

ISSN 0970-0277

**OSMANIA PAPERS
IN
LINGUISTICS**

Volume 38

2012

Editor

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HYDERABAD 500 007
INDIA**

OSMANIA PAPERS IN LINGUISTICS

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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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Articles for publication, review copies, and communications relating to editorial matters should be sent to the Editor, OPiL, Department of Linguistics, Osmania University, Hyderabad 500 007, India.

ISSN 0970-0277

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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 Bhuvaneshwar (written in 2002 for *The EProverbiallinguist* but published in print now) whose work on proverbology 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 proverbology; 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 proverbologists 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 Bhuvaneshwar 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 Bhuvanewar 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 Bhuvaneshwar

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 Bhuvaneshwar: 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) *tadd^harma:rd^haka:lu* (declaratives); c) *vidjadard^haka:lu* (imperative) d) *nife:da:rd^hka:lu* (inhibitives); and e) *vjaṭire:ka:rd^hka:lu* (negatives). Again, they are also divided into five different classes according to their syntactic structure: a) *praṇa:rd^hka:lu* (interrogatives); b) *e:va:rdhaka:lu* (emphatic sentences); c) *a:ṭfarja:rd^haka:lu* (exclamations); d) *sambo:d^hana:rd^haka:lu* (vocatives); e) *sande:ha:rd^haka:lu* (propositions expressing doubt); and f) *pra:rd^hana:rd^haka: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 (*b^hu: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 *vja:karaṇa:mṇa: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:viɕe: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 (Bhuvaneshwar 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) naḍiṭṣe: ḍari lo: gaḍḍi molavaḍu.
 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, ḍu is a negative verbal suffix for the singular neuter, uncountable noun gaḍḍi (grass) with a zero honorific and moluṭṣu ‘grow’ is the verb occurring in the sentence final position with a singular, neuter, suffix avaḍu ‘does not happen’ attached to it. There is no article before gaḍḍi since it is an uncountable noun as in English and since no articles are used in Telugu.

- (205) eḍruḡa: unnavarḍe: pelli koḍuku (avuṭṭaḍu).
 opposite as be person him bride groom is

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 → Was there anyone around?]

- (208a) parigeṭṭi pa:lu ṭa:ge: 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: ve:ḥam ve: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 poṅgara:du, le:miki
 wealth to jubilate not poverty to
 kuṅga ra:du (manam /okaḍu).

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

- (211) kaRRaku peṭṭina: goRReku peṭṭina: tṣeḍaḍu.
 stick to putting sheep to putting spoils not
 ‘Investing on stick (and) investing on sheep does not go waste.’

- (212) eṭṭi iṭṭaku laṅka meṭṭaku saripoḥjindī.
 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) maṇḍuki paṃpiṭe: ma:sika:niki
 medicine to sending death ceremony to
 vaṣṭa:ḍu (paṃpincabaḍṇava:ḍu).
 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:va:diki
 gruel drinking man to
 mi:sa:leṭṭe: va: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) eṅṭa tṣeṭṭuki aṅṭa ga:li (uṅḍunu).
 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) *vigh^hne:svarud̥i mi:ḍa b^hak̥ṭa:?*
 Vighneswara on devotion?
und̥ra:l̥la mi:ḍa b^hak̥ṭa?
 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 mallavuṭṭunda: ?*
 Onion jasmine become will (q.m.) ?
unt̥jukunnadi pel̥la:mavuṭṭunda: ?
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 *la:ga*, *vale*, *ga* (like); *ṭa* (that); etc. and words such as *an̥ṭe*, *ani* (saying); and phrases such as *annattu*, *t̥seppinattu* (saying like), *ani an̥ṭe*: (saying that); etc. are much more frequently embedded in the proverbs than in English :

- (218) *pojji u:ḍamante: kunda baddalu kott̥e: ḍata.*
 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 vanamlo: gandza:ji mokka la:ga:
 basel garden in opium plant like
 'Like an opium plant in a basel garden.'

- (220) ni: tṣevalaku ra:gi po:gule: anṭe: ,
 your ears to copper ear rings only saying
 aui: ni:ku le:ve: 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 tṣu:ṣṭiva: anṭe:,
 daughter (acc) have seen q.m.(you) saying
 tṣu:ṣṭi ṣukravaramani. ka:valintṣukonṭi,
 have seen (V) friday that (it is) embraced (I)(have)
 ma:ṭala:ḍuḍa: manṭe maratṣi po:ṭini
 speak will saying that forgot
 annaḍaṭa.
 I said that
 'When (one) said, "Naughty 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) aḷḷo: aṅṅe: a:ru nelalu pa:pam vaṣṭuṅḍi.
 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) miṅga meṅṅuku le:ḍu (ga:ni)
 to swallow morsel not(there) (but)
 mi:sa:laku sampāṅgi nu:neṅa.
 moustache to sandalwood oil that
 ‘(I understand) that there is no morsel to swallow
 but (the man wants) sandalwood oil to (his)
 moustache.’

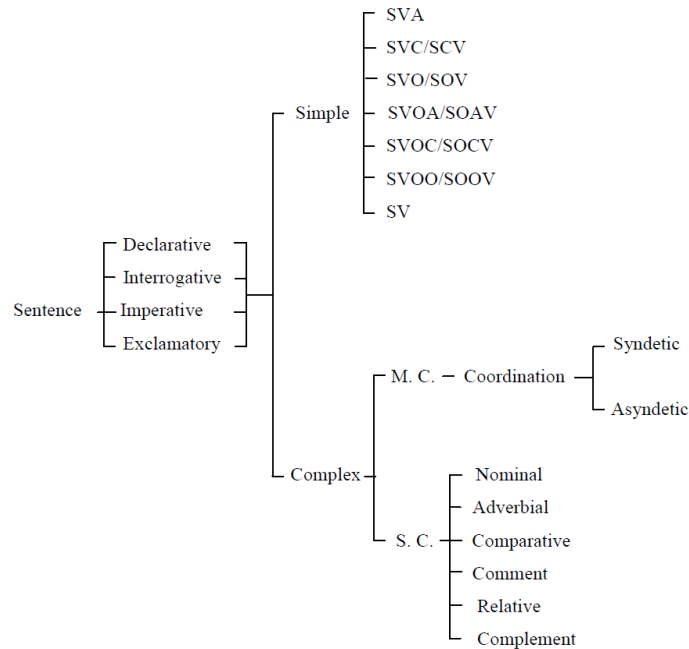
[This is a statement without a wh-element forming an exclamation due to the surprise element in the proposition.]

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:



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:ʃi ɖaggarama:ʃalu ku:ʃi ɖaggara unɖavu.
 burial ground near words food near be not
 ‘Near-the-burial-ground words (S) will not be (there)
 (V) near food (A).’
- (225) anɖani ɖra:kʃa paɖɖu pullana (avunu).
 unreachable grape fruits sour (are)
 ‘Unreachable grapes (S) ((are)V) sour (Complement
 –Adjective).’
- (226) ʃana ko:pame ʃana ɕatruvu (avuʃundi).
 one’s anger only(S) one’s enemy (is)
 ‘One’s anger only (S) ((is) V) one’s enemy
 (Complement – Noun).’
- (227) kotta bitʃʃa ga:ɖu poɖɖeragaɖu.
 new Beggar day(time) knows not.
 ‘A new beggar (S) does not know (V) the day (time)
 (O).’
- (228) ma:ʃala tʃe:ʃa mahankaʃini navvintʃavatʃʃu.(evaraina:).
 words with Mahankali laugh make can (anyone)
 (acc.).
 ‘(Anyone(S)) can make (V) Mahakali (O) laugh (V) with
 words (A).’
- (229) go:ʃi:pa:ʃaga:ɖu ɖisamolava:ɖi baʃʃa aɖiɖinaʃlu.
 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) ittaḍini puttāḍi tʃe:jale:mu (manamu).
brass acc. gold (complement) do cannot we
‘((We) (S)) cannot make (V) brass (O) gold (C).’

(231) ninḍu kuṇḍa 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 tʃa:vuku pilli mu:rc^ha po:ṭuṇḍa: ?
|-----▲

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 vatʃtʃina gurra:lu agadṭalu ḍa:ṭuṭava: ?
|-----▲

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

- (234) (nuvvu) anṭarve:ḍi ṭirt^hamlo: ma:
 (you) Antharvedi Mayfair in my
 ved^hava me:nattani ṭṣu:ṭṣa:va: ?
 widow aunt acc. see did q.m.
 ‘Did ((you) (S)) see (V) my widowed aunt in the
 Antharvedi Mayfair?’
 └──────────────────┘
- (235) a: ṭandri koḍuku ka:ḍa: ?
 that father son is not q.m.
 ‘Is not (V) that father (S) a son (C)
- (236) a:vu nalupaite: pa:lu nalupa:?
 cow black being milk black q.m.
 ‘Cow being black (A), will milk (S) be (V) black (C –
 noun)?’ └──────────────────┘
- (237) gu:nu vi:pu kuḍuru avutunḍa: ?
 hunch Back steady become q.m.
 ‘Does a hunchback (S) become (V) steady (c-Adj)
- (238) ṭa:ṭa:ku ṭṣappuḷḷaku kuṇḍe:ḷḷu beḍuruna: ?
 palm leaf to sounds to rabbits frighten i.m.
 ‘Do rabbits (S) fear (V) for palm-leaf rattling (A)?’
 └──────────────────┘
- (239) arupula godḍu piṭukuna: ?
 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 *a:* to the verb at the end of the declarative sentence:

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) hanumaṅṅuni muṅḍara(:) kuppi gaṅṅuḷ(a:/u)
Hanumantha before q.m small jumps q.m

The interrogative marker / a: / can be suffixed either to the postposition muṅḍara or to the noun gaṅṅulu .

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) itṭaḍḍini puṭṭaḍḍi(ni) tṣejjale:ma:?
'can't (we) make brass gold ?'

just by the addition of the interrogative suffix / a: / 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 ra:du 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, e: , and o: are commonly used in the formation of imperatives in addition to valenu (vale) and ra:du .

A few examples are given below.

/ ra:ḍu /:

(244) agni e:ṣam, ruṅa e:ṣam, eṭṭru e:ṣam vuntṣara:ḍu.
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 e: koppajina: peʈʈuko:vatʃʃu.

/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, vatʃʃu indicates possibility according to the context.]

(245) dʒuʈʈunnamma e: koppajina: peʈʈuko:vatʃʃu.

/u/: hair havingany hairdo at least put can
woman

‘A woman with hair can put on a hairdo in any way.’

valenu → va:li → a:li ¹

abaɖɖ^ha:la noʈʈiki aravi:se sunnam ka: va:li

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) na:luka: na:luka: na: vi:puku ɖɛbbalu ʃe: k e:

/e:/ : tongue tongue ! my back to slaps bring not h.s.,i.m.

‘Tongue! Tongue! Do not bring slaps to my back!’

(248) /i / < /a:li /

e: ro:ʈi ɖaggara a: pa:ʈa pa:ɖa:li

which mortar near that song sing

‘Near the mortar (of which kind it is), sing such kind of a song’

[e: a: 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) tʃa:daʃtam moguɖa: ni tʃa:reɖu
 /o:/ fastidious husband your palmful
 ve:re: vanduko: annaɖu.
 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 ga:ni* (permission), *ga:ka*, *a:li* (command, prayer, wish, curse, duty), *ɖi*, *ɖa:mu*, *a*, *ga:nu* and *i:* 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 *enɖa* (how much), *e:mi* (what), *e:* [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 (*ajjo:*, *akkaɖa: kaɖakaɖa:*); pain (*amma:*, *abba:*), fear (*ammo:*), surprise (*are*, *aha:*, *aura:*, *oho:*, *ai*, *abba:*), praise (*seb^ha:ʃ*, *b^ha:ʃi:*, *b^he:ʃu*, *b^hale:*, *va:hva:*, *ba:gu ba:gu*, *me:lu*

me:lu, abba:), joy (aha:, ha:j), disgust (tʃʰi:, abbe:), anger (e:miʃi:, 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: anʃe: e:makka: annaḍata.
 tchi:! dog when what sister! said that
 (interjection) said
 ‘(In understand that) when said, “tchi:! dog!”,
 she said, “what sister!”’

(251) tʃʰi: tʃʰi: ane:ḍi: i: no:re:
 tchi:! tchi: (the one) saying this mouth only
 çiva çiva: ane:ḍi: 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) aʃjo: anʃe: a:ru nelala pa:pam vaṣṭunḍi.
 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) va:ḍu enʃa navva:ḍu!
 he howmuch laughed h.s.
 ‘How much (Pronoun) he laughed!’

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

(258a) miṅṅanu meṭuku le:ḍu,
 swallow to Morsel not is
 mi:sa:laku sampangi nu:ne (a)ṭa !
 moustache to sampangi oil that.

‘(I understand) that morsel is not (there) to eat but sampangi 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)

miṅṅa meṭuku le:ḍu, mi:sa:la miḍiki sampangi nu:ne .

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) inṭi ḍi:pamani
house light (wick lamp)that
muḍḍu peṭṭukunṭe:,
kiss putting,
mi:salanni: ṭega ka:linavaṭa.
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 peṭṭukunenu ‘put’ into an adverbial phrase with a verb of incomplete predication peṭṭukunṭe: ‘putting’ as follows:

- (259b) (va:ɖu) inʃi ɖi:pamani
 He House light that (it is)
 muɖɖu [petʃukonenu > petʃukonʃe:]
 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) inʃi ɖi:pamani muɖɖu petʃukonuʃa
 house light that kiss putting NPP
 ‘Putting a kiss that /because it is a house light.’
 (Nominal Participial Phrase (NPP))

- (261a) muɖɖu petʃukonunna inʃi ɖi:pamu
 kiss putting having (APP) house light
 ‘The kissed house light’
 (Adjectival Participial Phrase (APP))

- (261b) inʃi ɖi:pamani muɖɖu petʃukonna va:ɖu
 house light acc.m. kiss put having he
 ‘He kissing the house light’

- (261c) inʃi ɖi:pamani va:ɖu petʃukonna muɖɖu
 house light that he put being kiss
 ‘The kiss having been put by him because (it(is)) a house light’

- (261d) (va:ɖu) inʃi ɖi:pamani muɖɖu petʃukonna va:ɖa
 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) mu:lige: nakka mi:ḍa ṭa:ṭi paṇḍu paḍḍaṭṭu
groaning fox on palm fruit falling like.
'Like a palm fruit falling on (pp) a groaning fox (pp.)'
- (262b) tṣe:ṭulu ka:lina ṭarava:ṭa a:kulu paṭṭukonnaṭṭu
hands burning After leaves holding like
'Like holding leaves after burning hands.'
- (263) i:ṭa vatṣṭinappuḍu lo:ṭu anipintṣuna: ?
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 niru 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 a:, te:, i, ajina:, aka, etc. are used to change the verb into a participle :

- (265) vṛaṭam tṣeḍḍa: p^halam 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) itʃtʃe: godḍune: piṭkeḍi.
giving animal only milking p.m. (godḍu cow/buffalo')
'Only an animal that gives milk is milked.'
- (267) itʃtʃe: va:ḍini tʃu:ṣte:
giving(p.m.) man (ac.m.) seeing (p.m.)
tʃatʃtʃe: va:ḍaina le:ṣṭa:ḍu.
dying man even gets up.
'Seeing a giving man even a dying man gets up.'
- (268) ka:çi:ki po:ji kukka pillanu tʃetʃtʃinaṭʃu.
Kasi to going dog kid bringing like p.m. acc.
'Like going to Kasi (and) bringing a puppy.'
- (269) kukkanu gurram vale sa:ki,
dog ac.m. horse like grooming
ḍoṅga vaṣte: redḍe: morigin:ḍaṅṭa.
thief coming Reddy himself barked that
(I understand) that grooming the dog like a horse, the
thief coming, Reddy himself barked.'
- (270) tʃuttu ajina: suḷuvu ḍari me:lu.
round about being even easy path better
Even (if it is) being round about, the easy path (is)
better.
- (271) eṅṭa mantʃi paṅḍi ajina:
how much good pig being even
ame:ḍ^hjam ṭinaka ma:naḍu.
excrement eat without stop not

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

- (272) unna ma:ʃa anʃe: ulukekkuva (avunu).
being word saying intemperance more becomes
'By saying the fact, the intemperance becomes more.'
- (273) ʃina ne:rcina amma petʃa neruʃtuᅇᅇi.
eating learning woman giving learn will.
'A woman having learnt eating, will learn giving.' Or
'A woman who learns eating will learn giving.'
- (274) ʃe:lo: puʃʃina mokka ʃe:lo: ʃʃaʃʃinaʃʃu
farm in being born plant farm in dying like
'Like the plant born in a farm dying in the farm.'
- (275) aʃʃa ʃe:sina paniki araʃʃu le:vu.
mother-in-law having done work to queries not are
'There are no queries to the work done by the mother-in-law.'
- (276) ʃeʃʃu le:ni ʃʃoʃa
tree not being place
a:mudapu ʃeʃʃe: maha: uruʃʃam.
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) peruʃʃa viruʃʃa ko:ake: (avunu)
growing n.p. breaking n.p for only is
'Growing is for breaking only.'

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

- (277) meḍa ṭaḍavaḍam pu:sala korake: (avunu)
 neck searching beads for only is
 'Neck-searching (Searching the neck) is for beads only!'
- (278) maḍja pa:nam tʃe:janu maḍjiguḍḍa ka:valena: ?
 alcohol drink doing n.p. sacred cloth need saying ?
 'For drinking alcohol, is a sacred cloth needed ?'
- (279) baṭaka le:ka baḍipaṅṅulu (avaḍam avunu)
 living not school teacher (becoming is)
 'Because of not (inability for) living, (one is becoming) a school teacher.'
- (280) tʃe:paḍa:niki tʃe:ṭa pejja tʃa:lunu .
 milking n.m. to cane sifter calf enough is
 'For milking, a cane calf is enough.'

There is an alternative version with tʃerapaḍa:ni ki 'to spoil'. Then the proverb means: 'To spoil, a cane calf is enough.' [tʃe:ṭa 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), o: (also), le:ka (or), kanuka (so), anḍuvalla (therefore), ajina:(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) aṣvame:t^ha ja:gam tʃe:javatʃtʃu gani
 asvametha Sacrifice do can but
 a:ḍapilla pe||i tʃejjale:mu.
 female child Marriage do cannot
 ‘asvametha sacrifice can be done but a girl’s marriage cannot be done.’
- (282) i: u:rika: vu:reṅṅa ḍu:ramo: a:
 this town to town how much distance c.c. that

 u:riki i: u:ru: aṅṅe: 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) andḍite: dʒuṭṭu le:kapo:ṅṅe: ka:l|u (paṭṭukonṅa:ḍu).
 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 uḍakale:ḍani kuṅḍaṭṭuku koṭṭe:ḍaṅṅa
 food cooked not that c.c. pot catching hit (V) that
 ‘He hit the pot since the food did not cook.’
- (285) tʃeppulu unna va:ḍito:nu appulu
 sandals having man with c.c. debts
 unna va:ḍito:nu po:ra:ḍu.
 having man with c.c. should not go.
 ‘Do not go with a man with sandals (and) a man with debts.’

- (286) d^hi:lli: ki radzuajina: t_lalliki koḍuke: (avunu).
 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 *mariju* ‘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) avva: ka:va:li, (mariju) buuva ka:va:li.
 mother wanted, (and) food wanted
 ‘(I) want mother, (I) want food.’

- (288) amma kaḍupu t_lu:stunḍi (ka:ni),
 mother belly see will (but)
 a:lu vi:pu t_lu:stunḍi.
 wife back see will
 ‘Mother sees the belly (but) wife sees the back.’

The contrasting coordinating conjunction *ka:ni* (but) is highly productive while conjunctions expressing cause such as *eṇḍu t_leṭa* (why with) *eṇḍuvalana*, and *eṇḍukante:* (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) nakkekkada ? na:galo:kamekkada ?
 Fox where Nagalokam where
 ‘Where is the fox ? (and) where is Nagalokam (the world of serpents) ?’

They are occasionally found in imperatives:

- (290) pel_li t_le:si t_lu:ḍu, illu katti t_lu:ḍu.

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) tʃitt̪eḍu nu:ne tetʃtʃi, tʃinnit̪lo:
 small (amount) Oil bringing, small house in
 ḍi:pam, pedḍint̪lo: ḍi:pam vattiki,
 light, big house in light wick to
 vaḍina nett̪iki, mangalivadi katt̪iki
 sister-in-law head to barber's knife to
 ma: ba:va dʒutt̪uki (pet̪a:li).
 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) ma:tʃakamma samar̪ta (ki) mak^haj̪ite:ne:mi ?
 Machakamma puberty (to) Makha being what if
 (on),
 pubbaj̪ite:ne:mi? mari punarvasaite: ne:mi ?
 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) gi:si gidḍed̪iṣ̪te: (t̪etʃtʃi)

scraping giddedu giving bringing

atʃʃi kantʃi, butʃʃiki , pulimi
Achchi anointing to Buchchi to coating
ama:va:sja bra:hmadʃkatte:
no-moon Brahmin to like
that

na:katte: ni:katte: anḍiṭa
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’ ”. (giddedu = approximately
1/8th 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*, *anṭu:*, *annaḍi* (different forms of the root *anu* ‘say’) and the suffix *o:* (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* *tṣalla* *pullaḍani*

his buttermilk cold that

ṭane: *tṣeppukunṭa: ḍa: ?*

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) *pilitṣi* *pillaniṣṭam (u)* *anṭe:*
calling girl will give (me) saying

kulam *ṭakkauvanna:ḍaṭa*

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 ‘ante:’ as a participle while the main clause contains another reporting verb in the past with a suffix ‘aʃa’ (that) which means ‘ I understand/heard that’. The subordinator ‘ani’ is ellipted in both the clauses.

- (296) e: puʃʃalo: e:
 which anthill in which
 pa:munḍo: evariki ʃelusu
 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 ‘o:’ 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 kaḍupunoppo: va:nik(i)e: maḍu.
 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) naru po:sina va:ḍu neru
 paddy seedlings putting man water
 po:jaka ma:naḍu.
 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) evaḍu na:ru po:ṣṭa:ḍo:
 who paddy seedlings puts adj.c.m
 vaḍu ni:ru po:jaka ma:naḍu.
 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) e: gu:ṭi ṭṣilaka
 which nest Parrot
 a: gu:ṭi paluku palukuṭuṇḍi.
 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) e: gu:ṭilo: e: ṭṣilaka
 which nest in which parrot
 unṭuṇḍo: a: ṭṣilaka
 stays adj.c.m that parrot
 a: gu:ṭi paluku palukuṭuṇḍi.
 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:*, *ante:*, and *ka:batti* 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	tʃaʃta:d (u)	anaga:
six	months to	die will	such that (adv.c.m.)
asalu	gunṇam	ma:ruṭundi.	
real	character	change will.	

‘[when a man is about to die within six months] (his) real character 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)
vanduku	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	ṭeṭʃuko:va:lante:	appu	ijjamanna:ru
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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 sampadḍ[(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 mettḍaga: 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 motṣe: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
bandaṭṣa: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:kar kala ka:lamunṭa:n (u)anna
 crow being forever will be I matter said
 ḍa:ni kanṭe: hamsai
 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:/unna: tṣa: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) *atta: !* *ni: konḡu* *ṭoligindanna:*
 Mother-in-law your saree edge slipped saying
ṭappe, *leḡanna:* *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* *bidḡa* *puṭṭindi,* *gaḡḡapa:ra*

pleasant surprise baby born is cudgel
 t̥e:ra: t̥evulu kuḍṭānu anna:ḍata.
 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) at̥t̥fiḡa:ḍu t̥ʃa:vani: an̥t̥e: bu:t̥t̥fiḡa:ḍe: t̥ʃat̥t̥ʃeṇaṭa
 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 ni:ku telijaḍa: ? ‘Don’t you know?’, nidzamga: t̥ʃeppa:lant̥e: ‘speaking truthfully’ in Telugu.

c. Monoturn Exchange with a Comment (Participle Phrase)

(315) a:ḍale:namma maḍḍela [o:ḍannaḍi → oḍannaḍa 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 [aṭuḷa > aṭlu 'like'] to the participle form of annaḍi 'said she' which is anna 'saying'. This type of a process is very productive in Telugu, though the former structure is also frequent.

d. Ditur Exchange

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

anṭe: ala:ga: paḍuko:biḍḍa
if said Is it so, sleep child !

u:ṭaga: neppulettukunṭe: u:rella: ni:ve:
well pains starting town all the you

le:puṭa:vu andāṭa
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:ḍaḍa: bra:hmaḍa: anṭe: a:paḍalu
Ekadasi is it O Brahmin saying dangers
ka:pura:lu tṣe:ṣṭa:ja: anna:ḍaṭa.
family do will they said that

“Saying, ‘Is it Ekadasi, O Brahmin?’, ‘Will dangers live long?’ he said.

- (318) e:me: va:ɖi ɖaggara paɖɖu konnavante:
 what? him near sleep did saying
 aɳta peɖɖa maniʃi tʃe:ʃi paɳtu kunte:
 that much big man hand holding
 ka:ɖane:ɖeɳla: annaɖaɳa.
 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 ‘annaɳtu, annaɳlu’ (like saying):

- (319) e:mi tʃe:stunna:vura: aɳte:
 what doing are you h.m saying
 olakapo:si eɳtukunɳunna:nu annaɳlu.
 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:ḍaḍi na:ḍu ṭala anṭukunṭa:ve:mi
 Ekadasi day on head anointing what
 anṭe:, aḍi niṭjavraṭamu,
 saying That daily vratham,
 ne:ḍe: a:ramb^hiṅṭṣa:nu anna:ḍaṭa
 today only started I said that
 marna:ḍu, ṭala enḍuku
 the next day, head why
 anṭuko:le:ḍanṭe: ninaṭṭo: uraṭam
 anointed not saying yesterday with vratham
 parisama:pṭi ajinḍ(i) anna:ḍata
 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 va:ḍu pakki anṭe:,
 catching Man pakki saying,
 gaṭṭununna va:ḍu ḍzella annaṭṭu.
 shore on staying man ḍzella saying like

“Like the man on the bank saying dzella when the catcher (of the fish) said pakki.

[dzella and pakki are two types of small fish]

- (322) pattina va:du pariga pilla ante:,
 catching man priga girl saying
 patṭani va:du mattapilla anna:ḍaṭa.
 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) appa: pappu vandave:,
 sister ! grams cook
 tṣeḍe:va:du ba:va unna:ḍukaḍa:
 spoiling man brother-in-law is there !
 ‘Sister ! cook grams, brother-in-law, bearing loss, is there indeed!’

- (324) ṭippula:dj: ṭippula:dj: ma:
 extravagant girl, extravagant girl, my
 avvanu tṣu:tṣina:va: ante:
 mother seen have you saying
 ṭi:rt^hamlo: ma: ba:vanu

Mayfair in my brother -in-law

tʃu:tʃina:va: 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 na:giredḍi: anṭe:

justice speak Nagireddy saying

na:ku idḍaru pe||a:le anna:ḍata.

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.

REFERENCES

Abrahams, Roger D. (1972). "Proverbs and Proverbial Expressions". *Folklore and Folk life An Introduction*. Ed. By Richard M. Dorson. Chicago: University of Chicago Press, 117-127.

Avadhani, D(ivakarla) V(enkata), Reddi, Y(asoda), P. and Reddi, M(arupuri) K(odandarama). (1974). *Telugu Samethalu*. Hyderabad: A. P. Sahithya Academy.

Bhuvanewar, C(hilukuri). (1998). "A Bibliographical Review of Telugu Proverb Literature from 1868 – 1998". A Paper (Unevaluated Assignment) for Ph. D. Course Work. Hyderabad: CIEFL.

_____ (2001a). "A Bibliographical Review of Telugu Proverb Literature I: Collections 1 (Whole Books) – (1868 to 2000). A Part of Bhuvanewar, C. (1998) as e-published in *Proverbiinguists @ yahoo groups.com* (2003).

_____ (2001b). "A Bibliographical Review of Telugu Proverb Literature I: Collections 2 (Whole Books) – (1868 to 2000). A Part of Bhuvanewar, C. (1998) as e-published in *Proverbiinguists @ yahoo groups.com* (2003).

_____ (2001c). "A Bibliographical Review of Telugu Proverb Literature II: Proverb Studies 1 (Dissertations and Books) – (1868 to 2000). A Part of Bhuvanewar, C. (1998).

_____ (2001d). "A Bibliographical Review of Telugu Proverb Literature II: Proverb Studies 1 (Dissertations and Books) – (1868 to 2000). A Part of Bhuvaneshwar, C. (1998).

Carr, M. W. (1998). *Andhra Lokokthi Chandrika*. The First AES Reprint of 1868 Edition. New Delhi: Asian Educational Services.

Dundes, Alan (1987). "On the Structure of the Proverb". Also in No. 25 (1975), 961-1008. *Proverbium (1965)-15 (1970)*. Ed by Wolfgang Mieder. New York: Peter Lang. 961-974.

Gangadharam, N(edunuri). (1960). *Pasidi Palukulu*. Madras: Jaatheeya Jnaana Mandiram.

Kimmerle, Marjorie M. (1947). "A Method of Collecting and Classifying Folk sayings". *Western Folklore* 6. 351-366.

Milner, George B. (1987). "Quadripartite Structures". Also in No. 14 (1969), 369-416. *Proverbium I (1965) – 15 (1970)*. Ed. by Wolfgang Mieder. New York: Peter Lang. 379-384.

Quirk, Randolph and Greenbaum, Sydney (1989). *A University Grammar of English*. Harlow: Longman.

Rao, B(ondugulapati) D(amoder). (1986). *Telugu Jaanapadula Saamethalu*. Post Gudem: Published by the Author.

_____ (1995). *Telugu Jaanapada Sanskruthi*. Karim Nagar: Published by the Author.

Reddi, P (aapireddi) N(arasimha). (1983). *Telugu Saamethalu Jana Jeevanam*. Thirupathi: Srinivasa Murali Publications.

Venkateswarlu, V(ajjhala). (1982). *Aadhunika – Praamaanikaandhra Vyakaranamu*. Visakhapatnam: Published by the Author.

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 /d/ 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.

Keywords: Gedeo, segmental phonology, minimal pair, phonemic inventory, morphophonemic process

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 /d̥/ and the four ejectives /pʰ/, /tʰ/, /kʰ/, /cʰ/. 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 Phonemesⁱ

	Bilabial	Labio-dental	Alveolar	Palatal	Velar	Glottal
Stop Plosive Ejective Implosive	b pʰ		t d tʰ d̥		k g kʰ	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: *mazmu:re* 'song', *barza:fe* 'Eucalyptus tree', *zo:ne* 'zone', *zannat'i* 'play/dance (Imp)', *zakk'e* 'belt', *zi:tta* 'lorry, huge person', and *zerk'o* '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; *zakk'e* 'belt' and *zi:tta* '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 /p'/, /t'/, /k'/, and /c'/ but lacks /s'/ which is prevalent in some other Ethiopian languages as in, for example, *s'elot* 'prayer' and *s'om* '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'a/ 'to fail'	/goda/ 'valley, lowland'
/ʔ/ vs /j/ /reʔe/ 'goat'	/reje/ 'he died'
/b/ vs /g/ /bana/ 'to open'	/gana/ 'to hit'
/f/ vs /r/ /ga:fa/ 'horn (of animal)'	/ga:ra/ 'eyelash, eyebrow'
/t'/ vs /l/ /t'at'a/ 'to rap'	/t'ala/ 'to slip, to skid'
/z/ vs /ʎ/ /zakk'e/ 'belt'	/lakk'e/ 'she inquired'
/t/ vs /s/ /taffe/ 'flea'	/saffe/ 'she began'
/h/ vs /c'/ /hora/ 'to bread'	/c'ora/ 'small bag made of goat's testicle'
/d/ vs /m/ /dara/ 'lie'	/mara/ 'to go'
/ʃ/ vs /g/ /gata/ 'to remain'	/ʃata/ '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) <i>Non-geminated</i>	<i>Geminated</i>
/t'ala/ 'to slide'	/t'alla/ 'shame'

/ga:do/	'Let me lie in wait for'	/ga:ddo/	'scorpion'
/ga:be/	'a type of cotton cloth'	/ga:bbe/	'he wished'
/gadda/	'Gada system' ⁱⁱ	/gadda/	'a praise of the dead after the funeral'
/ela/	'good'	/ella/	'name of a month approx. May'
/odo/	'news'	/oddo/	'center'
/ana/	'to clear'	/anna/	'father'
/woda/	'to save'	/wodda/	'to fry'
/mut'a/	'to taste'	/mutt'a/	'quality'
/adda/	'to gore'	/adda/	'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/, /a/, /u/, /o/ with the long counterparts /i:/, /e:/, /a:/, /u:/, /o:/. These phonemes are given in table 2.2 below.

Table 2.2.: Vowel Phonemes of Gedeoⁱⁱⁱ

	Front	Central	Back
High	i i:		u u:
Mid	e e:		o o:
Low		ɑ ɑ:	

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/ : /ila/ 'to give birth' /iba/ 'to fall'

	/ela/	‘to be good’	/eba/	‘to send’
/a/ v /u/ :	/ana/	‘to clear’	/bano/	‘let me open’
	/una/	‘member’	/buno/	‘coffee’
/o/ vs /u/	/goba/	‘to sew’	/gora/	‘blackberry’
	/guba/	‘to burn’	/gura/	‘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/	/fila/ ‘choice, comb’	/i:/ /fi:la/ ‘to favor’
/e/	/ela/ ‘to be good’	/e:/ /e:la/ ‘pond’
/a/	/gafa/ ‘to cook by boiling’	/a:/ /ga:fa/ ‘horn (of animals)’
/u/	/mut’a/ ‘to taste, to lick’	/u:/ /mu:t’a/ ‘to complete, to finish’
/o/	/gofa/ ‘courage, face’	/o:/ /go:fa/ ‘weak’

III. Clusters and Gemimates

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*

/di:danto/	‘breakfast’	/mu:nde/	‘blood’
/langa/	‘two’	/danca/	‘good’
/gurgura/	‘to sell’	/gorsa/	‘morning’
/bilbila/	‘phone’	/belto/	‘child’

(3.2) *Sonorant – Sonorant*

/karno/	‘this year’	/korma/	‘cock’
/worme/	‘knife’	/darne/	‘colt, young horse’

(3.3) *Glottal Stop – Sonorant*

/ʃiʔnna/	‘urine’	/k’eʔja/	‘claw’
/baʔlla/	‘wide’	/haʔwwa/	‘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’	/e:bba/	‘warm’
ʃʃ	/haʃʃa/	‘evening’	/ariʃʃo/	‘sun’
dʒdʒ	/bo:dʒdʒe/	‘cold(air)’	/dʒidʒdʒi:ra/	‘to exchange’
nn	/anna/	‘father’	/onna/	‘heart’
rr	/barra/	‘day’	/arrabo/	‘tongue’
ww	/uwwa/	‘to give’	/o:suwwa/	‘children’

ll	/ella/	'name of month (May)'	/melalle/	'female'
pp'	/k'u:pp'e/	'egg'	/lapp'e/	'chest'
dd'	/adda/	'to take'	/t'adde/	'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/	ita 'to eat'	ʃija 'to kill'	iti 'eat!' (2Sg.Imp)
/e/	elo 'good'	leba 'to add'	gane 'he hit'
/a/	anna 'father'	t'alla 'shame'	džila 'wedding'
/u/	ugga 'to put in'	sunk'a 'to kiss'	dulu 'he may slaughter'
/o/	onna 'heart'	noʔo 'we'	lamoʔo 'rat'
/ii/	i:ma 'top, on'	di:na 'enemy'	-----
/ee/	e:bba 'warm'	de:gge 'straw'	-----
/aa/	a:ga 'to enter'	t'a:t'a 'antelope'	-----
/uu/	u:rra 'to stand'	mu:tt'a 'to finish'	-----
/oo/	o:lo 'termite'	go:fa '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		
fij- 'to kill'	fil-t-e-tt-e	fil-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

gan- 'to hit'

gan-d-e-tt-e gan-din-e gan-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

macco?- ‘to be intoxicated’ maccon-n-e-nn-e maccon-n-e
 maddo?- ‘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 abid- ‘to catch’ abid-d-e-tt-e abid-din-e abid-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
 jt → jf gof- ‘to uproot’ gof-f-e-tt-e gof-fin-e gof-f-e

iii) Stem final /r/ or /l/ totally assimilates to the alveolar
 implosive /d/

When the benefactive/ reflexive marker –ed follows verb
 stems ending in /r/ or /l/ a total assimilation to /d/ occurs after
 the deletion of the vowel of the benefactive marker.

(4.6)

Verb Stem V-Benf-Perf- 1Sg-Perf
 r + -ed → d
 hir- ‘to buy’ hid-d-e-nn-e (< hir-ed-e-nn-e)
 gurgur- ‘to sell’ gurgud-d-e-nn-e (< gugur-ed-e-nn-e)

l + -ed → d
 kul- ‘to tell’ kud-d-e-nn-e (< kul-ed-e-nn-e)
 dul- ‘to slaughter’ dud-d-e-nn-e (< dul-ed-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 ejection/ glottalization

When Suffix initial /t/ follows verb stems ending in ejectives, glottal stop, or alveolar implosive, ejection would occur. If the stem final consonants are ejectives, i.e., /pʼ/, /tʼ/, /kʼ/ and /cʼ/, 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 /d/ that come preceding the suffix initial /t/, the result would be an ejection to /tʼ/ (4.10).^v

(4.9)

Verb Stem	V-2Sg-Perf-2Sg-Perf	V-2Pl-Perf	V-3Sg.F-Perf
pʼt → ppʼ	di:pʼ- 'to sleep'	di:p-pʼ-e-tt-e	di:p-pʼin-e
tʼt → ttʼ	wotʼ- 'to cut'	wot-tʼ-e-tt-e	wot-tʼin-e
kʼt → kkʼ	tukʼ- 'to touch'	tuk-kʼ-e-tt-e	tuk-kʼin-e
cʼt → ccʼ	bocʼ- 'to chop'	boc-cʼ-e-tt-e	boc-cʼin-e

(4.10)

Verb Stem	V-2Sg-Perf-2Sg-Perf	V-2Pl-Perf	V-3Sg.F-Perf
ʔt → ttʼ			
baʔ- 'to disappear'		bat-tʼ-e-tt-e	bat-tʼin-e
dt → ttʼ			
hed- 'to exist'	het-tʼ-e-tt-e	het-tʼin-e	het-tʼ-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-si:s-
	hoc'- 'to chop'	hoc'-i-si:s-
(b)	sunk'- 'to kiss'	sunk'-i-si:s-
	uww- 'to give'	uww-i-si:s-
	gaʔmm- 'to bite'	gaʔmm-i-si:s-

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 d), 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-m-f-e-nn-e	c’u-m-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 /ed/ as is exemplified in (4.13).

(4.13)

Verb Stem	V-Mid-V-3Sg.M-Perf	
af- ‘to get’	a-l-f-ø-e	(< af-ed-ø-e)
tuk’- ‘to touch’	tu-l-k’-ø-e	(<tuk’-ed-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 /ed/ 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-ed- → kul-ød- → kuʔll)
gan- ‘to hit’	gaʔnn- ‘to hit oneself’ (<gan-ed- → gan-ød- → gaʔnn-)

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 *hijj-* 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 > ∅ *ʃikk’i hijj-* → *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 > ∅ *boc’i hijje* → *boc’ijje* “You (Sg) cut in to pieces!’ he said”
amo hijje → *amojje* “‘You (Sg) come!’ he said”
amme hijje → *ammejje* “‘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
 ?? > ∅ *me??-* ‘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

?? > ?

me??- 'to go' me?-e-nn-e me?-i-n-e-nn-e me?-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 ane:ʔe fulce=ni
 3Sg.M.NOM 1Sg.ACC

- get_out.CAUS.3Sg.M.S.Perf=Dcm
 ‘He caused me to get out’
 (a₁) isane fulceni (ia > øa)
 (4.20)
 (a) p’ɑʔʔɑ asse
 Break.Vn make.3Sg.M.S.Perf
 ‘He broke open (in to two)’
 (a₁) p’ɑʔʔasse (aa > øa)

4.5 Replacement of /d/ by /ʔ/ and /l/

Usually the glottal stop /ʔ/ and the alveolar lateral /l/ replace the alveolar implosive of the middle suffix /-ed/.^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 lateral /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-i-t-e
ʃoʔ- ‘to hide’	ʃoʔ-ʔ-e-nn-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-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 intervocally 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

hijj- ‘to act/ (happen) to be’ and **hijj-** ‘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 /-ed/.

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		

REFERENCES

- Anbessa Teferra. (2000). A Grammar of Sidaama. Ph.D. dissertation. Jerusalem: Hebrew University.
- Baye Yimam. (2000)(E.C). *jamarijña sewasiw*. (The grammar of Amharic). Addis Ababa: Eleni Printers PLC.
- Eyob Kelemework. (2011). *Word Formation on Gedeo: a Cushitic language of Ethiopia*. Saarbrücken: VDM Verlag Dr. Müller GmbH & Co.KG.
- Hudson, Grover. (2007). Highland East Cushitic morphology. In Kaye, Alan S. (Ed.). *Morphologies of Asia and Africa*. Vol. 1, chap. 23. Winona Lake, Indiana: Eisenbrauns.
- Hudson, Grover.(1989). *Highland East Cushitic Dictionary*. (Cushitic Language Studies, 7.) Hamburg: Helmut Buske.
- Kawachi, Kazuhiro. (2007). *A Grammar of Sidaama (Sidamo): a Cushitic Language of Ethiopia*. PhD Dissertation. Buffalo, NY: University at Buffalo.
- Lulseged Erkihun. (1981). A contrastive analysis of the phonologies of Gedeo and Amharic. Unpublished M.A. Thesis. Addis Ababa: Addis Ababa University.

Mengistu Amberber (2000). Valency-changing and valency-encoding devices in Amharic. In Dixon, R.M.W. and Alexandra Y. Aikhenvald (Eds.) *Changing valency: case studies in transitivity*. Cambridge: Cambridge University Press.

Office of Population and Housing Census Commission. (2010). *The 2007 population and housing census of Ethiopia: Statistical report for country level*. Addis Ababa: Central Statistical Agency.

Wedekind, Klaus. (1980). Some Notes on the Verb Morphology of Derasa (Gedeo). *Journal of Ethiopian Studies*.

Wedekind, Klaus. (1990). Generating narratives: Interrelations of knowledge, text variants, and Cushitic focus strategies. (Trends in linguistics: Studies and monographs 52). New York: Monten de Guyter.

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 disputes.

ⁱⁱⁱ In my data I have found a long nasal back vowel \tilde{o} : in a single word stem / \tilde{o} :ʔ-/ ‘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	
\tilde{o} :ne	\tilde{o} :nenne	\tilde{o} :tette	\tilde{o} :tine
\tilde{o} :ʔe	\tilde{o} :te		
roar:3PL:S.PER			
\tilde{o} :ne			

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 precede a geminated consonant. However, the claim where /r/ or /l/ may precede a geminated consonant could not be supported from any of the text data of the current study.

^v Geminated ejectives 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 **e??-** '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
e??-i-n-e-nn-e *e??-i-t-e-tt-e* *e??-i-tin-e*
e??-i-t-e *e??-i-n-e*

^x However, it is also possible that the basic middle suffix /-ed/ 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 ‘metaæsis’ 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	Bilabial	Labio-dental	Interdental	Alveolar	Palatal	Velar	Uvular	Pharyngeal	Laryngeal
Manner of articulation									
Plosives (Em.) Non-emphatic				t ^ʕ d ^ʕ					
	b			t d	g	k	q		ʔ
Fricative (Em.) Non-emphatic			ð ^ʕ	s ^ʕ					
		f	θ ð	s z	ʃ		χ/x ʁ/ʁ	ħ ʕ	h
Nasal	m			n					
Lateral				l / l ^ʕ					
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 (kah.rabaa→kar.haba).

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: $h-r \rightarrow r-h$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
kah.ra.baa	kar.ha.ba	‘electricity’
kah.ra.baai	kar.ha.bai	‘electrician’
mu.kah.rab	ma.kar.hab	‘electrified’
kah.ra.man	kar.ha.man	‘amber’

Table 3: $h-n \rightarrow n-h$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
kah.nu:t	kan.hu:t	‘priesthood’

Table 4: $ts \rightarrow st$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
mut.sa.mih	mis.ta.mih	‘tolerant’
mut.sa.hil	mis.ta.hil	‘tolerant’

Table 5: $t-n \rightarrow n-t$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
mut.naz.zah	min.ta.zah	‘park’

Table 6: $r-f \rightarrow f-r$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
nar.faz	naf.raz	‘get nerves’
nar.fazah	naf.razah	‘nerves’

Table 7: $\zeta-q \rightarrow q-\zeta$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
\(\zeta\).rab	\(\zeta\).rab	‘scorpion’

Table 8: $l-\hbar \rightarrow \hbar-l$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
sul.ha.faah	su.h.lu.fuh	‘turtle’

Table 9: $z\text{-}b \rightarrow b\text{-}z$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
kuz.bu.rah	kab.za.rah	'coriander'

Table 10: $l\text{-}\zeta \rightarrow \zeta\text{-}l$ (Adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
mil.ʕa.qah	maʕ.la.qah	'spoon'

Table 11: $\zeta\text{-}d \rightarrow d\text{-}\zeta$

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

Table 12: $n\text{-}\hbar \rightarrow \hbar\text{-}n$ (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ta.naḥ.naḥ	ta.ḥan.ḥan	'to hem'
naḥ.na.ḥah	ḥan.ḥa.nah	'hem'

3.2 Non-adjacent Metathesis: Within syllable

Table 13: $\hbar\text{-}f \rightarrow f\text{-}\hbar$ (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ḥaf.rag	faḥ.rag	'he rattled'
ḥaf.ra.gah	faḥ.ra.gah	'rattling in the throat'
ju.ḥaf.rig	ji.faḥ.rig	'he rattles'

Table 14: (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
xa.saf	xa.fas	'he lowered'
jax.sif	jix.sif	'he lowers'

3.3 Non-adjacent Metathesis: across syllable

Table 15: *b-l-h* → *h-b-l* (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ʔab.lah	ʔah.bal	‘stupid’

Table 16: *ʕ-q* → *q-ʕ* (Non-adjacent metathesized sounds)

Modern Standard Arabic	Abyani Arabic	Gloss
ʕa.qaa.rab	ʕa.raa.qab	‘scorpion’

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

Modern Standard Arabic	Abyani Arabic	Gloss
ma.laa.ʕaq	ma.ʕaa.laq	‘spoons(pl.)’

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

Modern Standard Arabic	Abyani Arabic	Gloss
la.ʕan	na.ʕal	‘he cursed’
jul.ʕan	jin.ʕal	‘he curses’
la.ʕa.nah	na.ʕa.lah	‘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.nu: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.kar.hab**→ **ma.kar.hab**. 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 I 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 table 12, 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.

REFERENCES

- Abu-Mansour, M. (1987). A non-linear analysis of Arabic syllabic phonology with special reference to Makkan. ph.D dissertation. University of Florida.
- Abu-Salim, I. (1982). A Reanalysis of Some Aspects of Arabic

Phonology. Unpublished PhD dissertation, University of Illinois at Urbana-Champaign.

Ahmadkhani, M. (2010) Phonological Metathesis in Persian: Synchronic, Diachronic, and the Optimality Theory. *Pazhuhesh-e Zabanha-ye Khareji Journal*, 56:5-24.

Al-Ani, S. (1970). *Arabic phonology*. The Hague-Paris: Mouton.

Alexander, J. (1985). R-metathesis in English: A diachronic account. *Journal of English Linguistics*. 1:33-40

Al-Mohanna, F. (1998). Syllabification and metrification in Urban Hijazi Arabic: Between rules and constraints. Ph.D dissertation. University of Essex.

Blevins, j & Garrette. A. (1998). The origins of consonant-vowel metathesis. *Language* 74(3):508-555.

Blevins, J. and Andrew G. (2004). The evolution of metathesis. In Hayes, B. et al. (eds.), *Phonetically Based Phonology*. 117-156. Cambridge: Cambridge University Press.

Clements, G. (1990). The role of the sonority cycle in core syllabification. In John Kingston and Mary E. Beckman, editors. *Papers in laboratory phonology I: Between the grammar and physics of speech*. Cambridge: Cambridge University Press. pp. 283-333.

Chomsky, N. & Halle, M. (1968). *The Sound pattern of English*. New York: Harper & Row.

Flemming, E. (1995). Auditory features in phonology. Ph.D dissertation. UCLA.

Hock, H.(1985). Regular metathesis. *Linguistics* 23. 529-546.

Holes, C. (1995). *Modern Arabic: Structures, Functions and Varieties*. London and New York: Longman.

Hume, E. (1991). Metathesis in Maltese: Implications for the Strong Morphemic Plane Hypothesis'. *Proceedings of the NELS 21*, 157-172. University of Massachusetts, Amherst.

Hume, E. (1998a). Metathesis in phonological theory: The case of Leti. *Lingua* 104.147-186.

Hume, E. (1998b). The Role of Perceptibility in Consonant /Consonant Metathesis. *Proceedings of West Coast Conference on Formal Linguistics* 17. 1998. 293-307.

Hume, E. (2000). The Role of Speech Perception in Phonology: The Case of Metathesis'. Paper presented to the Department of Linguistics, University of Chicago.

Hume, E. & Keith J. (2001). A Model of the Interplay of Speech Perception and Phonology'. In Hume E. & Johnson K. (eds.), *The Role of Speech Perception in Phonology*. New York: Academic Press. 3-26.

Hume, E. & Keith J. (2002). The impact of phonological contrast on speech Perception. *Paper presented at the Second International Conference on Contrast in Phonology*, University of Toronto.

Huthaily, K. (2003). 'Contrastive Phonological Analysis of Arabic and English'. Unpublished Masters dissertation. University of Montana (2003).

Gairdner, W. (1925). *Phonetics of Arabic*. London .Oxford University Press.

Kharma, N. & Hajjaj, A. (1989). *Errors in English among Arabic Speakers: Analysis and Remedy*. United Kingdom. Longman Group UK Limited.

Katamba, Francis. (1984). *An Introduction to Phonology*. Longman, England.

Parker, Stephen G. (2002). Quantifying the sonority hierarchy. Ph.D dissertation, University of Massachusetts Amherst.

Parker, Steve. (2008). Sound level protrusions as physical correlates of sonority. *Journal of Phonetics*, 36:55-90.

Parker, Steve. (2011). Sonority. In Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice (eds.), *The Blackwell Companion to Phonology*. West Sussex, UK: Wiley-Blackwell. pp. 1160-84.

Parker, Steve. (2011). Sonority. In Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice, editors. *The Blackwell Companion to Phonology*. West Sussex, UK: Wiley-Blackwell. pp. 1160-84.

McCarthy, J. (1989). Linear order in Phonological Representation. *Linguistic Inquiry* 20:71-99.

McCarthy, J and Prince, A. (1993). *Prosodic Morphology*. MS. University of Massachusetts, Amherst and Rutgers University.

Seo, M. & Hume, E. (2001). A Comparative Account of

- Metathesis in Faroese and Lithuanian'. In Hume, S. et al. (eds.), *Phonology*. Oxford: Blackwell.
- Ultan, R. (1978). A typological View of Metathesis. In Joseph H. & Greenberg, *Phonology*, vol.2, 367-402. Stanford University Press.
- Webb, C. (1974). *Metathesis*. PhD. dissertation. University of Texas, Austin.
- Watson, J. (2002). *The phonology and morphology of Arabic*. New York: Oxford University Press.

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.

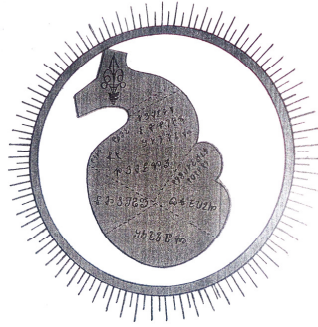


Image 1: of Sorang Sompeng (From mattarbano:m)

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 Sandaṅ Suṅ, t for tAṅO suṅ; 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-consonantly, 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-consonantly using six independent vowel letters. In six vowels, five are monophthongs and one is diphthong. When written post-consonantly, the implication is that they override the inherent [ə] vowel.

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,p/.

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 [d], but not retroflex [ɖ] or dental [ɖ]. In SS loan sounds (including [ʂ] and [ɳ]) are indicated by writing the one SS diacritic, mae, to the left of the closest equivalent letter. Retroflex [ɖ] 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 / ̄ / 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
ɖ	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

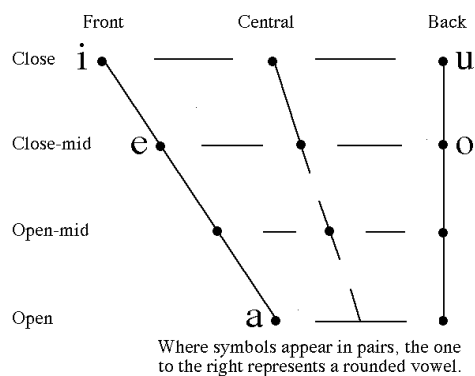
3.3 Vowels:

- 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		ɲ	ŋ	
Trill/Flap			r	ɽ			

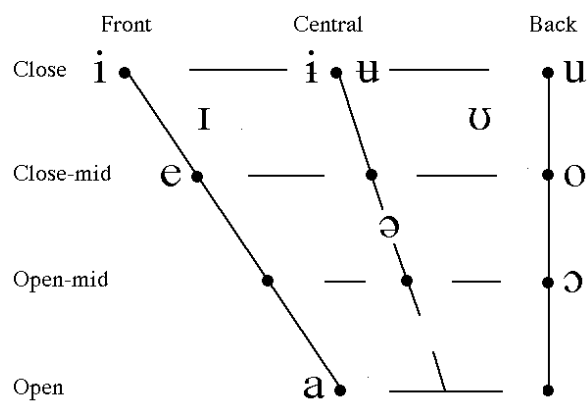
Fricative	v		s				h
Lateral			l				
Approximant					j		



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) ʃ	k g	ʔ
Nasal	m		n		ɲ	ŋ	
Trill/Flap			r	ɽ			
Fricative			s				

					j		
Lateral			l				
Approximant	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

REFERENCES

Census of India 2001.
 Florian Coulmas . 2003. *Writing Systems: An Introduction to their Linguistic Analysis*. Cambridge University Press, New York.
 Peter T. Daniels and William Bright (eds).1996. *The world's writing system*. OUP: New York

- Norman Zide. 1996. Scripts for Munda Languages. (Ed) Peter T. Daniels and Wolliam Bright. *The World's Writting Systems*. OUP: New York
- Peter T. Daniels and Wolliam Bright. *The World's Writting Systems*. OUP: New York
- Ramamurti, G. V. *English Sora Dictionary*, Madras: Government press.
- Ramamurti, G.V. *Telugu Savara Dictionary*, Director of Public Instruction.
- Ramamurti, G.V. 1938 [Reprint: 1986]. *Sora - English Dictionary*. New Delhi: Mittal.
- Sankara Reddy, M. 1993. *Savara Language Learning Book*. Goyidi, Srikakulam: Janachetana
- Shankar Reddy. S. 1997. *savara jivana vijnaan akambool (Savara Life Educative Book)*. Goyidi. Janacetana. First Edition.
- S.P. Mangaiah. 1976. *mattarbano:m*

Appendix 1 Alphabet of Sorang Sompeng

											
sa	ta	ba	ca	da	ga	ma	nga	la	na	va	pa
											
ya	ra	ha	ka	ja	nya	a	e	i	u	o	ae
											
0	1	2	3	4	5	6	7	8	9		

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.bandāvāḷa	Tel. peṭṭubaḍi	‘investment’
Ka.badalāvaṇe	Tel. māṛpu	‘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. hastapṛati	Ka.hastapṛati	‘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’ ṭheevanṭi ‘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. oḷaracane	‘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. gariṢṭa veetanam	Ka. gariṢṭaveetana	‘maximum pay’
Tel. ravāṇa sunkam	Ka. ravāne sulka	‘transport tax’
Tel. sviiya caritra	Ka. ātmacaritre	‘autobiography’
Tel. āṭa sthalam	Ka. kriidāṅgaṇa	‘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.

REFERENCES

Anantanarayana, H.S. (1984): 'Common Vocabulary between Telugu and Kannada' in Seminar papers in Common core Vocabulary in Indian Languages edited by M.Ramappa, International Telugu Institute, Hyderabad.

Baktavatsala Reddy, N. (1984): 'Common Vocabulary in Telugu and Malayalam'-ibid

Chakradhara Rao, L. (1984): 'Common Vocabulary in Telugu and Urdu'- ibid.

Dakshina Murti, P. (1971): 'PaaribhaaSika Padaalu-Kalpanaa 'Silpariitulu' in Saaradaamanjiiram Rajatootsava Vyasa SampuTi pp.261-278

Kanthi Rao, (1984): Administrative Terminology (English and Kannada), Dundubhi Prakasana, Bangalore.

Mohan Rao, S.S. (1985): 'Teluguloo PaaribhaaSika Padaala tayaarioka parisiilana' Telugu July-September, Telugu Akademi, Hyderabad.

Mohan Rao, S.S. (1998): A Socio-linguistic Study of Scientific Terminology in Telugu PhD Thesis (unpub.), P.S. Telugu University, Hyderabad.

Rajeswari, T. (1995): 'Teluguloo PaaribhaaSika padaala nirmaaNaPaddhatulu' presented to National Seminar on 'Teluguloo nighanTu nirmaaNam Suutraalu Paddhatulu', P.S. Telugu University, Hyderabad. Feb.15&16.

Ramachandran Nair, C.G (1996): 'Coining of Scientific and Technical Terminology' IJDL Vol.XXV.No.1, Drvidia Linguistics Association, Trivandrum.

Ramanjaneyulu, K. (1985): 'Telugu-Kannada Samaana padakoosam: nirmaaNariiti-ibid.

Ramappa, M. (ed.) (1984): Seminar Papers in Common core Vocabulary in Indian Languages, International Telugu Institute, Hyderabad.

- Rama Rao, C. (2000): 'BhaaSaasastramloo Saankeetika PadanirmaaNam' in BhaaSaantarangam (bhaaSaanirmaNa vyaasaalu), P.S. Telugu University, Hyderabad.
- Rama Reddy, M. (1988 3rd Ed.): Glossary of Administrative and Legal terms (English- Telugu), Telugu Akademi, Hyderabad.
- Sambasiva Rao, G. (1996): 'Formation of Technical Terms' in Indian Languages' IJDL Vol.XXVNo.1-ibid.
- Sarada, K. (1988): Telugu Paripaalana ParibhaaSa- Madhyayugam, Lasya Publications, Tirupati.
- Sastri, R.L.N. (1995): 'Saankeetika padaala eekaruupata' presented to National Seminar cum Work Shop on Saankeetika ParibhaaSa', P.S.Telugu University, Hyderabad. March13-16.
- Singaravelu, D. (1984): 'Commonness in Telugu and Tamil' in Common core Vocabulary in Indian languages-ibid.
- Subbanna Rai & Others (eds.) (2001): DraaviDa nighanTu, prasaranga, Kannada University, Hampi.
- Subrahmanyam, P.S. (1985): 'bhaaSaa saastramloo-saankeetika paribhaaSa' National Seminar cum Workshop, P.S. Telugu University, Hyderabad, March 13-16.
- Sundaram, Rm. (1996) : 'Coining of Technical Terminology' IJDL, Vol.XXV. No.1-ibid.
- Susheela, P. Upadhyaya (1973): Hindi-Kannada Common Vocabulary, CIIL, Mysore.
- Varadachari, G.S. (1995): 'Saankeetika paribhaaSa nirmaaNamloo patrikalapaatra' in Teluguloo Saankeetika paribhaaSa, National Seminar cum workshop - ibid.
- Venkataramana Rao, Y. (1984) : 'Common core Vocabulary in Hindi and Telugu' in Seminar papers in Common core Vocabulary in indian Languages-ibid.
- Venkataramana Rao, T (199): 'Telugu-Kannada bhaaSalaloo vidyaasamasthalaku sambandhincina aangla padaala anuvaadaalu: oka tulanaatmaka parisiilana' presented to National Seminar on 'Teluguloo nighanTu nirmaaNam Suutraalu- paddhatulu-ibid.
- Venkatappaiah, V. (1995): 'Saastra Saankeetika padajaalanirmaaNam-Konni Suucanalu' in Teluguloo Saankeetika paribhaaSa - ibid.

Venugopal, M.V. & SankarReddy M. (1995): 'Teluguloo paaribhaaSika padootpatti samasyalu' presented to National Seminar on 'teluguloo saankeetika paribhaaSika' - ibid.

Viswantham, K. (1984): 'Cultural Commonness reflected in the Vocabulary of Dravidian Languages' in Seminar papers in Common Core Vocabulary in Indian languages. Ibid.

Usha Devi, A. (1995): 'paribhaaSika tayaarii-pramaaNiikarana paddhatulu- ibid.