priya.

(37) S audr n<sup>h</sup> wt c n<sup>h</sup> wt .  
 'sea' 'was not there' 'not there'  
 The sea was not there at all.

The other negative prefix to the word ie. / / was not used by any of the children. Negative words were not used on the whole by the children (except for priya).

### Interrogation:-

The interrogative sentence is indicated by the presence of the Q element in the deep structure of the sentence.

A declarative sentence is related to an interrogative sentence by adding the 0 element.

S Q + NP + PDP

The interrogative sentences in the children's sample are of the following types.

- a) yes - no questions.
- b) tag questions.
- c) wh-questions.

(a) **Yes - No Questions** are formed in the following ways-

i) changing intonation.

(38) tula: pa:hiv e  
 you (for) want.  
 Do you want?

ii) By adding. /ka/

(39) a:is cri:m k<sup>h</sup>a:to a:he ka:  
 'ice' 'cream' 'eating' 'is' 'what'  
 (mas)

Is he eating ice cream?

iii) by adding a future marker /u/ (habitual emphasis)

(40) mi k fi k run deu  
 'I' 'coffee' 'make' 'give' (future)  
 Shall I make coffee and give?

iv) Another way of forming a yes - no question is using a phrase /ho ka:/ before the question which follows after a slight pause.

- (41) ho ka: tic -un c gel ka:  
 'Is it so'her's' 'burnt' 'went' 'what'  
 Is it? Did her's get burnt?

**b) Tag questions**:- are questions used by the speaker to merely confirm his proposition.

The following rule may represent the tag questions.

S Q + Neg + NP + PDP.

Tag questions are formed as follows:-

- i) by adding /na:/ (no? or what?)

- (42) tu ew ti a:hes na:  
 'You' 'eating' 'are' 'no'  
 You are eating, aren't you?

- ii) by adding /ho ki na:hi/ -(yes or no) or  
 /ki na:hi/ (or no). This type was not  
 used by 2½ year old children.

- (43) wedi mul s o un t<sup>h</sup>ew t c  
 'Bad' 'children' 'In this way' 'arrange' 'keep' (emphasis)  
 na:it ho ki nahi  
 'dont' 'yes' 'or' 'no'

Bad children don't arrange things in this way do they?

- c) Wh- Questions:- Interrogative pronouns replace the corresponding constituents of a declarative sentence in

wh- questions. The k element attaches itself to different elements of NP to yield different wh- types. These are illustrated below:-

Q + K + N ( + Pronoun ) koṇ' who'  
+ Person

(44) he koṇ a:he  
'This' 'Who' 'is'  
Who is this?

Q + K + N ( + Pronoun ) ka:y 'what'  
+ thing

(45) te ka:y a:he  
'That' 'what' 'is'  
what is that?

(46) h rSa: boh ra g<sup>h</sup>eu:n ka:y k rto?  
'Harsha' 'top' 'taking' 'what' 'does'  
What does Harsha do with the top?

Q + K + Adv<sub>p</sub> kuṭ<sup>h</sup>e 'where'

(47) rek<sup>h</sup>a: kuṭ<sup>h</sup>e ayhe  
'Rekha' 'where' 'is'  
Where is Rekha?

Q + K + Adv<sub>m</sub> k s 'how'

(48) kas karṭi a:he  
'How' 'doing' (fem) 'is'  
How is she doing it?

These forms were used by both groups of children.  
The three year old children used more forms.

Q + K + Det + N {+ Pro } kut<sup>h</sup>l 'which'  
[+ thing]

- (49) kut<sup>h</sup>li ka:r nli a:he  
which (fem) 'car' brought has  
which car has been bought?

- (50) kut<sup>h</sup>lya: ha:da:c ke] a:he  
'of which' 'tree' 'banana' 'is'  
of which tree is this banana?

Q + K + Det + N[+pronoun ] koŋa:c 'whose'  
[+ person ]

- (51) he kona:c a:he  
'this' 'whose' 'is'  
Whose book is this?

Q + K + Adv<sub>reason</sub> ka: 'why'

- (52) he ka; da:bl a:he  
'This' 'why' 'pressed' 'it'  
Why is this pressed?

ka: may be used after a yea - no question sentence after a slight pause.

- (53) he fa:dun ta:kl ba:la:ni ka:  
'This' 'tore' 'thro -wn' 'baby' (by) 'why'  
The baby tore this off, why?

Q + K + Det + Cardinal measure kit: 'how many'

- (54) he kiti emS a:het  
 'These' 'how many' 'gems' 'are'  
 How many gems are there?

Some wh- forms appear as reduplicated forms to give a distributive meaning.

- (55) ka:y ka:y a:he  
 'what' 'what' 'there is'  
 What all is there?

The interrogative words in isolation also served as questions.

- |       |       |       |                    |
|-------|-------|-------|--------------------|
| (55a) | ka?   | (55b) | kuṭ <sup>h</sup> e |
|       | 'why' |       | 'where'            |
|       | Why?  |       | Where?             |

Q + K + Adv<sub>T</sub> is not found in the speech samples of the children. Since the parents of the children also reported that /kad<sup>h</sup>i/ 'when' was not used by the children, it is probable that it has not been acquired as yet.

The children used appropriate case endings with the interrogative word like kut un - where from, kuṭ<sup>h</sup>ca - where of.

**Imperative Sentences:-**

Imperative sentences indicate commands or requests. The rule for imperative sentences may be rewritten as follows:-

S Imp + NP + PDP

The imperative sentences are of the following types,

(i) verb Root:-

The verb root was used with 6r without emphasis markers.

(56a) de na  
'give' (emphasis marker)  
Please give.

(56b) de  
'give'  
(you) give.

(56c) k a: ki  
'eat' (emphasis marker)  
please eat.

(ii) Subject + verb

(57) tu ub a: ra:ha: na:  
'you' 'stand' 'up' 'no' (emphasis marker)  
you stand up please.

(iii) Noun + verb:

(58) stu:l de  
'stool' 'give'  
give the stool

iv) Some times the verb is followed by another imperative sentence for emphasis.

(59) pi (pause) t<sup>h</sup>oð s pi  
 'drink' 'little' 'drink'  
 Drink a little.

v) The imperative sentence may be part of a compound sentence.

(60) mi g<sup>h</sup> ṭṭ d<sup>h</sup> rto tug<sup>h</sup>a:l  
 'I' 'tightly' 'will hold' 'you' put  
 I will hold it tightly, you put it in.

This was not used by the younger group of children.

**vi) verbal Noun:-** This form was used only by Rajashri aged 2½ years.

(61) un edka S k ra:yc  
 'Again' 'once' in this way' 'must do'  
 Do this once more.

**vii) Elliptical imperative sentences:-**

(62) ma:la pa:ni  
 for me water  
 'Water for me'  
 Here 'de' give is deleted.

**Negative imperative:-**

The negative markers /na:hi/ and nako were used.

- (63) ha:t na:hi la:wa:yca:  
 'hand' 'no' 'touch'  
 Don't touch it.

Eg. 36. priya:c ga:ŋ la:u n kos  
 'Priya's' 'dong' 'play' 'dont'  
 Dont play priya's song.

The children did not use forms like k raw ie. verb + second honorific with future suffix w , which are used by adults.

**Coordination:-**

Coordinated sentences are those sentences which are formed by joining two or more sentences with the help of coordinators. These coordinators or conjunctions can occur either between two NPs or two VPs.

The conjunctions may be of two types:-

- (a) coordinate conjunctions: This may be a pause or conjunctions such as ŋi - and

m g -- then

pause -

ŋkhin -- and more

- (b) Adversative conjunctions such as -

t ri - even then

m<sup>h</sup> ŋun--- so, therefore

(c) Disjunctive conjunctions -

ki - or

(a) Coordinated Conjunctions:-

NP Coordination using a pause.

(64) he fan (p) wa:yer a:het

'This' 'fan'(pause) 'wire' 'is'

This is the fan and wire.

**VP Coordination:** coordinator - pause.

(65) dady a:le (p) mumi a:li (Pornitin a:la.

Daddy came mummycame Nitin came.

Daddy, Mummy and Nitin came.

Sentence coordination: coordinator is pause.

(66) hi oren pensil aiw li (p) griin p n a:wli

'This' 'orange' 'pencil' 'liked' 'green' 'also' 'liked'

This orange pencil was liked, green was also liked.

Coordinator - ni 'and'

**NP Coordination**

(67) rek<sup>h</sup>a: ta:ri\_\_ni mi:na:kSi tya: m g aSok da:da: gele

'Rekha' 'sister' 'and' 'meenakshi' 'aunty' 'then' 'Ashok'

'brother' 'went'

Rekha, Meenakshi, Aunty and Ashok went.

**VP Coordination:-**

- (68) ti ba:lala: k<sup>h</sup>el wt:\_\_\_ni k<sup>h</sup>a;u deti  
 'she' 'baby for' 'plays' 'and' 'sweet' 'gives'  
 She plays with the baby and gives it a sweet.

**Sentence Coordination:-**

- (69) ga:di ripper k rta:t.\_\_ni tr k ripper k rta:t  
 'car' 'repair' 'do they' and 'truck' 'repair' 'do they'  
 They repair cars and they repair trucks.

Coordinator m g - then

Sentence coordination-

- (70) mi tiči a:i a:he na: m g mi g<sup>h</sup>a:lte  
 'I' 'her' 'mother' 'am' 'arent I' then I will put (it)  
 I am her mother aren I? then I will put it.

**NP Coordination:**

Eg. (67) m g is also a coordinator in the sentence.

**VP Coordination:**

- (71) m g čiw da: k<sup>h</sup>a:l la: m g pa:ni pya:yele  
 'Then' 'mixture' 'ate' (I) then water drank (I)  
 Then I ate mixture and then drank water.

Coordinator nk<sup>h</sup>i - and more.

- (72) ek S: la:in ni ek si la:in nk<sup>h</sup> in ek la:in  
 'one' 'like this' 'line' 'and' 'one' 'like this''line'  
 'and' more''one''line'  
 One like this and one like this and one more line.

**Adversative Conjunction:-**

Adversative conjunctions are m<sup>h</sup> nun - therefore used by both groups and t<sub>ri</sub> - even then - used only by the three year old children.

Coordinator t<sub>ri</sub>- even then.

sentence coordination.

- (73) kuṭ<sup>h</sup>ehil a:u n ka m<sup>h</sup> nun sa:ngitl t<sub>ri</sub>  
 'where ever' 'go' 'dont' 'this' 'told' 'even then'  
 a:ik t na:hi te  
 'listen' 'dont' 'they'

Even if they are told not to go any where they do not listen.

Coordinator m<sup>h</sup> nun, therefore

- (74) mi k<sup>h</sup>a:li b Ste na: m<sup>h</sup> nun ti p ŋ k<sup>h</sup>a:li  
 'I' 'down' 'sit' 'no' 'therefore' 'she' 'also' 'down'  
 b sli a:he  
 'sitting' 'is'

I sit down is n't it, that is why she also is sitting down.

(c) **Disjunctive coordination:-**

Word coordination:-

Coordination ki or as in ho kina:hi - Yes or no  
 (colloquial form hokini)

This form occurs with a sentence as a tag.

(see Eg. 43).

we i mul S o un t<sup>h</sup>ew t c na:it ho ki nathi  
 'Bad' 'children' in this way' 'arrange''keep(emphasis)  
 'don't' 'Yes or no'

Bad children don't arrange things in this way, do they?

### **Pronominalization:-**

Pronominalization is the process of substituting a pronoun for a NP in sentences where an antecedent NP is a coreferential of the NP.

Pronominalization may be forward or backward. It was present in the speech of both groups of children, but the older children used it more acceptably.

### **Forward pronominalization:-**

(75) s rɕ a:ta: na: č<sup>h</sup>ič<sup>h</sup>i<sup>h</sup>a:la: a:ta to  
 'shirt' 'nor' 'no' 'dirty' 'has become' 'now' it (mas)  
 Shirt no, now it has become dirty.

to refers to the shirt. The term č<sup>h</sup>ič<sup>h</sup>i is found in baby talk and is not normally used.

### **Backward pronominalization:-**

(76) ti:c wi awli mi meɲb tti  
 'It' 'only''put out' 'I' candle.  
 (fem)  
 It was the candle I put out.  
ti:c refers to the candle.

**Reflexivization**:- which occurs when two co-referent noun phrases occur in the same simple sentence was not present in the speech samples.

It is probable that it has not been acquired.

Embedded sentences:-

Embedded sentences were found in the children's speech. They were imperative or declarative.

**Declarative**:-

(77) kiti p<sup>h</sup>ul a:het

'how many' 'flowers' 'are'

There are so many flowers here.

kiti is an interrogative word.

**Imperative** -

o|a: k sa: a:he bag<sup>h</sup>

'eye' 'how' 'is' 'see'

See how the eye is.

II Developmental order among four syntactic aspects in the age range of 2½ to 3 2/12 years:-

In spite of difference of only 6 - 8 months between the two groups, there was a noticeable difference between the utterances of the two groups of children. In general, the older children had longer utterances and had less deviant sentences than the younger children.

Negation: All children used negative markers na:hi and n ko consistently and most of the time in the adult form. Negative words were used only by 3 year old priya.

Interrogation:- Both the groups of children used Tag and yes no questions. The differences between the groups is seen in wh- type of questions.

The 2½ year old children did not use kuṭ<sup>h</sup>li 'which' kona:č 'whose', kiti 'how many' nor ka: 'why'

Neither of the children used k d<sup>h</sup>i or kew<sup>-h-</sup>a 'when' which are probably being acquired as yet. 'when' is reported to be one of the last forms to be acquired (Tyack and Ingram 1977), Roopa (1980) also found that four year old children had not yet acquired 'when'. The results also support Klima and Bellugi's (1966) study that 'what' NP and 'where' NP are acquired before 'why'. 'How' is still used by the younger children. Sreedevi (1976) also found that 2+ children use yea - no and wh- type of questions like elli 'where', ya:ke 'why' ra:ru 'who'.

Tag questions formed by adding 'yes or no' at the end of the sentence was again not found in the utterances of the 2½ year old children.

**Imperative Sentences:-**

Both groups of children used imperative sentences. In general the 2½ year old children used more elliptical sentences than the 3 year old children. The three year old children used longer sentences, but no other difference was found between the two age groups.

**Coordination:-**

All four children use conjunctive coordinators pause, ni 'and' m g 'then'; But only the 3 year old children use adversative conjunctions t ri 'even then' <sup>h</sup>m nun 'there fore' was used by both the groups except for 2½ year old Nitin showing that adversative coordination is being acquired, with the limited data from the younger children on this aspect, generalization is difficult,

Disjunctive coordination is present at the word level. The coordinator used is ki or.

The finding that 2½ year old children use coordination is different from Sreedevi (1976) finding that 2+ children did not use any coordinators.

**Pronominalization:-**

There were very few pronominalized sentences in the speech sample. But pronominalization across sentences was

present. In the younger children, it was apparently being acquired. For eg. Rajashri said the following sentence k na:ru la:(p) he tit<sup>h</sup>e a:he ki (p) tela: he . 'Kangaroo'for this'there is'no'for'it'this:

This is for the kangaroo that is there, or literally "For the kangaroo, (pause) This that's there, (pause) this is for it.

This may be considered pronominalization across utterances. The 3 year old children used them more often and more acceptably. Backward pronominalization was not found in the speech samples of the 2½ year, old children.

#### **Reflexivization:-**

Bellugi (1971) reports that reflexivization occurs around 3 - 6 years. Reflexivization was not observed at all in the speech samples and it is possible that this aspect may have yet to be acquired by the children.

#### **Embedded sentences:-**

Embedded sentences were used by all children but inconsistently by the 2½ year old children.

#### **Gender:-**

The acquisition of gender in Marathi seems to pose a problem to most adults who attempt to learn the language.

It was found that these children exhibited similar deviances. In general, the three year old children were more consistent in their use of gender and in the accepted way. They never made a mistake when referring to themselves, in the younger children, Nitin often used the feminine markers with verbs as nitin yetg

nitin comes(fem)

(I) Nitin comes (fem)

The right way would be nitin yeto

nitin comes (mas)

Nitin comes (mas)

This would be the result of the endearments his parents used in which he was referred to in the feminine way. The 2½ year old children used less varieties of case endings, other aspects include absence of abstract nouns in the speech of the 2½ year children as well as the honorific pronouns. The developmental order may be seen from the table give.

Table Showing Structures which are present in each child's

Speech Sample

Structures	2½ year old children		3 year old children	
	NITIN(M)	RAJASHRI(F)	DARSHAN(M)	PRIYA(F)
NEGATION				
na:hi	+	+	+	+
nako	+	+	+	+
Negative words	-	-		+

Structures	2½ year old children		3 year old children	
	NITIN (M)	RAJASHRI (F)	DARSHAN (M)	PRIYA (F)
INTERROGATION				
Yes - No	+	+	+	+
Tag - Questions	+	+	+	+
Tag Questions (with Q marker Yes or No	-	-	+	+
Wh - Questions				
Ka:y	+	+	+	+
Kuṭ <sup>h</sup> e	+	+	+	+
koṇ	+	+	+	+
kuṭ <sup>h</sup> li	-	-	+	+
kiti	-	-	+	+
koṇa:c	-	-	+	+
ka:	-	-	+	+
k s	-	+	+	+
IMPERATIVE				
Positive	+	+	+	+
Negative	+	+	+	+

	2ig year old children		3 year old children	
Structures	NITIN (M)	RAJASHRI (F)	DARSHAN (M)	PRIYA (F)
<b>CO-ORDINATION</b>				
pause	+	+	+	+
ni	+	+	+	+
m g	+	+	+	+
nkhi	--		+	-
m <sup>h</sup> nun	-	+	+	+
t ri	--		+	+
ki	--		+	+
<b>PRONOMINALIZATION</b>				
Forward	-	+(partial)	+	+
Backward	-		+	+
Embeded sentence	+(partial)	+(partial)	+	+
Gender	Inconsistent use	Fairly consistent	Fairly consistent	Fairly consistent
<b>NOUNS</b>				
abstract	+	+	+	+
ra:g,b <sup>h</sup> iti				
tb u:k.				
<b>PRONOUNS</b>				
honorofic forms	-	-	+	+
			(partially aquired)	

- III (a) Characteristics of deviant utterances of the Children and (b) comparison to adult forms:-

**Deviant Utterances:-**

Most deviant sentences reflect the inconsistencies in the usage of some structures and indicate that the child is still in the hypothesis testing stage. The deviant sentences of the two age groups are somewhat different in quality and frequency of occurrence.

(i) Gender:- The concord between NP and VP is not always present with respect to gender.

eg. the 2½ or himself.

- (79) mi k rto  
 'I' 'do' (masculine)  
 I do (masculine)

This is the appropriate way. Some times he uses the feminine marker e for o.

- (80) Nitin m<sup>h</sup> nte  
 'Nitin' 'says' (fem)

Nitin says (fem). The appropriate utterance would be nitin m<sup>h</sup> nto. This confusion exists probably because he is the only child and his parents use endearments which use the opposite gender.

Eg. nitin ka:y K rte ?

'Nitin' 'what' 'does' (fem)

What does Nitin do? (fem)

None of the other children demonstrate this confusion when talking about themselves.

Darshan the three year old, only child of his parents has probably out grown this confusion. Endearments using feminine ending and concord for a boy's name and vice versa are common in Marathi. Baby talk (Kelkar, 1964) is possible that he was not as strongly exposed to them as Nitin is.

Proper gender markers are not used even with objects by the children. The older children make less mistakes. Rajashri said the following sentence.

(81) he w di kut<sup>h</sup>e a:he

'this' (neuter) 'sweet' 'where' 'is'

Where is this (neuter) sweet?

It should have been- hi w di kut<sup>h</sup>e a:he

'This'(fem) 'sweet' 'where' 'is'

Where is this sweet(fem)?

**ii) Pronouns:-**

The children often refer to themselves in the third person. The younger children even describe their actions

by using their own names instead of 'I'. This is also reported by Bellugi (1971).

(81) nitin b Sto  
 'Nitin' 'sits' (mas)  
 Nitin sits.

Instead of mi b Sto  
 I sit (mas)  
 I sit.

The three year old children do not use personal pronouns with possessive case endings most of the times.

(83) hi d rS n yi kaset a:he  
 'This' (fem) 'Darshan's' 'cassette' 'is'  
 This is Darshan's cassette.

It was observed that adults frequently used the child's name instead of 'tu', 'you'. The second person while talking to the child as 'what does priya / Darshan / Nitin / Rajashri do?'

iii) The verb at the end of the sentence is often omitted.

(84) ithe mor  
 'Here' 'peacock'  
 Here (is) a peacock.  
a:he or its is omitted.  
 Some times the wrong verb is used.

Eg. ml k r t na:hi

'I' 'dont' 'do'

I dont do. This is used by Nitin when he actually implies 'I can't do'.

ma.la yet na:hi

I(to me) able no

I cannot do.

Irregular verbs are wrongly used in their past or present forms.

k\_r to do is an irregular verb in Marathi. The past form of k\_r is kel or kele (the /r/ is deleted) depending on the dialect used, unlike other verbs which merely take suffixes 1 / lo or 1 depending on the gender.

b S ( to sit) is b Slo (mas) or b Sle or b SleΛ (neuter) 'sat'

Priya has not acquired the rule for k\_r. She says-

(86) mi k rle

I did (fem)

I did.

The appropriate way would be to say-

mi kel

'I'did'

I did.

iv) Numerals are reduplicated to indicate large amounts.

(87) tit e don don b nd r, a:het na:

'there' 'two two' 'monkeys' 'are' 'no'

There are a lot of monkeys there aren't they?

Here Nitin referred to the large number of monkeys present near a temple.

Another variation is used by priya, 3 years old.

(88) ek don tin ča:r pa:c ty wd<sup>h</sup> c hot

'one' 'two' 'three' 'four' 'five' 'only that many' 'were  
present.

'There were only a few there.'

The 2½ year old children used the numeral 'one' correctly and used 'two' to indicate many. The older children used 'ten' to indicate a large number. This could be related to the fact that the concept of numbers was not acquired completely by the children, but the concept of quantity was present to some extent. Savic and Miker (1975) also report a similar finding in Serbocroatian speaking children 1.9 to 1.11 years. Numbers 5, 3, 2 were used for 'many' in NP expansion.

v) Past position markers are incorrectly used. Nitin does not seem to have acquired pp for possession completely. He said-

- (89) ma:la: c Sma: kut<sup>h</sup>e a:he  
 'I' (to) 'spectacles' 'where' 'are'  
 Where are (to me) spectacles? (my is implied by  
 context)  
 when he should have said.-  
 ma<sup>h</sup>ae: č sma kut e a:he  
 my (of me) 'spectacles' 'where' 'are'  
 where are my spectacles?

Darshan also seems to have a confusion regarding the use of PP for -a:t'in'

He said- it pota:la duk<sup>h</sup>1

- (90) Here stomach (to) pained.  
 literally it pained to my stomach, when he meant  
 "there is a pain in my stomach."

This confu-sion could be due to two possibilities.

- (a) He treats duk<sup>h</sup>1 (pained) and la:gl (hurt) as the same in which case the ppused is right or  
 (b) he treats his stomach as if it were a third person, not a part of himself nor as a part of another person.

Another sentence he used was-

- (91) ma:ndi m d<sup>h</sup>e opa:yc a:he  
 'lap' 'in' 'to sleep (want) 'is'  
 (I) want to sleep in the lap.

The correct form would be-

ma:ndi w\_r <sup>h</sup>oparyc a:he  
 'Lap' 'on' 'to sleep want' 'is'  
 (I) want to sleep on the lap.  
 (I) is implied.

When his mother asked him which was correct 'on the lap' or 'in the lap', he corrected himself. Some post positions may be used when they are not necessary.

(92) ma: a: Si pusta k S mpl  
 'my'(with) 'book' 'is over'  
 My book is over.

Si or with is not necessary and is wrongly used. He was probably trying it out since none of the other children used it.

(93) ho hela: r bin a:he  
 'yes' 'is'(for)'robin'is'  
 yes this is the robin (implied)  
 He should have deleted la or replaced a:he (is) by m<sup>h</sup>nta.t 'called'to make the sentence.  
 ho hela: bin<sup>h</sup>ntat  
 'yes 'for this''robin''called'  
 Yes, this is called robin;

The post position may be shifted from subject to object.  
Priya ( 3 years) rased the following form consistently.

(94) pilluc , ma:k d hot

'young ones' 'monkey' 'was'

literally, the young ones monkey was there.

What was implied - monkeys'young one was there.

She shifted the possessive marker c from monkey to its  
young one. The appropriate form would be-

ma:k aic pillu hot

'monkeys' 'young one' 'was'

The monkey's young one was there.

The post position may be omitted.

(95) hi ga:di akeident na:hi hote.

'This'(fem) 'car' 'accident' 'not' happen.

There is no accident of this car.

This should have been - '

hya ga:dica aksident hot na:hi

'This' (of)'car' 'accident''happen not'

There is no accident of this car or this car's accident  
does not happen.

The oblique form is not used consistently by the  
children. It is omitted sometimes as in the above example,  
was not used, instead, hi was used.

vi) Adjectives may be used incorrectly. When Priya was asked the question "what is this car made of?" she

answered ti la:l č i keli a:he

(96) it (fem) 'red' of 'made' 'is'

It is made of red.

Needless to say it was a red car.

vii) Emphasis markers are incorrectly used, c is an emphasis marker, used generally after the subject noun or adjective. But emphasis on the verb, it is shown by adding t\_c.

Eg. yet c na:hi

can(emphasis) no

'cannot do' or 'is not able'

Darshan seems to have placed them in the same category and hence the sentence -

(97) hdmi t\_c k rto

'yes' I' (emphasis) do.

yes I only do it.

The appropriate would be- mic k rto

I only do

I only do it.

This form was used consistently by Darshan. His mother confirmed that he used this even irrelevantly and may reflect an over extended rule.

Another way of indicating emphasis is reduplication. Priya ( 3 Years ) uses it every where and hence sometimes inappropriately.

- (98) mi tula: Sodun So un gele  
 'I' 'you' (to) 'left' 'left''went'  
 I left you and went.

She however used reduplications like-

- (99) moṭ<sup>h</sup> čya: moṭ<sup>h</sup>  
 bigger than big  
 Very big.

This is an acceptable form.

None of the other children used such reduplications.

viii) Auxiliary inversion in negative sentences:-

The children did not always invert the auxiliary verb and NP.

- (100) tya: b s m d<sup>h</sup>e na:hi k n kt r a:he  
 In that 'bus' 'in' 'no' 'conductor' 'is'  
 There is no conductor in that bus.  
 The utterance should have been-  
 tya: b s m d<sup>h</sup>e k nd kt r na:hi a:he  
 'that' 'bus' 'in' 'conductor' not is  
 There is no conductor in that bus.  
 This was said by Darshan.

ix) The wh- form k sa:ni 'by what' was present in a deviant form in Darshan's speech. He used 'ka:y ni' 'what by' instead of k sa:ni.

(101) ka:y ni pu:sti a:he  
 what with wiping is  
 (fem)

With what is she wiping? A form not used by adults.

This is a strategy similar to that reported by Cairus and Hsu (1978) where children used 'what for' for why.

**x) Elliptical sentences:**

Some elliptical sentences were deviant.

(102) mi  
 'I'  
 I:

This was an imperative sentence used by Nitin when he asked his mother for the toy she was holding. The acceptable form would have been "ma:la:" 'for me'

There were no sentences that were ambiguous in the speech sample collected.

The children used various types of sentences and deviant patterns were present in both the children of each group.

Gender agreement, use of post position markers, emphasis markers has not been stabilized as yet. The deviant sentences suggest the pattern of acquisition of the language.

**COMPARISON TO ADULT FORMS:**

The basic sentence structure is similar to the adult structure, the stylistic variations are also similar.

The children however tend to speak in short phrases, punctuated by pauses, and there are frequent corrections of the previous phrase.

The children do not yet use many abstract nouns or honorific pronouns, nor do they differentiate gender in the plural pronouns as in adult speech. Oblique forms are inconsistently used. The children use *he* (they proximate) and *te* (they remote) for all objects or people. Post position markers emphasis markers are frequently inappropriate.

**Negation:**- The children use generally *na:hi*, and *n ko* the way adults use them, but negatives words are not used by any of the children except Priya (3 years). Auxiliary inversion is not always present. The negative word *n ye* 'should not' was not used by the children.

**Interrogations:**- The children use yes / no, tag and wh- questions like adults, but have not acquired all the forms yet. The wh- forms like *k d<sup>h</sup>i* 'when', *kew<sup>h</sup>a*, 'when'

k Sa:ni, 'with out' k Sa:la: (why for) are not used at all. The 3 year old children seem to have acquired tag questions in the adult form. But the younger children use only one form.

**Imperative sentences:-** Both the groups use both imperative affirmative and negative sentences. But some forms of imperatives like second person with future suffix as in the example below are not used at all.

p ŋ k raw  
you (hon) must do.

The children also do not use n ye - should not.

**Co-ordinations:-** The coordinate conjunctions used by the children are used by adults. Adversative conjunctions are used by adults. Adversative conjunctions were partly acquired but disjunctive conjunctions are used in conjoining words only as in the tag 'yes or no'. The conjunction kiw<sup>-h</sup>a: 'or' that is present in adult speech was not found in the children's speech. The children also have not acquired the rule of inserting ni 'and' just before the last NP in a sentence with more than two NPs. Coordinators are used infrequently. The coordination acquisition process is long and may not be complete by the age of 5, ( Neimark and Stolmick 1970, Prema 1979, Roopa 1980).

**Pronominalization:** is rare and the older children have both forward and backward pronominalization. The younger children

## CHAPTER V

### SUMMARY AND CONCLUSIONS

An attempt was made in this study to investigate the development of some aspects of syntax in 2½ - 3 year old Marathi speaking children.

Four children, two boys and two girls, served as subjects for this study. Each group (2½ years and 3 years) comprised of one boy and one girl. The age range of the subjects at the time of data collection was 2.6/12 years to 3.2/12 years.

All four children belonged to middle class families and were exposed to kannada, English and some Tamil. Of the four children, 3 are from Bangalore and one is from Mysore since it was not possible to get all the children from the same place.

A speech sample of approximately three hours was collected from the children in 3 - 4 consecutive days. The techniques used to elicit speech included interviewing, story telling, describing pictures, games and spontaneous speech as the child interacted with the members of his family.

The transcribed speech samples were combined and treated as a whole for analysis. The data were classified

seem to be acquiring forward pronominalization. Chomsky (1969) reports it may occur even after 5 years. Roopa (1980) also found it rare in the speech of 4 - 5 year old children.

Reflexivization:- was not found in the children's speech.

Embedded Sentences- were of a few restricted types.

Other Observations:- The children did not use future tense or past continuous as frequently as adults do. The children also use numerals differently from adults. They are used to indicate a large quantity instead of the actual quantity.

'Today', tomorrow are not used appropriately, and sometimes location 'here' 'there' is inappropriate.

A comparison with adult forms shows that the children are still actively engaged in the process of acquiring new structures. The sentence structure of the 3 year old children seems to be more like the adult forms than the sentence structure of the younger children, indicating the high speed of acquisition.

Further research on a larger scale is however needed for generalization.

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into four major types of sentences:-

1. Declarative,
2. Negative,
3. Interrogative, and
4. Imperative.

Additionally coordinated, pronominalized and embedded sentences as well as deviant sentences were analyzed.

The sentences were analyzed in the following lines.

- a) Sentence structure and stylistic variations.
- b) Developmental order of the four aspects of syntax.
- c) Deviant utterances and comparison to adult forms.

The following tentative conclusions are drawn from the study:-

**Sentence structure:-** The children's sentence structure is similar to that of the adult's sentence structure. They shift and delete certain constituents of NP and PDP which are considered as stylistic variations.

The children however did not consistently maintain concord between gender, number of the noun and the verb in their sentences. Some post position markers were also incorrectly used. Honorific forms are used only by the 3 year old children. Very few abstract nouns were used.

Deviant forms of sentences appeared to show one extension of some rules and incomplete acquisition of

other rules. Plural markers used were not differentiated for gender.

**Negation:-** The children use negative particles /na:hi/ 'no' or /n ko/ 'do not want'. Negative affixes were generally not used. Only one child used the prefix /na/.

A few negative deviant sentences were seen. ie. Auxiliary verb and NP inversion was absent some times.

**Interrogation:-** The children used the three major categories of interrogation, yes / no, wh- type and tag questions. The wh- type questions used by all children have the markers kon 'who, ka:y 'what', kut<sup>h</sup>e 'where'. The wh- form k d<sup>h</sup>i or kewa/ 'when' was not used by any of the children. It has probably not been acquired. kona:c 'whose', kiti 'how many', kut<sup>h</sup>l , 'which; ka: 'why' was used only by the three year old children.

**Imperatives:-** The two groups of children used both positive and negative imperative sentences. Positive imperative sentences were used more often. The negative imperative form /n ye/ -'should not' was not used by any of the children, nor was the 2nd person honorific with future suffix used by the children.

Ecliptical imperative sentences were used often by the 2½ year old children.

Coordination:- The children used coordinate conjunctions nj. 'and', pause, m g - 'then' and na: more often than adversative or disjunctive coordinators.

The 2½ year old children did not use adversative coordinator t ri 'even then' but the girl did use m<sup>h</sup> nun, 'therefore'.

Disjunctive coordinator ki 'or' was used only by the 3 year old children to coordinate words as in /ho ki na:hi/, 'yes or no! The structure of the coordinated sentences is not completely like adult sentence structure.

The children have not acquired the rule of inserting ni 'and' just before the last NP in a sentence with more than two NPs. Coordinated sentences are relatively infrequent.

Pronomilization:- is rare. The 2½ year old children seem to be in the process of acquiring pronomilization with in the sentence. Pronomilization across sentences is seen in both groups. The three year old children used both forward and backward pronomilization. Embedded sentences were few and were of a few restricted types.

Reflexivization was not present.

The children rarely used the future tense or past continuous.

They also used numerals differently from adults. Numerals were used to indicate large quantities rather than the actual quantity. 'To day', 'tomorrow', 'yester day' were not used most of the times, but if used, were in-appropriate.

**Developmental order:-** In general the 3 year old children used longer and more acceptable sentences. Agreement between noun and verb, pronoun and verb is present more often.

They used more abstract nouns, more case endings, than the 2½ year old children. The 2½ year old children did not use any honorific forms of pronouns, but the 3 year old children used a single honorific form tum i (you

All the children used yes / no, tag and wh- type of questions. The 3 year old children used more wh- forms like kuṭ<sup>h</sup>1 which, kiti - how many, ka: why, kona:c , whose, which was not used by the 2½ year old children.

Coordinated sentences were present in the speech samples of all the children. Again here, only the older children used disjunctive coordinator 'ki 'or' and the adversative coordinator t<sub>ri</sub> 'even then'.

Pronominalization within a sentence was not found in the speech samples of the younger group.

Embedded sentences were more common in the speech of the 3 year old children. Emphasis markers were more used by the older children.

The results of this study demonstrate the speech of acquisition of language. Though there was a gap of only 6 - 8 months between the two groups, there is a considerable difference in the sentence structures. Again supporting what has been often observed that the most active period for learning base syntax is between 18 months to 4 years, and that this period reflects distinct levels of linguistic development (Mc Neill 1970).

**Suggestions for further study:-**

- i) A longitudinal study from the age of one year done on a larger group of study so that development at each age can be specified.
- ii) A cross sectional study on children from different economic strata to see if linguistic experience affects acquisition.
- iii) A study on children exposed to only Marathi to find the effect of bilinguism and multi lingualism.
- Iv) Comparative studies in different Indian languages.

- v. Comparison of linguistically deviant children with normal children actively engaged in acquiring base syntax at a similar level of linguistic development. This would rather clearly demarkate areas of remediation.
- vi. Construction of language tests for production and comprehension as well as for reading readiness.
- vii To standardise language in text books so as to match it to the linguistic ability of children attending school.

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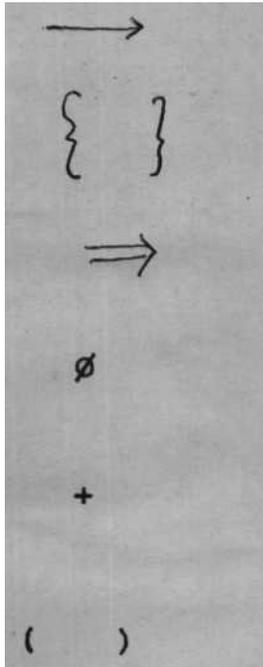
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APPENDIX

APPENDIX I

SYMBOLS



: Re Written as

: Suffixes, Choose one from list.

: Transformed into

zero

: Incorporated with

: Enclosed constituent is optional

\*\*\*\*\*

## APPENDIX II

### Abbreviations

	:	Sentence
0	:	Interrogative word
Imp	:	Imperative
Neg	:	Negative
NP	:	Noun phrase
PDP	:	Predicate phrase
Det (D)	:	Determiner
Pro/PRO	:	Pronoun
N	:	Noun
Indef. det	:	Indefinite determiner
Def. det	:	Definite determiner
Ouan	:	Quantifier
Demon	:	Demonstrative
Aggre/agg.	:	Aggregate
Enum	:	Enumerative
Emph	:	Emphatic
Num	:	Numeral

## Abbreviations

Ord	:	Ordinal
Card	:	Cardinal
(S)	:	Embedded sentence
VP	:	Verb Phrase
Adv <sub>T</sub>	:	Time adverb
Adv <sub>p</sub>	:	Place Adverb
Adv <sub>m</sub>	:	Manner Adverb
PP	:	Post positional phrase
V	:	Verb
Obj	:	Objective
Inst.	:	instrumental
SOC	:	Sociative
Dat	:	Dative
Tense	:	Tense
Asp	:	Aspect
Mod	:	Modal
Perf	:	Perfective

## Abbreviations

Prog	:	Progressive
Comp	:	completive
Fut	:	Future
Non-Fut	:	Non-Future
Pres	:	Present tense
Past	:	Past tense
e-	:	Interrogative
PNG	:	Person Number Gender
Adj	:	Adjective
Adv <sub>reason</sub>	:	reason adverb
Conj	:	Conjunction/coordination.

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