CHAPTER III

ACQUISITION OF MORPHOLOGICAL PATTERNS OF HINDI

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3.1 Introductory Section: General Morphological Patterns of Hindi

The infant's perceptual ability and developing cognitive ability enables the child at around one year of age to recognize words in the linguistic input. Stern refers to this as the "Principle of the Linguistic Sign", it is a unique genetic feature of humans. It appears to be dependent in part on earlier development and its operation becomes noticeable in comprehension during the period. The vocabulary grows to a considerable size before the child can produce the same. Along with the acquisition of phonemes of its L1, the child begins to identify and categorize the speech sounds in its words into linguistic categories, which forms its phonological system of its L1.

With increasing corpus the words become more classifiable morphologically. The child usually has contextually based knowledge, i.e. ability to do some thing in one context but not in another. The child begins phonological analysis of words during the period of single-word utterances, and many of the basic contrasts, especially of length, also develop. The child in its pre-morphophonemic period assigns meanings to sounds. The child does not analyze the parts of vocalizations but maps meanings directly on to the word.

The child's understanding of its earliest words in the period around 6 months to one year begins with the experience of intonation, rhythm and then it creates a sound picture of a word which gives meaning to the child. The sound pattern of the whole word symbolizes the meaning to the child. Later this sound pattern gets established as a concept or idea of an object with meaning into the child's idiolect. With repeated use the sound pattern attains stabilization. Later any change in the sound pattern attracts the attention of the child. The child begins acquiring a psychological representation of words that underlies its perception and production.

Linguistic organization, according to Shvachkin begins very early, starting with semantics. Yet it is out of sense to propose a radical reorganization around the age of one year. The child discriminates between sets of features going from the most general to the most specific. The unique phonemic features of the initial period in child's speech development correspond to the unique semantic features... it is not the phoneme (a phonetic unit of speech) but the intonation, the rhythm, and later a general sound picture of words which bear a semantic load at this stage.
Melody, as it has been noted in observation, plays an important role in the process of language acquisition and is one of the earliest linguistic features acquired by a child. Observations done for the present work illustrate the situations where the child perceives only the sentence melody while the meaning is irrelevant. It reproduces easily the intonation contours given to it for imitation. Furthermore the pitch variations perform a certain function from the very beginning. In the early stages where the corpus contains but a few words, most of them mono- or disyllabic, are very often homonymous, the pitches concentrated on various syllables are the main means of the child's expressing approval, protest, demand, astonishment, surprise, and so on.

The child commonly uses the falling, rising and a very high rising tone in case of expressive speech. The expressive speech is used in emotional condition, the rising contour typical of question, remains predominating, also applies to statements. The interrogative pronouns appear at around the beginning of 3rd year. The child has three interrogatives, viz., /kon/, and /kja/ for identification and /kɛha/ for location. The falling contour is used in these types of interrogative pronouns. The length of the vowels varies at the will of the child. The pitch level noticed in early period is common in the child's idiolect even at the age of three-and-a-half years in terms, like /ha/, /nɛhɔ/ ~ [nɛl].

The falling-rising and expressive pitch levels, noticed in the preceding developmental stages, are observed in the later stages also. The interrogative pronouns become stabilized and the intonational contours heard in association with them are identical with those of standard Hindi. /kʃa/ is another interrogative pronoun used frequently by the child. The child seems to be content with the interrogatives related to identification and location /kɛb/, for time, and /ke:sə/, for manner, are still absent from its speech.

Stress in Hindi is weak. The only overloud stress is heard in emphatic speech. Even while imitating the adults' speech stress is correctly reproduced, but only in short sentences. In urgent requests every syllable is stressed. Stress, like melody, too, is an expressive element in the child, though utilized to denote various connotations. These features perform, above all, the function of being the basis for gradual acquisition of even more complicated word images. As for stress, its correct usage in expressively neutral utterances is noted. As before, the overuse of stress is noticed under emphasis.

The child faces the problem of conceptual inference of going from the word used by another to the formation of a concept to be attached to the diversity of uses of the
word. In this case the concept of the object needs to be suitably defined by the child. In the process, the child may make inappropriate extensions (over or under) based on the experiences it has had with the object and the word. With sufficient exposure to the culture the child’s concept of object begins to match the uses of the word in the surroundings.

Another possibility is of the child having a primitive concept of an object already, involving its experience with the object itself, or its picture, or in its games. And here the experience is central to the meaning of the word because the concept, embedded in experience is established before the word referring to it belongs to the child’s corpus. Much later the child comes to be able to acquire a word from its linguistic context rather than from its situational context. Learning from situational context is primarily in the early stages of vocabulary building. But the specific sound-pattern of the word is also essential for the object.

Such learning proceeds throughout life, and the individual in a novel situation may form a concept of a particular object before encountering the correct word for it. Secondly, at all stages, attaching words to concepts, a knowledge already acquired is far quicker and easier than forming a new concept to go with a novel word. Last, but not the least, the fact that learning from linguistic context becomes possible in the preschool period indicates that a lexical system has been established.

Vocabulary spurt is observed to occur by the middle of the second year. Individual differences are prominent. Stern (1930) refers to this stage as the realization on the child’s part that “everything has a name.” Similarly, Dore (1978) has referred to the “designation hypothesis” and a truly symbolic system.

McCarthy (1954) states that around 17 to 20 months the acquisition of a new word accelerates from the rate of around 3 or 4 per month to 30 to 50 per month. However individual differences are not to be ignored. The child engages in tremendous use of extensions and overlapping meaning, as stated earlier, in its L1 acquisition. Rescorla (1976) found that fewer than one-third of the words learned by children between 12-20 months were overextended. Besides, it did not seem to be a function of cognitive development during this period. The basis for overextension usually has been found to be perceptual, i.e. an object gets a label because it looks like, sounds like, moves like, or feels like the original object, for example, a toy-car has all the above qualities. Functional basis can also be the means of overextension, as when the child makes an action of drinking from an empty bottle and says [dʌŋʰ pɪjə], or kicks a teddy and exclaims [ɡəŋ ɡəːt:]
The child faces a problem with its small vocabulary while communicating with adults. Overextension comes to its help as an economical device. Gradually underextension comes to play its part and the overextended terms get limited to a particular object or a class. As the child passes through the stage of learning basic concepts and then superordinate classes, these operations become less apparent, yet anytime a new word is acquired some variability in the use of the term is expected.

The baby talk used by both the child and the grown ups in their mutual intercourse consist mostly of nursery forms and interjections that deliberately adopt to the child’s mono- or disyllabic make-up of its early words. In view of the widespread belief that the first words of the child are monosyllabics, one would expect this group to have the highest proportion in the first developmental stage. It is, however, disyllabic words which account for more than half of all word occurrences in the child’s corpus.

The most frequent shapes in monosyllables are: /VCV/, /CV/, /CVC/, /CVCC/ and /VC/. In disyllables the shapes /CVCCVC/, /NCVCVC/, /VCCVC/, /VCV/ are frequent. At about one-and-a-half year the child uses various realizations of one and the same expression. Very often it returns to the original primitive forms too. Rather characteristic to its speech is the dropping of the initial consonant; which results not only in the high frequency of /VCV/ model but also in widespread homonymity thus making its speech hardly intelligible in irrelevant contexts, but for the parents it is always intelligible, cf. /roti:/ → [o:ti:], /ha:ti/ → [a:ti]: /koko/ → [o:lo].

3.2 Free and Bound Morphemes

Free Morphemes

The total free morphemes appear once the child starts acquiring L1. In the babbling period it has sound patterns as [ba:ba: bəbəba:], and the like. Later by the end of the first year free morphemes /mōma:, /ba:ba:, /pa:pa:, /pipi/, /pepe/ and so on, appear. As the child starts communicating with the grown ups it requires more words for an effective communication. Nouns, pronouns, verbs, interjections and nursery-forms appear, as /mōmɪ/, /ga:jɪ/, /pa:ni/, /думɪ/, /мɪ/, /думɪ/, /двол/, /fa:, /a:, /дө/, /daw/, /дө/. 

By the middle of the second year the vocabulary spurs, building up a maximum corpus of a child, that it can use. It is also the time when the child starts communicating freely with adults as it starts acquiring the consonants or their allophones. The
child becomes more creative and for making an audible expression more meaningful to the adults, it creates words close to those it hears.

Instead of matching individual segments, “the child, as Waterson observes, “perceives only certain of the features of the adult utterance and reproduces only those that he is able to cope with.” As at this stage the child lacks some phonemes, it drops them and varies the adjacent vowel or uses a substitute sound or its allophones. The morpheme is produced by making such amendments, cf. /bʰaːluː/ → [baːluː], /cʰɒmməc/ → [ɒmɒk] /sɒb/ → h₁ɒb, /gʰɒdiː/ → [ɡ disappoint].

The child endeavours to the most accurate form of a morpheme. And as and when the phonemes are acquired, it is ready with the full morpheme though the other forms of the same morpheme may also be present in its idiolect.

By the middle of the third year the child is full of free morphemes ready to undergo further changes to suit the grammatical needs of L1.

**Bound Morphemes**

Bound morphemes can be divided into three sub-categories:

(i) Bound morphemes as prefix.
(ii) Bound morphemes as prefix and suffix, and
(iii) Bound morphemes as suffix.

In the very early stage of acquisition of morphemes the bound morphemes do not occur as prefix and suffix in the same word. In onomatopoeic formations, either initial or the final repetition can be considered as bound morpheme, as /ci/ or /ci/ in /ci:ci/, /fɒn/ in /fɒn/, /bɔm/ in /bɔmbɔm/, /pi/ in /pipi/, /hɔk/ in /hɔkt hɔk/ (for the sake of convenience the child’s articulations are not used because it uses allophones of most of the above stated phonemes). /ci/ and /hɔk/ are nouns but rarely used as such in general speech. /ci:ci/ and /h- hɔk/ are common. Thus they have been used as examples.

Some of the sound-patterns acquired by the child in the second half of the first year disappear or get modified, as the case may be, when the child begins acquiring the vocabulary. But some of them appear again as interjections and also as bound morphemes. Following are some of the sounds: /ɔn/, /nɔn/ /n/, /n/, /n/ /a:/ /ɔ/, /n/, /n/, /n/, /s/ and the like.

The observations emphasize the fact that the child acquires the morphemes of L1, as intact-whole, not in parts. It understands the meaning of the whole thing. It understands
that all object having the characteristic of roundness can be treated as balls. It knows that all small boys and girls elder to itself are /b^h_aj/: or /di:di:/, respectively. There are yet some percepts which the child gets with relative ease and accuracy, for example, the percepts of size, shape, colour and taste, but this takes time. In between comes a stage when the child grasps the thing in whole. It does not break the word into parts : stems and affixes. This is one reason why the child is unable to acquire polysyllabic words easily, just because it tries to take the whole word at a time instead of breaking it into its morphemes.

The conversation with the grown ups brings the child in contact with various forms of words; nouns pronouns, verbs, adjectives and some post-positions. As the child is not always available with the correct word in a sentence it applies those that are in hand and in doing so it uses its creative ability. For example, the child understands a word; /d'b^h_aj/ or /d'b/, not [d'b+t_aj]. It uses a word /d'ek^h:o/ and not [d'ek^h+o]. /c^olo/ is a unit used at a time and /c^ole/ or /c^oli:/ are other units. They are not derived from the same root for the child. They are all individual units. However, at bottom the phonemic pattern of /c^olo/ or /d'ek^h/ may be helping the child in acquiring /c^olo/ or /d'ek^h:o/, respectively.

/ol, /a:l/, /o:n/, /o:v/, /o:v^a:, /k/, /ku:/, /ud/, /ut/, /ta:/ and others cannot stand as independent words. They are always attached to a free morpheme or a free form. But such free forms are not available for the child, even at the age of three. Rather free forms are there but it does not experience or hear them with bound morphemes. But there are all possibilities of their occurrence, since these sound patterns of most of the bound morphemes are heard in the child’s talks.

However, the child learns these forms systematically in grammar classes. Words like /be:o:r^e:n/ → [be+:o:r^e:n], /d^o:pok/ → [d^o+pok] and the like may be used. But such cases are very rare. Imitation, error-analysis by the child itself, and feedback mechanisms operate. The elders start checking the mistakes of the child and it gets lessons in the language used in the family.

3.3 Morphological Constructions

Inflexional Morpheme:

Inflexions change the form of a word. When attached to a morpheme they express ideas like number, tense, and comparison.

As L.N. Pandey puts it:
Hindi has just seven (inflexional affixes): plural, possessive, present, past participle, comparative and superlative.

Plural and possessive endings are applied with nouns, the next three are applied to verbs and the comparative and superlative endings go with adjectives.

Noun + Inflexional Morphemes

(i) Plural Endings

In the very first stage of speech development the child lacks the plural ending. At this stage it has words which fulfil its needs like /duːdā/ , /mām/, or those of relative nouns, like /māmmi/, /paːpaː/, /dādaː/. Considering its simple capacity the adults usually avoid plurals.

It is only when the child finds difficulty in expressing itself to the adults that it starts using the vocabulary more intensely getting involved with plurals. This stage comes when the child has completed its two years and enters the third year. Even in the third year, the child does not begin with plurals, but in the middle of the third year a few of them come up, as /aːn kā/, /kītaːbē/, /pensilē/, /bāːn/, /dābaː/. As [-ja:] is not in the idiolect, the standard form of [dābaː], i.e. /dābaːːjāː/ is not acquired by the child. Same is the case with /caːcijāː/, /rāːnijāː/ /dākijāː/. The child starts learning the Hindi numerals and uses the same with the singular nouns as /doːkāk/, /qːːn kītaːb/. The most common plural inflexion used by the child are [-e] and [-a], as in, [peːse], [bōce], [toːt], [peːsē], [pʰugge]. Nasalization of /e/ here is very common, may be due to the effect of colloquial environment, or may be a creation of the child.

[-iː] or [-āː] is not very common, only rarely it occurs in [bōkriː], [cudijē] or [cudijāː]. Nasalization of the feminine inflexion /iː/ - [iː] also forms plurals, as [tiːliː]-[tiːl], [kop], [pōkʰ]. Nasalization is a curious process used by the child and such plural forms occur in the child’s corpus; [kursiː], [rof], [gof].

/ō/ is used in verbs, very frequently, and this helps its stabilization in nouns also, as in /taːraː/- [tare] ~ [tarō] , /aːkʰ/- [aːn kʰ]. Nasalization may be partial or full which depends on the child’s moods. Any new plural form enters the child’s corpus with a “question mark” on the child’s face. It appears as if it is not a very clear concept or rule of plurality is operating.
Even at the age of four it has no rules to hang on to, though it has many plural nouns in its idiolect. Lessons in grammar help the child, at school or at home, to hear the plural forms and understand the principles working behind them.

Usually to suggest plurality, the child uses the plural verb forms or adjective forms in its sentences, like [lôdkâ: ñcc\,h\,a: he] - [lôdkâ: ñcc\,h\,e hê'], [kûttâ: b\,h\,ônk rôha: he] - [kûttâ: b\,h\,ônk rôhe hê']. It imitates the plural forms but makes errors when it comes across situations where it has to produce them in its spontaneous speech.

(ii) Possessive Ending

The infant starts understanding the ‘possessiveness’ by thinking of its mother, milk-bottle, toys etc., as its possessions. In the beginning the child thinks of itself. It is in the middle of the second year that it starts pointing to the possessions of others around it, whenever asked to do so. The property is associated with the possessors’ name through expression or directly, as in [bittu gend], [tomi: roti:]. Post-positions /k:λ/, /k:i:/, /k:e/ and possessive pronouns come up at around the middle of the third year.

In the first-half of the third year it starts using the relevant postpositions with its name to point out its possessions, as [c\,h\,nu ki: ca:j], [c\,h\,nu ka: b\,h\,a:lu]. Deviations are noted in /k:i:/ - /k:e/, /k:λ:/ - /k:e/, though all the forms are available, but they are not stabilized.

Possessive pronouns are also present in the corpus with the ending /\,l/, /\,l:/, /\,l:. These are derivational class maintaining endings which are acquired along with the post-positions.

(iii) Verb + Inflexional Ending

In the very early stages tenses do not appear as a concept in the child’s idiolect. Verb’s enter the child’s idiolect by the beginning of the second year. Earlier to this period, words indicating both the object and its action are common, as, /k\,t\,i:cu/, /h\,t\,i:t\,\,h/., /\,p\,o\,p\,o\,l/, /d\,o\,g\,d\,o\,g/, /\,\,d\,a/. The child begins with only the root or the stem of the verbs having imperative meaning. The stems acquired are root + /\,l/, eg., /k\,e\,l\,o\,l/, /k\,o\,l\,o\,l/, /d\,e\,k\,o\,l/, /d\,e\,k\,\,\,p\,o\,l/, /k\,e\,l\,o\,l/, /k\,o\,l\,o\,l/ are the roots. They are singular or plural in standing. By the middle of the second year the concept of /\,m\,e/ or /\,h\,e\,m/, whichever the child may confront in the family, becomes associated with the egocentricity of the child. The world for the child gets an orientation keeping itself at the
centre. Thus the terms /mēːl - /muːjʰe/ or /hōːm/ - /hōːmēːl enter its corpus and with it /hūː/ or /hēː/, respectively. The past forms of 'to be' - /h₃aː, /h₄iː/, /h₅e/ do not occur in its speech even at later stage, instead verbs with [-je], [-jaː] are used.

[-je:] is a frequently used past tense ending in verbs. But additional /gōjə:/ or /gōjii:/ may also come into the child's corpus if it is common in 'grown ups' speech, as in /cōla:gōjə:/, /kʰaː: gōjii/. Some incorrect uses are also noted, cf. /vo cōla: gōjə:/ - [vo cōla: gōje], /hōːm ne kʰaːjaː/ - /hōːm ne kʰaːje/, /vo gōjə:/ - [vo gōjo] ~ [vogōo] (colloquial influence). These forms occur when the child communicates with adults. They are either checked by the adults or dropped by the child at a later stage.

In the middle or end of the third year roots with [-naː], as in /kʰaːnaː: bōnaːnaː/, /gudijaː kʰelnaː/ occur. Such productions are accompanied or produced with melody to make requests, or as in interogatives. A form of the verb /hōːnəː/ or /hōːnaː/ or /hōːnih/ also enter the corpus of the child. It follows the verbs. At times the copula is dropped and following constructions are heard; /kʰaːrōhiː / /fārōdaː/.

Ending with hard consonants are common [-nː], [-eː], [-iː], [-aː]. [-unɡaː] or [-unɡiː] as inflexional endings are met with only at the middle or end of the third year. Egocentricity of the child brings in endings [-eŋe], as in [hōm kʰaːeŋe], [hōm faːeŋe]. Emphatic speech stresses all the syllables of the sentence. The child tries to make the sentence as correct as possible while trying to show its own importance. In the process it produces or imitates even long sentences, where it drops or resolves the complexities and endings which even adults are unable to sense. If asked to repeat the same the child may produce the endings correctly but not all the phonemes. If insisted to repeat the child drops the whole thing switching over to other activities or words. The child cannot be forced to reproduce the same thing again and again. It has been observed that the child tries to search the correct form of the verbs in its corpus by producing the same sentence or words again. However, it drops it if it gets no help from within or outside. [-oge] or [-ogiː] are used in the child-to-child conversation, as in /kʰeloːge/- /kʰeloːgiː/. /hēː/ is the common ending instead of /heː/.

In the songs and the nonsense-talks of the child, very common at this stage, the inflexional endings can be heard. For example, nonsense-talk produced by the child: [ōngaː sunnaː punniː pōnte legge, sēbne onfaː ho gōje kunnīː kōrge hēː]. However such talks are common only at the end of the third and the beginning of the fourth year. With age these
talks decrease. The advertisements and songs shown on T.V. also help it in acquiring the new endings.

By the end of the third year the child acquires the standard forms with [-je] or [-ji], as in [da:da: goje], [məmini: goji:], [pa:pa: a:goje].

At this stage the past form of ‘to be’, i.e. /hᵢ/ is used. But it is a rare case. The influence of colloquial language can also be seen. [te], [ji:], [fi:] have been used by the child who is surrounded with Bundelkhandi speakers. For example [həm goje ə].

The future tense does not show its influence until the child enters the middle of the third year. The child is mostly occupied with the problem of the present. Near future is the only possibility for the child. Even its marriage is seen by the child as an event very close to occur [-ga:] with /mə:/ and [-gə] with /həm/ denote future, as in [məʃarugna:], [həm soŋgo].

(iv) Adjectives

[-tə] and [-təm] are the inflexional endings which go with adjectives. As L.N. Pandey puts it, “They change the forms of the base word into comparative and superlative degrees.”

Words with [-təm] and [-tə] are not present in the speech of the child. They come into the corpus of a grown up child.

Derivational Morphemes

Derivation is a process of word formation. Derivational affixes, in Hindi, are of two types:

(1) Class Changing Derivations which Include both Prefixes and Suffixes.

Prefixes have been traced throughout the speech of the child until three years but words with derivational class changing prefixes are not found except for the word [be+/dəm], where the noun /dəm/ is changed to an adjective with prefix [be-].

As for derivational class changing suffixes, not many examples can be produced from the child’s speech. When the child starts producing multiword sentences some words with such suffixes, which are generally used in the family, enter into the child’s corpus, e.g. [həm b'uba: ko pjar kəte hə:], [b haja: pjar: pjar: he], [cunnu: pjar:i: he] i.e., /pjar/-/-pjar:i/. Another example can be given: [am k'hata: he], [k'hata: mət do], [tum jant]
In the above examples the changes occur as:

\[
\begin{align*}
/\text{pja}:r/ (\text{noun}) & \leftrightarrow /\text{pja}:\text{ra}/ (\text{adj}) \\
/k^h\text{tta}/ (\text{adj}) & \leftrightarrow /k^h\text{tta}:i/ (\text{noun}) \\
/\text{la}:\text{nt}/ (\text{adj}) & \leftrightarrow /\text{la}:\text{nt}/ (\text{noun}) \\
/mi:\text{t}^h\text{a}/ (\text{noun}) & \leftrightarrow /mi:\text{t}^h\text{i}/ (\text{adj}) \\
/gussa:/ (\text{noun}) & \leftrightarrow /gussa:/ (\text{verb}) \\
/d\ddot{o}/ (\text{noun}) & \leftrightarrow /d\ddot{o}:\text{rpo}/ (\text{adj})
\end{align*}
\]

In some cases the child has the derived form in the corpus without its root, as in /\text{fut}^h\text{a}/, /\text{pja}:\text{ra}/ and their other forms. Here the child may not use the roots /\text{fut}^h\text{a}/ or /\text{pja}:r/ in its speech.

Other derivational morphemes whether noun-forming, like /\text{d}\ddot{o}/, /\text{p}r\ddot{a}/, /\text{f}\ddot{a}/, /\text{a}:\text{s}/, /\text{a}:\text{v}\ddot{a}/, /\text{\ddot{o}}\ddot{a}/, /\text{g}u/, adverbs forming endings, as /\text{h}\ddot{a}\ddot{a}/, /\text{h}\ddot{a}:\text{r}/, /\text{s}:\text{a}/, /\text{i}:\text{k}/, /\text{a}:\text{v}/, /\text{a}:\text{ku}/, /\text{a}:\text{na}/, /\text{a}:\text{n}/, and so on and so forth are not present in the child’s corpus.

(2) Class Maintaining Derivations

Some derivational affixes which do not bring a change of class are called class maintaining derivations, as in.

a) Class Maintaining prefixes

As is with the class changing prefixes so is the case with class maintaining prefixes. Such prefixes do not occur even at the age of four.

b) Class Maintaining Suffixes of Verbs

With one-word sentences the child’s social conversation in a language begins. As stated earlier most of the words used by the child have the capacity to function as nouns, verbs, or adjectives, as, [ba:ub\ddot{a}:\text{r}] stands for both, the dog and to its barking likewise [\text{\ddot{u}:\text{d}u}], [\text{ta}:\text{t}a], [\acute{\text{\ddot{a}}}:\text{h}a:] denote various functions.

Hindi verbs change their form to denote number, gender, person, mood, tense and voice. The verbs agree with their nominatives. In the early stage of speech development the child begins with onomatopoeic-type of words or nursery forms which denote both the object and its action. Endings are not followed by the child. By the middle of the second year it comes across words suited to its needs, as /\text{lo}/, /\text{de}d\ddot{a}/, /\text{de}k^h\text{lo}/, /k^h\text{a}:\text{lo}/, /\text{a}:\text{o}/ and the like. /\text{lo}/ is a very common suffix along with [\text{-ja:}] and [\text{-i:}]. Suffix with [\text{-e}] is not very common as it
stabilizes after /o/. So verbs like /cōle/, /cōle/ or /cōlē/ are acquired along with the stabilization of /e/.

As the child is an egocentric entity at this stage it thinks of other objects, persons and their action in relation to itself. So the verbs used are mostly singular. As soon as the child understands the relation it bears with others, and the multiplicity of things around it, it begins using plural forms.

At the age of two-and-a-half the child has a great many verbs with class maintaining suffixes, as for examples:


In the above cases the root verbs may or may not be present in the child’s idiolect. The stem of the verbs are common. The child picks up the verb forms as used by the adults. As in the verb forms /kudō/- /kuḍel/, or in others, the child is not found to have used the root /kuḍ/, /cōl/, /naco/ or /ro/ in it speech. That is, the child directly switches over to the derivational verbs. When it uses verbs + /rō:ha:/ - /rō:hi:/ - /rōhe/ then the roots are acquired.

c) Class Maintaining Derivations in Nouns, Pronouns and Adjectives

By the end of the first year of age the child starts acquiring nouns, single uninflected nouns and a few pronouns as noted by T.L. Varma. However their number and variety is too little for analysis. In the second year the child starts understanding the terms used to denote relations as /ma:na:/ - /ma:ni:/, /ma:ma:/ - /ma:mi:/. The terms denoting animals and eatables also become common.

In terms used for animals the two ending [a:] and [-i:] of both the masculine and the feminine genders respectively, are used as in /kutta:/, /bili:/, /goda:/, /murgi:/ These endings undergo morphological alternations, which have been discussed in various sections.

In case of pronouns /hum/, /hōm/, /men/ are common and their respective derivations come up as the child progresses in its conversation. Pronouns in genitive case; /mera:/ - /mere/ - /meri:/ or /hōma:ra:/ - /hōma:re:/ - /hōma:ri:/ are realized by the middle of the third year. Then accusative case /μf h ɛ/ or /hōmɛ/ comes up. In dative case only /μf h ɛ/ or /hōmɛ/ are realized. /μf h ɛk/, /merelīje/ or /hōmkə/, /hōma:relīje/ are rarely used. In the dative case, in the latter ones, the child’s articulation is very slow as it is always accompanied with
melody. Locative case is absent in the third year but comes up in the beginning or by the middle of the fourth year.

The child begins with its egocentric personal pronoun roots /mē/ or /hōm/ and slowly acquires their derivations. But for possession it uses its name, as /ðnu ki ple:t/. The possessive-postpositions /ka:/ - /ki:/ develop very fast. Only simple forms of pronouns and their derivations are acquired at the end of the third year, as post-positions are yet to be realized correctly.

The /e/ ending shows its influence in the acquisitions of demonstratives /fe/- /fe/ which are present in the beginning of the third year. /vo/ is common in the middle instead of /vēh/. In case of indefinite /koi/ is common in the middle of the third year. /kisi/ comes up at the end of the third year. Post-positions are also applied with /koi/ (/koi/ is common as /s/ is not realized even at the end of the third year). Many errors come up while post-positions are used, cf. /kisi ne/ - [koi ne], /kisi:ka:/ - [koi ka:], /kisi: ko/ - [koi ko]. /ko/ in colloquial use can help the child in acquiring other pronouns. Here the [-i:] and [-i] and post-positions become frequent. By the end of the third year the indefinites becomes more common. /kuc/ also increases in frequency. Reflexive /ap/ has to be forced on the child. The child avoids /ap/ as it has /tm/, a more common pronoun. /ap/ and its derivations cannot be said to be stabilized at the end of the third year. However family atmosphere plays a significant role in acquisition of personal and reflexive pronouns. /tv/, /tm/, /ap/ depend on their usage in the family. Likewise their other forms come up in the child’s corpus.

The bound morphemes that help in deriving the other forms of pronouns are acquired as soon as the child gets more practice by using them frequently. Secondly, the suffixes are made up of those vowel phonemes which are quite stable in the third year.

As for the adjectives, they occur in their raw forms in the middle of the third year. The most common are /gōndə/ - /gōndi:/, /ācəbə/ - /ācəb:/, /ka:la/ - /ka:li:/, /bəja: gōndi/ he]. With the masculine forms of the nouns the feminine forms of the adjectives are more readily used, than vice-versa. Corrections made by others help the child. By the end of the third year the child is capable enough to use adjectives correctly. As soon as the child learns the colour names the frequency of adjectives increases in its speech.
In case of number, the plural genders are also used as they go with the pronoun /bun/; as in /bun gênde/, /bun ãcchê/. The singular forms are used with the nouns, as in /bittu: ãcchê he/. Sometimes the plural forms are also used, as in /bittu: pja:re hê/ or /bittu: gênde hê/. But these are more respectful instances. Usually the child repeats the adjectives in a sentence for emphasis, as in the song. /ka:li: re ka:li re tu: nó ka:li: ka:li: he/, or as in /subi: pja:ri: pja:ri: he/.  

In the fourth year the child is fully equipped with the common adjectives used in the family.

3.4 Morphological Processes

In this section more emphasis is laid on the acquisition of genders, adverbs and adjectives (endings).

By the beginning of the third year the child starts getting an insight into the genders of nouns and pronouns, particularly if it has brothers and sisters around. It is difficult to explain to the child, the gender differences in animals, like dog, cat, bitch etc. because of their morphological similarities. The child gets into a habit of imitating adults’ speech while communicating with them. The grown ups start differentiating terms into male and female for the child, as /lêdkà:/ - /lêdkì:/, /gûdda:/ - /gûddì:/, /bêta:/ - /bêti:jà:/, /ca:ca:/ - /ca:ci:/, /hà:w/ - /hà:ci:/, /nà:nà:/ - /nà:ni:/ and others become common. The child differentiates on the basis of external features and the dresses (so far as Indian men and women are concerned).

Along with these terms the child learns specific verbs as [bʰõjja: a:je], [di:di: a:i:]. The difference between nasalized and non-nasalized endings is not maintained, but both forms exist. Whenever the child is unable to differentiate the sex it is exposed to both endings and may use either of the two. Here corrections are induced by the adults immediately or picked up by the chid, at a still mature stage, by constantly hearing the forms used by the adults. With inanimate objects the endings may differ from one context to another, as [pʰu:l kʰìli:] or [pʰu:l kʰìla:]. [pà:ni: girgõ:] - [pà:ni: girgõ:ja:]. In the latter case a reason for the change may be that while maintaining the correct gender ending till the end of the sentence, the child gets linguistically-exhausted and binds the sentence with a short monosyllable. /gõ:jà:/, instead of a long syllabled morpheme /gõ:jà:/.
3.5 Allomorphs

According to L.N. Pandey:

... in Hindi also, there are nine allomorphs of the same morpheme. It is often seen that many morphemes appear to be separate but they resemble in lexicon, they don't have mutual contradiction and their application and position in sentence is fixed and they are not applied more than once in the same situation, or they are in complementary distribution. These are known as allomorphs of the same morpheme.  

The child is very flexible in its speech from the onset of one word sentence. Each time it produces a word it has a different sound. As the stabilization of phonemes progresses the words produced also undergo a change. For example, [məm] ↔ [məmmə] ↔ [məmməm] ↔ [məmmni:] ↔ [ma:mmi:] ↔ [məmi:] ↔ [ma:]. G. P. Srivastava has noted that it is sometimes very difficult to give model forms of the child’s utterances, because its ‘new creations’ are sometimes based upon quite unknown factors though they are identical with model forms in meaning. The onomatopoeic morphemes are the main target of the child’s creativity; [mə:mmu]-[mə:mmu]-[mə:mmu].

In the beginning of the third year the allophones of nursery-form show a decline as the audible structure of the words become familiar to the child and it makes corrections.

Allopomorphs of verbs are more common because in Hindi the verbs undergo changes with tense, gender and number. However, as the plurals of nouns are not common even in the third year, the verbs are also singular. The sentence [ve cəle gəje] can be used for any single adult person, or to a group. While communicating with others whenever the child is devoid of words it creates a new form of the word which can fill the gap, cf. /tum həma:re səŋg gen] k'elo]-[tum həma:le səŋge en] kelo], /həm k'a:na: k'ə:le/- [həm k'ə:a:jə]. In an instance two-forms for /fa:/ exist in the child’s corpus - /fa:jə/, /cə:le/. It may produce the sentence /həm fa:jə/ or /həm cə:le/ as [həm ca:jə].

The dropping or substitutions of the initial consonants, in the early stage, results in allomorphs of nearly all roots, stems or morphemes; some of them are stated below: /roti:/ - [oti:], /k'ə:na:/ - [a:na:], /p'bu:l/- [bu:l], /subi:/ - [subi:], /kərop/- [gəp], /ləg/- [gəg], /mom/- [om] in [mombətti:]. These allomorphs are resolved as soon as the child acquires the missing phonemes or learns the correct words.
When the child begins with long sentences it tries to retain the whole sentence. In doing so it produces the initial parts correctly but the latter parts are mostly its own formation. G.P. Srivastava has also noted that his child produced 4 to 5 word-sentences by attaining the age of 23 months, although not all such sentences were fully correct in pronunciation. If such sentences are at the same time presented by the parents, the child produces the correct form after 2-3 trials. Imitation and practice help the child in eliminating the irrelevant allomorphs, if the correct forms are within its capacity.

Plural forms are as a rule not adopted by parents when talking to the child. They may be used for animals but only [-e] or [-ě] is found to be very common, as in /kutte/, /ta:re/, /kita:bě/. Nasalization of [-e] is frequently heard. In the feminine words the nasalization of the last phoneme of the coda forms the plural for the child, cf. /lōdkijā/- /lādkā/, /cītijā/- /cītā/, /purijā/- /purā/. In the above process nasalization in the plural allomorph may be generalized to all the vowels of the word, as /cītā/, /pūrā/.

A more common word /ṛēha:/ or /ṛēhel/ undergoes change even in the adults’ speech. The [-he] becomes [-je] with the preceding /a/ of very short length, as /ṛēhel/ - [roje]. [-e] or /a/ is common in verbs coming with /hām/ or /me/ respectively, whichever is common in the family; /hām cōle/, /hām roje/ or /me cōla/, /me roja/. The variations of length of [-e] and /a/ create their allomorphs.

The gender of the child also influences the morphemes of the language it uses. The feminine endings become common if the child is female, but only if it uses the pronoun /me/ - [me roi:]/, [čhλ pōdi:]. [-u] and [-e] are also acquired by it with words indicating future tense, as /hā:u/, /hā:aje/.

Allomorphs of more standard form in Hindi, like [-ja:] in /nōdijā/, [-ō] in /lōdkō/, [-jō] in /kōvijō/ and the others, are not acquired in the third year. Such allomorphs get stabilized in the school.

3.6 Compound Words and Assimilation

In the very early stages when the child has meaningful nursery forms, it has words in which initial morpheme (or syllable) is repeated; as in /bōmbōm/, /mōmō/, /pa:pa:/, /b′u:bu/, and the like. The compound words used by adults are absent from the child’s corpus. A little later as the phonemes are acquired, it has onomatopoeic morphemes or their allomorphs; /dā:da/, /h′ōkt′ōk/, /hōktōk/, /gupcup/, /a:al/. Even in the early stage, i.e. 10-15
months, the child has examples at its disposal for assimilation, as, /dɔmɔːm/ - [ɔmmɔːm], /bɔmbɔːm/ - [bɔmmɔːm], /bɔbɔːm/ - [bɔbɔːm].

Simplification of two identical or similar consonants accounts for the principle of economy in articulation. This process plays a major role in onomatopoeic and compound words, and also in words where reduplicated second syllables lose the onset phoneme, as in /lɔntɔn/-tɔnnɔn/-[tɔnɔn], /tʰɔktʰɔk/ - [tʰɔkɔk], /nɔthɔɾ/- [nɔthɔɾ].

At the beginning of the third year the child starts creating compound morphemes as [bʰu:bʰu: kʊtːa:], [pʰi:pʰi: ga:d:i:], [cʰuk cʰuk ga:d:i:], [tʰəndi: tʰəndi: bɔrdʰ]. More standard forms used by adults are few, as [dɐ:l bʰaː,tʰ], [sɔbfj:i: rotiː], [pen pensil], [dʰu:dʰ rotiː], [tʰel kɔŋ bʰaː], [gji:j a:a], [slet-pensil], [tʰəbəɾ pensil], [cɔppəl fuːtiː].

Imitation and trial-and-error operation help the child to reproduce the words. The production of compound forms grows as the free-morphemes are acquired in larger number. A few examples are [ɡəndiː: mɔmmiː:], [accʰ: bʰojaː:], [cʰota: kʊtːaː]. The creativity of the child plays a leading role in the formation of compound morphemes.

The forms which once appear in an adult-like manner may undergo a change in the child’s speech, cf. [sɔbfj:i:-rotiː] - [rotiː -sɔbfj:iː], [gendʰ-bəlːaː] - [boːl - gendʰ]. As the child is also acquiring English language, its morphemes may combine with those of Hindi, as in [boːl-gendʰ]. Here both the forms indicate the same object. It is for emphasis that such forms are usually acquired.

Besides, lack of post-positions in the child’s corpus results in proximity of words which appear as compound forms, as [kriket kʰɔ bəlːaː] - [kriket-kʰəlːaː], and here distant assimilation is noted, as [kiket-bəlːaː]. In [tebil pʰɔ kɨtːaː:b] → [tebil kɨtːaː:b] also is influenced by assimilation, as [tebil kɪbaːtʰ], [rotiː: pʰɔɾ gʰiː] becomes [gʰiː: rotiː] and sometimes [gʰiː: gotiː].

The reason for the occurrence of such forms can be explained as

(i) The absence of post-positions in its corpus.

(ii) Child’s inability to reproduce the post-positions in a sentence.

(iii) Its inability to retain the whole sentence grammatically intact, so it drops the smaller forms.

(iv) Its eagerness to produce the whole sentence with the tempo of the adults, and in doing so it slips the post-positions and the tongue lacks the glide to
articulate the next consonant, thus it repeats the one it finds suitable and produces the whole sentence along with the compound words.

As the child starts recognizing the relationships among the family members and itself, and also with the outsiders, the frequency of compound-morphemes increases. But for assimilation, the child produces these words in melody or sing-song way which leaves little space for assimilation. If a consonant is missing from its repertoire, then distant assimilation can help it. Some of the compound morphemes adopted by adults for conversing with the child are [bittu: bʰɔɪaː:], [ɔnu bitijəː], /miːni: raːni/ → [miːni: naːniː]; /dʃʃu: caːcaː/ → [dʃʃu: caːʃaː:]. These forms are readily used by the child. The family atmosphere and words used around the child greatly influence the child’s vocabulary.

Compound morphemes of more standard form, viz., [maːtʰaː piːtaː:], [ɾesoiː ɡʱɹtʰ], [snaːŋʰɹtʰ], [ɾnɾ naːriː] appear at a more mature stage or in the school. The other general forms as [caːnd tʰaːre], [surɡʃ caːndəː:], [kɛp pleːtʃ] may occur at one or the other time by the end of the third year.

Adjectives and adverbs also become common but many of them are not correctly defined in the idiolect. It gets confused in colours, in using /upɔɾ/:/~nice/, /kʰɔtːlaː/, /bɔdaː/, /aːɡeː/~pieʰ/ and the like. The most correctly used pair of adjectives is /accʰaː/-/ɡɔndəː/ or /buraː/-/kʰʊːb/ instead of /bʊhutʰ/ is the adverb used frequently. In the duration of 4 to 5 years of age most of the adjectives and adverbs get stabilized along with their specific ending in specific contexts. Its tendency to create nonsense forms or childish forms decline with increase in vocabulary. Communication with adults helps it in stabilizing various forms acceptable in adults’ speech.

In case the child substitutes a phoneme, then the same may occur in place of other phonemes in the word, as in /sɔbʃiː rotiː/ → [tɔbʃiː toːtiː]. /slet pensil/ → [tʃlet penʃil] cannot be a case of assimilation. Thus assimilation may occur in the early stage in compound words, but it is difficult to point it out as the child lacks a few phonemes even in the third year.

3.7 Morphophonemics

i) Modification
a) Modification due to Vowel-Change.

Vowel change can take place in any and all positions of the words of the child. Since the child is just in the beginning of acquisition stage, its early period of speech development has many cases of vowel change.

The child begins with vowels and consonants in their roughest forms. The earliest modifications are in length of the vowels within the word which usually do not bring about a change in the meaning of the words, as in, [mɒmmɒm]-[mɒmmɒd] - [mɒmma:]. When the child realizes the proper word then the allophones of /i/ occur; [mɒmmini] - [mɒmmini:] - [mɒmmini:-], [pɒpa:] - [pa:pa:].

The changes in length of all vowels get stabilized and such a stage occurs at around the middle of the third year when the child has most of the phonemes in its idiolect. These restrict the unusual lengthening of the vowels in the words. But such changes can be heard in later life also because of the individual idiolects.

The quality of vowels also gets modified in the early stage. As new words enter the idiolect of the child, they show their emergence in words and some of them try to replace the others, as /i/ replaces /i:/ in /mɒmmɒd/. /pɪpɪ/ ~ /pupu/ ~ /pepe/ also provide an example, where front close /i/ changes to back close /u/ or front mid /e/. The short forms can get long or vice-versa.

With the vocabulary spurt in the middle of the second year new words enter the idiolect in abundance and the child finds difficulty in supplying the correct vowel in its most correct form in the words and thus all types of vowel forms / allophones appear, as [biskur] - [biskɪ], [bulbul] - [bɔlbul], /fɛfɛ/ - [fefe], /oːr/ - [ɔur] - [or], [belo] - [beːlo].

The creativity of the child has no bounds and it can play with the vowel in length and manner of articulation until the forms stabilize according to its L1.

The vowels in the final position show many changes as the ending in Hindi words/vocabulary are inflexional:

/kɑːka:/ - [kaːki:], /pɔŋkʰa:/ - [p ɔŋkʰi:]  
/paːpa:/, /baːba:/, /mɒmmi:/ stabilize /aː/, /iː/ and their allophones in the words earlier to other vowels. Nasalized and non-nasalized varieties of /u/ or /u:/ also stabilize in the cry of the child. (Other such vowel changes have been discussed in the previous sections).
Partial modification occurs when the vowel changes vary within nearly the same vocalic region, as from /a/ to /e/ - /lɔdkə/ - /lɔdkə/. Total modification cannot be taken into account because the child acquires the words as units whether it is /cədə/ or /gədə/.

b) Modification Involving Consonantal Changes:

Modification at the consonantal level cannot be labelled at the earliest stage of speech development as the child has very limited number of consonants, /p/, /b/ and /m/. With the entry of consonants into the idiolect the changes become intense.

The child begins with bilabial stops and they compensate for other consonants absent from its repertoire. The various features of the consonants also lead to modifications. The unaspirated voiced stops /b/, /p/ compensate for aspirated voiced stops /pʰ/, /bʰ/ respectively, cf. bʰu:bʰu: / - [bu:bu:], pʰu:l/ - [pu:l]. The child with its development goes on using the allophones nearest to the aspirated forms. As soon as the stabilization of the phonemes takes place the true phonemes occupy their real position in the words.

/ʃ/ /dʒ/ /dr/ /tʃ/ /dʒ/ /dr/ /tʃ/ /b/ /d/ /dr/ /tʃ/ /b/ /d/ /dr/ /tʃ/. A few examples are : /hɔtʃi:/ - [hɔtʃi:], /dɔgɔdɔg/ - [dɔgɔdɔg], /hɔkʃɔkʃ/ - [hɔkʃɔkʃ].

In case of /ʃ/, /dʒ/, /dr/, /tʃ/, they replace in the same sequence until the required form of the word is acquired, as [tʃɔndi:] - [tʃɔndi:] or [tʃɔndi:]. The modification is progressive, i.e., the consonant change from the earliest phonemes acquired by the child to the required phoneme and then the process somewhat stops, it does not turn backward. Once the child acquires the correct phonemes in a word it drops the incorrect form, exceptions may be present.

The feature of voice is acquired slowly by the child. It uses devoiced consonants and also partially devoiced phonemes, for example /d/ is devoiced earlier and it sounds like an allophone of /ʃ/. Allophones of /c/ once acquired compensate for voiced /f/, as in /aːf/ - [aːʃ].

Modification among the members of a particular group as in the group of stops or in affricates is common. But instances are in abundance to illustrate modification among the members of one group to those of the other groups. For instance allophones of voiceless unaspirated dental stop /t/ compensate for the voiceless palato-alveolar affricates,
both unaspirated and aspirated, /c/ and /cʰ/ respectively, as in /naːc/-/naːʧ/, /cʰaː/ - [ɔtaː],
/cʰaː升起/-[tʰaː升起]. When the aspirated /hʰ/ gets stabilized it replaces /tʰ/ in the above cases, it even
replaces the second correct /tʰ/; /cʰaː升起/-[tʰaː升起]. Repetitions guided by adults are non-
effective. The child retains the forms even in the middle of the third year. In many idiolects it is
noted even in the middle of the third year.

Similar is the case with the fricatives /s/ and /ʃ/. The concerned stops
compensate for the fricatives. When affricates are acquired they replace the stops. Following
stops illustrate the fact:

/sʰb/- [ʃb] - (allophones of /c/ in [cːb]) - [cʰb].

Initially the fricatives can be dropped when they occur in clusters, as in /skuː/-
[ʃkuː], /stuː/- [tʰuː]. Even at the end of the third year most children find difficulty in
producing the clusters /sk/, /st/ and the like, initially.

The use of /l/ in place or /ɾ/ is a very common example which occurs at one
stage or another in almost all idiolects. In some cases it is intense and is observed even in the
fourth year. /ɾ/ at all positions is replaced by /l/. Gradually /ɾ/ and its allophones appear and
replace /ɾ/ first in initial position followed by medial and final position.

The child is a master of modification. The changes that occur in its idiolect are
audible to adults only when special attention is paid to its speech. Adults usually ignore its
speech and so cases of error-correction and practice given to the child are rare. At the surface
the speech appears as normal to the adults’ ear, but at bottom many changes take place within
the same word.

(ii) Reduplication

Reduplication is also common in the child’s acquisition of speech just like
modification. At the onset of L1 it has only similar reduplication, example /nənumənumə/-
/bəbəbbəbə/ - /bubbubbu/.

With the beginning of vocabulary spurt reduplication, both partial and total, at
similar and contrastive levels is possible. It is possible to differentiate reduplication when the
child has acquired a well defined corpus by the age of two-and-a-half.
a) Partial-Similar Reduplication:

Partial reduplication are common when the child begins with two or more word-sentences. It is the stage of learning a particular phonemic and morphological pattern at the same time, in a sentence that differentiates it from other sentences. The child tries to maintain both the patterns, as it hears in adults' productions, at its level best. In this process most of the words are repeated as the child hangs up while searching for the most correct form of the patterns at its disposal. For example, in the sentence [muʃe ʝendo de do] - [muʃe ʝendo de do ~ do do]. The audible impression of /muʃe/ and /do/ may be similar, but the acoustic expression may include the allophones of nearly all phonemes. Thus in place of total repetitions partial repetitions are produced.

By the middle of the third year the child has following words with initial similar repetitions: [murgi: -murgi:], [gudda: guddi:], [aːdə eː aːdə eː], [quala: caː - quala: caːciː:], [aːo - aːfəaːo].

Reduplication in the other positions is noted in words, [rotiː - motiː], [gupcupt], [dɔgmɔɡ], [cɔkmɔk], [cunmun], [gũ:umne-pĩrime]. Melody plays a major role in reduplication of adjectives and adverbs; as /pjaːrɪiː / - [pjaːliː : pjaːliː:]/, /gɔrɔm gɔrɔm/ → [gɛlɔm - ɬɛlɔm].

Partial reduplications are also the result of dropping or missing a phoneme. This is common in adults too.

b) Total Similar Reduplication

Total reduplication exceeds in number from the beginning of the onomatopoeic words and other terms used for the adults, as in /cuːcuː/, /baːwːbaːwː/, /bɔbːuːbɔbːuː/.

This process does not stop here but goes on in the second and the third year where the child starts playing with words, as :


In the middle of the third year the child begins with multi-word sentences, it has a tendency to imitate and then repeat the same sentence again. It is a self-induced process. In the same sentence the child can reduplicate more than one word (usually monosyllabic). However, while doing so the child takes more time to complete the sentence. It emphasises the
redduplicated items and stresses nearly all the words of the sentences, for example [muʃe bɔde bɔde ɗo ɗo lɔddu: ɗo], [hɔm tʰɔndi: tʰɔndi: a:iskri:m bittu sɔŋ sɔŋ kʰajenge], [hɔmɛ hɔmɛ].

As the child gets busy with more polysyllabic words and complicated sentences the total reduplication decreases. In the fourth year such examples are less in number.

c) Contrastive Reduplication

Contrastive reduplication is noted in terms denoting the eatables as /ɗa:l bɔ:ɔ:/, /sɔbʃi: roti:/, [caj biskut], [dɔwɔ: roti:], [sɔkkɔt roti:], [ɡa:1 cairɔl], [goli: biskut], [puri sɔbʃi:], [pʰɔl pʰu:l], and others as [slet pensil], [jel kɔŋɔ:], [kita:b pensil], [bindi: paudɔ:], [li:pa: pojɔ:], [ni:ce u:pojɔ:], [sɔb kucʰ], [ɗo car]:, [tʰa: panɔ], [na:co gα:o]. More contrastive reduplicated pairs await the child in later stages.

L. N. Pandey says,
Reduplication creates a greater impression in our mind to grasp the real sentiment or feeling than any other genitive elemental morpheme. That’s why, reduplication is somewhat more popular in Hindi language than any other language.  

(iii) HaploLOGY

The process of haplology is also common in the early speech of the child. As the child tries to imitate the adults’ production and also endeavours to retain all the syllables by utilizing the various articulatory patterns; as varying the length of the vowels or by replacing the missing ones with suitable phonemes, still the child has the easiest way of dropping the phonemes. In case of vowels (more than one) in clusters especially at the onset, whether diphthongal or hiatic, seem to pose a difficulty in production in the early stages. The child simplifies them, as bʰaːu bʰaːu → [bʰɔu bʰɔu], /jɔː: aːo/ → [jɔːhɑːo] or [jɔːhɑːo], /fʰuːlaː aːo fʰuːlaː, /dɔːgɔːg → [dɔːgɔːg] → [dɔːgɔːg], /paːpɔː pɔːpɔːdiː/ → [paːpɔːdiː], bʰiːɾ røkʰ doː → [bʰiː: tɑːrøkʰ doː], /aːlu: ubaːlo/ → [aːlu: obaːlo] ↔ [aːlu: olaː], /maː aːo/ → [maːo], /biskut tʊt gɔːjaː/ → [biskut ut gɔːjaː], /gɛnd doː/ → [gɛnddoː], /tʊm mɔːmmi: koː doː/ → [tʊm ɔːmmi: koː doː].

The child endeavours to give impression of a complete sentence, while doing so it produces it slowly. But some phonemes are still dropped. Even by the third year the child’s speech illustrates the process of haplology working. Whenever two words, such that the final phoneme of the first word and the initial phoneme of the following words are same or nearly similar, come close by, one of the phonemes is lost.
Imitation and self-induced error-correction operate in the third year. The child tries to produce the most accurate form of the phoneme, word and the sentence. Repetitions help it in checking the mistakes.

(iv) Alternations

Both Automatic and Non-Automatic types of alternation are noted in the child’s corpus. But these can be judged correctly when almost true form of words are produced, i.e. at the beginning of the third year. Earlier to this stage changes undergo at a tremendous speed and to apply morphophonemic rules is a folly.

As a rule in Hindi whenever two vowels occur at adjacent proximity, either a consonant comes between the two or both get fused into a single long vowel. Such cases can be delineated in words /haːu/ + /aː/ → /hɔːuːaː/→ /hɔːuːaː/. But the above rule does not work here because the child’s ability to retain more than one vowel together does not go against by the rule of grammar of its L1. At 27-30 month it has following words in its corpus.

/[puːaː] ~ /puːaː/, /bʱɔːiːaː/ ~ /lɔːiː/. In the first two examples the first vowel is reduced in length, but all the three vowels are retained. In /puːaː/ both the vowels are retained but variations in the length can be observed, as [puːaː]→[puːːaː]→[puːːaː:]. Overemphasis and underemphasis lead to such reproduction.

In more frequently used word /bʱaːiː + aː/ ~ [bʱɔːiːaː], the child does not use /j/, rather it retains all the three vowels by varying their lengths.

At a more mature stage, when the child begins using more standard forms of Hindi, /u/ may occur before the final vowel when it gets stabilized. The length of the preceding vowel, if long, reduces in length, as in :

/haːu/+ /aː/ → [hɔːuːaː] ~ [hɔːvɑː]
/puːaː/ → [puːaː] ~ [puːaː]

In [bʱɔːiːaː] it inserts an /j/, i.e. /bʱɔːjaː/, in the middle of the third year because /j/ gets stable at that stage.

In an another rule aspirated consonants usually do not occur before plosives and if they occur, the aspirated consonant gets transferred into an unaspirated one. Such cases are very rare in the child’s corpus. In [dekʰ + tʰː], the child produces [dektʰaː] when /kʰ/ is not stabilized. When /kʰ/ gets stabilized it produces a well aspirated /kʰː/; [dektʰaːː]. However [dektʰaːː] is also used side by side.
Two exceptions are /mitʰu:/ and /mʊkkʰiː/, where the unaspirated retroflex stop /ɾ/ and velar /k/ get aspirated and the child has [mitʰuː] and [mʊkkʰiː].

Thus the creativity of the child cannot be questioned at the initial stages.

Regular alternations are noted in case of gender suffixes of nouns, as /maːma/ - /maːmiː/, /daːdaː/ - /daːdiː/. However, in case of terms used for animals irregularities are seen. The child has /kuttaː/ - /billiː/ - /mʊcʰliː/ - /gʰodaː/. It has two options to change the endings:

/kuttaː/- [kuṭṭiː] or [kuṭṭjaː]
/billiː/- [billaː] or [bilotaː]
/mʊcʰliː/- [mʊcʰlaː]

In the first stage the child uses these words without gender difference. In later stages it makes changes, [kuṭṭiː] may be used as an abuse and the child has all possibilities to pick it up, as it already has nouns with [-iː]. It can pick up [kuṭṭjaː], if it comes in frequent contact with the word. In case of /billiː/ and /mʊcʰliː/ the child rarely comes across situations where it has to use the masculine forms. /bilotaː/ is acquired at a very mature stage. /mʊcʰliː/ may have a masculine form [mʊcʰlaː] if playfully used while teaching the child.

Irregular alternations are noted in the middle of the third year, as in /haːfa/- /raːniː/- /betaː/- /bitijaː/, and in the words used by adults while speaking to the child, like [bittu betaː] - [ānu bitijaː]. But /ānu betiː/ is also noted. /kuttaː/- /kuṭṭjaː/ appear by the end of the third year.

(v) Metathesis

In early vocalizations the child has many cases where the phonemes or neighbouring segments interchange their place of occurrence; /boːbə/ - /bəboːbə/, /mʊmʊmmʊmbʊm mʊm/, /nʊnninnin-/ /nʊnʊnninn/.

In the middle of the second year metathesis is noted in words /ɡʊrʊm/- /ɡʊrʊm/ and [ɡʊnʊm ɡʊnʊm] - [ɡʊbən ɡʊbən], /kɪbaːd/- /kɪdəb/, /ɛʰɪkəː/ → /ɛʰɪkəː/. Here the possibilities are that the sound patterns of the words are unstable just like the sounds of a phoneme. The child produces a pattern nearest to the word. At the end of second year cases like /bʊkrə/- [kʊbrə], /lʊdkaː/- [lʊkəː], /cʊmʊk/- [cʊmʊk] occur. In /lʊdkaː/- /d/ is not in its repertoire, it is replaced by /ɾ/ which in turn is replaced by /l/ as in [lʊkəː].
In the third year it comes across complicated words which do not fit in its corpus in their true form on the first contact but with frequent use they acquire their true forms. A few of them are: [pɔɾdaː] - [pɔɾdaː] - [pɔɾdaː], /ta:biʃ/ - [ba:biʃ] - [ta:fiːbi], /səvənaː/- [səvəlaː], /a:lu bukʰ:a:raː/- [a:bulukʰ:a:laː], /ʃəbeliː/- [ʃəbeliː], /maːliː/- [maːliː] (l/ in place of l/), /dɔtʰaiːs/- [a:iθoː], /gupcup/- [cupcup], /cehra/- [celhaː] (l/ in place of r/), /pʰim/- [pʰiml], /hɔliː/- [hɔliː], /dink/- [dink], /mir/- [mir], /dɔmːiː/- [dɔmːiː], /ɛdipɔd/- [pɔdɔ], /b³oːjaː/ gussa: nənːiː/- [b³oːjaː: busuː: nəŋ], /cidiːaː boliː: gupcup/- [cidiːaː goiː: bupcuk].

By the middle of the third year the child encounters a vast array of words and sentence patterns. It appears as if the child tries to get an insight into the sound pattern of words and also of the morpheme-pattern in a sentence. With repetitions it tries to reach the true form. If it fails it drops it. Imitation is a major operation working at this stage. It is observed that the audible impression of the adults' production is correctly perceived and memorized by it, but the failure is at the level of articulation. It is quite possible, as the child is only at a preliminary developmental stage, that the articulation for a particular sound pattern is possible for the organs, but not for others, and so the forms which are possible are produced by it.

Metathesis is also operational in the first half of the fourth year, though it is not noticed by the family members. It is not in words but in sentences that the child reverses the sequences. Gradually the sentence formation and polysyllabic words get stabilized in its repertoire along with the complex clusters, reverses become less frequent.

(vi) Assimilation

With the appearance of consonantal clusters, all kinds of assimilation typical for Hindi are noted in the child's speech. In the early stages, the child has examples of progressive assimilation at its disposal, as /dɔmːiː/- [dɔmmːiː], /bɔmbɔm/- [bɔmmːbɔm], /ba:bn/- [bɔbɔb]. In the second year consonants increase in number along with the frequency of words. Almost all consonantal clusters undergo assimilation because of the unstable realization of either phonemes. Assimilation of aspiration, unaspiration, voice and voiceless feature is common. For example, the unaspirated phonemes influence the adjacent consonant and makes it a copy of itself, as /dɔcʰaː/- [dɔː] → [dɔcʰaː] → [dɔcʰaː], /kɔlo/- [kɔllo], [tɔntɔn] - [tɔntɔn].
With the acquisition of more phonemes the irrelevant assimilations decrease, but those for the affricates, fricatives and nasals persist even in the middle of the third year. The problems with the stops are resolved first. Certain examples of assimilation noted in the speech of the child, at this stage are:

Regressive assimilation, as in

/gudgudi:/ - [guggudi:], /bɔcʰa:/ - [bɔcʰa:], /nɔʔkʰə/ - [nɔʔkʰə], /murgi:/ - [muggi:], /sɔʔtima:n/ - [sɔʔtima:n],

Assimilation of nasality, as in /cəkmə:k/ - [cəmmə:k], /kəmkəm/ - [kəmməm].

G.P. Srivastava noted /ni:d/ - [nəndi:] in 22nd month and /sa:bun/ - [məmmun] in 24th months.8

Assimilation of fricativity, as in /kərə:/ - [kussi:]

Assimilation of aspiration, as in /mittʰu:/ - [mitʰu:]

Assimilation of consonantal quality: /ka:ka:/ - [kɔkka:]

Assimilation of devoicing: /muŋgpʰəli:/ - [mupʰəli:] ~ [mûmpʰəli:]

In accordance with standard usage, the regressive type of assimilation is adopted as a rule, while the progressive type is restricted to a few terms, which nevertheless, have their correlates in standard or dialect pronunciation.

In sandhi assimilation the voiced initial consonant induces aspiration in the final voiceless consonant of the preceding word, as in /dəbhi:/ - [dəbʰi:], /kərlo:/ - [kəllo], /ekhi:/ - [egi:]

In accordance with Hindi, the operation of the progressive voice assimilation concerning the vibrant /r/ is evident in the child even in the period when the trilled articulation is not mastered and /r/ is for this reason replaced by a substitute. In all instances the substitute is /l/.

The neutralization of the feature of voice, which is considered a certain type of voice assimilation, is used by the child consistently and correctly in accordance with standard pronunciation.

As for the point of articulation, the operation of this kind of assimilation is seen when velar allophones of /n/ or velar nasal /n/ appear in the child simultaneously with the stabilization of the velar consonant /k/, /g/, /kʰ/ and /gʰ/, as in [uŋkə], [pɔŋkʰa:], [nɔŋga:], [lʊŋi:], [kɔŋkɔd]. In those items which have entered into vocabulary after the stabilization of
/k/ and /g/, only the correct form with the velar allophones exist. The assimilatory process concerning the points of articulation, however, affects other consonants as well.

Simplification of two identical or similar consonants accounts for the principle of economy in articulation. This process plays a major role in onomatopoeic words and also in words where reduplicated second syllable loses the onset phoneme, as in /tɔntɔn/- [tɔnɔn] - [tɔntɔn], /tʰɔktʰɔk/- [tʰɔkɔk], /hɔrɔhrɔ/- [hɔrɔhrɔ], /bɔmbɔm/- [bɔmbɔm].

As the child faces the floods of words and ideas, it slips the onset of the second syllable in many repetitive words, and may or may not replace a suitable phoneme to fill the gap, cf. /mija:umija:w/- [miu:ja:u:], /bʰa:ubʰa:u/- [bʰa:ua:u], /pʰus:us/- [pʰusus].

Besides, there are also instances where one of the two non-similar consonants are dropped, examples, /pʰile/- [pe:le], /bɔdlo/- [bədo], /kɔhəni:/ - [kəni:].

The simplification of consonants, typical in these stages is reflected in this phenomenon. Sometimes, the simplified and non-simplified forms exist parallel to each other: /bʰagva:n/- [bʰənva:n].

Distance assimilation results when the child substitutes a consonant it already has in its repertoire, by another phoneme cf. /bɒfa:o/- [mɒfa:o], /dɔmdɔm/- [mɒm ɒm], /pʰata: gobʰi:/ - [bɔtta: gobʰi:], /pʰu:l gobʰi:/ - [gu:l gobʰi:], /kɔbutɔ: - [kɔbutɔ:], /udʰɔm/- [udɔm].

Distance assimilation of non-contiguous phonemes of some word does not provide many examples. Only a few of them are : /nɒtkʰɔv/- [kʰɔtkʰɔv], /nɒmki:n/- [nɒmki:n].

Since the child has immature muscles and non-standardized language memory, it is free to have all sorts of sound patterns. It gets its input from the surrounding atmosphere which is full of varieties of sounds, and almost all of them trying to hold its shifting attention. As a result the child is unable to concentrate on a particular sound pattern. And finally whatever it receives it adjusts according to its moods, and produces it as per the ability of its speech organs.
References


4. Ibid., p. 69.

5. Ibid., p. 107.


7. L. N. Pandey, ibid., p. 106.