OSMANIA PAPERS
IN
LINGUISTICS

COMMITTEE ON PUBLICATIONS

It is regretted that, due to unforeseen problems, the publication of *OPiL* volume 2 (1976) and volume 3 (1977) has been delayed and could not be issued as scheduled. It will be, however, possible hereafter to bring out the issues regularly as per schedule.

—*Editor*

OSMANIA PAPERS
IN
LINGUISTICS

Volume 2 February 1976

PROBLEMS OF LANGUAGE STANDARDIZATION IN INDIA

BH. KRISHNAMURTI

The properties of a standard language are defined. General and specific problems in the process or standardization of five Indian languages are briefly described. Some research srategies in this area have been set forth.*

0. INTRODUCTION. Anthropologists and sociologists trace the entire growth of human civilization based on science and technology and the complex socio-political systems to the invention of the writing system (Goody and Watt). While language is as old as man, human civilization, as we now understand it, is 5000 or so years old. The progressive evolution of the alphabetic from pictographic writing with distinctive symbols for vowels and consonants has made both the representation and the transmission of oral messages more efficient. The printing press and the mass media have made universal education not only a possible concept but also a goal of democratic citizenship.

The notions of " standard " and " nonstandard " usage are a direct consequence of the introduction of the writing system and the creation of written literature. These terms are used sometimes synonymously with " correct " and " incorrect ", " grammatical " and " ungrammatical " by laymen as well as language pedagogues.

What the layman and the school teacher characterize as " grammatical " is in fact the socially acceptable or respectable choice of usage. Here a complex pattern of social values is projected onto linguistic usage to provide a judgment as to its validation or invalidation, and this is representedas though the judgment is basically lingustic. These terms and concepts should, therefore, be understood as primarily nonlinguistic, which are transferred from the value system of a literate society. These nonlinguistic factors include values and aspects such as educated/ uneducated, cultured/uncultured, urban/rural, and forward/ backward in the socioeconomic hierarchy. According to Bloomfield (p. 396),.

The nearest approach to an explanation of, "good" and "bad" language seems to be this then, that, by a cumulation of obvious superiorities, both of character and standing, as well as of language, some persons are felt to be better models of conduct and speech than others.

In the emergence of standard languages, two attitudes of speakers play an important role — what is " high " and " imitation-worthy " and what is " low " and, therefore, not a " model " for imitation, and what is worthy of the written form and what is not. The speech behavior of a small segment of the population, who are highly literate and who wield social, economic and political power, thus becomes fashionable and respectable and sets the model for others to imitate. Since such groups are usually concentrated in and around a metropolis, standard speech spreads from urban centers with a centrifugal force absorbing the surrounding provincial varieties of rural populations. It is, therefore, no accident of history that standard English and French evolved from the speech of the elite of London and Paris respectively. Mass media and the modern means of communication accelerate the pace of dissemination of the " standard language ". There is always a constant interaction between standard language and nonstandard usage. What is deemed non-standard and provincial at one time may later become part of the standard language through the medium of powerful creative writing. Standardization is not, normally, a process to be determined by a group of scholars or by committees of governments.

1. THE PROPERTIES OF A STANDARD LANGUAGE. The properties of a standard language are said to be "flexible stability " and "intellectualization." Clarifying these concepts, Paul Garvin says :

> Flexible stability here refers to the requirement that a standard language be stabilized by appropriate codification, and that the codification be flexible enough " to allow for modification in line with culture change. " Intellectualization here refers to the requirement of increasing accuracy along an ascending scale of functional dialects from conversational to scientific (521).

Furthermore, according to Garvin, a standard language has to fulfill three functions : the unifying function, the prestige function, and the frame-of-reference function (Garvin, 522). By its unifying function a standard language links up several dialect regions into a single STANDARD language community which can be identified as a separate entity from other neighboring languages. The prestige function gives a standard language a superiority over nonstandard local varieties, and its possession lends a degree of social prestige to its speakers when compared to those that do not possess it. As a frame-of-reference, the standard language is the tool to judge degrees of appropriateness (correctness) in social context.

Ferguson (1962 : 23-27) proposes two dimensions for the classification of world languages, viz. the degree of utilization

in writing (W 0, 1, 2, 3) and the degrees of standardization (St. 0, 1, 2). They are defined as follows :

"W 0. Not used for normal written purposes.

W 1. Used for normal written purposes.

W 2. Original research in physical sciences regularly published.

W 3. Translation and resumes of scientific work in other languages are regularly published.

St 0. There is no important amount of standardization.

St 1. This is not defined but explained as obtaining in languages with one or more implicit standard forms with a wide range of variation.

St 2. A single, widely accepted norm which is felt to be appropriate with only minor modifications or variations for all purposes for which the language is used."

This is an oversimplified matrix requiring subclassifying scales under each category.

Haugen (1972: 107) refers to these two as aspects governing the form and the function of a language, one representing codification (standardization) and the other elaboration (utilization in writing). " As the ideal goals of standard languages, codification may be defined as minimal variation in form, elaboration as maximal variation in function."

An absolute standard with uniform spelling, grammar, and lexicon has never been attained by any known language (Bloomfield, 393). A high degree of uniformity backed by social prestige is what is to be aimed at.

2. DIGLOSSIA AND STANDARD-WITH-DIALECT. In languages having a rich literary heritage, a situation, characterized as " diglossia" by Ferguson, will arise: He maintains that

DIGLOSSIA is a relatively stable language situation in which, in addition to the primary dialects of the language (which may include a standard or regional standards), there is a very divergent, highly codified (often grammatically more complex) superposed variety, the vehicle of

a large and respected body of written literature, either of an earlier period
or in another speech community, which is learned largely by formal
education and is used for most written and formal spoken purposes but
is not used by any sector of the community for ordinary conversation.
(Ferguson, 435).

In this situation two varieties of a language exist side by side
throughout the community, each having a definite role to play.
One of these exists as a superposed variety for certain higher
roles—formal speeches, rituals, poetry, newspaper writing,
and broadcasting, etc. The low variety is used in conversation
and folk-literature, in informal talks, and as captions on political
cartoons, etc. In the case of Arabic, Greek and Tamil such a
situation exists. The high variety has its origin in history, is
several centuries old and has only marginally changed. This
variety is acquired through formal education nearly as a second
language (p. 433). The superposed variety here is the standard
language though it is not the elite counterpart of contemporary
speech as in the case of English, French, etc. With the spread
of literacy, there is bound to be a prolonged conflict, and as in the
case of the emergence of Romance languages breaking away
with the superposed Latin, the diglossia situation may eventually
give way to the standard-with-dialect situation.

3. STANDARD VS. NONSTANDARD IN INDIAN LANGUAGES.
Against the above conceptual background we may examine the
standard and the non-standard varieties of some typical Indian
languages.

The Constitution of India recognizes fifteen languages inclu-
ding Sanskrit, which account for 88 per cent of the total popu-
lation of the country. Of the fifteen modern languages, eleven
belong to the Indo-Aryan family and four to the Dravidian.
With the exception of Sindhi and Urdu, the rest of the modern
Indian languages are the dominant regional languages in one or
more States.

All these languages have rich poetic literature and fiction
and almost all of these had been in use as media of instruction up
to the secondary level long before 1947. Since independence
(1947) and, later, since the formation of the linguistic states
(1956),the regional languages have gained increasing importance
in local administration and higher education. During the past
decade most of the states recognized the regional languages as
official languages for local administration. University education,

being a state subject, has fallen in line with the changing trend and the universities have introduced regional languages as media of higher education up to the first-degree level during the late sixties. Although English remains still as an interstate link language at the higher levels of intellectual communication (all-India conferences, etc.), its role has significantly changed at the State-level. Hindi is sought to replace English eventually as the link-language for interstate communication in administration and higher education. But it will take a long time to accomplish this. Meanwhile, the functions of the regional, State-level languages have considerably increased and this has led to problems of acceptance and selection of one variety as a standard form over others. In the natural process of culture change, implicit standard forms have emerged for nearly all the regional languages, though the nature and degree of standardization is not as institutionalized for Indian languages as it is for Western languages like English, Swedish, and German. In terms of Ferguson's typology, modern Indian languages can be classified as W1 St1 moving fast in the direction of W2 St2 (see 1 above).

It would appear that a supra-dialectal norm of St2 type is necessary for each of the modern Indian languages for the following purposes :

1. To spread literacy among illiterates who constitute, on the average, 80 per cent of the total population,

2. To serve as an effective vehicle of intrastate administration,

3. To spread modern knowledge at all levels of formal education,

4. To facilitate intertranslatability with the other Indian languages for exchange of information and knowledge, and

5. To make bilingualism and multilingualism feasible as a means of preserving national integrity and nationhood.

It is necessary to examine if these objectives are fulfilled by the existing standard forms of Indian languages and, if not, what steps are needed for planned standardization. Five languages are taken for case study: Telugu, Tamil, Marathi, Bengali and Hindi.

3.1. Telugu. According to the 1961 Census, Telugu is spoken by 38 million, second only to Hindi in numbers. The

ratio of rural to urban population is 80 per cent : 20 per cent.
Only 25 per cent of the population is literate (D. R. Ramanujam,
12).

Sharp differences appear from the beginning of literature
(11th century) between the literary language and the contem-
porary spoken language as revealed fron the inscriptions (ca.
6th century onwards). All classical literature was poetry but
there is no evidence for the literary dialect ever being used for
formal speech roles even by the high class. Grammars were
written for the high variety and the spoken language was banned
from usage in poetry where the two differed. The spread of prose
literature in the nineteenth and the twentieth centuries necessi-
tated the growth of a current standard variety. Attempts to
create a diglossia situation where there had been no such tra-
dition failed with the emergence of mass media and modern
forms of literature like the novel, the essay, and the social play.
The variety widely used in the newspapers, radio and fiction is
based on the speech of the educated middle and upper classes of
Central Andhra (Guntur, Krishna, East and West Godavari
districts). For more information on this, see the diagram below.[1]
This area has produced the largest number of writers who have
influenced the direction of standard usage and their pattern is
widely imitated.

Differences between standard and nonstandard can be
linguistically formulated mainly in phonology, verb and noun
inflexion, and the choice of certain lexical items.

The following phonological features are significant in dis-
tinguishing modern standard from nonstandard (Krishnamurti,
1962, 1971).

	Standard	**Nonstandard**
(1) Deaspiration	p:ph; b:bh, d:dh, etc.	p, b, d, etc.
	h-	ϕ
(2) Semi-vowel loss	w [front vowel	ϕ

1. The diagram appended to this paper gives a glimpse into the social
stratification and speech variation in Telugu. The primary classification is
into spoken and written. Under the "spoken" there are four regional dialects
in Telugu (numbered 1 to 4) ascertained on the basis of an extensive survey of
the terms used in native occupations like agriculture, weaving, carpentry, etc.
(Krishnamurti 1962). This is also partly supported by variation in the speech
of the urban educated classes. The educated speech of the central area (No. 4
in the diagram) is the basis of modern standard written language. The educated

(3) Cluster-simpli- fication	consonant clusters	Simplified through (a) assimilation or (b) anaptyxis
	-st-	-tt-
	pr-	par-

speech of the other three areas is extensively influenced by the standard collo-
quial and written forms. Phonological differences between the educated and
the uneducated follow the general pattern shown on page 10, irrespective of
region, economic class, or caste. Besides these, there may be other phonological
variations restricted to regional dialects e.g., in Dialect 3 (Visakhapatnam and
Srikakulam districts) the uneducated replace initial l of the educated variety
by n, e.g. *leedu* (ed.): *needu* (uned.) "it is not", similarly, in Dialect 1 (Telangana),
initial *w* is lost before low vowels (*a, aa*). The loss of *w* before high and mid
vowels (*i, ii, e, ee*) is a common feature of the uneducated throughout the State
as opposed to its retention in the educated speech. Among the educated, the
informal spoken style has a greater degree of code-mixing and code-switching
than the formal. The uneducated speakers are subclassified as urban and rural.
The urban un-educated are exposed to the educated speech and other spoken
media which make them much more sensitive than rural uneducated to upward
mobility in their speech patterns. Occupational division comes below rural;
even here speech variation is mainly in the lexicon and not in phonology and
morphology. Carpenters use terms germane to their occupation which are
not understood by speakers of the other professions. Caste, if it has any signi-
ficance, comes at the bottom of the chart underneath occupational groups.
There are two sects engaged in the handloom industry, *saalaani*, and *padmasaal*
who maintain and use distinct terms for some of the common tools used in
weaving. Beyond such lexical differences caste-wise variation in phonology
and grammar is totally baseless.

Under informal written comes personal letters and folk songs, and also
recently, in social plays writers have introduced uneducated regional dialects
appropriate to characters. Under formal written, administrative and judiciary
registers are yet to develop. Regional variation obtaining in the speech of the
educated is accepted in writing and it is mostly in the area of morphology and
lexicon, and marginally in phonology, e.g., past tense *inaa* (Dial 2)/*iaa* (Dial 4);
purative *tuu* (Dial 4)/*taa* (Dial 2) etc.

(4) Sibilant reduction	s:ś:ṣ	s
(5) Deretroflexion	n:ṇ	n
	l:ḷ	l
(6) Affricate, vs. fricative	ts/tś	s/ś
(7) Fricative vs. stop	f	p

    The above phonological variations show that " the ability to use borrowed words from Sanskrit and English without assimilating them to the native system distinguishes standard from nonstandard " (Krishnamurti 1972: 3).

    ' The hierarchy of politeness reflected in the choice of appropriate pronouns and honorific clitics like -gāru and-andi distinguish the standard formal usage from the nonstandard informal. In word-coining the educated speakers draw on English and Sanskrit, whereas the uneducated coin compounds with native constituents. This area is still unexplored as to the community's sensitivity to notions of standardness. The controversy over the style to be used in school and college text-books is not yet totally resolved, although for subject books the State Government Institute of Telugu (Telugu Akademi) uses only the standard colloquial language.

Some issues in the standardization of Telugu

    (1)   The writing system is fairly phonemic. Symbols have to be provided for ç and f. Certain symbols of archaic phonemes, occasionally used, can be discarded.

    (2)   Popularized Sanskrit words have regional variation in the pronunciation of educated speakers. Such variation need not be represented in spelling.

    (3)   Deaspiration is the major phonological marker of nonstandard pronunciation, though its function is limited to a small vocabulary. When the majority of nonstandard speakers are exposed to formal education, the flooding of textbooks with technical terms drawn from Sanskrit would demand greater attention from the teacher in correcting the spelling and pronunciation mistakes. It is even possible that a new batch of *tadbhavas* will come into vogue if the teacher's scholastic background is such as to make him insensitive to this phenomenon.

(4) Variation within the standard language is much more in the case of Telugu than, say, English. Efforts to choose one standard form over the other may not be advisable since it has no function to serve insofar as intelligibility or social prestige are concerned, e.g. *tināle, tināli* " one should eat "; *ceppædu, ceppināḍu* he said, etc.

(5) Dictionaries and grammars for modern standard Telugu are yet to come out.

3.2. TAMIL is spoken by 31 million and is the dominant regional language of Tamilnādu. It has one of the oldest literatures dating back to the early Christian era. There is a definite tradition of diglossia in Tamil (Ferguson, 1964: 435-36). The language used on formal occcasions (teaching, platform lectures, radio broadcasts, etc.) and in writing (newspapers, poetry, fiction, etc.) is *cen-tamiz* (Literary Tamil) which is not based on contemporary spoken variety of any section of the population. It is acquired only through education. There are several regional and social varieties used for informal purposes— at home, in the bazaar, and rarely in movie dialogues, and fiction. Formal Tamil is closer to the written classical variety which does not take into account sound changes that have taken place in speech since the time of Cangam literature (Shanmugam Pillai, 28-35). Even in morphology, literary Tamil and common Tamil differ widely (*ibid*, 35-40). It must, however, be noted that the modern formal Tamil forms, particularly in the case of compound verbs, reflect deliberate substitution of classical Tamil inflexions for their modern counterparts, working backward, although such compound verb forms are not attested in the literary texts; e.g., colloquial *senjigiṭrike* " I had done it for myself" is rendered into *ceytu-konṭ-irukkirrēn* in formal Tamil. The reconstructed literary form does not derive from the literary dialect. Taking such as these into account Ramanujan assumes that the written form " furnishes us with the underlying, even historically prior, base-forms" (p. 463). What is important to note is the impact of the spoken form on the written. In other words, formal Tamil follows the syntactic rules of colloquial Tamil but the phonological (morphophonemic and phonemic) rules of literary Tamil. In this respect, the case of Tamil may be different from that of Arabic and Greek cited by Ferguson (pp. 435-36). The regional parties in power have given a new boost and stability to the " superposed variety ". Even literal translation of original Sanskrit proper names into Tamil is attempted as a mark of political and cultural emancipation of Tamil and its distinctness from Aryan Sanskrit. Tamilization of technical terms of even English loan-words which are otherwise popular is comparable to the current Hindi situation where extensive borrowing

of *tatsamas* is undertaken deliberately by writers motivated more
by socio-political considerations than educational.   Whether the
new stability given to Tamil by these parties is apparent or real,
only time   can   judge.

Tamil   " diglossia " has   tremendous   implications   for   the
spread of literacy.   Illiterates have to acquire reading and writing
skills with literary Tamil as the target language which naturally
involves greater exposure   time and effort.   It is practically
like learning a second language (Shanmugam Pillai, 40). The
diglossic situation has inhibited the growth of an educated spoken
variety as a vehicle of   formal communication.   The polari-
zation is between a superposed literary Tamil and many regional
social varieties, none of which has any particular superiority and
prestige over the other (Ramanujan, 1968).   A change for the
choice of a spoken variety for purposes of writing can only come
from the educated keenly aware of the   problems of mass literacy.
Even linguists of Tamilnadu are afraid of advocating a modern
dialect form for formal written communication — for fear of
reprisals from the party in power.

3.3.   MARATHI is the mother tongue of 33. 3 million spea-
kers and the dominant regional language of Maharashtra.   The
standard language is based on the educated middle-class speech
of Poona.   The standard and the nonstandard have the following
phonological differences (Apte 8-13).

	Standard	**Nonstandard**
(1) Deaspiration	b:bh, d:dh, k:kh, etc.	b, d, k, etc.
	h-	ϕ-
(2) Deretroflexion	s:ṣ	ś
	n:ṇ	n
(3) Semi-vowel loss	w [front vowel	ϕ
	y [ə	ϕ
(4) Cluster simplifi- cation	pr-	pər-
	mru-	mur-

Occasionally nonstandard speakers (perhaps, in the process
of acquiring standard speech) acquire hyperstandard forms:

puḍhə   phuḍ - "in front of"

Apte mainly contrasts Brahmin dialect with non-Brahmin dialects equating the Brahmin speech with standard. He indicates education and urban dwelling as factors influencing the nonstandard speech toward standard. Recent in-depth studies show that speakers are more sensitive to " education " than to " caste " as a determiner of standard or nonstandard speech (Berntsen).

3.4. BENGALI. Bengali is spoken by 34 million according to the 1961 Census, and is the dominant regional language of West Bengal. There existed two recognized styles, *Sādhu-bhāṣā* (SB: Literary language) and *Calit-bhāṣā* (CB: Colloquial language). SB is never spoken as the grānthika (bookish) style of Telugu, whether on formal or informal occasions. The CB, whose base is the educated speech of middle and upper classes of Calcutta, has gradually spread as the modern written vehicle restricting the use of SB. The SB has earlier Bengali morphology but predominantly Sanskrit vocabulary including inflected nouns (*sāstratah̥, lokatah̥*, "from science", "from world"). As in the case of Telugu, the earlier form of literature was poetry confined to a small section of pundits well-versed in Sanskrit. When prose developed as a literary form and the mass media spread under social change, the CB could hardly be prevented from entering the written language in the twentieth century. The modern SB is also influenced by the CB and is " far less definable grammatically than it was a century ago " (Dimock, 43-63).

3.5. HINDI. According to the 1961 Census, Hindi is returned as the mother tongue of 133 million speakers excluding Bihari and Rajasthani, which account for 32 million speakers. It is the dominant language of seven States : Uttar Pradesh, Madhya Pradesh, Rajasthan, Bihar, Haryana, Delhi, and Himachal Pradesh. Hindi (also called Hindwi and Hindustani) originated as a trade language during the Moghul rule in Western Uttar Pradesh and Panjab and spread as the urban vernacular of Northern India (Chatterji, 192 ff.), known as *kharī bolī*, which constitutes the basis of modern standard Hindi. By the beginning of the 19th century Hindustani already became the vehicle of prose in two styles — Nagari Hindi and Urdu (Chatterji, 212). Because of different scripts and other socio-religious differences reflected in the choice of sources of borrowing (Sanskrit vs. Perso-Arabic), Hindi and Urdu came to be treated as two different languages, although in syntax they are practically identical. This difference in style between High Hindi and Urdu got further accentuated after Hindi become the official language of independent India, and Urdu, that of Pakistan after 1947.

Although the regional and subregional varieties used within the Hindi area are mutually unintelligible at distant points,

khaṛi boli serves as an urban vernacular and lingua franca throughout the Hindi area. It is also widely understood as a bazaar language in important cities like Bombay, Calcutta, Hyderabad and Madras outside the Hindi area (Gumperz and Naim, 100). Standard Hindi, based on this vernacular, has recently become highly sanskritized in its derivational morphology and lexicon. Even popular Hindustani expressions are being systematically replaced by Sanskrit forms, thereby needlessly interfering with the essential communication of a day-to-day nature.[2] The sanskritized style thus gives an air of superiority and exclusiveness to writers enabling them to maintain their control of the standard language and the social distance from the uneducated or the moderately educated.

3.6. To summarize, two historical processes are evident in the evolution of standard norms for writing among the dominant Indian languages :

1. A spoken form of the educated classes with clearly identifiable geographical boundaries constitutes the base of the modern written form, e.g., Hindi, Bengali, Marathi, and Telugu.

2. A literary dialect which is not the spoken form of any section of speakers superposed on several regional and social dialects is accepted as standard for forma communication, e.g. Tamil.

4. CASTE DIALECTS VS. STANDARD LANGUAGE. Sociolinguistic work on Indian languages by American linguists has emphasized " caste " as a factor in the shaping of standard languages, particularly in Southern India. These studies are sketchy and have not taken other variables into account (Bright 1960, Sjoberg 1962, McCormack 1960, Southworth 1972). Recent studies in some of these languages have shown that nonstandard speakers correlate standard speech with higher educational level than with

---

2. The following are examples of replacements of popular words of Indo-Aryan and Persian origin by Sanskrit tatsamas in standard Hindi (popular standard) *kapDaa* : *vastr* "cloth" *aaⁿkh* : *netr* "eye" *ke baad* : *pascaat* "after", *aur*: *evam* "and", *havaa* : *vaayu* " air " *davaakhaanaa* : *cikitsaalay* " hospital ", *taariikh* : *dinaank* " date ", *bijlii* : *vidyut* " electricity ", *khetii* : *kRSii* " agriculture " *bukhaar* : *jwar* " fever " *gussaa* : *krodh* " anger ", *khuun* : *rakt* ." blood ", *khaalii* : *rikt* " empty ", " vacant ". An elaborate discussion of this trend occurs in Gumperz and Naim (1960) and Gumperz and Das Gupta (1972).

caste (Krishnamurti 1962, Pandit 1972, Berntsen 1973). The model presented for Telugu would broadly suit the other Dravidian and Indo-Aryan languages. Caste has never been a static model in India and to establish speech variation along caste lines presupposes absence of communication between one caste and the other. Pandit maintains that caste is not a " relevant speech group " and variation in speech is functional simultaneously facilitating communication and maintaining social distance between the educated and the uneducated (1972, 55-56). Krishnamurti noticed no distinction in phonology between the uneducated Brahmin and the non-Brahmin varieties in Telangana Telugu (1971). If we were characterizing the speech varieties of, Indian languages at a point in history when Brahmins were the only educated class, perhaps caste would be a relevant variable in sepeech variation. But this is no longer true of modern Indian languages.

At least one linguistic aspect seems to be dominant in distinguishing the standard from the nonstandard. In Marathi (Apte 1962, Berntsen 1972), Telugu (Krishnamurti 1962), and Kannada (Bright 1960, McCormack 1960), the standard language has a much larger inventory of phonemes incorporating the phonologies of borrowed words from Sanskrit and English. This indicates that the phenomenon of bilingualism and multilingualism is a function of education in India and the bilingual's phonology naturally sets the model for the monolingual illiterates.

5. PROBLEMS IN THE STANDARDIZATION OF INDIAN LANGUAGES. Parallel phonological differences between the standard and the nonstandard among three mutually unintelligible languages like Kannada, Telugu and Marathi is a striking phenomenon which needs investigation. In the case of Marathi, Southworth traces this and similar parallels to a Dravidian substratum and the consequent hybridization (1968: pp. 45-55). In the process of modernization of Indian languages, Sanskrit is the main source language for lexical expansion. The distance between educated standard, on the one hand, the illiterate varieties, on the other, will be further increased and accentuated with the influx of a large body of Sanskrit based technical terms in textbooks and treatises on science and technology. Either terms with native constituents or borrowed international terms would do less to widen the existing social gap between the standard and the nonstandard, since a feature like aspiration reminiscent of social distance would be absent here. In this respect, fewer phonetic adaptations are required in a language like Tamil between the standard and the nonstandard speakers, since all lexical expansion is devoid of Indo-Aryan influence.

Whether the standardization of a language can be planned by committees or governmental agencies is a question relevant for the Indian situation. Where no standard norms exist, this is perhaps possible as in the case of Israeli Hebrew and Finnish. " Finland's was an unwritten vernacular, Israel's an unspoken standard. Today both are standards capable of conveying every concept of modern learning and every subtlity of modern literature. Whatever they may lack is being supplied by deliberate planning, which in modern states is an important part of the development process " (Haugen, 1972: 105).

The process will not be very successful in the case of Indian languages where widely accepted regional norms have developed long before their functional range has expanded. The only type of planning that seems to be within the range of planners is modernization which, according to Ferguson, is "lexical expansion and developing new styles and forms of discourse " (Ferguson, 1968: 32-33). The question boils down to one of finding technical terms and promoting rigorous styles of writing for scientific and technological subjects. Language planning in these areas has been defective for the Indian languages. The Scientific and Technical Terms Commission has manufactured nearly 300,000 terms with a Sanskrit base for different branches of knowlegde and they are avidly used by government agencies and law-makers. The users of modern knowledge should have participated in the creation of such terminologies. This has not happened except in the form of associating a few experts for each branch of knowledge.

A better beginning could have been made by encouraging the bilingual style of instruction in schools and colleges without a bar on code-switching and without insisting on the production of textbooks. Technical terms could have come into vogue by exploiting the natural processes of language growth, viz., borrowing through phonetic adaptation, coining with native components and expanding the meanings of the existing terms wherever possible. In subjects like agriculture, fisheries, etc. a survey of occupational vocabularies, as is done in Telugu, could provide the basis for coining new terms. The UNESCO paper on the use of vernacular languages in education proposes six principles for the creation of terminologies (707-78):

(1) Begin by making a study of vocabulary already in use, including recent borrowed words and native expressions recently formed to describe new concepts. The principal methods used include giving new meanings to old terms, using native descriptive expressions or derivatives, adopting foreign terms, modelling native descriptive expressions after convenient foreign models. The problem, then, is to determine which of these procedures are most generally used and in what way they tend to be applied to different sets of concepts.

(2) Avoid coining new words where native words are already in general use or where there are words which could easily be stretched to include the new concept without special confusion. If the native word is mainly used by people in a given section of the country or by specialists in some particular craft, then the problem would be simply that of generalizing its use. Along with the employment of words of strictly native tradition, one must give full consideration to relatively new words adopted from other languages, particularly if they already have general currency.

(3). Before adding a word to the vocabulary, be sure that it is really needed either at once or in the relatively near future. It is not wise to prescribe words which will not be used with some frequency, since such needs can be met by using brief descriptions. People generally will not bother to learn special words in such cases, and those few persons who go out of their way to use the prescribed terms may not be made in the case of new terms whose meaning is reasonably self-evident.

(4) Where a whole set of terms applying a given field of science has to be adopted, try to maintain general consistency among them, consistency as to type of formation and language of origin. The international terms from Latin and Greek, and other terms in widespread usage through the world, should be given special consideration.

(5) Make necessary adaptations to the phonemic structure and grammar of the language.

(6) Once the new terms have been chosen, try them out on a number of people to see how readily they take to them. If possible, experiment with the use of the new terms in lectures, class instruction and general conversation for a while before publishing.

These principles are hardly followed in modernizing Indian languages. Most of the new coinings are loan-translations of international terms, word-to-word or even morpheme-to-morpheme with Sanskrit components. Even popular terms of established usage have been replaced by Sanskrit-based loan translations. The so-called pan-Indian terminologies prepared by the Scientific and Technical Terms Commission have not found favor with the educational agencies of State Governments even in the Indo-Aryan area.

3. Here are a few specimens of technical terms used in Telugu collegiate level textbooks: equator belt *bhuumadhyareekhaameckhala*, reciprocal value *wyutkramamuulyamu*, dipolemovement *dwidhruwa bhraamakamu*, diaphram *wibhaajaka paTalamu*, spectrometer *warNapaTalamaapakam*, spark *sphulingamu*, magnetic meridian *ayaskaantakSitijasamaantara reekha*, inorganic *ajaiwika:* horizontal *samastaliiya*.

(Taken from *Provisional list of technical terms.* Telugu Akademi, Hyderabad, 1972.)

6. RESEARCH STRATEGIES IN LANGUAGE STANDARDIZATION. At present, in-depth studies are lacking on the exact form and function of standard languages in India. I would like to identify some of the areas in which research is needed.

(1) Cross-linguistic comparisons of the sociological and historical processes underlying the emergence of one or more norms for written communication should be made. Written norms in Hindi, Bengali, and Marathi originated from the spoken languages around metropolitan centers (Delhi, Calcutta, Poona). The standard norm in Telugu is more diffuse, its place of origin being the rich Krishna-Godavari delta from where most modern writers have come and evolved a written standard based on their colloquial speech. Telugu and Bengali are again comparable in that a classical language is progressively being replaced by a modern standard of the educated middle class. The standard language of Tamil stands on a different footing altogether, being a superposed classical variety which some consider as an underlying and even historically older form, from which modern dialects can be derived by a set of regular phonological rules (Ramanujan, 1968).

(2) A study should be made of the extent of use of the standard language in terms of the number of readers and listeners exposed to mass media, the number of prose publications, creative and scientific, and whether uni-modal or multi-modal standards are used in different spheres of written communication.

(3) A critical and comparative study should be made of the procedures of modernizing the languages and their impact on the acquisition of knowledge and the saving effected in terms of learning time, comprehension, and concept formation. The consequences of language planning by the Central and State Institutes of Languages in the production of college-level textbooks be examined. The extent to which this reform has accelerated the learning process as compared to the use of English as the medium should be assessed.

(4) Social acceptability does not necessarily guarantee wider intelligibility of a norm. Intelligibility surveys of the language and styles used in mass media (newspapers, radio-broadcasts, etc.) should be undertaken for different languages to see what factors matter most in comprehension. Phonological, grammatical

and lexical features interfering with intelligibility should be listed to quantify the degree of comprehension of the standard language in different social, regional, and educational groups.

(5) An assessment should be made of the role played by the language of the newspapers and the new *literati*, who, prompted by political power and nationalist sentiment systematically ban the process of borrowing as a means of enriching the language for modern concepts and its impact on the shaping of the standard language. Gumperz and Das Gupta (1971: 142-46) fear that the increasing classicization of Hindi by Eastern U.P. scholars under the aegis of the Hindi Sahitya Sammelan has widened the gap " between the media of elite communication and mass comprehension ". New rules of derivational morphology have been introduced by such coinings as *varjit, prakaaśit, sthaapit*, etc., causing uneasiness even among the educated speakers of Hindi regarding their control of the new standard.

7. ATTITUDES CONDUCIVE TO THE GROWTH OF STANDARD LANGUAGE. The following attitudes seem to help in the development of modern standard languages.

(1) As long as the spelling is uniform, regional variation in pronunciation should be tolerated where it does not signal information of strata along the social scale, e.g. In Telugu *ty* and *dy* are pronounced by educated speakers as *ccɛ, jjɛ* and *ttɛ, ddɛ*, respectively, in different regions.

Spelling		*Pronunciation*		
padyam	pajjɛm		paddɛm	" poem "
satyam	saccɛm		sattɛm	" truth "

The differences in regional variation are therefore derivable by a set of regular phonetic rules applied to spelling. Variation in morphology and lexicon should be tolerated where it does not correlate with social variation; different modes of addressing kinsmen and words in common parlance for daily essentials show a great deal of regional variation even within the standard language.

(2) In the coining of technical terms natural processes of language growth should be exploited including promotion of extensive borrowing. " A technical vocabulary can be equally effective whether it comes from the language's own processes of word formation or from extensive borrowing from another language " (Ferguson, 1968: 33).

419—2.

(3) Efforts should be made to promote multi-modal standards for different roles. A local educated standard would be more suitable as a medium of instruction at the primary school level and in adult literacy programs, to enable the learners to have smooth transition from their working-class home dialect to an " elaborated code " of the standard language. Bernstein maintains that " the lower the social strata, the greater the resistance to formal education and learning; and that this is a function of the social structure of the strata " (224). Although there are practical difficulties in publishing textbooks in local standard dialects, the cost is worth it when compared to the devastating effects of exposing socially backward children to a totally unfamiliar variety called the standard language.

(4) A standard language, once established, should absorb a greater number of regionalisms by planned efforts of creative writers to expand its comprehensibility. In Norway the elitist *riksmål* and the popular *landsmål* are thus being brought together by the planned efforts of government agencies and academic institutions. There are cases where standard languages died out by their exclusiveness, like Sanskrit and Latin, but no instance of a standard language losing its acceptability by being brought closer to the regional dialects. The mass media and powerful writers have a crucial role to play in this process. It is said that Bahasa Indonesia has enhanced its acceptability by its relative flexibility (Tanner, 133-35):

1. Standard Indonesian shows signs of becoming more acceptable for polite speech—as indicating respect and social distance.

2. Slang based on regional codes are being incorporated into daily Indonesian in order to make it " swing ", to mute its public, utilitarian, colorless and stiff connotations, and transform it into a flexible, informal style capable of promoting subgroup solidarities.

3. Through vocabulary expansion it has begun the process of becoming an adequate vehicle for technical discussions and for advanced as well as elementary education.

When this happens, several standard varieties develop within a standard language for different functional roles overlaid by a major standard for highly formal communication and rigorous writing.

(5) In scientific and technical discourses, informal code-switching should be encouraged between an Indian language and English so that concept formation takes precedence over word formation

This process will lead to free borrowing of terminology from the source language with necessary adaptation and assimilation into the phonological and syntactic patterns of the borrowing language.
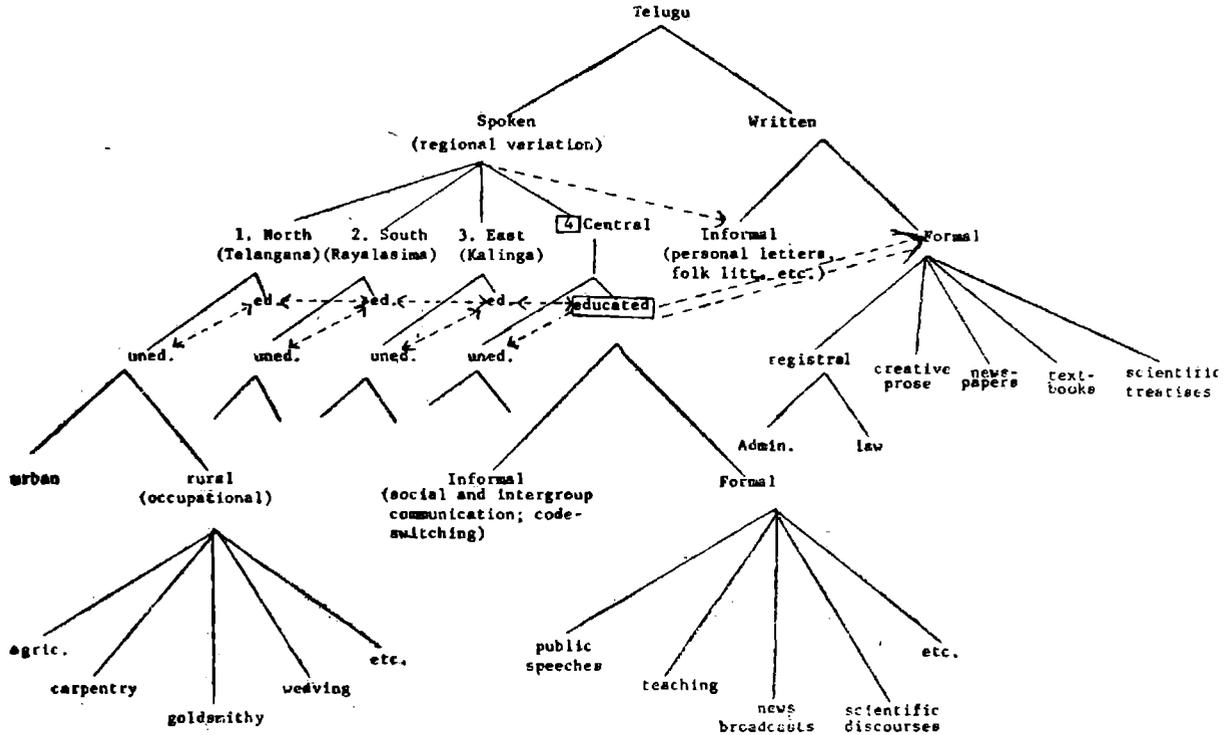
REFERENCES

Apte, Mahadev L. 1962.   Linguistic acculturation and its relation to urbanization   and   socio-economic   factors.   *Indian linguistics* 23.5-25.

Bernstein, B. Some sociological determinants of perception : an inquiry into subcultural differences. In Joshua A. Fishman (ed.), pp. 223-39.

Berntsen, Maxine. 1973. Social stratification in the Marathi speech of Phaltan. (Mimeo.) pp. 1-24.

Bloomfield, Leonard. Literate and illiterate speech. In Dell Hymes, pp. 391-396.

Bright, William. Linguistic change in some Indian caste dialects. In Ferguson and Gumperz, pp. 19-26.

————and A.K. Ramanujan. 1964. Sociolinguistic variation and language change. *Proceedings of the ninth international congress of linguists* 1962, pp. 1107-14. The Hague: Mouton and Co.

Chatterji, Suniti Kumar. 1960. *Indo-Aryan and Hindi* (2nd edn.). Calcutta.

Dell Hymes (Ed.). 1964. *Language in culture and society (A Reader in Linguistics and Anthropology).* New York: Harper and Row.

Dimock, Edward C. Literary and colloquial Bengali in modern Bengali prose. In Ferguson and Gumperz, pp. 43-63.

Fishman, Joshua A. 1968. *Readings in the sociology of language.* The Hague: Mouton and Co.

————, Charles A. Ferguson, and Jyotirindra Das Gupta (eds.). *Language problems of developing nations.* New York: John Wiley and Sons, Inc.

Ferguson, Charles A. Diglossia. In Dell Hymes, pp. 429-39.

————. Language development. In J.A. Fishman et al. (ed.), pp. 27-35.

————. 1962. The language factor in national development. *Anthropological linguistics* 4:1.23-7. New York: Kraus Reprint Corporation (1966).

Ferguson, Charles A. and John J. Gumperz (eds.). 1960. *Linguistic diversity in South Asia: studies in regional, social and functional variation.* Indiana University Research Center in Anthropology, Folklore and Linguistics. Publication 13. Bloomington, Indiana.

Garvin, Paul L. The standard language problem: concepts and methods. In Dell Hymes, pp. 521-23.

Giglioli, Pier Paolo (ed). 1972. Language and social context. Penguin books.

Goody, J. and I. Watt. The consequences of literacy. In Giglioli, pp. 311-57.

Gumperz, John J. and C.M. Naim. Formal and informal standards in the Hindi regional language area. In Ferguson and Gumperz, pp. 92-118.

Gumperz, John J. and J. Das Gupta. 1970. Language, communication, and control. In *Language in social groups: essays by J. Gumperz* (selected and introduced by Anwar S. Dil), pp. 129-50. Stanford University Press.

Haugen, Einar. Language planning in modern Norway. In Joshua A. Fishman (ed.), pp. 673-87.

————. Dialect, language, nation. In Pride et al., pp. 97-111.

Krishnamurti, Bh. 1962. A survey of Telugu dialect vocabulary. *A Telugu dialect dictionary of occupational vocabularies,* pp. 99-130. Hyderabad: Andhra Pradesh Sahitya Akademi.

————. 1971. Telugu māṇḍalikālu: Karimnagaru wāḍuka, pp. 7-25. *Telugu dialect bulletin no.* 1, Hyderabad: Telugu Akademi.

————. 1972. Bilingualism and social dialects in Telugu (Mimeo.), pp. 1-14.

McCormack, William. Social dialects in Dharwar Kannada. In Ferguson and Gumperz, pp. 79-91.

Pandit, P.B. 1972. *India as a sociolinguistic area.* Poona: University of Poona.

Pride, J. B. and Janet Holmes (eds.). 1972. *Sociolinguistics.* Penguin books.

Ramanujam, D.R. 1972. *Handbook of Statistics: Andhra Pradesh 1970-71.* Hyderabad: Bureau of Economics and Statistics, Govt. of Andhra Pradesh.

Ramanujan, A.K. The structure of variation: a study in caste dialects. In Milton Singer and Bernard S. Cohn (eds.), *Structure and change in Indian society.* Chicago: Aldine Publishing Co., 1968.

Shanmugam Pillai, M. Tamil, literary and colloquial. In Ferguson and Gumperz, pp. 27-42.

Sjoberg, Andrée F. 1962. Coexistent phonemic systems in Telugu: a sociocultural perspective. *Word* 18.269-79.

Southworth, Franklin C. 1968. Detecting prior pidginization: an analysis of the historical origins of Marathi. (Mimeo.), pp. 1-67.

————. 1972. Problems in defining the standard languages in India, England and the United States. *International Journal of Dravidian linguistics,* 1.29-37.

Tanner, N. Speech and society among the Indonesian elite: a case study of a multilingual community. In Pride et al. pp. 125-41.

The use of vernacular languages in education. Report of the UNESCO meeting of specialists, 1951. In Joshua A. Fishman (ed.), pp. 688-716.

Styles in Speech and Writing in Telugu

Telugu

Spoken
(regional variation)   Written

1. North   2. South   3. East   4 Central   Informal   Formal
(Telangana)(Rayalasima) (Kalinga)   (personal letters,
                                              folk litt. etc.)

        ed.←   ed.←   ed.←   educated

   uned.   uned.   uned.   uned.   registral   creative   news-   text-   scientific
                                                                            prose   papers books   treatises

urban   rural   Informal   Formal   Admin.   law
        (occupational)   (social and intergroup
                            communication; code-
                            switching)

   agric.   public   Formal
                                 speeches
      carpentry   weaving   teaching   etc.
           goldsmithy   etc.   news   scientific
                                           broadcasts   discourses

4. The educated speech of this area (central coastal districts)
   is the basis of modern written standard.

RULE STRATEGY FOR NATURAL RULES: PENGO TACTICS

C. RAMARAO

The present study of Pengo Phonology reveals that a language may inno-
vate unnatural rules and that they may not be contingent upon natural rules.
Three ordered rules have been intensively studied and their functions and mo-
tivations have been established. It is shown that an unnatural rule may come
to existence in order to make the way clear for a natural rule. A well motiva-
ted natural rule can exist in a language at the cost of the naturalness of a pre-
ceding rule. Pengo Vowel Elision is an unnatural rule which creates proper
environment for the following Vocalization rule, which is a natural one. It
has also been proposed that the Vowel Copying should be preferred to Epenthe-
sis and Harmony because it combines the effects of both without being arbitrary
like the former and without requiring an underlying vowel like the latter. * ·

It is a well recognised fact that languages employ unnatural
rules along with natural rules. Natural rules are interesting
because of their cross-linguistic significance and phonetic plausibility
Unnatural rules are language specific and lack phonetic justi-
fication. The study of unnatural rules is equally interesting for
it discloses many hidden mysteries of languages. An unnatural
rule may look quite meaningless on the surface but a close examina-
tion often reveals that it has functional significance in its interaction
with the other rules in .a given language.

There are two recent contributions to the study of unnatural
rules in phonology, with which we are directly concerned in the
present study. Bach and Harms(1972)contend that 'the
existence of implausible rules can be shown to result in large part
from the transmission and simplification of plausible rules.'
They state the source of unnatural rules in the following clear
terms. 'Thus languages have rules which are plausible or which
can be derived from plausible rules by a sequence of steps involving
(among other things) simplification: but in the process rules can
become highly implausible. In short languages have crazy rules.'
The authors seem to imply here that languages innovate natural
tules but become crazy in transmission. They seem to imply
rhat languages do not innovate unnatural rules.

Schane (1972), in his investigation of German dialects, studies
an unnatural rule that nasalizes a vowel in the final position.
He shows that this rule is contingent upon a natural rule that
exists in the same dialect which assimilates a vowel to nasality
before a final nasal consonant that would be deleted by a later

rule. He also makes an observation similar to that of Bach and Harms ' .... perhaps many unnatural rules or, in any event less natural rules can be considered as generalizations or extensions of a process to new environments.' He proposes a principle which we may call contingency principle the essence of which is that unnatural rules are contingent upon natural rules. He observes, ' It would be very nice if one could demonstrate that in a given language all unnatural rules are contingent on certain specific preceding natural rules '. But immediately he expresses his skepticism by saying " However, I doubt very much that Mother Nature is likely to be so kind to the phonologist.'

It is the purpose of this paper to show that languages may even innovate unnatural rules and a natural rule may depend on an unnatural rule for its existence which is the reverse situation of Schane's observation. It is not to deny the correctness of Bach and Harm's ' transmission source ' and Schane's ' back ward contingency ' of unnatural rules. But I think it is possible to find a situation where a given language innovates an unnatural rule, if it has a purpose to serve. It may be the case that when a natural rule is dependent upon an unnatural rule, the unnatural one often may have an independent origin, i.e. it may not have transmission source. The evidence for this observation comes from Pengo, a Dravidian language, spoken by approximately 1300 speakers in the Southern strip of Orissa state, bordering Andhra Pradesh in the Eastern part of India. The present study is based on T. Burrow and S. Bhattacharya's (hereafter B and B 1970) ' The Pengo language ' the only description of the language available so far.

I discuss mainly three rules in detail, viz 1. Vowel copying, 2. Vowel elision, and 3. Vocalization, which are necessary for the derivation of Pengo verbs. Among these, vowel copying is interesting for the problems it poses for formalization.

Pengo verb consists of root, tense, and person morphemes in that order. Tense may include not only tense but other related categories and there may be several at a time in a single verb, person suffixes are the morphemes that agree for gender, number, and person features of the subject of a sentence. Verb roots may end in a consonant or a vowel. Tense morphemes in my analysis are represented by a single consonant each. Person suffixes begin with a vowel.

B and B give the following paradigms for the verb huṛ ' to see '.

POSITIVE PARADIGMS

	PAST		FUTURE	
	Singular	Plural	Singular	Plural
I	huṛ-t-aŋ	huṛ-t-ap(excl.)	huṛ-n-aŋ	huṛ-n-ap
		huṛ-t-as(incl.)		huṛ-n-as
II	huṛ-t-ay	huṛ-t-ader	huṛ-n-ay	huṛ-n-ader
III m.	huṛ-t-an	huṛ-t-ar	huṛ-n-an	huṛ-n-ar
f.	huṛ-t-at	huṛ-t-ik	huṛ-n-at	nuṛ-n-ik
n.	huṛ-t-at	huṛ-t-iŋ	huṛ-n-at	huṛ-n-iŋ

·From these paradigms past morpheme t and future morpheme n can easily be identified. The forms that follow tense morphemes are person markers. All person markers, except II plural, are of VC type, and *ader* may be morphologically a complex marker.

NEGATIVE PARADIGMS

	PAST		FUTURE	
	Singular	Plural	Singular	Plural
I	huṛ-wat-aŋ	huṛ-wat-ap	huṛ-u-ŋ	huṛ-u-p
		huṛ-wat-as		huṛ-u-s
II	huṛ-wat-ay	huṛ-wat-ader	huṛ-u-y	huṛ-u-der
III m.	huṛ-wat-an	huṛ-wat-ar	huṛ-u-n	huṛ-u-r
f.	huṛ-wat-at	huṛ-wit-ik	huṛ-u-t	huṛ-u-k
n.	huṛ-wat-at	huṛ-wit-iŋ	huṛ-u-t	huṛ-u-ŋ

In order to minimize the typographic complexity I have taken the liberty of transcribing *w* for B and B's *v* and this is justified by their comment on the segment's phonetic nature. ' In pengo *v* is a bilabial continuant, fairly close in pronunciation to English *w* .'

We can see that the negative past is expressed with the shape of *wat* where *t* is past marker as in the positive paradigm. *wa* and *wi* are identifiable as negative markers. B and B have taken *wa* as the basic allomorph of negative morpheme and *wi* and *u* are suggested to be derivable. ("In the negative verb-*w*-followed by -*a*- in the past tense alternates with-u- in the present-future tense; *huṛwatan huṛun* (p.7). Alternatively *at* and *it* can be taken as variants of past tense and the vowel change can be achieved by the same harmony rule that would derive *wi* from *wa*.

As a matter of fact there is no compelling reason to associate the intervening vowels either with preceding negative marker *w* or the following past tense marker *t*. The representation of the negative marker with *wa* would even create unnecessary complication in deriving future negative verbs. For example the derivation of huṛ-u-t 'she will not excavate' would have to be ' huṛ-wa-at > huṛ-wa-t > huṛ-w-t > huṛ-u-t. This requires a vowel reduction rule to reduce a vowel complex in addition to vowel elision rule that is going to be posited in the present study. Besides, the association of the intervening vowel to the neighbouring morphemes is quite arbitrary. If we represent the negative morpheme as *w* and the past as *t* the intervening vowel can be supplied by a rule, which I call vowel copying rule.

VOWEL COPYING RULE

$$\text{R.1a.} \quad \phi \;\longrightarrow\; \begin{bmatrix} V \\ \alpha F \end{bmatrix} \;\Big|\; \text{w-t+} \; \begin{bmatrix} V \\ \alpha F \end{bmatrix}$$

Vowel copying is a process that combines epenthesis and harmony. Simple harmony rule requires a vowel in the underlying representation which would cost a segment. Epenthesis would be arbitrary because the epenthetic vowel would have no source in the environment. Hence, vowel copying should be highly valued and preferred to harmony and epenthesis. The environmental simplicity in epenthesis is only deceptive bacause an epenthetic vowel is an arbitrary insertion, and selection of the inserted vowel has no basis. Almost any vowel can be inserted by the rule and there does not seem to be any constraint on the quality of the vowel.

There is also evidence for vowel copying in closely related languages. Konḍa has the same rule between negative marker ? and past marker *t* (Ramarao, 1976). Parji, another related language, has it between grammatical morphemes. (Ramarao

and Usha Devi, 1976). This rule can be posited for pre-Konda-Pengo stage because of the partial identity of the environments in both the languages. In Bh. Krishnamurti's subgrouping Konda is more closely related to Pengo than to Kui and Kuvi. Kui and Kuvi have epenthesis instead of copying in this environment. It is possible to infer that pre Konda-Pengo-Kui-Kuvi stage had this rule which has been retained by Konda and Pengo and changed to epenthesis in Kui and Kuvi by probably a sound change. If this inference is correct, we would have a case for rule complication in Kui and Kuvi because epenthesis is less natural than copying. Parji's copying rule is a problem for historical linguistics because Parji subgroup is different from Konda-Pengo-Kui and Kuvi subgroup and Parji is the only language that has copying rule in Parji subgroup. (Parji and Gadaba together are closely related to Kolami and Naiki than to Konda-Pengo-Kui-Kuvi subgroup. Konda's copying is limited only to the environment of negative and past morphemes. But Pengo's copying rule can operate between any grammatical forms that occur between verb root and person suffixes. Only one for each of the Person suffixes beginning either with a or i, will be illustrated; III person feminine-neuter singular at will be taken as representative for a-beginning suffixes and feminine plural *ik* for i-beginning suffixes in verb paradigms· Copied vowels in verb paradigms are limited only to a and i. A variety of perfect tense is formed with the combination of past t and future n as in hur-tan-at ' She hase seen ' and hur-tin-ik they (female) have seen '. There is also a special base formed by the addition of d (B and B give t, d, ta and da as allomorphs), which is used when the object, direct or indirect, in the first or second person. The verb forms for hur ' to see ' are: Past. hur-dat-ar ' he saw ' hur-dit-ik ' they (female) saw '; Future: hur-dan-at ' ' she will see ', hur-din-ik ' they (female) will see '. Similar alternations occur with intensive—frequentative base förmed by the addition of b and the motion base formed by he addition of g (B and B give p, b, pa, ba and k, g, ka, ga as allomorphs, respectively for Intensive-Frequentative and Motion bases which have similar distributions as the above mentioned variants of special base morpheme). Copying operates in all the above cases, which facilitates the generalization of the rule as below.

$$\text{R.1 b.} \quad \phi \;\rightarrow\; \begin{bmatrix} V \\ \propto F \end{bmatrix} \Big/ \; + C - C \; \begin{bmatrix} V \\ \propto F \end{bmatrix}$$

This rule operates between any two consonant sequences that come after the root.   The rule copies the vowel not only from the person suffixes but also from the nonfinite formatives as the following examples would show.

Infinitives: huṛ-d-deŋ > huṛdedeŋ   ' to see ';

kic-d-deŋ > kij-d-deŋ > kij-j-deŋ > kijjedeŋ 'to pinch '

us-p-deŋ ⫸ uspedeŋ ⫸ ' to wear (clothes) '

Absolutives:—huṛ-d-dele ⫸ huṛ-de-dele   ' When(some one)
sees ' uṇ-w-dele ⫸ uṇwedele ' When (some one) does not eat '.

The above rule gives the impression that the copying operates

only once. But this can operate between the consonant sequences
of any number in the suffixes, though the actual number never
exceeds three.

huṛ-d-w-t-at	huṛdawatat	' she did not see '
huṛ-d-w-t-ik	huṛdiwitik	' they (female) did not see '

Rule 1b. can be modified to accomodate the above facts
by using the familiar parenthesis star notation.

R.1c. $\phi \rightarrow \begin{bmatrix} V \\ \alpha F \end{bmatrix} \Big/ + C \ (\!-\!C)^* \begin{bmatrix} V \\ \alpha F \end{bmatrix}$

If this is the whole story, there is no problem in formalization. The
application of this process is restricted by the root final vowel as
in the following forms of the verb hī ' to give ' would indicate.

hī-d-w-t-at	hīdwatat	' she did not give '.
hī-d-w-t-ik	hīdwitik	' they (female) did not give '

These forms would require us to incorporate the consonant
conditioning in the environment to block the operation in the
immediate *CC* after vowel ending roots. But that will not work
either because the simple negative past forms of vowel ending roots
allow this process as in the following forms.

hī-w-t-at	hīwatat	' she did not give '
hī-w-t-ik	hīwitik	' they (female) did not give '

When the negative morpheme *w* immediately follows the root,
the root final vowel is incapable of blocking the copying rule.
This means the parenthesis star notation would not be sufficient for
the operation of copying where it is needed and for blocking where
it should not operate.

The sequence of negative w and the following C seems to admit copying irrespective of any segment that precedes it. The copying is blocked when the sequence of grammatical morphemes involes other consonants than the negative w, by the root final vowel. To incorporate these facts the environment would have to be split into two parts.

$$\text{R.1d.} \quad \phi \;\rightarrow\; \begin{bmatrix} V \\ _\propto F \end{bmatrix} \Big/ \begin{array}{c} +w{-}C \\ C{+}C{-}C \end{array} \begin{bmatrix} V \\ _\propto F \end{bmatrix}$$

This rule applies in the first environment irrespective of the root final segment and in the second environment when the root final segment is a consonant. The application of the rule would be vacuous if the second environment includes the first.

Comparative evidence suggests that the first environment is the original domain of the rule and second environment is indicative of the expansion of the rule in the process of which generalization resulted in complex formalism. Current conventions of rule formalism do not reflect this generalization because environmental addition does not correlate with rule simplicity. This is what Schane, probably means when he says ' ....perhaps, many unnatural rules or, in any event less natural rules can be considered as generalizations or extensions of a process to new environments.' (quoted earlier)

This rule operates to break the sequences of consonants, permitted as well as non-permitted. The sequence of wC is permitted as in ṛaw-t-at ' she excavated ' and ṛiw-t-at ' it strewed'. There must be some reason to break the allowed sequence of consonants belonging to grammatical morphemes.

B and B do not illustrate the negative forms for the above verbs, but we can derive them by the application of regular rules. Negative past for the verb ṛaw would be ṛaw-wat-at. Geminated w does not occur in the language. As it happens in case of the sequence of ṇṇ, (retroflex nasal consonants) we can predict that a degemination process would operate to reduce the sequence. The resulting form would be ṛawatat ' it did not excavate '. This form differs from the corresponding positive form ṛawtat ' it excavated ' only in a vowel, which is supplied by the copying rule. It is possible to infer from this evidence that the copying rule is employed here to preserve surface contrast between positive and negative forms. Negative is a marked morphological category which cannotbe easily erased. The same reason would hold for the operation of this rule between other grammatical forms.

In other grammatical forms assimilation may operate between the sequence of consonants which would again erase the distinction. For example hur-d-t-at would become hurtat after assimilation and degemination. Again, only the copying rule can protect these morphemes from extinction. Therefore vowel copying is a well motivated rule with specific functions in the language. This is an antithesis to degemination and assimilation processes in the language.

In the future negative no tense marker appears and the presence of the negative morpheme alone is capable of giving future negative meaning. As the illustrated pardigm for hur 'to see' shows, the negative morpheme in future is represented by u. This has to be derived from w by a vocalization rule. Alternatively, u can be taken as the basic shape and w may be derived by desyllabification rule. But this alternative would destroy the conditions for vowel copying, which has been sufficiently justified earlier. Therefore vocalization seems to be better alternative than desyllabification. But this has problems too.

A vocalization rule cannot operate between two vowels. It would be natural for this rule to operate between two consonants. In Pengo it operates before a consonant. This language allows vowel sequences. The sequence of morphemes for the verb hī 'to give' in III person singular is hī-w-at resulting phonetically in hī-u-t 'she will not give' and for hur 'to see' is hur-w-at resulting in hur-u-t 'she will not see'. The initial vowels of all the person suffixes are elided. This requires us to formulate the following rule.

VOWEL ELISION

R.2. $V \rightarrow \phi \;/\; + w + \quad —C$

This rule provides a natural environment for the next rule by eliding an inter consonantal vowel.

VOCALISATION

R.3. $w \rightarrow u \;/\; + — + \; C$

This rule changes the back glide into corresponding high back vowel. The specification of morpheme boundaries is necessary to block this change in cases like raw-t-at 'she excavated' and riw-t-at 'it strewed'. We could have formulated a more natural rule if we did not have ader as II person plural marker. All the other person markers are of VC shape. After the elision

of the vowel, they provide a natural environment -C, but *ader* resists this formulation. In Koṇḍa this occurs with the shape of *ider* which has been analysed as a complex form with *id* as singular marker and *er* as an addition for plurality. This has been possible in Koṇḍa because the singular has i~id alternation and *er* occurs as masculine plural marker. (Krishnamurti, 1969, p. 286). Such an analysis is not feasible for Pengo for lack of evidence from within the language. Admitting this peculiarity in restricting the glide to inter boundary position, the very process of vocalization before a consonant should be accepted as a natural process.

Vowel elision changes an unmarked sequence of segments, CVC into a marked sequence CC, which will be reverted to an unmarked sequence VC by vocalization rule. As can be seen from the interaction of these two rules that the vowel elision rule is unnatural but vocalization, a naturl rule cannot operate without the former. In other words, a natural rule owes its existence to a preceding unnatural rule which is the converse of Schane's contingency principle. The purpose of vowel elision is only to provide the necessary environment for the vocalization rule.

There is no evidence to show that this unnatural rule has had a source in an earlier natural rule. In the closely related Koṇḍa, Kui and Kuvi languages the negative marker is ? (glottal stop) and it does not change shapes. The two rules could have been purely Pengo innovations.

Similar situation is found in Gondi which is another related language, spoken in Adilabad district of Andhra Pradesh. Observe the following paradigms (Subrahmanyam, 1971).

Present-Future positive for sūṛ ' to see '

	SINGULAR	PLURAL
I	sūṛ-ānt-on	sur-ant-om
II	sūṛ-ānt-i	sur-ant-it
III M.	sūṛ-ānt-or	sur-ant-er
non M.	sūṛ-ānt-a	sur-ant-an

Present-Future negative for tin (n) " to eat "

	SINGULAR	PLURAL
I	tinn-ōn	tinn-ŏ-m

II	tin-v-ī	tin-v-īt
III M.	tinn-ō-r	tinn-(ō)-ōr/ūr
non M.	tinn-o	tinn-ō-n

Past negative in this language is constructed by different negative markers which have no connexion with the marker here. Though the situation is not very clear from the above paradigms, we may note that Gondi has the same negative marker and the person suffixes begin with vowels. But no strong motivation can be found for either vocalization or vowel elision. Subrahmanyam's morphological divisions make us recognize ō as a negative variant but v → ō is quite an unnatural rule, at least, less natural than v → u. Negative paradigms can be derived simply by dropping v in certain cases (before mid vowels) and changing ā to ō in III person nonmasculine. At any rate Gondi cannot present a natural source for Pengo vowel elision rule and vocalization does not seem to be necessary for Gondi. Besides that *v* (w) and *u* as negative markers have been employed more widely in Pengo rather than in Gondi suggests that Pengo situation is older than Gondi's.

Vocalization in Pengo has a minor variation, which further supports the ' reality ' of this process for the Pengo speakers.

Future negative II person singular

	ō " to take "	jē ' to open '
Underlying	ō-w-ay	jē-w-ay
Vowel elision	ō-w-y	jē-w-y
Vowel shortening	o-w-y	je-w-y
Vocalization	o-ŭ-y∿o-w-i	je-u-y∿je-w-i

The sequence of *wy* may result in *uy* or *wi* by mutually exclusive vocalization rules. This alternative vocalization of *y*, limited to second person singular, may be a later innovation. Vocalization of one of the glides is obligatory in this situation because of phonetic constraints on the sequence of *wy* in the final position. This is an additional indirect support for vowel elision process in Pengo.

After vowel elision, vocalization has sufficient justification, but it has to be done on independent grounds because then alone, vowel elision could be justified. A rule which comes into existence at the cost of the naturalness of another rule should have a strong motivation to justify its emergence and survival.

B and B illustrate the verbs *huṛ* ' to see ' and *hī* ' to give ' as representatives of consonantal and vowel ending verb roots respectively. The underlying representations in future negative are *huṛ-w-at* and *hī-w-al* in III person feminine singular. There is no reason why the language should innovate a vocalization rule for either of these two cases for these forms consist of the segments in permitted sequence and they are sufficiently in contrast with their corresponding positive forms *huṛ-n-at* and *hī-n-at*.

But observe what happens with the w-ending roots. In future negative without vocalization the III person feminine singular for *ṛaw* ' to excavate ' and *ṛiw* ' to strew ' would be *ṛaw-w-at and *ṛiw-w-at. Degemination rule would reduce them to *ṛaw-at and *ṛiw-at. Though the surface contrast would be maintained by zero, the negative morpheme would lose its identity. I think it is a natural tendency for a language to strive for the preservation of identity of a marked category. As has been noted earlier, the future is already represented by zero in negative and further zeroing may be out of balance.

There is a contradiction in the above observations. We have justified the copying rule in terms of surface contrast for the past tense forms like *ṛaw-t-at* ' it excavated ' and *ṛawatat* ' it did not excavate ' where the forms are differentiated only by the copied vowel. A question may be raised here as to what happens to the principle of identity preservation in marked category? (Of course some languages may not have this tendency as can be seen in the Gondi paradigm illustrated earlier). There is surely confusion in the identification of *w* in *ṛawatat* ' it did not excavate ' as belonging to negative. The limitations of copying rule, I think, would resolve this. As has already been noted, copying would apply only between the consonants of grammatical morphemes and the copied vowel helps in identifying the neighbouring consonants as belonging to grammatical morphemes and thus the copied vowel in *ṛawatat* helps in identifying *w* as the consonant of negative marker. This also explains why copying is flanked by the consonants of grammatical morphemes and why it is obligatory in the environment of w-C. This means that the copying has three fold purpose, (i) to break the sequence of consonants, (ii) to preserve the identity of grammatical morphemes and, (iii) to preserve surface contrasts.

Then, the only way to defend the negative *w* in future against the attack of degemination is to innovate a change in the shape of the negative morpheme so that the degemination is blocked. This necessitatied the vocalization rule that changes *w* to *u*. This rule keeps the identity of both the root and the negative morpheme intact. But vocalization cannot apply if there is

419—3.

vowel in the following position. Hence the vowel elision rule
to clear the obstacles for vocalization. With the operation of
these rules in sequence ṛaw-w-at would be converted into ṛaw-u-t
with an intermediate stage *raw-w-t. Once innovated for these
cases, the rules have been uniformly applied to all the future
negative forms to give regular paradigms for all the verbs. B and
B list only ṛaw, and ṛiw for w ending roots. Apparently they are
the only verbs of such type found in their texts; '........it (w)
occurs at the end of two verbal roots, namely, ṛaw- ' to excavate
earth ' and ṛiw-' to strew, scatter ' (p.7). They are not even
illustrated in the grammar for future tense, positive or negative.
The forms that are cited here, have been derived by the rules
formulated for the derivation of verbs in general. I have no
doubt about the derivability of these forms. But a pertinent
question can be asked at this point. ' Has this language innovated
these two rules namely, vowel elision and vocalization, only for
these two verbs? It is obviously very expensive to innovate two
rules, one of which is unnatural, only for these two roots. I can
not answer this question in a straight forward way. It is possible
that the language has more verbs of this type which can be verified
only by further field investigation. Even if the number increases
by a few more verbs of this type, still the question remains as to
how many items are needed to innovate rules. I am not even
sure whether the number of items is pertinent for this. Perhaps
there are even stronger motivations which have escaped   my
notice, waiting for further intensive investigation. Pending
further investigation, I, however, think that it is well established,
that a language may innovate an unnatural rule to pave the way
for a natural rule, if it is required by the language.

REFERENCES

Burrow, T and S. Bhattacharya. 1970. The Pengo language:
    Grammar, Texts and Vocabulary. Oxford: University
    Press.

Bach, E and R.T. Harms. 1972. How do languages get crazy
    rules? In Stockwell, R & R.K.S. Macaulay (eds.) Linguistic
    Change and Generative Theory. Bloomington: Indiana
    University.

Krishnamurti, Bh. 1969. Konḍa or Kūbi, a Dravidian language:
    Texts, Grammar and Vocabulary. Hyderabad: Tribal
    Cultural research and training institute.

Ramarao, C. 1976. Konḍa conspiracy case. Paper presented
    in the 6th All India Conference of Linguists, Tirupati.

Ramarao, C. & A. Usha Devi. 1976.   Dialect differences in Parji
      vocalism: A possible case of rule insertion.   Paper presented
      in the 6th All India Conference of Linguists, Tirupati.

Schane, S. 1972. Natural rules in phonology. In Stockwell,
      R &   R.K.S. Macaulay.

Subrahmanyam, P.S. 1971.   Dravidian verb morphology: A
      comparative   study.   Annamalainagar: Annamalai
      University.

REDUPLICATION IN SANKETI TAMIL

H.S. ANANTHANARAYANA

Reduplication as a morphological process is examined in some detail and is noted to serve three functions, distributive, iterative, and emphatic. It is either complete or partial. Besides formal repetition, there is also meaning repetition. A few grammatical peculiarities are also indicated.*

Reduplication is a morphological process. By reduplication is meant the repetition of all or part of a base form. This repetition may either precede or follow the base. Occasionally, there may be variation in the radical vowel.

Reduplication in Sanketi,[1] as in any Dravidian language, is a very productive process and is found not only in onomatopoeic words but also in other areas of the lexicon. Almost all the grammatical categories, i.e. nouns, adjectives, verbs, are reduplicated in Sanketi and the syntactic use of these forms is sometimes different from that of the non-reduplicated base forms. The aim of this paper is to examine this process in some detail and to present some of their phonological features and semantic functions. It may be possible to think of some kind of semantic reduplication or meaning extension as we will be able to point out in this paper.

We may, to begin with, consider onomatopoeic words. These words are formed from sounds that resemble those associated with the object or action.

kaca kaca	' to masticate slowly '
kaṭa kaṭa	' to grind one's teeth '
kili kili	' to laugh heartily '
gaḍa gaḍa	' to shiver heavily '
gava gava	' to devour hastily '
giji giji	' a sticky state '
guḍu guḍu	' sound of disturbance in belly '
goṇa goṇa	' to grumble '
ghama ghama	' to smell sweetly '

---

*This paper was originally presented at the 5th All India Conference of Linguists held in New Delhi in 1974.

[1]Sanketi is a Tamil dialect spoken chiefly in Mysore, Hassan, Shimoga, and Kadur districts of the State of Karnataka. The Sanketi speakers are all bilinguals in Kannada which they employ also for writing. Further, they all belong to the Brahmin class and many are good at Vedic study.

cura cura	' belly feeling hungry '
cora cora	' to sip noisily '
jhaṇa jhaṇa	' sound of coins '
ḍava ḍava	' sound of fast beating of heart '
taka taka	' to jump excitedly '
thaḷa thaḷa	' to glitter brightly '
daḍa daḍa	' sound of fast walking '
ḍaba daba	' sound of thumping '
dhaga dhaga	' flame burning brightly '
pisi pisi	' sound of whispering '
phara phara	' sound of tearing of cloth '
buḷa buḷa	' feeling of something crawling on one's body '
bhara bhara	' sound of farting '
miṇi miṇi	' state of dying candle '
ləṭi ləṭi	' sound of breaking '
vaṭa vaṭa	' sound of prating '
sara sara	' sound of a snake's motion '

Examples may be multiplied. The reduplicating pattern
is obtained by repeating the base form completely without any
internal change. The base form itself has the CVCV pattern.
It is not possible here to decide which portion of these forms is
the base and which portion the repetition. Since Dravidian
languages use principally suffixation rather than prefixation,
we might take the first part as the underlying form and the second
part the repeated form. The underlying forms are themselves
never used in this shape. Some of them are however found in
use when some kind of a derivational suffix is added to them.

kacak ənt kədce	' I bit (that) with the noise *kaca* '.
gavak ənt sa:ptã	' He ate with the noise *gava* '.
laṭak ənt morīnjdu[2]	' (The tree) broke with the noise *laṭa* '.

The reduplicated forms in the above list contain words which
resemble sounds in nature and words which describe certain
actions and states. Syntactically, they modify the verbs and

[2]In word-final position, /u/ is phonetically [i] if the radical vowel or the
penultimate vowel is a non-back vowel; otherwise it is [u]. The penultimate
vowel is phonetically indicated where necessary to avoid confusion since all the
relevant morphophonemic rules are not given in the paper. For the remaining,
the material is in phonemic transcription.

therefore are classifiable as manner-adverbs. Like other non-reduplicated adverbs, these are also not inflected and have invariable forms. They are used as direct quotation with a following verb to mean 'say'.

giji giji ɔnnɔndu	'(The place) feels very sticky'.
vaṭa vaṭa ɔnva:ṇa	'Do not prate'.

They are likewise followed by a non-finite form of the verb 'to say' which is semantically equivalent to Sanskrit *iti*. The sentence is then completed by a verb the meaning of which is modified by the reduplicated form. There exists a correlation between the reduplicated form, which is used adverbially, and the verb in that each one of these reduplicated forms cooccurs with only a particular verb.

gaḍa gaḍa ɔnṭ nɔdgaṇã	'He shivers heavily'.
dhaga dhaga ɔnṭ eryɔndu	'It burns brightly'.
kili kili ɔnṭ ciryaḍa	'She laughs heartily'.

There are a few onomatopoeic words where the vowel of the radical position is changed in the reduplicated part.

kaṭam kuṭam	'sound of chewing something hard'
karam kuram	'sound of chewing something crisp'

Complete repetition of the underlying form is also found in words which are not onomatopoeic words. Any part of speech may be reduplicated and they differ then for meaning from the non-reduplicated forms. Unlike in onomatopoeic words, the base forms here are also used without reduplication.

VERBS

ka:t ka:t	'to wait for a long time'
kuɲj kuɲj	'to dance for a long time'
ko:ṭ ko:ṭ	'to hear repeatedly'
khu:vi khu:vi	'to shout for a long time'
cutti cutti	'to go around repeatedly'
cu:ḍi cu:ḍi	'to eat repeatedly'
colli colli	'to say repeatedly'
pa:t pa:t	'to see repeatedly'
pɔnni pɔnni	'to make repeatedly'
vɔnd vɔnd	'to visit repeatedly'

, The base form in these cases is the stem of past tense form. The reduplication expresses 'iterative' action as opposed to non-reduplicated forms which stand for a single action.

na: pa:te	'I saw'.
pa:t pa:t susta:cu	'I am tired of seeing that repeatedly'.
avũ vənd tondre 'kuḍaṇã	'He gives trouble by coming (here)'.
avũ vənd vənd tondre kuḍaṇã	'He gives trouble by coming (here) frequently'.

The reduplicated forms in the above sentences may be substituted by just the base form. In either case, it is a non-finite form and will have to be followed by a finite form of the verb to complete the sentence.

Reduplication is employed also to express 'continuity' of action. In this case, it is the present stem which is reduplicated.

o:da o:da 'reading regularly' ; *kuḍa kuḍa* 'giving regularly'

o:ḍa o:ḍa 'running regularly' ; *colla colla* 'saying regularly'

poha poha 'going regularly' ; *vara vara* 'coming regularly'

NOUNS

Nouns are reduplicated to express emphasis as well as distributive meeaning. The underlying form seems to be predominantly of CVC pattern.

(i) *ka:l ka:lĩk* 'foot'[a] ; *ci:l ci:lu* 'bag'

    tal tale 'head' ; *poy poy* 'lie'

(ii) *u:r u:ru* 'town after town' ; *din dinu* 'day after day'

    po:d po:de:k 'time after time' ; *ha:t ha:tĩk* 'house after house'

(iii) *kən kən* 'eye' ; *pəl pəl* 'tooth'

    cu:r cu:r 'piece' ; *cov covi* 'ear'

    va:y va:yi 'mouth'

The English meaning given here refers to the base word. It may be pointed out that the gloss in some instances is only 'approximate' and not an exact equivalent.

The inflection is added only to the second part of the reduplicated form which may be noted in the items *ka:l ka:lik* ' to each foot' or *ha:t ha:tik* ' to each house'. The emphatic sense is found in the items of group (i), as for example, *poy poy colva:na* ' Do not tell lies'. The distributive meaning is found in the items of group (ii), as for example, *avũ ha:t ha:tik po:nã* ' He went from house to house', versus *avũ ha:tik po:nã* ' He went home'. Reduplication serves the purpose of obtaining idiomatic expressions in the items of group (iii) as in *kən kən uṭṭã* ' He was surprised', as opposed to *kən uṭṭã* ' He opened his eye'.

ADJECTIVES

aḷ aḷhi:	' good-good'	;	*sol solpu*	' little-little'
uṇḍ uṇḍa	' full-full'	;	*puḷ puḷi*	' sour-sour'
pher pheri	' big-big'	;	*saṇ saṇṇu*	' small-small'

The second part of the reduplicated form may be used by itself, e.g. *ad aḷhi: huḍgi* ' She is a good girl'. The first part may be taken as the repeated portion. In the repeated part, the final vowel of the base is dropped. Excepting sequences of homorganic nasal and stop and clusters with /r/ as the first member, the remaining consonant clusters and geminates are simplified by dropping the second member. The reduplicated form has a distributive meaning, e.g. *ardh ardhu kuḍu* ' Give each one a half', versus *ardhu kuḍu* ' Give half'.

ADVERBS

ang ange	' there itself'	;	*uḷ uḷḷe*	' secretly'
jo:r jo:ru	' very fast'	;	*taḍ taḍvu*	' very late'
be:g be:gu	' very quickly'	;	*maḷ maḷḷa*	' very gently'
mod modlu	' at the very beginning'			

As in the above examples, here too the repeated forms drop the final vowel of the base form and simplify consonant clusters and geminates. Reduplication expresses ' emphasis'. The numerals are similarly reduplicated (e.g. *oṇḍ oṇḍu* ' one-one', *mu:d mu:ḍu* ' three-three') and the form has a distributive meaning.

We may now examine partial reduplication pattern. It is found in what are called ' echo' words. The widespread Dravidian echo construction is to repeat the word substituting for the first syllable (CV) a constant form *gi*. The vowel of this

echo syllable is short or long depending on the quantity of the radical vowel of the base word. Observe the following.

ka:lu gi:lu 'grain and the like' ; *ku:li gi:li* 'porter and the like'
ko:ti gi:ti 'monkey and the like' ; *kɔtti gitti* 'sword and the like'
ci:ra gi:ra 'saree and the like' ; *puli gili* 'tiger and the like'
bennu ginnu 'back and the like' ; *maru giru* 'tree and the like'

Here we have an open-ended list and any noun may enter into this echo construction. This kind of partial reduplication is found also for adjectives, adverbs, and verbs. Some examples for each are:

ADJECTIVES

kharpu girpu 'black and the like' ; *choppu gippu* 'red and the like'
Pheri giri 'big and the like' ; *saṇṇu giṇṇu* 'small and the like'

ADVERBS

ulle gille 'inside and the like' ; *be:gu gi:gu* 'quickly and the like'
malla gilla 'gently and the like' ; *modlu gidlu* 'firstly and the like'

VERBS

ka:vu gi:vu 'wait and the like' ; *cuttu gittu* 'turn and the like'
pa:tu gi:tu 'seeing and the like' ; *vɔndu gindu* 'visiting and the like'

In all the above instances, the pattern is to repeat the base word and to substitute *gi:/gi* for the first syllable. We can unhesitatingly consider the first part as the underlying form and the portion beginning with the syllable *gi-* as the echo form or repetition. Each part here behaves like a separate word for purposes of phonological rules.

It appears that here we have a case of semantic extension or semantic reduplication.[4] The meaning of the repeated portion shows resemblance to the meaning of the base word. The object or action referred to is similar to the one indicated by the base form. The reduplicated form therefore refers to a whole class of items all of which belong with the explicitly stated item indicated by the base word. Derivative as well as inflectional

---

[4]I am indebted to Dr. Sanmugadas for this expression. At the final stages in the working of this paper, I came across with his paper which I found to be very stimulating.

suffixes are added either to both parts of the construction or only at the end, e.g. *tu:ṇṇa:k gi:ṇṇa:k pa:ru* ' See, if you touch (me) or anything like that ', or *tu:ṇ gi:ṇṇa:k pa:ru* ' id.' If the base form is a monosyllabic word, then the echo form is simply *gi:/gi*, e.g. *hã:gī:* ' house and the like ', *sã:gī:* ' cooked rice and the like '. The vowel of the echo form here is also nasalizad, since the vowel of the base form is nasalized.

Another type of echo formation may be seen in the following:

ghɔṭṭa: muṭṭa: ' very strong '   ;*tiglmuglu* 'too much of something'

ha:ḷu mu:ḷu 'spoiled and the like' ;*hikka: mukka:* ' mercilessly '

higgari muggari ' mercilessly '   ;*hɔrku murku* ' rag and the like '

Here the first syllable of the echo form has *mu:/mu* instead of *gi:/gi* and the base word has in most cases an /h/. While *hɔrku* ' rag ', *ghɔṭṭi* ' hard ' can be used also in their non-reduplicated form, the other base words are not used like that. The echo construction emphasizes the meaning expressed by the base word.

The echo formation is different in the following:

a:rl pa:rlu 'staleness and the like';*ayl paylu* ' stupid '

e:r pe:ru ' uneven '   ;*aḷh paḷhu* ' good and the like '

ɔrh pɔrhu ' neighbourhood '

The first part is considered here as the base and the second part the echo, which can not be used by itself. The echo form prefixes a labial consonant /p/ to the base form. The echo construction emphasizes the meaning of the base form. In one instance, *o:r ko:ra* 'crooked ', the affixed consonant in the echo form is /k/ instead of /p/.

A reverse situation is however found in the following:

akku pakku ' neighbourhood '   ;*ɔdl bɔdlu* ' exchange '

ɔdr mɔdru 'to make loud noise ' ;*ɔrl mɔrlu* ' sign of oldage '

Here the second part is the base word which can be used independently, e.g. *u:si ɔttha mɔdru* ' the needle-like throat'. The first part which is considered here as repetition is without the initial consonant of the base word. The consonant is in all these examples again a labial consonant.

In three cases below, it is the dental consonant which is dropped in the first part of the construction, when repeated.

The vowel of the radical syllable is also different in each part of the pattern. It is /a/ in the first part and /i/ in the second part. Here, neither part is however used by itself and the construction has meaning only in combination.

appa:le tippa:le   ' a step in a game '

aḍḍam diḍḍam ' a count in a game ' ;*aḍḍa: diḍḍi:* ' prodigality '

Although formally different from the regular reduplication, the following seem to have an ' intensive ' meaning. The base form is the second part of these formations and can be used independently. The first part contributes to the intensive meaning.

guppaṭ gusu 'amounting to nothing' ;*cappaṭ ca:ru* ' tasteless'

niṭ nila:vu 'bright as moonlight ' ;*paṭṭa: pa:lu* ' broad daylight '

The first part is some kind of an echo and contains only the initial syllable of the base form in common. The long vowel of the base is shortened in the echo. This may be taken again as an instance of semantic reduplication.

Similarly, the following are semantic reduplications in that they emphasize the meaning of the base which may be used independently. The base is the first part.

a:ri avlu ' to grow cool '	;*u:l uppaṭṭa* ' very cold '
ja:r jappaṭṭu ' to slip awkwardly'	;*ji:n jippaṭṭa* 'extremely miserly'
ti:r tiṭva:ṭu ' shapeless'	;*ni:r nippaṭṭa* ' very watery '
po:ru pokkaṭṭa 'barely sufficient '	;*virinj vikke:pa:lu* 'fully opened'

The second part, which is some kind of an attribute to the base, has in common with the latter only the initial CV with however the short counterpart of the vowel of the base form in that syllable. In the remaining portion, we may note as in some examples of the earlier type a suffix of the form *-ppaṭṭ*. An alternant of this may be *-kkaṭṭ-* when the base word begins with a labial. The initial of the base word being a non-labial, the suffix is *-ppaṭṭ-*.

In the following constructions, the second word is echo and it shares with the base all but the initial syllable. The initial syllable is different between the base and the echo.

u:di ba:di	' swollen and what not '
cilla gulla	' small and smaller ones '
cu:ru pa:ru	' piece and what not '

tithi mati   ' day and what not '

puḷki:ri loḷki:ri   ' curry and what not '

sɔndi gondi   ' nook and corner '

hɔŋga:y ni:rga:y ' completely beaten up '

The reverse situation is found in the items below. The shared segment is only the initial consonant.

aṭṭu ara   '·upper storey and the like '

ka:nj kopri   ' dry as a dry coconut '

nuc nu:ru   ' hundreds of small pieces;'

poyyi pirṭu   ' false and the like '

mu:la mugṭu   · ' corner and the like· '

loḍḍu losku ,   ' excuses, pretexts '

śi:nj śi:ro:ḍu   ' overcharred '

sɔndi sokru   ' nook and corner '

higgi heggo:ḍu   ' overjoyed '

The echo extends the meaning of the base to include similar things or simply emphasizes the meaning expressed by the base.

Semantic extension is achieved in the following items by the use of alliteration in non-initial position. Neither part of the construction can be used independently.

arg bergu   ' very much surprised '

ɔj bijji   ' very much pressed '

ka:ṭa: pi:ṭi   ' carelessness '

nuj gujju   ' completely losing shape '

The second word may be something of a standard with which comparison is made of that expressed by the first word. The following illustrate this type.

oḷind burḍa   ' dry as a skull '

ka:ḷ kanga:ḷi   ' very fearsome '

tɔggi nugge:ka:yi ' bent down like a pterygosperma '

higgi hi:re:ka:yi ' blown out like a sponge gourd '

To sum up, reduplication as we amply illustrated is a productive process in Sanketi Tamil. It serves to express various functions. Complete repetition of the base word is found both in onomatopoeic expressions as well as in other vocabulary items. Partial repetition of various types are noted in the echo constructions. The base word in onomatopoeic expression is generally of the CVCV pattern while the pattern in echo formation is varied. We have shown here not only formal repetition as in onomatopoeia but have been able to demonstrate some kind of meaning repetition as in echo formation. Reduplication is used here at least in three different functions, viz. distributive, intensive, and iterative. There are also a few instances of idiomatic expressions obtained by the process of reduplication. We have also indicated some of the grammatical peculiarities of the reduplicated forms vis-à-vis non-reduplicated base forms. Finally, we may add that onomatopoeic and echo constructions are as important in   a language as other vocabulary items for one to understand and participate in the linguistic activity of a community with almost a native-like command.

COADUNATE MODEL

A Proposal for Language Planning in India

A.K. SHARMA

Attempt is made here to propose a new model for language planning in India. The Three Language Formula and Dil's plus or minus two and a half language model are critically examined and rejected. Teaching of the lingua franca as a compulsory second language in a multilingual situation is suggested as an important factor towards language planning.*

Language plays a significant role not only in the development of human beings but also in the progress of nations. It reflects the culture of a social group and is a tool for wider communication, education, regional and national identity. However, in a multilingual country like India, where more than a dozen regional languages or so-called national languages are constitutionally recognized, establishing a successful language policy poses problems.

Several studies have been done and suggestions made regarding the language factor in developing nations. India is one such nation where a model better known as the Three Language Formula was recommended. In January, 1955 the All-India Council for Secondary Education recommended Three Language Formula which could be implemented in all the schools of the nation at the secondary stage. The idea of such a formula was to equalize the burden of language learning among children of different linguistic regions. Actually, two versions of the Three Language Formula had been proposed by the Council (Silver Jubilee Souvenir 1960). One version included (i) Mother tongue or regional language or a composite course of both, or a composite course of either plus a classical language, (ii) Hindi or English, (iii) a modern Indian language or a European language other than the one already taken under (i) or (ii) The other version consisted of (i) Mother tongue or regional language, or a composite course of both, or a composite course of either plus a classical language, (ii) English or a modern European language, (iii) Hindi for non-Hindi areas, and a modern Indian language for Hindi areas.

---

*This article is a slightly modified version of the main chapter of the author's Ph.D. dissertation accepted by the University of Texas at Austin, 1975.

Almost every state introduced and implemented the Three Language Formula, but with its own modifications. These modifications which were originally not expected to take place, created non-uniformity among the states in the implementation of the formula. A new version of the formula was therefore proposed at the Chief Ministers' Conference in August 1961. The new version was to comprise (Fourth report 1962:90-93).

 (i) The regional language and, if the mother tongue is different, also the mother tongue.

 (ii) Hindi for non-Hindi areas, and another Indian language in Hindi areas.

 (iii) English or another European language.

The new formula actually turned out four language formula for the linguistic minorities, because it reequired the study of mother tongue, a regional language, Hindi and English.

Once again thinking on the lines of bringing about maximum uniformity among the states, the Government of India appointed an Education Commission in July 1964 to suggest formulation of a new policy for language study in the schools. The Commission recommended the following three language formula in 1966 (Report of the Commission 1971:192).

 (i) Mother tongue or Regional language.

 (ii) Official Language of the Union (i.e. Hindi) or Associate Official Language (i.e. English) as long as it had that status.

 (iii) Any modern Indian language or foreign language not covered under (i) or (ii).

Another model,which is not very different from the Three Language Formula, was proposed by A.S.Dil (1968), but not exclusively for India. The model is called The Plus-or-Minus Two-and--a-half Language Model. This model is a theoretical framework in which three languages are involved. The first language is referred to as the Local Language, the second is the Language of Special Status, and the third is an International Language. The Local Language is defined as the first language of an individual, whether written or unwritten. Language of Special Status could be any language, other than the first language, which has some special function in a social group. For example, for a native speaker of Hindi in Andhra Pradesh, Telugu could be a Language of Special Status for cultural or business reasons. The International Language could be any foreign language which has some international functions (Dil:121).

The term half language refers to the functional control of a language, i.e. an individual having a comprehensive and speaking knowledge of the language. In his study Dil claims that a language can qualify as a full language only when an individual can comprehend, speak, read and write the language. He further states:

> .... the " half language'' part in our model only indicates that whereas two languages are required to the level of native or near-native control, any one of the three languages in the model might be taken at the level of functional control (Dil: 125).

I think that the above model cannot be successfully implemented, even if India adopted it. For example, suppose a native speaker of Tulu, an unwritten language, goes to school in Andhra Pradesh. He will have to choose one of the nine languages offered in the State as media of instruction. So right in the begining one of the nine languages (whichever he chooses, probably Telugu) becomes a language of special status from his standpoint. Later he will have to study Hindi, which is a compulsory second language taught in most of the schools in the State. Now Hindi becomes a second language of special status for him because it is the Official National Language. He will have to learn English as an International Language because it is the most prevalent international language in the nation. But Dil is of the opinion that:

> ...a local language which is unwritten is limited to a very small number of people who are scattered in different places and are already in the process of giving up their language in favor of another which offers them better chances of employment, upward social mobility, etc. Under such circumstances, the model accepts this other language as the local language of these people." (Dil:122)

The statement seems contradictory to what Dil described as the local language.

According to the model, two out of the three languages must be acquired to the level of native or near-native control. Now the question arises as to which of the three languages the native speaker of Tulu will choose to be his full or half languages. All the three languages would seem as essential as his own mother tongue for him to be a successful individual in the modern society. However, acquiring native or near-native control of two of the three languages may or may not be necessary and would, at the same time, depend on his status in the society.

419—4

In Dil's model, there is no mention of a common link language which is very important for national integration and development in a multilingual country. There is a good possibility that the link language the nation would choose would be one of the regional languages spoken in the country which could become a symbol of national identity and, at the same time, retain the cultural heritage of the nation. The common link language will fall under the category of the Language of Special Status, if one accepts the Plus-or-Minus Two-and-a-half Language Model. Therefore, in the Indian sub-continent the Language of Special Status in Dil's model would become Languages of Special Status for the linguistic minorities in most of the States. For example, a native Tamil speaker residing in Andhra Pradesh will have to learn Hindi and Telugu as languages of special status; Hindi because it is the Official National Language and because it is the compulsory second language in the school curricula. It is not necessary for every individual in India to attain native or near-native command of either the Language of Special Status or the International Language. Only functional control of either or both of the languages mentioned in the category above are sufficient. What is more important for a multilingual country is a common link language which can bring about national integration, for once the nation is integrated by the link language then it (nation) can have better prospects of rapid development and industrialization.

The language model proposed here is a modest attempt to give insight into the development of the Regional Languages and justify Hindi as the *lingua franca* of the nation.

The Indian Government Language Policy has not been very successful either in Andhra Pradesh or for that matter in any of the other States, in making Hindi the common link language. One of the main factors which has prevented Hindi from becoming the link language is the recognition of English as the associate official language of the nation. Another one is the manner in which the language policy had been implemented by individual states. Furthermore, the voice of the politicians has overpowered the clamor of the educationists.

We would like to propose here a language model called COADUNATE MODEL. The term coadunate means 'flowing or coming together', and this is what is most needed in India today. The word coadunate is very appropriate for the model because it allows equal opportunity for the growth and development of both the Regional Languages and the Link Language.

COADUNATE MODEL

The languages involved in the model will be:

(a) Mother tongue (MT).

(b) Link Language (LL), Hindi in this case, or any one of the Regional Languages (RL), for speakers of the Link Language, recognized by the Indian Constitution.

(c) Language of Special Interest (LSI).

The model basically provides for the use of only two languages in the school curricula at the elementary, secondary and higher-secondary level. The first language will be the Mother Torgue as the medium of instruction at all three levels. The second language to be taught on a compulsory basis will be the Link Language, i.e. Hindi or any one of the Regional Languages recognized by the Constitution for the native speakers of the Link Language. The reason for offering one of the Regional Languages for the 'native Link Language speakers on a compulsory basis is to avoid any political friction from the different States ard to maintain the balance of language load for the students. Political friction was one of the factors for the failure of the present Three Language Formula in India. A third language may be studied on an optional basis, but only after the higher-secodnary stage. The language will fall under the category of Language of Special Interest.

MOTHER TONGUE: As the term indicates, it could be any language written or unwritten which a social group uses as medium of communication in everyday life. But when we talk about allowing the Mother Tongue to be the medium of instruction in schools, etc., then the unwritten languages are automatically ruled out for such a role. The native speakers of an unwritten language are usually a very small minority. In such cases the minority groups will have to opt for either the Link Language (Hindi in this case) or any one of the Regional Languages offered in the State, as their choice of medium of instruction.

LINK LANGUAGE: It could be any one of the various regional languages spoken in a multilingual nation. The choice of the Link Language may be based on the following criteria:

(i) Number of speakers.

(ii) non-elite groups of other languages.

(iii) Attitudes of the people towards the language.

(iv) Literary tradition.

    (v) Whether it has potential of rapid growth and develop-
        ment in accordance with modern trends.

    (·i) The quality and number of publications, including
        books, journals, dictionaries, etc. '

The final choice will have to be that of the people because it is
they who make the nation.

In our case Hindi seems to be the ultimate choice, because
it fulfils at least four of the six criteria mentioned above.

    (a) Total number of native speakers is about thirty percent
        of the population, which is about twenty-two percent
        more than its nearest competitor, which could be
        either Bengali (eight percent) or Telugu (eight percent).
        If English is considered to be one of the contenders,
        then the difference in number of speakers of Hindi
        and English will be about twenty-eight percent.

    (b) With regards to comprehensibility and usage in everyday
        day life, Hindi is either used or understood by about
        seventy percent of the Indian population.

    (c) Hindi has a literary tradition.

    (d) It has shown potential of growth as compared to other
        regional languages during the last quarter of a century.

LANGUAGE OF SPECIAL INTEREST: It could be any foreign
language, such as English, German, Russian, etc., or Sanskrit
Pali, etc., which may be of special interest to students entering
college and university education in various fields such as sciences,
the humanities, the social sciences, etc. For example, a student
working towards a degree in physics would feel that a working
knowledge of English or German would be of great help in know-
ing modern trends of research and studies in his field. For a
student in the humanities, Sanskrit might seem a good language
to do a comparative literature study. Facilities for the study of
the Language of Special Interest should be provided at the college
and university level, depending upon the State's resources and
the demand for the languages.

The stage at which the Link Language (Hindi) or any one
of the Regional Languages should be introduced will be the third
grade in the present school program. In doing so, each student
will study the compulsory second language for eight years. This
duration is sufficient to acquire a good working knowledge of the
second language.

An objection could be raised here by the native Hindi speakers with regard to learning, for eight years, a Regional Language which may not be of much practical use to most of the students. The objection is valid because Hindi, theoretically though not practically, is the Official National Language, and the National Language should be the one studied by the native speakers of the Regional Languages rather than vice versa. But unfortunately the attitude of the native speakers of the Regional Languages is not in complete favor of Hindi. Therefore, until Hindi gains popularity and acceptance as the *lingua franca* of the nation, maintaining balance in language load in school curricula seems to be the only logical solution. Once Hindi passes the test of nation-wide acceptance, which is the basic idea of our mode , modifications could be made in the language policy in accordance with the attitude of the people and the type of situation that prevails later in the country.

The medium of instruction for higher education can be both Hindi and Regional Language of the State, in each of the States of the Union. For example, in Andhra Pradesh there can be two universities, one having Hindi as the medium of instruction and the other offering degrees through the Regional Language, Telugu. At this point a question could be raised regarding the medium of instruction for higher education for the linguistics minorities. The situation will be identical to the present one. Today in Andhra Pradesh only four languages are being used as the media of instruction for higher education, viz. English, Hindi Telugu, and Urdu. But there are nine regional language media schools in the State, and students graduating from schools where the medium of instruction is Tamil, Kannada, Gujarati, Marathi, and Oriya are choosing one of the four languages mentioned above as the medium of instruction for their college education. Therefore the linguistic minorities will have to make a choice between the Hindi medium and the Regional Language medium until the State can provide facilities to establish institutions for higher education with minority languages as media of instruction. If the Coadunate mode is accepted, then Hindi will have the same position as English is now enjoying.

Apart from education, socio-economic factors also play an important role in making a regional language the *lingua franca* of a nation. From the socio-economic point of view, Hindi has a better chance of becoming the *lingua franca* of India than any other regional language. Hindi is either understood or used by about seventy percent of the population, as mentioned in an earlier paragraph.

In most of the major cities, either Hindi or the regional language is used for communication in everyday situations. For example, if one hires a taxi in Hyderabad, the capital of Andhra Pradesh, there is good possibility that the taxi driver will communicate in Hindi. If one enters a shopping centre he is likely to hear either Hindi or the regional language instead of English. Even highly educated individuals tend to use Hindi or the regional language rather than English at social gatherings, although they may not be Hindi speakers. In certain formal situations such as job interviews, etc. Hindi, English, or the regional language is used, depending upon the kind of job applied for. For example, if the job is for a labourer, a mason or a maid, the employer will communicate with the prospective candidates either in Hindi or the regional language, depending upon what language the candidate knows.

If one leaves the urban sector and travels through the rural areas of Andhra Pradesh, he finds that the regional language (Telugu) is used more by the population in everyday situations than Hindi or English. Therefore it is quite obvious from the above example that the regional language and Hindi are used more often in day-to-day dealings in the urban and rural areas than English.

This situation will not change and the average person will not be motivated to learn English when he is able to communicate in Hindi and the regional anguage. Therefore, our model could prove fruitful in the future because English cannot replace Hindi or the regional languages in every day use.

CONCLUSION

Language planning is one of the most complex problems most of the multilingual nations face today. The present model is an unpretentious attempt to suggest Hindi as the *lingua franca* of India. At present, there is not any set or well-recognized theory of language planning which can help provide a balanced language model that can solve the language problem in a multilingual country. Only time can solve such a problem, but this does not mean a country should just sit and wait for the right time. One has to make a start, and then may be time may change the course of the language policy in the nation. Even our model is not a perfect one. There are certain limitations at the present time for its immediate implementation. For example, the question regarding the teaching of profe sional courses like engineering, technology and medicine, etc. Hindi cannot be used (at present) as the medium of instruction in the above mentioned fields, but it is gradually advancing in that direction. In due course it will

be able to replace English in all aspects of administration, education, etc. There is enough evidence in the field of education, where Hindi has shown considerable progress. There are universities in the States of Bihar, Uttar Pradesh and Madhya Pradesh where the medium of instruction is Hindi and Master's and Bachelor's degrees in sciences, humanities, and even law, etc., are offered. (for details, see Goel and Saini).

The Caste System in India is one of the major causes for a high percentage of illiteracy. Illiteracy is one of the major factors which hinder the progress and development in a nation. But the situation is changing in India. Efforts are being made to educate the people of the backward classes and give them equal opportunity in employment, etc. So on the one hand the Indian Government is trying to overcome the Caste System in the country, but on the other hand the English language has created another social caste, the English elite, who are once again creating divisions in literate social groups speaking the same language. Our model, if accepted, can restrict creation of such a social caste as English has. An objection could be raised here saying that Hindi can also create such a social caste. But the situation will be entirely different if Hindi becomes the *lingua franca*. Because then every literate individual will know Hindi, and the question of seperate group within the same language society will not arise. The speakers will either communicate in their own language or, if they prefer, can converse in Hindi. This thought seems very idealistic, but can become a reality if Hindi is accepted as the *lingua franca*.

B.H.Jernudd and Jyotirindra Das Gupta (1971) do not define language planning as an idealistic and exclusively linguistic activity but as a political and administrative activity for solving language problems in a society.

If a model of language planning is normative, prescriptive, and development-oriented, then it may stand a chance of being successful when implemented in a multilingual country. Our proposed model seems to comply with the above mentioned requirements. It is normative in the sense that it can give insight to the multilingual nations who are faced with language planning problems; it is prescriptive because it makes the Link Language (Hindi) a compulsory second language for the non-native speakers of the Link Language; and it is development-oriented since it it allows equal opportunity for the regional Languages and the Link Language (Hindi) to develop without intereferring with each other if they are to be the media of instruction in the education system of the nation.

The Coadunate Model would prove more successful if implemented in every State of the Union rather than on a nationwide basis. In doing so, the Education Ministry and the Federal Government will be able to note the reactions and the results of the implementation in each State. Later a better Language Policy could evolve, based on the findings of the language situation in each State. Sometimes a little pressure from the Federal Government may help in implementing a language model in a State. For example, in India if all the States of the Union are alloted specific funds for the development of the regional Language and the Link Language, and if one of the States refuses to use the fund alloted for the specific purpose, then further allotment of such funds could be terminated. This idea has never been tried in India but could prove worthwhile.

REFERENCES

Dil, A.S. 1968. The Language Factor in the Development of Emerging Nations. Ph.D. dissertation, Indian University.

Goel, B.S., and Saini, S.K. 1971. Mother Tongue and Equality of Opportunity in Education. New Delhi: NCERT.

Government of India. Ministry of Education. 1966. Education and National Development: Report of the Education Commision, 1964-66. New Delhi.

Government of India. Ministry of Education. 1960. Central Advisory Board of Education, 1935-1960. Silver Jubilee Souvenir. Delhi.

Government of India. Ministry of Home Affairs. 1962. Report of the Commissioner for Linguistic Minorities: Fourth Report. Delhi.

Jernudd, B.H. and Das Gupta, J. 1971. Towards a Theory of Language Planning. in Can Language be Planned? Honolulu: University Press of Hawaii.

MARKEDNESS AND MISARTICULATIONS

C. Pushpalata

Data presented here shows that linguistic concepts can be utilized for explaining linguistic deviations. The concept of markedness is made use of, to explain misarticulation instances found among children in the age group of 4 to 8 years.*

In recent years, linguistics has been making inroads into several of the disciplines hitherto considered unrelated to it. One such field is that of speech pathology. Studies made by Roman Jakobson (1971), Schnitzer (1974) and others have shown that such interdisciplinary work helps enrich both the disciplines involved. Speech deviations can be explained in a better way now by linguists who profess to study language in all of its aspects, in a scientific manner. On the other hand, several of the linguistic hypotheses being put forward may find support or get rejected by evidence gathered from speech defects. An attempt is made in the present paper to explain instances of misarticulation by the concept of markedness in phonology.

A speech survey was conducted by the Linguistics Department in the twin cities of Hyderabad and Secunderabad. The purpose of the survey was to make an assessment of the speech problems present in the school-going children in the age group of 4-8 years though there was a large number of children in the age group of 5 and 6. A total of 503 students were studied.

The survey was started with the minimum of assumptions. No attempt was made to control and match the variables strictly. It was planned to include children from the three income groups of low, middle, and high. Since the proportion of low income group is higher than the high income group, more number of children from the lower income group were taken. The proportion of boys to girls was 224:179.

For testing the articulation of the children, ' Tests for Articulatory Evaluation of Telugu Speech Sounds' (1974) was utilized. The test consists of three types of evaluation, among which, the global test is the part which is concerned with grading of the articulation features into seven points. The left positive side

has three grades—(1) excellent (pronunciation), (2) fairly good, (3) good: the right negative side has three grades: (5) bad, (6) quite bad, and (7) very bad. Grade (4) represents the turning point from good or acceptable pronunciation of a speech sound to bad or unacceptable pronunciation.

For the present report, only a limited portion of the data is being used. That is, from the seven point scale used in the survey for grading the deviations, only grades 5 and 6 are taken because of their relevance to the study. In grade 5 are included all those cases of substitution where it was felt that the substituted sound is the unmarked one in a given pair of sounds. For example, for the sound [b] if the child's response happened to be [p], it was ranked as (5). Other instances of substitution, where the substituted and the substituting sounds have no such relationship, are put in grade (6).

Following are the percentages of errors in grades (5) and (6) for voiced and voiceless stops:

		Grade 5	*Grade* 6
p	..	..	0.5
b	..	3.5	0.5
t	..	..	1.6
d	..	1.6	2.5
k	..	..	1.4
g	..	4.9	2.0

The [+voice] feature supposed to be marked in the obstruents was pronounced as voiceless, as grade 5 indicates. The misarticulated voiceless stops, it was noticed, were produced at a different place of articulation.This led to their placement in grade 6. In all such cases, it was observed that the voiced counterpart too was produced at the same place as the misarticulated voiceless stop which supports the contention of the proponents of 'Markedness' that marked sounds presuppose the presence of unmarked ones. Thus, if the voiceless stops themselves are not mastered by the child, it is logical to expect the same error to occur while the voiced stop is being produced.

It is also claimed that voicing is a marked feature in obstruents while sonorants are voiced in their natural state. As it was pointed out earlier, it was observed that for misarticulation of marked sounds, the main feature to be noted was the absence of this marked feature. And this phenomenon of devoicing was found only in the case of obstruents. Not a single case was found where a sonorant was devoiced. All the substitutions for sonorants

have been made by voiced sounds. For instance, retroflex [ṇ] and [ḷ] have been found to be substituted by [ḍ], a voiced retroflex obstruent. The segment [r] was substituted by [l], again a voiced substitute. This indicates that the child is subconsciously aware of the voicing even though he is finding it difficult to produce the sound correctly. The percentage of correct responses also indicates that the voiceless obstruents are acquired much faster than the voiced obstruents.

Following are the percentages of correct responses for voiceless and voiced stops:

p	b	t	d	k	g
99.1	94.1	95.0	90.9	97.7	90.4

Ramarao (1975) proposed that retroflexion is a marked feature and that it is progressively marked from obstruents to sonorants to vowels. Both distribution and frequency of these sounds suggest such a situation. In several of the misarticulation instances retroflex [ṇ] and [ḷ] were found to be substituted by [ḍ]. Existence of this type of hierarchy in markedness is further suggested by other types of substitutions. It was observed that in the place of certain aspirated voiceless sounds, voiced unaspirated sounds have been used. For instance [ph] and [ch] in some cases have become [b] and [j]. It is quite possible that the children realized that [ph] and [ch] were in some way different from their unaspirated counterparts, but did not know how exactly. Since they were familiar or more exposed to voicing, they might have used this feature instead of aspiration.

It is also proposed in the theory of markedness that dento-alveolar region is a less complex position for producing a sound since it is the closest to the resting position of the tongue. This statement to a certain extent finds support from the deviations found, in that, most of the substituting sounds were found to be produced in this area. Thus, there were instances of k$>$ t, and also t (alveolar), g$>$ d, t$>$ t, ḍ$>$ t, d, c$>$ s, j$>$ d.

It was observed that ' marked features are less frequent in texts than the unmarked ones '. Appended to this statement, a hypothesis was formulated that the less frequent sounds are also those most often misarticulated than the frequent ones. A rank correlation (Pearson's) was calculated to see the relationship between text frequency and misarticulations, and a nearly significant ' r ' was obtained at twentynine degrees of freedom. The text frequency of [jh], according to a frequency count made some time ago, was one out of a total of 17,362, which, calculated in

percentage becomes .000%. This particular segment was observed
to have the maximum instances of misarticulation. Nasal [n]
which has the maximum text frequency ranks high in percentage
of correct articulations. However, this hypothesis seems to have
only a limited application in that [r] which ranks third in text
frequency also ranks second in frequency of errors. Several of
the investigators have found that [r] and [s] are among the most
difficult sounds, though their frequency of occurence is rather
high.

It was also observed in the frequency count that between
long and short vowels, it is the short vowels which have a higher
text frequency than the long ones. It is also the short vowels
which have higher scores of correct responses than the long ones,
as the following table indicates.

i:	i	e:	e	a:	a
95.6	99.4	91.3	95.05	93.6	97.4

o:	o	u:	u
94.5	94.9	97.8	100.0

It can be seen that the differences in percentage between
long and short vowels, with the exception of [o:] and [o] are
quite significant.

Thus, it is demonstrated here how linguistic concepts and
deviations in speech could be related. Current linguistic research
could give many insights to the problems of speech. On the
other hand, linguistic deviations could reinforce or reject the
propositions made by linguists.

REFERENCES

1. Jakobson, R. 1971. Studies on child language and aphasia.
    The Hague: Mouton.

2. Kostić, Dj., Mitter, A. and Krishnamurti, Bh. 1974. Tests
    for Articulatory evaluation of Telugu Speech Sounds.
    Hyderabad.

3. Ramarao, C. 1975. Dravidian evidence for abstract
    phonology. *OPiL* 1.30-44.

4. Schnitzer, M.L. 1974. Aphasiological evidence for five
    linguistic hypotheses. *Lg.* 50.300-315.

REVIEW ARTICLE

SOCIOLOGY OF SECRET LANGUAGE By R.R. MEHROTRA.
Indian Institute of Advance Study, 1977.

Reviewed by

GERALD KELLEY

Cornell University

This book is a collection of four related papers. The first presents the author's view of the notion of secret language, or ' argot ', the second and the third present specific data on two varieties of secret language, the Pandas and the Dalals, and the fourth presents an array of secrect number-names.

In the rst paper, Mehrotra presents his definition of an *'argot'* or secret language. He argues (p.5) that " perhaps the most essential quality of an argot in the context of criminal sub-culture is its secret nature " By his definition, an argot is invariably directed towards some kind of illegal or semi-legal activity and the concealment desired by non-criminal groups is different from the secrecy of an argot.' This provides a quite clear definition, though not one with which I would agree and not, I think, fully borne out by the evidence he presents. I would prefer to take fully borne out by the evidence he presents. I would prefer to take secrecy and resistance to outsiders to be the central properties of an argot, and to distinguish it from a jargon which, though also characteristic of a group, is hospitable to newcomers. Such a definition includes within secret language both criminal and non-criminal sub-groups. It may turn out that most (if not all) instances of what I want to call an argot would fall into Mehrotra's criminal behaviour set, but I would like to include non-criminal behaviour as well, and would recognize, as Mehrotra does (p.4), that some sort of c ine from criminal to non-criminal usage must be recognized. In talking about ' the communication matrix of professional criminals, ' (p. 10) one should recognize that there is a wide range between murder and rape on the one hand and gulling innocent pilgrims on the other, just as there must be a difference between eve teasers and thugs (p. 12). As he points out (p. 19), " the Indian scene, for instance, can offer a ready laboratory for observation and study of the fascinating argots of various criminal and semi-criminal groups like the

thieves and dacoits, burglars and smugglers, kidnappers and
eve-teasers, hippies and homosexuals, pimps and prostitutes,
and even a large section of *dalāls* (brokers) and *Paṇḍas* ''. In short,
on a scale of criminality, perhaps his definition presents boundary
problems which are not present in the definition I offer. The
prime consideration should not be what the legal status is, but
whether one can join the group. Following that definition, we
would not get into the problems which Mehrotra faces in distingui-
shing, for instance, sound business practice, sharp business practice
and out-right fraud among the merchants, Dalals and Pandas.
Samarin (p. 49) questions the criminal status of Pandas, because
of their traditional religious role and Mehrotra's rebuttal is not
altogether convincing. This seems to present another boundary
problem between the mainstream culture, some twi-lit world
(hippies?) and outright criminals, though here Mehrotra shows
himself aware of it.

At the outset, M's definition does not make it clear whether
the use of an argot requires the presence of an outsider. It is
possible, though difficult to know. of course, that the argot also
has some solidary functions, when used in private, among the
in-group. What about the silk merchants, for instance? Do
they use secret numbers or perhaps some of the Dalals' argot
among themselves, possibly in jest? He indicates (p. 26) that
both occur, but the argot is especially used in the presence of an
outsider. Presumably the sentence *majhi sambhal selale ho* (p. 32)
is interpretable by the pilgrims, ' The boatman has (paid?) the
pimp'. Is this a sentence to be said in his presence, since majhi
is given the open meaning " boatman " with the secret meaning
client, and Sambhal is given the open meaning pimp with the
secret meaning one hundred? Some other boundary problems
are also illustrated in Table 1.1 (p. 9) which gives pejorative
expressions in criminal sub-cultures. Here, we may be facing
the difficulty of distinguishing argot from slang. What is the
fate of argot terms which become well-known? A good case
can be made for the survival of the argot itself, as against usages
which die a natural death. (p.19) To take a few examples
from his list *sporting house* is probably a customer's term, not an
ingroup term. *Rip-off artist* has a wider application than the
domain of prostitution; *AC-DC* is well-known outside homosexual
circles; so also the terms *golden shower* and *hand job*.

We may also question the notion of argot as code (p. 37).
If we take code in the linguistic sense, no evidence of code-status
has been presented. It is too much to attribute a knowledge of
Sanskrit to Pandas, at least as a *code*, since their control is limited
to rituals, not always well-understood (p. 27). Similarly, an
argot is several times called an artificial language (e.g. p. 28),

but this term must be construed loosely, since no evidence is produced to show in it the systematicity or the creativity of a language; in act, its limited scope is often stressed. The *argot*, as we would expect, is almost exclusively a closed lexicon, with few regularly applicable grammatical processes. As he notes, it is largely (p. 30) lexical. Convincing evidence of widespread systematic innovation, beyond some minor mechaı i ms which are well within the structure of the dominant language is not forthcoming (cf.pp. 39-40); argot verbs are patterned on the dominant language.

Many of these criticisms would seem to be met by the author's claim (pp. 46-47) that the present study which, in fact, is a preliminary statement makes no pretenses to completeness either in regard to the linguistic or the social data. Yet elsewhere (e.g. p. 48) he says, After having acquainted myself with this secret lexicon, I watched them talk in their argot and examined its use in a variety of interactional contests. The paucity of semantic range in the argot may be covered by the statement (p. 47) that the " subjects in which they require secrecy are very limited, but it has not been shown that with a little stock of secret vocables and a few manipulations of the majority language, they manage to awe and mystify the uninitiated and maintain their group exclusiveness. Mystification true, but there is no evidence of awe.

As for mystification, the material from the tapes given as illustration (p. 55) does not add up to a coherent discourse. If this is agrot embedded in a discourse which also includes non-argot material, it would be useful to know the proportions, especially in view of the uncertainty of the status of discourse in argot (p. 11). Some terms such as restricted range or restricted domain of buying and selling might be more appropriate than ' restricted language' (p. 57). The complicity of the sıʼk merchants in the Dalal's transactions seems, once again, to blur the criminal notion. Or, is it only unscrupulous merchants who are involved?

On ambiguous utterances (pp. 67-70), we might note that they are certainly so in the abstract, but presumably, in context, the ingroup makes only the hidden interpretation and the dupe gets the open reading. That is, if only the open interpretation is possible for the pilgrim and the argot speaker recognizes the discourse as argot, ambiguous sentences are disambiguated.

The fourth paper is most interestirg ard irfcrmative. A study of the core of the commercial argots, it presents the most solid and provocative data in the book. Mehrotra, after discussion, rightlv concerns himself only with number names, ruling

out other properties of numbers. While, as he notes it is true
that the category of number appears to be universal, the language
-specific (or, in this instance, the argot-specific) systems may vary
widely. For example, the suffix *tay* in the usage of the silk mer-
chants seems to be regular for the numbers 10-19, though 3 and
13 show variations in stems (Suppletion?) a useful mystifying
device?). In this variety, there is also considerable systematicity
in the numbers 21-50, with predictable alternations, as Mehrotra
shows. Table 4.3, which gives the numbers used by the diamond
merchants in Varanasi, calls to our attention not only the regularity
of the (possibly complex) item-*birayate* in the numbers 15 to 19,
but also displays an intriguing factorial sub-system on the base
4. Thus,

thal	$=8$	*thal pa* $(8 \times 1/4)$	$=2$
babar	$=12$	*babar pa* $(12 \times 1/4)$	$=3$
sut	$=20$	*sut pa* $(20 \times 1/4)$	$=5$

airan pa$=1$ and *airvan*$=4$ may also be considered regular, taking
airvan as the base point for the sub-system. The Pandas of Gaya
use a combination of multiplication on the base 2 and addition
for odd numbers (Table 4.9). Their system, however, is
not comparable to the Australian example which Mehrotra cites
(p. 90), because apparently that system uses only addition. It
is difficult, likewise, for me to understand why Mehrotra considers
the diamond dealers usage economical (p. 94) and the Pandas
of Gaya unsystematic, since the latter appear to have a clear,
though limited, system.

There are also a few secret number names commonly used
by groups belonging to the same profession or place. This evidently
reveals borrowing at either end. (p. 85). Possibly this is so,
but, the presentation of more evidence, or at least this evidence
differently presented, might lead us to think of a common source.
Mehrotra makes much of the similarity of the Pandas' usage to
that of the thugs, but on the whole, I find his arguments unconvin-
cing. Table 4.15 gives a smattering of number names linking
the Varanasi Pandas and the thugs (pp. 2,3,5,20), but this dribble
is not persuasive (at least to me), given the over-view of number
names in the following chart, especially since *panro* (obviously
relate to Hindi as Table 4.13 indicates) is given as the Panda
term in Table 4.6.

(For the chart, see at the end.)

It should be noted that, of the numbers 1-10, only six is no*
common to more than one usage. 4,5, and 7 seem to point

towards some common origin, rather than borrowing, but the evidence is admittedly slim. I should also note that Mehrotra does not include the number names of the Dalals of Varanasi in this Chapter. Is this because they coincide with the number names of the silk merchants with whom they seem to interact the most?

The claim is also made (p. 88) that there is striking dissimilarity between the use of secret number names by *Pandas* and those of silk merchants, fruit merchants, diamond dealers, and others. Whereas in the case of the latter, only the number names are secret, the rest of the utterance being drawn from the ordinary language, the former i.e., *Pandas*, use their secret number names embedded in an utterance which is no less secret and private and suits their underworld activity. If this is so, how can one account for the non-numerical argot used by the Kothidar in the tape-recorded exchange reported on pp. 55-56? One should also recall Mehrotra's discussion (p. 54).

Some details may also be noted. Numbers refer to pages:

8. Shibboleth is really an example of dialect difference, not part of a secret language.

9. Gumperz 1971 is not in bibliography.

10. Does changing initial sounds result in possible but non-occurent sequences or in a natural Hindi word? On later evidence, apparently both.

11. The inconsistent marking of vowel length, and the lack of marking of apical and retroflex consonants witholds much information of value to the linguist. (See appendix for transcription of nagari. Symbols for ṛ and ṇ are given but not used in the text.)

12. It is hard to see how *bhasmi* 'flour' is a useful secret word, *ghoṛa* 'horse' = 'pistol' is clearer.

Mukerjee in text, but Mookergee in bibliography (cf. p. 11).

22. If there are 80 ghats and only 200 ghatiyas, they seem thin on the ground.

Bhandars are called 'sarak chap' derisively. By whom? Members of the ingroup presumably. Where is cohesion of the group.

419—5.

27.   Grimshaw 1972 appears to be an error.

31.   Repeated references to Maurer 1955 are apparently in error, or ref. to Maurer 1953 in the bibliography is wrong.

36.   Resemblance to Ramesi is impressive, but here *borki* ' knife ', cf. (p. 10) *chaku*, also (p. 37).

37.   lakra: ' boy ' an example of inversion or inheritance, or both? cf. table 2.44 (p. 38) lakra ' boy ' is given a kalava; kanaka. Perhaps M. does not mean ' gypsy ' in the sense I usually take it. ' Migratory criminal tribes ' might do sufficently.

38.   Table 22.4. *maspatti* is given for bhang; earlier (p. 32) *danaghas;* (p. 39) *khart=ganja.* Important items often have more than one term, but no explanation is given here.

39.   Table 2.5 gives *khosta=panda;* Table 2.7 (p. 41) gives a more specific gloss, but no explanation, no cross reference.

40.   Phantom note 6.

42.   Some questions on multiple terms are answered in Table 2.8, but the abandonment of terms is not shown; this matter is cleared up on p. 62.

42-43.   Interesting set of items regarding ingroup-outgroup positive-negative values. But there is still some confusion about grass and guns: *ghora* or *baja*?

44-45.   Function words are all drawn from the dominant language while, it is alleged, *most* nouns, adjectives and verbs are special argot forms. Given the difficulty of elicitation, if more examples are available, why are they not given? Although I did not make an exact count, the items occuring in various tables seem to me repetitive and scant.

45-46.   Goffman is already quoted in Chap. I. There seems to have been little effort to integrate the papers, which may be all right in itself, but results in some overlap as here.

53.   Chapter III has footnote numbers, but no notes. The pagination, however, is continuous, leading me to think that I do not have a defective copy. This is a very unfortunate omission since the notes in other chapters are very helpful.

58-59.   In Table 3.1. it appears that a suffix-*uca*-(not *ucana*) is added to stems, since-*na* is the regular infinitive ending. But

how secret are these verbs? The author claims (p. 59) that, *bharna, palna* and *dhalna* are already part of the sub-terranean language, not known to the layman. Yet all these verbs are given in Table 3.1 as corresponding terms in ordinary language.

This is somewhat confusing, since in Table 3.2. which gives semantic shifts in ordinary language verbs, *bharna*, for instance, is glossed as 'to fill', while in 3.1 it is 'to take' unless this latter is a gloss of *lena* only. Table 3.1. cannot be giving ordinary forms and argot glosses, since *milna, ana*, etc. have their ordinary glosses. Further confusion is introduced (p. 61) where *bharna* with the ordinary gloss 'to fill', is said to mean buy or pay in the argot, cited there without *-uca-*.

60. *lingo* is u.ed several times, but not defined. Presumably it is to be treated as synonymous with argot.

61. The glosses on Lallu Mal reflect the context rather than real semantic differences, perhaps like English 'thick', or at least they can be so interpreted.

64. *Mulsimvara* 'a moslem' and *Panditvara* ' a Pandit ' cannot be very hard to decipher, so also *sora* 'hundred', given context. *Saura* 'hundred' does not, incidentally, occur in the tables of secret numbers in Chap. IV.

64. The use of proper names for speech disguise is undoubtedly wide-spread. cf. American Mary Jane (perhaps now obsolete) for marijuana.

65. The example offered is confusing. If the weaver is offered Rs. 110 for a sari and the wholesale customer is prepared to pay more, why cancel this willingness? Perhaps, I missed the whole point.

67. On a commission of one anna per rupee. Figures in annas and paise do not work out exactly, of course, and negotiation: in annas (other than 25;50,75 paise) are advantageous on the whole. Negotiations in annas are still common in the markets and, for the broker, subsequent examples seem to bear out transaction in annas.

78. The examples Mehrotra gives of number names tied to specific objects are perhaps, well-known, but in my dialect, at least, *set* and *team* do not necessarily indicate a pair.

79-80. In Tables 4.2 and 4.3, would not the use of open *upar* suggest to the outsider, not only that a secret language is

being used (as he must know already) but that prices or calcu-
lations are involved? So also the use of *or* in the argot of the
Varanasi vegetable dealers (Table 4.5).

85. Table 4.4 informs us that *sut* (wrongly glossed here as,
'25') is common to Varanasi silk merchants, diamond dealers
and Pandas. The term does not appear in Table 4.6 (Varanasi
Pandas).

88. How did a chief Panda become a *cimada*, when Table
2.7 (p. 41) leads us to expect *dil?* A *cimada*, there, being a lowly
bodyguard or the like.

89. In Table 4.16 the fruit merchants number for 100 is
gongha. In Table 4.5 the gloss is '20'.

Table 2.3 (p. 6), stressing relationships between Panda
and Thug usage, gives bhartote as "a Panda at Kashi karwat"
and the Thug gloss as a 'strangler'. This seems to contradict
the euphemistic point raised in Chap. 1.

Table 4.4, giving numbers used by diamond dealers
shows babar pa dahay =30
:   babar pa dahay   =30
       sut pa dahay   =50

which follow the system, but airanpa dahai=40 where, systema-
tically, airan dahai would be expected.

90. Mehrotra claims that, apart from the Pandas of Gaya,
the base of numeration in all the secret number scales....is 10
with stray monomorphemic words. This is not quite true, because
of the factorial 4 of the diamond dealers.

93. For *rakhlay* in silk merchants' speech, compare *rakh*
=3 in Delhi Dalals speech.

95. With the exception of *pent* or *pintu*, Table 4.17 is identical
with Table 3.6 Dalali numbers given there are identical with
those o silk merchants!

Much of the tone of this review has been carping, and perhaps
some of the details are unimportant, but I would like to go on
record as saying that I have written so because I take this book
very seriously and I think the author has made a significant con-
tribution to our knowledge. Not the least valuable portion of
the book, and a signal of the author's scholarly achievements,
are the excellent bibliographies which accompany the papers.
The author has carefully studied the field and made a welcome
addition to sociolinguistics.

SECRET NUMBER NAMES (after Mehrotra)

Silk (V)	Diamond (V)	Fruit (V)	Pandas (V)	Pandas (KK)	Pandas (M)	Pandas (G)	Dalals (D)	Thug
1. sāng	.. airaṇ pā	nimā	sāng	dev	cattā	sung (?)	ekal	yetu
2. swān	.. thāl pā	jōr	javar	mahā	dukari	jognua (?)	swān	bitri
3. ikwai	.. babar pā	rag	singhara	adalc	netra	singhara	rakh	sancod(?)
4. fok	.. airvan	fok	fok	rava	fok	kusor	phuk	wodli
5. bud	.. sut pā	bud	panra	tandale	haltu	barmhat	budh	panchurā
6. dahak	.. citti	pochari	mithuni	kothu	khat	jogna singhara	kalangan	scrlue, scru
7. pēnt	.. būli	pent	salākhu	shalak(?)	risi	jogna sanghara sang	pent	sathuni
8. mang	.. thāl	mājhi	atthu	thaha	vasu	jogna kusor	majh	
9. kon	.. nahali	kon	nakhu	nakku	graha	jogna-kusor sang	wah	

Silk (V)	Diamond (V)	Fruit (V)	Pandas (V)	Pandas (KK)	Pandas (M)	Pandas (G)	Dalals (D)	Thug
10. salay ..	dhot	note	salay	dasain	note	jogna barma hat	salah	desur
11. iklay ..	gyagar	jaulay	ekadash				akala	
12. jolay ..	bābar	barsvay						
13. takhlay ..	tinpar	note ōr rag						
14. foklay ..	copar	note ōr fot						
15. budlay ..	palo bira-yate	note ōr bud	landar					
16. dahaklay	citti bira-yate	note ōr dahak				·		
17. pentlay	būli bira yate	note ōr pent						
18. nanglay	thāl bira yate	note ōr majhi						

Silk (V)	Diamond (V)	Fruit (V)	Pandas (V)	Pandas (KK)	Pandas (M)	Pandas (G)	Dalals (D)	Thug
19. konlay ..	nahali birayate	note ōr kon						
20. sūt ..	sūt	gongha						
50. bud dahay	sut pā dahai					adhākur		
100. legwara			sambhal	asli		akur		
1000. tāt ..								mahi
2000. ..								lacade
10,000. salay tāt								decade
1,00,000. la-kari								descade

Notes to the chart
V = Varanasi
KK = Kashi Karhat
M = Mathura
G = Gaya
D = Delhi

NEWS OF THE DEPARTMENT

Award of research degree:

Ph.D. : Swarajyalakshmi, P. The influence of Urdu on Telugu. (Supervisor: Dr. H.S. Ananthanarayana); Upadhyay, U.S. A Descriptive study of the Banjara language. (Supervisor: Dr. Bh. Krishnamurti)

M.Phil. : Ethiraj, Pramila. A stylistic analysis of T.S. Eliot's The Waste Land. (Supervisor : Dr. H.S. Ananthanarayana); Nirmala, P. Syntax and Semantics of auxiliary verbs in Telugu. (Supervisor: Dr. C. Ramarao); Pushpalata, C. Normal and deviant pronunciation of Telugu speech sounds in school-going children. (Supervisors: Dr. Bh. Krishnamurti and Dr. C. Ramarao); Pannala, Usha. Morphophonemics of Modern Telugu. (Supervisor: Dr. C. Ramarao); Subbarao, A. A linguistic analysis of thirty English verbs and their Telugu equivalents. (Supervisor: Dr. V. Prakasam)

Fellowship at the Advanced Center in Behavioral Sciences:

Prof. Bh. Krishnamurti spent a year (September 1975 to August 1976) at the Center for Advanced Study in the Behavioral Sciences, Stanford, U.S.A. as a Resident Fellow. During the year he also lectured to linguists' groups at the Universities of California (Berkeley), Chicago, Wisconsin, Illinois (Urbana), and Cornell (Ithaca). He attended the Third International Phonology Meeting in Vienna, September 1 to 5 and presented the paper, 'Sound change: shared innovation vs. diffusion'.

Publication:

BH. KRISHNAMURTI

1975a. Review of Dravidian Comparative Phonology: a Sketch (1970) by M.B. Emeneau. *JAOS* 95.312-3.
1975b. Language varieties and problems of standardization. *IL* 36.191-6.
1975c. Gender and number in Proto-Dravidian. *IJDL* 4.328-50.
1975d. (ed.) Telugubhāṣācaritra (History of Telugu language). Hyderabad: A.P. Sahitya Akademi.
1976. Review Article. Comparative Dravidian Phonology (1970) by Kamil Zvelebil. Lingua 39.139-53.

H. S. Ananthanarayana

1975.   The similes in Taittirīya Brāhmaṇa. *VIJ* 12.1-9.

1976a.   Kannaḍadalli Samskṛtada kelavu pratyayagaḷu (Some Sanskrit suffixes in Kannada). Sreekaṇṭhatīrtha 550-54. Bangalore.

1976b. Nominal derivation in Sanketi Tamil. *IJDL* 5.108-13.

1976c. Case system and metathesis in Sanketi- *Dravidian Case System* 241-62.

C. Ramarao

· 1976a. Mutyālasaram (Garland of Pearls. *Mahakavi Gurujada Appa Rao.* ed. Chalapati Rao. South Delhi: Andhra Association.

1976b. Markedness in cases. *Dravidian Case System* 221-40.

B. Lakshmi Bai

1975. Modes of Agent Suppression in Tamil. *Dravidian Linguistics* V. 73-86.

Dissertation Abstracts

Swarajyalakshmi, P.   THE INFLUENCE OF URDU ON TELUGU. (*Ph.D. Dissertation,* 1976).

Bilingualism is a widely observed phenomenon in several linguistic communities of the world and has been studied with reference to Germany, Switzerland, and the U.S.A. The Indian situation however presents great scope for bilingual and even multilingual studies. P. Swarajyalakshmi chose Andhra Pradesh in her thesis and in particular Telangana area, for a case study in language contact. During the period of the 14th to 18th century, Dakhini Urdu having received the Royal patronage was considered the dominant language and Telugu, the mother tongue of the natives, the lower language. This attitude towards Telugu, the scholar explains, was greatly responsible for Telugu to be influenced by Urdu.

The material made available by earlier workers in this field has been augmented by the scholar bringing data from Mackenzie manuscripts, Official and Court documents which throw valuable light on the revenue administration and judiciary. In addition, she carried out field work in Telangana area to observe lexical impact of Urdu in the speech of Telugu people of that area. She has also gathered Urdu words in the areas of Agriculture, Spinning

and Weaving, and Building construction, from the three volumes of dialect dictionaries which were not available to earlier workers.

The Urdu words in Telugu collected by earlier scholars were not subjected to any rigourous linguistic analysis; only a few observations were made. P. Swarajyalakshmi attempts here for the first time to classify the material scientifically and to offer a discussion of this material in traditional linguistic framework.

At the phonological level new contrasts are shown to have developed in Telugu. Different phonemic adjustments of the Urdu loans are shown to have correlation with dialect variation. The borrowings are neatly classified and minutely studied. Under the influence of the borrowing even some native words are shown to have changed their meaning. Frequency of Urdu words and the degree of Urdu influence in the speech of Telugu speakers is shown to have a correlation with their social background. The Verb system of Telugu too has changed under the impact of Urdu. Even some suffixes are borrowed into Telugu and the distribution of native suffixes has changed. In the changed political situation now, the inter-relation between Urdu and Telugu has been reversed and consequently, Dakkhini Urdu is now at the receiving end. This situation has been noticed and the Telugu influence on Urdu is also discussed.

[*abstract by the Editor*]

ETHIRAJ, PRAMILA. A STYLISTIC ANALYSIS OF T. S. ELIOT'S THE WASTE LAND. (*M.Phil. dissertation*, 1976).

There are broadly two approaches, viz., the Monistic and the Dualistic, to the study of style. But neither of these has been able to give a universally acceptable definition of style. Though style is too complex to be captured in a single neat definition, it is nevertheless useful to see it as 'purpose'. The purpose could be various, viz., decoration, effect, description, communication of an experience or message, etc. Most stylistic judgements, excluding that associated with genre, are largely intuitive. It can be shown that these intuitive judgements have a linguistic basis and they could be analysed and proved to be objectively verifiable. With this in mind, the Waste Land has been analysed to explain the cause of ambiguity and the sense of disorganization widely felt in the poem by literary critics and readers alike. The phonology, the syntax, and the semantics in the Waste Land have been analysed using linguistic information. It has been necessary to do this because of the device of 'parallelism' wherein the same message is conveyed on all these three different linguistic levels employed by every poet.

On the phonological level the use of free verse with its lack of a uniform rhythm and metrical pattern gives scope for ambiguity and therefore variant reading. On the syntactic level the ambiguity and the sense of disorganization are brought out by the frequent use of ellipses and apposition as also by the frequent change of linguistic forms to suit particular social situations. Eliot's syntactic style is free from any complexity and is characterised by a simplicity that is found only among the early writers or which is found in spoken language. He exploits apposition to the fullest extent. Apposition has been used here to denote any kind of word or word-group which is ap-posited to the 'sentence kernel'. Eliot does not conceive the sentence as a whole but proceeds piece-meal. He states the first idea in the first poem that occurs, without premeditation, and the second member is determined by the situation in which the mind finds itself after the first has been spoken and so on throughout the poem. The words are in a merely appositional relation, expressing the order in which the ideas present themselves. These appositives because of the manner in which they occur are ambiguous and commit themselves least. They could denote cause, consequence, or identify. They could be post-modifying adjectivals or could be reduced to relative clauses. Thus we find that the syntactic relations and functions are blurred and merge into one another resulting in incoherence.

On the semantic level the discordance and utter meaningless-ness of life in the Waste Land is brought out in the images and the mutually incompatible collocation of words. The images in the poem singularly personify nature or inanimate objects and dehumanise humanity thus focussing on the theme of life-in-death and death-in-life. Another characteristic of these images is their quality of being static and dynamic at the same time. Verbs play an important role in the humanising and dehumanising process. The images express the ambivalence of the poet. The analysis shows that style in the Waste Land could be regarded as a dimension of meaning.

NIRMALA, P. SYNTAX AND SEMANTICS OF AUXILIARY VERBS IN TELUGU, (*M.Phil. dissertation*, 1976).

Auxiliaries in Telugu, probably, like in other languages, pose many problems, semantic as well as syntactic, for investigators. Even the identification of auxiliaries and demarcation from other categories is not a mean problem to sort out. These and other problems have been discussed in this dissertation. The thesis consists of a preface and four chapters. For the benefit of non-Telugu people, a brief introduction to the area and dialects has been given in the preface.

A working definition for the category of auxiliary verbs has been proposed in the first chapter. On the basis of this, the auxiliary verbs have been identified and classified into modal auxiliaries and simple auxiliaries. Modal auxiliaries occur after infinitive form, simple auxiliaries occur after an extended verbal stem. Characteristics of both the types are discussed in this chapter.

In the second chapter is provided a detailed classification of the auxiliaries based on distributional and functional criteria. Distributionally, auxiliaries are of three varieties. There are auxiliaries that occur after extended verbal stems and that occur after inflexional stems. The stem formation and the auxiliaries that occur in each category have been discussed in detail. Various functions of these auxiliaries like modality, tense and aspect, transitivization, reflexivization, reciprocation, modification of the root, verbalization, negation and completion have also been discussed in this chapter.

The third chapter deals with the syntax of auxiliaries. The variation in the form and the differences in the use of modal and simple auxiliaries and the co-occurence restrictions of auxiliary and main verbs and the sentential constraints on the auxiliary verbs have been discussed.

The fourth chapter deals with the semantic aspect of auxiliaries. The contribution of meaning of auxiliaries to a sentence is distinguished and explained. The meaning differences of verb roots functioning as main verbs and as auxiliaries is also noted in this chapter along with certain identifiable similarities as well as differences. A few dimorphic verbs which can be seprated as root and auxiliary but fused into single lexical items have also been discussed. The last chapter is a summary of the results of the investigation. A short bibliography has also been appended.

Pushpalata, C. NORMAL AND DEVIANT PRONUNCIATION OF TELUGU SPEECH SOUNDS IN SCHOOL-GOING CHILDREN. (*M.Phil. Dissertation*, 1976).

The dissertation consists of 5 chapters. The first chapter presents an 'Introduction' to the topic. The problems and methods of collecting data are sketched here. Operational definitions of a few terms are also given.

Chapter 2 deals with 'methodology' followed in collecting the data. The test tool, population, and methods of elicitation of data are discussed in detail.

Chapter 3 gives the criteria for grading the articulatory responses of the children along a seven point scale. The concept of markedness is introduced here and the grading is based on this.

Results and discussion of the results are presented in the fourth chapter. A sketch of normal pronunciation of Telugu Speech sounds is also included here. Percentage scores are presented for each sound as well as for each group of sounds. These scores are discussed in the light of markedness. Various variables like economic status, sex, age, and their influences on the articulatory responses of the children are also presented here.

The final chapter presents a brief summary of the whole report and further research potential in this area.

At the end, the test used in the survey, some tables and a list of schools visited are included after which a detailed reading list is presented under bibliography.

OSMANIA PAPERS IN LINGUISTICS

Volume 2, February 1976