OSMANIA PAPERS
IN
LINGUISTICS

Editor

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OSMANIA PAPERS IN LINGUISTICS

Osmania Papers in Linguistics (OPiL) is an annual refereed research journal devoted to the publication of articles in the field of general and applied linguistics. It also includes book reviews and review articles.

The journal publishes work primarily by the staff, students, and visiting faculty of the Department of Linguistics, Osmania University. However, articles may occasionally be invited from scholars outside Osmania on special topics. All contributions must be in English. Views expressed in OPiL are only those of the authors.

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CONTENTS

EDITORIAL

It gives me great pleasure to inform our OPiL readers that the OPiL 38 of 2012 has also been published together with OPiL 37. The delay was due to so many unforeseen circumstances in receiving the articles from our contributors and finalizing the details. Finally, we are able to get 14 articles from various authors covering different areas of linguistics and applied linguistics.

Just as we did in OPiL 37, we also included articles not only from Pure Linguistics but also from Applied Linguistics with a focus on Language Teaching and Literary Criticism from a linguistic perspective. In addition, we have also included Two articles on machine translation.

In Pure linguistics, we received seven articles on phonetics and phonology, lexis, syntax, and semantics. Articles on Gedeo segmental phonology (Eyob Kelemework), and metathesis in Arabic (Aisha Mohdar) deal with phonology. Reduplication on Savara (Muralidhar and Gabriel) and construction and coinage of technical terms in Telugu and Kannada (Ramanjaneyulu) deal with lexis. Articles on Gedeo segmental phonology, Abayami Arabic are mainly descriptive but informative. Ramanjaneyulu gives a brief survey of technical terms and shows some similarities between two cognate languages Telugu and Kannada. In addition, there is an article on Sorang Sompang, a cultural script of Savara language by

Muralidhar. At the level of Syntax, we are happy to include the seminal article on the sentence patterns of Telugu proverbs by Bhuvaneswar (written in 2002 for *The EProverbiallinguist* but published in print now) whose work on proverbiology is well-known abroad. In this article, he has made a comprehensive analysis of the overall sentence patterns of Telugu proverbs with more than a hundred examples – probably for the first time in Telugu proverbiology; articles written earlier on the syntax of Telugu proverbs are scanty as well as not comprehensive – and provided empirical evidence to counter the claim made by some proverbiologists in the western proverb literature that proverbs are formed only in certain chosen patterns. Madhava Sarma's article on *sphota* reviews some important Indian views on artha (meaning) and sphota. He concludes his article by citing the opinions of Korada Subrahmanyam who accepts sphota, and Sri A:di Samkara Bhagavatpujyapada who does not. Chilukuri Bhuvaneswar also feels that cognitive linguistic research has not identified any specific *sphota gene* so far; in addition, he also opines that sphota can be explained by the Principle of Dispositional Analyticity and Creativity through *insightful behaviour* as proposed in *psychology*. He concludes that more research into this area is required to know the relationship between sphota and insightful behaviour and understand precisely what the Revered Bhartruhari meant by sphota.

Bindu Madhavi discusses the architecture and tools involved in Telugu POS tagger (rule based) and Srikant

studies the dynamics of the English word *of* for machine translation into Telugu. Finally, Khateeb Mustafa's article is on the linguistic characteristics of Urdu used in (Urdu) newspapers.

In the field of Applied Linguistics, which we have introduced in OPiL 37, we have four articles: on soft skills (Ansari), on lexical errors made by secondary school students (Bapuji), ka:rmik language learning strategies (Buvaneswar), and a review of linguistic theories in language teaching. Ansari conducted case studies and observes that soft skills should be taught at an early stage of schooling. Bapuji identifies eleven types of lexical errors made by the 8th and 9th standard students in a Z.P. high school in Guntur. In this issue, the second article of Bhuvaneswar on Ka:rmik Language Learning Strategy has been published. This is in continuation to his first article published in OPiL 37 in which he proposed a *new* definition for a learning strategy as a *plan* instead of a *technique* as proposed by the ELT practitioners in the west. In this second article, he proposes a new learning strategy called the *Ka:rmik Language Learning Strategy* based on his Ka:rmik Linguistic Theory. These two articles are seminal for they provide a new understanding of what a Language Learning Strategy is and how it should be linked with the Language Learner's disposition. Accordingly, he proposes three main strategies and six sub-strategies. Incidentally, this is probably the first type of a learning strategy proposed by an Indian on a solid linguistic theoretical basis in the modern language teaching era. In the fourth

article, Ansari initiates a new turn in the debate on the application of linguistic theories in language teaching by reviewing the major formal and functional approaches to language teaching vis a vis ka:rmik language teaching approach. He comes to the conclusion that English language teaching in India is severely hampered by western theoretical approaches and therefore the language and linguistic departments in India should take the initiative and test, apply and develop this new approach to language teaching, learning, and designing syllabi in India.

Mohammad Ansari
Editor

THE SYNTAX OF TELUGU PROVERBS 1:
THE SENTENCE

Chilukuri Bhuvaneswar

Abstract

According to the folk belief and the opinion of some critics of English proverbs (See Abrahams: 1972; Dundes: 1987; Kimmerle: 1947; Milner: 1969), proverbs are considered to have certain special phonological, syntactic and semantic structures. However, no extensive and overall analysis of these levels has been attempted either in English or in Telugu (See Bhuvaneswar: 1998, 2001a, b, c, d).

In this paper, which is the first in a series of six research articles dealing with the sentential, clausal, phrasal and compound word levels of the syntax of Telugu Proverbs, the sentence is taken up for such an overall analysis. Such an analysis, contrary to the folk belief and the opinion of some critics, shows that proverbs are represented in an unrestricted, open-ended fashion in all the major syntactic classes of the declarative, interrogative, imperative, and exclamatory sentences; the two simple and complex sentence types; coordinate and subordinate clauses; and even nominal, adverbial, comparative and comment clauses in complex sentences. Furthermore, such an analysis helps the paremiologist to identify the syntactic properties of proverbs and find out their generic relationship with the source language's syntactic structure. In addition, such an analysis will be useful in comparing and contrasting the structure of proverbs among different languages.

I. Introduction

Syntax of Telugu proverbs is almost a virgin field. Except the brief sketches made by Reddi, P. N. (1983), Narasayya, V. V. (1989), and Rao, B. D. (1986, 1995), no exhaustive analyses have been attempted so far. There is a need for such studies, especially, in view of the paucity of empirical studies about the overall syntactic structure of proverbs within a language and across languages not only for comparison and contrast but also for a firm proof against a formal linguistic definition of the proverb.

A. Aims and Objectives
In this paper, an attempt will be made to identify and analyze the proverbs used in the form of sentences in Telugu.

B. Materials and Methods
Important collections of proverbs such as Carr (1868), Avadhani, D. V. et al (1974), and Gangadharam, N. (1960) are taken as the sources for the examination of Telugu proverbs.

In order to classify and study the Telugu proverbs, a framework will be developed using Quirk and Greenbaum (1989) and Venkateswarlu, V. (1982). In this framework, the major classes of sentence and its constituent elements as found in Telugu and English will be incorporated for a common analysis under a single model.

Such a framework can be extended to both Telugu and English proverbs as well and so will be useful for their comparison and contrast also.

II. Literature Review
In Telugu, most of the critical literature is devoted to the study of meaning and cultural background of the proverbs. There are no comprehensive and in depth analyses of the syntactic structure of proverbs. It is only in Reddi, P. N. (1983: 21-24), a compact but very brief review of the syntactic structure of Telugu proverbs has been attempted.

He divides Telugu proverbs into verbless and 'verbfull' sentences. He further notes that in verbless sentences, usually there will be two parts and rarely one part. Sometimes, there can be three or four or even more parts. So also in the case of sentences containing verbs, there can be one or more than one sentence. He further divides proverbial sentences with finite verbs into five categories: a) b^hu:ṭa ka:lika:lu (Past Tense

Forms); b) taddʰarma:rdʰaka:lu (declaratives); c) vidjaḍardʰaka:lu (imperative) d) niʃe:da:rḍʰka:lu (inhibitives); and e) vjaṭire:ka:rḍʰka:lu (negatives). Again, they are also divided into five different classes according to their syntactic structure: a) praçna:rḍʰka:lu (interrogatives); b) e:va:rdhaka:lu (emphatic sentences); c) a:çtʃarja:rḍʰaka:lu (exclamations); d) sambo:dʰana:rdʰaka:lu (vocatives); e) sande:ha:rḍʰka:lu (propositions expressing doubt); and f) pra:rdʰana:rḍʰaka:lu (propositions expressing request, prayer). Finally he assigns a separate class to dialogue proverbs (Wellerisms).

This is a mixed classification. For example, propositions expressing request, wish, prayer, etc. can equally be brought under imperatives and so also the inhibitives. Again, proverbs in the past tense (bʰu:ṭaka:lika:lu) are assigned that class according to the tense of the proverbs. However, the other two tenses-present and future- in which proverbs occur are not assigned a separate class.

Another important work on proverbs is the area study conducted by Narsayya, V. V. (1989). In this analysis of agricultural proverbs, Narsayya has devoted a special chapter on metre, grammar and figures of speech (ibid. 84-100). Under the topic ʋja:karaŋa:mça:lu 'Grammatical Topics', the author divides proverbs into verbless and verbfull sentences, directives, adjectival phrases from verbs, warnings, negatives, questions and manner adverbial sentences. He further mentions the three types of tense that are observed in proverbs. In addition, he also gives a number of examples of simple present tense, indefinite, and negative indefinite verbs as observed in agricultural proverbs.

In B. D. Rao (1986: 88-104), under the section bha:ʃa:ʋiɕe:ʃa:mɕamulu, a discussion of figures of speech and phonological changes in proverbs has been attempted. However, the syntax of proverbs has not been discussed.

Syntax has not been the focus of these works and therefore it is obvious that no detailed discussion of grammar is found in them. As such, it is worthwhile to undertake a comprehensive syntactic analysis of Telugu proverbs and know how syntax is represented in proverbs.

III. An Analysis of the Sentence in Telugu Proverbs

Telugu is a Dravidian language and it has its own peculiarities. Nonetheless, there are many similarities in the structure of Telugu and English sentences. Based on these similarities and the unique properties of Telugu language, it is possible to construct a common model to study the syntax of Telugu and English proverbs.

Before we do so, first, let us discuss the properties of Telugu distinct from English.

A. Comparison and Contrast of Telugu and English Syntax

Telugu exhibits the following syntactic properties which are distinct from English.

1. Telugu is verb final and therefore the six out of the seven basic types of the simple sentence in English will accordingly be: 1. SAV; 2. SC(V) ; 3. SOV; 4. SOAV; 5. SOCV; and 6. SOOV while the seventh is the same SV since V is final in this type. The order of the elements, as in English, is also subject to variation depending on marked or unmarked themes, inversion and cleft sentences (Bhuvaneswar 1999a)

2. Telugu is postpositional and so the phrases are right headed. As such, the internal structure of phrases will be, for

example, NP + PP and not Prep + NP in the case of adpositional phrases.

3. Telugu takes honorifics for the nouns as well as verbs. Hence, the structure of the noun and verb phrases contains honorific suffixes attached to the headword in an NP and the VP.

4. Telugu allows equative and attributive constructions which are generally verbless. Hence, the SVC in English becomes SC (V) in Telugu.

5. The articles *the, an,* and *a* are absent in Telugu. As a result, the nouns will not be premodified with these articles. However, other premodifiers such as *some, any, enough, this, that, every, many,* etc. are allowed.

6. 'If' as an anticipatory subject and 'there' as a grammatical subject are not used in Telugu sentences.

7. Subjectless sentences are also common in Telugu in two ways: 1. as a pro – drop phenomenon; 2. as a subject implied verbal feature.

A few examples are given below to illustrate these properties.

(204) naɖitʃe: ɖa:ri lo: gaɖɖi molavaɖu.
　　　walking　path　in (A)　grass (S)　grow not h.m.(V)
　　　'In a walking path (A), grass (S) does not grow(V)'.

In the above sentence, lo: (in) is a postposition, ɖu is a negative verbal suffix for the singular neuter, uncountable noun gaɖɖi (grass) with a zero honorific and molutʃu 'grow' is the verb occurring in the sentence final position with a singular, neuter, suffix avaɖu 'does not happen' attached to it. There is no article before gaɖɖi since it is an uncountable noun as in English and since no articles are used in Telugu.

(205) eɖruga: unnava:ɖe: pelli koɖuku (avuṭaɖu).
　　　opposite as　be person him　bride groom　　is

'The oppositely staying (available) person(s) (is (V)) the bridegroom (C-Noun).'

(206) ḍu:rapu   konḍalu   nunupu   (avunu).
       distant   hills   smooth   are
       'Distant hills (S) (are(V)) smooth (C-Adjective).'

In the above examples, the verb is ellipted and the complement is either a noun or an adjective, giving an equative and an attributive verbless sentence. 'ḍu' is an honorific suffix of the lowest degree which becomes ḍe: when joined with 'e:' (only) in sentence (205). peḷḷi koḍuku is a common noun which has no article premodifying it as is the case in Telugu.

(207a) uḷḷe:lani   va:ru
        town not ruling   persons
        ra:dʒa:lu   e:luṭa:ra: ?
        kingdoms   will rule i.m.(plural)
        'Not-ruling-towns   persons(S) do/will   rule   (V)
        kingdoms (O)?'

In the above interrogative proverb in S O V structure, there is no possibility to introduce the existential 'there' as a grammatical subject. Only 'there' as an introductory adverb can be used and so the meaning changes:

(207b) akkaḍa   u:ḷḷe:laniva:ru
        There   towns not ruling persons
        radʒja:lu   e:luṭa:ra: ?
        kingdoms   rule will i.m.(pl.)
        'Are   there   not-ruling-towns   persons   ruling
        kingdoms?'

Here, akkaḍa is an adverb which points out to a place and therefore the sentence means: At that particular place, will people (who do not rule towns) rule kingdoms?
[cf. UGE: 418 –

   Was anyone around $\longrightarrow$ Was there anyone around?]

(208a)   parigeṭṭi   pa:lu   ṭage: kanna
         running   milk   drinking   than
         nilabaḍi   ni:ḷḷu   ṭa:gaḍam   me:lu.
         standing   water   drinking   better
         'Drinking water (by) standing is better than drinking milk (by) running.'

This proverb cannot be changed into a sentence by extraposing the subject and filling the subject by the anticipatory subject (it).

*(208b)   iḍi (agunu)   parigeṭṭi   pa:lu   ṭa:ge: kanna
          It (is)   running   milk   drinking than
          nilabaḍi   ni:ḷḷu   ṭa:gaḍam   me:lu.
          standing   water   drinking   better
          '*It is better to drinking water by standing than to drink milk by running.'

(209)   kukkaku   e: ʋe:ʃam   ʋe:sina: moragaka   ma:naḍu.
        dog to   any dress   putting   barking not stops not
        'Putting any dress to dog, (the dog) stop not barking;'
                     or
        'Put any dress to a dog, still it stops not barking'

(210)   kalimiki   poŋgara:du,   le:miki
        wealth to   jubilate not   poverty to
        kuŋga ra:du   (manam /okaḍu).

shrink not   we/one
'(One) should not jubilate over wealth, (and) shrink over poverty.'

(211) kaʀʀaku peʈʈinaː goʀʀeku   peʈʈinaː tʃeɖaɖu.
stick to   putting   sheep to   putting spoils not
'Investing on stick (and) investing on sheep does not go waste.'

(212) eːʈi   iːʈaku   laŋka   meːʈaku saripoːjinɖi.
Stream   swim to island   graze to equal went
'To stream-swimming (and) to island grazing went on par'.
[= 'It went on par with stream swimming and island grazing']

In the above-mentioned examples, the subject is either understood as in (209) and (210) or not there at all as in (211) and (212). In (209) and (210), the subject dog and one are inferred from the context. But in (211) and (212) what does not go waste and what went on par is not given at all. The verbs themselves imply the subject, namely, 'the investment' in the case of (211) and 'the effort' in (212) which equals the benefit of grazing.

(213) manɖuki   pampiʈeː maːsikaːniki
medicine to   sending   death ceremony to
ʋasʈaːɖu   (pampincabaɖinavaːɖu).
comes   the person sent
'When sent for the medicine, he (the person being sent) comes back to the death ceremony.'

In the above sentence, the subject is understood from the context and also from the pro-drop property of the sentence. So far, we have illustrated some of the important differences in the syntactic character of Telugu. There are many other

syntactic differences between Telugu and English features such as tense, double parts of speech (e.g. verbal adverbs, verbal adjectives, adjectival nouns, double nouns, and postpositional nouns), etc. A detailed analysis of these aspects is beyond the scope of the present work. It will suffice to know that these differences in their syntax are adequate enough to demand a separate syntactic framework for a comprehensive analysis of Telugu proverbs. However, such a model is not yet available and therefore we need to frame a simple model which can work out for both the languages. Before we do so, let us also consider some of the differences in the stylistic choice of syntactic structure.

In Telugu, unlike in English, nominalization is much more frequent than clause formation (Venkateswarlu 1982 : 107, 131, 375). As *such participial phrases abound in Telugu proverbs and they avoid clauses to a great extent, especially, adjectival clauses:*

(214) ambali   ṭa:ge:ʋa:ḍiki
       gruel   drinking man to
       mi:sa:leṭṭe: ʋa:ḍokaḍu.
       moustache raising   man one
       'For gruel drinking man another moustache raising man'.

The participial phrases gruel drinking man and moustache-raising man are not expressed as clauses in Telugu: 'To a man who drinks gruel'; 'One who raises moustache' in normal usage. In a similar way, verbless proverbs are also very many:

(215) enṭa   tʃeṭṭuki anṭa   ga:li (unḍunu).
       how much   tree to   that much   wind (is)
       'As much the tree (is) that much the wind to (it) is.'

Another interesting feature in Telugu proverbs is the conspicuous presence of double questions such as alternative questions, parallel prepositional questions, etc:

(216) viɡʰneːsʋaruɖi miːɖa   bʰakṭaː?
       Vighneswara   on   devotion?
       unɖraːḷḷa miːɖa   bʰakṭa?
       undrallu   on   devotion?
       'Is it devotion to Vighneswara? (or) to devotion to undrallu'
       [undrallu, a variety of rice cakes, are offered to Vighneswara, the God of obstacles, as a special dish on the day of Vinayaka Chavithi.]

(217) ulli   mallaʋuṭunɖaː ?
       Onion   jasmine become will (q.m.) ?
       untʃukunnaɖi   peḷḷaːmaʋuṭunɖaː ?
       keep   wife become will (q.m.)
       'Will an onion become a jasmine (flower)? Will a keep become a wife?' [q.m. = question marker]

In addition, the introducing affixes such as laːɡa, ʋale, ɡa (like); ṭa (that); etc. and words such as anṭe, ani (saying); and phrases such as annaṭṭu, tʃeppinaṭṭu (saying like), ani anṭeː (saying that); etc. are much more frequently embedded in the proverbs than in English :

(218) pojji uːɖamanṭeː   kunɖa baɖɖalu koṭṭɛː ɖaṭa.
       hearth blow that saying pot   break   hit h.s. that
       "Saying, 'blow the hearth (i.e. when one said blow the hearth)', (I understand) that (he) broke the pot.'
       [h.s. = honorific suffix]

aṭa 'that' is a suffix which is used in indirect speech to report events which the speaker has not witnessed but heard.

(219) ṭulasi   ʋanamlo: gandʒa:ji mokka   la:ga:.
       basel   garden in   opium   plant   like
       'Like an opium plant in a basel garden.'

(220) ni: tʃeʋalaku ra:gi   po:gule: anṭe: ,
       your ears to copper   ear rings only saying
       aʋi: ni:ku   le:ʋe: annaṭṭu.
       those   you to   not   saying like
       'When one said, "(You have) only copper earrings to your ears", (It is) like (the other one) saying, "Even those are not (there) for you."

Vocatives are frequently observed in Telugu proverbs. They are exclamatory in their usage. So also are interjections. However, many exclamatory proverbs are formed in a non-exclamatory syntactic structure while few are formed in the formally assigned syntactic structure with a wh – element :

(221) ṭikkapilla: ṭikkapilla: ma: akka
       crackish girl   crackish girl   my sister('s)
       pillanu   tʃu:sṭiʋa: anṭe:,
       daughter (acc)   have seen q.m.(you) saying
       tʃu:sṭi   çukraʋa:ramani.   ka:ʋalintʃukonṭi,
       have seen (V)   friday that (it is) embraced (I)(have)
       ma:ṭala:ḍuḍa: manṭe   maratʃi po:ṭini
       speak will   saying   that   forgot
       annaḍaṭa.
       I said that
       'When (one) said, "Naugty girl! Naughty girl! Have you seen my sister's daughter", she said (that) "I have seen –

I have embraced her since it is Friday, but for to speak I forgot".'

(222) ajjoː anʈeː   aːɾu nelalu paːpam   ʋasʈunḍi.
       Alas! saying   six months sin   come will.
       'If one says, 'Alas!' , six months sin will befall.'

[Interjections in Telugu proverbs occur generally in direct speech.]

(223) miŋga   meʈuku   leːḍu (gaːni)
       to swallow   morsel   not(there) (but)

       miːsaːlaku   sampaŋgi   nuːneʈa.
       moustache to   sandalwood   oil that

       '(I understand) that there is no morsel to swallow but (the man wants) sandalwood oil to (his) moustache.'

[This is a statement without a wh-element forming an exclamation due to the surprise element in the proposition.]

Direct speech is the norm in Telugu oral communication but indirect narration is also widely used in the written language. This might be due to the influence of other languages and journalism [Venkateswrlu 1982 : 770]. It might be one of the reasons for the presence of many wellerisms in Telugu. [See 221 for an example and P. for further discussion.]

Finally, the frequency of interrogative proverbs in Telugu is very high. There are hundreds of them in Telugu while in English they are not many.

In spite of these differences in the syntactic structure and its choice, the English classification of the major syntactic classes of declarative, interrogative, imperative, and exclamatory

sentences ; the two simple and complex sentence types ; coordinate and subordinate clauses; and even nominal, adverbial, comparative and comment clauses can be applied to Telugu also. Based on this basic typology, we can conceive of a framework for exemplifying the proverbial syntax of both Telugu and English as follows:

```
                                                        ┌─ SVA
                                                        ├─ SVC/SCV
                                                        ├─ SVO/SOV
                                         ┌─ Simple ─────┼─ SVOA/SOAV
                                         │              ├─ SVOC/SOCV
                                         │              ├─ SVOO/SOOV
                                         │              └─ SV
                  ┌─ Declarative ─┐      │
                  ├─ Interrogative ┤     │
   Sentence ──────┼─ Imperative ───┼─────┤
                  └─ Exclamatory ──┘     │                                    ┌─ Syndetic
                                         │              ┌─ M. C. ─ Coordination ┤
                                         │              │                      └─ Asyndetic
                                         └─ Complex ────┤
                                                        │              ┌─ Nominal
                                                        │              ├─ Adverbial
                                                        └─ S. C. ──────┼─ Comparative
                                                                       ├─ Comment
                                                                       ├─ Relative
                                                                       └─ Complement
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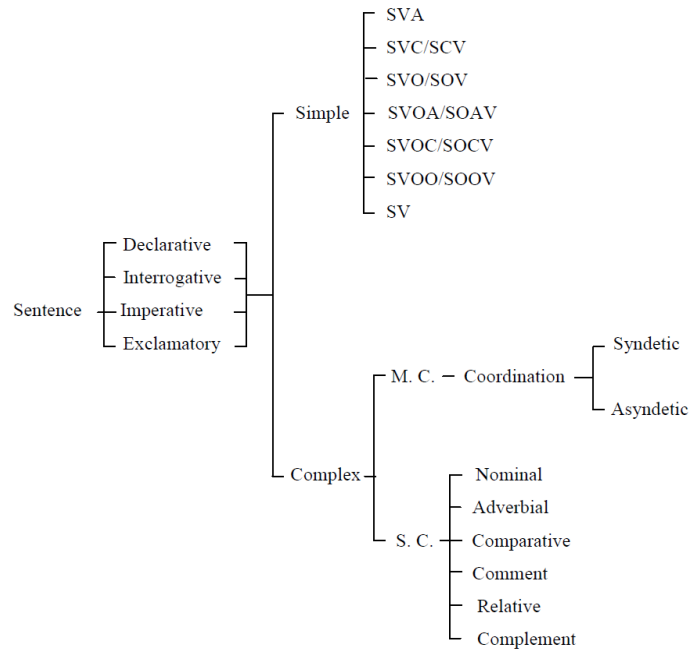
Network 1: Basic Sentence Typology of English and Telugu

B. The Structure of the Sentence in Telugu Proverbs
As has already been pointed out, Telugu also shares the major syntactic classes of the four sentences in the simple and complex sentence types with coordinate and subordinate clauses.

A few examples are given below to illustrate the basic types of sentences in Telugu proverbs. The parts of speech such as

subject (S), Verb (V), Object (O), Adjective (A), Complement
(C), Adverbial (Adv), etc. are indicated at the end of the phrase
within brackets by the respective symbols in italics, e.g.(S)
A. Simple sentences in Telugu Proverbs

(224) ka:ʈi   ḍaggarama:ʈalu ku:ʈi ḍaggara unḍavu.
        burial ground near   words   food near   be not
        'Near-the-burial-ground words (S) will not be (there)
        (V) near food (A).

(225) anḍani   ḍra:kʃa panḍḷu pullana (avunu).
        unreachable   grape   fruits   sour   (are)
        'Unreachable grapes (S) ((are)V) sour (Complement
        –Adjective).'

(226) ʈana ko:pame   ʈana   çatruvu (avuʈunḍi).
        one's anger only(S) one's enemy (is)
        'One's anger   only (S) ((is) V) one's enemy
        (Complement – Noun)'.

(227) koʈʈa bitʃʈʃa ga:ḍu   poḍḍeragaḍu.
        new   Beggar   day(time) knows not.
        'A new beggar (S) does not know (V) the day (time)
        (O).'

(228) ma:ʈala tʃe:ʈa mahankaḷini navvintʃavatʃʈʃu.(evaraina:).
        words with   Mahankali   laugh make can (anyone)
                                  (acc.).
        '(Anyone(S)) can make (V) Mahakali (O) laugh (V) with
        words (A).'

(229) go:tʃi:pa:ʈaga:ḍu   ḍisamolava:ḍi baʈʈa   aḍiginaʈlu.
        Lion clothed man   no clothed mancloth   asking like

(acc.)
'Like a loin-clothed man(S) asking (V) a no-clothed man (O) cloth(O).'

(230) iṭṭaḍini   puṭṭaḍi   tʃeːjaleːmu (manamu)).
brass acc. gold (complement) do cannot   we
'((We) (S)) cannot make (V) brass (O) gold (C).'

(231) ninḍu   kunḍa   ṭoṇakaḍu
Full   pot   shakes not
'A full pot (S) does not shake(V).'

2. Interrogative Sentence

As has been already pointed out, interrogative proverbs are rhetorical questions. There are more than 250 such proverbs listed in the third edition of Telugu Samethalu (Venkatavadhani, et al 1972). In the simple sentence type, some patterns such as SAV and SOV are more productive while SOOV and SOCV are the least productive. SAOV, SVC, and SV (with adverbials) are observed occasionally. A few examples are given below :

(232) eluka tʃaːʋuku pilli muːrcʰa   poːṭunḍaː ?

rat death to   cat   convulsiongo into q.m.
'Will a cat (S) go into ((get)(V)) convulsion (O) over a rat ('s) death (Adv) ?'

(233) aḍḍeku ʋatʃtʃina   guʀʀaːlu agaḍṭalu ḍaːṭuṭaʋaː ?

hire to   come having horses   moats   cross q.m
'Will horses having come to hire (=hired horses) (S) corss (V) moats (O).'

(234) (nuvvu) anṭarʋeːḍi ṭirtʰamloː   maː
       (you)   Antharvedi Mayfair in   my
       ʋeḍʰaʋa meːnaṭṭani tʃuːtʃaːʋaː ?
       widow   aunt acc.   see did q.m.
       'Did ((you) (S)) see (V) my widowed aunt in the
       Antharvedi Mayfair?''

(235) aː   ṭanḍri   koḍuku   kaːḍaː ?
       that   father   son   is not q.m.
       'Is not (V) that father (S) a son (C)

(236) aːʋu   nalupaiṭeː   paːlu   nalupaː?
       cow   black being   milk   black q.m.
       'Cow being black (A), will milk (S) be (V) black (C –
       noun)?'

(237) guːnu   ʋiːpu   kuḍuru   aʋutunḍaː ?
       hunch   Back   steady   become q.m.
       'Does a hunchback (S) become (V) steady (c-Adj)

(238) ṭaːṭaːku   tʃappuḷḷaku kunḍeːḷḷu beḍurunaː ?
       palm leaf to sounds to   rabbits   frighten i.m.
       'Do rabbits (S) fear (V) for palm-leaf rattling (A)?'

(239) arupula   goḍḍu   piṭukunaː ?
       bellowing   Cow   milks q.m.
       'Does a bellowing cow (S) milk (V)?'

In all the examples given above, questions are formed by the
addition of the interrogative suffix aː to the verb at the end of
the declarative sentence:

[po̱ʈunɖi, tʃuːtʃaːʋu, beḏurunu, etc̣] [aː]   ⟶
[po̱ʈunɖaː, tʃuːtʃaːʋa: , beḏurunaː, etc]

/aː/ suffixation gives rise to yes/no elicitation questions in ordinary language but rhetorical questions equivalent to statements in proverbs. The only way to decide whether such a question is rhetorical or yes/no type is to know the context. Incidentally, interrogative proverbs, thus, indicate the inadequacy of a formal linguistic analysis at the level of syntax. Intonation is a help in such situations.

Other types of questions which require supplying items of information in a normal context also function as rhetorical questions in proverbs. They normally contain a wh – element :

(240) ṭeːluku   eʋaru   apakaːram tʃeːsaːru ?
       scorpion to   who   harm   did
       'Who (S) did harm (V) to the scorpion (A)'.

It is a rhetorical question meaning the negative statement: 'Nobody did harm to the scorpion' just like 'A cat will not get convulsion over a rat's death' in (232). Even in other types of wh – questions in which the wh – word functions as an interrogative adverbial, the same rhetorical effect is observed:

(241) ninɖaː muliginaʋaɖiki   tʃaleːmiṭi ? (unṭunɖi)
       fully   drowned man h.s. to   cold what   is
       'What cold(S) (is there) for a fully drowned man (A)?

The dative construction involving the suffix ku/ki 'to' is very frequently observed in the formation of the adverbial element in interrogative proverbs as in the above sentence.

Depending on the mood of the speaker, some proverbs are exclamatory in their function even though they are rhetorical

questions. These exclamatory questions combine surprise with force in the assertion and are said in a falling tone (sometimes accompanied by laughter, facial gestures, etc.) as in:

(242)   hanumanʈuni munḍara(ː) kuppi ganʈul(aː/u)
         Hanumantha before q.m   small jumps q.m

The interrogative marker / aː / can be suffixed either to the postposition munḍara or to the noun ganʈulu .

In innovative uses of proverbs, it is possible to change the structure from one type to another. Thus, for example, (230) can be changed from a statement to an interrogative (rhetorical) proverb as in :

(243)   iʈʈaḍini puʈʈaḍi(ni) tʃejjaleːmaː?
         'can't (we) make brass gold ?'

just by the addition of the interrogative suffix / aː / to the verb.

3. Imperative Sentence

Subjectless imperative sentences are the norm in Telugu proverbs. However, imperatives with vocatives are observed. In addition, negative imperatives are also observed. Most of the imperatives in Telugu are complex sentences. Among the simple sentences, the words valenu and raːdu meaning 'should' (advice) and 'prohibition' are frequently used to form the imperatives. Other types of imperatives with a subject, and with damu (let) are rare. The suffixes u, i, eː , and oː are commonly used in the formation of imperatives in addition to valenu (vale) and raːdu .

A few examples are given below.

/ raːḍu /:

(244)   agni ɕeːʃam, ruṇa ɕeːʃam, ɕaʈru ɕeːʃam   ʋuntʃaraːḍu.
         fire remains debt remains enemy remains keep not
         'The remainder of fire, the remainder of debt, the
         remainder of enemies should not be left'.

(245) dʒuʈʈunnamma   eː koppajinaː   peʈʈukoːʋatʃtʃu.
/u/:   hair having woman Anyhairdo at least put can
       'A woman with hair can put on a hairdo in any way.'
[u added to vatʃ 'can' indicates permission. In statements, ʋatʃtʃu indicates possibility according to the context.]

ʋalenu   ⟶ ʋaːli⟶ aːli ¹
       abaddʰaːla noʈiki   araʋiːse sunnam   kaː ʋaːli
       lies   mouth to half visa lime   need i.m.
       To a lying mouth, (one) needs half a visa of lime
        [visa is a weight which is approximately equal to
       grams]

(247) naːlukaː naːlukaː naː ʋiːpuku ḍebbalu ʈeː k eː
/eː/ : tongue tongue ! my back to slaps   bring not h.s.,i.m.
       'Tongue! Tongue! Do not bring slaps to my back!

(248) /i / < /aːli /
       eː roːʈi   ḍaggara a: paːʈa   paːḍaːli
       which mortar   near   that song   sing
       'Near the mortar (of which kind it is), sing such kind
       of a song'
       [eː …. aː is a correlative conjunction which means: for
       which kind of…. that kind of]
       [= As the mortar, such kind of a mortar song you
       should sing].

(249) tʃaːɖasʈam   moguɖaː   ni   tʃaːreɖu
/oː/:   fastidious   husband   your   palmful

    ʋeːreː   ʋanɖukoː   annaʈʈu.
    separately   cook i.m.   saying like
    'Like saying : fastidious husband ! cook your palmful separately.'

In Telugu, imperatives are used to convey different meanings such as command, permission, request, advice, wish and curse. The verbal endings used to convey the imperative meaning are many. They accompany the honorific suffixes also. Particles such as *u* (affirmative), *aku* (negative), *ɖu* (request), *ɖuvu* gaːni (permission), *gaːka, aːli* (command, prayer, wish, curse, duty), *ɖi, ɖaːmu, a, gaːnu* and *iː* are suffixed to create the imperative mood in Telugu. In spite of such a wide range of suffixes, not all of them are productive in the simple sentence. Nonetheless, in the complex sentence, more variety is observed.

4. Exclamatory Sentence:
In Telugu, strong emotions of surprise, anger, happiness, pain, etc. are expressed with help of interjections, and exclamatory words such as *enʈa* (how much), e:*mi* (what), *eː* [exclamatory suffix], etc. in the sentences according to formal categorization. Exclamatory mood is also expressed by an appropriate shift in pitch and intonation in questions, statements and imperatives.

Many interjections are used in Telugu to represent sorrow (*ajjoː*, a*kkaʈaː kaʈakaʈaː*); pain (a*mma*ː, a*bba*ː), fear (a*mmo*ː), surprise (*are*, ahaː, auraː, ohoː, ai, abbaː), praise (se*bʰaːʃ*, bʰaɭiː , bʰeːʃu, bʰaleː, vaːhʋaː, baːgu baːgu, meːlu

me:lu, abba:), joy (aha:, ha:j), disgust (tʃʰi:, abbe:), anger (e:miʈi:, e:), censure (tʃa:lu tʃa:lu), irritation (iss, abba:), sarcasm (abbo:, oho:). Surprisingly there are very few proverbs with interjections. Even the proverbs having interjections have them as part of direct speech:

(250) tʃʰi: kukka: anʈe: e:makka: annaɖata.
      tchi:!   dog   when what sister! said that
      (interjection)   said
      '(In understand that) when said, "thchi:! dog!",
      she said, "what sister!" '

(251) tʃʰi: tʃʰi: ane:ɖi: i: no:re:
      tchi:! tchi: (the one) saying this mouth only
      çiʋa çiʋa: ane:ɖi: i: no:re:
      siva siva   (the one) saying this mouth only
      'The one saying chi:, chi: is this mouth only; the one
      saying 'siva,' siva is also this mouth only.'

(252) ajjo: anʈe: a:ru nelala pa:pam ʋasʈunɖi.
      ayyo ! when said   six months sin   come will
      'When said 'ayyo!' six months sin will come.'

Very rarely does one come across an interjection otherwise. One reason might be that interjections are used in direct speech only and so they occur only in direct speech proverbs.

In Telugu, the exclamatory element consists of words such as enta (how much), e:mi (what), etc., which are used as pronouns, adjectives and adverbs in sentences considered as a formal category for exclamations:

(253) ʋa:ɖu   enta   naʋʋa:ɖu!
      he   howmuch   laughed h.s.
      'How much (Pronoun) he laughed!'

(254) e:mi   maniʃiʋira: !
       what   man hon
       'what (adjective) a man !'

(255) i: pilla   enṭa   anḍaŋga: unḍi !
       This girl   how   beautifl(ly)   is
       'How (Adverb) beautiful is this girl!'
Proverbs with such constructions are rare in Telugu.

The suffix /e:/ is used to form exclamatory sentences when it is attached to nouns at the end of clauses:

(256) e:ṭiḍari   ma:nuki   eppuḍu: ganḍame: (unḍi)
       stream near tree to   always   threat excl.marker is
       '(There is) Always a threat to the tree near the stream!'

Other types of exclamations in proverbs have no formal exclamatory syntactic structure assigned to them. Their exclamatory mood is mainly derived from their prepositional content.

(257) e:mi:/   (ṭo:tʃi:) ṭo:tʃanamma   ṭoṭiko:ḍali
       what   avocation less woman co-daughter-in-law's
       puṭṭinṭik(i)   eḷḷinḍita.
       birth house to   went that
       '(I understand) that a woman without any vocation(S) went (V) to the co-daughter-in-law's house (A) !'

In this sentence, there is no explicit exclamatory structure except that the proposition in an SAV statement expresses surprise, making it an exclamatory sentence. Propositions such as these generally express meaning which contradicts normal practice or which is not natural. But what is natural and what is

normal is subjective and therefore leads to differences in interpretation. For example,

(258a)
minganu	meṭuku	leːḍu,
swallow to	Morsel	not is
miːsaːlaku	sampaŋgi	nuːne	(a)ṭa !
moustache to	sampangi	oil	that.

'(I understand) that morsel is not (there) to eat but sampaŋgi oil (scented oil) to moustache!' is listed with an exclamation mark in Avadhani, D.V. et al (1972 : 486) but not so in Carr (1868 : 299):

(258b)

miŋga meṭuku leːḍu, miːsaːla miḍiki sampaŋgi nuːne .

In Carr, only a handful of proverbs are translated with exclamation marks while in Avadhani, D.V. et al (1972), there are many such proverbs (without the formal exclamatory syntactic structure) with exclamation marks.

So far we have discussed the proverbial simple sentence with examples. We have noted that some structures are more productive while others are not. Does it mean that the unproductive structures are not possible in proverbs. No. It only means that the syntactic choice is open-ended and if a structure is absent, it is absent because a suitable proposition that can be expressed in that syntactic structure has not become a proverb. Sometimes, other structures are more favoured than these types of structures owing to stylistic choices.

B. Complex Sentence in Telugu Proverbs:
Venkateswarlu (1982 : 18-21; 103-139; 738-757) deals with the structure of the Telugu sentence along the lines of traditional English grammar. He divides the sentences into:
1. Sarala (Simple); 2. Jatila (Simple sentence with one or more

than one participial phrase); 3. Samyukta (Complex) and 4. Dvandva (double) Vakyamulu (sentences). He also divides clauses into main and subordinate clauses and the latter into nominal, adjectival and adverbial clauses. In a similar way, he divides the participial clauses also into nominal, adjectival, and adverbial participial clauses.

We have already noted a number of examples for simple sentences earlier. Let us examine the Jatila Vakyam (simple sentence with one or more participial phrases) with more examples.

Jatila Vakyam (Participial Sentence)
When one or more than one of the elements of a sentence which are subject, object, adverb (phrase) and complement is joined with a verb of incomplete predication, we get a participial phrase (Venkateswarlu 1982 : 92-93). A sentence with subject or object or adverbial or complement can be turned into a participial phrase in Telugu by giving importance to any one of them as follows:

(259a) iņʈi ḍi:pamani
house light (wick lamp)that
muḍḍu peʈʈukunʈe:,
kiss putting,
mi:salanni: ʈega ka:linaʋaʈa.
moustache all very much burnt that
'(I understand) that kissing (that it is) a house light, the moustache got profusely burnt.'

The above participial phrase 'kissing (that it is) a house light' is formed by turning the sentence with a verb of complete predication peʈʈukunenu 'put' into an adverbial phrase with a verb of incomplete predication peʈʈukunʈe: 'putting' as follows:

(259b) (ʋa:ɖu)   inʈi   ɖi:pamani
       He   House   light that (it is)

       muɖɖu   [peʈʈukonenu > peʈʈukonʈe:]
       kiss   [put > putting] adv.participle m.

       'Because it is a house light, he [kissed (it) > kissing].'

The same sentence can be changed into nominal and adjectival participial phrases as follows:

(260) inʈi   ɖi:pamani muɖɖu   peʈʈukonuʈa
       house   light that kiss   putting NPP

       'Putting a kiss that /because it is a house light.'
       (Nominal Participial Phrase (NPP)

(261a) muɖɖu   peʈʈukonunna   inʈi   ɖi:pamu
        kiss   putting having (APP)   house   light

        'The kissed house light'
        (Adjectival Participial Phrase (APP))

(261b) inʈi   ɖi:pamani   muɖɖu   peʈʈukonna ʋa:ɖu
        house light acc.m.   kiss   put having   he

        'He kissing the house light'

(261c) inʈi   ɖi:pamani ʋa:ɖu peʈʈukonna muɖɖu
        house light that he   put being   kiss

        'The kiss having been put by him because (it(is)) a house light'

(261d) (ʋa:ɖu) inʈi   ɖi:pamani muɖɖu peʈʈukonna ʋa:rʈa
        he   house light that kiss   put having   news

        'The news of him having put a kiss because ((it(is)) a house light'

Sometimes, postpositional (pp) adverbs and suffixes combine with participial phrases (partp.) to form new phrases:

(262a)   muːligeː   nakka   miːḍa   ṭaːṭi panḍu paḍḍaṭlu
             groaning   fox   on   palm fruit   falling like.
             'Like a palm fruit falling on (pp) a groaning fox (pp.)'

(262b)   tʃeːṭulu kaːlina   ṭaravaːṭa   aːkulu paṭṭukonnaṭlu
             hands   burning   After   leaves   holding like
             'Like holding leaves after burning hands.'

(263)   iːṭa   vatʃtʃinappuḍu   loːṭu anipintʃunaː ?
             swimming come having then   depth feel make q.m. ?
             'After (adverb - literally meaning 'then') learning
             swimming (partp.) does (it) make (you) feel the
             depth?'

(264)   uppu   ṭinna va:ḍu ni:ru   ṭragaka ṭappaḍu.
             salt   eating man   water   drink   not avoid not.
             'The man eating salt cannot avoid drinking water.'
 [va:ḍu is a suffix joined with the participial phrase 'salt
eating' to form a new participial phrase 'salt eating man'.]

A few more examples are furnished below to illustrate the
nominal, adjectival and adverbial participial phrases whose
more explicit versions are participle clauses. Adverbial
participial phrases are the most frequent while adjectival and
nominal participial phrases follow them in that order.

a. Adverbial Participle Phrases :
Suffixes such as aː, teː, i, ajinaː, aka, etc. are used to change
the verb into a participle :

(265)   vraṭam tʃeḍḍaː   pʰalam   ḍakkinḍi.
             vratham being spoiled(p.m.) fruit (result)   obtained.
             'Though the vratham (is) spoiled, the fruit (is)
             obtained.'

['vratham' is a Hindu religious ceremony performed
to get some boon.]

(266) itʃtʃeː goḍḍuneː piṯkeḍi.
       giving animal only milking p.m. (goḍḍu cow/buffalo')
       'Only an animal that gives milk is milked.'

(267) itʃtʃeː   vaːḍini   tʃuːsṯeː
       giving(p.m.)   man (ac.m.)   seeing (p.m.)
       tʃatʃtʃeː   vaːḍaina   leːsṯaːḍu.
       dying   man even   gets up.
       'Seeing a giving man even a dying man gets up.'

(268) kaːçiːki poːji kukka pillanu ṯetʃtʃinaṯḷu.
       Kasi to going dog kid   bringing like p.m. acc.
       'Like going to Kasi (and) bringing a puppy.'

(269) kukkanu   guʀʀam ʋale   saːki,
       dog ac.m.   horse like   grooming
       ḍoŋga   ʋasṯeː reḍḍeː   moriginːḍanṯa.
       thief   coming Reddy himself barked that
       (I understand) that grooming the dog like a horse, the
       thief coming, Reddy himself barked.'

(270) tʃuṭṭu   ajinaː   suḷuʋu ḍaːri   meːlu.
       round about   being even   easy path   better
       Even (if it is) being round about, the easy path (is)
       better.
(271) enṯa   mantʃi   panḍi   ajinaː
       how much   good   pig   being even
       ameːḍʰjam   ṯinaka   maːnaḍu.
       excrement   eat without   stop not

'However much good a pig (is) being, it does not stop eating excrement'.

(272) unna   maːʈa anʈeː ulukekkuʋa   (aʋunu).
being   word saying intemperance more becomes
'By saying the fact, the intemperance becomes more.'

(273) ṭina   neːrcina   amma   peṭṭa   neruṣṭunḍi.
eating   learning   woman   giving   learn will.
'A woman having learnt eating, will learn giving.' Or
'A woman who learns eating will learn giving.'

(274) tʃeːloː puṭṭina   mokka tʃeːloː   tʃatʃtʃinaʈlu
farm in being born   plant   farm in   dying like
'Like the plant born in a farm dying in the farm.'

(275) aṭṭa   tʃeːsina   paniki   aːraʄʄu   leːʋu.
mother-in-law having done work to   queries   not are
'There are no queries to the work done by the mother-in-law.'

(276) tʃeṭṭu   leːni   tʃoʈa
tree   not being   place
aːmuḍapu   tʃeṭṭeː   mahaː ʋrukʃam.
castor oil   Tree   big tree.
'At a place being without a tree (where there is no tree), castor oil tree (is) a big tree.'

c. Nominal Participial Phrases :

(276a) peruguʈa   ʋiruguʈa   koʀakeː (aʋunu)
growing n.p. breaking n.p   for only   is
'Growing is for breaking only.'

[n.p. 'nominal participle marker'.]

(277) meɖa ʈaɖavaɖam puːsala   koʀakeː (avunu)
       neck   searching   beads   for only is
       'Neck-searching (Searching the neck) is for beads only!'

(278) maɖja paːnam tʃeːjanu maɖigudɖa ka:valenaː ?
       alcohol drink   doing n.p. sacred cloth need saying ?
       'For drinking alcohol, is a sacred cloth needed ?'

(279) baʈaka   leːka baɖipanʈulu   (avaɖam avunu)
       living   not   school teacher (becoming is)
       'Because of not (inability for) living, (one is becoming) a school teacher.'

(280) tʃeːpaɖaːniki   tʃeːʈa pejja   tʃaːlunu .
       milking n.m. to cane sifter calf   enough is
       'For milking, a cane calf is enough.'

There is an alternative version with tʃerapaɖ*aːni* ki 'to spoil'.
Then the proverb means: 'To spoil, a cane calf is enough.'
[tʃeːʈa pejja is the toy made with either the dead calf's skin
(stuffed with cotton) or with the cane sifter to induce the cow
to give milk when the calf is dead.]

II. Compound Sentence:
When two main clauses (coordinate clauses) are joined
together with coordinating conjunctions (CC) such as ka:ni
(but), oː (also), leːka (or), kanuka (so), anɖuvalla (therefore),
ajinaː(at least), etc., double compound sentences are formed.
When more than two main clauses are present multiple
compound sentences are formed. Within the main clause, a

participial phrase or a subordinate clause can be present. A few examples are given below:

(281) aɕʋameːtʰa ja:gam tʃeːjaʋatʃtʃu gani
asvametha Sacrifice do can but
aːɖapilla peɭɭi tʃejjaleːmu.
female child Marriage do cannot
'asvametha sacrifice can be done but a girl's marriage cannot be done.'

(282) iː u:rikaː ʋu:renṭa ḍu:ramoː aː
this town to town how much distance c.c. that

u:riki iː u:ruː anṭeː ḍu:ram
town to this town c.c that much only distance
'How much distant that town is to this town, that much (distant) only this town too (is).'

(283) anḍiṭeː dʒuṭṭu le:kapoːṭeː ka:ɭɭu (paṭṭukonṭaːḍu).
reaching hair otherwise(cc) legs will catch he
'If possible he will grab the hair (on the head); otherwise (he will catch) the feet.'

(284) ku:ḍu uḍakaleːḍani kunḍaṭṭuku koṭṭɛːḍaṭa
food cooked not that c.c. pot catching hit (V) that
'He hit the pot since the food did not cook.'

(285) tʃeppulu unnaʋaːḍitoːnu appulu
sandals having man with c.c. debts
unna ʋaːḍitoːnu poːraːḍu.
having man with c.c. should not go.
'Do not go with a man with sandals (and) a man with debts.'

(286) dʰilliː ki   radʒuajinaː ṭalliki   koḍukeː (aʋunu).
        Delhi to   king even   mother to   son   only (is)
        '(He is) a king to Delhi but (he is) a son only to (his)
        mother.'

In Telugu, the coordinating conjunction maʀiju 'and' is not
there in the olden times but was introduced due to the
influence of English. So it is always ellipted. Other
conjunctions are also ellipted in many sentences:

(287) aʋʋaː   kaːʋaːli,   (mariju)   buʋʋa   kaːʋaːli.
        mother wanted,   (and)   food   wanted
        '(I) want mother, (I) want food.'

(288) amma kaḍupu   tʃuːstunḍi   (kaːni),
        mother belly   see will   (but)
        aːlu   ʋiːpu   tʃuːstunḍi.
        wife   back   see will
        'Mother sees the belly (but) wife sees the back.'

The contrasting coordinating conjunction kaːni (but) is highly
productive while conjunctions expressing cause such as
enḍu tʃeṭa (why with) enḍuvalana, and enḍukanṭeː (why
because) are rare in Telugu proverbs. Even the conjunctions
indicating result are also rare.

Compound sentences occur very frequently in double
questions also:

(289) nakkekkaḍa ?   naːgaloːkamekkaḍa ?
        Fox where   Nagalokam where
        'Where is the fox ? (and) where is Nagalokam (the
        world of serpents) ?

They are occasionally found in imperatives:

(290) peḷḷi   tʃeːsi tʃuːḍu, illu   kaṭṭi   tʃuːḍu.

marrying   doing   see   house   building   see
'See (what struggle is) by performing marriage (to your daughter), (and) see (what is struggle) by building a house'.

Sentences with more than two main clauses are also possible in Telugu. Such compound sentences may create subtle humour :

(291) tʃitṭeḍu   nuːne   tetʃtʃi,   tʃinniṭḷoː
      small (amount)   Oil   bringing, small house in
      ḍiːpam,   peḍḍinṭḷoː   ḍiːpam   vattiki,
      light,   big house in   light   wick to
      vaḍina   neṭṭiki,   mangalivaḍi   kaṭṭiki
      sister-in-law   head to   barber's   knife to
      maː baːva   dʒuṭṭuki   (peṭṭaːli).
      my brother-in-law   hair   to   (I should put)
      'Bringing a small amount of oil, (I should put it to) the light in the small house, the light in the big house, to the wick, to the head of the sister-in-law, to the knife of the barber, (and) to my brother-in-law's hair.'

(292) maːtʃakamma   samarṭa (ki) makʰajiṭeːneːmi ?
      Machakamma   puberty (to) Makha being what if
                                     (on),
      pubbajiṭeːneːmi? mari   punarvasaiṭeː neːmi ?

      what   if   (on) Or   Punarvasu what
      Pubba?   if even ?
      'What if Machakamma's puberty takes place on Makha? What if Pubba? Or what if even Punarvasu?'

(293) giːsi   giḍḍeḍisṭeː   (ṭetʃtʃi)

scraping   giddedu giving   bringing

atʃtʃi kanʈi,   butʃtʃiki ,   pulimi
Achchi anointing to Buchchi to   coating
ama:ʋa:sja   bra:hmaɖikaʈʈe:
no-moon   Brahmin   to   like
                                that
na:kaʈʈe: ni:kaʈʈe: anɖiʈa
me to like that   you to like that   said that
" (I understand that) she said, when given a giddedu
(oil), applying it (to the hair on the head) to Achchi,
stroking (the head with oil) on Buchchi, to the
amavasya Brahmin, 'like that', to me 'like that'
(and) to you 'like that' ". (giɖɖeɖu = approximately
1/8[th] of a litre)

3. The Complex Sentence:
The complex sentence in Telugu consists of one main clause
and one or more than one subordinate clause (Venkateswarlu
1982: 742). In addition, the subordinate clause can be a
nominal, an adjectival or an adverbial clause. Comparative and
comment clauses are not shown separately but considered
within them.

As has been pointed out earlier, subordination is not common
in Telugu and so too in Telugu proverbs. Not all the functions
of clauses are exemplified in the available proverbs. It will be
worthwhile to note that the number of proverbs in complex
sentences in Avadhani, et al (1972) may not exceed 2% of a
total of 12,000 proverbs approximately.

A few examples are given below to illustrate the complex
sentence in Telugu proverbs.

a. Nominal Clause:

The nominal clause in the Telugu complex sentence performs different functions such as the subject, object, appositive, complement, and postpositional complement. The subordinators such as ani, anna, anṭuː, annaḍi (different forms of the root anu 'say') and the suffix oː (attached to the nominal clause) link the subordinate clause with the main clause. Three examples of nominal clause in proverbs for the object and subject positions are given below. Examples for the other functions are hard to get.

(294)   ṭana   tʃalla   pullaḍani

       his   buttermilk   cold that

       ṭaːneː   tʃeppukunṭaː ḍaː ?

       himself   tell will q.m.

       'Will he tell himself [that his buttermilk is sour] ?

       ani 'that' is the subordinator and joins the nominal clause (as the object of the verb) with the main clause.

(295)   pilitʃi   pillanisṭam (u)   anṭeː

       calling   girl will give (me)   saying

       kulam   ṭakkauʋannaːḍaṭa

       caste   less said that

       'Calling, if we said we would give (you) a bride, he said that the caste is low.'

                     Or

       'If (one), inviting (another), said ["(We) will give (you) a bride",]

       (I heard that) he said [that the caste is low.]'

                     [Venkateswarlu 1982 : 129]

[The subordinate clause consists of a participial phrase 'pilitʃi' and direct speech with the reporting verb 'anteː' as a participle while the main clause contains another reporting verb in the past with a suffix 'aṭa' (that) which means ' I understand/heard that'. The subordinator 'ani' is ellipted in both the clauses.

(296) eː   puṭṭaloː   eː
       which   anthill in   which
       paːmunḍoː   evariki   ṭelusu
       serpent is c.s.m. whom to   known
       '[That which serpent is in which pit] is known to whom.'

         [c.s.m. 'complex sentence marker']

b. Adjectival Clause

The suffix 'oː' comes at the end of the adjectival clause in a complex sentence. Adjectival clauses (relative clauses) are very rare in Telugu proverbs. For example,

(297) evaniki   kaḍupunoppoː   vaːnik(i)eː   manḍu.
       whom to   stomach ache   him to only   medicine
                   adj. c.m.
       'To whom is stomach ache], to him only is the medicine.'

Sometime, a proverb like

(298) naːru   poːsina vaːḍu   neːru
       paddy seedlings   putting man   water
       poːjaka   maːnaḍu.
       without pouring   stops h.m.
       'The man raising paddy seedlings will not stop giving water (to them).'

can be uttered as a complex sentence with an adjectival clause for emphasis according to context as follows:

(299) eʋaɖu naːru   poːsṭaːɖoː
      who   paddy seedlings puts adj.c.m
      ʋaɖu   niːru   poːjaka   maːnaɖu.
      he   Water   pouring without stops not
      'He who raises paddy seedlings will not stop giving water (to them).'

However, such constructions are not common in Telugu proverbs since they are circumlocutions and as such are avoided.

For example :

(300) eː   guːṭi   tʃilaka
      which   nest   Parrot
      aː   guːṭi   paluku   palukuṭunɖi.
      that   nest   Word   speak will.
      'Which nest (a) parrot (is in) that nest word (it) speaks.'

Becomes circumlocutous when expressed with an adjectival clause as follows:

(301) eː guːṭiloː   eː tʃilaka
      which nest in   which parrot
      unṭunɖoː   aː tʃilaka
      stays adj.c.m   that parrot

      aː guːṭi   paluku   palukuṭunɖi.
      that nest   Word   *speak will.*
      'Which parrot stays in which nest, that parrot speaks that nest word'.

In English proverbs, relative clauses are very common and they are more productive restrictively. In Telugu, relative clauses are ellipted into adjectival participial phrases giving rise to jatila vakyamulu which are very productive.

C. Adverbial Clauses

Majority of the clauses in Telugu proverbs are adverbial and the subordinators such as a, ani, anaga:, o:, anțe:, and ka:bațți link the subordinate clause with the main clause. They either qualify the verb or the adverb in the main clause. A few examples are given below.

(302) Time:

a:ru	nelalaki	tʃasṭa:ḍ (u)	anaga:
six	months to	die will	such that (adv.c.m.)

asalu	guṇam	ma:ruṭunḍi.
real	charater	change will.

'[when a man is about to die within six months] (his) real chracter will change]'.

(303) Place:

ekkaḍa	ni:ru	ninḍuno:
where	water	fills adv.c.m.

akkaḍa	kappalu	tʃe:runu.
there	frogs	gather

'[Where water accumulates], there frogs gather.'

(304) Cause:

kunḍalu:	tʃeṭalu:	le:vani
pots	sifters	not (that)

vanḍuku	ṭinaḍam	ma:nukunṭa:ma: ?
cooking (for)	eating	stop will q.m.

'[Because pots and sifters are not (there)], do we stop cooking for eating?'

(305) Condition:

va:ḍu	ṭetʃtʃuko:va:lanṭe:	appu ijjamanna:ru

altercation   bring buy should if that   loan   give said
'If one should (wants to) bring altercation, (they) said that one should give loan.'

                            Or
'If you want to have a quarrel, give a loan (so they said).'

(306) Proportion:

enṭa   sampaḍ[(a)(unḍunu)] o:anṭa   a:paḍa (unḍunu)
how much wealth is adv.c.m   that much danger is

'As the wealth (is), so the danger (is).'

(307) Reason:

me:ka çiram meṭṭaga: unnaḍani mari ka:sṭa la:gæḍaṭa.
goat head soft as is since a little more pulled that
'(I understand) that since the goat's head is soft, he pulled it a little more.'

(308) Circumstance:

bellamu   unḍani   motʃe:ṭi   ḍa:ka   na:kinaṭlu.
jaggery   is since   elbow   upto   licking like
 'Like licking upto the elbow since jaggery is there (on the elbow).'

(309) Result:

ba:gu   paḍaḍa:mani   po:ṭe:
Better   get let us   that going

banḍaṭʃa:kiri   ṭagulu   konnaṭlu.
drudgery   hooked   like

  'Like drudgery befalling on (us), when gone (for work) so that we will become better. '

4. Comparative Clause

Comparative clauses are generally avoided in proverbs since they result in roundabout constructions. Accordingly, they are better expressed in participial constructions, just like adjectival clauses (relative clauses). For example:

(310) ka:kaɪ   kala   ka:lamunṭa:n (u)anna
      crow being   forever   will be I matter said

      ḍa:ni   kanṭe: hamsaɪ
      that   than   swan being

      a:ru   nelal(u)   unṭa: n(u)
      six   months   be will

      annaḍi   me:lu (agunu).
      matter said   better is

      '(The matter) that I will live for six months being a swan is better than (the matter) that I will live forever being a crow.'

is expressed in a simpler way with a participial construction:

(311) ka:kila: kalaka:lamunḍe: kanṭe: hamsala:
      crow like   forever living   than   swan like

      a:ru   nelalu   unṭe:/ʊnna: tʃa:lu.
      six months   living   enough

      'Living like a swan for six months is enough (better) than living like a crow forever.'

That is why, the majority of the constructions involving the comparative conjunctions such as kanṭe (than)... (me:lu, najam, etc. 'better') and kanna: (than)… (me:lu, najam 'better' etc) are used with participles. Comparative clauses are hardly observed in Telugu proverbs.

e. Comment Clause:

Comment clauses are also hardly observed in Telugu proverbs, except in conversational proverbs (see below). So far we have observed the clause character of Telugu proverbs and noted that except for adverbial clauses, other clauses are not frequently employed in their formation.

4. Exchanges as Proverbs

Among Telugu proverbs, we come across a variety of proverbs which can be grouped under one category that can be called conversational proverbs. Into this category can be grouped those proverbs which are full conversational exchanges. They are generally two - turn exchanges in which the speaker initiates the exchange in a single sentence – very rarely in two sentences – and the hearer replies in one or two sentences. Once in a way, we also come across four - turn exchanges. These exchanges contain humorous propositional content. These conversational proverbs can be divided into mono-turn, bi-turn and poly-turn exchanges according to their discourse structure and inform or elicit or directive exchanges according to their syntactic function.

A few examples are given below:
a. Monoturn exchange

(312) aṭṭa: !   ni: koŋgu   ṭoligindanna:
        Mother-in-law your   saree edge   slipped saying

        ṭappe:,   le:danna: ṭappe:
        mistake   not saying   mistake

        'Mother-in-law! If I say that your saree slipped, (it is) a mistake, not so also is a mistake.'

(313) abbura:na   bidda   puṭṭindi,   gaddapa:ra

pleasant surprise baby   born is   cudgel
ṭeːraː   tʃevulu kuḍuṭanu   annaːḍata.
bring   ears   pierce I will said that
"(I understand) that, 'To my pleasure, a baby is born, bring a cudgel, I will pierce the ear lobes', said someone."

A turn as seen above may consist of one or more than one sentence and also the reporting verb may or may not be present.

b. Monoturn Exchange with a Comment as the Main Clause

(314) atʃtʃigaːḍu tʃaːvani: anṭe: butʃtʃigaːḍe: tʃatʃtʃenaṭa
      Achchigadu die let saying Buchchigadu   died that
                                only
      "(I understand that) when (one) said, 'Let Achchi die', only Buchchigadu died."

The main clause is a comment (on the subordinate clause) which also expresses the result of saying the proposition in the subordinate clause. These are however different from the stereotype comment clauses such as you know, to be honest in English and niːku telijaḍaː ? 'Don't you know?', nidʒamgaː tʃeppaːlanṭe: 'speaking truthfully' in Telugu.

c. Monoturn Exchange with a Comment (Participle Phrase)

(315) aːḍaleːnamma maḍḍela [oːḍannaḍi → oḍanna aṭula]
      playing   drum   defective said defective saying
      unable woman   + like
      'A woman unable to dance said (that) the drum is defective.' →
       'Like an incompetent dancer saying that the drum is defective.'

In the above mentioned proverb, a sentence in the indirect speech is turned into a participial phrase by suffixing [aʈula > aʈlu 'like'] to the participle form of annaɖi 'said she' which is anna 'saying'. This type of a process is very productive in Telugu, though the former structure is also frequent.

d. Diturn Exchange

(316) amma: amma: neppuleʈʈukunnappuɖu nannu le:pave:
      Mama ! Mama! pains starting when me wake
                                                                     me up

      anʈe: ala:ga: paɖuko:biɖɖa
      if said Is it so, sleep child !

      u:ʈaga: neppuleʈʈukunʈe: u:rella: ni:ve:
      well pains starting town all the you

      le:puʈa:vu anɖaʈa
      yourself said that
      wake up will

      "Saying, 'Mama! Mama! at the time of labour pains starting, wake me up', she said, 'Is it so, sleep child ! labour pains starting well, you yourself will wake up all the town !' "

                    Or

      "(I understand) that when said, 'Mama ! Mama ! At the time of labour pains starting, wake me up, she said, 'Is it so, sleep child ! Labour pains starting well, you yourself will wake up all the town."

(317) eka:ɖaça: bra:hmaɖa: anʈe: a:paɖalu
      Ekadasi is it O Brahmin saying dangers
      ka:pura:lu tʃe:sʈa:ja: anna:ɖaʈa.
      family do will they said that

"Saying, 'Is it Ekadasi, O Brahmin?', 'Will dangers live long?' he said.

(318) e:me: ʋa:ɖi ɖaggara   panɖu konnaʋanʈe:
      what?   him near   sleep   did saying

      anʈa   peɖɖa maniʃi   tʃe:ji paʈʈu kunʈe:
      that much   big man   hand   holding

      ka:ɖane:ɖeʈla: annaɖaʈa.
      no saying that how   said that

      "Saying, 'What? (you) slept with him,' she said, 'If such a big man holds the hand, how to say no?' "

All the above mentioned examples consist of two turns: an initiation and a reply. Each turn may further consist of one or more than one sentence. As can be seen from the above mentioned examples, we get a variety of syntactic structures; the first one is a directive with another directive and an informative in the reply; the second is an elicitation with a rhetorical question as a reply; while the third is a challenge with an assertive as a reply.

In diturn exchanges also, participialization is observed when the reporting verb is replaced by 'annaʈʈu, annaʈlu' (like saying):

(319) e:mi   tʃe:stunna:ʋura: anʈe:
      what   doing are you h.m   saying

      olakapo:si   eʈʈukunʈunna:nu   annaʈlu.
      spilling   lifting am I   like saying

      "When said, 'What are you doing?', like saying, 'I am spilling (the objects) and lifting (them).' or "Like saying, 'I am spilling and lifting', when said, 'What are youn doing?' "

Sometimes, the exchange may continue beyond two turns and may have more than one sentence in a turn:

(320)　eka:ḍaçi na:ḍu　　ṭala　　　　　aṇṭukuṇṭa:ʋe:mi
　　　　Ekadasi　day on　　head　　　　anointing what
　　　　aṇṭe:,　　　　　aḍi　　　　　niṭjaʋraṭamu,
　　　　saying　　　　　That　　　　　daily vratham,
　　　　ne:ḍe:　　　　　a:rambʰiɳtʃa:nu　anna:ḍaṭa
　　　　today only　　　started I　　　said that
　　　　marna:ḍu,　　　　ṭala　　　　　eṇḍuku
　　　　the next day,　　head　　　　　why
　　　　aṇṭuko:le:ḍaṇṭe:　ninaṭiṭo:　　ʋraṭam
　　　　anointed not saying　yesterday with　vratham
　　　　parisama:pṭi　　　ajinḍ(i)　　　anna:ḍaṭa
　　　　completion　　　became　　　said that
　　　　"When said, 'Why are you washing your head on Ekadasi (the eleventh day of the lunar month, which is auspicious)?' he said, 'That is a regular penance. I started today only.' The next day, when asked why he did not wash his head, he said penance was completed yesterday."

[The person is clever enough to cover his fault by telling one lie and further telling another to justify it which calls out the bluff]

e. Exchange in Indirect Speech

Most of the conversation in Telugu is generally in direct speech. However, sometimes, indirect speech is also observed:

(321)　paṭṭina　　　　ʋa:ḍu　　pakki　aṇṭe:,
　　　　catching　　　Man　　　pakki　saying,
　　　　gaṭṭununna　　ʋa:ḍu　　dʒella　annaṭṭu.
　　　　shore on staying　man　　dʒella　saying like

"Like the man on the bank saying dʒella when
the catcher (of the fish) said pakki.
[dʒella and pakki are two types of small fish]

(322)   paʈʈina   ʋaːɖu   pariga pilla   anʈeː,
        catching   man   priga girl   saying

        paʈʈani   ʋaːɖu   maʈʈapilla   annaːɖaʈa.
        not catching man   matta fish   said that
        'When, the man catching said that it was a
        young pariga, the man not catching it said (that
        it is) a young matta fish.'

In traditional Telugu, there are no orthographic conventions
such as the inverted commas and comma to distinguish direct
speech from indirect speech. Indirect speech is indicated by the
change of pronouns and adverbs which are sometimes not
present in proverbs as in the above examples.

f. Vocatives in Exchange

In Telugu proverbs, vocatives are more frequently observed
than in English. They may be either the names of individuals
(with or without historical reference) or personal pronouns:

(323)   appaː   pappu   ʋanɖaʋeː,
        sister !   grams   cook

        tʃeɖeːʋaːɖu   baːʋa   unnaːɖukaɖaː
        spoiling man   brother-in-law is there !
        'Sister ! cook grams, brother-in-law, bearing
        loss, is there indeed!'

(324)   ʈippulaːɖi̤   ʈippulaːɖi̤   maː
        extravagant girl, extravagant girl,   my

        aʋʋanu   tʃuːtʃinaːʋaː   anʈeː
        mother   seen have you   saying

        ʈiːrtʰamloː   maː   baːʋanu

Mayfair in   my   brother -in-law
tʃuːtʃinaːʋaː   annaḍaṭa.
seen have you   said she that
"Saying, 'Extravagant girl! Extravagant girl! Have you seen my mother?' she said, 'In the Mayfair, have you seen my brother-in-law!' "

(325)   njajamu   tʃeppu   naːgireḍḍiː   anṭeː
       justice   speak   Nagireddy   saying
       naːku   iḍḍaru   peḷḷaːle   annaːḍata.
       me to   two   wives   said that
       "Saying, 'speak justice, Nagireddy!' he said, 'To me also are two wives!'"

g. Conversation with Nonverbal Action
Certain proverbs not only report speech but also report the nonverbal action resulting from such speech as in (218).

So far we have exemplified a number of syntactic patterns of Telugu proverbs at the simple, compound and complex levels.

IV. Conclusion
From an analysis of the sentence in Telugu proverbs, it has been shown that proverbs do utilize the existing patterns in the language to express social praxis as prototypes in an open-ended and non-restrictive pattern.

All the four major syntactic classes of declarative, interrogative, imperative, and exclamatory sentences in their simple and complex sentence types with all the clauses except the adjectival clause are represented in the corpus of Telugu proverbs.

In terms of socio-pragmatic choices, Telugu proverbs differ from those of English in the following respects:

There is a conspicuous presence of double questions such as alternative questions and parallel propositional questions in addition to a large number of rhetorical questions in Telugu.

Telugu prefers the participial phrasal structure to the clause structure. Hence, there is a very large corpus of participial phrasal sentences when compared with English. Complex sentences containing the nominal and the adverbial clauses are few and far between in Telugu. Very conspicuously, the adjectival clause in proverbs is absent.

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AN OVERVIEW OF GEDEO SEGMENTAL PHONOLOGY

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Abstract

Gedeo is a language spoken in the Southern part of Ethiopia and belongs to the Cushitic branch of the Afro-Asiatic language phylum, specifically to the Highland East Cushitic (HEC) language group. The HEC language group can be seen as Northern Highland East Cushitic (nHEC) that includes Hadiyya and Kambaata, and Southern Highland East Cushitic (sHEC) that includes Sidaama, Gedeo and Burji (cf. Hudson 2007).

Gedeo is a head final and suffixing language that follows an SOV word order and has complex morphological features. Regarding the phonemic inventory, Gedeo consists of 24 consonant phonemes, and 5 short and 5 long vowels. The characteristic feature of Gedeo consonants is the presence of the alveolar implosive /ɗ/ and the four ejectives /p'/, /t'/, /k'/, /c'/. Consonant gemination and vowel length have a phonemic status in this language.

The focus of this article is to give an overview on the segmental phonological features of Gedeo. Hence, it briefly discusses phonemic inventories of consonants and vowels by providing basic minimal pairs, deals with the possible clusters and geminates, and explains some of the morphophonemic processes of the language.

I. Introduction

Gedeo is a language spoken in the Southern part of Ethiopia and belongs to the Cushitic branch of the Afro-Asiatic language phylum, specifically to the Highland East Cushitic (HEC) language group. The HEC language group can be seen as Northern Highland East Cushitic (nHEC) that includes Hadiyya and Kambaata, and Southern Highland East Cushitic (sHEC) that includes Sidaama, Gedeo and Burji (cf. Hudson 2007). The number of Gedeo mother tongue speakers throughout the country is 974,609. Among these, 735,765 are living in the south-west part of Ethiopia, more precisely in Gedeo Zone, which is 360 km far from the country's capital Addis Ababa (CSA 2007).

Gedeo is a head final and suffixing language that follows an SOV word order and has complex morphological features. Regarding the phonemic inventory, Gedeo consists of 24 consonant phonemes, and 5 short and 5 long vowels. The characteristic feature of Gedeo consonants is the presence of the alveolar implosive /ɗ/ and the four ejectives /p'/, /t'/, /k'/, /c'/. The first three are plosive ejectives while the last one is an affricate ejective. Consonant gemination and vowel length have clearly a phonemic status in this language.

The focus of this article is to give an overview on the segmental phonological features of Gedeo language. Hence, (2) briefly discusses phonemic inventories of consonants and vowels by providing basic minimal pairs of the language, (3) deals with clusters and geminates, and finally (4) explains some of the morphophonemic processes in Gedeo.

II. Phonemic Inventories
This section deals with the consonant and vowel phonemes of Gedeo.

2.1 Consonants
Gedeo has 24 consonant phonemes. The inventory of these phonemes is given below in Table 2.1.

Table 2.1: Inventory of Gedeo Consonant Phonemes[i]

	Bilabial	Labio-dental	Alveolar	Palatal	Velar	Glottal
Stop Plosive Ejective Implosive	b p'		t d t' ɗ		k g k'	ʔ
Fricative		f	s z	ʃ		h

Affricate Ejective				c dʒ c'		
Nasal	m		n			
Tap/ Flap			r			
Lateral			l			
Approximant	w			j		

The voiced alveolar fricative /z/, which I have included in the inventory as a phoneme, is found in loan words from/ through Amharic. When the native speakers of Gedeo encountered loan words of this sound, they do not try to assimilate it to the related sound found in their language, rather they keep using it as it is pronounced in the source language. Thus, it should be included as part of the consonant inventory of Gedeo. The following lists of such words are found in the data: *mazmuːre* 'song', *barzaːfe* 'Eucalyptus tree', *zoːne* 'zone', *zannatʼi* 'play/ dance (Imp)', *zakkʼe* 'belt', *ziːtta* 'lorry, huge person', and *zerkʼo* 'guessing'. However, some of the words from this list do not seem to be derived from Amharic or through Amharic for they are not used in the language at least in the current usage; *zakkʼe* 'belt' and *ziːtta* 'lorry' can be considered from this respect.

Glottalized ejective consonants are common in Cushitic, Chadic and Ethiopian and South Arabian Semitic, so it probably be the Afro-Asiatic feature (Hudson 2007: 531). Gedeo, similar to the other Ethiopian languages, in general, and to the other East Cushitic languages, in particular, has a list of ejective consonants, which include /pʼ/, /tʼ/, /kʼ/, and /cʼ/ but lacks /sʼ/ which is prevalent in some other Ethiopian languages as in, for example, *sʼelot* 'prayer' and *sʼom* 'fasting' in Amharic, an Ethio Semitic language.

For the Highland East Cushitic (HEC) groups, Hudson (1989) reconstructed /k'/ as the only proto ejective consonant. If his reconstruction holds true, it is possible to say that the other ejectives that are found in the current usage of HEC languages are latter developments. The bilabial ejective /p'/ is not frequent in HEC languages, and it is almost absent in Kambaata (cf. Hudson 2007). However, Gedeo uses this bilabial ejective, both in the geminated and non-geminated form, in a few words as in, for example, *si:pp'e* 'personal name for females' , *k'u:pp'e* 'egg', *di:p'a* 'to sleep', *gop'a* 'to be weak, to fail'.

As discussed above the number of Gedeo consonant phonemes is 24. Below in (2.1) a list of minimal pairs is given to attest the phonemic status of these consonant sounds.

(2.1)   Minimal Pairs of Consonants

/p'/ vs /d/	/gop'ɑ/ 'to fail'	/godɑ/ 'vally, lowland'
/ʔ/ vs /j/	/reʔe/ 'goat'	/reje/ 'he died'
/b/ vs /g/	/bɑnɑ/ 'to open'	/gɑnɑ/ 'to hit'
/f/ vs /r/	/gɑːfɑ/ 'horn (of animal)'	/gɑːrɑ/'eyelash, eyebrow'
/t'/ vs /l/	/t'ɑt'ɑ/ 'to rap'	/t'ɑlɑ/ 'to slip, to skid'
/z/ vs /l/	/zɑkk'e/ 'belt'	/lɑkk'e/ 'she inquired'
/t/ vs /s/	/tɑffe/ 'flea'	/sɑffe/ 'she began'
/h/ vs /c'/	/horɑ/ 'to bread'	/c'orɑ/ 'small bag made of goat's testicle'
/ɗ/ vs /m/	/ɗɑrɑ/ 'lie'	/mɑrɑ/ 'to go'
/ʃ/ vs /g/	/gɑtɑ/ 'to remain'	/ʃɑtɑ/ 'to split'

Consonant gemination has a phonemic status in this language. Consider the contrasts between geminated and non-geminated consonants in (2.2) below:

(2.2) Non-geminated   Geminated

/t'ɑlɑ/   'to slide'   /t'ɑllɑ/   'shame'

/gɑːdo/ 'Let me lie in wait for'   /gɑːddo/ 'scorpion'
/gɑːbe/ 'a type of cotton cloth'   /gɑːbbe/ 'he wished'
/gadɑ/ 'Gada system'[ii]   /gaddɑ/ 'a praise of the
                                             dead after the funeral'
/elɑ/ 'good'   /ellɑ/ 'name of a month
                                             approx. May'
/odo/ 'news'   /oddo/ 'center'
/ɑnɑ/ 'to clear'   /ɑnnɑ/ 'father'
/wodɑ/ 'to save'   /woddɑ/ 'to fry'
/mutʼɑ/ 'to taste'   /muttʼɑ/ 'quality'
/aɗɑ/ 'to gore'   /aɗɗɑ/ 'to take'
/bule/ 'name of a place'   /bulle/ 'flour'

The other feature regarding Gedeo consonants is the presence of voiceless and voiced contrasts between alveolar fricatives /s/ vs /z/, alveolar plosives /t/ vs /d/, velar plosives /k/ vs /g/, and palatal affricates /c/ vs /dʒ/.

2.2   Vowels

The vowel phonemes in Gedeo are /i/, /e/, /ɑ/, /u/, /o/ with the long counterparts /iː/, /eː/, /ɑː/, /uː/, /oː/. These phonemes are given in table 2.2 below.

Table2.2.: Vowel Phonemes of Gedeo[iii]

	Front		Central		Back	
High	i	iː			u	uː
Mid	e	eː			o	oː
Low			ɑ	ɑː		

Below is given the minimal pairs of Gedeo vowels so that one can understand their phonemic status.

(2.3)   Minimal Pairs of vowels
/i/ vs /e/ : /ilɑ/   'to give birth'   /ibɑ/   'to fall'

	/elɑ/	'to be good'	/ebɑ/	'to send'
/ɑ/ v /u/ :	/ɑnɑ/	'to clear'	/bɑno/	'let me open'
	/unɑ/	'member'	/buno/	'coffee'
/o/ vs /u/	/gobɑ/	'to sew'	/gorɑ/	'blackberry'
	/gubɑ/	'to burn'	/gurɑ/	'to collect'

Similar to consonant gemination, vowel length is also phonemic in Gedeo. The contrasts between short and long vowels below in (2.4) illustrate this fact.

(2.4)		Short Vowels			Long Vowels
/i/	/filɑ/	'choice, comb'	/i:/	/fi:lɑ/	'to favor'
/e/	/elɑ/	'to be good'	/e:/	/e:lɑ/	'pond'
/ɑ/	/gɑfɑ/	'to cook by boiling'	/ɑ:/	/gɑ:fɑ/	'horn (of animals)'
/u/	/mut'ɑ/	'to taste, to lick'	/u:/	/mu:t'ɑ/	'to complete, to finish'
/o/	/gofɑ/	'courage, face'	/o:/	/go:fɑ/	'weak'

III. Clusters and Geminates

Basically two clusters of consonants occurs intervocalically in a word medial position in Gedeo. However, in most cases the second of the clusters is a geminated consonant that may lead us to assume that the maximum number of consonant sequences is three. Most previous studies, (Hudson 2007; Wedekind 1990 among others), on HEC languages, in general, and on Gedeo, in particular, assume that only two consonant clusters are possible, and they did not recognize the presence of the three consonant sequences. Nonetheless, Lulseged (1981) and Eyob (2011) mention the possibility of such sequences at certain conditions. In Eyob (2011), I discussed the possibility of three consonant sequences where a geminated consonant is preceded by /ʔ/, /l/, /m/, and /n/. However, I revise this assumption in the current work and con-

firm that three consonant sequences exist across syllables where the initial consonant is a glottal stop followed by geminated sonorants. [iv]

The cluster of consonants can be in any of the following order: i) Sonorant- Obstruent, ii) Sonorant – Sonorant, and iii) Glottal – Sonorant, as is exemplified in (3.1) – (3.3) below.

(3.1) Sonorant – Obstruent
/diːɗɑnto/	'breakfast'	/muːnde/	'blood'
/lɑngɑ/	'two'	/dɑncɑ/	'good'
/gurgurɑ/	'to sell'	/gorsɑ/	'morning'
/bilbilɑ/	'phone'	/belto/	'child'

(3.2) Sonorant – Sonorant
| /kɑrno/ | 'this year' | /kormɑ/ | 'cock' |
| /worme/ | 'knife' | /dɑrme/ | 'colt, young horse' |

(3.3) Glottal Stop – Sonorant
| /ʃiʔnnɑ/ | 'urine' | /k'eʔjjɑ/ | 'claw' |
| /bɑʔllɑ/ | 'wide' | /hɑʔwwɑ/ | 'water' |

Regarding gemination, all Gedeo consonants except /h/ and /z/ can be geminated. Few examples are given below in (3.4) based on manner of articulation, i.e., one example from each manner of articulation. In addition, two more examples are provided for ejective and implosive consonants. (Also cf. section (2.1) above).

(3.4)
bb	/ibbe/	'louse'	/eːbbɑ/	'warm'
ʃʃ	/hɑʃʃɑ/	'evening'	/ɑriʃʃo/	'sun'
dʒdʒ	/boːdʒdʒe/	'cold(air)'	/dʒidʒdʒiːrɑ/	'to exchange'
nn	/ɑnnɑ/	'father'	/onnɑ/	'heart'
rr	/bɑrrɑ/	'day'	/ɑrrɑbo/	'tongue'
ww	/uwwɑ/	'to give'	/oːsuwwɑ/	'children'

ll	/ellɑ/	'name of	/melɑlle/	'female'
		month (May)'		
pp'	/k'uːpp'e/	'egg'	/lɑpp'e/	'chest'
ɗɗ	/aɗɗɑ/	'to take'	/t'aɗɗe/	'morning sun'

As discussed above consonant clusters/ geminates occur only word medially. The sequence of consonant clusters is predominantly Sonorant – Obstruent (cf. (3.1) above).   No cluster of consonants is possible either word initially or word finally. The distribution of a single consonant is also restricted to word initial or medial position. This is to mean that all Gedeo words end with vowels. On the other hand, a vowel phoneme in Gedeo can occur in all positions, i.e., word initially, medially, or finally. Every short vowel has its long counterpart and the distribution of these long vowels is possible at word initial and medial position. Consider the examples in (3.5) below

(3.5) Word Initially   Word Medially   Word Finally

/i/	itɑ	'to eat'	ʃijɑ	'to kill'	iti	'eat!' (2Sg.Imp)
/e/	elo	'good'	lebɑ	'to add'	gɑne	'he hit'
/ɑ/	ɑnnɑ	'father'	t'ɑllɑ	'shame'	dʒilɑ	'wedding'
/u/	uggɑ	'to put in'	sunk'ɑ	'to kiss'	dulu	'he may
						slaughter'
/o/	onnɑ	'heart'	noʔo	'we'	lɑmoʔo	'rat'
/iː/	iːmɑ	'top, on'	diːnɑ	'enemy'	--------------	
/eː/	eːbbɑ	'warm'	deːgge	'straw'	--------------	
/ɑɑ/	ɑːgɑ	'to enter'	t'ɑːt'ɑ	'antelope'	--------------	
/uu/	uːrrɑ	'to stand'	muːtt'ɑ	'to finish'	--------------	
/oo/	oːlo	'termite'	goːfɑ	'weak'	--------------	

IV. Morphophonemic Processes

The major morphophonemic processes that take place in Gedeo are assimilation, epenthesis, metathesis, elision, and replacement.

4.1   Assimilation

Both partial and total assimilation are identified in Gedeo. Total assimilation is more frequent and productive than the partial one. The direction of assimilation can also be either regressive or progressive. In below these two types of assimilation are briefly discussed.

4.1.1   Partial Assimilation

The partial assimilation can be seen with regard to change in place of articulation, or voicing. The following are common changes of partial assimilation. The direction of assimilation in (4.1) and (4.3) is regressive, while in (4.2) it is progressive.

i) Stem final /j/ or /m/ partially assimilates in place of articulation with suffix initial /t/ as is exemplified in (4.1) below.

(4.1)
Verb Stem   V-2Sg-Perf-2Sg-Perf V-3Sg.F-Perf
mt → nd
c'im- 'to become old'
               c'in-d-e-tt-e(<c'im-t-e-tt-e)   c'in-d-e(<c'im-t-e)
sim- 'to become fat'
               sin-d-e-tt-e (<sim-t-e-tt-e)   sin-d-e(<sim-t-e)
jt → lt
ʃij- 'to kill'   ʃil-t-e-tt-e   ʃil-t-e
gej- 'to reach'   gel-t-e-tt-e   gel-t-e

ii) Suffixing initial /t/ partially assimilates in voicing with stem final /m/, /n/, or /l/ as in (4.2) below.

(4.2)
Verb Stem V-2Sg-Perf-2Sg-Perf V-2Pl-Perf V-3Sg.F-Perf
mt → nd
sim- 'to become fat'

        sin-d-e-tt-e   sin-din-e   sin-d-e

nt → nd
gɑn- 'to hit'

        gɑn-d-e-tt-e   gɑn-din-e   gɑn-d-e
lt → ld
kul- 'to call'

        kul-d-e-tt-e   kul-din-e   kul-d-e

The partial assimilation of /m/ with /t/ where /mt/ → /nd/ passes through two steps mt → nt → nd.

iii) Suffix initial /n/ partially assimilates to the labial place of articulation as in (4.3) below.

(4.3)
Verb Stem   V-1Pl-V-Perf-1Pl-Perf   V-3Pl-V-Perf
np' → mp'
gop'- 'to be weak'

        go-m-p'-e-nn-e   go-m-p'-e
di:p'- 'to sleep'

        di:-m-p'-e-nn-e   di:-m-p'-e

4.1.2 Complete Assimilation
Complete assimilation in Gedeo can be summarized as follows:

i) Stem final /ʔ/ totally assimilates either to suffix initial /n/
(4.4)
Verb Stem   V-1Pl-V-Perf-1Pl-Perf   V-3Pl-Perf

maccoʔ- 'to be intoxicated' maccon-n-e-nn-e maccon-n-e
maddoʔ- 'to be injured'   maddon-n-e-nn-e maddon-n-e

ii) Suffix initial /t/ totally assimilates to stem final obstruent
(4.5)
Verb Stem V-2Sg-Perf-2Sg-Perf V-2Pl-Perf V-3Sg.F-Perf
bt→bb gub- 'to burn' gub-b-e-tt-e gub-bin-e gub-b-e
dt→dd ɑbid- 'to catch' ɑbid-d-e-tt-e ɑbid-din-e ɑbid-d-e
kt→kk tik- 'to untie' tik-k-e-tt-e tik-kin-e tik-k-e
ft→ff c'uf- 'to close' c'uf-f-e-tt-e c'uf-fin-e c'uf-f-e
st→ss hos- 'to spend the day'
                           hos-s-e-tt-e hos-sin-e hos-s-e
ʃt → ʃʃ goʃ- 'to uproot' goʃ-ʃ-e-tt-e goʃ-ʃin-e goʃ-ʃ-e

iii) Stem final /r/ or /l/ totally assimilates to the alveolar
     implosive /ɗ/
When the benefactive/ reflexive marker –eɗ follows verb
stems ending in /r/ or /l/ a total assimilation to /ɗɗ/ occurs after
the deletion of the vowel of the benefactive marker.
(4.6)
Verb Stem   V-Benf-Perf-   1Sg-Perf
r + -eɗ → ɗɗ
hir- 'to buy'   hiɗ-ɗ-e-nn-e   (< hir-eɗ-e-nn-e)
gurgur- 'to sell'   gurguɗ-ɗ-e-nn-e   (< gugur-eɗ-e-nn-e)

l + -eɗ → ɗɗ
kul- 'to tell'   kuɗ-ɗ-e-nn-e   (< kul-eɗ-e-nn-e)
dul- 'to slaughter' duɗ-ɗ-e-nn-e   (< dul-eɗ-e-nn-e)

iv) Suffix initial /n/ totally assimilates to stem final /l/
(4.7)
Verb Stem   Verb-1Pl-Perf-1Pl-Perf V-3Pl-Perf
ln → ll
kul- 'to call' kul-l-e-nn-e   kul-l-e
ul- 'to smell' ul-l-e-nn-e   ul-l-e

v) Stem final /j/ totally assimilates to suffix initial /n/
(4.8)

Verb Stem	V-1Pl-Perf	V-2Pl-Perf	V-3Pl-Perf
jn → nn	ʃij- 'to kill'	ʃin-n-e-nn-e	ʃin-n-e
	gej- 'to reach'	gen-n-e-nn-e	gen-n-e

vi) Suffix initial /t/ undergoes ejectivization/ glottalization
When Suffix initial /t/ follows verb stems ending in ejectives, glottal stop, or alveolar implosive, ejectivization would occur. If the stem final consonants are ejectives, i.e., /p'/, /t'/, /k'/ and /c'/, the suffix initial /t/ totally assimilates to the respective ejective consonant (4.9). However, if the stem final consonants are either glottal stop /ʔ/ or alveolar implosive /ɗ/ that come preceding the suffix initial /t/, the result would be an ejectivization to /tt'/ (4.10).[v]

(4.9)

Verb Stem	V-2Sg-Perf-2Sg-Perf	V-2Pl-Perf	V-3Sg.F-Perf
p't → pp'	diːp'- 'to sleep'	diːp-p'-e-tt-e	diːp-p'in-e	diːp-p'-e
t't → tt'	wot'- 'to cut'	wot-t'-e-tt-e	wot-t'in-e	wot-t'-e
k't → kk'	tuk'- 'to touch'	tuk-k'-e-tt-e	tuk-k'in-e	tuk-k'-e
c't → cc'	boc'- 'to chop'	boc-c'-e-tt-e	boc-c'in-e	boc-c'-e

(4.10)

Verb Stem	V-2Sg-Perf-2Sg-Perf	V-2Pl-Perf	V-3Sg.F-Perf
ʔt → tt'			
bɑʔ- 'to disappear'	bɑt-t'-e-tt-e	bɑt-t'in-e	bɑt-t'-e
ɗt → tt'			
heɗ- 'to exist'	het-t'-e-tt-e	het-t'in-e	het-t'-e

4.2 Epenthesis

The epenthetic vowel /i/ is inserted to break the impermissible

sequence of consonants. Gedeo allows two (or three, if a glottal stop is followed by geminated sonorants) consonant sequences only word medially (cf. section 3). If any sequence other than this occurs, an epenthetic /i/ is inserted.

Moreover, since the language does not allow an Obstruent – Sonorant, or Obstruent – Obstruent sequence in its native words, if such sequences occur, one of the three morphophonemic rules, i.e., epenthesis, assimilation, or metathesis, would apply. [vi] Some examples on the use of epenthetic are given below in (4.11).

(4.11)

	Verb Stem	V-Ep-DOUBCAUS
(a)	ʃik'- 'to approach'	ʃik'-i-siːs-
	hoc'- 'to chop'	hoc'-i-siːs-
(b)	sunk'- 'to kiss'	sunk'-i-siːs-
	uww- 'to give'	uww-i-siːs-
	gaʔmm- 'to bite'	gaʔmm-i-siːs-

In (4.11 a) even though the number of the consonant sequence is two, an epenthetic is used in between because they have an Obstruent – Obstruent order. However, in (4.11 b) the epenthetic is used to avoid three or more consonant sequences.

4.3   Metathesis

Mostly metathesis occurs in Gedeo to avoid the impermissible obstruent – sonorant sequences. In addition to this, when verb stems ending with sonorants are followed by glottal stop (the variant of the middle suffix ɗ), metathesis would take place. For both of these conditions examples are provided in (4.12), (4.13) and (4.14).

(4.12)

Verb Stem	V-1Pl-V-Perf-1Pl-Perf	V-3Pl-V-Perf
gib- 'to refuse'	gi-m-b-e-nn-e	gi-m-b-e

but- 'to abduct'	bu-n-t-e-nn-e	bu-n-t-e
c'uf- 'to close'	c'u-ŋ-f-e-nn-e	c'u-ŋ-f-e

The examples in (4.12) shows the metathesis of stem final obstruents (stops and fricatives in this case) with suffix initial sonorant /n/. This alveolar sonorant sound undergoes bilabial assimilation in the first example and labio-dental on the third. Whereas, it remains the unchanged on the second. In addition to these, stem final obstruent (fricative in this case) can also metathesize with suffix initial sonorant /l/, which is the variant of the middle suffix /eɗ/ as is exemplified in (4.13).

(4.13)

Verb Stem	V-Mid-V-3Sg.M-Perf	
ɑf- 'to get'	ɑ-l-f-ø-e	(< ɑf-eɗ-ø-e)
tuk'- 'to touch'	tu-l-k'-ø-e	(<tuk'-eɗ-ø-e)

Even if sonorant – obstruent is a possible sequence in Gedeo, metathesis would take place if the stem final sonorant precedes the middle suffix /ʔ/, a variant of /eɗ/ resulting the gemination of the stem final sonorants. The examples in (4.14) below show this.

(4.14)

Verb Stem   V.Mid

kul- 'to tell' kuʔll- 'to tell for own benefit'(<kul-eɗ-→ kul-øɗ-→kuʔll)

gɑn- 'to hit' gɑʔnn- 'to hit onself'(<gɑn-eɗ- →gɑn-øɗ- → gɑʔnn-)

4.4   Elision

In Gedeo, we commonly see i) elision of the initial CV *hi* of the homophones verbs *hijj*- 'to act/ (happen) to be', and *hijj*- 'to say', ii) elision of stem final glottal stop, iii) elision of app-

roximants/glides and iv) elision of stem final vowel. Each of these are briefly discussed below by providing a few examples.

i) Elision of **hi**

In a compound verb construction, the auxiliary verbs *hijj-* *'to act/ to be'*[vii] and *ass-* 'to do/ to make' are used as the second member of intransitive and transitive compound verbs respectively. The initial **hi** of the head of the compound verb **hi**jj- is elided in fast speech following the categorically unclear (most probably verbal-noun/ verb like) stem.[viii] Consider the examples in (4.15) below.

(4.15)

hi > ø   ʃikk'i **hi**jj- → ʃikk'ijj-   'to approach '

(Lit. to act the approaching/ happen to approach)

          mett'i hijj- → mett'ijj-   'to stick'

(Lit. to be in a sticking position)

Similarly, the other homophonous form *hijj-* 'to say' also undergoes similar process where the initial CV is elided as in the direct speech in (4.16).

(4.16)

hi > ø boc'i **hi**jje → boc'ijje   "You (Sg) cut in to pieces!' he said"

ɑmo **hi**jje → ɑmojje "'You (Sg) come!' he said"

ɑmme **hi**jje → ɑmmejje "'You (Pl) come!' he said"

ii) Elision of Stem final glottal stop

When followed by consonant, stem final geminated glottal stop may be elided or degeminated as in (4.17) below.[ix] Both of the two forms are acceptable.

(4.17)

Verb stem V-2Sg-Perf-2Sg-Perf   V-3Sg.F-Perf   V-3Pl-Perf

ʔʔ > ø meʔʔ- 'to go' me-t-e-tt-e me-t-e   me-n-e

Verb stem V-Perf-1Sg-Perf V-Ep-1Pl-Perf-1Pl-Perf V-Ep-3Pl-Perf

ʔʔ > ʔ

meʔʔ- 'to go'   meʔ-e-nn-e   meʔ-i-n-e-nn-e   meʔ-i-n-e

iii) Elision of glides/ approximants

The approximants /w/ and /j/ may be elided stem finally and results in lengthening of the preceding vowel as in (4.17) and (4.18) below.

(4.17)

V-Lv-1Pl-S.Perf-1Pl-S.Perf   V-Lv-2Sg-S.Perf-2Sg-S.Perf

foj- 'to separate'   fo-o-n-e-nn-e   fo-o-t-e-tt-e

V-Lv-2Pl-S.Perf   V-Lv-3Sg.F-S.Perf   V-Lv-3Pl-S.Perf

fo-o-tin-e   fo-o-t-e   fo-o-n-e

(4.18)

V-Lv-1Pl-S.Perf-1Pl-S.Perf V-Lv-2Sg-S.Perf-2Sg-S.Perf

uww-   'to give'   u-u-n-e-nn-e   u-u-t-e-tt-e

V-Lv-2Pl-S.Perf   V-Lv-3Sg.F-S.Perf   V-Lv-3Pl-S.Perf

u-u-tin-e   u-u-t-e   u-u-n-e

iv) Elision of stem final vowel

In fast speech stem final vowels are elided when followed by a word that begins with a vowel as in (4.19) and (4.20) below. In each pair the elision is shown on the second example.

(4.19)
(a)   isi   ɑneːʔe   fulce=ni
            3Sg.M.NOM 1Sg.ACC

get_out.CAUS.3Sg.M.S.Perf=Dcm
'He caused me to get out'
    (a₁) isɑne   fulceni   (iɑ > øɑ)

(4.20)

(a)   p'ɑʔʔɑ   ɑsse
              Break.Vn   make.3Sg.M.S.Perf
              'He broke open (in to two)'
    (a₁) p'ɑʔʔɑsse   (ɑɑ > øɑ)

4.5   Replacement of /ɗ/ by /ʔ/ and /l/

Usually the glottal stop /ʔ/ and the alveolar lateral /l/ replace the alveolar implosive of the middle suffix /-eɗ/.[x] If the stem final consonants are sonorants or glottal stop, the glottal stop /ʔ/ replaces the implosive of the middle suffix (4.21). Whereas if the stem final consonants are obstruents, the alveolar latter /l/ replaces the alveolar implosive of the middle suffix (4.22). This replacement initiates metathesis to avoid the impermissible consonant sequences.

(4.21)

V-Mid-S.Perf-1Sg-S.Perf	V-Mid-3Sg.M-S.Perf	V-Mid-Ep-3Sg.F-S.Perf
ʃij- 'to kill' ʃiʔ-ʔ-e-nn-e	ʃiʔ-ʔ-ø-e	ʃiʔ-ʔ-i-t-e
ʃoʔ- 'to hide' ʃoʔ-ʔ-e-nn-e	ʃoʔ-ʔ-ø-e	ʃoʔ-ʔ-i-t-e

(4.22)

V-Mid-V-S.Perf-1Sg-S.Perf	V-Mid-V-3Sg.M-S.Perf	V-Mid-V-Ep-3Sg.F-S.Perf
but- 'to abduct' bu-l-t-e-nn-e	bu-l-t-ø-e	bu-l-t-i-t-e
boc'- 'to chop' bo-l-c'-e-nn-e	bo-l-c'-ø-e	bo-l-c'-i-t-e

V. Conclusion

So far we have briefly outlined the segmental phonological features of Gedeo where phonemic inventories of consonants

and vowels, properties of clusters and geminates, and different morphophonemic processes are treated.

Gedeo is found to have twenty four consonant phonemes. Among these the alveolar fricative /z/ is only found in loan words from or through Amharic. The presence of the glottalized/ ejective consonants is the characteristic feature of this language. Consonant gemination also has a phonemic status in Gedeo. The distribution of every single consonant is restricted to word initial or medial position for all Gedeo words end with vowels.

Basically two cluster of consonants occurs intervocalically only in a word medial position in Gedeo. However, in most cases the second of the clusters is a geminated consonant that may lead us to assume that the maximum number of consonant sequences is three. The cluster of consonants can be in any of the following order: i) Sonorant- Obstruent, ii) Sonorant – Sonorant, and iii) Glottal – Sonorant. However, the predominant order is sonorant – obstruent.

Regarding vowels, Gedeo has five short vowels with their long counterparts all of which with a possible distribution at all positions, but long vowels seem not to occur word finally.

The common morphophonemic processes that take place in Gedeo are assimilation, epenthesis, metathesis, elision, and replacement. The type of assimilation can be partial or complete, and the direction of assimilation is also either progressive or regressive. The assimilation of consonants can be towards voicing, place of articulation, or manner of articulation. The high front vowel /i/ is used to break the impermissible consonant sequences or number of clusters. Metathesis mainly occurs to avoid the obstruent – sonorant sequence. Elision of the initial CV *hi* of the homophones verbs

hi*jj*- 'to act/ (happen) to be' and ***hi****jj*- 'to say', elision of stem final glottal stop, elision of approximants/ glides, and elision of stem final vowel are common phenomena. Usually the glottal stop /ʔ/ and the alveolar lateral /l/ replace the alveolar implosive of the middle suffix /-eɗ/.

Abbreviation

1	First person	2	Second person
3	Third person	Dcm	Declarative clause marker
E.C	Ethiopian Calendar	F	Feminine
Imp	Imperative	Lv	Long vowel
M	Masculine	Mid	Middle voice
Ø	Deletion/null sound	Perf	Perfective
Pl	Plural	S.Perf	Simple perfective
Sg	Singular	V	Verb
Vn	Verbal noun		

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[i] The alveolar sounds in this study are treated as dentals by Lulseged (1981) but alveolars by Wedekind (1980). On the other hand, the palatals in this study are analysed as palatals by Lulseged (1981) but postalveolars by Wedekind (1980).

[ii] Gada system is a traditional way of settling desputes.

[iii] In my data I have found a long nasal back vowel õː in a single word stem /õːʔ-/ 'to roar' which did not recur any where in the corpus. My informants are also unable to find any other word with this sound. Hence, it is difficult to tell the status of this sound. There is also no base or any motivating factor to consider it as an allophone of the phoneme /o/. Consider below the conjugation of this verb stem in simple perfective form:

roar:1SG:S.PER   roar:1PL:S.PER   roar:2SG:S.PER
roar:2PL:S.PER   roar:3M.SG:S.PER   roar:3F.SG:S.PER

õːne   õːnenne   õːtette   õːtine
õːʔe   õːte
roar:3PL:S.PER

õːne

In the 2SG, 2PL and 3SG of the above conjugation, this nasal vowel retains before the non nasal consonants. Hence, it probably be an additional vowel phoneme rather than an allophone resulted from phonological process.

[iv] Lulseged (1981) points out that mostly the maximum number of clusters is two and /r/ or /l/ may preced a geminated consonant. However, the claim where /r/ or /l/ may preced a geminated consonant could not be supported from any of the text data of the current study.

[v] Geminated ejective are written as pp', tt', kk', cc'. This pattern holds even if a morpheme separator is inserted in between the geminates as in p-p', t-t', k-k', c-c'.

[vi] Assimilation is discussed under section 4.1. For metathesis make a look at section 4.3 below.

[vii] I claim that there are two homophonous forms for the verb *hijj-* ; the one is with the meaning 'to say', as is used by all other linguists working so far on Ethiopian languages (Anbessa 2000; Mengistu 2000; Baye 200(E.C); Hudson 2007; Kawachi 2007 among others), but the other is with the meaning 'to act/ to happen to be', where I considered it as a different form contra to all the other linguists working on Ethiopian languages who did not make any difference between these two aspects and still continue to gloss both aspects as 'to say'.

[viii] The categorically unclear stems in compound verb constructions are common features in Ethiopian languages. For example,

[ix] Still there are a few verbs with a stem final geminated glottal stop that do not undergo either elision or degemination. For example, see the conjugation of the verb **eʔʔ-** 'to enter' below:

V-EP-1PL-S.PERF-1PL-S.PERF   V-EP-2SG-S.PERF-2SG-S.PERF   V-EP-2PL-S.PERF   V-EP-3SG.F-S.PERF   V-EP-3PL-S.PERF
eʔʔ-i-n-e-nn-e   *eʔʔ-i-t-e-tt-e*   *eʔʔ-i-tin-e*
eʔʔ-i-t-e   *eʔʔ-i-n-e*

[x] However, it is also possible that the basic middle suffix /–eɗ/ can be used with out any replacement taking place.

PHONOLOGICAL METATHESIS IN COLLOQUIAL ABYANI ARABIC

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Abstract

The main purpose of this study is to describe the phonological process of metathesis in Abyani Arabic. Abyani Arabic is a dialect spoken in the southern part of Yemen. Both Abyani Arabic obstruents and sonorants exhibit consonant-to-consonant transposition either adjacently (i.e. two contiguous sounds are transposed in adjacent syllables) or non-adjacently (i.e. transposed sounds may be separated by one or more intervening vowels or consonants). The results of the study show that Abyani Arabic exhibits adjacent and non-adjacent metathesis either within syllable or across syllables. Adjacent metathesis across syllables exceeds non-adjacent metathesis which occurs within a syllable or across syllables. Metathesis occurs in Abyani Arabic as an abrupt and sporadic process rather than being gradual and regular. Finally, obstruent consonants are reported to be more frequent within the metathesized sounds than sonorants.

Keywords:
Metathesis, Abyani Arabic, Syllable contact law.

I. Introduction

One of the long standing issues in linguistic theory is metathesis. Metathesis can be defined as the process whereby in certain languages, under certain conditions, sounds appear to expose positions with one another. Thus in a string of sounds where we would expect the linear ordering of two sounds to be …*xy*…, we find instead…*yx*….

Metathesis comes from the Greek word 'metaθesis' which means 'transposition, change of sides' (Campbell, 2004:39). In contrast to cluster simplification and assimilation, metathesis is a process which is not likely to be systematic; that is, metathesis will apply to individual words but there cannot be a general statement that all sequences of segments are often tendencies, and one tendency which seems common in English learners and may be universal is for an alveolar consonants to be delayed .Thus words such as wasp and ask become waps

and aks. Metathesis in this last word is common also among foreign learners of English and occurs in some dialects.

There is a commonly held view of metathesis as being irregular and sporadic process which is restricted to performance errors, child language or sound change (Hume, 2001: 1). This view is regularly expressed in the linguistic literature. In fact, Webb (1974) claims that metathesis does not exist as a regular phonological process in synchronic phonology. According to Montreuil (1981), rules of metathesis are rarely productive. Thus, they are most likely to be discussed from the point of view of historical linguistics, and their sporadic nature gives them a definitely marginal character. Synchronic metathesis is viewed as a performance factor responsible for erratic surface deviations. Strazny (2005: 679) asserts that metathesis has been investigated typologically along with the following four parameters:

1. Synchronic metathesis occurs within one chronological period. Diachronic metathesis takes place from one time period to another, e.g. from Middle English to Modern English.
2. Adjacent metathesis occurs when two contiguous sounds are transposed. With nonadjacent or 'long distance metathesis, the transposed sounds may be separated by one or more intervening sounds.
3. Regular metathesis applies consistently, to many different words. Sporadic metathesis is restricted to only a few words and occurs haphazardly.
4. Abrupt metathesis completely transposes sounds in a single step. Gradual metathesis can best be understood as a type of chain reaction, a series of sound changes over time that eventually inverts two sounds. Gradual metathesis therefore

uses one or more intermediate stages between the original order and the final transposed order.

The aim of the first part of this study (i.e. metathesis) attempts to answer the following two basic questions:
1. Does metathesis occur in the phonological system of Yemeni Abyani Arabic?
2. Why certain sound combinations tend to undergo metathesis, and why others are common results of metathesis?
3. Why metathesis happens and under what conditions applies?

II. Geographical and Ethnic Backgrounds

Arabic is a Semitic language with various dialects spoken in Arab countries in the Middle East and North Africa. Major Arabic dialects are Iraqi, Egyptian, Levantine, Gulf, Northwest African, and Yemeni Arabic. Yemeni Arabic is spoken in Yemen with some lexical and phonological differences. Depending on the geography or ethnic background, there are many variant dialects in Yemeni Arabic. Sana'ani Arabic, Ta'zzi Arabic, Tahammi Arabic, etc. are the dialect of the northern part of Yemen. Abyani Arabic, Adeni Arabic, Hadrammi Arabic, Shabwaani Arabic, Lehji Arabic and Mahri Arabic are the dialects of the southern part of Yemen. Abyani Arabic is spoken in Abyan, one of the cities of the southern part of Yemen. The variety described here is a representative of colloquial Abyani, spoken in most districts of Abyan and is the home of the researcher. Abyani Arabic is rich of many phonological processes such as assimilation (i.e. emphatic assimilation, sibilants assimilation, and nasal contiguous assimilation), metathesis, vowel harmony, epenthesis, deletion, insertion, etc.

Table (1) Consonant Inventory of Yemeni Abyani Arabic

Place of articulation / Manner of articulation	Bilabial	Labio-dental	Interdental	Alveolar	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Plosives (Em.)				tˤ dˤ					
Non-emphatic	b			t d	g	k	q		ʔ
Fricative (Em.) Non-emphatic			ðˤ	sˤ					
		f	θ ð	s z	ʃ		χ/x ʁ/ɣ	ħ ʕ	h
Nasal	m			n					
Lateral				l / lˤ					
trill				r					
Semi-vowel	w				j				

III. The Nature of Metathesis in Abyani Arabic

Generally speaking, in Abyani Arabic, metathesis has been observed in child language, speech errors, and colloquial speech of most illiterate people, and sometimes, of literate people. In the same vein, Hume (2001: 2) states that metathesis is viewed synchronically as a performance factor responsible for spoonerisms and other erratic surface deviations in everyday speech. Metathesis can be diagnosed and identified through resorting to the word stem or root.

Metathesis is defined as a phonological process of transition of sounds within a word, refers to what is generally known as "ʔal.qalab ʔal-maka:ni" in Arabic language which means changing places of consonants. It involves redistribution of consonants; a change in the linear order of the segments within a word. Metathesis occurs as ease of perception and production on the part of Abyani Arabic native speakers/listeners (Ahmadkhani, 2010).

There are two patterns of metathesis in Yemeni Arabic; adjacent and non-adjacent. The first involves the observation that adjacent metathesis systematically involves adjacent sounds and the second one involves that multiple contextual conditions are frequently relevant in predicting metathesis, it occurs in two non-adjacent syllables. The data will be analysed according to the type of the metathesis and the syllable in which metathesis takes place.

Metathesis in Yemeni Arabic is classified into adjacent and non-adjacent according to the syllable in which metathesis occurs. In adjacent metathesis, two adjacent segments are swapped, without any necessary change in their features. Adjacent metathesis occurs in the same syllable between the onset and the coda of the same syllable, for instance (xa.**saf**→xa.**fas**) or in adjacent syllables (i.e. across syllable) between the onset of the first syllable and the coda of the neighbouring syllable   such as (ka**h.r**abaa→ka**r.h**aba).

Abyani Arabic words are compared with those of Modern Standard Arabic ones to identify the metathesized sounds that have occurred. The following metathesized sounds of Abyani Arabic are diagnosed and presented in the tables below:

3.1 Adjacent Metathesis in Abyani Arabic
Table 2: h-r→r-h (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ka**h**.**r**a.baa	ka**r**.**h**a.ba	'electricity'
ka**h**.**r**a.baai	ka**r**.**h**a.bai	'electrician'
mu.ka**h**.**r**ab	ma.ka**r**.**h**ab	'electrified'
ka**h**.**r**a.man	ka**r**.**h**a.man	'amber'

Table 3: h-n→n-h (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ka**h**.**n**u:t	ka**n**.**h**u:t	'priesthood'

Table 4:ts→st (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
mu**t**.**s**a.mih	mi**s**.**t**a.mih	'tolerant'
mu**t**.**s**a.hil	mi**s**.**t**a.hil	'tolerant'

Table5 : t-n→n-t (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
mu**t**.**n**az.zah	mi**n**. **t**a.zah	'park'

Table 6:r-f → f-r (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
na**r**.**f**az	na**f**.**r**az	'get nerves'
na**r**.**f**azah	na**f**.**r**azah	'nerves'

Table7: ʕ-q →q-ʕ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ʕa**q**.**r**ab	ʕa**r**.**q**ab	'scorpion'

Table 8: l-ħ →ħ-l (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
su**l**.**ħ**a.faah	su**ħ**.**l**u.fuh	'turtle'

Table 9: z-b →b-z (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ku**z**.**b**u.rah	ka**b**.**z**a.rah	'coriander'

Table 10: l-ʕ →ʕ-l (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
mi**l**.**ʕ**a.qah	ma**ʕ**.**l**a.qah	'spoon'

Table 11: ʕ-d→d-ʕ

Modern Standard Arabic	Abyani Arabic	Gloss
dˤif.di.ʕah	laf.ʕa.dah	'frog'

Table 12: n-ħ →ħ-n (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ta.**na**ħ.**n**aħ	ta.**ħan**.**ħan**	'to hem'
naħ.**n**a.ħah	**ħan**.**ħ**a.**n**ah	'hem'

3.2 Non-adjacent Metathesis: Within syllable

Table13: ħ-ʃ→ʃ-ħ (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ħa**ʃ**.rag	**ʃ**a**ħ**.rag	'he rattled'
ħa**ʃ**.ra.gah	**ʃ**a**ħ**.ra.gah	'rattling in the throat'
ju.**ħ**a**ʃ**.rig	ji.**ʃ**a**ħ**.rig	'he rattles'

Table 14: (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
xa.**s**a**f**	xa.**f**a**s**	'he lowered'
jax.**si****f**	jix.**si****f**	'he lowers'

3.3 Non-adjacent Metathesis: across syllable
Table15: b-l-h →h-b-l (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ʔa**b**.la**h**	ʔa**h**.ba**l**	'stupid'

Table16: ʕ-q →q-ʕ (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ʕa.**q**aa.**r**ab	ʕa.**r**aa.**q**ab	'scorpion'

Table 17: l-ʕ →ʕ-l (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ma.**l**aa.**ʕ**aq	ma.**ʕ**aa.**l**aq	'spoons(pl.)'

Table 18: l-n →n-l (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
la.ʕa**n**	**n**a.ʕa**l**	'he cursed'
ju**l**.ʕa**n**	ji**n**.ʕa**l**	'he curses'
la.ʕa.**n**ah	**n**a.ʕa.**l**ah	'curse'

IV. Analysis of the Data

The motivations for the transposition of sounds in Abyani Arabic in each type of adjacent and non-adjacent metathesis proposed in the present study is syllable contact law, the place of articulation and the manner of articulation.

Before I explain what syllable contact law is, it is better to define sonority. Sonority is generally defined either articulatorily, as the degree of openness of the vocal tract, or acoustically, as related to a property such as the intensity of a given segment. Parker (2002, 2008). Segments can be divided into a sonority hierarchy; the most commonly invoked sonority scale is the following five member scale:

Vowels > Glides > Liquids > Nasals > Obstruents (Clements 1990)

Syllable contact law is one of the motivations for the interchanging of consonant sounds across syllables in Abyani Arabic. The Syllable Contact Law is one of the cross-linguistic tendencies motivated by sonority. It has been defined in two ways. Syllable Contact Law (Parker 2011)

a. A heterosyllabic juncture of two consonants A.B is more harmonic (ideal) the higher the sonority of A and the lower the sonority of B.
b. In any heterosyllabic sequence of two consonants A.B, the sonority of A is preferably greater than the sonority of B.

In most of the previous examples of adjacent metathesis, Abyani Arabic undergo to the syllable contact law in the process of interchanging consonants in heterosyllabic sequence. The metathesis process happens in the coda of the first syllable and the onset of the second syllable such as ka**h**.**n**u:t→ kan.hu:t. It also happens between the coda of the second syllable and the onset of the third syllable in some examples such as ma.ka**r**.**h**ab→ ma.ka**r**.**h**ab. The codas of the preceding syllable are less in sonority than the onsets of their neighboring syllables so due to the syllable contact law the onset of the following syllable which is more in sonority aligns left to the coda of the preceding syllable and the coda of the preceding syllable aligns right to be in the onset's place of the following syllable. At the same time ,there are some example in Abyani Arabic violates syllable contact law suah as the example in table (6,8,11) so l havenot any evidence why these examples violates this principles. I consider them as exceptions.

There is another reason for the occurring of metathesis in Abyani Arabic

There are some motivations for non-adjacent metathesis in Abyani which occurs either in tautosyllabic sequence (i.e. within syllable) or in heterosyllabic sequence (i.e. across syllable). Transposing of consonants in the same syllable sometimes happens if the consonant sounds are near of each other in their places of articulation or in the same place of articulation, sonority principle. In table12, there are some examples such as ħaʃ.rag →ʃaħ.rag, in which the process of metathesizing consonants happens because of the place of articulation. The adjacent consonants /ʃ, r/ are very near of each other, /ʃ/ which is the coda of the preceding syllable its place of articulation is palatal and /r/ which is the onset of the following syllable is alveolar. Abyani Arabic speaker interchanges (ʃ with ħ) to be easier to pronounce such those words so this process happens because of the place of articulation to facilitate speech production.

In table (14), xa.saf→xa.fas, in this type of metathesis Hume (2000) states that there is a temporal decoupling of the noise of a fricative, especially a sibilant, from the surrounding signal which can lead to a sibilant being reinterpreted as occurring in the opposite of the original order. In these examples the switching of sounds happens because of that. The onset of the second syllable (i.e. the sibilant sound /s/), is more turbulence, more frication than the coda of the same syllable /f/ so when there is a sibilant fricative like /s/ + /f/ another fricative (the two sounds has the same manner of articulation), the two sounds are metathesized into (fs).

The process of interchanging sounds of non-adjacent syllable across syllables in table (15, 16, 17, and 18) is called long distance metathesis. It involves to two simultaneous displacement one leftward and one rightward as in /xcd yef/→/yed xef. Long distance metathesis shifts liquids, phary-

ngeals, laryngeals segments into relatively prominent (i.e. initial or stressed) positions but not into less position. Long distance metathesis changes are generally more disruptive to word recognition than adjacent ones (Connine et al. 1993). Long-distance segment switching may not yield successful recovery of the intended word, at least not easily, whereas adjacent segment switching may do so more of the time (Mark Pitt, p.c). For this kind of metathesis I cannot find any satisfactory reasons why Abyani Arabic tends to interchange the consonants of the words. This process happens in Liquids may be there is another reason for this or may be this something historical.

I will leave this part for future studies.

V. Conclusion

The present analysis of metathesis in Abyani Arabic concludes that transposing of sounds in Abyani Arabic occurs within syllable (in a non- adjacent segment) and across syllable (either adjacently or non adjacent). Adjacent metathesis is reported to be more frequent than non-adjacent metathesis in Abyani Arabic. The process of interchanging sounds is not limited to cases where two consonants transposed, but to cases where are three consonants are transposed as well. As a result, metathesis in Abyani Arabic is an abrupt and sporadic process rather than being gradual and regular. Both Abyani Arabic sonorant and obstruent sounds undergo the phonological process of metathesis with relatively significant differences.

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SORANG SOMPENG: A LINGUISTIC ANALYSIS

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Abstract

Savara is a language of the South-Munda family. The Sorang Sompeng, a cultural script which was developed in the beginning of the 19th century. This description of the Sorang Sompeng orthography explains the differences between sounds system of Sorang Sompeng and sound system of Savara language was explained with charts.

I. Introduction

Writing System is a form of human communication by means of a set of visible marks that are related, by convention, to some particular structural level of language. The writing is in principle the representation of language rather than a direct representation of thought and the fact that spoken language has a number of levels of structure, including sentences, words, syllables, and phonemes (the smallest units of speech used to distinguish one word or morpheme from another), any one of which a writing system can "map onto" or represent.

The invention of the first writing systems is roughly contemporary with the beginning of the Bronze Age in the late Neolithic of the late 4th millennium BC. The oldest- known forms of writing were primarily logographic in nature, based on pictographic and ideographic elements. Most writing systems can be broadly divided into three categories: logographic, syllabic, and alphabetic (or segmental). A logogram is a single written character which represents a complete grammatical word. Most Chinese characters are classified as logograms. In syllabic writing system, a syllabary is a set of written symbols that represent (or approximate) syllables, which make up words. Devanagari comes under the category of syllabic writing system. In alphabetic writing system, an alphabet is a small set of letters-basic written symbols-each of which roughly represents or represented historically a phoneme of a spoken language.

In New writing systems there are two types of writing systems. One is Influenced Creation happens when educated individuals, from within or without the speech community,

make unique and informed design decisions for a specific language. The influence from other writing systems may be directly reflected in the characters. Second one is Inspired Creation happens when a person who has been exposed to writing (but is not necessarily literate or linguistically aware) creates a novel writing system for his/her language. Sorang Sompeng belongs to the inspired creative writing script. (Norman Zide)

Savara language is spoken by the Savaras, a large and primitive tribe in the zigzag hill ranges of the great line of Eastern Ghats in Srikakulam and Vizianagaram districts in Andhra Pradesh. The Savara language speakers live in the hilly areas of Andhra Pradesh, Orissa, Madhya Pradesh and Bihar. The Savaras live also on the hills of Koraput, Kalahandi, Mayubhanj, Balasore, Cuttack, Ghanjam, Gajapathi districts of Orissa. The Savara population in Andhra Pradesh is 1, 22,979 as per 2001 census. The total literacy rate of Savaras as per 2001 Census report is 13.68.

Savara language belongs to the Southern Munda subgroup of the Munda branch of Austro-Asiatic language family, and is closely related to Bondo, Gadaba, and Juang. This family includes a number of Southeast Asian languages, especially Mon-Khmer.

There are three scripts which have been created specifically for writing Munda languages; Savara Sompeng for the Savara language, Ol' Chiki for the Santali language, and Varang Kshiti for the Ho language. However, these three scripts are not visually similar and are not derived from a common source, all having been created by influential community leaders to replace non-native scripts. (Norman Zide)

II. History of Sorang Sompeng

The Savara language has also been written in an IPA-based

script developed by Christian missionaries, and in the Telugu and Oriya scripts. In the 1930s there was conflict within the community as to which of these was best-suited to the language. To resolve the conflict, Mangei Gomango, the son-in-law of an influential Savara leader, introduced the Savara Sompeng script in 1936. Savara tradition states that the script itself is a divine incarnation of the deity called Akshara Brahma, but other scholars suggest that the shapes of the letters are loosely based on Latin/IPA letters, and the additional loops are based on Telugu writing. The Savaras possessed their own script which makes them proud and distinct from other tribes in the Indian sub-continent.

Savara Pandita Mangayya Gomango has developed the indigenous script for Savara language taking cues from the alphabet numbering in total engraved on a heart shape stone. He discovered that heart shape engraved with 25 letters at Mirchiguda, Padmapur Block of Gunupur Sub-Division of Rayagada District of Orissa. This Sorang Sompeng has the alternate names like 'mattar banoom/ akshara brahma/ maDi brahma'. It is claimed to have been developed as early as 1935–36. A final shape of Sorang Sompeng appeared after two years.

S. P Mangayya compiled stories, grammar, Astrology books, and history of Savara tribe in Sorang Sompeng. These books are published by CIIL, Mysore in 1976. I.T.D.A. Seetampeta, Srikakulam District is conducting training camps to the Savara people to learn this script. They also developed story books and primers using this script for the primary section students.
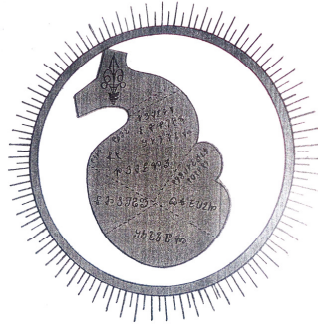
Image 1: of Sorang Sompeng (From mattarbano:m)

III. Phonetic Analysis of Sorang Sompeng

3.1 Description of Sorang Sompeng

The 25 characters are arranged in a four-row by six-column diagram, with the six vowels in the bottom row. The letters get their names from 25 gods in the Savara pantheon, e.g. s for Sandaŋ Suŋ, t for tAŋO suŋ; there is no rationale is apparent for the ordering. The names of the consonant characters are derived by adding /a/ to the consonant sound, i.e. \sa\, \ta\ etc. Mahapatra suggests that the general shapes of the characters owe something to English cursive letter shapes; perhaps the loops and curlicues were influenced by the Telugu script.

There are twenty-five letters in the Savara Sompeng script, named for the twenty-five deities in the Savara pantheon. (See the Table 1) The eighteen consonant letters carry an inherent [ə] vowel ([ɔ] may or may not be written post-consonantally, therefore, the inherent vowel could be said to merge [ə] and [ɔ]). Unlike many of the South Asian syllabaries, there are no vowel diacritics. Vowels other than [ə] are written both initially and post-consonantally using six independent vowel letters. In six vowels, five are monopthongs and one is diphthong. When written post-consonantally, the implication is that they override the inherent [ə] vowel.

Page 4 of 10

The script does not appear to be appropriate for the Savara language. Three letters, c, h and v are not the native sounds of the Savara language. Some vowel letters are used for representing more than one sound, for example the letter *i* can represent either [i] or [I].

Also unusual among South Asian syllabaries is the absence of both conjunct forms and a vowel-killer stroke; consonant clusters are written using linear combinations of consonant letters in their full (i.e. CV) form. It may be that the inclusion or deletion of vowels between consonants is governed by rules relating to stress/tone/intonation (prosodic rules), or to the sound rules applied at a morpheme break (morphophonemic rules), so is predictable to people familiar with the language and it doesn't need to be written. If this is not the case, then there is no way to deduce whether a sequence of consonant letters represents a phonetic CVCV sequence or a phonetic CC consonant unless the reader knows the pronunciation of the word intended.

SS have the 6 plosives in which bilabial voiced and voiceless stops /p/, /b/, one dental voiceless stop /t/ without its voiced counterpart, one retroflex voiced stop /D/ without its voiceless counterpart, and two velar voice and voiceless stops /k/, /g/. SS also have four nasals /m,n,ŋ,ɲ/.

Savara language don't have voiced counterpart of dental t and retroflex D in its phonemic system. Savara follows the Munda pattern of using dental [t] and retroflex [ɖ], but not retroflex [ʈ] or dental [d]. In SS loan sounds (including [ʂ] and [ŋ]) are indicated by writing the one SS diacritic, mae, to the left of the closest equivalent letter. Retroflex [ɽ] is also native to the Savara language, and is written using the letters r+d.

Aspiration is not distinct feature in Savara language. The aspirated sounds, which are borrowed from neighbouring

languages also problematic for Savara Sompeng writing. The letter h cannot be used to indicate aspiration; it is used for representing a glottal stop. In loan words which containing sound h it is uses as it is.

The glottal stop don't have any original symbol in SS. /'/ mark is used for glottal stop in recent books which are developed by Janachetana organization. Also it is using for unreleased stops.

Geminated consonants are written by arranging consonant right to the base consonant. Vowel length is not phonemic in Savara. It is thought that vowel length is generally not written. The exception to this is in cases where a long [a:] at the start of a word conveys some kind of grammatical information about the word, or in cases where it changes the stress pattern of the word. In these cases the letter is written twice. Sometimes IPA diacritic mark / ˉ / is for is used for long vowels.

There are no specific punctuation markers in SS. The Latin punctuation markers: full stop, comma, semicolon, exclamation mark, mathematical symbols, and parentheses are used.

3.2 Consonants:

s	This letter stands for Voiceless Alveolar Fricative
t	This letter stands for Voiceless Dental Plosive
b	This letter stands for Voiced Bilabial Plosive
c	This letter stands for Voiceless Palatal Affricate
ḍ	This letter stands for Voiced Retroflex Plosive
g	This letter stands for Voiced Velar Stop
m	This letter stands for Voiced Bilabial Nasal Stop
ŋ	This letter stands for Voiced Velar Nasal Stop
l	This letter stands for Alveolar Lateral Approximant
n	This letter stands for Alveolar Nasal Stop

v	This letter stands for Voiced Labiodental Fricative
p	This letter stands for Voiceless Bilabial Stop
j	This letter stands for Voiced Palatal Approximant
r	This letter stands for Alveolar Trill
h	This letter stands for Voiceless Glottal fricative
k	This letter stands for Voiceless Velar Stop
J	This letter stands for Voiced Palatal Fricative
ɲ	This letter stands for Voiced Palatal Nasal Stop

3.3 Vowels:

a   1. This letter stands for Open Back Unrounded Short Vowel
　　2. This letter stands for Schwa Vowel

e   This letter stands for Close-Mid Front Unrounded Short Vowel

i   1. This letter stands for Close Front Unrounded Short Vowel
　　2. This letter stands for Close-Mid Front Short Vowel

u   1. This letter stands for Close Back Rounded Vowel
　　2. This letter stands for Close-Mid Back Rounded Vowel

o   This letter stands for Close-Mid Back Rounded Vowel

ae This letter stands for Diphthong Vowel

Sorang Sompeng has 24 sounds in which 18 are consonants and 6 are vowels.

	Bilabial	Dental	Alveolar	Retroflex	Palatal	Velar	Glottal
Plosive	p b	t	d		c j	k g	
Nasal	m		n		n	ŋ	
Trill/Flap			r	ɽ			

Fricative	**v**		**s**				**h**
Lateral			**l**				
Approximant					**j**		

Where symbols appear in pairs, the one to the right represents a rounded vowel.
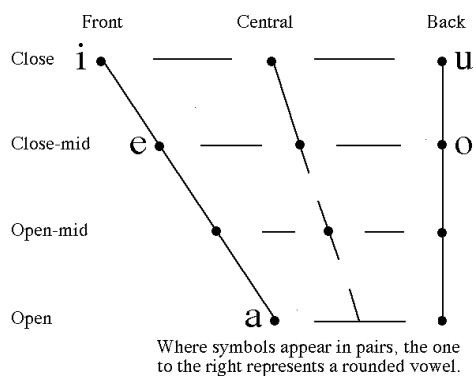
Savara language has 29 sounds in which 17 are consonants and 9 are vowels.

	Bilabial	Dental	Alveolar	Retroflex	Palatal	Velar	Glottal
Plosive	p b	t	d		(c) ɟ	k g	ʔ
Nasal	m		n		ɲ	ŋ	
Trill/Flap			r	ɽ			
Fricative			s				

				ɟ		
Lateral		l				
Approxi mant	w			j		
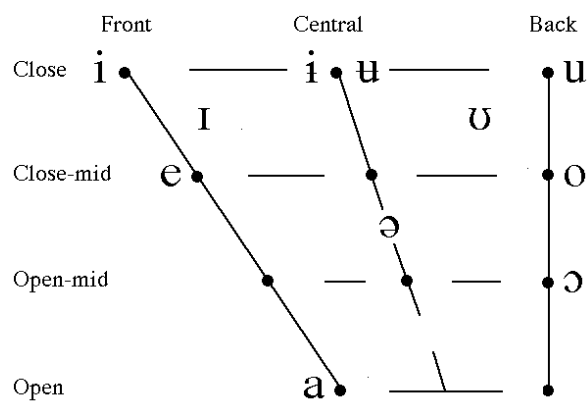
Where symbols appear in pairs, the one
to the right represents a rounded vowel.

IV. Conclusion

It may be observed that though the shapes of the letters appear to be a bit complicated, yet they are drawn similar to certain real life situations. SS belongs to alphabetic writing system. Diphthongs are written by writing the second member as as independent vowel.

Gemination

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S.P. Mangaiah. 1976. *mattarbano:m*

Appendix 1 Alphabet of Sorang Sompeng

ON CONSTRUCTION AND COINAGE OF TECHNICAL TERMS IN TELUGU & KANNADA

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Abstract

The language development is depending upon the enormous amount of vocabulary. Technical terms are unique and very useful in the development of a language. The technical terms are used for specific purposes to meet the needs of that speech community. They are made up of their precision, accuracy, definiteness, clarity, un-ambiguity and uniformity in meanings. They need to express new concepts in a language leads to the creation of new terms. These terms are developed by the process of standardization and codification.

Several attempts were made to evolve new terms in India. The Government of India constituted a Board of Scientific Terminology (B.S.T.) in 1950, a Central Hindi Directorate (C.H.D.) and Council for Scientific and Technical Terminology (C.S.T.T.) in 1961 and formulated some principles and guidelines for evolving technical terms in Indian Languages. The Telugu and Kannada Languages created enormous amount of technical terms according to the principles and guidelines of C.S.T.T. The present paper compares technical terms in both Telugu and Kannada and processes involved in them.

I. Introduction

Every Language is developed with the enormous amount of vocabulary. Technical terms are unique in the language development. It differs from one language to another language by its construction and coinage. The present paper is aimed at showing the history and development of technical terms in India and abroad in general and their construction and coinage in Telugu and Kannada in Particular.

Language is commonly used for the purpose of communication in day-to-day life and is also used for other Specific Purposes. The Vocabulary used for Specific Purposes is called Technical Terminology. The special lexical items used in a particular domain are called a register. These Special Laical items are also called terms. They are different from ordinary words as such because of their precision, accuracy, definiteness, clarity, un-ambiguity and uniformity in meanings. The need to express new concepts in a language leads to the creation of new terms.

These terms are developed by the Processes of Standardization and codification.

The Scientific and Technical terminology(S&TT) was developed in Europe from 17th Century. At that time both German and French Languages had rich Scientific and technical Vocabulary than English. By expansion of British Empire, the English was elevated as number one international language and it surpassed all other languages within a short period as a medium for scientific and technical expression Later on English was followed blindly by other languages in Science & Technology. Vocabulary. In olden days, Sanskrit was the language, which was used as a medium of expression in India. There was no difficulty in coining S& TT in Sanskrit language and it was considered to be an effective medium for coining S& TT. At the same time, some of the languages (regional) were also rich in this respect. E.g. Tamil.

Due to foreign invasions, India slumped into cultural and Linguistic decline including S&TT. As a result, India had to borrow S&TT European Languages from 18th Century onwards. The West became the cradle of the modern S&TT and the East had to borrow S&TT from the west.

During the dark ages of Indian S&TT, most of the scholastic traditions regarding S& TT also died and some remnants and fragments of S&TT remained. The old S& TT had become obsolete and unintelligible.

The Establishment of Council for Scientific &Technical Terminology (CSTT): Several attempts were made to evolve new terms in India. The most well organized attempt was initiated by the Govt. of India in the Post-independence era. The Ministry of Education set up a Board of Scientific

Terminology (BST) in the year 1950. The Hindi Section of the ministry started evolving terms in 1952. Later on, the Hindi section was expanded into Central Hindi Directorate (CHD) in 1960. At that time, Presidential order was also issued in this regard. The Directorate consolidated all the terms evolved till then were published in 1962 in one volume under the title 'The Consolidated Technical Terms'. In the meantime, the Standing CSTT was established by the Ministry of Education in October 1961. According to CSTT, the internationally accepted terminology may be altered minimally, but the derived words may be indianized. The Vocabulary prepared by CSTT as a model contained accordingly about 10% of its terminology directly transliterated from English where as about 80% of the words were derived from Sanskrit. The remaining 10% were either Hindi (pure) or regional language words or hybrid ones.

II. The Functions of CSTT

1. Review of the work done so far in the field of Science and Technology in the light of Principles laid down in the presidential order.
2. Formulation of Principles relating to coordination and evolution of S&TT in Hindi and other languages.
3. Coordination of the work done by different agencies in the states in the field of Science & Technology with the consent of state Governments concerned and approval of glossaries for use in Hindi and other Indian languages.
4. Preparation of standard scientific textbooks by using the new terminology evolved and approved by it.

III. The Principles of Technical Terminology
The CSTT has laid down certain Principles and guidelines for the evolving terms for Indian languages.
  a) International terms should be adopted as such in their current English form, transliterated in Hindi and Indian Languages according to the genius of language.

b) Indigenous terms which are already in vogue for certain English Technical terms should be retained (This includes terms from Sanskrit, Hindi, Urdu and other sources)
c) Where ever necessary, the terms should be borrowed from regional languages.
d) New coinages should be based on Sanskrit words.

IV. The Technical Terminology in Telugu and Kannada

Every language follows its own techniques in the construction of words or terms. It depends upon the genius of the individual language. Most of the technical terms are formed naturally in Indian languages. They are preserved in the dictionaries or glossaries. New terms are created or borrowed according to the needs of the languages. The archaic forms may be used in new meaning. Every language has its own limitations. The Telugu and Kannada languages have lot of similarities in construction and coinage of S&TT. They borrowed heavily from SKT and Other Languages such as English, Hindustani, Urdu, and Person -Arabic etc. These languages need to be compared each other to improve the S&TT. Generally, Kannada language uses more archaic forms than Telugu.

For e.g.

Ka. kulapati	Tel.	upādhyakSuḍu	'Vice chancellor'
Ka. kulasaciva	Tel.	registrar	'Registrar'
Ka. rājyapāla	Tel.	gavarnar	'Governor'
Ka. viḷasa	Tel.	cirunāmā	'address'
Ka. āsvāsane	Tel.	hāmii	'assurance'

The native words are being coined more in Kannada.
e.g.

| Ka. | kāryasuuci | Tel. ajendā | 'agenda' |
| Ka. | koṭhaḍi | Tel. gadi | 'room' |

Ka.kandāya	Tel. pannu	'tax'
Ka.banḍavāḷa	Tel. peṭṭubaḍi	'investment'
Ka.badalāvaṇe	Tel. mārpu	'change'
Ka.gaḷike	Tel. sampādana	'earning'

Some of the words are being used without any changes in both the languages after borrowing from Sanskrit.
e.g.

Tel. niyantraṇa	Ka.niyantraṇa	'control'
Tel. hastaprati	Ka.hastaprati	'manuscript'
Tel. sammati	Ka.sammati	'compliance'
Tel. mānavasakti	Ka.manavasakti	'manpower'
Tel. padacyuti	Ka.padacyuti	'removal from service'
Tel. alpakālika	Ka.alpakalika	'short term'
Tel. sahāyanidhi	Ka.sahayanidhi	'relief fund'
Tel. patrikāgōSṭhi	Ka.patrikāgōSṭhi	'press conference'

Even some of the words borrowed from Person-Arabic Languages do not show any change in their construction.
e.g.

Tel. manjuuru	Ka. manjuuru	'sanction'
Tel. rasiidu	Ka. rasiidu	'receipt'
Tel. nakalu	Ka. nakalu	'duplicate'

Though Telugu and Kannada languages borrowed technical terms heavily from Sanskrit, but they are used differently.
e.g.

Tel. carya		Ka.krama	'action'
Tel. sankSeemam		Ka.kalyāṇa	'welfare'
Tel. krSi	'endeavour'	Ka.krSi	'agriculture'
Tel. sākha		Ka.vibhāga	'department'
Tel. rāSṭram	'state'	Ka.raSṭra	'nation'

Tel. caritra 'history'   Ka. itihāsa   'history'

The structure of words is different from language to language so also in Telugu and Kannada.
e.g.

Tel. bhautika sāstram   Ka.   bhauta sastra   'physics'
Tel. visvavidyālayam   Ka.   visvavidyānilaya 'university'
Tel. alpasankhyāka   Ka.   alpasankhyāta   'minarity'
Tel. āmōdam   Ka.   anumōdane   'acceptance'
Tel. sampada   Ka.   sampattu   'property'
Tel. ravāṇa   Ka.   ravāne   'transport'

The processes of word formation like affixation, compounding, blending etc are same in cognate languages, but usages are different in individual languages.

4.1. Affixation: Telugu & Kannada take suffixes at the end of the stems (of the words). There are also prefixes at the beginning of the words due to influence of Sanskrit. But, they show some differences in the processes. Kannada does not take any suffixes in prathamā vibhakti (amahat) when it borrows words from Sanskrit. But, it takes plural and case suffixes and also suffixes for human (mahat & mahati) nouns. In this aspect of Linguistic behaviour, Telugu and Kannada developed their own individual mechanisms. In Kannada, jamiin is mostly used to indicate 'land' though it has a word bhuumi as in Telugu. In the same way ilākhe, 'place', haṇa 'money', vajā 'deduction' ṭheevaṇi 'deposit', khāsagi 'private', sārige 'transport' etc.

4.2. Predication: This process of prefixation is adopted from Sanskrit. Telugu and Kannada show some differences in some of the words.

e.g.

Tel. amōdam	Ka. anumōdane	'acceptance'
Tel. pratikuulam	Ka. ananukuula	'negative situation'
Tel. asantrpti	Ka. atrpti	'dissatisfaction'
Tel. avamānam	Ka. apamāna	'insult'
Tel. anantaram	Ka. nantar	'afterwards'
Tel. sanghaṭana	ka. ghaṭane	'incident'

***4.3. Compounding*:** Two or more words are combined in a natural way in the individual languages. In some combinations, Telugu and Kannada show some differences.
e.g.

Tel. padanirmāṇam	Ka. padaracane	'word structure'
Tel. antarnirmāṇam	Ka. oḻaracane	'internal structure'
Tel. janṭapadam	Ka. jōḍupada	'doublet'
Tel. viseeSaṇapadam	Ka. guṇapada	'adjectival word'

***4.4. Blending*:** Two or more words belong to same language or different languages are mixed together. In these combinations, individual words indicate their individual meanings. The process of blending is same in Telugu and Kannada. It may be variant according to the Genius of the language.
e.g.

Tel. nakalu prati	Ka. nakalu prati	'true copy'
Tel. gariSṭa veetanam	Ka. gariSṭaveetana	'maximum pay'
Tel. ravāṇa sunkam	Ka. ravāne sulka	'transport tax'
Tel. sviiya caritra	Ka. ātmacaritre	'autobiography'
Tel. āṭa sthalam	Ka. kriiḍāngaṇa	'play ground'

V. Conclusion

A brief survey on Technical terms has been carried out in this paper to show some similarities and differences between the cognate languages like Telugu and Kannada. It provides better understanding in the construction and coinage of technical terms in Telugu and Kannada because they behave in the same

manner and follow the same rules even in borrowing also. The Agencies of Technical Terms can make use of the comparative study of this kind to achieve more accuracy in the preparation of technical terms at Pan Indian Level.

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THE CONCEPT OF SPHŌṬA: A REVIEW

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ABSTRACT

The term sphōṭa stands for both śabda as well as artha. "sphuṭati arthaḥ asmāt iti śabdaḥ. Sphōṭaḥ- since it emerges out of this and therefore sphōṭa means śabda. 'sphuṭyate iti arthaḥ api sphōṭaḥ". Since it emerges, meaning is also sphōṭa.

This paper discusses the panorama of the concept of sphoTa taking cues from VyakaraNa, Mimasa, Nyaya and Vedanta. In this article, the views of modern linguists are discussed, especially, those of Bhuvaneswar, the pioneer of ka:rmik linguistic theory which have implications for understanding sphoTa.

I. INTRODUCTION

The term sphōṭa stands for both śabda as well as artha. "sphuṭati arthaḥ asmāt iti śabdaḥ. Sphōṭaḥ- since it emerges out of this (śabda) and therefore sphōṭa means śabda. 'sphuṭyate iti arthaḥ api sphōṭaḥ". Since it emerges, meaning is also sphōṭa.

The concept of Sphōṭa had been discussed by Indian scholars right from Rgveda as well as modern scholars. Indian scholars especially VaiyakaraNas accept the sphoTa. Whereas other systemists like Naiyayikas, Mimamsakas and even Vedantins like Sankaracharya also vehemently refute the SphoTa theory.

Modern scholars have different opinions on SphoTa. Some of them have accepted the SphoTa and some didn't. As such, there is a gap in understanding the concept of SphoTa and so there is a need for re-examination of the concept of sphoTa.

In this paper an attempt has been made to re-examine the concept of SphoTa and explain it by discussing the various interpretations given by both the Indian and Western

scholars and reinterpret these views as a whole in the light of KLT.

II. Review of Literature

In this review of literature, the views of various Indian and Western scholars has been made in two sections: 1) Indian views in the past and present; 2) Western views in the past and present.

2.1. Indian views in the past and present
2.1.1. Proponents of SphoTa

2.1.1.1. Veda

In Veda, Vāk was considered to be a manifestation of all-pervading Brahman. All forms of vāk have evolved from the praṇava.

2.1.1.2. Pāṇini

Pāṇini had mentioned the sage Sphōṭāyana in his rule (avaṅ sphōṭāyanasya, 6-1-123) and sphōṭa theory is identified with this sage.

2.1.1.3. Patañjali

Patañjali opines that sphōṭa signifies speech/language and the audible sound is its speech quality. The audible noise may be variable depending upon the speaker's mode of utterance, whereas sphōṭa is a unit of speech and is not subject to such variation.

He concludes that even though the sounds can't coexist at the time of utterance, they can do so in the mind of the speaker as well as the mind of hearer. According to him sphōṭa is the permanent and unchanging element in the śabda.

In Paspaśāhnika of Mahābhāṣya, Patañjali while discussing the form of śabda says that, by the pronunciation of which the jñāna (cognition) of dewlap, tail, hump and horns is attained is śabda-

"yenoccāritena   sāsnālaṅgūlakakudakhuraviṣāṇinām sampratyayo bhavati sa śabdaḥ" i.e. it is nothing but sphōṭa.

2.1.1.4. Yogānuśāsana
Patañjali in yogānuśāsana rules that the trio of śabda, artha and jñāna are identical as each of them is superimposed upon the other i.e. śabda is artha, artha is jñāna and jñāna is śabda (yoga sutram, 3-17) - śabdārtha pratyāyanām itaretarādhyāsāt   saṅkaraḥ   tatpravibhāgasamyamāt sarvabhūtarutajñānam.

2.1.1.5. Bhartṛhari
Bhartṛhari develops the sphōṭa theory. For him sphōṭa is neither a meaning bearing unit nor a linguistic sign. It is some thing more than that. Sphōṭa is indivisible, changeless. It is a two faceted coin; the sound pattern on one side; meaning bearing on the other side. In his view, there are two abilities in human beings - one is to express in speech form and the other is to discern meaning. Sphōṭa is inclusive of the two.

2.1.2. Opponents of SphoTa
There is no unanimity of opinion regarding the exact significance of sphōṭa amongst the ancient as well as modern scholars. There has been difference of opinion among different systems and schools of Indian philosophy such as vyākaraṇam, nyāya, mīmāmsa, sāmkhya, yoga etc. regarding the candidate that expresses the meaning.

2.1.2.1. Śabarasvamy

Śabarasvamy in his commentary viz. Śābarabhāṣya, takes up the question of the form of śabda and says that the varṇas-' ga-au-ḥ' are śabda, i.e., varṇa is śabda. Further Śabarasvamy asserts that the last varṇa coupled with the samskāras of the earlier varṇas will be the candidate that renders the meaning and therefore there won't be any problem even if the varṇas perish as soon as they are pronounced-

"pūrvavarṇajanitasamskārasahitato'ntyo varṇaḥ pratyāyak-aḥ" (śābarabhāṣyam,1-1-1-1).

2.1.2.2. Kumārilabhaṭṭa

Kumārilabhaṭṭa, in his famous work Ślokavārtikam, earmarked a chapter called sphōṭavāda simply to refute the sphōṭa of vaiyākaraṇas. He naturally supports Śabarasvamy's argument in this regard. According to pūrvamīmamsakas, a group of varṇas is a word and that of words is a sentence.

2.1.2.3. Naiyāyikas

As far as the naiyāyikas are concerned, the varṇas and padas are real. There cannot be any entity such as sphōṭa. Here is nyāyabhāṣya-
"śrutam   varṇamekamanekam   vā   padabhāvena pratisandhatte" (nyāyasūtrabhāṣyam).

2.1.2.4. Samkhyā

"pratītyapratītibhyām na sphōṭātmakaḥ śabdaḥ"- this samkhyāsūtra refutes the sphōṭa theory as there is no understanding of the meaning through sphōṭa and it is a burden to accept sphōṭa, when the meaning is understood through śabda.

2.1.2.5. Vedantins

So far as the vedantins are concerned, they follow in the footsteps of pūrvamīmāmsakas in most of the cases. In Devatādhikaraṇam, Sri: A:di Śamkarā Bhagavatpu:jyapa:da vehemently refutes the sphōṭa theory and says that meaning is understood through Śabda (group of varnas) and therefore when the meaning is understood through Śabda, there is no need for sphoTa: "Just like a group of ants makes a row, a group of varṇas makes a word - "yatha kramānurodhinya eva pipīlikāḥ paṅktibuddhimārohanti evam kramānurodhina eva varṇāḥ padabuddhimārokṣyanti". (Devatādhikaraṇam, 1-3-28)".

Vaiyākaraṇas advocate the theory of sphōṭa which holds that the sentence is the real candidate and padam and varṇa are unreal. Yogins and ālankārikas subscribed to the sphōṭa theory. On the other hand, mīmamsakas, naiyāyikas, vedantins, sāmkhyas, and vaiśeṣikas refute this theory of sphōṭa.

2.2. Modern views in the past and present

John Borough and K. Kunjunni Raja (Tandra Patnaik, 1994.) treat sphōṭa as the linguistic sign in view of its meaning bearing aspect.

Joshi and Cardona opine that sphōṭa is a sound-unit of language system.

Iyer refutes the concept of sound-unit of language system and argues that sphōṭa should include the meaning-bearing speech unit.

Matilal follows Bhartruhari's theory of sphōṭa in the following way: "…. sphōṭa is the real sub-stratum prior linguistic unit which is identical also with its meaning.

Language is not the vehicle of meaning or the conveyor belt of thought."

Śabdanā (languaging) is thinking; and thought vibrates through language - sphōṭa refers to this non-differentiated language principle." (Word and the World, p.85)

Korada Subrahmanyam opines on SphoTa in this way-
The varṇas perish as soon as they are pronounced. As such all the earlier varṇas are gone by the time the last one is pronounced. Nevertheless, the listener claims to have understood the meaning without a hitch. Therefore, vaiyākaraṇa:s argue that a candidate called sphōṭa is very much required for the transformation of meaning from the speaker to the listener.

Chilukuri Bhuvaneswar feels that more research in modern psychology and cognition is needed to have a definitive view on sphoTa. According to him, 1. no *sphoTa gene* has been identified so far and therefore we do not know whether there is sphoTa or not as a module. Revered Bhartruhari might have considered *pratibha,* according to Bhuvaneswar, to be "the analytical and relational aspect of intelligence of Consciousness-qualified-Disposition (C-q-D), the *cause*, which interconnects and interrelates the *signifier* with the *signified* to produce *sense* as meaning" and "sphoTa to be the *process* through which pratibha produces meaning in a flash". But, instead of looking at it "as *insightful intelligence* from a purely psycholinguistic and cognitive perspective, Revered Bhartruhari derives it from advaithic monism as a separate module, but this unfortunately robs *la:ghavam (principle of economy)* in its application".

2. Moreover, according to Bhuvaneswar (2011, 2012),
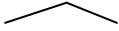
meaning can be arrived at in different ways in different contexts by

1. Representation and Creation of Meaning by Dispositional Creativity for the Construction of Ka:rmik Reality without sphoTa.

2. Recall through Memory in the case of known words or objects as *semantic meaning (i.e., without sphoTa)*;

3. Interpretation and Identification of Meaning of Words or Objects by Analyticity (& Cultural Memory) in the case of unknown words or objects, figures of speech and contextual implicature as *pragmatic meaning (by insightful intelligence, considered Pratibha by Bhartruhari)*;

4. Dispositional experience of discourse as ka:rmatic meaning (by Dispositional Knowledge which is a sort of Pratibha);

5. Meaning is ka:rmikally (experientially via disposition) derived by Interconnecting-Interrelating-Interdepending (I-I-Iing) the triangle of symbol-referent-disposition to produce sense from a background knowledge of the linguistic system, context, and disposition *(which is a sort of Pratibha).*

"Meaning is a property of C-q-D as differentiated awareness of this and that to be so and so in such and such manner and it is *vishaya jna:nam* (phenomenal awareness as knowledge) which is distinct from *Atma Jna:nam* (Consciousness as Undifferentiated Awareness as Undifferentiated Knowledge). To explain more, the phenomenal world consists of worldly phenomena: material; mental; and dispositional, and phenomenal awareness of these worldly phenomena constitutes phenomenal knowledge; while   Atma Jna:nam is the undifferentiated awareness of (Param)Atma 'Absolute

Consciousness' which constitutes Absolute Undifferentiated Knowledge (Bhuvaneswar 2012)." According to Revered Bhartruhari, no meaning can take place without language since they are inseparable. However, according to Bhuvaneswar (ibid.), "the language of creation (as knowledge as meaning) can be expressed in both the name-oriented form (as sound) as well as form-oriented form (as matter) by their differentiation into concepts - patterns and structures - material form – Einstein is known to think in the latter mode of form-oriented language, ie., he used to perceive scientific action in terms of the material scientific phenomena themselves instead of words as thought. What the medium of name-oriented form (i.e., speech and writing) conveys as sense (meaning) can equally be conveyed by the other medium of form-oriented form (i.e., material objects). For example, the *substance* 'water' conveys the meaning P (that water) while the same meaning is also conveyed by the *sound symbol* 'water' via the substance water as the referent. Here, a differentiated substance is understood as *water* in two ways instead of one: the *substance water* as 'water' by cognition and the *word water* as the substance 'water' again by cognition showing that there is a higher concept called 'water' which is the meaning.

water (super-ordinate concept)

The substance 'water'   The sound symbol 'water'
Isvara   (sub-ordinate concepts)   Ji:va
 Network 1: Concept – Form/Name Meaning Network

This meaning can only be grasped by Pratibha and according to Bhartruhari, only this Pratibha can give the meaning via sphoTa".
 Let us capture this distinction in equations for clarity:

(1) Bhartruhari's View of Meaning:
Symbol ➜ SphoTa ➜ Meaning

(2) Bhuvaneswar's View of Meaning:
i. Object ➜   Concept of Object ➜   Meaning
ii. Symbol ➜   Object ➜ Concept of Object ➜
Meaning.

What it means is that there is Absolute Consciousness as the substratum of creation first and last; this Consciousness has Absolute Energy in itself and when the Absolute Consciousness reflects in Its Absolute Energy and stirs it to cause the Big Bang of creation, that creation is realized as the form-oriented universe on one level. This form-oriented universe is semiotically represented and realized in terms of the name-oriented universe at the other level by the human beings through dispositional cognition. Revered Bhartruhari might have meant the *Conceptualization State of Absolute Consciousness* as the separate *Module of Pratibha (cf. Mahat Brahma).*

iii. Absolute Consciousness ➜   DAOC ➜   Concepts
➜   Creation
[DAOC Differentiated Awareness of Consciousness]

According to Bhuvaneswar's thinking, sphoTa might be somewhat similar to *insightful behaviour* in Psychology without *advaithic* monism in it. (Personal communication, 2012)

His views on the derivation of meaning in the Ka:rmik Linguistic Paradigm are further discussed with special reference to sphoTa in the following section.

III. Re-examination of the SphoTa Theory in Ka:rmik Linguistic Theory
From the analysis of SphoTa conducted by an examination

of the views expressed by the past and present critics, we have come to the conclusion that there are two dominant views regarding SphoTa:

1. SphoTa, as defined earlier by vaiyakaraNa:s and as commented by Korada Subramanyam (Sharma 2012: unpublished Ph.D. thesis), is there as a distinct cognitive phenomenon:

> *Group of VarNas – SphoTa – Meaning.*

2) The concept of SphoTa is redundant since meaning can be derived without sphoTa:

> *Group of VarNas -- Meaning.*

Bhuvaneswar raises the following objections to sphoTa theory and proposes his own solution in his ka:rmik linguistic paradigm.

1. Sadhu Shabda and Asadhu Shabda Controversy
According to traditional grammarians, /pa:lu/ 'milk' is a sadhu shabdam (standard word). My friend Muralidhar's little son (3 years) pronounces this word as /pa:/ which is not complete and /ba:yi/ which is not a standard word. Nonetheless, Murali's family understands these words to mean the same as /pa:lu/. So by what power his family understands these words since sphoTa is only applicable to sadhu shabdas? If you extend this argument to dialectal variations, what is a sadhu shabda becomes very difficult to establish. For example, in the TelangaNa dialect /ʋatʃtʃin‌ u/, /atʃtʃin‌ u/ are two words for *he came*. Where as in Simandhra /ʋatʃtʃina:‌ u/ and /ʋatʃtʃa:‌ u/ are widely used. Now which is the sadhu shabda for *he came*? If you take /ʋatʃtʃa:‌ u/ as the standard as it was done previously then

/ʋatʃtʃin| u/ and /ʋatʃtʃina:| u/ are not correct but they are perfectly correct according to the concept of dialectal variation. Therefore, sphoTa can't apply across the board and so problematic.

2. Dispositional Creativity and SphoTa

In Ka:rmik Linguistic Theory, there is a principle called The Principle of Creation of New Variables (PCNV). According to PCNV, a new word in a new word-formation process (WFP) is created by contextual exploration of variables (CEV) and rejection of the existing variables from dispositional knowledge of the creator of the new WFP. This is explained with the help of Graph 1 with an example of a new WFP of Quotational Lexical Bifurcation (QLB) in Telugu. It is created by a desire for novelty and expressivity which is shown by the diagonal in the first quadrant Disposition Quadrant. The creator wants to attract the newspaper readers by a new novel, surprising (expressive) word that captures more contextual meaning in a short word. This desire is formed because of one of his traits (guNa:s) for novelty and expressivity and the internalized habit (va:sana) of doing thing in a novel and surprising way. These two factors impact on the World View Quadrant II with the participant(s) in a culture projecting his/their world view through their spirituality and ideology filtered from their phenomenal knowledge and its experience. It is shown by the diagonal in the World View Quadrant II impacting in the C-q-D. Again, the Context Quadrant IV provides the platform for the desire, action, and its experience to take place. It is in this background, a dispositional impulsion shoots up as a desire in C-q-D to create QLB as a new WFP and consequently, this QLB word *da:'ruNa'* is cognized as a cogneme with an intended meaning of 'terrible loan' as an adjective (concept) in the Cognition Quadrant III as follows.

Graph 1: Combined Triaxial Graphs of Cognitive Actionality Quadrants (KLT)
Legend

☆   *The Individual Consciousness (the Being in the Human Being or the soul or the ji:va)*
△   *The Triad (sattva giving knowledge of activity; rajas giving choice of activity by traits; and tama:*
      giving inertia or materiality of activity by va:sana:s) of Disposition
——   *Horizontal Line;* | *Vertical Line;* / *Diagonal Line: Horizontal, Vertical, and Diagonal Axes;*
      I, II, III, and IV : the quadrants 1, 2, 3, and 4; ⟷ *gives rise to*
○ s *1.inner (pasyanthi 'cognitive'); 2. medial (madhyama 'pattern'); 3. outer (vaikhari 'form or phonic')*
      levels of realization of language

Graph 1: a. Cogneme Cognition of a QLB; b. QLB Evolution

First, he observes two contextual social activities: say, one of taking loans by farmers; and the other of not being able to repay them because of severe poverty; second, he hits upon, by *insightful behaviour,* a single word that can encapsulate both the activities: *da:ruNa* which contains *ruNa 'loan'* within *da:ruNa 'terrible'*; and third he uses his analytical and relational intelligence as well as his background lingual knowledge to find *quotation marks* to bifurcate one word denoting one activity within the whole word denting the other activity: *da:'ruNa'*; and finally he creates a new variable of using quotational marks to bifurcate a word and create a new meaning within a meaning by interconnecting and interrelating two meanings by *a flash of dispositional creativity.* He also cognizes the title *da:'ruNa' bandhamulu* to express the meaning of 'terrible loan bonds/shackles' and produces the cogneme of the title with the intended concept (meaning). Finally, it is realized as such in the context of the published newspaper report to be read by several readers. It is indicated by the downward pointing arrow in the Context Quadrant IV. Here, in this case, the meaning of the word is created by dispositional creativity by creating an appropriate single word to give that meaning of two words fused

together. The entire process of the gradual evolution of the QLB word is captured in the Chakram Network 1B. The QLB word da:'ruNa' gains its meaning by a complex process of its creation and not by sphoTa.

When the reader reads this title, he is surprised at this new word and interprets the meaning from the contextual information given in the newspaper report, again, by insightful behaviour and creative interpretation. This WFP of QLB is a product of insightful behaviour and dispositional creativity; it gradually evolves from the previous experience of the creator of the word. Bhartruhari calls this insightful behaviour *sphoTa* and dispositional creativity (or insightful intelligence) *pratibha*. However, according to modern psychology, they are properties of intelligence only without being separated as a module.

3. Semantic Meaning and SphoTa
When a word is created and used in a context (which is represented by the three walls of STM, SCS, IIH enclosing the discourse space shown by an oval) by an individual (I) with another person through interpersonal communication (I IPC) with a particular intended meaning, it starts getting noticed with that meaning; when the other person uses it again with a third person and so on, it gets collectivized and standardized by polishing of the word and its meaning.

Finally, what is standardized with a specific meaning gets culturally stored and remembered as such. In this standardized form, it is transmitted from the individuals as the Collective (C) to the other individuals by C IPC. Hence, in these cases, the meaning of the word is directly recovered from the word from memory and there is no need for sphoTa. This entire process of individual-collective-

contextual-conjunction of (lingual) action (ICCCSA) is captured by the following network.

a. Networks for Transmission of Language by ICCCS
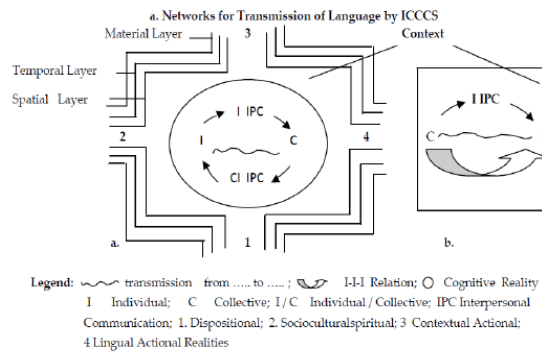
Network 2: a. ICCCSA Network in KLT b. SFL Network

4. Pragmatic Meaning and Ka:rmatic Meaning and SphoTa

When a word or phrase or sentence is used in a context, its semantic meaning is transformed into its pragmatic or ka:rmatic meaning.

a. Outer Chakram
b. Titled Inner Chakram
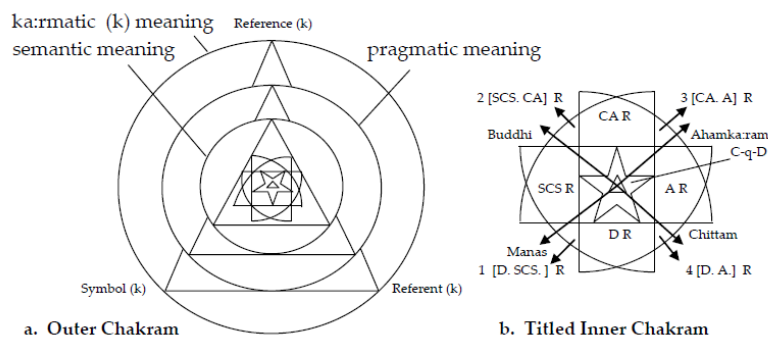
Network 3. Experiential Meaning Chakram:
a. Outer Chakram; b. Titled Inner Chakram

For example, the same phrase *da:'ruNa' bandhamulu* gets different meanings in different contexts. These meanings are derived by a complex process of contextualizing the concerned utterance. Factors such as background

knowledge, shared knowledge, Knowledge of culture and pragmatic constraints, knowledge of the disposition of the interlocutors and cognitive skills in processing the language play a crucial role in deriving meaning. For example, we understood the phrase to mean 'loans taken by farmers becoming terrible shackles' in the context of the news about farmers' loans. Its *semantic meaning* is the literal meaning of the phrase: 'terrible loan shackles' as indicated by the inner circle in the experiential meaning chakram network 3a. It is produced by I-I-Iing the words in the phrase and computing the reference (meaning) by combining the words as symbols with reference to their referents as parts of the whole in a triangle. If the same is used in the context of a father taking a loan to perform his daughter's marriage and commits suicide by hanging because he was unable to repay the loan, the meaning becomes different: 'dowry-loan taken by the father becomes a death rope'. This is their *pragmatic meaning*. It is produced by I-I-Iing the words in the phrase and computing the meaning by superimposing the contextual action on the semantic meaning and perceiving the semantic meaning as the contextual meaning by adhya:sam (like the superimposition of a snake on a rope). It is done by mapping the *contextual action* on to the *semantic action* as a metaphor. Here, meaning is computed by Interpretation and Identification of Meaning of Words/phrase or Objects/Group of Objects by Analyticity (& Cultural Memory). This is indicated by the medial circle in the experiential meaning chakram network 3a. However, the same meaning may be understood differently by different people with different backgrounds and disposition. To farmers so affected, it means a disgraceful and miserable life and to a politician from that area of such farmers, loss of his seat; to the news reporter 'the inefficiency and callousness of the government in dealing with the plight of

the farmers', etc. This is their *ka:rmatic meaning*. Here, meaning is computed by dispositional experience of discourse as ka:rmatic meaning. This is indicated by the outer circle in the experiential meaning chakram network 3a

In all these cases, the comprehension of meaning follows an elaborate process of intellection coloured by emotion and experience. In the case of semantic meaning, meaning is computed by I-I-Iing the parts of the phrase *literally*. To explain more, as indicated in the titled inner chakram 3b, the symbol represented by the vertical line on the left hand side in the network is superimposed on the referent represented by the vertical line on the right hand side and the meaning is derived dispositionally by following the *convention* as indicated by the two horizontal lines intersecting with the vertical lines in 3b. The procedure for constructing this semantic meaning as well as other types of meaning is through the construction of five realities in an a:nushangik (the following member inheriting the properties of the preceding member in addition to having its own property) manner. These five realities: (Dispositional Reality (D. R.), Socioculturalspiritual Reality (SCS. R.), Contextual Actional Reality (CA. R.) and Actional Reality (A. R.) are shown by the four arced-squares created by the intersection of the vertical and horizontal lines. In addition, the conjunction of these realities is also shown at the 4 joints of the lines. The fifth reality the Cognitive Reality is shown by the centre square containing C-q-D (indicated by the triangle encapsulated by the star). In addition, the C-q-D is resolved into four intersecting lines manas, buddhi, ahamkaram, and chittam cutting through the squares. In the case of cognizing the semantic meaning, manas (mind) deliberates on the conventionally established meanings and buddhi (intellect) decides on them to be this and that meaning as so and so meaning with such and such meaning

and ahamkaram (ego) owns the decision from chittam (contemplation and memory of dispositional knowledge). It is at the level of buddhi that insightful intelligence and behaviour come into play. These are called called Pratibha and SphoTa by Bhartruhari which are insightful intelligence (Bhuvaneswar's term) and insightful behaviour in psychology.

IV. Conclusion

In view of the discussion carried about the nature of sphoTa in Section III, there is a need to conduct more experimental research in psychology and cognitive linguistics and arrive at a better understanding of the concepts of pratibha and sphoTa. From such future research, according to Bhuvaneswar, "the relationship between insightful intelligence and insightful behaviour and pratibha and sphoTa will become clear". Therefore, we should rethink sphoTa from a modern cognitve linguistic perspective.

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ON NEWSPAPER URDU
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Abstract

Urdu is an Indo-Aryan language dominant in 18th and 19th centuries in India but now present only in certain centres such as Delhi, Lucknow, Hyderabad, Kolkata, and Mumbai. Nowadays, it is mainly in these centres literary and journalistic activities flourish. In this paper, an attempt has been made to study the linguistic characteristics of Urdu used in Newspapers nowadays. Four newspapers Roznama Rashtriya Sahara, Qaumi Awaz, Roznama Siyasat, and Roznama Salar were selected and they were linguistically examined to see whether there are any innovations in the structure and usage of newspaper Urdu and how far it has deviated from the norms of standard Urdu. Seven important features are noted as the special features of Urdu which are: code-mixing, compounding, deletion of copula in headlines and sub-headlines, no significant borrowings from Hindi, and other regional languages, conjoining words with vave-e-atf, use of broken plurals, and meaning extension by way of loan translation.

Urdu is an Indo-Aryan speech. It bloomed into a language in eighteenth and nineteenth centuries and proved to be a great vehicle of literary and cultural expression. Though played a dominant role by way of being used in a large chunk of pre-independent India currently it is a stateless language. In spite of its reduction in use the language shows its strong presence in many areas of the country. Today one may recognize many centres of the language like Delhi, Lucknow, Hyderabad, Kolkata, Mumbai etc. It is in and around these Centres that literary, cultural and journalistic activities in the language emanate and are carried forward from.

The present paper, as the title suggests, proposes to study the linguistic characteristics of Urdu used in newspapers. Journalistic activity in Urdu commenced in 1822 A. D. with the launch of 'Jam-e-Jahan Numa', the first Urdu newspaper. Urdu press has been reported to be active in and around 1857. Further during the freedom movement of India Urdu press was in the forefront and is noted to have played an inspiring role. Needless to add that in all its journalistic endeavours Urdu press used only Perso-Arabic script. Therefore the current day newspapers too use the same script.

For the purpose of the present study we have selected four newspapers at random. They are Roznama rashtriya sahara, Qaumi awaz, Roznama siyasat and Roznama salar. These papers are collected from different centres mentioned above. Further they are published by different agencies. Thus the first one viz Roznama rashtriya sahara is brought out by Sahara group of news papers and is published simultaneously from New Delhi, Lucknow, Gorakhpur, Mumbai, Hyderabad, Kolkata, Patna, Kanpur and Bangalore. The second one viz., Qaumi awaz is published by Associated Journals Limited., Herald house, New Delhi. The third newspaper viz, Roznama siyasat is published by Mr. Zahid Ali Khan of Hyderabad, A. P. and has Hyderabad and Bangalore editions. The fourth one, Roznama salar is by Salar Publications Trust and has only a Bangalore edition.

It may be added that the present study is based on only one day's copy of each of the above newspapers. Further in order to know the form and composition of Urdu that is used in these news-papers (henceforth newpaper Urdu) the author scanned the above referred to copies (of the above news papers) word-by- word and line by line. The attempt was to see and find out whether the newspaper Urdu has made any innovations in its structure and usage and how far it has deviated from the norms of standard Urdu.

It may also be pointed out here that the newspapers are a type of news-media and the compulsions of language use here are different from the ones we have in other spheres. The language used in news-media in general may be assumed to be different than it is in other media or other arena of language use. It may be argued here that in the news composition one thing that is foremost on the mind of news writer, reporter, editor etc is communication than any thing else. Exigency is one more

factor which is high on the mind of news producers. Therefore in such emergency like situations we may expect some compromise, some sort of casualness and dilution in the use of language. As a result the language that comes into being may be akin to standard language but is not exactly standard language. In other words, it may follow the norms of standard language but at the same time it is free to deviate from these norms as and when the situation so warrants. Keeping in line with the above general trend, it may be said that the newpaper Urdu shows a great degree of dynamism and tends to adopt itself in accordance with the exigencies and compulsions of the contemporary times. At the same time it tends not to sever itself from norms of standard language.

The current author, at almost all levels of linguistic organization, though has noted a number of features ascribable to newspaper Urdu, a full discussion on them would be out of the scope of the current study. Nevertheless a few important features may be discussed with reference to the following rubrics:

1.Code-mixing: It is interesting to find that the newspaper Urdu probably to adopt itself to different communicative situations mixes a great deal from English. Such mixed items by and large belong to the grammatical class of nouns. A few examples can illustrate this:

Unhõ ne sǝikṛõ talim yafta mUslIm nǝujǝvanõ ke **kærIar** ko

daɣdar kǝr dIya hǝi (Salar p.1)

jUnubi mUɣrIbi **mansun** ka pUrzor aɣaz (salar p.1)

mombǝi me˜ ǝgle cǝnd hafto˜ me˜ 1500 **kanḍom venḍiŋg mǝšine** lǝgai jaegi (salar p.2)

zImbabve ke xIlaf mUqabIle ke lIye yunUs xa˜ ne kəmand o treniŋng sUru kardi (qaumi awaz p.7)

e ti em dUrUst kərne ke bəhane ek lak rUpe luʈ lIye (qaumi awaz p.8)

trafIk jam ke dəuran zəcki (siyasat p.6)

drap ke bəhane lut (siyasat p.13)

post ke zərIye **penšən** ki fərahəmi zer-e-ɣaur (siyasat p.13)

Unho˜ ne kəha ke **prəimari** zərə-i **koapəretiv kəmet i** ke Intexab azadana **ətharIt i** ke təvəssUt se karae jae˜ge (sahara p.4)

IslamIk bǽnk and fəinans naye talimi sešən se (sahara p.6)

səhara **klasifəid** Ištehar **sentər** (sahara p.8)

In a noun phrase where noun is preceded by an adjective either of them may be an English element :

Un se **təim bəund vade** lIye (salar p.4)

hər vəqt məusul hone vale **təftisi fon kals** se bhi təŋg agŋyi həi (salar p. 6)

sanəvi talimi bord (sahara p.1)

pəblIk mUqamat pər kamIyab Ummidvar jəsn nahi manae˜ge (siyasat p.8)

həftavar pres brifIŋg ke dəuran tarjUman ne bətaya ke benzir bhUtto ki həlakət ke həvale se təhqiqat jari hə˜i (qaumi awaz p.4)

pi ar das mUnsi ne aj bis veˊ **qəumi foto mUqabIle** meˊ jitne valoˊ ko əvard dIye (p.5)

gujar rIzərvesən tehrik ki ag me rajəsthan jəl Utha (sahara p.1)

It has also been noticed that sometimes a code-mixed English word has its equivalent in Urdu; yet preference is for the English word :

Urdu dusri sərkari zəban hone ki vəjəh se baz **kaəstəmər** Is ka mUtalIba kər te həiˊ. (English word 'customer' has 'gahak' as equivalent in Urdu) [salar p.2]

qəyam-e-əmn əfvaj ke **apəresənz** (English word 'operations' has 'mohIme' as equivalent in Urdu) [salar p. 3]

ye sari cize hIndUstani **ticəro** ke peshavərana kamkaj me mUdaxIlət həi (English word 'teachers' has 'asatIza' as equivalent in Urdu) [salar p. 3]

As may be seen from the above while code-mixing is readily possible from English the current author has encountered only one example where code-mixing is from Hindi :

zehni **tənav** (instead of Urdu **pəragəndəgi, pəresani**) [salar p.8]

We have a couple of examples wherein the code-mixed word is a hybrid form. In these instances one part is an independent English word and the other is an Urdu suffix. Examples:

Inhi mUmalIk se **əvardyafta** 90 shahIdon ka ta-alluq tha (salar p.3)

vo xUd ko ek daktər ki bəjae **palIsisaz** ki həisIyət me dekhna cahta tha (sahara p.7)

2. Compounding: In newspaper Urdu compounding seems to be a very productive phenomenon and is excessively used to coin new vocables. It has been noticed that generally two or three (sometimes) independent words fuse together to give rise to a new coinage. All these words may be Perso-Arabic origin. Examples:

bhagalpur **fəsadmutasIrin** ko Insaf jald (sahara p.2)

əsmətdəri ke mUjrIm ko **Umərqəid** (sahara p.2)

Sometimes one or two words may be Perso-Arabic origin and the second or third word may be of English origin. Examples:

Unhe məzid **sekyurItiəhelkaro** ki nəhi bəlke həmla avəro ki gIrəftari cahIye (siyasat p. 1)

mUstərəkafors ke sinIar afisar ne ye kehte hUe Un ki gIrəftari ki təsdiq ki (salar p.1)

petrolIum, dizəl, əur **pəkvangas** ki qiməto me izafe ka fəisəla aj bhi nəhi ho səka (salar p.1)

yUrenIəməfzudgi se dəstbərdar nəhi ho ge (salar p.1)

dyutirIyayət ke bare me tin bar zIkr hUa (salar p. 1)

hUkumət ne aj **xUsusieqtesadi zon (SEZ)** qəyam ki 34 nəyi təjviz ko mənzuri dedi (qaumi awaz p.)

vəjəhnUmainotis jari kərdi gəi (siyasat p.13)

mombəi me sal-e-nəu pər **cherxani** ka mUamIla (qaumi awaz p.6)

Sometimes a word is of Perso-Arabic orgin while the other is of Indic origin:

Iqdamat ke a az ke təur pər **cIllərfərosi** ki qiməto me Izafa ke Imkanat ka jaeza lIya ja rəha həi (siyasat p.5)

gUrdacor daktər ki zamanət rəd (siyasat p.6)

Unho ne **sədərraj** ke xəyal se əur hal hi me xətm honevale eləksən ke pes-e-nəzər gəirqanuni kankUni pər əpni rIport pes ki (siyasat p.8)

ek səks ko lutne ka vaqIa je pi nəgər **polisthanahudud** me pes aya (siyasat p. 13)

Some times both the participating words may be of Indic origin:

pUjarIo ki hIdayət ke mUtabIq Unho ne **surəjpuja** ki (salar p. 11)

3. Deletion of copula in head-lines and sub-head-lines :
Head-lines are very important items in a newspaper. On the one hand they need to be catchy and attractive, on the other they need to reflect the jist of the whole write-up that follows them. In order to achieve these objects the reporters/news-composers follow a number of devices. In newpaper Urdu one of such linguistic devices is copula deletion. See the following examples:

ərusi qətl : qatIl səuhər ke dIfa me bivi ka bəyan (siyasat p.1)

nəye er port pər kargo verhəus namUkəmməl (siyasat p.2)

petrolIəm qiməto me phIr izafe ke əndese (siyasat p.5)

andhra prədes ke ek məndIr me bhəgdər məcne se 6 əfrad həlak (qaumi awaz p.1)

kəmpyutər ki əb Insani soc tək rəsai (qaumi awaz p.2)

kinIa me 50 həzar se zayəd hIndUstani mehfuz (qaumi awaz p.5)
nəye sal me bIgUl bəjane ke lIye sentral kantrakt me nəye khIlarIyo ki təlas (qaumi awaz p.7)

dusre ke nam pər Imtehan dete hUe 3 fərzi tələba gIrəfter (sahara p.7)

kəpas ki qiməto me məzid tezi ka Imkan (sahara p.9)

ek dIn pUrani yedi yurəppa hUkumat ko do zəbərdəst jhətke (salar p.1)

malIkməkan se chUp kər rehne vali cini xatun gIrəftar (salar p.9)

It may be noticed that grammatically the above head-lines simply hold phrasal status. At times the head-lines may end in adjectival or adverbial phrase:

yu pi bord IntərmidIat Imtehan ke nətaej ka elan **aj** (adverb; sahara p.1)

sərək hadIse me ek ki məut 3 **zəxmi** (adjective; sahara p.2)

gaza ki səngin surət-e-hal pər aləmi bIradəri ki xamosi **sərmnək** (adjective; salar p.9)

sərif bIradəran ka mUamIla ala Intexabi kəmisnar **ke pas** (adverbial phrase; salar p.1)

gəir mUqim hIndUstanIyo ke faIde vali Iskim ka elan **jəld** (adverb; qaumi awaz p.1)

sanIa mIrza əur rohən bopənna ka hopmən kəp ke fəinal me pəhUncne ka xab **cəknacur** (adjective; qaumi awaz p. 7)

əyodhya mUqəddəme pər səma-ət 7 jun tək **mUltəvi** (adjective; siyasat p. 1)

4. No significant borrowing from Hindi and other regional languages in newpaper Urdu:

As stated above Urdu currently though a stateless language in many areas of the India it is a popular language. In all these areas it is surrounded by different regional languages. Such a contact situation is bound to make a mutual impact on Urdu and the respective regional language. Mustafa (2003) while studying the impact of Urdu on newspaper Hindi notes that Urdu has impacted the later and one may find a good number of Urdu words in the newspaper Hindi.

Nextly as pointed out elsewhere in this paper while the newspaper Urdu readily borrows and accommodates English elements the same is not true with respect to elements from other regional languages. This however is not to say that it is averse to borrow from Hindi and other regional languages. A few examples from these languages may be given here:

sam ki bat to dur dIn me bhi **grahək** dekhe ja səkte həi (instead of simplified Urdu form **gahak**) [sahara p.4]

Unho ne kəha ke əb pure mUlk ke gujər rajəsthan ki gujər bIradəri ke bəre pəemane pər **əndolən** sUru kərenge (instead of Urdu **tehrik**) [sahara p. 8]

Page 9 of 14

jUnubi hInd me bharətiya jənta parti ki əvvəlin hUkumət ko aj Us vəqt **dhacka** ləga jəb rIyasəti gəvərnər ramesvər thakUr ne pəhele əksərIyət sabIt kərne ke lIye kəha (instead of Urdu's

dhakka/jhatka; the form is probably borrowed from Dakkhini) [salar p.1]

əqvam-e-mUttəhIda ke qəyam-e-əmn mIsn ke karkUnan blu helmet puri dUnya me ek əisi **səbih** bən gəyi həi jIse rəhəmdIl Insan pehente həi (use of this word due to the influence of Hindi ?) [salar p.3]

hIndUstan me əngrez səb se pəhele bəngal pər qəbza jəmaye (sentence without **ne** ; due to Dakkhini influence ?) [salar p.4]

dIl əur dImag me pəida hUe kəsməkəs əur Is se pəidasUda **tənav** Isi gələt fəisəle, gəlt amal əur səccayi se duri ka nətija həi (instead of Urdu's **vahsat, paragandagi)** [salar p. 8]

vəise ap kiro ki dəva Istemal kIye hai? (absence of **ne** in the sentence; probably due to influence of Dakkhini) [salar p. 8]

lekIn həzaro **kəttərpənthi** Is moxsəd ke lIye jan dene ko təyyar bəithe həi (instead of Urdu's **Intehapəsand, dehsətgərd)** [qaumi awaz p.4]

5. Conjoining words with vave-e-ətf: In Urdu orthography one of the letters is vav written as و . Phonologically it is a vowel, o and semi-vowel, v in the language. In addition to its orthographical function i. e. to represent o and v, in literary Urdu the letter has a grammatical function too. Here it is used as a conjunction to conjoin minimally two Arabic and Persian origin words. In this role it is known as vav-e-ətf, that is a 'vav

which conjoins'. A few examples: rənj-o-gəm 'sorrow', sUbh-o-sam 'morning and evening', səbz-o-sUrx 'green and red' etc.

The news paper Urdu is makes a very productive use of vav-e-ətf. Further with vav-e-ətf it is not only conjoining two Arabic and Persian orgin words but words and phrases from other languages too. A few examples:
ye kalejəz **motihari v dərbhənga** me qaem həi (sahara p. 4)

tənvir ke jel se **reha hone v lərki** ki vapəsi ke bad fəriqəin me səmjhota hogəya (sahara p.7)

bazar maherin ke mUtabIq **kIsano v karobarIyo** ke pas stok ki gəirməujudgi ki vəjh se bhi kəpas ki qiməto me tezi ka mahəul bəna hUa həi (sahara p. 9)

bhopal ke nəzdik məndidip əur bədhni məidan me mUjəvviza tekstəil park me **bəri v choti** sən-əto ke qəyam ke lIye 169 ekər zəmin ka Inteqab kərlIya gəya həi (sahara p. 9)

kafi ki aləmi qiməto me tezi v **dalər ke mUqabile me rUpe me kəmzori** ke mədd-e-nəzər ghərelu bazaro me kafi ki qiməto me məzid tezi ka Imkan bərqərar həi (sahara p.9)

Islamik bǽnkIŋg o fəinans kors ka agaz (siyasat p.6)

xas təur pər rat ko sote vəqt ye **tənav o dəbav** zIyada mehsus kərne se Us ka nind ka dəuranIya na hone ke bərabər həi (salar p.8)

zImbabve ke xIlaf moqabIle ke lIye yunUs xa ne **kamand o trenIŋg** sUru kərdi (qaumi awaz p.7)

6. **Use of broken plurals**: Literary Urdu in the case of plural formation of Arabic and Persian-origin (Urdu) nouns generally prefers broken plurals. It may be argued that the plural forms

of these nouns too have travelled into Urdu along with the singular forms. Therefore today in literary Urdu these forms are used as such with some minor changes at the orthographic level.

Following the trend of literary Urdu, in the case of plural formation of Arabic and Persian origin nouns newspaper Urdu too prefers broken plurals. A few examples may be given here to illustrate the point:

bIradǽəran [pl. of bIrədar 'brother']; Ijtema-at [pl. of Ijtema 'congregation']; təbqat [pl. of təbqa 'level']; maherin [pl. of maher 'expert']; saIqin [pl. of saIq 'one who has interest']; təhəffUzat [pl. of təhəffUz 'security']; zərae [pl. of zərIya 'source']; ərkan [pl. of rUkn 'member']; məndubin [pl. of məndub 'delegate']; məfadat [pl. of məfad 'benefit or interest']; təfsilat [pl. of təfsil 'detail']; qaIdin [pl. of qaId 'leader']; məhlukin [pl. of məhluk 'the killed ones']; qarI-in [pl. of qari 'reader']; mUzahirin [pl. of mUzahIr 'demonstrator']; tə-əllUqat [pl. of təəllUq 'connection']; mUtasIrin [pl. of mUtasIr 'affected person']; jəraem [pl. of jUrm 'crime']; mUlzImin [pl. of mUlzIm 'accused person']; bəqayajat [pl. of bəqaya 'remaining']; mUhajIrin [pl. of mUhajIr 'a displaced person']; Intexabat [pl, of Intexab 'election or selection']; məqtUlin [pl. of məqtul 'one who is killed']; əfsəran [pl. of əfsər 'officer']; membəran [pl. of member 'member']; tərəqqiyat [pl. of tərəqqi 'improvement']; afrad [pl. of fard 'individual or person']; Isteharat [pl. of Istehar 'advertisement']; Ittela-at [pl. of Ittela 'information']; halət [pl. of halat 'condition']; əsatIza [pl. of Ustad 'teacher']; tənaze-at [pl. of tənaza 'controversy']; sarIfin [pl. of sarIf 'consumer']; tərjihat [pl. of tərji 'preference']; təjaviz [pl. of təjviz 'proposal']; karkUnan [pl. of karkUn 'worker']; mUzmIrat [pl. of mUzmIr 'hidden thing']; nUmaIndəgan [pl. of nUmaInda 'representative']; xUtut [pl. of xat 'letter or line']; tələba [pl. of talIb 'student; one who demands'] and many others.

It may be clarified here that in Urdu it is not the case that all or any Arabic and Person origin noun in its plural formation must necessarily follow broken plural pattern. Even in literary Urdu where the norms are comparatively rigid, this is not the norm. Therefore in newspaper Urdu too one may find many Arabic and Persian origin noun being pluralized in the indic way. A few examples:

məzid tin **nəsIst-o** ki zərurət həi (pl. with suffix –o) [salar p.1]

nepal ke mazul shah ghər bədəlne **nUjumIy-o** ke dər pər (pl. with suffix –o) [salar p.2]

Is tərəh ki **varIdat-o** ki əmerIki ticəro ko ehsas hUa (pl. with suffix –o) [salar p.5]

mUsavat ka nara əur Uski **təbahkari-ya** (pl. with –ya) [salar p.5]

Urdu midIam ki nIsabi **kItab-o** ki dəstIyabi yəqini bənayi jae (pl. with –o) [sahara p.2]

fIrqapərəst **tənzim-e mUsəlman-o** ko dehsətgərd sabit kərne pər tuli hUi həi (pl. with –e and –o respectively) [sahara p. 7]

sərək **hadIs-o** ke pes-e-nəzər hUkumət motər garIyo ke mUayIne ka nIzam bənaye gi (pl. with –o) [qaumi aawaz p.8]

Un ke **varis-o** ko sərkari Imdad fəraham kərne ka mUtalIba kIya
(pl. with –o) [siyasat p.8]

In Iqdamat ke agaz ke təur pər **cIllərfərosi** ki qiməto me Izafe ke Imkanat ka jaeza lIya jaraha həi [cIllar 'change' marathi ?] (siyasat p. 5)

6. Meaning extension by way of loan translation: The news paper Urdu has made many innovations in the use of certain of

its vocabulary items by way of loan translation. Such loan translations are mainly from English rather than other languages. A few examples:

halat Intehayi **dhəmakaxez** (loan translation of 'explosive') [sahara p. 1]

fIrqapərəst tənzime mUsəlmano ko **dehsətgərd** sabIt kərne pər tUli hUyi həi (loan translation of English 'terrorist') [sahara p.7]

kəmpəni ne əvami theko v xərid me **shəffafIyət**, gəirjanIbdar o bədUnvanIyo ko xətm kərne ke lIye em o yu pər dəstxət kIye həi (sahara p.9)

gəir qanuni kankUni me mUləvvIs sIyasətdano ko aj **vəjhnUmayinotis** jari kərdi gəyi həi (siyasat p.13)

məgər məi ne **zəmini həqiqət** kUch əur hi dekhi (salar p.4)

məlesIa hUkumət ke xIlaf hIndUstan me jo **atIsi** sIyasət sUru hogəyi thi (salar p.4)

Is so me mezbani kərne ki peskəs lekər mere pas aye to Is pər mUjhe kUch **təhffUzat** the (salar p. 7)

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A RULE BASED POS TAGGER FOR TELUGU

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Abstract

The major bottleneck to develop NLP tools for Indian languages is the lack of annotated corpus. The tools involved to develop annotated corpus are morphological analyzers, POS taggers, Chunkers, etc. POS tagging is a process of assigning an appropriate tag for a given word in the context. Morphological analyzers will give the morphological information of a given word but POS tagging is somewhat different from analyses it gives the syntactic category of a given word within the context.

Statistical and Rule based taggers are the major divergent taggers available for natural languages. Within that Rule based taggers which shares the linguistic knowledge is more reliable to the languages with complex morphology than compared with statistical taggers. In this paper I'm going to discuss about the architecture and the tools involved in Telugu POS tagger (Rule-Based). And I will discuss about the variations of the two taggers (statistical and Rule based) and how rule based tagger is more reliable and few other issues.

There is always a scope of development in Rule based tagger than statistical one. Languages like Telugu, Tamil, etc., which has very rich morphological tradition; need more attention than other languages. Rule based tagger will take the help of morphological analyzer in initial stages and gives the unique tag with the help of syntax.

I. Introduction

Annotated corpora serve as one of the most important resources for researchers in natural language processing. They have proved to be the most sought after basic resources in the construction of statistical models for automatic processing of natural languages. Many such corpora are available for languages across the world and the development of them have proved to be a useful step towards NLP (natural language processing). Only recently, some work in this area is being carried out in Indian languages. The main obstacle is the unavailability of such annotated corpora to experiment with

statistical algorithms. POS (Parts of Speech) tagging of texts forms the basic step towards building an annotated corpus.

II. POS Tagging

POS tagging is the process of assigning a part of speech or lexical category uniquely to each word in a sentence. It essentially involves the task of marking each word in a sentence with its appropriate part of speech. It also involves the resolution of the ambiguity of POS of a given word in the text in context.

When morphological analyzers analyze words a considerable number of these words found to be ambiguous i.e. they are analyzed in more than one way. It not immediately forthcoming with the information to assign POS uniquely from the possible morphological analyses of the word. A morphological analyzer eventually analyses words without reference to their context of occurrences. It is the POS tagger that uniquely assigns POS tag from a set of possibilities in the context. Hence there is a need for a POS tagger. There are different kinds of tagging procedures available, mainly statistical and rule based on the top. We have selected rule based tagging on the assumption that it is best suited for morphologically complex languages like Telugu. We have also tried to compare both the statistical and rule based tagger outputs of Telugu with those of manually tagged text (gold standard) to find out empirically the best tagging procedure for Telugu.

III. Rule Based Tagging

It is totally based on a set of rules, which decide a relevant tag

for a given word. Initially a POS tagger module assigns all possible tags to each word in a given sentence later a procedure involving a set of rules selectively removes all tags but leaving one i.e. the correct tag for each word. It involves the formulation of context based tag assignment rules. The rules are either handcrafted or mechanically generated. It needs no training data. Tag assignment rules apply directly or indirectly on lexically or morphologically tagged ambiguous words. The size of the tag set has significant role in tagging.

3.1 Tag Set
A collection of a set of optimum number of POS tags for a given language is called a POS tag set. Each language may have its own POS classification schemes in terms of nouns, verbs, adjectives, adverbs, etc. However, this conventional broad classification is insufficient to capture all morpho-syntactic features of the words of a given sentence. It is obvious that a given word can have more than one morpho-syntactic feature. The reduction of all possible POS tags for a given word to one depends upon the availability of lexical and contextual rules. The number of rules increases as the number of tags increases. The tag set should be context independent while optimum in it size. We adopt a tag set that is developed by IL-IL MT consortium to be applicable for all Indian languages; the tag set is developed to fulfill the needs of all Indian languages.

The tag set we adopted is different from the hierarchical tag set which is already in use for Telugu. The hierarchical tag set has more number of tags and heavy for computational purpose. In this level we have taken fine-grained tags to cover the all morpho-syntactic features as well as less number of tags since,

less number of tags lead to efficient machine learning. But we have taken care of the issue that while reducing number of tags we shouldn't miss out on crucial information related to grammatical and other relevant linguistic knowledge which is encoded in words, particularly in morphologically rich languages like Telugu, Tamil etc. In our tag set we have around 26 tags covering all major and minor categories of the languages.

Ex. Noun – NN (IL-ILMT tag set)

Noun – nn,nn1,nn2,nn3,nn4,nn5,nn6, nn7, nn8, etc. (hierarchical tag set)

Table of tags

S.No	Category	Tag
1.	Nouns	NN
2.	Pronouns	PRP
3.	Proper nouns	NNP
4.	Locative nouns	NST
5.	Verbs	VM
6.	Verb Auxiliary	VAUX
7.	Adjectives	JJ
8.	Adverbs	RB
9.	Conjunctions	CC
10.	Postpositions	PSP
11.	Interjections	INJ
12.	Intensifiers	INTF
13.	Quantifiers	QF

14.	Question words	WQ
15.	Reduplicatives	RDP
16.	Echo words	ECH
17.	Demonstratives	DEM
18.	Quotative	UT
19.	Classifiers	CL
20.	Compounds	*C
21.	Particles	RP
22.	Numerals(Ordinals)	QO
23.	Numerals(Cardinals)	QC
24.	Negative forms	NEG
25.	Symbols	SYM
26.	Unknown	UNK

3.2 Architecture of Rule-based Tagger

Generally a rule-based tagger consists of three components.

1. Tokenizer
2. Morphological analyzer
3. Morphological disambiguator

In tokenization the input text divided into tokens suitable for further analysis in terms of punctuation marks and word-like units. After tokenization the output is fed to the morphological analyzer for assigning one or more number of its morphological categorization. The output of a morphological analyzer will be all and only the possible morphological category information for each word in the sentence. Later, their

corresponding POS tags will substitute these morphological tags.

Ex:

Noun	Morph Analyses	POS
ceruvu	ceVruvu{aruvu v *AjFArWa* 2_e }/ceruvu/	VM
	ceVruvu{meku n eka *0* }/ceruvu/	NN
	ceVruvu{meku n eka *obl* }/ceruvu/	NN

Ambiguity resolution or disambiguation is the last major phase in tagging. Disambiguation is based on information about the word in the context and the word/tag sequences. The design of the disambiguation procedure in language modeling is the hardest task in tagging. The appropriate POS tags for the words will be substituted for the given morphological analysis. If the assigned tags are more than one then syntactic information is used to resolve the ambiguity, since the output of tagger should contain only one unique tag. In other words context based disambiguating rules will be applied to remove the inappropriate tags. While in the assignment of tags we have used morphological information where as in the ambiguity resolution syntactic context is used. These disambiguating rules are context dependent. According to the context we assign appropriate tag to the word.

Some disambiguation rules for illustration

The following are some of the POS tag disambiguating rules used in the task:

$$W_1 :: W_2 \quad => \quad W_1 :: W_2$$

(Where W_1 and W_2 a sequence of words in that order)

NN,VM::NN => NN::NN

UT, VM:: VM => UT: : VM

UT, VM :: NN => UT :: NN

Final output after disambiguation:

ceruvu/NN

A set of rules would finally decide the POS tag for each word in a given text. It is a procedure where a linguist provides rules for automatic tagging of text given as input. In this type of automatic tagging the procedure purely depends on the rules provided by linguist.
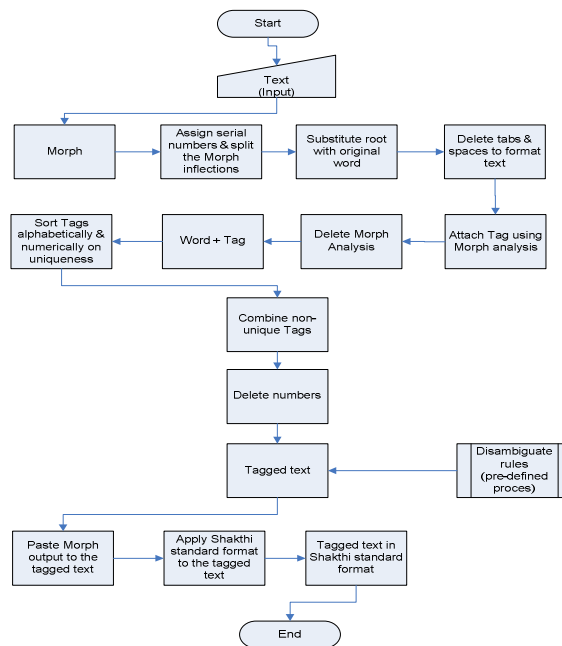
Flow chart of POS tagger

IV. Evaluation

For the evaluation of rule based tagged text we have taken the sample of statistical tagger outputs and compared those two

with the gold standard text. A linguist manually creates gold standard text and we consider that as a benchmark against two automatic taggers. Statistical tagger is based on simple notions. It is built from training data. The training data here would consist of dependable POS tagged corpora. Manually tagged corpus is taken as a training corpus. This tagger run on a larger corpus to produce a larger POS tagged corpus. It uses the basic probabilities and frequencies of word order patterns as clues and assigns tags to give the output. It takes most frequent and high probabilities into count. The statistical tagger I have used is HMM (Hidden Markov Model algorithm) tagger.

Overall Result:	**WORDS**
GS POS tagged text for comparison:	50, 094
Untagged test corpus for rule based tagging:	20,154

Overall Result in Rule Based POS Tagger:

1. Identity: 17,540/20,154 = (87.02) %
2. Difference: 2614/20,154 = (12.97) %

Observations

i. A major source of difference in tagging (by Rule-Based tagger) can be due to those words which take different tags in different contexts, particularly verb and noun.

ii. Another source for wrong tagging may be ascribed to unknown and proper noun. Because named entity recognition is a major problem in rule-based tagging, proper nouns are currently not tagged.

iii. The other major problem is unknown words. If a word is not analyzed by the Telugu morph it will be tagged as unknown in the text. Incorporating these into the dictionary to get the analysis will solve this problem.

Overall Result   : **Words**

  Training text (GS POS tagged) : 50, 094

  Testing corpus   : 20, 154

Overall Result in HMM tagger

  Identity   : 17,013/20,154= (84.14) %

  Difference   : 3141/20,154 = (15.58) %

Observations:

i. A major source of difference in tagging (by HMM tagger) can be due to those words which take different tags in different contexts, particularly   particles, conjunct, adverb, quantifier, and question words.

ii. Another source for wrong tagging may be ascribed to the tags reduplicate and echo, which are extremely rare.
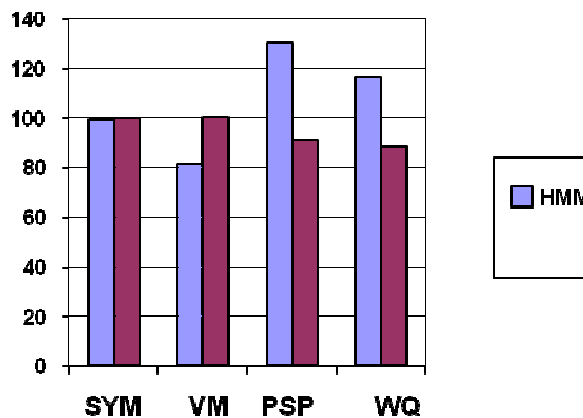
V. OBSERVATIONS

An HMM tagger considers the frequencies of patterns and sequence of words with their tags and computes the possibilities for assigning tags to individual words. While tagging it doesn't favor less frequented words hence there is a high probability that a word is restricted to only one category

when it is ambiguous. Indian languages are morphologically very rich languages' hence using HMM tagger is not appropriate to tag all the possible categories.

And it is also not easy to identify the errors and rectify the performance of the HMM tagger. It is very difficult to bring the accuracy levels near cent percent in case of HMM tagger.
The Rule-Based tagger as explained above is based on the morphology and syntax of the language hence there is a chance of identifying the errors and rectifying them. We can easily identify the problem and find a solution using the available linguistic knowledge. There is a possibility of reaching higher levels of accuracy in case of Rule- Based tagger.

With the above observations we propose that Rule-Based taggers are more reliable and appropriate to Indian languages than probability based HMM taggers.

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ENGLISH HYPER WORD 'OF' AND ITS FUNCTIONAL EQUIVALENTS IN TELUGU (FOR THE PURPOSE OF MACHINE TRANSLATION)

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Abstract

The aim of this paper is to study the dynamics of the English word of and to find its functional equivalents in Telugu for the purpose of Machine Translation. The overall approach of the investigation is resolutely descriptive and empirical. It is, mostly, an approach driven by translation needs.

I. Introduction

In Old English *of* is an unstressed form of 'mf' (preposition, adverb) with the meaning of 'away' and 'away from'.

Primary sense in Old English was still 'away', but shifted in Modern English as the substitute for the genitive case, and mostly grammaticised.

O*f* is the most grammaticised of all prepositions. Apart from its basic locative meaning 'away' 'away from', it has concepts like geographic origin, belonging, selection from a set, and many others.

Of can be part of complement in the structure of NP, VP, AdjP, AdvP etc., and it also functions as a modifier, stranded etc. Subject-determiner genitives exhibit extensive relation with *of*. Furthermore o*f* syntactically comes with many combinations: nouns, phrasal verbs, complex prepositions, adjectives, etc. O*f*, semantically, is also found in time, place adverbs, etc.

Nouns do not take non-genitive NPs as complement. Subordinate NPs are related to the head noun by genitive case by prepositions, and *of* is the default preposition used for this function. Like nouns, adjectives do not take NPs as post-head complement. Subordinate NPs are related to the head adjective by means of a preposition, and *of* can be the default preposition in this construction.

Verbs and prepositions do take NP complements, so prepositions in general, and *of* in particular, play a smaller role in their complementation. There are a number of verbs and prepositions which do select *of* complements.
Ex. She <u>approves</u> <u>of</u> the plan.

Like nouns, adjectives do not take NPs as post-head complement. Subordinate NPs are related to the head adjective by means of a preposition, and *of* can be the default preposition in this construction.
Ex. I feel <u>ashamed</u> <u>of</u> myself.

There are a few cases where *of* is not selected by the head and thus makes an independent contribution to the meaning. In the following examples *of* phrase is

Modifier in NP structure:
Ex. a matter <u>of no importance</u>

It can be seen from the above details that the word *of* has to be studied thoroughly to get proper output of a machine translation system.

II. Translation Process
Translating this hyper word *of* into Telugu is a challenging task for machine translation system. A translation task has two

phases. First phase is to identify the structure and the meaning of the source constructions involving *of,* and the second phase is to find appropriate equivalent structure and meaning in the target language.

To get proper meaning of a word we have to consider the polysemy and homonymy issues. These issues are in the form of proper nouns, adjectives vs adverbs, adjectives vs nouns, etc. Apart from these issues, finding meaning for idioms, metaphors, satires or ironies, etc. is more difficult for a machine. A meaning of a word or phrase depends on the context. In a direct interaction one can get help from various sources like intonation, context, body language etc. but when it comes in an indirect mode of interaction this gets worse.

Phrasal words/meanings are most common in any natural language. They have their own identity. It is very difficult to analyze these units in a straightforward way. There is a need to take them for a separate study. While analyzing a sentence first of all it is better to extract the phrases (phrasal nouns, phrasal verbs, phrasal prepositions etc.) and then analyze the sentence accordingly.

2.1. Distribution of of:
Of is found in the following structures:
Phrasal nouns, non inflected forms of genitives, fixed prepositional verbs (V + Prep (fixed)), mobile prepositional verb (V + Prep (mobile)), those which select a PP complement containing a specified preposition together with its own complement (fossilized), verbal idioms, fixed particle [V+Prep], mobile particle [V+X+Prep], adj+of+Nx, adv+of+Nx, complex, compound, stranded, at the beginning of the sentence, adjunct, idiomatic, functioning as other POS, and some typical constructions.

The above places should be studied while identifying the original meaning of a word in a source language.

After identifying meaning of the source language, finding equivalents for them is another challenging issue. Some of the issues are:

Explicit lexical/functional equivalent in the target language:
Ex.   Did something [come <u>of</u> all those job applications]?
        anni ā udyoga arjīla **<u>nunci</u>** ēmainā vaccindā?

(To identify these kinds of phrases, the following kind of rules would be helpful.
'come+of+Nx' is a phrase where the word *of* takes the equivalent 'nunci')

No lexical equivalent required in target language:
Ex. I reserved them by phone yesterday *in the name of Kittu*.
    …kiṭṭū pērupai phonlo rijarv cēsānu.

Ex. Much blood has been spilled in the name of religion.
    mataM pērupai cālā raktaM cimmindi.

Usage of inflections in the target language:

Ex. He sent me some flowers *by way <u>of</u>* an apology.
    atanNu kṣamāpanala**<u>ku</u>** gurtugā pūvulu pampincāDu.

Some issues in the translation of the structure N+of+N:

While translating the nouns from source language (here English) into the target language (here Telugu) the following issues have to be considered:
1. For some nouns target language may have local equivalent,
2. Sometimes transliteration is needed,

3. Some typical situations are there where the word order remains the same in the target language,

4. Sense difference may be there in different places (countries, states) and languages (Hindi, Telugu), etc

Following is a list of examples, which was sorted according to the markers, from the translated sentences.

1. tō:

Ex. *atanu kyānsarutō canipoyāḍu*

He *died of/from cancer*. (died of/from something)

2. gā:

Ex. *nēnu idi elā jarigindo telusukovālani anukunṭunnānu eMdukanṭē idi khaccitamgā dānantaṭaadi /dānikadē/ tanantaṭatānugā jarigi uMḍadu*

I want to know how it happened because it certainly didn't *happen of itself.*

3. lo: (among , inside, point of time, place/inside of something)

Ex. *mā kāru manci samayālalo kūḍā nidānamē*

Our car is slow even *at the best of times.*

(at the best of times (when things going well)).

4. niki/naku:

Ex. *mēmu paṭṭanāniki/paṭṭanamunaku oka mailu lopala nivasistāmu.*

We live *within a mile of the city centre.*

5. ku/ki): In Phrasal verbs:

Ex. prastuta samghaṭanalu cālā ardhālaku tāvistāyi/ tāvistunnāyi.

The latest events *admit of several interpretations.* (admit of something- resulting)

6. (nu/ni) :

Ex. *prastuta ṣeḍyūlu savarananu anumatincadu.*

The present schedule does not *admit of modification.*

(admit of sth)

7. nunci/nunḍi:

Ex. *anni ā aplikēṣanulalonunci /udyogaprayatnālanunci ēmainā vaccindā?*

Did anything *come of all those job applications*?

(come of sth)

8. gūrci/gurinci

Ex. *ataniki bahumati rākamundu atanigūrci/gurinci eppuḍu vinalēdu.*

I'd never *heard of him* before he won the prize.

(hear of sb/sth (know))

9. pu: (belongs or owning characteristics/things)

Ex. *itani padonnati pakṣapātapu kampukoḍutundi.*

His promotion *reeks of favouritism*. (reek of sth)

10. ē:

Ex. *pillalu tondaragā visugucendē (rakaM) bomma idi*

This is the kind of toy that children will soon *tire of*.

h/sb ((cendē/lo))

(pāliccē jantuvu, visugu puṭṭincē pillavāḍu, baḍikiveḷḷē pillavāḍu, appiccē vyakti)

11. kanṭe: comparison

Ex. *āme aMdarikanṭē mundu vaccindi.* **(case)**

She arrived in advance of everyone else.(in advance of sth/sb (idiom/phrase))

12. lāgā/lānṭi:

Ex. *āme 19va ʃatābdapu navalā pātralāgā/lānṭi dustulu dharistundi.*

She dresses like *a character out of a 19ᵗʰ century novel*.

13. ū:

Ex. *renḍu sekanula lopala prapanca rikār·unu baddalucēstū āme vaccindi/gelicindi.*

She *came within two seconds of beating the world record.*

14. kala/gala:

Ex. *goppa ākarṣana kala/gala yuvati*

a *woman of great charm*

15. aMṭē:

Ex. *sālīḍu(lu)aMṭē bhayapaḍē (vyakti)*
   (He is) *frightened of spiders*

16. koddi/lādi:

Ex. *vandalādi/vandalakoladi/vandalakoddi/vandalamandi
   amāyaka prajala narasaMhāraM.*
   The massacre of *hundreds of innocent people.* (quantity)

17. ani:

Ex. *ī madhya āme vīpu bāgālēdani cebutūuMdi.*
   She has been *complaining of a bad back* recently.
   (complain of sth (ni).

In fact, it is not the 'of' which is taking the equivalent but it is the semantic feature for the context (case) which is taking the equivalent. Broadly, after translation, 21+1 functional equivalents are found for the word 'of':

yokka, pu, koddi/lādi, lo, loki, ḍu, lānṭi/lāgā, aMṭē, kala/gala, nu, ādi, to, (t)ū, gā, gurinci/gūrci, ku, nunci/nunḍi, kanṭē, niki/naku, ē, valla and plural oblique ['lu=>la'/'ḷu=>ḷa' (u=>a), 'ru=>ri' (u=>i).]

2.2. Some Specific Observations

1. No lexical equivalent needed for English word *of* for noun+of+noun structure (but there are some exception are seen) in Telugu.
2. The oblique stem of the noun fulfills the function of genitive in Telugu. But some nouns have no explicit oblique forms, ceṭṭu, medau, guḷḷu etc.
3. Sometimes one of the homonyms takes oblique form according to their meaning, pannu – 'tooth' and 'tax'.
4. Within a synonym set, some words take oblique form and others do not, bāluḍu – bāluḍi, abbāyi – abbāyi.

5. Sometimes the syntax of the phrase shows the influence on the oblique form, pustaka puṭa, pustakaM mundu puṭa.

6. Proper nouns do not take oblique form except '·u' ending, as in rāmuḍi, kṛṣnuḍi.

7. We may write rule that 'lu' ending nouns take oblique form 'la', but it fails in the example like manumarālu

8. (granddaughter), 'la' is the oblique form of this noun. So while framing rules this point should be keep in mind.

9. Other cases (verb + of + noun) like instrumental, ablative etc needed an explicit equivalent for the word *of*.
   Ex. Died of something, Made of something.

10. In some cases change of syntax is not necessary: ex. a kilo of mangos – kilo māmiḍi paḷḷu. (where a quantifier occurs in pre nominal positions)

11. Usage: there is a possibility of substitution /interchangeability of words:
    Ex. Do you know of/about a good doctor?
    heard of/about someone/something

12. Dialectal influence on equivalents/translation:
    Ex. I'm sick of his excuses – atani sākulato/aMṭē visugu cendānu (causal/quotative marker)

13. The functional equivalent for *of* can be causative, instrumental, adverbial particle, quotative, etc.

14. Phrasal verbs are usually used informally in everyday speech as opposed to the more formal Latinate verbs, such as 'to get together' rather than 'to congregate', 'to put off' rather than 'to postpone', or 'to get out' rather than 'to exit'. Here we have an issue related to the translation: whether informal words of source language can be translated by using formal words in the target language. Because of this issue a translator should see whether the source text allows giving formal equivalents in target language.

All the above mentioned issues should be solved to get effective machine translation. This information should be given to the computer using a proper methodology. Some of the popular methods are Rule Based Method, Example/Parallel Corpus Based method, etc. Apart from these, dictionary can also be used to solve some of the issues related to the phrasal entries. The result of the dictionary method is given below.

2.3. Some of the machine translation methods and issues.
2.3.1. Dictionary Based Method:
One of the effective methods is, in machine translation, Dictionary Based Method. Basic principle here is the patter mapping. List the words, phrases etc in a dictionary and extract whenever required. But major limitation is the number of combinations, they are huge.

Listing all the phrases into the dictionary is not possible. The following result confirms that point.

Here, some sentences which contain phrasal nouns, idioms, phrasal verbs etc. are taken and mapped with the dictionary entries. Following are the details.
a. Phrasal Noun analysis
   Number of input sentences: 65.
   Input Sentences matched with the data: 43.
   Percentage of match: 66.1%
b. Idioms & phrases
   Number of input sentences: 351.
   Input sentences matched with the data: 112.
   Percentage of match: 31.9%
c. Others
   Number of input sentences: 37.
   Input sentences matched with the data: 14.
   Percentage of match: 37.8%
d. Phrasal verbs
   Number of input sentences: 77.
   Input sentences matched with the data: 0.
   Percentage of match: 0%

Some of the possible issues with the dictionary entries are given below:
1. Number: (singular-plural)
2. Extra information in data base (explanation etc)
3. Spelling mistakes: (human error)
4. Short form of usage (house-house of commons)
5. Capitalization of the entry (House-house)
6. No entry in the data base.
7. Singular form in the dictionary (arm- arms of sth).
8. Capital forms: there may be a conflict between the input and the data files with capitalization of the initials.
9. Data may have extra information i.e. Other than the main entry.
10. Complex structure of the phrasal nouns (n+of+n+n+n or n+of+adj+n, etc)
    Ex. index of leading economic indicators.
11. Clipping usage: the Fall (of Man).
12. Hyphenated usage: Jack-of-all-trades.

2.3.3. Some issues with phrasal verbs in the above method:
There are three major problems to identify the phrasal verb unit.
1. The tense of the verb (base form, 's' form, 'ing' form, 'ed' and the irregular past forms).

2. The complement of the phrasal verb. The complement of the phrasal verb can be anything like a noun, noun phrase, or clause etc. Identifying the phrasal verb's complement and giving the proper equivalent for that unit is a challenging task for machine translation because it is not practicable to put all the variables in a dictionary. For example in the following examples something (sth) can be any thing:

admit of sth:
admit of <u>modification</u>. - single word and singular form
admit of <u>several interpretations</u> - adjectival and plural form

allow of sth
allows of <u>no exceptions</u> - negative and plural form
allows of <u>only one interpretation</u> - determiner and singular noun

become of sth
(Whatever) became of <u>that parcel</u> (you sent?) - determiner and singualr

dream of/about sth
(I) dream of <u>one day working for myself and not having a boss</u>.
- a clause

3. And the third one is the homonymous prepositions:

get <u>out of</u> sth (avoid)
get <u>out of</u> sth (stop)
get sth <u>out of</u> sth (enjoy)
get sth <u>out of</u> sb (persuade) etc

III. Rule Base Method
Rule Base Method may be needed by both the phases of translation. (identifying the meaning unit in the source language and giving equivalent in the target language).

As we have mentioned earlier, the word *of* found in around 35 syntactic contexts. These structures include complements, idioms, stranded cases etc. Extracting these structures is a challenging task for a machine translation.

In computer programming, Regular Expressions are an extremely versatile tool for the extraction of lexical items and syntactic patterns from electronically stored text. But there are certain limitations are found here:

For example, by allowing up to three elements to occur before the nominal element, the precision of the search result of rule based method will be lowered. This is due to the fact that

instances will be retrieved where a syntactic boundary is located between the first prepositional element and the noun. One example of this, which features the PNP-construction 'in need of', is shown in the example below.

Ex. The beginning of this trend, in which the fundamental need of parents is to be happy in parenthood, can be seen in two ways.

After pattern extraction, ambiguity, polysemy issues should be resolved afterwards we need to give the proper functional equivalents to these patterns. As we discussed above lot of issues have to be considered for this process.

Identifying the oblique forms of nouns is very much important in this context of identifying the functional equivalent for the English word *of*, because most of the times, in Modern Telugu, oblique form fulfills the function of genitive etc.

I tried to limit the rule on the basis of attributive features. According to my data, only a limited number of structures take the functional equivalent for the word *of*. Instead of trying to generalize the structures, it is better to give direct structures and get the output according to the requirement. For some patterns, where it is not possible to write rules, other methods like example/parallel corpora method can be used.

IV. Example/Parallel Corpus Based Method
Giving the possible equivalents in the target language in the form of rules is not fully possible. We need some supportive methods to solve this kind of problem. The possible method would be Example based or Parallel Corpora method.

In the Example/Parallel corpus method we take full sentences with their translation and list in a file. When input sentence has a match with these sentences it retrieves that sentence's translation as an output. We can put all the sentences in this file and extract this wherever needed. The great limitation is

the processing speed of the computer. This method takes a lot of time to search the corpus file, mostly because of the size of the file. This is not at all acceptable for normal usage of a system. But this system can work efficiently if we get high speech computer. Another limitation is that lacking of discourse level parallel corpora. To solve this problem we may need some rules. Therefore it is a kind of cyclic process.

4.1. *Statistical Methods***:** one can use statistical base method to resolve the ambiguity in machine translation system.

V. Concluding Remarks

Though the hyper word *of* is the most frequent word in English, only a limited number of contexts in Telugu needs explicit equivalents for it, like in idioms, in phrases etc. All phrasal nouns containing *of* can be listed in a dictionary because these units are constant in nature, and do not yield for analysis of the structure. Listing the idiomatic expressions and phrases is also important, because writing rules for these structures is not recommended. We can maintain a database for these units. For other structures we can use Rule Based Method. Even though this method has limitations it works fast, in term of computing. Identifying nouns which take oblique forms is very important to find the correct functional equivalent for the word *of*. Because, some nouns in Telugu do not take oblique forms and some do, sometimes even according to the context. Example/parallel corpus method is more effective and natural. But the big limitation is that this method takes longer time to retrieve output. If we get faster computers then this method works very well.

It is not the shape or size of the word, but it is the function of the word which matters. Even a smallest unit of a language needs a whole range of study in translation particularly in machine translation. Here whole range means 99.999% not less than that.

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SOFT SKILLS FOR THE GEN Y

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Abstract

Soft skills which are the interpersonal skills at a group level are very important to make an individual an efficient team worker. In this paper, an attempt has been made to highlight the importance of soft skills by conducting four case studies. From these case studies, it has been observed that it takes time to absorb soft skills and hence they should be taught at an earlier stage at school or college.

I. Introduction

It is believed that high levels of intelligence quotient IQ, that is intelligence quotient, may give you an interview but high levels of Emotional quotient (EQ), emotional quotient, will reward you with a job and lifelong altitude. But, it is a sad reality that Education curricula in India and other developing countries lay more emphasis on the development of IQ but do not focus on developing EQ. Emotional quotient relates with the development of soft skills. The world is becoming global and piercingly competitive every year. To have a competitive edge one needs to have an edge over others by having interpersonal skills.

Interpersonal skills are very important since individual may be a good worker but may not be a group worker and the demand of the day is group worker, because real growth of the organization takes place only when a person is able to work in a group. These interpersonal skills which help to function in a group are termed as Soft skills.

II. Definitions

A look into Wikipedia's definition, of soft skills, will lucidly explicate the meaning and the use of the term in modern sense:
-
> " soft skills as a sociological term relating to a person's "EQ" Emotional Intelligence Quotient, the cluster of personality traits, social graces, communication, language, personal habits, friendliness, and optimism that characterize

relationships with other people. Soft skills complement hard skills (part of a person's IQ), which are the occupational requirements of a job and many other activities."[1]

Another elaborate definition has been given by Mohan Rao,[2] a technical director with Emmellen Biotech Pharmaceuticals Ltd, Mumbai [Images] defines a 'good attitude: "It is a behavioural skill, which cannot be taught. However it can be developed through continuous training. It represents the reactive nature of the individual and is about looking at things with the right perspective. You must be ready to solve problems proactively and create win-win situations. And you must be able to take ownership that is the responsibility for your actions and lead from the front without calling it quits at the most critical moment."

Hence, it is observed that, a number of CEO's and human resource managers prefer to hire people with high levels of soft skills and train them for the specific jobs that are available. They are looking for learning to learn . They are also looking for competence in listening, reading, writing and computing skills. According to the Managers and CEO's, hard-skills do not matter much, at the time of the interview, since the ever-changing impact of the technology has given the workers, a short shelf life as far as hard-skills are concerned.

It is easy to find people with hard skills that have the capability to operate machinery or fulfill other tasks but there is a scarcity of people with soft skills, which are highly required by the most companies as has already been mentioned that in India and other developing countries, 'soft skills' training has become even more important since the education system does not include personality development or any of the soft skills required for

future jobs, anywhere in its stream of academic curricula. Corporate houses invest a lot of money on soft skills training in order to groom their employees to help them develop interpersonal skills so that they can present themselves in a better manner and improve their performance.

A survey was conducted by the Workforce Profile, (source: www.workforce.com), who concluded in to believing that," the more valuable is the employee, who can grow and learn as the business changes."[3]

Soft skills "are as important, if not more important, than traditional hard skills to an employer looking to hire regardless of industry or job type. This could offer a major breakthrough as educators and training providers seek to develop and cluster training courses to fit business and industry needs."[4]

III. Top 60 Soft Skills
The Workforce Profile defined about 60 "soft skills", which employers seek. They are applicable to any field of work, according to the study, and are the "personal traits and skills that employers state are the most important when selecting employees for jobs of any type."[5]

1. Math.
2. Safety.
3. Courtesy.
4. Honesty.
5. Grammar.
6. Reliability.
7. Flexibility.
8. Team skills.
9. Eye contact.
10. Cooperation.
11. Adaptability.

12. Follow rules.
13. Self-directed.
14. Good attitude.
15. Writing skills.
16. Driver's license.
17. Dependability.
18. Advanced math.
19. Self-supervising.
20. Good references.
21. Being drug free.
22. Good attendance.
23. Personal energy.
24. Work experience.
25. Ability to measure.
26. Personal integrity.
27. Good work history.
28. Positive work ethic.
29. Interpersonal skills.
30. Motivational skills.
31. Valuing education.
32. Personal chemistry.
33. Willingness to learn.
34. Common sense.
35. Critical thinking skills.
36. Knowledge of fractions.
37. Reporting to work on time.
38. Use of rulers and calculators.
39. Good personal appearance.
40. Wanting to do a good job.
41. Basic spelling and grammar.
42. Reading and comprehension.
43. Ability to follow regulations.
44. Willingness to be accountable.
45. Ability to fill out a job application.

46. Ability to make production quotas.
47. Basic manufacturing skills training.
48. Awareness of how business works.
49. Staying on the job until it is finished.
50. Ability to read and follow instructions.
51. Willingness to work second and third shifts.
52. Caring about seeing the company succeed.
53. Understanding what the world is all about.
54. Ability to listen and document what you have heard.
55. Commitment to continued training and learning.
56. Willingness to take instruction and responsibility.
57. Ability to relate to coworkers in a close environment.
58. Not expecting to become a supervisor in the first six months.
59. Willingness to be a good worker and go beyond the traditional eight-hour day.
60. Communication skills with public, fellow employees, supervisors, and customers.

According to me some more could be added to this exhaustive list like

- Negotiation Skills
- Tackling Mercurial Mavericks Adapting to Change
- Mentoring
- Ability to lead through precepts
- Walk the talk
- Willingness to take initiative in community work
- Being responsible for creating good image of organization in the community and society at large,
- Willing to change attitude and approach.
- Technical competence
- Computing competence
- Ability to undertake learning all life
- Good interpersonal skills both transmitting and receiving information.

- Working with multilingual teams.
- Interdisciplinary knowledge and ability to work with such teams
- Ability to work with multilingual teams
- Thinking laterally and creatively
- Flexibility to tackle and solve wide ranging ill-defined problems
- Ability to interact with other discipline and cultures should be well developed.
- Problem solving based learning ability.
- Empathy
- But, The most important one is communication, communication and communication.

The following case studies will illustrate the importance of soft skills:

Case Study: 1
A teacher's handbook was bought from Flipkart.com . Before making a purchase a clear cut information was given on phone by a very helpful executive. But seller and purchaser both did not realize that book is useless without students book. When the customer mentioned this problem, Flipkart immediately refunded the money along with postal charges on the return of book.

This case reflects a helpful approach, good communication skill and empathy which is very essential in furthering the business and retention of old customers.

Case Study: 2
An individual paid for hotel booking through ICICI credit card. The individual was overcharged because of some technical error at the website. The matter was reported to the Credit Card

department. An executive from the department said , "Don't worry even if the payment has been done we would support you and take up the case for you and immediately interim cash was credited to the account. Without any reminders things were done. It had built up an image of the service provider and it also helped in giving confidence to use the card more.

The above mentioned case reflects very powerful communication skill and empathy.

Case Study: 3
An individual escalated the complaint to the MD of ICICI Lombard and the case was directed to the executive and the executive replies that since the file has been closed now whenever you meet with another accident then I will get the repairs done that have not been done this time. And further, there are mails being sent again and again, that ask for same information.

Any organization with its good intentions of helping customers will fail to get the desired results even with highly effective catch lines like "Khayal Apka" if people on the lower rung are not educated enough for soft skills.

What we find missing in this case was empathy and Communication Skills.

Case study: 4
General's inverter AC was a total failure in 49^{o} C temperature in Nagpur but the service engineer kept on forcing the customer to believe that it is perfectly OK. The customer was not satisfied but still service engineer was forceful and kept on insisting. He was over confident about his product and would remark "My company is so big that if one or two customers are not satisfied

with our product than that would not harm my companies image or profit". After a lot of experiments at the cost of the customer the product was taken back after deduction of INK 65007. The customer care was also too irresponsible.

Another major attitude, that company employees reflected, was that they would neither respond to the mails nor phone calls and throughout the organization from top to bottom, same work culture was reflected.

This case reflects that empathy and good attitude are missing out and Communication Skills are poor. The company has ruined its image by tackling the issue pathetically.

When the company spends so much money on the advertisements why does it not spend money and a little thought on tackling with the customers?

"The Smyth County Industry Council, a governing body based in the US, conducted a survey recently. The results of the survey was called the Workforce Profile which found "an across-the-board unanimous profile of skills and characteristics needed to make a good employee."

The most common traits, mentioned by virtually every employer, were:
- Positive work ethic.
- Good attitude.
- Desire to learn and be trained."[6]

IV. Conclusion
In fine, it takes time for soft skills to sink into one's behavior pattern and hence the soft skills training must be given at school and college level so that when an individual takes up any job , he will be able to take up responsibilities effectively at later stages.

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A STUDY OF LEXICAL ERRORS COMMITTED BY GOVERNMENT HIGH SCHOOL STUDENTS OF ANDHRA PRADESH 8th AND 9th STANDARD TELUGU SPEAKERS

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Abstract

This paper presents the report of a study on error analysis carried out on the students of 8th and 9th standard Telugu speakers at the Mandadam Z.P. High School Guntur. Its aim is to investigate the students' knowledge of English and the problems they have had in learning it. The study was conducted on the students written answer scripts. The question papers were designed by the District Education Officers. A detailed analysis of the data shows that there are eleven types of errors found in all the students and they can be arranged in the following order in terms of their severity. They are spelling errors, mirror image errors, errors due to metathesis, reversal errors, semantic errors, addition errors, deletion errors, substitution errors, spoonerism, grammatical errors and distortion errors. An effort has been made to describe and explain the possible causes of these errors.

I. Introduction

English language teaching (ELT) is an important academic area of applied linguistics, which deals with systematic study of English language for pedagogical purpose. In ELT, error analysis has become an important, which focuses on the errors committed by the learners of L2. It is one of the fascinating areas in applied linguistics too. Fries (1945) and Lado (1957) are the scholars who advocated the contrastive analysis for the language teaching purpose. While contrastive analysis failed in explaining many things, error analysis became an independent branch of applied linguistics. It mainly involves studying and analyzing errors, particularly those errors made by the learners of second language in the course of their learning career.

Error analysis plays an important role in language teaching and learning. This emerged in the 70s to reveal that learners'

errors occur not only because of the influence their native language, but they also reflect some of the universal learning strategies. It was a reaction to the contrastive analysis, which considered native language interference as the major source of errors in second language learning. Pit Corder, explains in his famous article 'Significance Learners Errors' (1967) about error analysis in a vivid way. Errors were regarded to be flaws in contrastive analysis which needed to be eradicated, whereas in error analysis they are treated important. In Corder's opinion, systematically analyzing the errors made by language learners makes it possible to determine the areas that need to be reinforced in teaching. Selinker (1972) introduces the term 'interlanguage' which is independent of both the systems of L1 and L2. Nemser referred to it as the 'approximative systems and Corder (1976) referred it as the 'idiosyncratic dialect'.

According to Corder (1976), error analysis has two objectives; one is theoretical and the other is applied. The theoretical objective refers to understand 'what and how a learner learns when he studies L2' and applied objective refers 'to enable the learner more efficiently by using the knowledge of his dialect for pedagogical purpose'. Corder (1967) says that investigation of errors can serve two purposes, diagnostic (to pin point the problem) and prognostic (to make plan to solve). He says, it is diagnostic because it can tell us the learners' grasp of language at any given point of time during the learning process. Again, it is prognostic because it can tell the teachers to modify learning materials to meet the learners' problems. Corder (1967) and Richards (1971) both make a distinction between errors and mistakes. Errors of performance are mistakes and, therefore, they are unsystematic and errors which reveal underlying knowledge of language are errors of competence and are part of transitional competence of the learners. Corder also distinguishes errors from slips, lapses, and mistakes. Errors, according to him, are systematic and give valuable

information regarding the competence of a learner, whereas slips, lapses, and mistakes are result of chance circumstances and are considered as errors of performance.

II. Relevance of Error Analysis in Language Teaching

Learning a second language is a step by step process during which errors are to be expected. Corder (1967) states that errors are a visible proof that learning is taking place. He emphasizes that errors, if studied systematically, can provide significant insights into how a language is actually learnt by a foreigner. He also argues that studying students' errors of usage has immediate practical application for language teachers. Errors provide feedback by telling the teacher something about the effectiveness of his teaching. According to Ancker (2000), committing errors is a natural process of learning and it must be considered as a part of cognition. Richards in his book Perspectives on Second Language Acquisition, argues that many of the learners' errors happen due to the strategies they use in language acquisition, especially in acquiring L2. The problem includes reciprocal interference of the target language items which is the negative effect of their prior knowledge of L1 on their absorption of L2. In this situation, error analysis could allow the teachers to figure out on what areas to be focused and what attention is needed in an L2 class room.

III. Objectives of the Study

Along with investigating the students' knowledge of English and the problems they have had in learning it, also aims at

a. Collecting data   b. Identifying errors
c. Classifying errors   d. Quantifying errors
e. Analyzing the source of errors   f. Explaining the errors

In addition to the above objectives, the study also tries to see the relevance of preparing the question papers by district education officers in the school context, which will have light on principles and procedures followed in setting the question papers.

IV. Methodology

The study was carried out in the Government Zilla Parishat High School in Mandadam village of Thullur Mandal, Guntur district. With permission of the school authority and controller of examinations, the investigator got the written answer books of 8th and 9th class students. As English was introduced as a medium of instruction in Telugu medium government schools in 6th and 7th classes and public exams were held in 10th class, so students from the three classes were excluded from the study. The study included 160 students belonging to the above two classes where each class was divided into two sections consisting of 40 students who were aged between 12 and 14 years. Many of them belonged to lower working class and different castes. Three-language formula is implemented in this school where English is taught as a subject. The students' proficiency level is low, but comprehension ability is relatively better. The students had 1st, 2nd and 3rd Unit Tests besides Quarterly and Half-yearly exams. The question papers for the Unit Tests were for 25 marks and those for the Quarterly and Half-yearly Exams were for 50 marks. Unit Tests were conducted in July, August, and October whereas Quarterly and Half-yearly Exams were conducted in the months of September and December. After getting the written answer books, the investigator went through each paper thoroughly and took down all the errors at different levels. These errors were taken only from descriptive-type answers

and not from objective-type answers. After finding out the errors, the investigator analyzed them into lexical errors.

V. The Types of Questions Which the Students Faced
1. Comprehension-type questions based on a given passage.
2. Reading of a poem and answering questions based on it.
3. Writing paragraph or story from the hints given.
4. Writing a letter on various incidents such as leave letter.
5. Complete the lines of a poem.
6. Complete the following stanza.

Page 4 of 12

7. Change of sentences into voices.
8. Sequential order of sentences.
9. Writing a paragraph on greeting and request etc.

VI. Classification of Errors
The errors brought out from the written answer books are lexical errors. These errors have been classified into 10 types and they are given below.

Spelling errors	Mirror Image Errors	Errors due to Metathesis
Reversal Errors	Semantic Errors	Addition Errors
Deletion Errors	Substitution Errors	Grammatical Errors
Distortion Errors		

VII. Analysis and Discussion
Significance of errors was decided based on the following scale. If the number of errors from one class to another increased by one or two, it was considered less significant. If the number of errors was up to five, it was significant. If it was more than seven, it was considered highly significant.

Name of the Error	8th Standard	9th Standard	Total Errors
Spelling	121	150	271

Mirror Image	26	22	48
Errors due to metathesis	10	12	22
Reversal	8	13	21
Semantic	5	15	20
Addition	22	12	34
Deletion	36	20	56
Substitution	27	14	41
Grammatical	23	44	67
Distortion	2	26	28
Total Number	280	328	609

TABLE - 1: Table of Errors and Total Number of Errors

7.1. Spelling Errors

Spelling errors are the errors in which the students write the graphemes in the same ways as they pronounce. Those indicate lack of grapheme phoneme correspondence and mother tongue influence. Spelling errors were observed in all the two classes. Those were significantly more in 9th class comparing to 8th class. The students in 9th class reflected more number of errors.

children	>	childran	smaller	>	smalr
bowl	>	boul	cold	>	kold
merchant	>	marchant	friend	>	frend
philosophy	>	phylasphy	went	>	vent

7.2. Mirror Image errors

Mirror image errors are the errors where children write the words and the alphabets as we see in the mirror. Though they are the features of dyslexia we come across such errors in all the two classes. Some other research must be done to find out exactly, whether they are dyslexic errors or not.

did	>	bib	do	>	bo	rabbit	>	raddit
big	>	dig	found	>	fonud	pebbles	>	peddals
bowl	>	dowl	pet	>	get	dolphin	>	bolphin

7.3. Errors due to Metathesis

Metathesis means transposition or rearranging of graphemes, sounds, or syllables within a word. Most commonly, it refers to the switching of two or more adjacent sounds or graphemes. These types of errors were found in all the three standards. There was less significant increase of errors in 8th class compared and 9th class. This could be the result of more exposure to the lexicon of English Language and awareness of phonological rules.

rabit	> arbt	before	>	berofe
broke	> bokre	fever	>	ferev
bird	> brid	smelling	>	semlling

7.4. Reversal errors

Reversal errors are the errors in which one of the segment or segments in a word seems to be the reversal of the natural target segment. These errors were found only in 8th and 9th standard. There was significant increase in these errors from 8th to 9th standard. The reason for this might be the enhanced cognitive load, weak memory, or poor visual pattern discrimination or recognition. Among the reversal errors, (p > d) is more frequent. They were found in initial, middle, and final position of the words.

example	>	examqle	squirrel	>	spuirrel
pocket	>	docket	marcus	>	warcus
gone	>	goue	help	>	held
spill	>	sbill	curtain	>	cnrtaiu
about	>	aqout			

7.5. Semantic Errors

A semantic error is an error in which violation of the rules of a meaning of a natural language can be observed. There were hardly any semantic errors in 8th class, but there was highly

significant increase in such errors in 9th standard. This was due to more emphasis on writing expression (composition, letter writing, and story writing) which enhances conceptual and cognitive load on the learners' mind and makes it difficult for him/her to express appropriately, even though he understands the words to a longer level. Two types of semantic errors were observed among the students. They are semantically related errors and semantically unrelated errors. Semantically related errors occur, where the target item was related to the error at semantic level. For example, 'pouch' and 'pocket' both are containers for money and accessories. So they are semantically related and 'took' and 'hire' are partially synonymous. However, using 'printed' instead of 'painted' is not totally semantically related in both the cases. Visual images or symbols are deciphered, but modes are different.

pouch	> pocket	hired	> took
painted	> printed	dust	> dirty
vegetables	> food		

7.6. Addition Errors

Addition errors are the errors in which some other segments are added to the actual word. These errors were marked by syllable insertion, gemination, initial consonant insertion, vowel insertion and insertion of consonants in unpredictable places. There was a significant increase in such errors in 8th class and significant decrease in 9th class.

fish > filish   (syllable addition)
shining> shinning (gemination)
write > writte   (gemination)
had > hade   (final vowel addition)
what > whast   (addition of consonant before last segment)
social > socioal (medial vowel addition)

7.7. Deletion Errors

Deletion errors are the errors in which the student deletes some of the segments in the words. These errors have been observed in all the classes. Most frequent errors are consonant deletion errors, vowel deletion errors, syllable deletion errors, and cluster reduction errors.

squirrel	>	quirrel	(initial consonant deletion)
different	>	differen	(final consonant deletion)
successful	>	essful	(initial syllable deletion)
aphrodite	>	aphrod	(final syllable deletion)

7.8. Substitution Errors

Among the substitution errors, the investigator more frequently came across consonant substitution patterns, m > n, n > m, l > r and vowel substitution errors which are based on the pattern a > e. Both these type of errors are the result of homophonous nature of target and error graphemes. They obviously reflect

lack of grapheme-phoneme correspondence among the students. Most of the substitution errors are the result of inattention among pupils due to background noise from other classes.

messenger > nessanger many > meny   nurse > curse
smelling > snelling oceans > oceams hostel > hoster

7.9. Grammatical errors

Grammatical errors are those in which students violate grammatical rules. Grammatical errors are marked by over generalization, plural changes into singular, past tense marker deletion, possessive plural becoming singular possessive, present perfect becoming past perfect, model change, etc.

These errors were found more in number in 9th class comparing to 8th class. Overgeneraliation in past tense form

was prominently observed in all the standards. They used present tense verbal forms (eat, tell and go) and blended with past tense regular bound morpheme /ed/ for most of the words in their past tense forms. This shows that they were taught only regular verbs and not rules for irregular verbs.

told	> telled	fruits	> fruit	ate	> eated
are	> is	your	> yours	have	> had
could	> can	honoured	> honour		

7.11. Distortion Errors
Distortion errors refer to the words in present data where pupils completely distorted the target words in their writing. Most of these errors were found in multi-syllabic words. These errors reflect that the students of the present study had sequential problems and thus, they were not able to write multi-syllabic and bi-syllabic words. Distortion errors were found less in 8th standard. However, there was significant increase in such errors in 9th standard. This could be the result of frequent drop-outs.

compartment	> comeont	congratulations	> congltns
studying	> suing	porridge	> porris
hovercraft	> hovect	mentioned	> mentd

VIII. Summary and Conclusion
In the present study, error analysis was carried out in Zilla Praza Parishat High School on 8th and 9th class students who have English as a subject in their curriculum. Most of the spelling errors were due to mother tongue pronunciation, and lack of grapheme-phoneme correspondence. Mother tongue pronunciation in such errors was seen more in 9th class. Spelling errors were marked by gemination, degemination, deaspiration, voicing, vowel deletion, and consonant addition.

There was a direct correlation between phonemic awareness, mother tongue influence and spelling errors. Mirror image errors were found large in number in all the standards. Prevalence of such errors among pupils reflects that some of them were visual dyslexics. However, it cannot be proved clearly based on the present sample.

Occurrence of metathesis errors were observed in all the two standards with less significant differences between them. There were few distortion errors in 8th class but a substantial error increase in such errors were found in 9th class due to frequent drop-outs.

Structural errors, like addition and deletion errors were found in large number in all the standards. Addition errors were marked by syllable insertion, gemination, initial consonant insertion, vowel insertion, and insertion of consonants in unpredictable places.

Among the substitution errors, lateralization errors were negligible in 8th classes and these were not found at all in 9[th]

class. Spoonerism was found only in 8th class.

Grammatical errors were marked by overgeneralization, plural changes into singular, past tense marker deletion, possessive plural becoming singular possessive, present perfect becoming past perfect, model change, etc. These errors reflect lack of awareness of grammatical rules among the pupils and weak instruction by teachers. Pupils changed irregular forms of verbs and their tenses to regular forms. This reflects lack of knowledge about irregular verbal forms in English among them.

Deletion errors were marked by consonant deletion, vowel deletion, syllable deletion, cluster reduction. Substitution errors were marked by consonant substitution patterns, m > n, n > m, l > r and vowel substitution errors which were based on the pattern of a > e.

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KA:RMIK LANGUAGE LEARNING STRATEGY 2
KA:RMIK LANGUAGE LEARNING STRATEGIES: A BRIEF OUTLINE

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Abstract

According to KLTA, language is learnt holistically by I-I-Iing all the LSRW skills by gradual evolution *through the construction of* ka:rmik learning reality. *Most of the teaching approaches and methods are* atomic *in their learning approach (Bhuvaneswar 2013 a, b) and hence the learning strategies are also atomically described; they are not packaged into a* holistic *plan with a specific set of* procedures, techniques, and tactics *to achieve specific* goals *in the spatiotemporalmaterial (STM), socioculturalspiritual (SCS), inclinational-informational-habitual (IIH) context of learning the language by the learner. Such a holistic integration is necessary because without such integration, it is unlikely that LLS will function effectively as indicated by Griffiths (2004).*

In the first article (Bhuvaneswar 2013 c), in the Ka:rmik Language Learning Strategy (KLLS) Series, an attempt has been made to review the definitions given by the major ELT practitioners who look at strategies as techniques and a new definition in the Ka:rmik Linguistic Paradigm as a plan is offered. In this second article, three basic KLLSs are proposed along with two mixed KLLSs for each basic strategy – in all they are 9 strategies. In addition, they are described along with an example to illustrate how these strategies are applied in learning-teaching-syllabus designing.

 Keywords*: disposition, LL (language learning), atomic, holistic, LLS, KLLS*

I. Introduction

Research on language learning strategies is increasingly gaining prominence in English Language Teaching and Learning nowadays. However, the very term *strategy* is loosely used without a standard definition and both tactic and strategy are interchangeably used by many ELT practitioners. Setting aside this anomaly, strategies are not analyzed systematically and comprehensively by such writers as Rebecca Oxford (2001). For example, she classified strategies

into direct and indirect and then further classified the direct strategies into memory, cognitive, and compensation strategies and indirect strategies into metacognitive, affective, and social strategies under the communicative language teaching approach model. However, in her analysis, strategies are understood as actions or operations but her inclusion of metacognitive strategies (which deal with planning) into the same group is confusing since they are taxonomically above the level of action. *Second*, the treatment of strategies is not comprehensive since it does not deal with different types of learners and their *learning styles*: *what* strategies in what *combinations* should be used by what *type* of learners with different learning styles of their own are not dealt with. *Third*, there is no specific categorization of the types of learners as well as the learning strategies in the sense of plans. *Fourth,* her approach is communicative which is atomic since it does not integrate form-function-meaning-discourse-choice in a holistic framework. In view of such a scenario, there is a need to revisit the analysis of strategies from the perspectives of: the *learners' status* and rethink *strategy planning* from such a focal point; the *nature of the content* and its selection-gradation-presentation-repetition-evaluation; the *qualification of the teacher* and the resources available for teaching; and the *administrative capacity* of the management to I-I-I the learning-teaching-materials network in an efficient way.

Keeping in view all these problems, in Bhuvaneswar (2013 c), a new definition of language learning strategy as a specific plan with a specific set of procedures is offered and a new set of three basic strategies: Ta:masik-Ra:jasik-Sa:ttvik are proposed. In this article, an attempt has been made to briefly outline those strategies with an example of teaching the Names of the Parts of the Human Body in English.

The terms *tamas, rajas, and sattva* as they are applied in Ka:rmik Language Teaching Approach (KLTA) are briefly explained for those who are not familiar with these terms, especially, westerners and Africans and Arabs.

1. 1. Nature of the Phenomenal World

According to KLTA, the phenomenal world that we live in can be broadly divided into three categories: 1. Physical; 2. Mental (Ideational and Emotional); and 3. Dispositional. The noumenal world is not empirical but experiential and it deals with the spiritual, or the Consciousness. This phenomenal world is created on the basic principles of Objectification (giving natural *objects* such as rocks, trees, etc., and artificial objects such as toys, pots, etc.), State (giving *state of beings* as solid, liquid, gas, anger, happiness, motion, decay, death, etc.), and Action (giving *action* such running, thinking, talking, etc.) seated in *Space*, and existing in *Time* as *Matter.* In addition, all objects, states of being, and action are inherently *qualified* and *adjuncted* to bring variety-range-depth in them. Furthermore, this material world is bifurcated into living and non-living systems with human beings possessing the highest sensory organs. What is more, human beings are endowed with another unique quality of *complex disposition* that gives rise to *complex desires* leading to complex thoughts (e.g., rule the world), actions (e.g., flying in space) and states of being (e.g., exalted states of luxury and comfort) and *complex efforts* to fulfil their desires. In the process, they will get *complex results* and they *experience* them in *complex ways* for getting *pleasure* which they may or not depending on their fulfilment.

Very significantly and obviously, they needed a means to coordinate the coordination of their activity to fulfil their desires (lying in their unmanifest state of speech) and succeeded in creating speech as the most appropriate means. Once speech is created, the rest of their evolution from *homo*

sapiens to *homo loquens* changed so radically that the primitive man looking for fruits from trees is now looking for planets and rule the sky! As speech (as language) became so critical and complex, he needs to learn it and master it for effectively coordinating the coordination of his complex activities for complex living. It is in this context, language learning became a subject of study and language learning strategies as a sub-field of study gained attention.

Any object, state of being, and action (OSBA), as we observe in Nature and our daily life, is qualified in three important ways: *conceptually, pattern and structure wise, and materially*. These are the three states in which each and every OSBA is constituted; furthermore, every OSBA has a *form-function-meaning* in the overall network of creation. If we observe them, we find that they are qualified primarily in three ways again: in terms of *matter (form)*, *action*, and *knowledge (luminosity)*. The primordial essences (guNa:s) that cause this kind of comprehensive qualification are known by the three terms: Tamas, Rajas, and Sattva in a bottom-up process in Indian philosophy. These Samskrit terms are retained in the discussion owing to their variety-range-depth and not replaced by English equivalents of *inertia, activity, and luminosity* which fail to capture these different shades of meaning.

1. 1. 1. Tamas

Tamas means *darkness* (in Samskrit) *or inertia.* It is the *gross* constituent of Nature - along with the other two guNa:s *rajas (activity)* and *sattva (luminosity)* which are *subtle* and *causal -* which is distributed both in the sentient and insentient creation. It is an essence which brings about inertia or immobility. When matter becomes immobile, it leads to its solidification or materialization, e.g., gas becoming a solid. Without this essence, there will not be any matter or material object, or

Page 4 of 52

potential state. What is more, when this guNa (quality) dominates, the dominated OSBA is affected by this GuNa (quality). As a result, it possesses and exhibits this guNa of inertia in an appropriate manner in the object, state of being, and action (OSBA).

When it affects a human being, that human being's physical, mental, and vocal behaviours are accordingly influenced and so he exhibits the effected qualities. For example, if it affects a person as a whole, then, he will be lazy and slow in his action since inertia retards activity; if he is a language learner, his learning activity will also be similarly affected. Thus he will be lazy in learning and slow in listening and reading comprehension as well as speaking and writing production. In terms of thinking, he will also be slow in processing; in addition, he will think narrowly – short sighted, incomplete (not comprehensive), compressed (shortened and not elaborate), bald (plain), superficial, looking for short-cuts, etc.; he will be form-oriented in his approach (more interested in the gross material form, the outer side, the *what*, but not in the pattern and structure, the subtle form or the inside, the *how*, as in the case of a ra:jasik learner; or concept, the causal form, the core, the *why,* as in the case of a sa:ttvik learner). In terms of his emotions, he is raw, elemental, disjointed, deluded, indifferent, callous, headstrong, cold, vulgar, unresponsive, passive, etc. *As a man thinks and feels, so he acts.*

Therefore, when he learns, he learns ta:masikally. How tamas affects his learning is discussed in Section III and how a ta:masik learning strategy should be is also outlined accordingly.

1. 1. 2. Rajas
Rajas is a constituent of Nature as the essence of *activity.* Its adjective is *ra:jasik.* It is the opposite of tamas and breaks

inertia and immobility and imparts motion. When matter gets ra:jasik, it gets activated and changes its state, say, from solid into liquid. It is not only associated with activity but also expansion, patterning, function, and complexity. A ra:jasik person is active and fast in his action since rajas imparts motion and breaks inertia. A ra:jasik learner will be active in work, dashing in initiative, fast in speed, complex in thinking and planning, ornate and complex in processing, restless and volatile in emotions, etc. in the learning activities.

1. 1. 3. Sattva

Sattva is a constitutent of Nature as the essence of *luminosity.* Its adjective is *sa:ttvik.* It is the illuminating essence, that is, cognition, thinking, intelligence, analysis, purity, etc. are its properties. Creativity springs through sattva since it is causal and is the basis for pattern and structure and material form. A sa:ttvik person is steady, intelligent, effective, gentle, kind, cheerful, tranquil and unruffled in his emotions and optimistic. Sattva is the hallmark of pious people. A sa:ttvik learner is primarily analytical and grasps knowledge precisely objectively without distortions and biases. He gains quick memory since he is tranquil and practices effortlessly since he is clear about what he wants to do and skilled in what he does. He takes initiative in a befitting manner and accomplishes his learning by a critical path.

II. Literature Review

In the literature available on the understanding and use of the term *strategy,* there are two ways. One is in the field of military, business, and games and the other is in language learning and teaching. These two views have been elaborately discussed in Bhuvaneswar (2013 c) taking into consideration the definitions and explanations offered by various specialists in language learning strategy such as Rubin (1975, 1982),

Stern (1975), Bialystok's (1978), Rigney (1978), Naiman (1978), Brown (1980: 87), Tarone (1980: 419), Brown and Palinscar (1982), O'Malley et al (1985), Ellis (1986), Wenden (1987), McLoughlin et al (1983), Spolsky (1985), Willing (1988), Oxford (1990), Nunan (1991), MacIntyre (1994),De Corte et al (2001) and Chamot (2004). In view of their inadequacies, a new definition has been offered. This new definition is offered by looking at language learning as *dispositional* lingual action that takes place according to the *likes and dislikes and abilities* of the learner in acquiring lingual knowledge. In that sense, it is *learner-oriented* and learning takes place *strategically and not randomly* since even in random action there is an inherent procedure that embodies random action as a specific plan. In that perspective, a language learning strategy is redefined elaborately in KLTA as follows:

A strategy is *an overall specific plan that is dispositionally designed to achieve a specific effect/goal(s) (of learning LSRW skills) through specific means (of dispositional modulation, knowledge acquisition, and va:sana (internalized habit) formation)) from a specific cause (of a process of LSRW). It is the whole, dispositionally designed plan of execution of action (with implied parts) to achieve a specific goal in a specific manner through specific means.*

Or

succinctly as

"an overall plan dispositionally designed to achieve a specific goal through specific means from a specific cause". It is the whole, dispositionally designed plan of execution of action (with implied parts) to achieve a specific goal in a specific manner through specific means.

III. Planning LLS for ESL Learners: A Ka:rmik Language Learning Strategy (KLLS) Design

Language Learning Strategy is defined as mentioned earlier by

taking into consideration the important factors of *learning, learner,* and *knowledge* in the teacher-learner-materials-administration network to impart the LSRW skills. Their nature and characteristics are briefly explained below for arriving at a definition of the term strategy and LLS.

3. 1. Types of Learning
Learning can take place from a number of *directions* but what is required is a critical path approach that saves time, effort, and cost; sustains interest according to the context; and gives maximum results. In the LLS literature available, the strategies that are mentioned except the meta-cognitive strategies do not focus on these directions and the way in which they have to be I-I-Ied as a *plan* to constitute the strategy.In KLLS design, there is a focus on these directions and the learner's aptitude, the nature of learning, and the desired outcomes are I-I-Ied in a systematic procedure. In addition, the terms *plan, strategy, sub-strategy, procedure, technique,* and *tactic* are more clearly distinguished and identified than in other models.

Generally, there are two basic types of language learning: 1. Atomic; and 2. Holistic. Atomic learning can be visualized from three basic perspectives and the fourth one is obtained by a mixture of these three in varying degrees according to the choice of the learner: *1. Form-oriented; 2. Action-oriented; 3. Meaning-oriented; and 4. Mixed* with any two of these three types. In *form-oriented learning*, more emphasis is put on the *form* of language through *participants* (in an activity) and learning is achieved by mere *memorization* and less reasoning, logic and intellection and practice than in action-oriented and meaning-oriented learning; it is characterized by ta:masik learning (*rote-learning* with low activity, less thinking, and least interpretation and integration). In *action-oriented learning*, more emphasis is laid on the *function* of language through *action* (in an activity), and learning is achieved by

more *practice* (and less analysis) through which memory is gained. Obviously, action-oriented learning implies an understanding of the form-aspect but its emphasis is not on form. In *meaning-oriented learning*, semantic or cognitive oriented learning can be proposed. More emphasis is laid on the propositional content of language *(meaning)* through the *relationships* (in an activity) in semantic-oriented learning, and learning is achieved by *analysis* of the form and function of language through meaning. In this cognitive-oriented learning, language learning is conceptual-oriented. In mixed-type of learning, any two of these three types are mixed and learning is achieved by a combination of the two types of activities. Fundamentally, either analysis or practice or memory is dispositionally chosen as the means for learning and so *choice* becomes the basis of these three types of learning.

In addition to these three types of form-function-meaning oriented learning, learning can also take place from the perspective of *style* and *context*. In such a stylistic approach of language learning, language is learnt from its *formal, functional,* and *semantic appeals* on the one hand and *socioculturalspiritual, contextual* and *aesthetic appeals* on the other hand in the context of its use and experience. For example, it is very much used in language for specific purposes learning. At the level of context, language is learnt from such levels as *formal, informal, and intimate* as well as *genre and register*. Since style is superimposed on the basic grid of form-function-meaning in the context of its use, both *style and context* are *implied* in the form-function-meaning grid. Consequently, in mixed type of learning, they are also implied. However, it is useful to do apava:dam (sublation) while teaching style and context, especially, in ESP.

In holistic learning, at the linguistic level, form-function-meaning are I-I-Ied to create *linguistic holism*; whereas in *ka:rmik (cause-effect experiential) holism, form-function-*

meaning-style-context are unified - through choice - as a whole in speech and used for realizing a goal or purpose and its results are experienced from that *choice.* To elaborate further, likes and dislikes to do this and that to be so and so in such and such manner create *choice* and established choices as (learner) preferences become the *traits* in the svabha:vam (disposition) of an individual and the *practice* of action (i.e., participants + action + relation between them) driven by these choices leads to their *memory* and *va:sana* formation. Thus, memory and practice can be clubbed together to correspond with *va:sana:s*, analysis which leads to knowledge corresponds with knowledge, and choice which leads to traits corresponds with traits. As a result, there is a systematic correspondence between learning and the disposition of the learner. Since all action, that includes learning as learning action, is dispositional and constructs dispositional reality, it becomes ka:rmik (because dispositional reality which is produced from disposition is realized as ka:rmik reality and hence ka:rmik).This kind of ka:rmik learning is the learning obtained in real life and so it should be the ultimate goal in teaching, learning, preparing educational materials and administration.
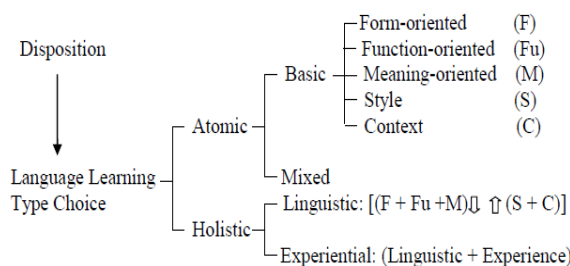
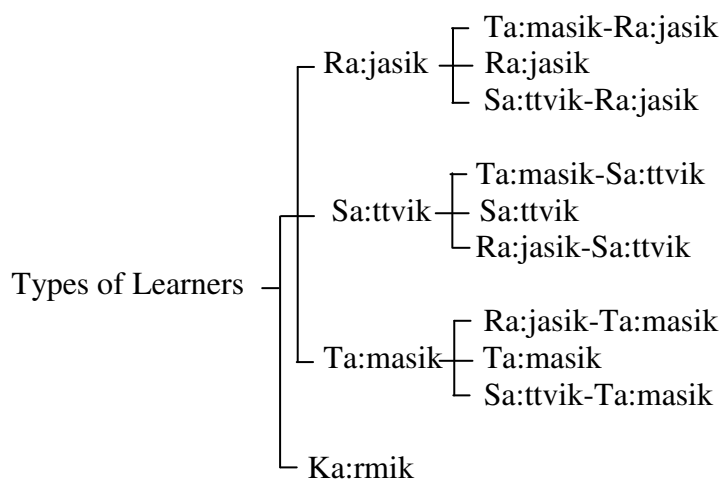**Network 1: Basic Language Learning Type Choice Network**
Legend: ⇩ *superimposed on the following components;* ⇧ *superimposed on the preceding components;* ⇩ ⇧ *mutual superimposition (i.e., one component is superimposed on the other and vice versa)*

This is with reference to learning the language from *within* or *the lower level (level-below)* and this basic language learning taxonomy is captured in a network as given above.

3. 2. Types of Learners

At the level-around (middle level), the character of the learner comes into play in learning the language. Applying disposition as the basis, three basic types of learners can be identified according to their personality: *1. Ta:masik (inert, object or form-oriented); 2. Ra:jasik (dynamic, action or function-oriented); and 3. Sa:ttvik (luminous or meaning-oriented).* In addition, we can posit a fourth type of learner called a *ka:rmik (cause-effect oriented experiential) learner,* who dispositionally and contextually I-I-Is all these levels by contextual action-reaction into a dispositionally unified experience. In other words, he uses language **ka:rmatically** instead of semantically or pragmatically. However, these learners may not be so neatly cut out and generally we get more mixed types of learners who share features from other types in addition to their own. As a result, we also get: *Ra:jasik-Ta:masik; Sa:ttvik-Ta:masik; Ta:masik-Ra:jasik; Sa:ttvik-Ra:jasik; Ta:masik-Sa:ttvik; and Ra:jasik-Sa:ttvik.* There is a systematic correspondence between the type of the learner and the learning-strategy. To elaborate further, ta:masik learners are more inclined towards form-oriented learning; ra:jasik learners towards action-oriented learning; and sa:ttvik learners towards meaning-oriented learning; and finally the ka:rmik learner towards contextually *I-I-Ied experiential learning* by dispositionally networking form-function-meaning-style-context in a critical path. The network 2 given below captures the choice of LLS by various types of learners.

At an emotional level, ta:masik learners are introverts and influenced by inertia; ra:jasik learners are extroverts and influ-

```
                                 ┌─ Ta:masik-Ra:jasik
                     ┌─ Ra:jasik ─┤─ Ra:jasik
                     │            └─ Sa:ttvik-Ra:jasik
                     │
                     │            ┌─ Ta:masik-Sa:ttvik
                     │─ Sa:ttvik ─┤─ Sa:ttvik
 Types of Learners ──┤            └─ Ra:jasik-Sa:ttvik
                     │
                     │            ┌─ Ra:jasik-Ta:masik
                     │─ Ta:masik ─┤─ Ta:masik
                     │            └─ Sa:ttvik-Ta:masik
                     │
                     └─ Ka:rmik
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Network 2: Types of Learners

enced by activity; and sa:ttvik are *equiverts* and influenced by analysis at all the levels of language learning.

3. 2. 1. Ta:masik Learner and His Learning Characteristics

Tamas is that essence in Nature that imparts any object, action, and state of being, in fact any phenomenon, with the quality of ***inertia*** as an attribute (viseshaNam) like redness in a red lotus. This quality by its attribution to the concerned phenomenon changes that phenomenon's character or properties with inertia. For example, water becomes ice, a moving train stops to a halt or runs slowly, a person becomes heavy, dull, etc. It is the opposite of *Rajas* which imparts activity to any phenomenon. As a by-product of inertia, simplification or shortening of learning activity; and defective or muddled or unappealing or incomplete execution of learning activity takes place. On the other hand, form-orientation is strong and mechanical execution of learning takes place easily.

Human beings are endowed with this quality in varying deg-

rees of its variety-range-depth and it affects all their physical, mental, and vocal states of objectification, being, action, and experience. As such, according to this KLTA view, it also affects a learner and his learning characteristics. There is a systematic correspondence between a learner and his learning behaviour. Language Learning is a lingual action which is *interdependent* on the learner and the linguistic knowledge to be learnt – if the learner is not good, he cannot learn the knowledge successfully; similarly, it is also *interconnected* because learning cannot take place independently of either the learner or the knowledge; likewise, it is also *interrelated* because learning is a product of the learner and knowledge: there cannot be learning without a learner or knowledge. Hence, the nature of the learner, knowledge, and learning determine the final outcome of learning. Therefore, it is crucial to know a learner's character before imparting him the knowledge. If we know the learner's *abilities* and his *likes and dislikes*, we can devise a learning strategy with a specific plan consisting of a set of procedures according to the abilities and likes and dislikes of the learner. Of course, the nature of knowledge should also be taken into consideration in devising a learning strategy to provide optimum learning conditions.

3. 2. 2. Activities of Learning (AOL)

Learning a language involves *comprehension* of the language by listening and reading when it is spoken and written and *production* of the language by speaking and writing. Again both these activities can be general and specific. *Speed and clarity* in comprehension and production are general. The five levels of language: *form (phonetics/phonology, morphology (lexis), and syntax and discourse organization), content (semantics), function (speech acts), style, and context* (see Bhuvaneswar 2013 b, c for details) are the specific areas which a learner should master both atomically and holistically in or-

der to learn a language. In addition to comprehension and production, there is the learning process of comprehension and production which comes into play in learning the language. It consists of *analysis (and synthesis)* of the various levels in the linguistic system, *(application and) practice* of the linguistic system for contextual coordination of the coordination of activity and the experience of its results, and its *memory (fixation and recall)* for its appropriate use in a context.

3. 2. 3. AOL and Their Performance by a Ta:masik Learner
Basically, a Ta:masik Learner is form-oriented in performing AOL with less analysis and practice but more rote-memorization. As he is dominated by Tamas, he will be: lazy to perform any action and slow in *speed*; clouded in *understanding (clarity);* timid in *initiative;* incomplete or defective in *planning*; inclined towards mechanical learning and rote-memorization: and low in learning all other specific areas except those areas that deal with *form* (sounds, words, and sentence patterns) only. This is in contrast with a Ra:jasik Learner who is function-oriented, fast in activity, and dashing in initiative and inclined towards practice and a Sa:ttvik Learner who is steady in activity, balanced in initiative and meaning-oriented in learning.

How a Ta:masik Learner behaves in learning a language is shown in a table in the Appendix 1 for quick reference.

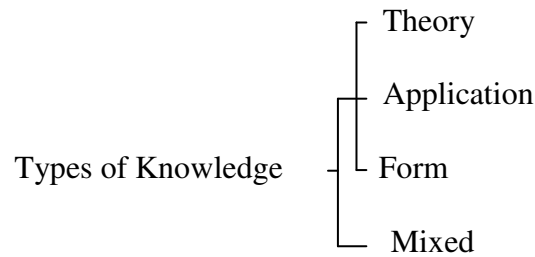**3. 2. 4. AOL and Their Performance by a Ra:jasik Learner**
Basically, a Ra:jasik Learner is function-oriented in performing AOL with less analysis and rote-memorization but with more practice in a functional approach. As he is dominated by Rajas, he will be: dynamic to perform any action and fast in *speed*; functionally *understanding (clarity);* dashing in *initiative;* complex in *planning*; inclined towards practical

learning and memorization by exercise: and medium in learning all other specific areas except those areas that deal with *function* (speech acts and the corresponding syntactic patterns) only. This is in contrast with a Ta:masik Learner who is form-oriented, slow in activity, and timid in initiative and inclined towards memory and a Sa:ttvik Learner who is steady in activity, balanced in initiative and meaning-oriented in learning.

How a Ra:jasik Learner behaves in learning a language is shown in a table in Appendix 2 for quick reference.

3. 2. 5. AOL and Their Performance by a Sa:ttvik Learner
Basically, a Sa:ttvik Learner is meaning-oriented in performing AOL with more analysis of form and function to derive the meaning but little rote-memorization and practice in a semantic approach. As he is dominated by Sattva, he will be: steady in performing any action and appropriate in *speed*; *understanding well* through analysis *(clarity);* perfect in *initiative;* thorough in *planning*; inclined towards meaningful learning through which he gains memory and exercise effortlessly: and medium in learning all other specific areas except those areas that deal with *function* (speech acts and the corresponding syntactic patterns) only. This is in contrast with a Ta:masik Learner who is form-oriented, slow in activity, and timid in initiative and inclined towards memory and a Sa:ttvik Learner who is steady in activity, balanced in initiative and meaning-oriented in learning.

How a Sa:ttvik Learner behaves in learning a language is shown in a table in the Appendix 3 for quick reference.

3. 3. Types of Knowledge (Learned Phenomena)
Just as there are three types of learners and learning, the learned phenomenon is also tristratal: 1. Theoretical

(Conceptual); 2. Applied (Productive or Practical); 3. Formal (Descriptive) with an additional fourth one, which is Mixed. In knowledge which is theoretical, the content of language deals with the theory of action: *why* (the Causality) an action takes place, its nature, and its principles and concepts. For example, in physics, theoretical physics deals with the nature of matter and its concepts, principles, and laws; in applied physics, in knowledge of physics which is applied, the content of language deals with its application: how (the process in terms of manner (how), where (place), and time (when); and its procedures (how a theory is implemented). For example, applied (practical) physics deals with *how* these laws and principles can be applied in real life for our use; and 'formal' physics – even though it is not given as a separate branch - deals with *what* the form of matter is; and it is mainly descriptive in its content. The *theory* behind the working of a fan leads to the *application* of that theory in the innovation of a fan; the application leads to how the pattern and structure of the fan is constituted in terms of (*what) matter* and gives us the *formal* knowledge of the fan. Language is capable of expressing *the theory, the application, and description of objects, states of being, and action in their entire variety-range-depth in addition to expressing ideas.* The point is that *theoretical* content is different in its linguistic conceptualization, structure and pattern, and form from the *application* content as well as *formal* content but at the same time application implies theory and form implies both the application and the theory successively and I-I-Ily. In addition to these three basic types, we also have the fourth type which is *Mixed Knowledge*. In this type, the language contains *theory, practice, and formal description* not as isolated but as a mixture of more than one type of knowledge. This is more complex and varied in its variety, range and depth.

```
                              ┌─  Theory
                              │
                              ├─  Application
                              │
Types of Knowledge  ─┤ └─  Form
                              │
                              └─  Mixed
```

Network 3: Types of Knowledge

In Literary Knowledge, we can make a similar analysis: knowledge that deals with the formal description, and narration of events as formal knowledge; exposition can be both descriptive and applied; and debating about an issue as theoretical.

3. 3. Theory of Action

Language learning is one type of lingual action that is derived from the Universal Science of Living in which desires are generated-specified-directed-materialized by *Svabha:vam* (disposition). *To learn a language* is one such desire that is impelled as a sub-desire to fulfil the major desire to use that language for *observation-interpretation-identification-representation-creation-initiation-communication-coordination-experience (OI³C³RE)* of action. As a result, efforts are made to *learn a language* through another sub-

> **Disposition** → **Desire (for Learning a Language)** → **Effort (to Learn a Language)** → **[Language Learning Strategy]** → **Learning Action** → **Result** → **Experience**
> **(2) Principle of Choice of Action:**
> **Disposition** → **Dispositional Bias (for LL)** → **Response Bias (for LL)** → **Choice (of LLS)** → **Variation (in LLS)** → **L. Action** → **Result** → **Experience**
> **(3) Principle of Creation of Strategy:**
> **Disposition** → **Desire (for the Goal)** → **CEM** → **Choice of PTT** → **Critical Path Mapping** → **Plan of the Strategy** → **Creation of the Strategy**
>
> *[L (Language); LL (language learning); LLS (LL Strategy); CEM (Contextual Exploration of Means); PTT (procedure-technique-tactic)]*

desire *to teach the language* and two minor desires to *teach*

and learn the language through strategies. As an offshoot of these desires, the field of LLS is created and developed. In this ongoing process, KLLS emerges as one product among others. All these activities follow the simple foundational Principle of Action and the Principle of Choice of Action in the Ka:rmik Linguistic Theory as given in the above equations (1) – (3).

3. 3. 1. Components of Action

Any activity consists of a set of actions ranging from a single act to many. A single act consists of a single action. An *action* consists of *participants* to perform the *action* by getting into a specific *relationship* with one another. Hence, *participants, action,* and *relation* (between the participants in forming the action) are the three *internal components* of action. An action is performed in *a context* by a specific *choice* of its internal components by the *Traits* component of Svabha:vam (Disposition). Hence, context and svabha:vam are the two *external components* of action. In addition, choice creates another component *style* by a specific choice of performing an action in a particular manner. In the case of lingual action, all these components can be grouped together under five categories: *Form, Function, Content, Style, and Context with their sub-categories. Form* gives rise to phonetics/phonology-lexis-syntax; *Function* gives rise to the five speech acts (assertives or representatives, directives, commissives, expressives, and declarations)); *Content* gives rise to subject, topic, etc., *Style* to its formal, functional, semantic, and contextual features, and *Context* to its [Inclinational-Informational-Habitual], Socioculturalspiritual, and Spatiotemporalmaterial features in which lingual action takes place (see Bhuvaneswar 2013 e, f).

In the case of LLSs, the *action* is the *strategic planning*, i.e., planning how to perform the action of language learning which gives a *strategy* for LL; the *participant* is the *learner* in self-

directed learning, or the *participants* in teacher-directed learning are the *teacher and the learner(s)* as well as the *administrators* – they are the *direct participants* and *indirect participants* respectively; and the relationship between the learner and the content (of learning) constitutes the *direct action* of learning and *how* (manner, time, and place) it is done constitutes the *indirect action*. This HOW to carry out the *learning action* is influenced by WHY (*cause*) to carry out the learning action - *learning action* is the WHAT and also the *goal*. Since our focus is on *how*, this how becomes the goal (WHAT) instead of the learning action and the cause (WHY) will be the *desire to learn the content in the best possible way* (HOW) for the learner, where the best possible way is decided by a dispositional, contextual and experiential process. Whether a learner likes it or not, he has to make conscious or unconscious choices about *how* to learn the language and hence he involves himself in strategic planning of learning. To ignore this obligatory planning and call *techniques* and *procedures* strategies is nothing short of violating a natural process in learning and making an unnatural and incorrect classification.

3. 3. 2. Taxonomy of Performance of Action by Planning

Once a desire to perform an action arises and a language learning action is chosen, the selected language learning action is performed through certain *tasks* in a particular *manner* by adopting a particular *strategy, sub-strategies, procedures, techniques, and tactics* according to the learner's disposition.

(4 a) *Desire* **to Perform an Action** ➔ *Choice* **of an Action** ➔ **Selected Action**

(4 b) Manner of Performing the Action:
Strategy ➔ **Sub-Strategy** ➔ **Procedure**   ➔
Technique ➔ **Tactic** ➔ **Task**

These terms are defined in Bhuvaneswar (2013 c) to distinguish a strategy from a sub-strategy, a procedure, a technique and a tactic. After clarifying the concepts, Ka:rmik Language Learning Strategies are divided into a *General KLLS* for preparing a syllabus content as well as teaching it and *Specific KLLSs* for use by learners for learning the syllabus content.

3. 4. Acquisition of English Vocabulary through KLLSs: A Case Study of Names of the Parts of Human Body

Let us take the case of the names of the parts of the human body as an example to illustrate the acquisition of English vocabulary through KLLSs.

3. 4. 1. Type and Nature of Knowledge to be Acquired

The parts of the human body are *parts* of the *whole* body which is a *biological form*. These parts are spatio-materially located in different places in the body and have their size, shape, and matter which is also temporally affected. In addition, they perform certain functions as parts of the body, as individual objects with their own distinct meaning - seated collectively in a bigger object in an I-I-I network. As such, their naming belongs to the domain of *description* of form and its parts. Therefore, it is *formal (descriptive)* knowledge.

This formal knowledge requires the following: 1. At the level of Universal Science of (Biological) Action, awareness of them as small physical objects - on which qualification and adjunction can be superimposed - within a bigger biological object in a part-whole relation; in addition, they can be *participants* in the conduct of *physical action* and enter into relationship with other participants; 2. At the level of Universal Science of Living, awareness of them as objects

suitable to perform certain functions for a bigger function of performing triple action for the individual body and conducting living for the human being at the microcosmic level of creation. At the level of *Universal Science of Lingual Action, objects* and *qualified objects or objects with adjunction* are typically represented by *nouns and noun phrases* in English. Therefore, the acquisition of this type of knowledge requires knowledge of nouns and noun phrases at the syntactic level, corresponding words at the lexical level together with their meanings at the semantic level and their *corresponding (semiotic)* awareness as objects in the real world used for performing action. In addition, how these words function in sentences to convey different meanings as different parts of speech, for example, *eye* can function as a noun and a verb and how these words are collocated, for example, *eye up.*

3. 4. 2. Types of Learning the Chosen Language Content

As explained in *3. 1. Types of Learning,* the names of the parts of the body can be learnt basically in four different ways by memorization or analysis or practice or mixing these processes in their permutations and combinations. For effective learning to take place, what is to be learnt should be perceived and observed as this and that; analyzed to be so and so in such and such manner (by analysis); applied and practiced *as* such in an appropriate context (practice); and finally remembered and retained in memory (by memorization) for further *contextual experiential* (karmaphalabho:ga(m)) application. All the three processes of *memory-analysis-practice* are critical in learning a language. Any uneven emphasis or neglect will affect the learning process. Analysis-oriented learning includes knowledge of practice and analytical memory producing learning; practice-oriented learning may be analytical practice-oriented and practical memory-oriented learning; and memory-oriented learning anticipates the other two. However, each one has its own dominant focus and the other two are relegated to a

subordinate status and carried out – in mixed learning, these three types are mixed in their variety-range-depth according to the likes and dislikes of the learner. As a result, the learner has to exploit his own (dispositional) orientation and integrate the other two to I-I-I all the three orientations to the required levels by *gradual evolution* for effective learning, i.e., the learner has to internalize the language and attain *automaticity* in its memory-analysis-application-experience. The existing learning theories do not envisage such an integrated view and hence this new view is offered by Ka:rmik Language Teaching Approach through Ka:rmik Language Learning Strategy.

3. 4. 3. Types of Learners and Their Learning Strategies
According to KLTA, there are three basic types of learners: Sa:ttvik; Ra:jasik; and Ta:masik and each basic type has two mixed types at the second order of delicacy: Sa:ttvik [Ra:jasik – Ta:masik]; Ra:jasik [Sa:ttvik –Ta:masik]; and Ta:masik [Sa:ttvik – Ra:jasik]. In all, we get 9 types of learners. In other words, we can identify 9 types of learning for these 9 types of learners and consequently 9 types of strategies for them. We can further extend the order of delicacy up to third, fourth and so on but for practical purposes, only up to the second order is taken into consideration.

3. 4. 3. 1. Ta:masik Learners and Ta:masik Learning Strategy
Tamas is inertia, materiality, form, structure, effect. This basic quality permeates all kinds of objects, states of being and action which are ta:masik. Thus this inertia impacts at the level of learning and planning learning also. As a result, a ta:masik learner tends to learn language by putting more emphasis on form and rote memorization and less emphasis on analyticity and practice according to his svabha:vam (disposition).

Therefore, his learning is hampered by less reasoning, logic,

and interpretation as well as by less language learning activity.

In view of this svabha:vam of a ta:masik learner, a *Ta:masik Learning Strategy (TLS)* should be: **memorize [**to **practice** and **understand] or m[p&u].** In other words, he should exploit the natural tendency for rote-memorization and supplement it by simple-to-complex practical and analytical exercises and explanation to overcome *laziness, indiscrimination and superficial learning*. This TLS should lead to the acquisition of other learning strategies in a *bottom-up* process; and it should enable the TLS learner to I-I-I memory-analysis-practice to bring the maximum results with minimum effort in an enjoyable, cost-effective and time-saving plan.

In the following three sections, how the TLS is applied in teaching, learning, and syllabus designing is briefly outlined to show how a strategy is distinct from what Oxford (1990) and others understood it and used it. The same type of analysis can be extended to all other 8 types of Ka:rmik Learning Strategies by suitably modifying the details.

3. 4. 3. 1. 1. Teaching Vocabulary through TLS
Teaching the *Names of the Parts of the Body* by TLS is briefly outlined below.

1.   *Ta:masik Learning Strategy*:

memorize [to practice and understand]

2.   *TL Sub-strategies*: i. memorize to practice;

ii. memorize and practice to understand

3. ***Procedure I:***   ***Memorization for Practice Procedure***

   Step1:   Selection of the Names of the Parts of the Body
   Step 2: Gradation of the Names of the Parts of the Body
   according to Their 1. Spatial Physical Location;

2. Function;
3. Ease of Understanding
Step 3: Presentation of the Names of the Parts of the Body
according to Their 1. Area Classification:
a. External; and b. Internal
2. Functional Classification
Step 4: Memorization of the Names of the Parts of the Body
1. TLS Techniques: Rote-Memorization through
a. Physical Association;
b. Wall Picture with Names of the Parts of the
Body:Whole Body Picture; Area-wise Picture
with Parts

2. TLS Tactics:
a. Repetition: see and repeat;
hear and repeat; feel and repeat
b. Serial Repetition by Progressive Chunking
c. Chanting and Singing the Names in Clusters

3. Processing:
a. algorithmic; b. heuristic; and c. automatic

Step 5: Practice of the Names of the Parts of the Body

a. Classroom Tasks: Naming by Question and
Answer and Pointing Out; Giving Commands to
Elicit Names and Their Actions; etc.
b. Games: Tokkudu BiLLa (Nageza in Arabic;
Stamping Tablet in English) for girls and kids;
Cards for teenagers and adults; etc
[Select any local folk games and adapt them.]

Procedure II: Memorize and Practice to Understand
(Follow Steps 1-3 as outlined above and jump to Step 6.)

> *Step 6:*   *Understanding the Names of the Parts of the Body Classroom tasks and games can be slightly modified to include questions on the qualities and functions of the names of the parts of the body to learn the meaning of these words and understand what they are by their description.*
>
> *Step 7:*   *Contextual Experiential Application*
>
> *Step 8:*   *Evaluation and Remediation*

In a similar fashion, the teacher will can teach all other 8 types of learners by suitably modifying the procedure, steps, techniques, tactics and tasks. These will be described in the syllabus in Part II (Practice).

3. 4. 3. 1. 2. Learning Vocabulary through TLS

In the case of learning, a similar strategy is to be followed since the learner is ta:masik and he is naturally inclined to less analysis and activity and is more inclined towards rote-memorization. Such learners may not be in a position to easily execute *Steps 1-3 as outlined* in Procedure 1 as self-learners and therefore it is the job of the teacher and the syllabus designer to do it and take him to Step 4. Furthermore, many of these learners lack intrinsic motivation and so need to be extrinsically motivated. Consequently, his learning activity is initiated by the teacher in the classroom and is persuasively extended to games for making him more active and analytical. In executing Steps 5 and 6, the teacher should be sensitive and not overload them in the beginning itself with activities. They should be gradually enticed in a friendly manner. Finally, a copy of the body chart and any audio-visual aids, if available, should be made available at home and the parents should in casual conversation (gossiping) engage him in naming the parts of the body. If he is extrinsically motivated by praise or rewards, he will slowly become active and acquire the vocabulary. If he successfully plays the games, he will become a ra:jasik-ta:masik and eventually a sa:ttvik-ta:masik learner

also. Ultimately, he will be able to I-I-I the three levels and learn the vocabulary successfully. As time goes by, they change their behaviour from ta:masik to sattvik learners and become experiential learners.

As can be seen from above, the TLS is networked by making the teacher learner-centred and carry out his teaching to suit the svabha:vam of the ta:masik learner. In a similar way, the syllabus will also be designed in a ta:masik learner friendly manner as explained below.

In a similar fashion, all other 8 types of learners can strategically learn by suitably modifying the procedure, steps, techniques, tactics and tasks according to their svabha:vam and needs. These will be described in the syllabus in Part II (Practice).

3. 4. 3. 1. 3. Syllabus Designing of Vocabulary through TLS
Syllabus Designing is a very complex process in the Ka:rmik Language Teaching Approach. It takes the entire curriculum into consideration and designs the syllabus by I-I-Iing all the five levels of phonetics and phonology, lexis, syntax, semantics, and discourse of the content. Therefore, two considerations arise in designing the syllabus for names of the parts of the body: 1. Names as a Part of a Whole; 2. Names as the Whole. To simplify the issue, let us take the second option for our purpose and design the syllabus for teaching it by TLS.

1. Title of the Booklet:
   Human Body: Learn the Names of Its Parts in English
2. 1. Aims: To name and describe the various parts in the human body
2. 2. Objectives: To divide the human body into its major and minor areas, identify the important names of the external and internal organs in the body and describe them to understand what they are.

2. 3. Materials
  and Method: An Anatomy and Physiology Textbook of
                  Medicine; KLTA

2. 4. Strategy: Design a Ka:rmik Language Teaching
                  Syllabus Using KLLSs

2. 5. Sub-   1. Do Register Analysis;
  Strategies: 2. Select and Grade the Data (Content)

3. Present the Selected and Graded Content in Two Parts in:
   i. Analysis: Form-Function-Meaning-Discourse-
                  Experience Analysis in a Linear Order;
   ii. Practice: Strategic Ta:masik-Ra:jasik-Sa:ttvik Order
                  Planning with Appropriate Directions,
                  Exercises and Games.
  iii. Attach a General Chart for Pronunciation, Lexis, and
    Grammar

4.   I-I-I the Content and Strategy in a Ka:rmik
                Network

5.   Repeat the Names in New Functions and
                Context in Presentation

6.   Use Ta:masik-Ra:jasik-Sattvik-Experiential
                Learning Strategies A:nushangikally in an
                I-I-I Network

7.   Superimpose Sub-Strategies for Economy
                and Efficiency

8.   Do a Needs Analysis to Suggest Appropriate
                Learning Strategies

Procedure 2:

Procedure 2. 1. Register Analysis

  Step 1. Identify all the major and minor *areas* of the human
            body as classified in the prescribed Indian medical
            college textbooks and list them.

  Step 2. Identify all the names of the *parts* of human body
            under each major and minor area of the human body

both internally and externally as listed in these
textbooks.
Step 3. Gather all the details of the description of the areas
and parts of the human body regarding their size,
shape, colour, matter, location, and function.
Step 4. Arrange the areas and parts of the body together with
their names in graphics and pictures area-wise and as
a whole in the body.

Procedure 2. 2. Content Selection
Step 5. Make a selection of the names of the parts by:
1. Alphabetical Arrangement
2. Classification of the External and Internal Organs
Area-wise and Location-wise Spatially;
3. Grammatical and Morphological Analysis

Procedure 2. 3. Content Gradation
Step 6.Grade the Content into:
1. Elementary Vocabulary
2. Intermediate Vocabulary
3. Advanced Vocabulary

Procedure 3. Presentation of the Content
Step 7. Present the Content by *Gradual Evolution*:
1. in a Linear Order in Part I (Analysis):
i. Form; ii. Function; iii. Meaning; iv. Discourse; and
v. Contextual Experience;
2. in a Strategic Order in Part II (Practice):
i. Ta:masik; ii. Ra:jasik; iii. Sa:ttvik; and iv. Experiential
Strategies with Appropriate Directions, Exercises and Games
for Each Type of a Strategic Learner.
3. Prepare a general chart for pronunciation, lexis, and
grammar of the parts of the human body and attach it in
a double sheet at the   beginning of the lessons.

Procedure 4. I-I-I Networking of the Content
  Step 8.   Integrate Form into Function into Meaning into Discourse into Contextual Experience
      1. Serially and ii. by Superimposition.

Procedure 5. Repetition of Names in New Functions,
          Collocations and Meanings
  Step 9. Repeat the Same Words in:
1. Word Classes such as Noun functioning as Verb, etc.;
2. New Meanings; and 3. Collocations

Procedure 6. Integration of Strategic Learning into the
          Content
  Step 9. Merge it into Procedure 3, Step 7.2 by
      Superimposition.

Procedure 7. Superimposition of Sub-Strategies for Economy
        and Efficiency
  Step 10. Superimpose: 1. Form-to-Experience; &
                    2.Ta:masik-Ra:jasik-Sa:ttvik
                    Strategies on One Another
                    Wherever Possible

Procedure 8. Needs Analysis to Suggest Appropriate Learning Strategies
   Step 11. Do Needs Analysis and Merge it into Procedure 3,
      Step 7.2.
After the syllabus is prepared and the booklet is given to the TLS Learner, direct him to go through Part I along with other types of strategic learners and then go through Part 2 (Practice) individually for practicing the exercises and games as a TLS Learner by following the appropriate instructions given there for him separately.

3. 5. *Part I: Analysis of Content (Linear Order) by General KLLS*

In Part I, an overall analysis of the content of the lesson is presented in a linear order in 5 sections as follows: i. Form; ii. Function; iii. Meaning; iv. Discourse; v. Style; and vi. Contextual Experience. Here, the content is presented in a linear order by gradual evolution of action from form into function into meaning into discourse and ta:masik into ra:jasik into sa:ttvik into ka:rmik strategic learning. [*Gradual evolution of action* is the evolution of action from disposition into desire into effort into action; evolution of concept into pattern and structure into form; evolution of function into meaning into form; evolution of form into theory into application; and sattvik into rajasik into tamasik states of all activity. In KLT syllabus design, a *bottom up process* devolves up to *a top down* and *radial* processes (Bhuvaneswar 2013 d)].

i. Form (LEXIS)

In this section, the important lexical items are listed in a spatio-material order by classification of the body into its major and minor areas both internally and externally. Appropriate graphics including pictures, charts, and diagrams are made use of to make the analysis clear, simple, and comprehensive. Important divisions and keywords are made prominent by the technique of visual perception through contrastive highlighting and achieved by the tactics of using opposite and adjacent colours or diagrams; and big-small letters. In addition, meaning is presented through the form of isolated and group pictures in natural colours along with the corresponding names of the parts of the form. In both teaching and learning, pointing out one's own body parts first and then pointing them out in graphics will give stronger impression. Noun phrases containing the key words as nouns and their qualifying adjectives, etc. can also be listed at intermediate and advanced levels. For example, for the word *eye,* the following

words can be given: Elementary Level – eye, eyelid, eyeball, eyebrow; Intermediate Level – eyes, eyelids, eyeballs, eyebrows; small eyes, big eyes, blind eyes, black eyes, blue eyes, green eyes; Advanced Level – eye (v), eyeing, eyed, eye up; lotus eyes, almond eyes, jaundice-eyed,

ii. Function (Syntax)

In this section, the same vocabulary is re-presented in phrases and sentences denoting the functions of these parts. For example, the word *eye* will be given as a word in the sentence: ***Eyes** see objects, **Eye balls** move sideways, **Eye lids** close and open the eyes, **Eyes** can be **black, blue**, and **green** in colour, Big eyed girls look beautiful, He **eyed up** the big man etc.*

iii. Meaning of Content (Semantics)

In this section, meaning is presented in three ways by: 1. Superimposition; 2. Functional Use and Description and 3. Individual Explanation using Bilingual Translation. For example, the meaning of the word *eye* is indicated by a graphic picture of the eye in Lexis by superimposition of the meaning on the word eye through the picture; in a similar way, the meaning of *small and big, blue and green, almond and lotus eyes* can equally be conveyed by superimposition through graphic pictures. Sometimes, functional descriptions may convey the meaning, e.g., eyeballs move sideways. Sometimes, it may not be possible to do so. In such cases explanation of the word or phrase is needed. For example, the phrase *eyed up* requires explanation in equivalent words such as *looked at, gazed at, etc.* in English or the concerned native language.

Bilingual translation should be judiciously used and *not* to be highlighted. At the level of form, the English word should precede the translation; at the level of function, the translation should be after the English equivalent and should be optional; and at the level of meaning, it should be avoided and if there is a necessity, the learner should be encouraged to refer to the bilingual translation of it at the level of form.

iv. Discourse

In this section, the words that have to be learned are presented in naturally occurring discourse. To design this type of discourse, observe how people elicit information about body parts and bring such conversation, documentaries, and composition from standard printed books. The learner should be familiarized with question and answer sentence patterns prior to the teaching of this section.

v. Style

In this section, stylistic variants of the names of the body parts are introduced. Generally, informal and formal varieties can be introduced but depending on the objectives, literary or highly technical terms can be introduced. For example, for *short sight* its medical term *myopia;* for *eyesight, vision*; for *touch, sensation*, etc. can be introduced. Style should be superimposed on discourse and so it is merged in discourse. As a result, samples of different genres and registers should be included in the Discourse section.

vi. Contextual Experience

Provide culturally relevant and real life examples of discourse in this section and superimpose it on Discourse. Therefore, this section is also merged with the fourth section on Discourse.

3. 6. Part II: 1. Practice (Strategic Order) by Gradual Evolution

Here, the content is presented in a linear order by *gradual devolution* of form into function into meaning and then *spontaneous creation* into discourse; and at the same time ta:masik into ra:jasik into sa:ttvik into ka:rmik strategic learning. This part is divided into two main sections: *Atomic Practice and Wholistic Practice.* Furthermore, atomic practice is divided into three sub-sections of Form-Function-Meaning Practices and Wholistic practice into two sub-sections of

Discourse and Contextual Experiential Discourse Practices. Finally, the four types of Ta:masik-Ra:jasik-Sa:ttvik-Ka:rmik (Experiential) learning strategies are superimposed on these two sections to suit the abilities and likes and dislikes of the learners. By doing so, economy of presentation is achieved and choice of strategy is also provided to the learner with the same content without repetition. What is more, such an arrangement challenges the learner and goads him to go up in the use of strategies.

In the atomic section practice, different types of graded exercises (from simple to complex) that include games also are given in each sub-section. These exercises and games are designed by clubbing the language level with an appropriate learning strategy from *form (ta:masik strategy) -to- function (ra:jasik strategy) -to- meaning (sa:ttvik strategy).* Each sub-section is independent on its own but it is I-I-Ied with the other language levels and strategies. This technique provides the facility to switch between the levels and strategies according to the likes and dislikes and abilities of the learner. In addition, it I-I-Is the corresponding sections of Part I with those of Part II and generates *loops of reference*.

3. 6. 1.   Practice of Strategic Learning
3. 6. 1. 1. Atomic Practice
3. 6. 1. 1. 1. Practice by Ta:masik (Language) Learning Strategy (TLS)

The basic TLS is memory-oriented: **memorize [**to **practice** and **understand]** and therefore a TLS learner should be provided an opportunity to memorize the names of the parts of the body through different exercises. The easiest way to memorize is to repeat the words in different combinations and remember the words. In rote-memorization, the words are memorized by frequent repetition in *chunks and sets by classification*: e.g., face: forehead, eyes, ears, cheeks, jaws, mouth, and chin; eyes:

eyebrows, eyelids, eyeballs. This chunking can be *truncated chunking* by progressively joining two, three, four words together: e.g., forehead and eyes; fore-head, eyes and ears; etc. or *regressively chunking* by joining the words in reverse direction in chunks: e.g., chin, mouth and jaws; chin, mouth, jaws and cheeks; etc.

Since rote-memorization is boring, it can be done through games by organizing the learners into groups to memorize the words through *Serial Shouting of the Word game*: e.g., A will say *face;* B follows A by saying *forehead;* C follows B by saying *eyes;* etc. If the following learner fails to say the appropriate word in two to three seconds, he will be out. Eventually, the last person(s) will be the winners.

This repetition can be played in Kho-Kho and Stamping Tablet (Tokkudu BiLLa in Telugu or Nageza in Arabic) games also. These are liked by kids and teens.

When two elders want to memorize the words, they can play the card game *Predict the Names.* In this game, all the names are written (printed) on cards and arranged serially one over another according to the classification of the areas of the body. In another set, all the pictures of the body part names are printed. After choosing the player to start the game, he will choose pictures. He will show a card and the opponent has to recall the name until the last picture. If he fails, he will lose a point for each mistake. Alternatively, he will play a name and the opponent should show the picture and say the name.

In another variation, first, the chosen player will shuffle both the sets and distribute 10 cards to each player containing 10 names and their pictures. When the first player plays a name, the opponent should play its picture and say the name to score a point; if he does it wrongly, he will lose the card to the opponent. If he wins, he will play whatever he likes to play from his set. The opponent will play either a picture or word to

match the card and say the name.

Ta:masik learning is incomplete in the sense that a TLS learner will not master the functional use of the names of the parts of the body as well as their meaning which gives a proper understanding of the names of the parts of the body. Therefore, he should use RLS and SLS and gradually evolve into a KLS user.

3. 6. 1. 1. 2.   Practice by Ra:jasik (Language) Learning Strategy (RLS)

The basic RLS is function-oriented and is based on practice: **practice [**to **memorize** and **understand]**. Therefore, an RLS learner should be provided with an opportunity to learn the names of the parts of the body through their use in performing their functions and practicing their use. Through practice, the names of the parts of the body will be *practically* memorized and remembered. Consequently, if the practice is inadequate, the names of the parts will not be remembered. Two types of exercises can be given for this type of learners: 1. Practice of the use of these words in sentences, cloze exercises, and question and answer type exercises; 2. Games that will make these functions highlighted can be played. For kids and teens, the same *Stamping Tablet* can be played by mixing both the names and functions in the thick tablets: it can be done by using the obverse for the name and reverse for the function and arranging them erratically or name and function can be separately written on the tablets. *Catch the Function* game can also be interesting for kids and teens. To play this game, the names of the parts and their functions should be printed on bands in big letters. A team will wear *names* and B team will wear *functions*. A team will be outside a big circle and all the B team players will be within the circle. The mission of the A team member is to get into the circle and catch the player on whom the appropriate function is displayed. For example, if A team member is EAR, he should chase the B team member

HEAR and touch him. 'HEAR' will evade him by all means; others will distract EAR by teasing him. When EAR catches HEAR, he should say EAR Hears. At an advanced level, both EAR and EARS can be used as display names and HEAR and HEARS are also displayed. Even sentence patterns can be used: EAR/ hears a sound, hears a sound in the house, etc. This type of writing can be used to teach not only number and sentence patterns but also other grammatical items. Card games can also be improvised in a similar fashion. Natural Discourse can also be superimposed on these exercises.

3. 6. 1. 1. 3. Practice by Sa:ttvik (Learning) Learning Strategy (SLS)

The basic SLS is meaning-oriented and is based on analysis: **understand [**to **practice** and **memorize].** Therefore, an SLS learner should be provided with an opportunity to learn the names of the parts of the body through the *analysis* of their description, and use in performing their functions. There is a twist in this strategy: analysis requires *understanding* of *form* through description and *function* through use. Hence, what is required is practice of description, function, and analysis. To achieve this, we need two types of exercises with three classes for each type: 1. Classroom Exercises: i. Description; ii. Function; and iii. Analysis; 2. Games: Games dealing with Form, Function, and Analysis collectively. The classroom exercises contain question-answer type in all their variety-range-depth. Role-play is essential to make the learners understand description and use of the parts of the body. For example, two teams can be formed and made to question and answer each other. Questions such as: What is the colour of your eyes?; What is the shape of your eyes?; Are your eyes big or small?; etc. on description and What do eyes/ears/legs do?; What does tongue/nose/skin/hair do?; on function can be practiced. Prior to role-play, the same questions should be given as homework for answering. Short presentations on body

parts should be organized with follow up questions by the other learners.

Search the Object Game can be well exploited to make the learners understand the meaning of the names of the parts of the body. The classroom or any open space (hall, etc.) can be very well used as the place for conducting such a game. The names of the parts written on cards will be put in a box. Each team captain (say 2 or 3 utmost) will pick up a name of the body part from the box. One after the other, each team consisting of 4-6 players will search the qualities and functions of the part of the body quickly, collect them and submit them to the referee. He will note them down on a paper. At the end, he will call each team and present their analysis to the other teams. There will be a further analysis by the class with the help of the teacher and scores will be made. Each mistake will cost a mark. Finally, the highest scorers will be the winners.

The same type of a procedure can be applied to all other 6 types of mixed learners: RTLS & STLS; TRLS & SRLS; TSLS & RSLS by mixing the additional features to the basic features. For example, a ra:jasik-ta:masik strategy learner will follow a TLS qualified by an RLS. For example, in memorization by chunking, the function can also be added: eyes, eyes see, etc.. In a similar way, in *Serial Shouting of the Word* game, functional sentences can also be added or used to replace names: i. Eyes – Eyes see; ii. Eyes see; iii. Eyes see and Ears hear; etc. of   by following the appropriate instructions given there to each type of a learner separately. Thus, for self-directed learners, the syllabus plays a critical role in supporting and facilitating their learning process in an I-I-I network.

3. 6. 1. 2. Wholistic Practice: Ka:rmik (Language) Learning Strategy (KLS)
In KLS, the strategy is: *understand, practice and memorize as*

a whole. Therefore, equal importance should be given to all the three processes as a whole in practice. This can be superimposed on Part I and reinforced by more emphasis on discourse and contextual experience in the General KLLS. Reading Comprehension passages are selected and graded and given for I-I-Iing understanding-practising-memorizing through discourse after going through form-function-meaning quickly but attentively. Generally, KLS learners are excellent students who have sharp over-viewing skills and who can quickly grasp the features adroitly. Alternatively, SLS can be used and supplemented by contextual experience through discourse.

3. 7. Ra:jasik - Ta:masik Learners and Ra:jasik -Ta:masik Learning Strategy (RTLS)
Ra:jasik-Tamas is tamas qualified by rajas. Rajas is activity, and is the source of practice, function, pattern and structure, and means. Therefore, a ra:jasik-ta:masik learner will add practice to his ta:masik learning. In other words, he is one step ahead of a ta:masik learner owing to the natural tendency for practice and less laziness. So, a RTLS should be: ***memorize and practice [to understand].***

3. 8. Sa:ttvik - Ta:masik Learners and Sa:ttvik -Ta:masik Learning Strategy (STLS)
Sa:ttvik-Tamas is tamas qualified by Sattva. Sattva is luminosity, analyticity, meaning, concept, and cause. Therefore, a sa:ttvik-ta:masik learner will add analyticity instead of practice to his ta:masik learning. In other words, he is one step ahead of a ta:masik learner owing to the natural tendency for analyticity and less indiscrimination. So, a STLS should be: ***memorize and understand [to practice].***

3. 9. Ra:jasik Learners and Ra:jasik Learning Strategy (RLS)
In the case of a Ra:jasik Learner, he is the opposite of a

ta:masik learner by being active, practical and function-oriented. His emphasis will be more on how language functions in an *around-the-object* process instead of its form and therefore tends more towards its functions and applications in learning. Instead of rote-memorization, he is more inclined towards its practice. Therefore, an RLS should be: ***practice [to memorize*** *and* ***understand].*** In other words, he is one step ahead of a ra:jasik learner owing to the natural tendency for not only practice but also memorization. In the case of such strategy, practice with memorization should be highlighted and not memorization as in the case of TLS.

3. 10. Ta:masik - Ra:jasik Learners and Ta:masik - Ra:jasik Learning Strategy

When tamas qualifies a ra:jasik learner, he becomes a ta:masik-rajasik learner. In this case, he is less active and practical and function-oriented than an RL. However, he is also inclined towards memory and form. Therefore, a TRLS should be: **practice** and **memorize [**to **understand].** In the case of such learners, practice with memorization should be highlighted and not mere memorization as in the case of TLS.

3. 11. Sa:ttvik - Ra:jasik Learners and Sa:ttvik - Ra:jasik Learning Strategy (SRTLS)

Sa:ttvik-Rajas is Rajas qualified by Sattva. Therefore, a sa:ttvik-ra:jasik learner will add analyticity instead of memorization to his sa:ttvik - ra:jasik learning. In other words, he is one step ahead of a ra:jasik learner owing to the natural tendency for analyticity and less indiscrimination. So, a SRTLS should be: ***practice*** *and* ***understand [to memorize].***

3. 12. Sa:ttvik Learners and Sa:ttvik Learning Strategy (SLS)

In the case of a sa:ttvik learner, he is intelligent, analytical, meaning-oriented, conceptual, and causal in his learning and strategy. Therefore, he is more interested in learning through

analysis and understanding from a cause to means and effect process; he conceptualizes more and practices and memorizes less. He approaches language as meaningful and derives its function and form through it. So an SLS should be: *understand [*to *practice* and *memorize].*

3. 13. Ta:masik - Sa:ttvik Learners and Ta:masik - Sa:ttvik Learning Strategy (TSLS)
In the case of a Ta:masik-Sa:ttvik Learner, his sa:ttvik nature is coloured by tamas. Therefore, he not only understands but also memorizes to learn language. Hence, his TSLS should be: *understand and memorize [*to *practice].*

3. 14. Ra:jasik - Sa:ttvik Learners and Ra:jasik - Sa:ttvik Learning Strategy (RSLS)
In the case of a Ra:jasik-Sa:ttvik Learner, his sa:ttvik nature is coloured by rajas. Therefore, he not only understands but also practices to learn language; he not only understands language but also knows its functions. Hence, his RSLS should be: *understand and practice [to memorize*].

3. 15. A Ka:rmik Learner & Ka:rmik Language Learning Strategy (KLLS)
A ka:rmik (experiential) learner is a (w)holistic learner and therefore he gives equal importance to analysis, memory and practice. As such, he not only analyzes, not only practices, but also memorizes. However, in his case he starts from *a radial (ka:rmik) process* and I-I-Is all the three levels. His KLLS should, therefore, be: *understand, practice, and memorize as a whole.*

So far we have analyzed how different types of learners learn the linguistic system and suggested how their strategies should be thought out. Once the strategy is decided, the next step is to prepare a specific set of sub-strategies, procedures, techniques,

tactics, and tasks.

IV. Conclusion

It has been shown in the Introduction and Literature Review how the term *strategy* is understood as *action or operation* by the ELT practitioners which is different from its general sense as a *plan.* It has been further shown why such a view is defective. Consequently, the term *strategy* has been re-examined and redefined as a *specific plan* and three basic strategies (and 6 mixed strategies) have been proposed from the perspective of the learners. Furthermore, these strategies have been illustrated with an example to show the distinction between the understanding and use of the term by traditional ELT practitioners and the Ka:rmik ELT practitioner. It is hoped that this new understanding will serve as a spring board for further research and development in language strategy studies.

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Appendices

The three appendices are given in three tables in the next page.

Legend:

Comp   *Comprehension*;   Prod   *Production*

Appendix I: **Table 1: Characteristics of Ta:masik Learners**

S. No.	Type of Learner				LSRW Skills (Atomic)				LSRW Skills (W)holistic)
					L (Comp.)	S (Prod.)	R (Comp.)	W (Prod.)	Integrated and Unified Mastery of Language
	Type	Activity							
		Type		Class					
1	Ta:m-asik	1. Comprehension/ Production a. General		1. Speed	Slow	Slow	Slow	Slow	Slow
		b. Specific		2. Clarity	Low	Low	Low	Low	Low
				1. Form	High	High	High	High	
				2. Content	Low	Little	Low	Little	Form-oriented
				3. Function	Low	Little	Little	Little	
				4. Style	Least	Plain,	Least	Plain,	

			Sensitive	Simple, Form-oriented	Sensitive	Simple, Form-oriented	
	2. Learning Process	5.Context	Least Receptive	Little Relevant	Least receptive	Little relevance	
	0. Choice		Atomic, Vague & Form-oriented	Atomic, Vague & Form-oriented	Atomic, Vague & Form-oriented	Atomic, Vague & Form-oriented	Slow, Little & Form-oriented
	a. Memory	1.Form-oriented 2.Other	High Low	High Low	High Low	High Low	
	b. Analysis	1. Reason	Little	Little	Little	Little	

				Little	Little	Little	Little	
			2.Interpret -ation	Little	Little	Little	Little	
		c. Practice	3.Identific -ation	Little	Little	Little	Little	
			1.Applica-tion	Little	Little	Little	Little	
			2. Practice	Little	Little	Little	Little	
		d. Initiative: Timid	—	—	—	—	—	
		e. Mood: Pessimistic or Indifferent throughout	—	—	—	—	—	

Appendix I: **Table 2: Characteristics of a Ra:jasik Learner**

S. No.	Type of Learner				LSRW Skills (Atomic)				LSRW Skills (Wholistic)
	Type	Activity			Listening *(Comprehension)*	Speaking *(Production)*	Reading *(Comprehension)*	Writing *(Production)*	Integrated and Unified Mastery of Language
		Type		Class					
2	Ra:ja-sik	1. Comprehension/ Production a. General		1. Speed					
				2. Clarity	High	High	High	High	Medium
				1. Form	Medium	Medium	Medium	Medium	
		b. Specific		2. Content	Medium	Medium	Medium	Medium	Medium
				3.Function	Medium	Medium	Medium	Medium	
				4.Style	High	High	High	High	

			5.Context	Most Sensitive More Receptive	Ornate & Complex More Receptive	Most Sensitive More receptive	Complex; Function-oriented More relevance	Function- oriented
		2. Learning Process		Atomic & Function-oriented	Atomic & Function-oriented	Atomic & Function-oriented		
		0. Choice	1.Short Term	Medium				
		a. Memory	2.Long Term	Medium	Medium	Medium	Atomic & Function-oriented	
					Medium	Medium	Medium	Medium & Function-oriented
			2. Reason	Medium				
			3.Interpret-ation	Medium	Medium	Medium	Medium	
		b. Analysis	3.Identific-ation	Medium	Medium	Medium		

c. Practice	1.Applica-tion 2. Practice — —	High High — —	Medium High — —	Medium High — —	Medium Medium Medium High High — —	— —
d. Initiative: Dash - ing Throughout					
e. Mood: High or Restless Throughout					

Appendix III: **Table 3: Characteristics of Sa:ttvik Learners**

S. No.	Type of Learner				LSRW Skills (Atomic)				LSRW Skills (Wholistic)
	Type	Activity			Listening *(Compr.)*	Speaking *(Prod.)*	Reading *(Compr.)*	Writing *(Prod.)*	Integrated and Unified Mastery of Language
		Type	Class						
4	Sa:ttvik	1. Comprehension/Production							
		a. General	1. Speed		Steady	Steady	Steady	Steady	High
			2. Clarity		High	High	High	High	
		b. Specific	1. Form		High	High	High	High	High
			2. Content		High	High	High	High	

			3.Function	High	High	High	High	
			4.Style	Most Sensitive	Perfect and Suitable	Most Sensitive	Perfect & Meaning-oriented	High
			5.Context	Most Receptive	Most Communicative	Most receptive	Most relevant	
		2.Learning Process		Atomic & meaning-oriented		Atomic & meaning-oriented	Atomic & meaning-oriented	Meaning-oriented
		0. Choice			Atomic meaning-oriented			
				High		High	High	
		a. Memory	1.Short Term	High	High	High	High	
			2.Long Term	High	High	High	High	
		b. Analysis	2. Reason	High	High	High	High	

	3.Interpretation	High	High	High	High	
	3.Identification	Low	High	Low	Low	
c. Practice	1.Application	Low	Low	Low	Low	
	2. Practice	—	Low	—	—	
d. Initiative: Dashing Throughout	—	—	—	—	—	Medium & Function-oriented
e. Mood: High or Restless Throughout	—		—			

APPLICATION OF LINGUISTIC THEORIES IN LANGUAGE TEACHING: A REVIEW OF FORMAL, FUNCTIONAL AND KA:RMIK LINGUISTIC THEORIES

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Abstract

According to Stern (1994: 119), "... it is hardly imaginable that a language could be taught without some underlying conception of the general nature of language... It would be unreasonable for language teaching theory to disregard what linguistics has to say about language". We also observe that language teaching theory in the west has been greatly influenced by the formal and functional linguistic theories and "thrown into confusion by recent developments in linguistics (ibid.)". Recently in India, Communicative Language Teaching Approach has become popular and the trend has been continuing. However, these theories have their own problems among which atomicity *is a major concern. In view of this, Bhuvaneswar (2009, 2013 a, b, c, d, e) has advocated his own theory of language teaching, syllabus design and learning in his Ka:rmik Linguistic Theory which is a holistic theory that integrates form-function-meaning-discourse levels of language as dispositional action. In that paradigm, his own approaches to teaching, syllabus designing, and learning are: 1. KLTA (Ka:rmik Language Teaching Approach); 2. KLTS (Ka:rmik Language Teaching Syllabus Design); and 3. KLLS (Ka:rmik Language Learning Strategies). He claims that his model, in view of its holism, is better suited for teaching second languages since SL learners have problems in all aspects of language. Moreover atomic approaches are ill-suited to second language learning and their eclecticism does not work because of inherent contradictions in the approaches (e.g., formalism and functionalism contradict each other in their premises).*

In this paper, an attempt has been made to review all these three types of approaches to teaching, learning, and preparing teaching materials and point out their merits and demerits.

I. Introduction

In the history of language teaching in the west, language teaching is primarily moulded according to the *proficiency* the learners needed such as oral proficiency or reading proficiency; in addition, theories of *'the nature of language and of language learning'* also impacted on language teaching. In this context, a number of methods and approaches such as the *GTM (Grammar-Translation Method), the Direct Method, The Oral Approach*

*and Situational Language Teaching, The Audiolingual Method,
TPR (Total Physical Response), The Silent Way, Community
Language Learning, Suggestopedia, Whole language, Multiple
Intelligence, Neurolinguistic Programming, The Lexical
Approach, Competency-based Language Teaching, and
communicative approaches such as Communicative Language
Teaching, the Natural Approach, Cooperative Language
Learning, and Content-Based Language Teaching* have evolved
in the course of time (see Richards and Rodgers 2001 for details
about these approaches and methods). These methods and
approaches have been directly or indirectly shaped by the
existing theories of language such as structuralism, generative
grammar, and functionalism. In spite of all the development,
language teachers have not yet come to a common understanding
about which method and approach should be the most universal
in its principles and practices and so research still goes on for the
key to comprehensive and holistic teaching.

In this context, a new approach to language teaching emanated
from the ka:rmik linguistic theory of Bhuvaneswar (2009 a, b,
2013 a, b, 2014 a, b, c, d,) which integrates form-function-
meaning-discourse levels of language into a unified whole and
offers a new perspective on language teaching-learning-teaching
materials through his Ka:rmik Language Teaching Approach
(KLTA), Ka:rmik Language Learning Strategies (KLLS), and
Ka:rmik Language Teaching Syllabus (KLTS) . In view of this,
there is a need to re-examine the use of linguistic theories in
language teaching and reassess the whole situation, especially,
with reference to teaching Indian languages in particular and
also English in general.

In this article, an attempt has been made to fulfil this need by
reviewing the important linguistic theories of structuralism,
generative grammar, Systemic Functional Linguistics, and
Ka:rmik Linguistic Theory and offer a few observations on the

role of linguistics departments in India.

II. Literature Review

There is a great amount of literature available on language teaching, learning and syllabus design and Stern (1990) and Richards and Rodgers (2001) are especially relevant to a review of the influence of linguistic theories on language teaching. Let us briefly review their work.

2. 1. Stern's Views on "Trends in Linguistic Theory"

In Stern (1983: 136), a brief sketch of "three of the schools of thought which have in one way or another had some influence on language teaching theory" has been made under five sections: 1. Bloomfield and American Structuralism; 2. Neo-Firthian theory; 3. Transformational Generative Grammar; 4. Transformational Generative Grammar and Structuralism; 5. Towards a More Semantic and More Social View of Language. In these sections, he dwells on how structuralism, generative grammar, sociolinguistics, and pragmatics are related with language and how they influence language teaching. In the conclusion, he sums up how the trends in linguistics contributed to the field of language teaching in five points:

1. creation of a new situation for language pedagogy; 2. language teaching theory cannot disregard linguistics; 3. common ground between the problems faced by linguistic and language pedagogy; 4. linguistics owing to the internal controversies creates problems for a language pedagogy; and 5. discontinuous coincidence between the theoretical interests of linguistics as a science and language teaching as an applied activity.

2.2. Richards and Rodgers' Views on the Theory of Language and Theory of Language Learning

In their view, a *method* of language teaching consists of three

components: approach, design, and procedure (ibid. 33). It is in approach that linguistics plays the major role which will be reflected in design and procedure. An approach deals with a theory of the nature of *language* as well as the nature of *language learning*. According to Richards and Rodgers (2001: 20-21), there are three different theoretical views of language and the nature of language proficiency: *structural, functional, and interactional*. There is only a change in naming and classification between Stern, and Richards and Rodgers since they all discuss structuralism and functionalism in essence. In the case of a theory of language learning, they (ibid. 22) propose two types of theories of language learning: *process-oriented theory of language learning; and condition-oriented theory of language learning.*

2. 2. 1. Theories of Language
According to the *structural view* of language in linguistics, "language is a system of structurally related elements for the coding of meaning. The target of language learning is seen to be the mastery of elements of this system, which are generally defined in terms of phonological units (e.g., phonemes), grammatical units (e.g., clauses, phrases, sentences), grammatical operations (e.g., adding, shifting, joining, or transforming elements), and lexical items (e.g., function words and structure words)" (ibid. 21). This view of language is reflected in such methods as *Audiolingual Method, Total Physical Response,* and *the Silent Way.*

According to the *functional view* of language in linguistics, "language is a vehicle for the expression of functional meaning.... The theory emphasizes the semantic and communicative dimension rather than merely the grammatical characteristics of language, and leads to a specification and organization of language teaching content by categories of

meaning and function rather than by elements of structure and grammar" (ibid.). This view of language is reflected is reflected in communicative approaches, notional syllabuses and English for Specific Purposes (ESP) movement.

According to the *interactional view* of language in linguistics, language is "a vehicle for the realization of interpersonal relations and for the performance of social transactions between individuals. Language is seen as a tool for the creation and maintenance of social relations" (ibid.). *Task-Based Language Teaching, Whole Language, Neurolinguistic Programming, Cooperative Language Learning, and Content-Based Instruction* subscribe to this view of language.

2. 2. 2. Theories of Language Learning

Language teaching methods may be derived from language learning theories also. According to Richards and Rodgers (2001:22), "A learning theory underlying an approach or method responds to two questions: a. What are the psycholinguistic and cognitive processes involved in language learning? and b. What are the conditions that need to be met in order for these learning processes to be activated? ... Process-oriented theories build on learning processes, such as habit formation, induction, inferencing, hypothesis testing, and generalization. Condition-oriented theories emphasize the nature of the human and physical context in which language learning takes place. "

Krashen's *Monitor Model* (1981)*,* Asher's *Total Physical Response* (1977) and Terrel's *Natural Approach* (1977) address both the process and condition dimensions of learning; whereas Curran's *Counseling-Learning* (1972) as well as Gattegno's *Silent Way* (1972, 1976) is built on condition-oriented learning.

Looking at both the theory of language and the theory of language learning, we notice that a we are concerned with "a

model of language competence and an account of the basic features of linguistic organization and language use" (Richards and Rodgers 2001: 23-24) with reference to theory of language, and "with an account of central processes of learning and an account of the conditions believed to promote successful language learning" (ibid.).

Bhuvaneswar (2013 a: 5) made a review of all the 10 approaches and 8 methods mentioned in Richards and Rodgers (2001) and comes to the conclusion that "A close look at these approaches and methods reveals the following characteristics which are not in line with the natural processing of language and its learning: *1. atomicity; 2. lack of universality; 3. inadequate networking of components; 4. improper time management; 5. non-experientiality"*. In a similar vein, he also feels that a theory of learning should address the three factors of *grammatical competence, functional competence, and experiential competence* (GFE Competencies) in an interconnected-interrelated-interdependent (I-I-I) network in which the cause-means-effect (CME) principle of action operates. As such, it is not only the process and conditions (HOW) but also the cause of learning (WHY) that should be taken into consideration in producing learning: the cause (WHY) is as important as the means (HOW) in bringing about the product (WHAT); *You can only take a horse to water but you cannot make it drink and You can only teach a learner to learn but you cannot make him learn!*

We observe a radial process of three factors: 1. *Dispositional* Creativity (DC) in language processing; 2. Application of *Knowledge* of Scientific Principles of Action (KSPA) in language processes; and 3. Application of Habituated Performance Patterns (or acquired Skills) of Action (HPPA) as captured in the following network.

Why: D. C. : Cause

$$\bigwedge$$

What: KSPA: Effect   Means:HPPA: *How*
Network 1: Dispositional Choice of the System Network

Dispositional creativity is the cause (WHY) of language. It impacts on the knowledge of Universal Science of Action as reflected in the Universal Science of Lingual Action and impels the linguistic processes (WHAT) through the skills acquired from the habituated performance patterns of lingual action determining the manner of the concerned language process (HOW). In the process, svabha:vam (disposition) erupts *innovation* of a LP from sheer Dispositional Functional Pressure by a flash of creativity (FOC).

The cause deals with motivation and it plays the most crucial role in making the learner put the required effort in an optimal procedure that will process learning quickly, effortlessly and enjoyably. Moreover, according to KLT, learning holistically is crucial in learning effectively because *language is learnt or acquired and used as a whole in I-I-I network but not piecemeal even though linear processing of the parts may take place.* In such a view, *a part functions as a mini-whole but not as an individual part sans the whole.* For example, a sentence contains the formal (phonetic and phonological, lexical, syntactic), functional, and semantic properties of the linguistic system but narrowed down to its own characteristic level. On the other hand, the part is sans the whole in other theories: formalism excludes functionalism and vice versa in their focus.

In the next section, a basic review of ka:rmik language teaching, learning, and preparation of learning materials will be attempted with reference to formal and functional linguistic theories.

III. A Review of Ka:rmik Language Teaching, Learning, and Preparation of Learning Materials

In Bhuvaneswar (2009a), a contrastive review of CLT and KLT has been made. In this article, there is a very detailed contrastive discussion of Ka:rmik Language Teaching Approach with Communicative Language Teaching Approach. In Khadija et al (2012-13), there is further contrastive discussion of KLTA with Grammar Translation Method (G.T.M.) and Direct Method (D.M.). In addition, in Bhuvaneswar (2009 b), the use of games as a technique in KLT to motivate young students in learning quickly, effortlessly, and enjoyably has been carried out. In Abubakar (2012-13), a discussion of KLTA as a holistic method for teaching Libyan students has been made. This is with reference to KLTA. In Bhuvaneswar (2012-13 a, b), a detailed and lengthy discussion of the design of Ka:rmik Language Teaching Approach Syllabus (KLTS) has been made and in Bhuvaneswar (2012, 2013 c), the theory of Ka:rmik Language Learning Strategies (KLLS) has been outlined. Even though KLT is new, it is based on solid psychological and sociocultural principles interwoven together in a scientific network that provide a systematic pedagogical framework for teaching-learning-materials preparation. Therefore, it is worth testing, evaluating, applying and developing in the Indian context.

As far as I know, such a comprehensive theory of language teaching from an indigenous Indian linguistic theory has not been proposed so far even though enormous research has been carried out by Indians in this field. Of course, KLTA is new but it deserves serious attention and further application in pedagogy for confirming its value as a viable alternative to the unsuccessful western theories of pedagogy in India and the other African and Asian countries (See Pramod Misra 2013; and Bhvaneswar 2013 a, b). Therefore, in this article, a brief review of KLTA, KLTS, and KLLS has been made with a view to further discuss its application in the Indian context.

3. 1.   Ka:rmik Language Teaching Approach

According Bhuvaneswar (2009a) and Khadija, et al (2009b), KLT is distinguished from CLT, D.M., and G.T.M. by many important points of language theory and language learning theory. The dissimilarities of KLT with these three methods can be broadly applied to all other language teaching methods and approaches. In the following review these points are summarized and discussed by giving them as they are captured in tables in Bhuvaneswar (2009a) and Khadija, et al (2009b). The discussion draws very heavily (with permission of the authors) from these papers to acquaint the reader with the original papers as they are not available in India.

3. 1. 1. Five Important Properties of Language

1. *Language is dispositional action:* Since it is dispositionally created and used, its learning has to be dispositionalized. Therefore, it has to be taught in *a framework of dispositionalized learning.* Consequently, the teacher has to teach the learner according to his traits of learning, i.e., according to his preferences and styles of learning; as a result, the teaching materials have to be prepared to suit the three basic types of sa:ttvik (knowledge-oriented), ra:jasik (action-oriented), and ta:masik (form-oriented) learners (along with the six   mixed types of these three basic learners) and the teacher has to teach them accordingly. Hence, his teaching is *dispositionalized learning-oriented* and *learning-specific syllabus oriented* to suit the *learner's dispositionality*.

2. *Language is holistic:* Since language is holistic, it evolves as a whole with all its parts I-I-Ied in NwNs within an AWF network. Therefore, learning has to be processed as a whole, i.e., the form-function-meaning-discourse levels have to be processed in a unified framework. In other words, the parts have to be identified and then fused together in a *whole and that whole evolves gradually into the linguistic system of the learner.* Hence, the syllabus should be selected-graded-

presented-repeated and finally evaluated by gradual evolution of the *parts into the whole* as well as the *whole into a greater whole* of the linguistic system. Consequently, the teaching has to adopt this gradual evolution of teaching from a whole into a greater whole along with a systematic integration of the parts into the whole. In an I-I-I network, the syllabus will also be framed to reflect this gradual evolution of Language. For example, as more vocabulary is learnt, new syntactic patterns are acquired and new knowledge of the phenomenal world is gained. All these as a whole will further give new content and also discourse patterns for coordinating the coordination of action.

3. *The Linguistic System as Networks-within-Networks*
   At the semiotic level of the linguistic system, we have the phenomenal world *out there*, the dispositional world *in here*, the linguistic world *around* both of *them* to coordinate the coordination of the actional world *constructed about* these three worlds, and the experiential world *emerging from* the dispositional actional world. In addition, there is a systematic correspondence between the phenomenal world and the lingual world because of its functions to *observe, interpret, identify, and represent* phenomenal objects, states of being, and activity. To do so, the lingual world is created in a similar way as the phenomenal world (compare the chemistry, physics, and mathematics of the phenomenal world with that of the phonetics and phonology, properties of language, and the principles of creation and application of language in the lingual world) to represent the phenomenal world. Just as there are atoms, molecules, radicals, compounds and mixtures in matter (form-oriented universe), humans also created phonemes, syllables, morphemes, words, and phrases in language (name-oriented universe); and just as compounds and mixtures enter into reactions, so also do the words and phrases enter into concatenation in the form of sentences. Just

as matter and energy (light, sound, electricity and magnetism) have their own properties, so do *phonetics and phonology, lexis, syntax, semantics, and discourse structure.* Just like phenomenal (form-oriented) action, at the lingual action level also , we have the five levels of *form, function, meaning, and style and context*; and at the creation/application level of language, we have the five levels of *disposition, socioculturalspirituality, cognition, contextual action, and lingual action*; and so on. This is the most outstanding dispositional socioculturalspiritual achievement of human intelligence!

What is more, human disposition is I-I-Ied with both the lingual and phenomenal worlds to generate-choose-specify-direct-materialize triple activity to coordinate the coordination of action for the fulfilment of desires and the experience of the results of action.

What has this understanding got to do with language teaching? This understanding points out that phenomenal action has to be systematically mapped on lingual action and *vice versa* and both of them together with disposition. As a consequence, the teacher has to *I-I-I* and *integrate* phenomenal activity with lingual activity and vice versa and both of them together with dispositional activity in language teaching. Since the learner as an individual is the focus, dispositional activity becomes twofold: internal (learning the language dispositionally according to one's own disposition) and external (learning the language to construct one's dispositional reality by knowing the correspondence between one's dispositional choices and linguistic choices). This twofold connection demands meshing the ka:rmik language learning strategies (Bhuvaneswar 2012, 13 a, b) with ka:rmik language syllabus design (Bhuvaneswar 2012-13) and informs the teacher in his ka:rmik language teaching

(Bhuvaneswar 2009, Khadija et al 2012-13) to take appropriate steps to implement this knowledge. Such an approach is lacking in the approaches discussed in Richards and Rodgers (2001).

4. Atomic-(W)holistic-Functionality

All the levels of language encapsulated in NwNs have to be finally unified into the linguistic system. It is done by making the parts into the whole in such a way that the sum of the parts makes the whole and then the whole remains as it is as an archetype either with more or less than the sum of the parts (Gestaltian View) or beyond the sum of the parts as a whole (pragmatic and ka:rmatic view). This understanding points out that a linguistic system is dispositional and has to be learnt in such a flexible way to internalize and ingrain alternative ways of dispositionally construing and comprehending lingual action. However, language learning is goal-oriented and hence appropriate choices can be made in learning the alternative ways of saying the same thing.

5. Language is used as a resource for Experiential C COA.

Another very important point that is observed in KLT is that language is used as a resource for the construction of experiential reality as ka:rmik reality by coordinating the coordination of action for the fulfilment of desires. What this means is that a thorough needs analysis via register analysis is required to construct a syllabus that has content built on authentic phenomenal activity as semiotically embodied by authentic lingual activity. Of course, specificity of the materials is implied owing to the goal-oriented principle in language learning.

3.1.2. A Comparative and Contrastive Analysis of KLTA with Other Approaches

In Richards and Rodgers a teaching method and approach are

evaluated by a set of 10 principles. Based on the above mentioned five important properties of language along with some other principles of KLT, Bhuvaneswar has also made use of these principles in comparing and contrasting KLTA with three important approaches which are G.T.M., D.M. and CLT. In the following table 1, D.M. and G.T.M. are contrasted with KLTA on a 11 point scale by including *atomicity* as an important principle (see Khadija et al 2009 and 2012-13).

Table I: Comparison of the Charateristics of D.M. and G.T.M. with KLTA/M

Principle	Direct Method	Grammar-Translation Method	Ka:rmik Language Teaching Approach/Method
1.Goal of Teacher	1. Communicate in the target language. TO DO SO 2. Think in the TL	1. Read Literature in SL TO DO SO 2. Learn Grammar Rules and Vocabulary. 3. It is a good mental exercise	1. Specific Goal Oriented TO DO SO 2. Tailor LSRW to the specific goals. 3. Coordinate Disposition- Cognition- Action- Experience Network
2. Role of Teacher	1. Teacher is the Authority TOBE SO 2. The Students and the Teacher are like Partners in T/L Process.	1. Teacher is the Authority TOBE SO 2. The Students do what the teacher says.	1. Teacher is the Friend/Team Player and Team captain TOBE SO 2. The Student Follows the Teacher – Gets Help –Works to Learn.

3. Characteristics of Teaching –Learning Process	1. Associate Meaning and the Target Language. TO DO SO 2. Use Realia, Pictures, Pantomime 3. Use Situational Materials. 4. Teach Grammar Inductively.	1. Translate from one language to another. TO DO SO 2. Teach Grammar Deductively 3. Memorize Rules 4. Apply to Other Examples 5. Memorize Native Language Equivalents	1. Induce knowledge by i. Direct Perception; ii. Translation; iii. Inference TO DO SO 2. Teacher: S-W- L/S-R Student: L-R-S/L-W 3. Teach by Induction-Deduction; ii. Creative Application of Rules of Language 4. Practice by Atomic –Holistic Networking
4. Nature of Student – Teacher Interaction	1. Student-Teacher-Student: Multi Directional	1. It is Teacher - Student Directional. 2. Little Student Interaction and Initiation	1. Spherical Interaction of [Teacher-Student-Material-Lingual Action] : Networking 2. Student Centred Throughout 3. Game –like Interaction
5. Feelings of the Students	No Principles in This Method	No Principles in This Method	1. Student-sensitive but Teacher is not neglected 2. Pleasurable and Challenging

			like a game Easy –to - Complex; Quick-to- Challenging Processing
6. Language-Culture View	1. Language is Primarily Spoken Information about Culture	1. Literary Language is Superior to Spoken language 2. Culture is Literature and Fine Arts.	1. Language is dispositional. 2. So LSRW are all important according to the goal. 3. Content is culture –sensitive but open-ended and Register-friendly
7. Areas of Language and Language Skills	1. Vocabulary is Emphasized more than Grammar. 2. Oral communication is seen as Basic even though all WLS are taught.	1.Vocabulary and Grammar 2. R-W are the Primary Skills 3. S-L-Pronunciation Neglected	1.Vocabulary-Phonetics-Syntax- -Meaning-Discourse 2. LSRW spherically Networked 3. Emphasis According to Goals
8. Role of Student's Language	1. Native Language should not be used.	1. Meaning made clear by NL. 2. NL is mostly used in the Class	1. NL is appropriately used 2. Second language is Primarily Used. 3. NL is stopped after Phase II

			(ie In Practice)
9. Evaluation	1. Students are Asked to Use the TL. 2. Oral and Written Skills Tested by Interview and Writing	1. Translation from NL to SL and Vice Versa 2. Grammar Rules and Cultural Norms	1. Oral: Conversation and Presentation 2. Written: Q/A; Paragraphs; Different Types of simple Tests such as Fill in the Blanks, Cloze, etc.
10.Teacher Response to Student Errors	10. 1. Self Correction by Various Techniques	10.1. Correct Answers Very Important 2. If the Students Make Mistakes, the Teacher Supplies the Correct Answer.	10. 1. Impersonal Correction and Individual Attention: a. Attack the Error , not the Student; b. Don't Offend the Students 2. a. Be Firm with Unruly Students. b. Team Spirit is Required. 3. Individual-Group-Collective Attention according to Time/Context 4. Always Encourage but Gently Correct.

11. Over View	Atomic	Atomic	Atomic-Holistic/Ka:rmik

The major distinctive features of the communicative language teaching approach and KLTA are given below in table 2. Bhuvaneswar has taken Finocchiaro and Brumfit's (1983: 91-93) table of CLT Characteristics for selecting the 22 features of CLT for comparison with KLT.

Table 2: Comparison and Contrast of the Characteristics of CLT with KLT

S. No.	CLT	KLT
1.	Meaning is paramount.	Experiential Meaning is paramount.
2.	Dialogues center around communicative functions and not memorized.	Dialogues center around experiential functions and are memorized by contextual experience.
3.	Contextualization is a basic premise.	Experientialized context is a basic premise
4.	Language learning is learning to communicate.	Language learning is learning to coordinate the coordination of action (CCOA) for the fulfillment of desires (FOD) by constructing ka:rmik reality.
5.	Effective communication is sought.	Ka:rmik (purposeful cause-effect experiential) learning is sought.
6.	Drilling may occur peripherally.	Drilling occurs by experientialized contextual learning.

7.	Comprehensible pronunciation is sought	Comprehensible pronunciation is sought but native speaker like pronunciation is aimed at.
8.	Any device that helps the learner is accepted- varying according to their age, interest, etc.	The devices that help the learner are pre- selected according to their interests - varying according to their age, interest, etc.
9.	Attempts to communicate may be encouraged from the very beginning	Attempts to CCOA for FOD are initiated from the very beginning.
10.	Judicious use of native language is accepted where feasible.	Judicious use of native language with code- mixing is accepted only for clarification when the learner is unable to communicate.
11.	Translation may be used where students need or benefit from it.	Translation is used when students do not understand and communication is blocked.
12.	Reading and writing can start from the first day, if desired.	LSRW go together in an interconnected- interrelated-interdependent network.
13.	The target linguistic system will be learned best through the process of struggling to communicate.	The target linguistic system will be learned best through the process of systematic construction of dispositional reality through lingual actional reality.
14.	Communicative competence is the desired goal.	Ka:rmik (cause-effect experiential) competence is the desired goal.

15.	Linguistic variation is a central concept in materials and methodology.	It is not so. Linguistic variety is purposefully central in materials and methodology – learning is goal oriented.
16.	Sequence is determined by any consideration of content, function, or meaning that maintains interest.	Sequence is determined by the gradation and I-I-Iing of content, function, and meaning in an appropriately interesting manner.
17.	Teachers help learners in any way that motivates them to work with the language.	Teachers help learners in an experiential framework that motivates them to work with the language.
18.	Language is created by the individual, often through trial and error.	Language is created by the individual, according to his ability (i.e., disposition) through three basic and six ka:rmik linguistic strategies.
19.	Fluency and acceptable language is the primary goal.	Fluency and acceptable language for the construction of dispositional reality is the primary goal.
20.	Students are expected to interact with other people.	Students are expected to experience language by all means.
21.	The teacher cannot know exactly what language the students will use.	The teacher tells what language the students will use but is flexible in what language they

		should use.
22.	Intrinsic motivation will spring from an interest in what is being communicated by the language.	Intrinsic motivation will spring from an interest in what and how dispositional reality is constructed by the language.

From an observation of the characteristics of Ka:rmik Language Teaching Approach as listed in the two tables , we see a very different view of how language is created and acquired or learnt.

3. 2. The Ka:rmik Language Learning and Ka:rmik Language Learning Strategies (KLLSs)

Five important LT practitioners have proposed their own views on language learning. 1. Richards and Rodgers; 2. Savignon; 3. Krashen; 4. Johnson; and 5. Littlewood. According to Richards and Rodgers (ibid. 70 -73), there are three elements of learning theory in CLT practices: 1. *communication principle*: activities that involve real communication promote learning; 2. *task principle*: activities in which language is used for carrying out meaningful tasks promote learning (Johnson 1982); and 3. *meaningfulness principle*: language that is meaningful to the learner supports the learning process. As Richards and Rodgers pointed out, "they address the conditions needed to promote second language learning, rather than the processes of language acquisition." Savignon (1983) considers the role of linguistic, social, cognitive, and individual variables in language acquisition. Krashen (1982) feels that language learning comes about through using language *communicatively*, rather than through *practicing* language skills (Richards and Rodgers 1986: 72). Johnson (1984) and Littlewood (1984) propose a skill-learning model of learning. This model involves both *a cognitive* and *behavioural* aspect: the cognitive aspect involves the internalization of plans (derived from the language system) for creating appropriate behavior and the behavioral aspect involves the automation of these plans so that they can be converted into fluent performance in real time through **practice** (Richards and Rodgers 1986:72-73).

From a glance at the views expressed by the five critics, we notice that learning involves the use of all the above mentioned principles and practices. However, *eclecticism of all the above*

mentioned principles is not advisable because that requires meshing them together in a solid framework which is not possible: Krashen, and Johnson and Littlewood contradict each other. Hence, in a new theory of language, a different theory of learning has to be worked out which is another story.

There is a large corpus of literature on language learning strategies that deals with their definition, classification and application. Different ELT practitioners such as Rubin (1975, 1982), Stern (1975), Ellis (1986), O'Malley et al (1985), Brown and Palinscar (1982), Naiman (1978), Oxford (1990) and Chamot (2004) have proposed different definitions for language learning strategies (LLS) and according to Bhuvaneswar (2012 a), "it is confusing to understand what LLS are from these definitions..... the LLS field, according to Griffiths (2004), "continues to be characterised by 'confusion' with 'no consensus' (O'Malley *et al,* 1985, p.22) while Ellis (1994, p.529) comments that the language learning strategy concept remains 'fuzzy' ". In view of this lack of consensus, there are three important issues that need to be reviewed in LLS literature to gain a proper perspective of the state of LLS research. They are: 1. Problem of Definition; 2. Choice of LLS by Learners; and 3. Need for a (W)holistic Strategy Design.

In addition to theories of learning, according to Bhuvaneswar (2012), strategies are also not analyzed systematically and comprehensively by such writers as Rebecca Oxford (2001). For example, she classified strategies into direct and indirect and then further classified the direct strategies into memory, cognitive, and compensation strategies and indirect strategies into metacognitive, affective, and social strategies under the communicative language teaching approach model. However, in her analysis, strategies are understood as actions or operations but her inclusion of metacognitive strategies (which deal with

planning) into the same group is confusing since they are taxonomically above the level of action. *Second*, the treatment of strategies is not comprehensive since it does not deal with different types of learners and their *learning styles*: *what* strategies in what *combinations* should be used by what *type* of learners with different learning styles of their own are not dealt with. *Third*, there is no specific categorization of the types of learners as well as the learning strategies in the sense of plans. *Fourth*, her approach is communicative which is atomic since it does not integrate form-function-meaning-discourse-choice in a holistic framework. In view of such a scenario, there is a need to revisit the analysis of strategies from the perspectives of: the *learners' status* and rethink *strategy planning* from such a focal point; the *nature of the content* and its selection-gradation-presentation-repetition-evaluation; the *qualification of the teacher* and the resources available for teaching; and the *administrative capacity* of the management to I-I-I the learning-teaching-materials network in an efficient way.

Bhuvaneswar (2013) proposes a new KLTA theory of learning based on empirical and scientific principles (mentioned above) according to which learning a language involves a three dimensional networking of the:

1. acquisition of *the knowledge* of the linguistic system (*formal knowledge acquisition*) to construct *actional reality*;
2. acquisition of *the skill* of using the knowledge of the system to construct his *dispositional reality* in *a context* (*functional skill acquisition*); and
3. *dispositionalization* (i.e., symbolically embodying the dispositional choice of action controlled by *traits*) of the knowledge of the linguistic system in its use (desire – lingual action – action) for the construction of experiential reality by *ka:rmik networking:* language is acquired as *a means* to bring *the effect* (goal) of experience impelled by *the cause* of disposition.

According to Bhuvaneswar (ibid.), such an acquisition of formal knowledge, functional skills, and dispositionalization of the linguistic system is comprehensive, descriptively and explanatorily more adequate and so psychologically more valid. To quote him, "the acquisition of the knowledge of the system is somewhat similar to *the cognitive aspect* of learning. In *knowledge acquisition,* the learner learns the formal, functional, and semantic system of the language and gains *grammatical competence*; in *skill acquisition,* the learner acquires through systematic practice the use of language to construct his dispositional reality in a context by acquiring *communicative competence.* In *dispositionalization,* the learner acquires *experiential competence* by which he is in a position to coordinate the coordination of action by lingual action to embody his disposition in his lingual action for the experience of the results of his action." **(p. ?)**

In KLTA, learning is *the outcome of an integrated network of the Teacher – Learner – Materials – Administration – Society Grid*. As Bhuvaneswar says, "In an ideal setting all these components are properly coordinated to bring about the emergence of learning but in real life situations they can only be coordinated fairly well. The teacher has to adjust to the fluctuations and maintain a balance to bring about optimum results. If these components are well coordinated they will generate high levels of motivation; if not, the system will be adversely affected."

Another point of departure is in *practice* as a feature in learning. In CLT, practice is *communicative* practice whereas in KLTA, it is *experiential* practice which includes communication. That means, in KLTA, "learning is *personalized and subjective* whereas in CLT, it is not. In that sense, there is scope for style variation and *creativity* in KLTA which is missing in CLT as explained earlier. In a similar way, different types of motivation can be offered to suit the individual tastes." (ibid.)
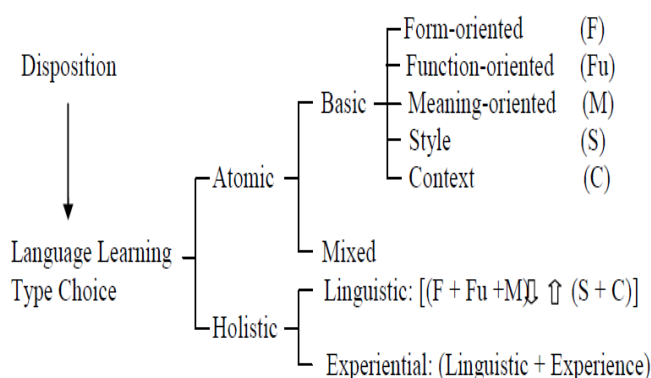
Network 1: Basic Language Learning Type Choice Network

Legend: ⇩ *superimposed on the following components;* ⇧ *superimposed on the preceding components;* ⇩ ⇧ *mutual superimposition (i.e., one component is superimposed on the other and vice versa)*

Bhuvaneswar (2013a) proposes a basic language learning type choice network as shown above in which the choices of language learning type are captured. Basically, these choices can be atomic or holistic. Among the atomic type choices are the well-known formal, functional, semantic, and contextual types. Among the holistic types, we have eclectic types in linguistics but not experiential types.
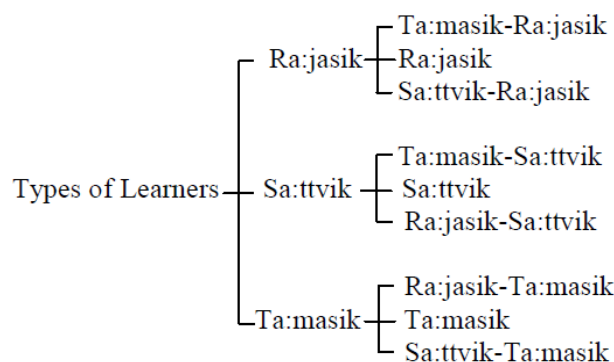
Network 2: Types of Learners

He also proposes a network of types of learners who are divided

into three basic and six mixed types to give us a broad idea about how learners carry out their learning activity. He further   I-I-Is the type of a learner with the learning type choice. For example, sa:ttvik, ra:jasik, and ta:masik learners are meaning, function, and form-oriented learners respectively (see Bhuvaneswar 2012 in this book for complete details).

Another point of departure is in *memorization* as a feature in learning. Memorization is "an important factor in KLTA (which is not in CLT) since the acquisition of the knowledge of language is complex – it is a verbal system with numerous words, sentence patterns, and meanings – and so memory is associated with learning. However, rote memory is not encouraged; on the other hand, *experiential memory* – remembering language through experience - or even *bilingual memory* of cognates is encouraged in the initial stages until the second language memory is firmly established: like using a car to travel to a destination and then leaving it" (ibid.). In *rote memory*, only the words are remembered without their meaning. According to KLT, "*A word and its meaning* memory is better than rote memory and in this memory, the direction is from the word to its meaning" (ibid.). In a similar way, *pattern memory* along with *superimposition skills* of template mapping reduces the burden of retaining the system. According to KLTA language is first created out of dispositional reality for constructing experiential reality and then by *the principle of reversal of order* language is used to construct experiential reality: remembering language in that experiential perspective helps to retain the linguistic system in long term memory better.

In our daily life, we already have the *first* language to construct our experiential reality but we need an *alternate* language to do so (in second language acquisition) and therefore to facilitate easier, quicker and efficient learning we make use of both *the first language* and *experiential reality* (as in the primitive stages of language development) to construct *second language reality*.

The only difference is that in second language acquisition, there is already an established lingual reality as the background which is not there in the first language creation. Consequently, *the signified* (or va:chyam in Sanskrit) is remembered as *the word* in KLTA by using *experiential memory* because the va:sana:s which impel man to a specific type of action without an antecedent or a precedent cause are stored in ka:rmik memory. To explain it further, in rote memory a word is memorized without its meaning; in a word-meaning memory, both the word and its meaning are remembered; but in an experiential memory, the experience of the object/state of being/action is remembered *as* the word/sentence.

["Here, the direction is from the experience of an object/state of being/ action to the word: **(2) Action ➝ Language**. For example, the word *milk* is remembered as the word *milk* in rote memory*; milk as a white drinking liquid from an animal* in word-meaning memory*; and the object (the white liquid* drunk*)* as *milk; the action* of *drinking (milk)* as *drinking;* or *the state of relaxation* as *joy* in experiential memory – it has a connection with the *direct method* and *task-based instruction* in teaching which was not mentioned in those methods but in KLTA it is used as one of the techniques in memorization. Experiential memorization is possible for only those objects/actions/states of being experienced or easily available for experience. However, it can be used to establish *syntactic memory* and even *lexical memory* by *association* techniques. For example, the memory of present continuous tense of *write* can be easily taught by enacting *writing* by the students and *moon walking* by *simulated walking* on the floor. Experiential memory is a good aid to establish long term memory and therefore by generating language through *salient* experiences will help in establishing strong language habits. Since lingual memory is easier and stronger than actional memory, and since we are now culturally trained to be more lingually memorizing, action *reinforces*

language and it is likely to be remembered quickly and longer." (ibid.)]

All these three components of *Knowledge Acquisition, Skill Acquisition, and Dispositionalization* are interconnected-interrelated-interdependent as a homogeneous phenomenon in Disposition (Svabha:vam) which is a complex of *Traits – Knowledge – Va:sana:s.* In the learning of a language, the formal system is acquired along with the functional system in a ka:rmik networking process.

3. 3. Theory of Syllabus Design and Preparation of Teaching Materials

In the field of syllabus design also, many types of syllabi have been proposed. A brief review of 13 types of syllabus has been made by Bhuvaneswar (2012-13) and some problems such as atomicity, etc. in them have been pointed out by him to pave the way for a KLT Syllabus Design. A brief summary of his ideas is given below.

3. 3. 1. Types of Syllabus Design
The following 13 types of syllabus are discussed in various works on syllabus design:

1. A procedural syllabus; 2. A cultural syllabus; 3. A situational syllabus; 4. A skill-based syllabus; 5. A structural or formal syllabus; 6. A multi-dimensional syllabus; 7. A task-based syllabus; 8. A process syllabus; 9. learner-led syllabuses; 10. A proportional syllabus; 11. A content-based syllabus; 12. A notional/functional syllabus; 13. A lexical syllabus

3. 3. 2. A Review of 13 Important Types of Syllabus Design
In "An Overview of Syllabuses in English Language Teaching", Mohammad Mohseni Far (2008) lists 13 types of syllabus design and discusses their main principles and pleads for an integrated version of syllabus incorporating all the important points

mentioned in the above syllabi. This is a plea for an *eclectic* syllabus. However, Bhuvaneswar (2012-13) feels that such "a possibility is remote since formal and functional syllabi for example are inherently contradictory in their premises: one emphasizing the formal as opposed to the other emphasizing the functional aspects of language."

From the perspective of communicative language teaching, Richards and Rodgers (1983) summarize Yalden's classification (1983) into 8 types out of which:

a. *Wilkins (1976): structures + functions;*
b. *Brumfit (1980): functional spiral around a structural core;*
c. *Allen (1980): structural, functional, and instrumental, and*
d. *Jupp and Hodlin (1975): functional*

deal with structural, functional, and instrumental types of syllabus. Wilkins (1976) deals with the first type of notional syllabus whereas Widdowson (1979) criticizes such a syllabus and proposes an interactional type of syllabus while Prabhu (1983) worked on task-based syllabus. In addition, Candlin (1976), and Henner-Stanchina and Riley (1978) proposed a learner generated syllabus.

All the above mentioned syllabi have been proposed from one angle of looking at teaching-learning a language: they are proposed either from a theory of language (be it formal, or functional, or cognitive), or from the procedural, or process, or technique perspective of learning. For example, *the structural or formal syllabus* is based on the perspective of grammar (derived from a theory of language as consisting of a system of structures) and *the lexical syllabus* is based on the perspective of lexis (derived from a theory of language learning as starting from lexis); *the notional or functional syllabus* is based on the perspective of function (derived from a theory of language as consisting of a system of notions and functions); *the procedural*

syllabus is based on the perspective of meaning (derived from a theory of learning a language by focusing on meaning while learning the structures); *the cultural syllabus* is based on the perspective of culture (derived from a theory of language as consisting of a system used for the construction of social reality); *the situational syllabus* is based on the perspective of situation (derived from the pragmatic knowledge of the use of language in situations); and *the skill-based syllabus* is based on the perspective of skills independent of the situation (derived from the knowledge of the use of language through LSRW skills); *the task-based syllabus* is based on the perspective of performing tasks and activities (derived from the knowledge of learning a language from interaction and practice); *the proportional syllabus* is derived from a theory of language learning as taking place from form to interaction; *the content-based and process syllabi* are based on the perspective of content (derived from a theory of language as consisting of a system representing specific phenomenal knowledge); *the learner-led syllabus* is based on the perspective of the learner (derived from a theory of learning a language as done by primarily by the learner and so he should decide the syllabus); and finally, *the multidimensional syllabus* is based on the perspective of multidimensionality (derived from a theory of language as consisting of a system of form, function, topics, and context).

As observed from the brief comments made above, all the above types of syllabi are **atomic** in their approach in understanding what language and language learning is: language is not only formal, or functional, or contextual but also all of them together and even beyond them. Therefore, learning a language requires not only a mastery of all them but also requires the ability to go beyond them and *interconnect-interrelate-inter-depend* it with one's disposition that generates, specifies, directs, and materializes all lingual action in the context of its use.

All the popular theories of language (formal, functional, cognitive) are atomic in their approach and hence they could not inspire a holistic language teaching method or syllabus even though they could not deny each other's perspective in a conclusive manner. For example, in the above mentioned syllabi, the link between *cause-to-effect* (i.e., from *why-to-what*) in the *cause-means-effect* (why-how-what) network is neglected since they are atomic and linear, and only *the means-to-effect (how-to-what)* link is taken into consideration. Every cause is seated in a context and is a:nushangikally realized into the effect through the means: *without the cause, there can be no effect and hence it should not be neglected.*

In the KLTA model, which is *causal*, all the three are interconnected-interrelated-interdependent in a network as shown below.

Cause   Means

Lingual Action
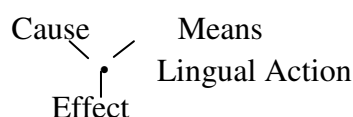
Effect

Figure 1. Cause –Means – Effect Network of Lingual Action
[Cause: Disposition – Desire; Means: Functional Form; Effect: Its use in a Context]

Another problem with the these types of syllabus is that they do not a:nushangikally flow from one level into another level in the Administration-Teaching-Syllabus-Learning network and a steady flow from one level to another level is not maintained. For example, what is planned in the administration should be realized through materials-to-teaching-to-learning in a systematic manner without any bumps and jerks – there is disconnection in the networking: sometimes, the time schedules are disjointed; sometimes, the teaching methods don't match; sometimes, the students cannot cope with the onrush of the class tests, etc.

(1)   Administration   Syllabus (+ Administration)

**Teaching [(Syllabus (+ Administration)]   Learning
[Teaching (Syllabus (+ Administration)]**
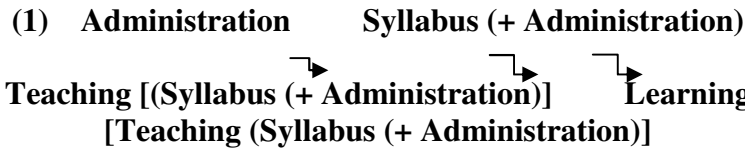
3. 3. 3. The KLTA Syllabus
**The Ka:rmik Language Teaching Approach Syllabus
(KLTS)** is based on the principles of the Ka:rmik Linguistic
Theory and is formulated as a holistic syllabus that integrates the
pre-language principle of *disposition-desire-effort*, the language
principle of *form-function-meaning*, the post-language principle
of *concept-pattern-form,* and the lingual actional principle of
lingual action-coordination of contextual action-experience in a
unified framework to provide a holistic description of language.
According to Bhuvaneswar **(?)**, the basic tenets of the Ka:rmik
linguistic theory are as follows.

3. 3. 3. 1. Basic Tenets of the Ka:Rmik Linguistic Theory
1. Language is used as a resource for the construction of actional
   reality at the lower level, dispositional reality at the middle
   level, and ka:rmik reality at the higher level in a holarchy. To
   explain it further, each reality from the top is realized as the
   lower reality by *apparent transformation in an a:nushangik
   process (the process of the cause being inherited into the
   effect like clay into pot) indicated by 'the elbow arrow
   connector' symbol.*

 *(2) Ka:rmik Reality ⌐ Dispositional Reality ⌐ Actional
    Reality ⌐ Experiential Reality*

   Ka:rmik reality and dispositional reality are two terms which
   are *interchangeably used* in the discussion of the ka:rmik
   linguistic theory since ka:rmik reality is variable dispositional
   reality even though the former is a higher reality: Ka:rmik
   Reality = one variety of dispositional reality giving rise to

experiential reality. In addition, dispositional reality is immediate and easily understandable whereas ka:rmik reality is remote and more difficult to empirically understand. The term *dispositional reality* is only used most of the times since it refers to the individual.

2. Language is not only used by human beings living in a context as a resource for the construction of dispositional reality but it is also produced by human beings dispositionally to live in the context. To explain further, it is first produced dispositionally by the originators of a language, and then what is produced as a language is used to construct dispositional reality.

3. In Ka:rmik Language Teaching Approach, the learning of a second language is derived from a desire to learn the second language to fulfill a specific desire - for example, to pass in the second language examination as a requirement to get the degree in the concerned field of study. In this case, *language* is used as a resource for the construction of *lingual dispositional reality – language* is used as *a means* to learn *language* as *an object (effect):* double action of language as both means and goal. Therefore, there is only a change in the goal: in ordinary action, language is used as a resource for achieving a material effect, say, the buying of medicines, or the construction of a house whereas in language learning, that effect is replaced by language. So learning a language is one class of action, namely, language learning action, which is a class of lingual action – lingual action itself is one of the three types of action, the other two being mental, and physical action. All these three are the only types of *human action* which is the super-ordinate category as captured in Fig. 2 below.

Human Action

Mental   Vocal   Physical

Intellectual   Emotional   Experiential   Non-semiotic   Semiotic
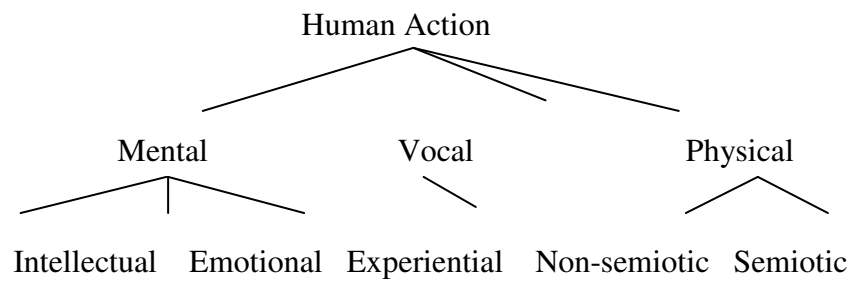
Lingual Action
Fig.2. Human Action and Its Taxonomy

4. The performance of any action is motivated from disposition: disposition generates, specifies, directs, and materializes action for its experience through desire, and effort. Hence, language is *dispositional action*. Since it is used for experiencing the results of action, it is also *experiential action* (i.e., language is used as a means for experiencing action). In addition, disposition also specifies the choice of action as *this and that* to be *so and so* in *such and such* a manner and thus is the cause of variation in action.

(3) **Disposition** ➔**Desire** ➔**Effort** ➔ **Action** ➔ **Result Experience**

(4) **Disposition** ➔ **Dispositional Bias** ➔**Response Bias** ➔
      Choice   **Action**   **Variation**

5. All objects of action, states of being of objects and action, and action have a tristratal structure of *concept-pattern-form* and *form-function-meaning* which are generated by *disposition-desire-cognition*.

(5) Disposition – Desire – Cognition
(6) Concept – Pattern – Form
(7) Form- Function-Meaning

6. All action is processed through a ka:rmik-archical series of five realities which are as follows:

(8) Ka:rmik Reality: Dispositional Reality – Cognitive Reality – Socioculturalspiritual Reality – Contextual Actional Reality – Actional Reality

7. All action is performed as a *means* for the experience of the fulfillment (*effect*) of desires (*cause*) in *a cause-means-effect* network.

8. All activity takes place in *a ka:rmik field* which can be positive or negative to the fructification of action and the action is performed by *the ka:rmik actors* as *ka:rmik action* for its *ka:rmik experience.*

9. As an action is performed, it is done so within the framework of *a theory, procedure,* and *techniques* which develop by *gradual evolution.*

Since disposition is the key feature in this model, the syllabus is made to be learner friendly by making learning simple through judicious bilingual explanation, saving his time, sustaining his interest, and at the same time benefitting him in his area of specialization. Based on these principles, the KLT Syllabus Design takes a new look at syllabus design, especially, by laying emphasis on I-I-Iing various elements of teaching, time management by utilizing inside-outside classroom in the institution, providing opportunities for playing games in the hostel/house/public places, providing natural exposure to language by bilingual news items, posters, and exhibitions, preparing mini-projects that are simple and creative, and doing testing and evaluation by quiz programmes.

3. 3. 3. 2. The Syllabus
The objectives in KLTA are both *general* and *particular,* and

beyond them where the general includes the particular and the particular embodies the general and both of them are transcended by the goal *beyond* them. By taking no level of learning for granted, the particular needs of the individual learners are taken care of; and again by being broad and comprehensive, the general needs are taken care of. When the particular needs interfere with the general objectives, they are appendixed to the general objectives. All of them are networked to cater for the ultimate goal of constructing the experiential reality which is beyond.

A very crucial factor in design is the implementation of the *Networks-within-Networks Principle and the Atomic-Holistic Functionality Principle*. The entire syllabus has to be designed as a whole and at the same time it has to be designed with each of its parts functioning as a whole at its own level: there should be *Atomic-Holistic Functionality*. All the same, each part should have its own internal network which should be a part of a major network at a higher level. Each function contributes to the larger function in the network. For example, phonology evolves into lexis, and lexis into syntax, and all of them into semantics and discourse. Furthermore, lexical items and grammatical items, and semantic items should be networked together at a higher level to produce a network of sentence structure and then discourse structure. At the same time, each one at its own level should have its own network. Web networking is also recommended if it is not complex. For example, words that function as nouns are selected from an ESP text and these words are turned into noun phrases containing articles. Here, articles are a separate section and independent at their own level but they form a part of the network of noun phrases at a higher level. At the level of the noun phrase, it is independent at its own level but it will be a part of a clause/sentence section … and so on. This is one network – *a formal network*. It has to be interconnected-interrelated with another network, say, *the functional network*

which deals with speech acts and implicature in a context, and *the contextual network* that contains the formal and functional networks has its own network of the *immediate, wider, and global* contexts, and finally it ends up in *a discourse network* with its own internal structural networks of speech acts, turns, and exchanges in conversation and sentence, paragraph, and essay, and so on in composition. This systemic network should again be interconnected-interrelated with *the dispositional network* with its own internal network of desires, lingual action, coordination of action, result, and experience to produce the *Networks-within-Networks* grid. In addition, each sub-unit can be further broken down into smaller networks, for example, desires into a network of lingual, and non-lingual; lingual desires into general and specific; and specific into EST, EAP, etc.

A typical lesson in the KLTA consists of three major parts in a top-down process: *1. Experiential Reality; 2. Dispositional Reality; and 3. Actional Reality* each consisting of the other in an a:nushangik process (the cause inherited into the effect like clay in the pot) *but presented in a bottom-up process for convenience*. This is in accordance with the fundamental principle that language is used as a resource for the construction of actional reality at the lower level, dispositional reality at the middle level, and experiential reality at the higher level.

(3) Experiential Reality ⬉ **Dispositional Reality** ⬉

Actional   **Reality.**

Each lesson is interconnected and interrelated with the following lesson and becomes a part of the next lesson in its functional structure; in a similar way, each lesson can be devolved into the preceding lesson by removing the *new* content of the following lesson. This process continues until the last lesson. For example, if the first lesson is about articles (syntax), it will be a very short lesson introducing the articles *a/an* and ***the*** and they will be related to the articles in the native language (say, the articles in

Arabic). The second lesson/section will be about the Noun Phrase which contains nouns (+ articles). If the lesson deals with the basic noun phrase, it deals with *count* and *non-count nouns* and *specific* and *generic reference* as parts of it at its own level but *still* contains articles. If the text is an ESP text, say, English for Science and Technology: English for Civil Engineering/Architectural Engineering to ESL learners, the lexical items chosen will be from, say, *a house with a gloss in the native language*. *Here lexis, syntax, and semantics go together.*   When these noun phrases are presented in a conversation/composition drill, discourse practice leading to experience takes place. By introducing choice of lexical items in the conversation, *dispositional creativity* will not be neglected. In a similar way by introducing games, competitions, etc. *the interest* will be sustained and boredom minimized. What is more, at the level of lexis, another network-within-networks will be formed which is related to different types of houses, buildings, and so on. On *a parallel process*, the students will be motivated to prepare their own extensive ESP word lists in their own leisure time and submit them for marking. This will build up a good vocabulary basis for them in due course of time. The concerned lecturers (Non-English teachers, say, Lecturer of Building Construction, Soil Mechanics, etc) will refer to some of the important words in their native language and give the English equivalents during their lecture in a casual way. As the syllabus is developed, all the four levels are made interconnected-interrelated-interdependent in an *economical, elegant, and effective way* to save time, bring in order, and generate systematic and effective learning.

IV. Conclusion
From the discussion of the formal, functional, and ka:rmik linguistic theories and their application to language teaching, we come to the conclusion that language teaching, especially,

English language teaching is severely hampered by following the western theories blindly without looking into various problems that we have to face in adapting western-oriented theories of teaching, learning, and syllabus design.

As far as the teaching of Indian languages is concerned, we do not have a *modern* theory of language teaching based on sound principles of linguistics, talk less of *a unified theory of language teaching as proposed in KLTA.* In this context, *Ka:rmik Language Teaching, Learning and Syllabus* is undoubtedly a breakthrough in language teaching which has to be *sensitively handled in the Indian context* for reaping the best results and at the same time regaining and establishing the supremacy of Indian teaching in the world scenario. In this connection, it should be remembered that Chomsky started his generative grammar in 1950s and revised it a number of times and so also is the case with Halliday who also started it a long time ago and revised his SFL theory twice. In line with that experience, Indians, other Asians and Africans should not be bogged down by any limitations that crop up in developing original theories and therefore think originally and try to build up context-sensitive language teaching approaches and methods.

In this connection, it is strongly recommended that linguistic departments in India collaborate with other language departments and pursue the development and application of this theory in a very structured national level programme by inducting all the linguistic departments into one platform and affiliating them to the research projects in the linguistic departments. In this connection, Osmania University authorities are humbly requested to take the initiative and encourage original research in our linguistics department.

Since there are many foreign students studying in India, they may also be encouraged to join the research projects and do

research on ka:rmik linguistics and see how far it can be profitably utilized to develop their own language teaching methods and approaches. In this way, there can be a fruitful interaction and development of Indian approaches to language teaching internally and externally.

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A SEMANTICO-PRAGMATIC STUDY OF 'GA:' AS A MODAL AUXILIARY IN HINDI

Prashant Mishra

Abstract

'ga:' as a modal auxiliary is used in Hindi to express the semantic categories like willingness, intention, determination, prediction, command and request. Previous studies on modals in Hindi as well as English were restricted to the semantic and formal criteria. Ambiguity in the use of modals is found in English as well as in Hindi. To understand the real intent, it becomes necessary to take into account the socio-cultural context in which modals are uttered. We, therefore, have chosen the semantico-pragmatic framework that will take into consideration various sociological and pragmatic parameters. The use of 'ga:' as a modal auxiliary by was studied by applying the semantico-pragmatic approach on the samples selected from one-act plays written in Hindi. The sociological and pragmatic parameters which take into account the context of the utterance and the shared knowledge between the interlocutors was found to be helpful in disambiguating the utterance and in interpreting the real intent of the speaker.

Keywords: Modals, Semantico-Pragmatic, Illocutionary Act, Illocutionary Function, Politeness Principles

I. Introduction

Modality is a term used by the logicians to refer to a certain way of classifying propositions. Modal logic deals with various propositions which are drawn from human attitudes and experiences from which semantic choices like necessity, possibility, impossibility etc. available for utterances are derived. Khlebnikova(1976), Lyons(1977), Palmer(1979), Coates(1983) and Leech (1971) regards modality a notional category which is expressed with the help of grammatical categories like mood and modal auxiliaries. Halliday (1970) is of the opinion that people use language with one another in order to manage their social lives. Modality is directly related to the social functions of language. Modality, which expresses different semantic implications like permission, request,

obligation, necessity, possibility, is used to perform different communicative acts. Halliday regards modality a form of participation by the speaker in the communicative act. Modality is related to the interpersonal function of the language. Modality is expressed linguistically by a number of devices like moods, modal auxiliaries, quasi auxiliaries, adjectival and participial expressions, nominal expressions and lexical verbs (Perkins 1983). Apart from these grammatical categories, modality is also manifested in orthographic devices like punctuation, prosodic features like stress and intonation-contour (Searle 1969). Verbal categories like tense are also used in some cases to express modality (Lyons 1977). However, linguists have now realized that modals have the singular potential to represent illocutionary force in language. For example, 'He will come on Monday' can be interpreted as 'I predict he comes on Monday'. Searle regards the study of the meaning of sentences and the study of speech acts synonymous as "the speech act or acts performed in the utterance of a sentence are in general a function of the meaning of the sentence" (Searle1969:18). This view of Searle's relates the semantic notion of modality to the functional concepts like speech act and illocutionary force. We have thus discussed the concept of modality and how it is related to the concepts of speech act and illocutionary force. In the next part of the paper we will present a brief account of the semantico-pragmatic approach that we propose to apply on the selected data.

1. 1. Aims and Objectives

Our main aim in the present paper is to investigate the semantico-pragmatic uses of 'ga:' as a modal auxiliary in Hindi. In this connection we have made the following assumptions:

a. Modals represent various semantic categories. However, these semantic categories are influenced by the interplay of various socio-cultural factors. Grammatical and semantic

analyses are inadequate to interpret the actual intention of the speakers.

b. Modals are highly ambiguous. They cannot be interpreted in

isolation and without reference to the socio-pragmatic considerations. The illocutionary force of the utterance cannot be brought out and understood without the aid of socio-pragmatic factors.

c. To test our framework, we have collected data from the one-act plays written over the last fifty years in Hindi.

d. We have proposed to analyze the data on a four-point scale using the following semantico-pragmatic parameters: i. Meaning ii. Illocutionary Act iii. Illocutionary Function iv. Politeness Principle.

1. 2. Methods and Materials

This section of the paper deals with the theoretical framework and the methodology adopted during the collection and analyses of the data. It outlines the semantio-pragmatic framework which is different from the earlier semantic and syntactic approaches. A semantico-pragmatic framework gives priority to sociological and pragmatic use of language. To test the framework, samples have been collected from some one-act plays of Hindi.

1. 2. 1. Method and Framework: Semantico- Pragmatic

In the present paper we are trying to demonstrate that grammatical and semantic criteria are inadequate to understand the intended meaning of the utterance. For the encoding and decoding of messages, we believe that the speaker and the hearer share some common knowledge. This sharing of the knowledge helps them in facilitating the communication process. The shared knowledge which consists of socio-cultural factors influences the communication across various languages. Since modals are highly ambiguous and their true

meaning cannot be easily interpreted without reference to their contextual features in which they are uttered, we think that the shared knowledge between the interlocutors, which consists of the context and the background assumptions, plays a vital role

in the comprehension of an utterance. To support our view point, we present a brief account of the back ground to the semantico-pragmatic framework that we propose to apply on the selected samples in the subsequent part of the paper.

J.L. Austin (1962) contributed significantly to the pragmatic paradigm by relating meaning to its illocutionary force. He believes that a person utters a sentence not only to convey something but also to perform some act. Austin looked at communication system through the goal-oriented pragmatic point of view. He made a distinction between constative and performative utterances. In his work "How to Do Things with Words", Austin(1962) says that constative utterances refer to the statements that are used to describe some events to evaluate something as true or false whereas performative utterances are used to do something with the help of language.

Another philosopher who enriched the speech act theory is Searle(1969). According to Searle 'A theory of language is a part of a theory of action' (Searle 1969:17). Searle regards that there are two types of Speech acts – direct and indirect and both of them are performed at the same time and the performance of one leads to the performance of the other. In a direct speech act, a speaker believes that the hearer understands his message and this understanding of the message will lead him to perform the desired action. Searle defined indirect speech acts as "cases in which one illocutionary act is performed indirectly by way of performing another"(Searle 1979:60). Apart from classifying speech acts into direct and indirect, Searle also classified illocutionary acts into various

categories. His classification is based on the politeness principles. According to him, "Assertives commit s to the truth of the expressed proposition" and are "neutral as regards politeness" (Leech1983:105). Assertives include stating, suggesting, boasting, complaining, claiming, reporting and

belong to the collaborative category of illocutionary function. Directives are the speech acts "intended to produce some effect through action by the hearer: ordering, commanding, requesting, advising and recommending are examples "(Leech:106). These acts in most of the cases belong to the competitive category of illocutionary functions. In the next place comes commissives which "commit s to some future action: e.g. promising, vowing, offering. These illocutionary acts are related to convivial function of politeness. Expressives express "the speaker's psychological attitude towards a state of affairs which the illocution presupposes: e.g. thanking, congratulating, pardoning, blaming, praising, condoling etc. Expressives like commissives, also belong to the group of convivial as "the illocutionary goal coincides with the social goal" (Leech:104). The last category in the classification of illocutionary acts based on politeness maxims is the class of declaratives. Declaratives "bring about the correspondence between the propositional content and reality" (Leech:106) e.g. resigning, dismissing, christening, naming, excommunicating, appointing, sentencing etc. Declaratives, according to Searle(1969), are institutional acts and do not involve politeness.

All verbal utterances take place in various types of socio-cultural situations. Hence an important feature of speech acts is that they have a close affinity with the socio-cultural background of the speakers and listeners. Several linguists including Boyd and Thorne (1969), Halliday(1970.a) and Lyons(1977) have acknowledged this fact that various modal

verbs possess illocutionary force and to confine the study of modals only to semantic and formal analyses without taking into consideration their illocutionary potential will be a partial study. Philosophers like Lakoff (1973), Brown and Levinson (1978) and Leech (1983) suggest some politeness strategies to maintain harmony and to strengthen the bond of friendship

among individuals**.** However In the present study we confine ourselves to the politeness maxims enunciated by Leech. Leech (1983) contributes to the Politeness strategies by discussing various maxims of politeness with regard to the process of minimization and maximization. His maxims, which are primarily based on showing concern and respect for others, are grouped into six categories. These six types of Politeness maxims, according to Leech, are as follows (1983:132):

(i)   Tact Maxim (in impositives and Commissives)
      a. Minimize cost to other. [(b) Maximize benefit to other.]
(ii) Generosity Maxim (in impositives and commissives)
      a. Minimize benefit to self[(b) Maximize cost to self.]
(iii) Approbation Maxim (in expressives and assertives)
      a. Minimize dispraise of other [(b) Maximize praise of
         other]
(iv) Modesty Maxim (in expressives and assertives)
      a. Minimize praise of self [(b) Maximize dispraise of self]
(v) Agreement Maxim (in assertives)
      a. Minimize disagreement between self and other
      [b. Maximize agreement between self and other]
(vi) Sympathy Maxim (in assertives)
      a. Minimize antipathy between self and other
      [b Maximize sympathy between self and other]

The politeness maxims dealing with the interpersonal rhetoric include two participants – self and others. The speaker represents self whereas others include the hearer as well as third parties expressed by third person pronouns.

The above discussion about speech acts, speech functions and politeness maxims help us in evolving semantico-pragmatic parameters – meaning, speech act, speech function, and politeness principle which explain the pragmatic uses of modals in various speech situations. Therefore, after presenting a brief account of the theory of speech acts and the

politeness maxims which relate meaning to the illocutionary force of the utterance, in the next part of the paper we propose to apply the same on 'ga:" as a modal auxiliary in Hindi applying the following semantico-pragmatic parameters:(1) meaning (2) speech act (3) speech functions and (4) politeness principles.

1. 2. 2. Material and Sample Collection
The data to support our point of view in the present paper has been collected from popular one- act plays written by modern writers in Hindi. A detailed reference to the plays has been given in the reference at the end of the paper. The plays selected to collect the data and support our point of view have been spread over a period of the last fifty years. We decided to collect the data from various one-act plays as this saved us from the exercise of inventing and deliberately constructing the data which are generally separated from the context. The utterances culled from one-act plays also approximate to the conversation of the speakers of Hindi and represent the specimen of the Hindi spoken by the people in the Hindi speaking community. The utterances chosen from the popular one-act plays provide us sufficient contextual evidence and help us in discovering the intended meaning of the utterance. As it has not been possible for us to incorporate the entire data in such a short study as this, we have selected only one example for each notional category expressing the use of 'ga:' as a modal auxiliary in Hindi.

1. 3. Significance of the Study

The present study is an extension of the earlier studies that were confined only to the formal and semantic aspects of various modals in Hindi. It has added a new perspective to the study of "ga:' as a modal auxiliary in Hindi by incorporating various sociological and pragmatic parameters. 'ga:' as a modal auxiliary in Hindi is used to perform a number of

illocutionary acts like assertive and commissives and also cover a wide range of sociological functions ranging from a simple assertion of facts to the expressions of commands, threats etc. The framework and the parameters used by us are the results of the various works done by scholars like Halliday, Searle, Austin and Leech. To the best of our knowledge, we have made a beginning by applying these sociological and pragmatic parameters on some selected samples of 'ga:' in Hindi. This criterion helped us in disambiguating the uses of modals and also in understanding the real intents of the utterances and in overcoming the limitations of the formal and semantic perspectives.

1. 4. Scope and Limitation

The present study is confined only to the semantico-pragmatic aspect of the use of 'ga:' as a modal auxiliary in Hindi. However, it can be extended to cover other modal auxiliaries like 'sak', 'pa:', 'paR' and 'cahiye' in Hindi. We think that the present study will pave the way for future researchers who can apply these parameters and principles to the other grammatical and semantic categories and this might be true of other languages too. Cross-cultural studies can further strengthen this point of view and can reveal semantico-pragmatic principles of universal application. The semantic concepts like permission, obligation, ability, possibility, threat, command, promise, willingness and certainty are universal in nature and are expressed in different languages through the use of modals

and other linguistic means. Hence a comparative and contrastive study can be undertaken to find out the conceptual parallels and differences in the use of modals in different languages. Such a comparative and contrastive study will help the learners of a second language in overcoming errors arising due to the interference of their mother tongue and will help the learners in improving their communicative competence. However, a more detailed and comprehensive study can be

undertaken to cover all the modals of Hindi by analyzing more data and including more pragmatic parameters. Even a separate study on 'modals' can be undertaken on various sociological and pragmatic principles – like the 'cooperative principle' (Grice1975) and 'politeness principle' (Brown and Levinson1978,Leech1983).

1. 5. Definitions of Technical Terms
Illocutionary Act: An illocutionary act is actually a verbal act that takes place in a particular situation.
Context of an Utterance: The context of an utterance means any background knowledge shared by the speaker and the listener.

II. Review of Literature
A brief review of literature pertaining to the works done on modal auxiliaries in Hindi has been presented in this section to provide a background to the present study and to also acquaint with the aim of the same as we wish to extend the earlier studies based on formal and semantic aspects of modals to the semantico-pragmatic aspect.

Unlike English, not much scholarly attention has been paid to modality in Hindi. However, recently some Hindi grammarians like Kachru (1966); Van Olphen (1970) and Amar Bahadur Singh (1978) explored this category in Hindi. There seems to

be considerable disagreement among scholars on the list of Hindi modals. Based on the available scholarly material, my attempt in this section is to focus on auxiliary verbs that function as modals in Hindi.

Yamuna Kachru (1966) recognises 'sak' and 'cuk' as the only modals in Hindi. However in her later study she rejected 'cuk' and included 'paR' and 'ca:hiye' in her list of modal verbs. Van Olphen (1970) identifies only three modals in Hindi 'sak',

'pa:' and 'cuk'. Amar Bahadur Singh (1978:184) grouped auxiliaries in Hindi into temporal and non-temporal categories. Modals like 'ho / hota:' which represents contingent / unreal belongs to the temporal whereas modals like 'pa:' and 'sak', representing accomplishment and ability respectively, belongto the non-temporal group. Apart from temporal and non-temporal categories, Singh also talks about a third category called obligatory. He puts it under the non-temporal class. 'ca:hiye' representing a moral idea and 'he:' and 'paR' representing compulsion are treated under this category. But Singh does not recognise obligatory as a modal category (1978:185).

Arya (1979) discussed the works of the above-mentioned grammarians and used the notional and syntactic criteria for the identification and classification of modals in Hindi. He rejected 'cuk' as a modal auxiliary and regarded it as an aspect marker in Hindi. Arya included 'ga:' in his list of modals as it is ambiguous in use in the same manner as the other epistemic modals 'sak' and 'ca:hiye' are used. 'ga:' like 'sak' and 'ca:hiye' refers to the event of the proposition in the past, present and future. It can be used with both past and non-past tenses. 'cuk' fails to pass the test of ambiguity and functions only as an aspect marker along with the modal auxiliary (1979:336). Hence it does not find a place in Arya's list of

modal auxiliaries in Hindi. Arya included 'ga:', 'sak', 'ca:hiye', 'paR' and 'pa:' in his list of modals.

Controversy regarding the inventory of modals apart, we propose to discuss in detail the functions of 'ga:' as a modal auxiliary in Hindi applying the semantico-pragmatic framework and parameters proposed by us on selected samples in the following part of the paper.

III. Semantico-Pragmatic Study of 'ga:' As a Modal Auxiliary in Hindi

As a modal auxiliary 'ga:' is used in Hindi to express various semantic notions like willingness, intention, determination, prediction, command and request. To express these notional categories, 'ga:' is used in Hindi as a equivalent of 'will', 'would', 'shall', 'should', 'could', and 'must'. It covers a wide range of semantic options in Hindi. In the next part of the paper we will examine the use of these semantic options expressed through 'ga:' in various socio-cultural situations to perform various speech-acts and speech-functions depending on the politeness strategies used by the speakers.

3. 1. Analysis of Six Samples

To substantiate our view-point, we have selected specimens of each semantic category expressed by 'ga:' from some well-known contemporary plays written by writers in Hindi as plays are the powerful and effective medium of expressing interpersonal communication representative of the respective societies. A reference to the plays has been given after each example in italics.

Example No. 1.
umā   : kitne din bīt gae hai. tum to kahte

the merā
Uma : how many days passed away have. You do told
my
lāl   lauṭ   āegā.
darling back come will.
Uma : How many days have passed away. You told me that
my darling will come back.
mahārāj : hāṁ hāṁ ! jarūr lauṭ āegā ummī.
Maharaj : Yes, yes ! certainly back come will Ummi.
Maharaj : Yes, yes ! He will certainly come back Ummi.
(cakkar dār sīḍhiyāṁ aur andherā)

Semantico- Pragmatic Parameters:
Meaning   : Assurance.
Illocutionary Act   : Commissive.
I assure you that your son will certainly come back.
Illocutionary Function   : Convivial.
Politeness Principle   : Sympathy maxim.

Example No. 2.
manohar   :   shashi, tum ummī ko merī kear meṁ
choḍh
jāo … maiṁ
Manohar   :   Shashi, you ummi to my care under
leave ……..I
tumhārī patnī ko apne baṅgle par
rakkhūgā. tum kuch roj ghūm
your wife of my bungalow at keep
shall. You few days trip
āo. jāo yūrop yā iṅglend.
have. go Europe or England.
Manohar   :   Shashi, you leave Ummi under my care. I shall
keep your wife at my bungalow. You, have a
trip for a few days. Go to England or Europe.
mahārāj   :   nahīṁ dākṭar ab kahīṁ nahīṁ jāūṁgā.

		apne īshvar se
maharaj	:	No, doctor, now anywhere not go will. Your God to manāie ki vah merī umā ko acchī kar de.
		pray that he my Uma to cure do to.
Maharaj	:	No doctor, no I won't go anywhere else. Pray your God to cure my Uma.

(cakkardār sīḍhiyāṁ aur andherā)

Semantico-Pragmatic Parameters:

Meaning	: Promise.
Illocutionary Act	: Commissive.

I promise you to keep your wife at my bungalow.

Illocutionary Function	: Convivial.
Politeness Principle	: Generosity maxim.

Example No. 3.

mahārāj	:	kaun ā rahā hai.
Maharaj	:	who coming is.
Maharaj	:	Who is coming?
naukar	:	ḍākṭar manoharlāl sāhab hai sarkar
Servant	:	Doctor Manoharlal saheb is sir
Servant	:	It is Doctor Manoharlal saheb, sir.
mahārāj	:	narsa! maiṁ apne bacce ko abhī -abhī dekhnā
Maharaj	:	Nurse! I my child to just now see cāhūṁgā. like would/determined
Maharaj	:	Nurse! I would like/determined to see my child, just now.

(cakkardār sīḍhiyāṁ aur andherā)

Semantico-Pragmatic Parameters:

Meaning   : Wish

I wish to see my child at the very moment.

Illocutionary Act   : Commissive.

Illocutionary Function   : Convivial.

Politeness Principle   : Tact maxim.

Example No. 4.

ḍākṭar bansal   :   jāo. sab jāo. helen…. kishorī sab jāo.
                      tum sab

Dr.Bansal   :   Go . all go. Helen Kishori all go .
                    you all

                    mere dushman ho. maiṁne…maiṁne tum
                    meṁ se kisī ko kabhi bhī pyār
                    my foes are. I I you anyone of loved
                    nahīṁ kiyā maiṁ sabse naphrat kartā hūṁ.
                    sabko mār dālūṁgā.
                    never have I all of you hate do am. You all
                    kill would.

Doctor Bansal :   Go, all go away. Helen…… Kishori – all
                    go away. You are all my foes. I, I have
                    never loved any one of you. I hate all of
                    you. I would kill you all.
                    (cakkardār sīḍhiyāṁ aur andherā)

Semantico-Pragmatic Parameters:

Meaning   : Threat.

Illocutionary Act   : Commissive.

I threaten to kill you all if you don't go away.

Illocutionary Function : Conflictive.

Politeness Principle   : Impolite. Violates politeness maxims.

Example No. 5.

ilāhī   :   taṭṭū vaṭṭū cāhiye to bolo.

Ilahi   :   mule need then tell.

yātrī   :   nahīṁ maiṁ paidal hī jāūṁgā.
Passenger   :   no, I walk down go would.
                   Ilahi, Tell me if you need a mule.
Passenger   :   No, I would walk down on foot.
                   (buddhū kā kāṁṭā)

Semantico-Pragmatic Parameters:
Meaning   : Determination.
Illocutionary Act   : Commissive.
I am determined to walk down on foot.
Illocutionary Function : Collaborative.
Politeness Principle   : Impolite, violates politeness maxims.

Example No. 6.
raghunāth   :   dārsūri   jānā   hai   jī . maiṁ
                    pahle   kabhī
Raghunath   :   Darsoori go is . I before
                    idhar āyā nahīṁ. kitnī dūr hai? kab tak
                    pahuṁc jāūṁgā?
                    here come never. How far is when reach
                    shall.
Raghunath   :   I want to go to Darsoory. I have never been
                    there before. How far is it? When shall I
                    reach there?
kanyā   :   yahī pandrah-bīs din meṁ tīn-cār sau
Girl   :   about fifteen-twenty days three-four hundred
                    kos to hogā
                    miles must.
Girl   :   In about fifteen to twenty days' time. It must
                    be at a distance of three to four miles.
pahlī istrī   :   chih, yahī do ḍhaī kos bhar hai.
First woman   :   it two two and half miles is
                    abhī ghaṇṭe bhar meṁ pahuṁc jāoge.
                    an hour 's in reach would.

First woman   :   No it is about two to two and a half miles
                        away. You shall reach
                        there in an hour's time.
(buddhū kā kāṁṭā)

Semantico-Pragmatic Parameters:
Meaning   : Prediction.
Illocutionary Act   : Assertive.
I predict that you shall reach within an hour. Illocutionary
Function   : Collaborative.
Politeness Principle   : Apathetic towards politeness.

3.2   Findings
The semantico-pragmatic analysis of the modal auxiliary 'ga:'
used in the six examples extracted from contemporary Hindi

plays shows that modals in Hindi are not only used to express
different semantic categories but are also used to perform
multiple speech-acts and functions in accordance with the
politeness strategies employed by the addressers. The analysis
of the selected examples shows that 'ga:' in Hindi is used by
the speakers to express different semantic options like
assurance, promise, wish, threat, determination and prediction.
These notional categories are used in different socio-cultural
situations to perform assertive and commissive speech acts and
to perform convivial, conflictive and collaborative speech
functions in accordance with the politeness strategies used by
the speakers. In examples No. (1), (2), (3), (4) and (5) when
'ga:' is used to express the semantic notion of 'assurance',
'promise', 'threat' and 'determination', it performs
commissive act as the speaker commits himself to perform the
action described in the propositional content. In examples No.
(1), (2) and (3) where illocutionary goal coincides with the
social goal due to speaker's commitment to help the hearer, the
illocutionary function is convivial but in example number (4)
where the speaker commits to harm(threaten) the hearer, the

illocutionary function is conflictive as the illocutionary goal is against the social goal. In example number (6) where 'ga:' semantically expresses prediction, it performs assertive act and the illocutionary function is collaborative as the utterance is neutral towards politeness. Thus the use of 'ga:' in Hindi is governed by different semantico-pragmatic factors as a result it performs different speech acts and functions in accordance with the degree of politeness used by the speakers. The study shows that the degree of politeness determines the functions of modals in Hindi.

IV. SUMMARY AND CONCLUSION
To sum up we can say that the aim of the present study has been achieved as we have been able to explore the sociological and pragmatic aspects of 'ga:' as a modal auxiliary in Hindi.

The semantico-pragmatic parameters chosen by us worked well on the selected samples analyzed by us. The framework chosen by us helped us in resolving ambiguities in the use of 'ga:' as a modal auxiliary and in understanding the real intent of the utterance. The samples used in the study provide us clues regarding the background knowledge and the context of the utterance. The paper successfully analyzes the utterances by relating the semantic categories represented by 'ga:' as a modal verb in Hindi to the different speech acts and speech functions performed by them and relates them to the use of politeness maxims by the speakers.

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Department Notes

Dr. K. Ramesh Kumar has taken over the responsibilities of Head of the Department from 16th June, 2011.

Mr. Mohammad Ansari assumed the responsibilities of the Chairperson, Board of Studies in Linguistics form 09th August, 2011.

Prof. D. Vasata

2012   Vasanta, D. Telugu translation of the book, Bhimaayana: Experiences of untouchability by Navayana Publishing, New Delhi. Telugu version published by the Hyderabad Book Trust.

2012   Vasanta, D. and Viswanatha Naidu, Y. 2012. Cutting and Breaking events in Telugu. Proceedings of an international conference in cognitive linguistics brought out by the World Academy of sciences, engineering and technology 72, 428-435.

2012.   Vasanta, D. 2012. Linguistic awareness and hearing impairment in Telugu children (monograph based on Research Award Project funded by the UGC). E-book. Germany: Lambert Academic Publishers.

Post-doctoral research project (completed)

2009 -2012
D. Vasanta has been selected by the Department of Science and Technology (DST), Govt. of India as one of the 26 investigators representing 16 major institutions around India to work on an interdisciplinary research initiative on "Language and brain organization in normative multilinguals in India" as part of the 11th Plan Initiative in Cognitive Science. She has worked with a neurologist from Nizam's Institute for Medical Sciences and a professor of Computer Science from the

Hyderabad Central University on a project related to spatial semantic knowledge and use among Telugu-Hindi/Urdu-English speakers, both normal and neurologically impaired. The project was initiated in July 2009 and concluded on Dec. 31, 2012. Including the salary of a JRF who worked with her, an amount of Rs. 13.5 lakhs has been allotted for this project. The project expenditure has been audited and final technical report has been submitted to the DST.