Linguistic Analyses: Implications for Language Teaching

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Introduction

This paper shows implications of linguistic analyses for teaching of language. In addition, it explores how understanding of language acquisition (a subconscious process) helps learning a language where learning is very much a conscious process and involves formal instructions. The acquisition of a knowledge system and the acquisition of language are related to each other in a significant way in the sense that language is a significant tool for acquiring any kind of knowledge system. To be aware of the conceptual knowledge of language becomes an important concern of educators seeking to develop minds of the future citizens of society. Faculty of Language is a speciesspecific ability to know, acquire and use language. This ability is biologically grounded in humans only (Chomsky 1986). Every normal human child is hardwired to acquire language. Language grows in the human mind with minimal stimuli. Under this widely accepted notion, linguists have analyzed language. To a great extent, languages of the world have a lot in common, yet they differ significantly from each other. Linguistic theory clearly reveals that the fewer the operations/rules, the better the grammar (Chomsky 1965). Since Panini onwards grammarians have had the notion of simplicity of grammar in terms of fewer operations. To understand the nature and structure of language, we need to look at a whole and then to what lies underneath and not in linear and additive fashion (Agnihotri 2006). The examples in this paper and their analyses show what a child knows about her language. While

doing so, I will relate the implications of such analyses to language teaching. Understanding what a child knows about the structure and use of their language helps us in teaching target languages. This paper has three broad sections dealing with nature and structure of language at the levels of sounds, words, and sentences.

Speech Mechanism and Sounds

This section deals with the mechanism of speech sounds. To understand the sound system of a language, we need to look at the analysis and the mechanism underlying production of sound. In Hindi we find that vowel sounds are represented in terms of their length (short and long) and places of articulation (back, mid, and front) as in (1).

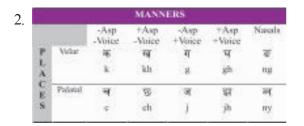
Vowel Sounds



Consonant Sounds

Several places in the oral cavity (vocal tract) serve as places of articulation for consonant sounds. Consonant sounds in Hindi are organized as velar, palatal, retroflex, dental, and labial. Their manners of articulation reveal their distinctive features. Let's take a look at their organization. Consonants in first four vertical columns are oral sounds and consonants in the last vertical column are nasal sounds. Among

the oral sounds, first two columns are non-voiced sounds whereas the last two vertical columns are voiced. They alternate in terms of aspiration as in (2).



Word Formation

Plurals: Number and Gender

Some books describe nouns ending in *aa* as masculine and nouns ending in *ii* as feminine, and the rest as exceptions. Every noun in Hindi must be either masculine or feminine as it has a role in syntax. However, the assignment of gender to a noun in Hindi is arbitrary. The idea of language as a rule governed phenomenon rules out existence of 'exceptions' to a great extent. Now the arbitrary assignment of gender to Hindi nouns and a huge number of exceptions that do not follow the above pattern requires explanation. A careful analysis finds a systematic and rule governed pattern. Let us look at the data in (3) for the underlying pattern.

	Singular		Phrat
Musculine	InRkaa	Shop?	hiRke
	ghar	'house'	ghar
	dhobi	'washer man'	dhobi
Feminine	laRkiii	'girl'	laRkiyaaN
	kamiiz	'shint'	kamitaeN
	maolaa	'necklace'	maalaayeN

Some nouns that end in a vowel sound *aa* turn out to be masculine and others ending in a vowel sound *ii* turn out to be feminine. This is evident from native intuitions. This generalization breaks down with the examples such as *dhobii* (M)

'washer man' and ghar (M) 'house'. We find two types of masculine nouns in Hindi; one that end with a long vowel aa and the others that end in anything else other than the vowel aa. Nouns that end in a long vowel aa change to e in plural forms. Nouns that end in anything else other than aa do not change their forms in plural. Since dhobii 'washer man' and ghar 'house' do not change their forms in plural, they are masculine nouns. Similarly, there are two types of feminine nouns; one that end in *ii* and the other that end in anything other than *ii*. Both have different plural forms. Nouns ending in a vowel sound ii change to iyaaN. Nouns like maalaa (F) 'necklace' changes its form in plural just like the noun kamiiz (F) 'shirt'. Both are feminine nouns and both end in anything else other than the vowel sound ii. This explanation does not yield any exceptions. This knowledge of underlying pattern helps understand language as a rule governed phenomenon and such a knowledge system becomes handy for teaching language; in this case Hindi.

Nasal Harmony

The most regular phonotactic pattern is CVCV. Both vowels and consonants are required for formation of a word. Vowels are more fundamental to word formation as we find plenty of examples across languages where we have words with vowels alone. There is no word across languages consisting of consonant sounds alone. There are a lot of words that have consonant clusters in them at initial, medial, and final positions. All the consonants have an inbuilt vowel 'a' within them. In a cluster, the first consonant loses its inbuilt vowel quality. The following examples in (4) consist of nasal clusters where the first consonant is nasal.

4.	paNkhaa	fan	[प - इ - खा - पंखा पङ्खा]
	paNjaa	'palm"	[प - ज् - जा ⊨ पंजाः पञ्जाः
	aNDm	'egg'	[स - ण् - दा - मंदाः मण्दाः]
	aNdhaa	'blind'	[अ - न् - धा - अधा/अन्धा]
	khaMbhua	'pole'	manam - eint man

In each of the above examples, there is a nasal consonant that forms a cluster with the following consonantal sound. In paNkhaa, what follows the nasal consonant is kh which is a velar sound. In paNjaa, the consonant following a nasal is a palatal sound; in aNDaa the consonant following the nasal is a retroflex sound, in aNdhaa, the consonant following the nasal is a dental sound, and in khaMbhaa, the consonant following the nasal is a labial sound. A close look at these clusters reveals a lot. In these clusters, the nasal quality of the consonant is predictable when analyzed in the light of their places of articulations. Both nasal and oral sounds have same place of articulations; namely velar nasal in paNkhaa, palatal nasal in paNjaa, retroflex nasal in aNDaa, dental nasal in aNdhaa, and labial nasal in khaMbhaa. This phenomenon is nasal harmony. This cross linguistic phenomenon also helps understand the rule governed pattern of language and makes teachers informed in dealing with such issues in the classroom.

Syntax

This section deals with language as a rule governed system at the level of sentences. Examples come from agreement systems, negation, and negative polarity items. There are two major parts of a sentence namely, subject and predicate. Predicate consists of a verb and an object. Universal principles of language reveal that a sentence is not possible without a subject and a verb. At the same time, there must be agreement between the phi features of these two parts.

Agreement

Subjects agree with verbs in languages in terms of some of the phi features. These features vary from language to language. These features usually consist of number, person and gender. Some of these features on the subject NP must match with those on the VP. Languages vary

from one another as per the physical presence of these features on the verb.

 raajuu muuvii dekh rahaa thaa Raju-S-M movie-S-F watch cont-S-M pst-S-M 'Raju (M-S) was (M-S) watching a movie (F-S).'

Number and gender both must show up on the verb in a Hindi sentence as in (5) whereas, only number shows up on the verb in an English sentence. See the English counterpart of (5). In (5) the masculine and singular feature of the subject *Raju* shows up on the verb *dekh rahaa hai* with the same value. This is an example of agreement between the subject and the verb.

Word Order (S-O [IO-DO]-V)

As far as the order of words in a sentence is concerned, subject precedes predicate. However, languages vary according to the position of the object within the predicate. The object precedes the verb within the predicate in Hindi and it follows the verb in English.

siimaa ne raajuu ko kapRe diye
 Sima-S-F ERG Raju-M-S to cloth-P-M give-PERF-M-P
 'Sima gave clothes to Raju.''

In (6) the Subject Noun precedes the predicate. Objects precede the verb within the predicate. With this example we also learn that the indirect object in Hindi precedes the direct object of the verb within the predicate.

Negation and Negative Polarity Items

Negation is yet another fascinating aspect of human language. The analysis of negation helps us understand acquisition and learning along with several interesting aspects of language.

Negation Markers

There are three markers of negation in Hindi; *nahiiN*, *na*, and *mat*. N*ahiiN* and *naa* occur almost in all the contexts as in (7), whereas *mat* occurs only in the imperative sentence as in (8).

There are two types of negation in a language, sentential and constituent negation. Sentential negation usually occurs right before the verb and negates the entire sentence as in (7). Constituent negation on the other hand negates only the constituent that it follows as in (9).

- raajuu aaj [nahiiN/na/*mat aayegaa]
 Raju today NEG come-FUT-M-S
 'Raju will not come today.'
- (tum) [mat/nahiiN/na jaao]
 you NEG go-IMP
 Don't go.'
- ham [moTar saaikal se nahiiN] (kaar se) jaayeNge we motar cycle by NEG car by go-FUT-M-P 'We will go but not by motor cycle.'

Licensing of negative polarity items

Languages have elements such as *ek phuuTii kauRii* 'a red cent', *hargiz/kataii* 'at any cost', and *koii/kisii* 'any' that are warranted only in the presence of a negation marker in a sentence. In the absence of a negation marker, the presence of such items leads to ungrammaticality as in (10a-b). These are negative polarity items.

- 10a. gariiboN ko ek phuuTii kuuri *(nahiiN) milii
 poor-P-OBL to one broken shell NEG get-PERF-F
 'The poor did not get a red cent.'
 - b. raajuu hargiz/kataii *(nahiiN) aayegaa
 Raju at any cost NEG come-M-S-FUT
 'Raju will not come at all/at any cost."

Some negative polarity items are licensed in the absence of a negative marker too. They are licensed in the absence of a negative marker as in (11a) and (12a).

11a. majuu ne kisii ko maaraa? Raju ERG someone to hit-M-S-PERF 'Did Raju hit anyone?"

- 11b. *raajuu hargiz/kataii aayegaa?
 Raju at any cost come-M-S-FUT
 'Will Raju come at all/at any cost?'
- 12a. raajuu kisii ko maar saktaa hai
 Raju someone to hit can-IMPF-M-S PRES-S
 "Raju can hit anyone."
- 12b. *raajuu hargiz/kataii siimaa ko maar saktaa hai
 Raju at any cost Sima to hit can-IMPF-M-S PRES-S

 Raju can hit Sima at all/at any cost.

The grammaticality of (11a) and (12a) show that questions and modals have capability to license negative polarity items. However, note that questions and modals can only license *kisii* 'any' type of negative polarity items and not *hargiz/kataii* 'at any cost' type as the ungrammaticality of (11b) and (12b) demonstrates. These examples show that there are two types of negative polarity items in language. The first type of negative polarity items strictly requires a negative maker for licensing. The second type of negative polarity items can be licensed by questions and modals in the absence of a negative marker (Kumar 2006).

Conclusion

Now what does all this mean to a teacher? First of all, it shows that an explanatorily adequate analysis will have fewer operations. With simpler presentation and adequate explanation learning takes place effectively. Teaching of language without some sort of understanding of acquisition of language, learning appears difficult. Teaching of second language does not have to be done in a linear fashion, like building a wall; brick by brick. In the light of many recent findings of linguistic research the focus must shift to the fact that language grows under appropriate circumstances. Direct intervention does not work effectively rather it has to be indirect (Krashen 1985, 2003). Given the analyses that I presented in this paper, we

understand language acquisition better. The better we understand language, fewer the rules, simpler the grammar, lower the intervention, superior the teaching and fabulous the learning.

References

- Agnihotri, R.K. (2006). *Hindi: An essential grammar.* London: Routledge
- Chomsky, N. (1965). *Aspects of the theory syntax*. Cambridge, MA: The MIT Press
- Chomsky, N. (1986). *Knowledge of language: Its nature, origin and use.* New York: Praeger
- Krashen, S. (1985). *The input hypothesis: Issues and implications*. Longman
- Krashen, S. (2003). *Explorations in language acquisition and use*. Portsmouth: Heinemann
- Kumar, R. (2006). *Syntax of negation and licensing of negative polarity items in Hindi*. New York: Routledge

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