This volume is a collection of papers presented at the second annual meeting of the American Council of Teachers of Uncommonly-taught Asian Languages (ACTUAL) held in Boston, Massachusetts. The following papers are included: (1) "Passives as Reflections of Thought: A Case in Indonesian" by S. Dardjowidjojo, (2) "Acquainting Language Students with Dialect" by D. Dellinger, (3) "A Classification of Verbs in Vietnamese and Its Pedagogical Implications" by N. Liem, (4) "Kam-sui-mak and Tai Tonal Correspondences" by B. Oshika, (5) "Degree of Comparison in Modern Javanese" by R. Sumukti, (6) "The Problems of Programming Devanagari Script on Plato IV and a Proposal for a Revised Hindi Keyboard System" by T. Bhatia, (7) "The Nature of Rural Marathi: Some Hypotheses" by I. Junghare, and (8) H. van Olphen's "Honorifics and the Teaching of Hindi." Most of the papers have extensive bibliographies. (PMP)
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David W. Dellinger, Editor
This volume is a collection of papers presented at the second annual meeting in Boston of the American Council of Teachers of Uncommonly-taught Asian Languages (ACTUAL). It is fortunate that, from the beginning, ACTUAL has been able to publish its annual proceedings. In the future, these volumes will be a clear mark of the growth and development of the professional organization specifically oriented toward the more rarely taught languages of South and Southeast Asia.

The concern for languages of this geographical area received its greatest impetus as a result of defense needs during the Second World War. Following this war, many of the scholars with experience in these languages were absorbed by, and taught in area programs established at various universities. For the next fifteen years, the "languages" struggled along with only moderate growth. Development was hampered by lack of materials, scholars, trained native-speaker teachers, funds and student interest. The conflict in Vietnam brought on a new wave of interest which overnight generated a proliferation of area programs and course offerings. With the decline of American participation in events in Asia has come the painful withdrawal symptoms of waning interest in, and funds for, most Asian languages.

Perhaps there could not have been a more appropriate time for the formation of ACTUAL. Just when the uncommonly-taught Asian languages are faced with prospects of a "life or death struggle," they have received a forum where they can be heard. In the past, their presence always has been obscured at other professional meetings by the dominant presence of the "major" languages. ACTUAL now provides an outlet for those scholars with similar interests and problems. It is my personal hope that scholars and teachers of South and Southeast Asian languages will not regard ACTUAL as just another organization demanding time and money, but one which can meet their specialized needs. This publication is one effort by ACTUAL to justify the interest of its members.

I wish to thank the Center for Southeast Asian Studies of Northern Illinois University for its support by publishing this collection of papers as an Occasional Paper in the Center's publication series. The Director of the Center, Donn Hart, has been generous in providing typing assistance and funding for publication. I am grateful also to the Department of English for a supplemental grant. I also express my appreciation to the authors who submitted copy-ready typescripts of their papers, reducing the labor of typing and editing.

David W. Dellinger
Editor

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PASSIVES AS REFLECTIONS OF THOUGHTS: A CASE IN INDONESIAN

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University of Hawaii

Any perceptive observer of Western Austronesian languages can readily see that there seems to be a serious difference in the way speakers of these languages express some of their ideas, especially when compared to English speakers expressing these ideas in English. The difference does not seem to lie in the style of speech as this term is usually understood, but in the socio-cultural values established within the society. I am thinking in particular of the expressions in which there is an unconscious and yet consistent attempt on the part of the native speakers to "play down" the role of the agent and the activity which this agent is to perform, and replace it, instead, with an emphasis on the state of affairs either resulting from or connected with the activity. A goal-oriented phenomenon of this type is usually referred to as passive.

The relatively extensive and intensive study of the structures of Philippine languages by both native and non-native scholars (Hidalgo and Hidalgo, 1971; Ramos, 1971; Constantino, 1965; McKaughan, 1958; Reid, 1966) has, among other things, revealed a structural construction peculiar to western languages such as English. Around the middle of the sixties it was referred to as passive (Constantino, 1965), but later on replaced with the term "focus" — a term which is now used to cover what we call here passive and some other related phenomena.

What interests me most from the study of these Philippine languages is that some structures of these languages revolve around the concept of having one element within a sentence "in focus." This means that if the focus is on the goal, the sentence is equivalent to what we usually call passive. Another interesting point is that Philippine languages possess, rather uniquely, quite a great number of focus types. Constantino (p. 79), for instance, mentions that many of the twenty-six languages which he studied have six different — at that time he still used the term — passives. Teresita Ramos (p. 122) believes that there are actor, goal, locative, benefactive, and instrument foci in Tagalog. She further mentions that an imperative sentence can also be given in the goal-oriented form.

The active versus passive problem in Indonesian has been in existence for some time, but it has not been sufficiently handled. The old controversy between Alisjahbana and Mees on whether or not Indonesian has passive sentence type remains a controversy. What creates the controversy seems to be the fact that the term passive means different things to different people. I am using the term passive in this paper to refer to both syntactic and semantic phenomena. Included under the syntactic phenomena are the morphological changes that the verb must undergo in its surface structure and other syntactic constraints resulting from these morphological changes. Semantically, a sentence is to be considered passive, if in the deep structure the patient bears "old information" as defined by Chafe (1970, p. 219).

In order to arrive at the relation between passives and modes of thinking,
I must go through the following points. First, I will briefly mention the forms of the passive sentences in Indonesian and then point out how extensively these forms are used in other constructions. Second, I will describe their usages in situational contexts. And finally, I will present my conclusion, however speculative it may be.

Using primarily meaning and secondarily verbal affixes as the criteria for classification, we have in Indonesian four types of passives. The first type is that which indicates intentionality of the action. The verb is marked by the presence of the intentional passive prefix di-. The patient is normally, but not obligatorily, placed before the verb. The agent marker oleh is obligatorily present, only if the agent is separated from the verb by anything at all. This marker plus the agent are optional. We thus have sentence (1) below:

(1) Rumah dia dibakar (oleh mereka).
house he be-burnt by they
'His house was burnt by them.'

The second type of passive indicates an unintentional action. The verb is marked with the unintentional prefix ter-, and the agent is not normally given. The patient occurs normally before the verb as given in (2):

(2) Rumah dia terbakar.
house he be-burnt
'His house was on fire.'

The third type is adversative passive. There are several types in this group, but I will only present one which has both an agent and a patient. They are rather unique as far as syntax and semantics are concerned. Consider sentence (3) below:

(3) Rumah dia kejatuhan pohon.
house he get-fallen-onto tree
'His house got fallen onto by a tree - A tree fell on his house.'

The adversative verb affixes consist of the prefix ke- and the suffix -an. The nominal occurring before the verb is the patient onto which the nominal after the verb falls. Notice here that the marker oleh as found in (1) does not occur in (3).

And finally, there is a passive sentence whose verb takes the affixes ke-an as in (3) with the meaning "capable of being + past participle of the verb." The agent does not normally occur. See sentence (4).

(4) Rumah dia kelihatan.
house he can-be-seen
'His house can be seen.'

Using Chafe's approach the semantic structures (deep structures) of (1) through (4) are represented below as (1a) through (4a) respectively.
X and Y refer to the inherent and the contextual features which, in our present discussion, are not relevant.

Comparing the above semantic structures and their respective surface manifestations in (1) through (4), we can readily see that the agent is missing, or at best optionally indicated as in (1). The only time when an agent is obligatory is when an alternate passive for (1) is used as given below, where the verb loses its passive prefix di- and the agent is placed immediately before the verb.
Let us now look at some constructions, usually involving relative clauses, in which the verb used is passive. As we can see from the four types above, type 2 and 3 are unique in that these are the only types that can be used to express unintentionality and adversity respectively. Type 4 can be paraphrased in such a way that the verb kelihatan is replaced by dapat dilihat 'can be seen' — thus following type 1. This replacement, however, implies the presence of an agent. We are left with type 1 which should have no reason to be more frequently used than its perfectly grammatical and acceptable active counterpart as given in (6).

(6) Mereka membakar rumah dia.
    they burn house he
    'They burnt his house.'

The fact is that there are constructions in the language in which only passive verbs are permitted. The first type of these constructions is that which places an emphasis on the object. Sentence (6) is a plain statement of fact with no special emphasis on any of its constituents. If, however, the speaker wishes to emphasize the object, he has to perform several operations. First, he must remove the object to the beginning of the sentence with -lah optionally added at the end of the nominal phrase. Second, this shift brings about the existence of the relative marker yang 'who/which' which relativizes the rest of the sentence. The relative marker here functions as a substitute for the shifted object. The internal structure of the relative clause must be passive. We, therefore, have (7) or (8):

(7) Rumah dialah yang dibakar oleh mereka.
    house he-emphatic which be-burnt by they
    'It was his house which they burnt.'

(8) Rumah dialah yang mereka bakar.
    'It was his house which they burn.'

instead of the ungrammatical sentence (9) as, say, English speakers would expect.

(9) *Rumah dialah yang mereka membakar.

where the verb membakar is active as indicated by the prefix mem-. While (7) and (8) are interchangeable, they are interchangeable in so far as the agent is a third person pronoun, an unmodified kinship term, or a short proper name. If the agent is not a third person pronoun, only the type exemplified by (8) is acceptable. On the other hand, if the agent is a modified kinship term, a non-pronoun NP, or a long proper name, only the type exemplified by (7) is acceptable.
With the obligatoriness of the agent in passive sentences such as (5) and (8) above, are we not in fact saying that the role of the agent is more significant than we thought? I do not think that this is the case. When hearing these passive sentences spoken, I intuitively feel that the speaker is directing my primary attention to the concept or thing whose referent he and I share — in Chafe's terminology this is minus new information. Then he supplies further information as to what happens to this concept or thing, with only very minor reference to the agent who performs the activity.

The second type of construction in which a passive is used is similar to the one we have just discussed except that the second type is interrogative. Consider sentences (10) and (11) below:

(10) Mereka membakar apa?  
they burn what  
'What did they burn?'

(11) Mereka membakar siapa?  
they burn who  
'Who did they burn?'

Again here, if the speaker wants to emphasize the object which, in this case, has been replaced with the interrogative word apa or siapa, he must perform the same operation as we just did for (7) and (8). The only difference is that the shifted object can take optionally the particle -kah, and not -lah. We, therefore, accept (12) and (13) but reject (14) and (15).

(12) a. Apakah yang dibakar oleh mereka?  
what which be-burnt by they  
'What was it which they burnt?'

   b. Apakah yang mereka bakar?  
'What was it which they burnt?'

(13) a. Siapakah yang dibakar oleh mereka?  
'Who did they burn?'

   b. Siapakah yang mereka bakar?  
'Who did they burn?'

(14) *Apakah yang mereka membakar?  
(15) *Siapakah yang mereka membakar?

The third construction is also in the form of a relative clause related to object substitution. This time it involves embedding. Consider (16):
(16) a. Rumah itu sangat tua.

'The house was very old.'

b. Mereka membakar rumah itu.

'They burnt the house.'

The object rumah itu in b has the same referent as the subject rumah itu in a. If we now want to embed b into a, the relative clause used must be in the passive form as given in (17) and (18):

(17) Rumah yang dibakar oleh mereka itu sangat tua.

'The house which they burnt was very old.'

(18) Rumah yang mereka bakar itu sangat tua.

'The house which they burnt was very old.'

The fourth construction in which a passive is used is significantly different from the first three we have just discussed. This construction has an adjective predicate followed by a verb as given in (19):

(19) Rumah dia mudah dibakar.

'His house is easy to burn.'

The verb which modifies the predicate adjective, as we can see, must be in the passive form, although its active counterpart can occur in constructions such as (20):

(20) Membakar rumah dia mudah.

'To burn his house is easy.'

We see from the foregoing analysis that there are constructions in Indonesian which obligatorily require the passive form. We can also see that these constructions take either active or "to-infinitive" form in English.

How extensively are these passive forms used in real situational contexts? This question is, in fact, the very reason why I am presenting this paper. As native speaker of Indonesian (and Javanese which behaves in the same way), I often caught myself and others using quite a great number of passive sentences, although the active counterparts are available. Under normal circumstances, when a husband wants to ask, say, his wife whether or not she has boiled water for the morning coffee, very likely he will come up with a sentence such as (21), and not (22):

(21) Apa airnya sudah dimasak?

'Has the water been boiled?'
although there is nothing wrong whatsoever with (22). What may be wrong with (22) does not lie in the grammatical structure of the sentence but in the explicit mentioning of the second person to whom you direct the question and the activity you expect her to perform. It is indeed immaterial to the questioner whether or not she is the one to do the boiling, although it is very probable that he assumes she did. By using (21) rather than (22) he is interested more in the state of affairs resulting from an activity which someone — in this case, perhaps his wife — has performed than on someone doing an activity which then results in the state of affairs. From the wife's point of view, (21) is a much softer request in the form of a question with no explicit reference to her having to do the boiling, although she knows very well that her husband must have her in mind when uttering the sentence. The state of affairs is achieved with no one feeling uneasy about "being ordered" by anyone.

The subtle usage of the passive sentences is not restricted to family circles or socially oriented conversations. Even under the most serious circumstances, people very often use passives rather than actives. For instance, if someone in an office wants to know whether the person he is talking to (or someone else) has burnt the tape which he wanted burnt, he will very likely phrase the question as given in (23), and not (24).

(23) Apa pitanya sudah dibakar?
   "Has the tape been burnt?"

(24) Apa kamu sudah membakar pitanya?
   "Have you burnt the tape?"

Similarly, at the end of a formal meeting, the chairman may want to have the minutes typed immediately. The order that he gives will be in the form of (25), not (26).

(25) Coba notulen itu diketik segera.
    'Please have the minutes typed soon (by you).'

(26) Coba kamu mengetik notulen itu segera.
    'Please (you) type the minutes soon.'

We see here that an imperative sentence is very commonly given in passive. I must admit that there are cases in English where an order or interrogative request is given in the passive form. I believe, however, that this is what I earlier called style — "an individual's deviations from norms for the situations in which he is encoding" (Osgood, 1964, p. 293). The usage of the Indonesian passives, however, is not a deviation from the norm. It is the
norm — norm being defined here on the basis of statistical probabilities.

Now if life verbally revolves around asking questions, giving orders, and making statements, and if many of these activities are verbally expressed in passive sentences, I wonder why we linguists (including myself!) have not grasped this cultural significance after years of involvement. In my previous works, for instance, I discussed the active-passive contrast but stopped short at describing what the contrast was, and only briefly touched upon the difference in usage, let alone the relative frequency which may have some bearing on the society. I was hoping that the Philippine linguists, who have made a much more intensive and extensive study of their languages and who have found quite a great number of passive related structures, would throw some light upon the problem which I have just become aware of. From my reading, which is far from being extensive, I found only one work which deals with the frequency of the passives. Ruiz (1968, p. 35) reported that out of the 650 verb formations in Hiligaynon, 47% were in the actor focus, the other 53% were in the goal focus with the objective focus having the highest functional load of 35%. He further said that of the 6,000 tense-aspect modifications in English, only 8.5% were in the passive construction.

In view of the fact that passives permeate the structures of Indonesian and many other Indonesian languages so extensively, and that in many cases they constitute the norms rather than the deviations, I believe that we should give the passives more attention than we have given before. Just to quench my curiosity, I took Kipandikusmin's short story Langit Nakin Mending which consists of approximately 500 sentences. It is fiction telling the story of Prophet Muhammad who descended to earth for a fact finding mission. It has, therefore, narrative as well as conversational parts. While the story precludes the possibility of using extensive passive sentences, to my surprise I found that 25% of the sentences are in passive. For a completely different purpose, my student translated this story into English. Going through her English version, I found that only 4% of the 25% are passive. There are five instances which are active in Indonesian but passive in English. This then gives us approximately 10% passive forms of the total sentences in the story.

Quite obviously we need a much more indepth study than one short story, but if our present finding is indicative of what may be the real truth, I think that it is high time for us to pursue this matter further.

Finally, I would like to raise the following question: does this linguistic reality which manifests itself in the form of a passive and which is used as a norm have anything to do with the mode of thinking? I realize that I am raising the oldest question in human history, "but I just cannot believe that the preference to use passive sentences over their active counterparts is without reason. The question of whether language shapes thought, or thought shapes language is centuries old with no clear cut solution (Muller, 1871; Humboldt, 1836; Sapir, 1921; Whorf, 1956). In 1836 Humboldt said that "language wells from a depth of human existence (p. 2) ... the creation of language is an innate necessity of humanity. It is not a mere external vehicle designed to sustain a social intercourse, but an indispensable factor for development of human intellectual powers, culminating in the formulation of philosophical doctrine (p. 5)." He further mentioned that the continuous operation of the intellect "exerts in its usage a definite and persisting effect" (p. 127).

If I correctly understand his highly complex style, Humboldt in fact says
that there is a give-and-take reciprocality between language and thought. At one stage in the development of humanity, there was a period when thought was necessary to develop language. As the language became gradually developed, it restricted the operation of the mind.

I tend to believe that the preference to use passive sentences in certain situations in Indonesian and other Indonesian languages results from the mode of thinking lying way down below consciousness. I fail to see why sentences such as (21), (23), and (25) are chosen instead of (22), (24), and (26), if not because of the mode of thinking prevalent in the life of the speaker in relation to the people in the society.

BIBLIOGRAPHY


ACQUAINING LANGUAGE STUDENTS WITH DIALECT

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Of all the aspects of language and language learning known to, and studied by, language teachers, one of the least discussed is the question of dialects. Probably no foreign language taught on any scale anywhere in the world today is a one-of-a-kind, dialect proposition; all the languages are collective labels for groups of dialects, and yet the dialect aspect is very much ignored, usually rating little more than a cursory acknowledgement of the fact. Languages are usually taught because they are spoken by a substantial body of speakers; and the very fact that there is a large number of speakers initiates the interest in the language that leads to its being taught. As a corollary, because a language belongs to a large body of speakers, it is a linguistic verity that there will be dialectal varieties.

Languages that get taught in schools are usually defined as languages on a political basis, i.e. such a language can be viewed as a collage of dialects within the borders of a state. It is somewhat more apt to define languages according to language communities - groups of people who regard themselves as using the same language (Halliday 1964). Within a language community, each speaker has a variety of language, characterized by certain features, which he uses all the time. This variety he uses in common with a certain body of other habitual users, but probably not all other users; this is a dialectal variety. The other dialects of the same language have their own distinguishing sets of features. But within the limits of his dialect, the speaker has a range of other varieties that he calls upon according to the social situation - formal, informal, intimate, subservient, etc. These are registers (styles) of language (Halliday 1964).

We are quite familiar with dialects and registers in our own languages. In English we can recognize Cockney, Oxford English, Yorkshire English, Australian 'Strine', American Southern, Appalachian, Black, etc. In any one of these dialects, the speakers can exploit linguistic devices to be stand-offish; to invite intimacy; to make official announcements; to interview for a job; to talk on the telephone to a stranger; etc. That registers exist in Asian languages is confirmed by Jacob's observation that "Well-educated Cambodians...tend to adopt a formal, reading style of speech rather easily if they become serious or didactic. They then reveal a consciousness of the writing and of Sanskrit and Pali loanwords and give a pronunciation based on the spelling." (Jacob: xi) Male/female language distinctions; royal language; and literary style all reflect registerial variation, rather than dialect differentiation, but what we teach in the classroom seldom systematically incorporates information on register or dialect.

In effect, then, we do not teach a language as such, but a particular dialect of a language. The reasons why a particular dialect is chosen to be taught are well-known. It is the dialect of the capital city or province; it is the dialect of the prestige group; it is the
Dialect institutionalized in the educational system; it is the dialect of mass communication, politics, the courts, etc.; it is the literary dialect; it is the dialect of the people the student will be talking to; or perhaps it is the dialect of the teacher. Once the decision is made that such and such a dialect is to be propagated in the foreign language classroom, the other dialects slide into a (supposedly) necessary oblivion. After all, it is struggle enough to make students competent with one set of patterns, sounds and vocabulary without suffocating him in a mire of variant forms!

The nature of the actual differences between the dialect being taught and other existing dialects is quite diverse. Dialects are marked by systematic variations in phonology and syntax and by lexical differences. Phonological and lexical divergence are by far the most frequent and extensive dialect markers, with syntactic divergence running a very poor third. The extent of these divergences varies considerably from one language situation to the next, and any consideration of their relationship to foreign language learning must definitely consider the nature of the particular case.

Let's consider some situations among southeast Asian languages. Shafer has classified Burmese, Arakanese, Tavoy, Taungyo, Intha, Danu and Yaw as all belonging to a common genetic group of languages - the Burma Branch of the Burmish Section of the Burmic Division of Sino-Tibetan (Shafer 1955: 103). These languages have identical structures and idioms, though differing phonologically. Though these could conceivably be considered as merely varieties of a common language, Maran warns against interpreting them as such, because they are mutually unintelligible (Maran: 20). The speakers of standard Burmese, in fact, constitute only about one-fifth of the total speakers of all varieties of Burmese! (Maran: 21). In other words, the language of the capital has become the prestige dialect and the basis of a standard form of the language (as represented in Coryn and Roop 1968) which has been institutionalized and perpetuated through education and mass communication. But there are other dialects of Burmese which should not be ignored. In addition, there are other extremely closely related languages which, though we should not confuse them as dialects, are close enough that they need to be considered.

The situation in Thai (Tai) is equally complex. The extended Tai family of languages has been divided by Li into three main groups. Li's southeastern group would be of primary concern to us since it is represented by present day Thailand and the immediately contiguous territories of other countries containing speakers of Thai. Within the borders of Thailand, five different Tai languages are used by large numbers of native speakers - Northern Thai, Central Thai, Phu Thai, Lao and Southern Tai (Brown 1965: 12-15). The number of dialects within each language varies considerably, as does the degree of intelligibility between the particular language and standard Thai (Standard Thai is based on Central Thai, but not on one single dialect. Brown says (p. xii), "It can best be described as having vowels common to all central dialects, the consonants of Supan Buri, and the tone of Bangkok.").

Generally, there is almost a village-to-village variation between dialects in minor points of pronunciation and vocabulary, but there are also sharper dialectal divisions in some cases. Southern Thai has two
distinct subgroupings; Lao contains three (Brown: 14-15). Northern
has seven, corresponding roughly to the seven provinces in which it is
spoken (Purnell: iii).

Cambodian (Khmer) presents its own complications. Related languages
are spoken all over southeast Asia, including Stieng and Biet within
Cambodia itself; Khmu and Lamet in Laos, Lawa in Thailand, etc. (Huffman: ix). But even within what can be termed the Cambodian language proper,
there exists the inevitable dialectal variations, e.g. the varieties
spoken in Siem Reap and Battambang, (Jacob: xi) and those of Buriram,
Surin and Srisaket provinces in Thailand (Huffman: ix). Predicatably,
it is the dialect of the capital which is closest to the standard dialect
taught in school and used in educated circles. "Although some colloquial
dialects, notably that of Phnom Penh and the immediately surrounding area,
differ considerably from the standard at the phonological level, standard Cambodian is virtually identical with the dialect spoken by the
majority of the people in the central Provinces." (Huffman: x)

What we have said in regards to just three languages, could be
equally well applied to the other languages of the area, such as Viet-
namese, Tagalog, Indonesian, etc.

Since most of the uncommonly-taught languages of southeast Asia are
national languages of political domains, they are bolstered by standard-
ized versions perpetuated in very formal ways. This minimizes consid-
erably the problems for foreign learners and speakers of the language.
The foreigners can readily expect that wherever he goes in the country,
the variety of language he has learned will be recognized and understood;
and he can have reasonable expectations that he will be able to under-
stand the "version" of the standard language spoken to him. In addition,
he can expect that the bulk of the literature - newspapers, magazines,
books - will be written in some variety of the standard language with
uniform spelling conventions from one source to the next.

But still the dialect situation exists, and the foreigner may be
confronted with it in one form or another. There is, on occasion, a
literature in other dialects or closely related languages. In earlier
times, there was a considerable amount of writing in the Northern Thai
language; valuable historical documents are written in that language.
Some native writers produce in a colloquial, or dialectal, version of
the language, or dialect may appear within a piece written in the
standard language.

Most commonly, the foreigner will contact dialect speakers as he
travels about the country. His contact may be nothing more than asking
directions or prices, or passing the time of day. But he could be en-
gaged in more serious pursuits like interviewing, data collecting, or
other research where the contact was more intimate and prolonged. The
lack of familiarity with local dialects could possibly cause a commu-
nication problem. The likelihood is not great of its being a serious
and continuing problem, since the standard, or prestige, dialects are
generally well-known throughout each country. Also, after a few false
starts, the foreign speaker will normally be cued in enough to cope.
But even the remote possibility of misunderstanding is motivation for
studying dialects.
We might also consider the advantages of the greater rapport we could gain with the local people; the instance of a foreigner attempting the local patois may have great appeal (of course, on the other hand, it might be interpreted as an insult—linguistic slumming. The individual case must always be considered). We might even make a case for the intellectual value of such knowledge—the greater appreciation of the origins and diversities of the various dialect groups represented; the increased understanding of the complexities of language and the processes of communication; etc.

I believe one of the most important reasons for acquainting students with dialects other than the standard dialect is the language-learning benefits to be derived. My conclusion in regards to these learning advantages is not an experimentally-tested conclusion, but rather a subjective notion based on my own experiences in language learning. An exposure to variations in pronunciation will attune the student's perception to the subtleties of speech sound. Where before the student had only his native language against which to compare the phonology of the second language, knowledge of dialectal differences in pronunciation will give him a second dimension for assessing what he is hearing and producing. Familiarity with variant syntactic patterns may also aid the student in learning the patterns of the standard language, by the same effect. It is less likely, however, that learning special dialect lexical items will have any far-ranging effect on his mastery of vocabulary, because the inventory of a lexicon is not based on any general rules but on the item-by-item accumulation of new morphemes. Lado has suggested that the student should follow only one native speaker model in learning to speak, but should be exposed to a variety of speakers and dialects in learning to understand (Lado: 74).

By what means can we tackle this task? Obviously, we could insert dialect information into the language textbooks, i.e. we could explain and give examples of alternate pronunciations; we could provide dialectal variants of vocabulary items; we could even (where it occurs) give examples of syntactic patterns that differ by dialect. In a few cases, this has been done. The Foreign Service Institute course in Cambodian gives information on both the standard and the Phnom Penh dialects. We could also provide reading materials wherever dialect differences would create relevant differences, e.g. in dialogues; in variant spellings; in synonymous lexical forms; etc. But the most important approach, I believe, is to expose the student to the dynamic, oral form of the dialect.

This means, of course, a native speaker of the dialect in the classroom, or access to taped materials. Dialogues already familiar to the student in the standard language could be taped in a dialect and represented to the students. Or original dialogues, stories and drills could be used. If a native speaker is available, the student could engage in real conversation, providing a live encounter with a variant dialect. It would probably be well to adhere to Lado's admonition, that for aural comprehension the student be exposed to a variety of language forms, but for modeling, only one. In other words, in his drill and conversation, the student should be expected to produce only the standard language while comprehending the dialect.
Timing is an important question. At what stage should the student be introduced to these materials? The student should not be introduced to them too soon, or he may only be confused; but a lot depends on the particular linguistic situation. The closer the two forms, the less likely that there will be problems at any stage, so the sooner they could be used. For very diverse material, it may be well to save it till after the first hundred hours, or more, of instruction. It is important not to overemphasize dialect work, or the student's learning may be retarded, rather than assisted. Dialect material is for familiarization purposes, not for production.

The kind of material I'm visualizing in the discussion above is the colloquial spoken language (it might also apply to the colloquial written language, if there were such a thing). But if the material to be introduced is a literary, technical, or stylistic variation, rather than a dialectal one, it might prove necessary to refrain from using it till after the first year of work, i.e., until after 150, 200 or perhaps more than 200 hours. Such variations seem to introduce problems of their own not found in the colloquial language.

Some useful materials are already available, such as Purnell's A Colorful Colloquial, a language textbook of the Northern Thai language; Cornyn's Burmese Chrestomathy, which includes texts relating to colloquial narrative style; colloquial conversation; mixed colloquial and literary style; radio; literary style; and Wilding's Spoken Pattani Malay. But in actuality, on the one hand Purnell's and Wilding's works deal with what could more rightly be termed different languages, rather than dialects; and on the other hand, Cornyn's book exemplifies styles, or registers, of language. But even so, such materials could be systematically and productively used, and, if nothing else, they point the way for development of purely dialectal materials.

To my knowledge, exposure to dialects has only rarely been systematically incorporated into foreign language instruction, and never very extensively. Yet it seems to me there is a place for it.

**BIBLIOGRAPHY**


A CLASSIFICATION OF VERB: IN VIETNAMESE AND ITS PEDAGOGICAL IMPLICATIONS

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For over a generation, there was the conviction that the best language teaching materials are based upon a contrastive analysis of the language to be learned and the language of the learner. Allied with the conviction was the hypothesis that the new linguistic system, and by extension, the new cultural behavior, should be established as a set of new habits by drill, drill which would ensure overlearning. Such a pedagogical philosophy was systematized mainly by Charles C. Fries (1945) and Robert Lado (1957).

However, all this firm belief in contrastive analysis seems to be in the past, at least for some people. The generative-transformational theory claims that language behavior is rule-governed behavior, and consequently that language learning should be in the form of a process of internalizing the creative rules in the new language, and not just that of mere habit forming.

Before such a theoretical dilemma, a language teacher may be tempted to make the most use of existing linguistic theories to improve teaching materials as best as he could. With this pragmatism in mind, I am trying to present a contrastive analysis of Vietnamese and English on the case, clause, and sentence levels in this study.


In that this study is tagmecically oriented, it recognizes firstly the hierarchical levels in syntax and secondly the grammatical unit or tagmeme as composed of a slot and a filler class. The concept of hierarchies in syntax makes it possible to single out the clause and sentence levels for this study, and consequently it is unnecessary to write, at the very beginning, phrase structure rules of the entire base component, a matter of mandatory nature in a transformational analysis (Chomsky 1965:88ff). The grammatical slot of the tagmeme at the clause level has been pointed out by Becker (Becker 1966 and 1967b), Fries (Fries 1970), and Young, Becker, and Pike (Young, Becker, and Pike 1970) as having not only the overt syntactic relationships (case realizations or case forms) but also the covert meaning relationships (case relations) with the predicative verb which is considered to be central in the
clause (Chafe 1970).

In that this paper is also case grammar oriented, it recognizes the case relations between various nouns and the predicative verb in the clause (or proposition in Fillmore's terminology). The type of case grammar utilized here introduces both the overt case realizations (or case forms) and covert case relations into the grammar as syntactic features assigned to nouns by verbs (Starosta 1971a, 1971b, 1972a, 1972b, and 1973).

In that this is also a contrastive analysis of Vietnamese and English, the study will present not only the particular construction in Vietnamese but also will point out similarities or differences in parallel constructions in English. However, specific types of drills to teach the patterns will not be suggested because generally drills on case forms and case relations (in Chapter I) [ed. This paper is an excerpt from a larger work.] will be substitutional, whereas they will be surface-to-surface transformational on the clause and sentence levels (in subsequent chapters). The phrase level has been purposely omitted in this study because there are not many similarities on that level in Vietnamese and English. The reader is referred to LiAmil969, chapters III, and IV, pp. 75-163 for an analysis of the phrase level in Vietnamese. Particular attention should be paid to the verb phrase on pages 75-108, the noun phrase on pages 109-131, and the cross-level tagmemes and cross-level constructions on pages 160-164 of the 1969 study.

2.2 Classification of Verbs

The following verb classification is based upon identificational-contrastive features such as the presence or absence of nuclear case form/case relation tagmemics. There are sixteen classes of verbs in the proposed classification. In fact, according to their hospitality to case-marked tagmemic slots, verbs in Vietnamese can be classified into sixteen groups as indicated in Chart IV. The sixteen verbs representative of their classes will be listed below with their hospitable case-marked tagmemic slots. It is noted that all the case-marked tagmemic slots, except the slot [+O, +OBJ] hosted by the submissive verbs, can be filled by noun phrases. When they can be filled by other than noun phrases, they will be so indicated. Numbers will refer to the examples found earlier in this study. Learning problems for the English speaking student will be pointed out, if any. A list of sample verbs in each group will be given as examples for the preparation of substitution drills.

2.2.1 'be'. The verbs in this class host [+NM, +OBJ] and [-K] (or caseless) tagmemic slots:

\[[+NM, +OBJ] \quad [-K]\]

\[\{\text{noun phrase} \quad \text{noun phrase}\}\]

\[\{\text{verb phrase} \quad \text{verb phrase}\}\]

\[\{\text{clause} \quad \text{clause}\}\]

\[\{\text{prep. phrase} \quad \text{prep. phrase}\}\]

Both [+NM, +OBJ] and [-K] slots can be filled by a noun phrase, a verb phrase, an independent clause, or a prepositional phrase.
Ông ấy là bác sĩ. (2.1.)
He is a doctor.

Đi là chết.
To go is to die.

Ông ấy đi là ông ấy khôn.
he go be he intelligent (He was wise to have gone.)

Từ đây đến đó là hai dặm.
From here to there is two miles.

The filling of the [+NM, +OBJ] slot hosted by an equational verb such as là 'be' by a verb phrase or an independent clause in Vietnamese is a learning problem on the production level for English speakers who are used to a To verb phrase, or a dependent clause introduced by That in the same slot in English:

To go is to die.

That he went was a good move.

The verb là 'be' seems to be the lone verb of its class. There is another similar verb, làm 'to exercise the profession' in that it is also an equational verb:

Ông ấy làm bác sĩ.
He is a doctor. (professionally)

2.2.2 chậm 'slow'.
The verbs in this class are stative verbs, host a [+NM, +OBJ] slot, can be adverbalized, and can be followed by an Intensifier:

[+[+NM,+OBJ] (Intensifier)]
The class of stative verbs presents two learning problems for English speakers. Firstly, they are not introduced by a copula or equational verb like in English, and secondly, they function as adverbs. Note the equivalent English clauses:

He goes slowly.

He is very cold.

Examples of verbs in the class: lanh 'cold'.

2.2.3. The verbs in this class are stative verbs, host a [+NM, +OBJ] slot, cannot be adverbialized, and can be followed by an intensifier:

He is very cold.

Examples of verbs in the class: nóng 'hot', vui 'gay', buồn 'sad', đau 'sick'.

2.2.4. The verbs in this class are stative verbs that host a [+NM, +OBJ] slot and that cannot take an intensifier. Incidentally, there are also
reasons to consider these verbs intransitive:

\[+\{+NM, +OBJ\}\]

Ông ấy chết. (2.2c)
He died.

\[+NM \]
\[+OBJ\]

The class of verbs does not present a learning problem since it behaves like its equivalent class of verbs in English. Examples of verbs in the class: sống 'live', sinh 'be born'.

2.2.5. bị 'be adversely affected'.

The transitive submissive verbs in the class host \[+NM, +DAT\] and \[+0, +OBJ\] slots. The \[+0, +OBJ\] slot is only filled by a clause:

\[+\{+NM, +DAT\}\] \[+0, +OBJ\]

Ông ấy bị di. (3.1a)
He was forced to go.

\[+NM \]
\[+DAT \]
\[+0 \]
\[+OBJ \]

The phrase structure tree for the clause is as follows, with the nominative in the embedded clause being deleted obligatorily:

\[+NM \]
\[+AGT \]
\[+0 \]
\[+OBJ \]

Ông ấy bị họ đánh. (3.1b)
He was forced they beat
He was beaten by them.

\[+NM \]
\[+0 \]
\[+DAT \]
\[+OBJ \]

The phrase structure tree for the clause is as follows, with the Nominative in the embedded clause being optionally deleted and with the Objective in the embedded clause being obligatorily deleted:
The class of transitive submissive verbs presents a semantic and a structural problem. The semantic problem stems from the fact that the verb utilized always carries an adversative or a benefactive connotation. The structural problem is that of the embedded clause. The two verbs in the class are: bể 'be adversely affected', and dỗ 'happily experience'. Following are examples with dỗ:

\[
\begin{array}{l}
\text{bể} \quad \text{dỗ} \quad \text{di},
\text{He} \quad \text{happily experience} \quad \text{go}
\text{He} \quad \text{was allowed to go.}
\end{array}
\]

\[
\begin{array}{l}
\text{bể} \quad \text{dỗ} \quad \text{phở} \quad \text{khen},
\text{He} \quad \text{they praise}
\text{He} \quad \text{was praised by them.}
\end{array}
\]

It is noted that the obligatorily deleted Objective case form in the embedded clause does not necessarily host an OBJECTIVE case relation as in the above examples. It can also host a BENEFACTIVE case relation:

\[
\begin{array}{l}
\text{bể} \quad \text{dỗ} \quad \text{phở} \quad \text{cho} \quad \text{dồ} \quad \text{(bể)}
\text{He} \quad \text{happily exp.} \quad \text{they give} \quad \text{thing} \quad \text{he}
\text{He} \quad \text{was given things by them.}
\end{array}
\]

2.2.6. mua 'buy'.

The class of bi-transitive BENEFACTIVE verbs is characterized by the fact that its verbs host \([+NM, +ACT], [+O, +BEN] \) or \([+O, +DAT] \), and a \([+O, +OBJ] \) slots.
The sentence is ambiguous in that it may mean either "He bought the books for me (on my behalf)", or "He bought the books and gave them to me." The former interpretation is a BENEFACITIVE case relation, and the latter a DATIVE case relation. It is noted that the sentence can contain a Dative case form rather than an Objective case form, and the ambiguity still exists:

\[
\text{Ông ấy mua \textit{cho tôi sách}}. \\
\text{He bought \textit{me books}}
\]

The class of verbs does not present a serious learning problem to students, except the inherent ambiguity between a BENEFACITIVE and a DATIVE.

2.2.7 bán 'sell'.

The class of bi-transitive DATIVE verbs is characterized by the fact that its verbs host \([+\text{NM}, +\text{AGT}], [+\text{O}, +\text{DAT}], \) and \([+\text{O}, +\text{OBJ}]\) slots:

\[
\text{Ông ấy bán \textit{tôi sách}}. \quad (7)
\text{He sold \textit{me books}}
\]

The class of verbs does not present a learning problem since its counterpart in English has the same syntactic features. It is however noted that the DATIVE case relation can be realized by the Dative case form, and yet, is placed before the \([+\text{O}, +\text{OBJ}]\) tagmem, a matter that, in English, would depend upon the relative lengths of the two tagmemes.

\[
\text{Ông ấy bán \textit{cho tôi sách}}. \\
\text{He sold \textit{to me books}}
\]
Also, due to phonetic harmony requirements, the shorter of the two post-verbal tagmemes is placed before the longer one.

Ông ấy bán tài nhiều sách và báo.
He sold me many books and newspapers
\[ [+NM] \quad [+O] \quad [+DAT] \quad [+OBJ] \quad [+OBJ] \]

Ông ấy bán sách cho Ông Bà Nguyễn-Thanh-Trương.
He sold books to Mr. and Mrs. Nguyễn-Thanh-Trương.
\[ [+NM] \quad [+AGT] \quad [+OBJ] \quad [+DAT] \]

Examples of verbs: gòi 'send', chuyển 'transfer', giúp 'help', sang 'transfer'.

2.2.8. chọn 'choose'.

The verbs in this transitive class host \([+NM, +AGT]\) and \([+O, +OBJ]\) tagmemes, and their \([+O, +OBJ]\) tagmemes can be optionally complementalized.

\[ [+[+NM, +AGT] \quad [+0, +OBJ] \quad (Complement)] \]

Ông ấy chọn bà ấy làm đại diện.
He chose her to be representative.
\[ [+NM] \quad [+AGT] \quad [+0] \quad [+OBJ] \quad [Complement] \]

The relationship between the \([+O, +OBJ]\) tagmeme and its complement is as follows:

bà ấy làm đại diện.
She is representative.
\[ [+NM] \quad copula [-K] \quad [+OBJ] \]

The class of verbs presents a learning problem because the complement to the OBJECTIVE case must be introduced by a copula in Vietnamese, while the English similar construction does not usually have a copula.

They elected her representative.
\[ [+NM] \quad [+AGT] \quad [+0] \quad [+OBJ] \quad [Complement] \]

Examples of verbs: cù 'to elect', lừa 'choose', bỏ phiếu 'cast vote'.

2.2.7. ăn 'eat'.

The verbs in this transitive class host \([+NM, +AGT]\) and \([+O, +OBJ]\) tagmemes. The \([+O, +OBJ]\) tagmemic slot can be filled only by a noun phrase and it cannot be complementalized.

\[ [+ [+NM, +AGT] \quad [+0, +OBJ]] \]
The class of verbs does not present any learning problem since there is an equivalent class in English. Examples of verbs: uống 'drink', hít 'inhale', nhí 'secrete', ngóm 'swallow'.

The verbs in this transitive class host [+NM, +AGT] and [+O, +OBJ] tagmemes. The [+O, +OBJ] slot can be filled by either a noun phrase or a dependent clause introduced by rằng 'that'.

\[ [+NM, +AGT] \rightarrow [+O, +OBJ]\]
He knows that she went already.

The class of verbs does not present a learning problem since there is an equivalent class in English. Examples of verbs: thấy 'see', nghe 'hear', hiểu 'understand', nghĩ 'think'.

The verbs in this transitive class host [+NM, +DAT] and [+O, +OBJ] tagmemes. They differ from the previous verb class in that they can be modified by an intensifier. Their [+O, +OBJ] slot can be filled by either a noun phrase or a dependent clause introduced by rằng 'that'.

The class of verbs does not present a learning problem since there exists an equivalent class in English. It is noted however that the intensifier in English in this case is 'very much', and not 'very' as in Vietnamese.

Examples of verbs: giận 'angry', buồn 'sad', thích 'like', muốn 'prefer'.

The verb ở stands by itself as an intransitive locative verb, and occurs very frequently either as a main verb or as a co-verb. It hosts [+NM, +OBJ] and [+O, +LOC] tagmemes when it is a main verb.
As a co-verb, *ay* functions as a locative preposition introducing a Locative case relation.

\[ \text{Ong ay sang \& Saigon.} \]
\[ \text{Ho lives in Saigon.} \]

The verb *ay* presents a learning problem on the production level in that its LOCATIVE case relation is cast in an Objective case form in Vietnamese whereas in English the same case relation is cast in a Locative case form. It is incidentally noted that Hawaiian English has the same construction as in Vietnamese.

\[ \text{Lucky you live Hawaii.} \]

2.2.14. \( \text{ra} \) 'go out'.

The verbs in this intransitive class are characterized by their being directional and having a [locomotion] feature. They host \([+NM, +OBJ] \) and \([+O, +DIR] \) tagmemes.

\[ [+NM, +OBJ] \quad [+O, +DIR] \]

\[ \text{Ong ay ra \& Saigon.} \quad (2.3b) \]
\[ \text{He went out to Saigon.} \]

The verbs in this group are also co-verbs. As such, they function as directional prepositions introducing a Directional case relation.

\[ \text{Ong ay di ra \& Saigon.} \]
\[ \text{He went out to Saigon.} \]

The class of verbs presents a learning problem on the production level in that their DIRECTIONAL case relation is cast in an Objective case form whereas in English the same case relation would be cast in a Directional case form. It is also incidentally noted that such a \([+O, +DIR] \) tagmemes exists in Hawaiian English.
28

He went Halewa.

Examples of verbs: ế 'go in', lên 'go up', rơi 'go down', lại 'go back'.

2.2.15. đi 'go'.

The verbs in this intransitive class are characterized by their being directional and having a [-locomotion] feature. They host [+NM, +OBJ] and [+O, +DIR] tagmemes.

[+[NM, +OBJ] ___ [+O, +DIR]]

Ông ấy đi Saigon. (2.3c)

He went to Saigon.

[+NM ] [-locom] [+O ]
[+OBJ ] [+DIR ]

The verbs in this group are also co-verbs. As such, they function as a directional preposition introducing a Directional case form.

Ông ấy gửi sách đi Saigon.

He sent books to Saigon.

[+NM ] [+O ] [+ Di ]
[+AGT ] [+OBJ ] [+ DIR ]

The class of verbs presents a learning problem of the production level in that their DIRECTIONAL case relation is cast in an Objective case form whereas in English the same case relation would be cast in a Directional case form.

2.2.16. tới 'arrive'.

The verbs in this intransitive class are characterized by their having a [+ goal] feature. They host [+NM, +OBJ] and [+O, +GOL] tagmemes.

[+[NM, +OBJ] ___ [+O, +GOL]]

Ông ấy tới Saigon. (2.3d)

He arrived at Saigon.

[+NM ] [+goal] [+O ]
[+OBJ ] [+GOL ]

The class of verbs presents a learning problem on the production level in that their GOAL case relation would be cast in a Goal case form, with the rare exception of verbs such as reach which host [+NM, +AGT] and [+O, +OBJ] tagmemes.

Ông ấy tới Saigon.
Examples of verbs: đên 'arrive', về 'return', qua 'go over', sang 'go over'.
2.2.17. có 'have'.
This verb could be classed in the transitive DATIVE group discussed
in 2.2.11 above. Thus, it would host [+NM, +DAT] and [+O, +OBJ] tag-
memes.

\([+\text{NM, +DAT}] \rightarrow [+O, +OBJ]\)

Tôi có sách.
I have books.
\([+\text{NM} ] \rightarrow [+O ] \rightarrow [+\text{OBJ} ]

However, the verb stands out of the group in that it can occur
without a Nominative. It means 'there is', 'there are', etc.

Ở sách ấy.
There are books here.
\([+O] \rightarrow [+\text{LOC}] \rightarrow [+\text{L}]

The pattern presents a learning problem for English speakers on the
production level. As for the teaching of all the classes of verbs
above, substitution drills could be prepared to teach this existential
pattern.

BIBLIOGRAPHY

Michigan.

Press.

appear)


1 The verbs in this group are also co-verbs. As such, they function as a goal preposition introducing a Goal case form.

Ưng ấy gởi sách tôi Sài Gòn.
He sent books to Saigon.

[+NM] [+O] [+GL] [+COL]
I. Introduction. The hypothesis that a genetic relationship exists between the Kam-Sui-Mak languages of southern China and the Tai languages was first advanced by Li 1948b:

The Kam-Sui group has a close relationship to the Tai group, but it does not belong to the Tai group in a narrow sense. It has the same origin with the Tai group, but they split before the Ancient Tai group evolved into the modern languages.

In subsequent articles (1948a, 1951, 1965) Li continued to suggest that there was evidence of systematic sound correspondences, particularly with respect to consonant initials and tones, to support the view that the Kam-Sui-Mak languages were related to the Tai languages, yet were sufficiently different to comprise a distinct language group.

Other scholars have suggested a Kam-Sui-Mak and Tai relationship, such as Haudricourt 1959 and Nishida 1954, 1955. However, the supporting evidence for this hypothesis of relationship was incomplete because comparative studies included data only from the languages of Mak, T'en and Sui, but not from Kam. Now that Chinese materials on Kam and related languages have been made available (Chinese Academy of Sciences 1959a, 1959b; Liang 1965; Pei 1963; Wei 1965), the comparative relationships can be more completely described.

II. Data. Sets of cognates from fifteen Kam-Sui-Mak and Tai languages and dialects were compiled for this study.

The Kam data are from the Kam-Chinese dictionary (Chinese Academy of Sciences 1959b) with additions from Liang 1965 and Pei 1963. The dictionary forms are based on the Kam (called T'ung in Chinese) dialect spoken in the Jung-Chiang area of Kweichow province. The Liang forms are from the Che-Chiang Commune in the same area, while Pei apparently includes forms from several dialects.

The Sui data come primarily from Li 1948a, 1949, 1951, 1965 and include forms from dialects of Li-Ngam, Jung-Chiang, and Pyo, in southern Kweichow province. The Nishida 1954, 1955 and Rai 1955 citations for Sui appear to be based on Li's data.

The Mak data are from Li 1948b, 1965. Additional forms from Rai 1955 appear to belong to a similar dialect and exhibit similar tonal structure. The forms for T'en (called Yang-Huang in Chinese) come from Li 1965, 1966, 1967, 1968. Both Mak and T'en are found in Kweichow province.
Languages representing the Northern branch of Tai are Saek, Po-Ai, Wu-Ming, and Yay. The Saek forms come from field notes of W. J. Gedney. This language is described by Gedney 1970 and Haudricourt 1963. The Po-Ai data are from Li 1944, 1957, 1965 and represent dialects spoken in Kwangsi and Kwei-chow. Data for Wu-Ming, also spoken in those provinces, are from Li 1947, 1956. The Yay data are from Gedney field notes and represent a dialect of extreme northern North Vietnam. Gedney 1965 has shown this language to be identical with the Giay language cited by Haudricourt 1960, and to be related to, but not identical with, the Dioi language of the Esquirol-Williate dictionary published in 1908.

Languages representing Central Tai are Lung-Chow (Li 1965) and Lung-Ming (Gedney field notes). Both languages are spoken in southwestern Kwangsi.

Representing Southwestern Tai are Siamese and White Tai. Siamese forms are common knowledge. The White Tai data are from Gedney field notes and from Gedney 1964.

The results presented in this paper are based on over 375 distinct lexical items with cognate forms in all or most of the languages mentioned.

III. Framework. It may be useful to briefly review the situation in the Tai languages with respect to the correlation of tones and initial consonants which is the basis of much of the comparative/historical study of Sino-Tibetan languages. It is generally assumed that the parent Tai language had a system of three distinctive tones (here termed A, B and C) on open syllables, and no tone, or a neutral tone (here called D), on checked syllables. After the major break from the parent language, each daughter language underwent tonal splits conditioned by phonetic features of the initial consonants. In checked syllables there appears to have been an additional conditioning factor of vowel length.

A primary phonetic feature of initial consonants which appears to have influenced tonal development is that of voicing. That is, if the three tonal categories A, B and C are bisected along a voiced vs. voiceless distinction, a maximal six-way tonal system would result, as in Wu-Ming, Lung-Chow and White Tai in the table of tonal correspondences given on the next page.

Additional phonetic characteristics, such as friction and glottalization, have also been posited as conditioning factors in the tonal development of Tai languages, and account for the multiple correspondences within the voiceless series. For example, in tonal category A, Siamese has tone 5 in words reflecting original friction initials, and tone 1 elsewhere.
<table>
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<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D short</th>
<th>D long</th>
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<td>Voiceless</td>
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<td>Kam</td>
<td>1,2</td>
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<td>Sui (Pyo)</td>
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<td>Mak</td>
<td>1,6</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>T'en</td>
<td>1,5</td>
<td>3</td>
<td>2,6</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Saek</td>
<td>1,2</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Po-Ai</td>
<td>1,6</td>
<td>5</td>
<td>3</td>
<td>2,3</td>
<td>5</td>
</tr>
<tr>
<td>Wu-Ming</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Yay</td>
<td>1</td>
<td>2</td>
<td>3,6</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Lung-Chow</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Lung-Ming</td>
<td>1,4</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Siamese</td>
<td>1,5</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>White Tai</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Voiced</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kam</td>
<td>3</td>
<td>9</td>
<td>6</td>
<td>3,6</td>
<td>6</td>
</tr>
<tr>
<td>Sui (Li-Ngam)</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sui (Jung-Chiang)</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Sui (Pyo)</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mak</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>T'en</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Saek</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Po-Ai</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Wu-Ming</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Yay</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Lung-Chow</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lung-Ming</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Siamese</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>White Tai</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

(The numbers stand for tonal contours described in the Appendix.)

IV. Results. Some general observations can be made about tonal correspondences within the Kam-Sui-Mak and Tai languages (Oshika 1973).

1. It appears that the Kam-Sui-Mak languages conform to the initial consonant and tone framework described. The
voiced vs. voiceless distinction appears to be the basic conditioning factor in the tonal splits.

Lexical items which reflect original friction initials (that is, are cognate with Siamese forms with tone 5) appear to exhibit considerable variation. The situation in Kam is particularly complicated and it is not yet clear how to associate the tonal variation with any systematic patterning of the initial consonants.

2. The question of tonal alternation across the voiced-voiceless line is cited by Li 1957 as a feature which distinguishes Northern Tai from the other two branches. That is, there are Northern forms which belong to the A-voiced class according to their tones, which are cognate with Central and Southwestern forms having tones in the A-voiceless class. This may occur in reverse, that is, the Northern voiceless class corresponding with Central and Southwestern voiced class, and it may occur in all tonal categories A, B and C.

A+ examination of cases in which Northern Tai and Kam-Sui-Mak forms agree in tonal correspondences and are different from Central and Southwestern correspondences shows that, in almost all cases, Northern and Kam-Sui-Mak forms reflect original voiced initials and Central and Southwestern forms reflect original voiceless initials. Examples are:

'body, animal classifier'

<table>
<thead>
<tr>
<th>Kam</th>
<th>tu³</th>
<th>Saek</th>
<th>thu⁴</th>
<th>Lung-Chow</th>
<th>tuu¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sui</td>
<td>to²</td>
<td>Po-Ai</td>
<td>tu³</td>
<td>Lung-Ming</td>
<td>tuu¹</td>
</tr>
<tr>
<td>Mak</td>
<td>to²</td>
<td>Wu-Ming</td>
<td>tu⁴</td>
<td>Siamese</td>
<td>tua¹</td>
</tr>
<tr>
<td>T'en</td>
<td>too⁵</td>
<td>Yay</td>
<td>tua</td>
<td>White Tai</td>
<td>to¹</td>
</tr>
</tbody>
</table>

'to carry, to wear'

<table>
<thead>
<tr>
<th>Kam</th>
<th>tey³</th>
<th>Saek</th>
<th>thu⁴</th>
<th>Lung-Chow</th>
<th>thu²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sui</td>
<td>tay⁵</td>
<td>Po-Ai</td>
<td>tay²</td>
<td>Lung-Ming</td>
<td>thu²</td>
</tr>
<tr>
<td>Mak</td>
<td>tay⁵</td>
<td>Wu-Ming</td>
<td>tay²</td>
<td>Siamese</td>
<td>thu²</td>
</tr>
<tr>
<td>T'en</td>
<td>tay</td>
<td>Yay</td>
<td>tua</td>
<td>White Tai</td>
<td>tua</td>
</tr>
</tbody>
</table>

'to sharpen'

<table>
<thead>
<tr>
<th>Kam</th>
<th>pan³</th>
<th>Saek</th>
<th>-</th>
<th>Lung-Chow</th>
<th>phan¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sui</td>
<td>pan²</td>
<td>Po-Ai</td>
<td>-</td>
<td>Lung-Ming</td>
<td>phan¹</td>
</tr>
<tr>
<td>Mak</td>
<td>pyan</td>
<td>Wu-Ming</td>
<td>-</td>
<td>Siamese</td>
<td>fon⁵</td>
</tr>
<tr>
<td>T'en</td>
<td>pan⁵</td>
<td>Yay</td>
<td>pan⁴</td>
<td>White Tai</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>pyaann⁴</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

'bean'

<table>
<thead>
<tr>
<th>Kam</th>
<th>to⁹</th>
<th>Saek</th>
<th>thu⁵</th>
<th>Lung-Chow</th>
<th>thu⁵</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sui</td>
<td>to⁹</td>
<td>Po-Ai</td>
<td>tuu⁵</td>
<td>Lung-Ming</td>
<td>thu⁵</td>
</tr>
<tr>
<td>Mak</td>
<td>thaw⁶</td>
<td>Wu-Ming</td>
<td>tu⁶</td>
<td>Siamese</td>
<td>thu²</td>
</tr>
<tr>
<td>T'en</td>
<td>taw⁴</td>
<td>Yay</td>
<td>tua</td>
<td>White Tai</td>
<td>thu³</td>
</tr>
</tbody>
</table>
Because of evidence in the correspondences of initial consonants which will not be presented here, this tonal alternation leads to an hypothesis about initial consonants in the source language common to Tai and Kam-Sui-Mak. Perhaps there were three series of initials in the source language, $X_1$, $X_2$, and $X_3$. Series $X_1$ would be the source of original Kam-Sui-Mak and Tai voiced initials. Series $X_2$ would be the source of original Kam-Sui-Mak and Tai voiceless initials. Series $X_3$ split, the voiced version falling together with $X_1$ in the Northern Tai and Kam-Sui-Mak languages, and the voiceless version falling together with $X_2$ in the Central and South-western Tai languages. The examples of variation across the voiced-voiceless distinction, then, would be reflexes of original $X_3$.

If that were the case, then the Northern Tai languages would have an even more special status vis-a-vis the Central and Southwestern languages than that posited by Li 1957.

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——. 1951. Preliminary comparisons of three groups of Sui-Chia dialects. In Special Publication in Memorial to Director Fu-Ssu-nien. Taipei: Institute of History and Philology, Academia Sinica.


APPENDIX

The tonal notation for each language is outlined below:

| Kam | 1 high level          | Saek | 1 low rising           |
|     | 2 high rising         |      | 2 mid-low level        |
|     | 3 low falling rising  |      | 3 low falling,         |
|     | 4 mid falling rising  |      | glottalized            |
|     | 5 low rising          |      | 4 high rising falling  |
|     | 6 low falling         |      | 5 high falling         |
|     | 7 high falling        |      | 6 mid level,           |
|     | 8 high rising falling |      | glottalized            |
|     | 9 mid level           |      |                         |

| Sui (Li-Ngam) | 1 low level          | Po-Ai | 1 low rising           |
|              | 2 mid falling        |      | 2 high level           |
|              | 3 mid-high level     |      | 3 mid-high level       |
|              | 4 high falling       |      | 4 mid level            |
|              | 5 mid rising         |      | 5 mid-low level        |
|              | 6 high level         |      | 6 mid falling          |

| Sui (Jung-Chiang) | 1 low rising          | Wu-Ming | 1 mid level           |
|                   | 2 low level           |        | 2 mid falling         |
|                   | 3 mid-high level      |        | 3 high level          |
|                   | 4 mid falling         |        | 4 high falling        |
|                   | 5 mid rising          |        | 5 mid rising          |
|                   | 6 high level          |        | 6 low rising          |

| Sui (Pyo) | 1 low rising          | Yay | 1 mid-low level       |
|           | 2 mid falling         |     | 2 low level           |
|           | 3 mid-high level      |     | 3 mid rising          |
|           | 4 high falling        |     | 4 high rising falling |
|           | 5 mid rising          |     | 5 high falling        |
|           | 6 low-mid rising      |     | 6 high, slight rise   |
|           |                       |     | at end                |

| Mak | 1 low rising          | Lung-Chow | 1 mid level           |
|     | 2 mid falling         |        | 2 mid falling         |
|     | 3 mid-high level      |        | 3 rising              |
|     | 4 high falling        |        | 4 low falling,        |
|     | 5 high rising         |        | glottalized           |
|     | 6 mid rising          |        | 5 high level          |
|     | 7 high level          |        | 6 low level           |

| T'en | 1 low rising          | Lung-Ming | 1 high level           |
|      | 2 mid falling         |        | 2 high rising          |
|      | 3 mid-high level      |        | 3 mid level,          |
|      | 4 high falling        |        | glottalized           |
|      | 5 high rising         |        | 4 low falling          |
|      | 6 mid-low level       |        | 5 low level            |
|      |                       |        | 6 low falling rising,  |
|      |                       |        | glottalized            |
Siamese
1 mid level
2 mid-low level
3 falling
4 high, glottalized
5 low rising

White Tai
1 mid level
2 high rising
3 low rising, glottalized
4 mid level, glottalized
5 level with rise and fall at end
6 falling, glottalized
0. Introduction

Present-day Javanese is spoken natively by approximately seventy million Indonesians. We can distinguish between two primary groups of Javanese dialects, the Western Group and the Eastern Group. The latter is further subdivided into the Central Subgroup, which comprises the dialects spoken in Mid and Eastern Central Java, and the Eastern Subgroup, comprising the Javanese dialects spoken in the province of East Java.

Basically, there are two levels of speech, the Ngoko or "familiar" (Ng) and the Krama or "formal" (K). They are relatively speaking mutually exclusive, in the sense that each is linguistically self-contained and can be used independently from the other. However, the two levels share the same phonological system and there are instances of grammatical and lexical overlapping. In this paper, utterances not preceded by either Ng or K belong to both.

This is a description of the degree of comparison in modern Javanese, especially the Central Subgroup dialects. There are many interesting grammatical features in the category of degree which have never been accounted for in any Javanese grammar books written so far. Syntactically as well as morphologically, the category of degree marks off Javanese adjectives and verbs.

1. Types of Category of Degree

We can distinguish between five types of category of degree: degree of equality and similarity, comparative degree, superlative degree, intensive degree, and excessive degree.

1.1. The degree of equality is expressed by means of Ng /po'do ... -(n) e (karo)/, K /sami ... -(n)ipon (kalian)/ "the same ... (as), as ... as" which occurs with adjective and noun bases to form inflectional phrases. For instance:

Ng /pitku po'do ragane karo pite adiku/, K /pit kulo sami reginipon kalian pitipon aji kulo/ "my bike is the same price as my younger sibling's"
Ng /pitku po'do larage karo pite adiku/, K /pit kulo sami awesipon kalian pitipon aji kulo/ "my bike is as expensive as my younger sibling's"

The degree of similarity is indicated by Ng /koyo/, K /kados/ "like", for example:
Ng /aðiku koyo aku/, K /aði kulo kados kulo/ "my younger sibling looks like me"
Ng /atose koyo watu/ "as hard as a rock"
Ng /lakune koyo macan luwe/ "she walks gracefully" (literally "she walks like a hungry tiger")

Sometimes, due to repeated use, Ng /koyo/, K /kados/ "like" is not uttered:
Ng /rindeq asu digiteq/ "to move quickly" (literally "as slow as a dog that is whipped")
Ng /ssese paet madu/, K /ssemipon paet madu/ "her smile is as bitter as honey"

/saq-/ is also a device to express degree of similarity:
Ng /godene saqgrobak/, K /agbinations saqgrobak/ "as big as an ox-cart"
Ng /duwure saqlaqet/, K /i4gelipon saqlaqet/ "as high as the sky"

Finally, /q-/ and its homorganic variants are prefixed to noun phrases to denote degree of similarity. For example:
Ng /lenene ngandewo pinentaq/ "her arms resemble stretched bows"
Ng /godese nqop turi/ "her sideburns look like 'turi' buds"
Ng /suraqe mboto ruboh/ "the applause resembles a collapsing wall"
Ng /lembeane mblaraq sempal/ "her gait is graceful" (literally "her gait looks like a dangling broken branch of a palm tree")
Ng /mrilat ndamar kajiman/ "her eyes flicker" (literally "her eyes flicker like a light blown by the wind")
Ng /alize nangal sepisan/ "her eyebrows curve beautifully" (literally "her eyebrows are like the first moon")
Ng /rambute nambel wijen/ "his black hair is interspersed with gray hair" (literally "his hair is like sesame seed sauce")
Ng /suwsqe nqakem kodoq/ "the torn clothes resemble the gaping mouth of a frog"

1.2. The comparative degree is of two dimensions: simple and correlational. The former is manifested by Ng /luweh ... (timbaq)/, K /lanqoq ... (timbaq) "more/-er than", on the one hand, and by Ng /kalah ... -(n)e (timbaq)/, K /kawon ... -(n)ipon (timbaq) "less than", on the other:
Ng /pitiku luweh laraq (timbaq pite adiku)/, K /pit kulo lakoq aves (timbaq pitipon adi kulo/) "my bike is more expensive (than my younger sibling's)"
Ng /pitku kalah duwure (timbaq pite adiku)/, K /pit kulo kawon ingelipon (timbaq pitipon adiku kulo)/ "my bike is less high (than my younger sibling's)"

The correlational dimension of the comparative degree is expressed by means of Ng /soyo suwe soyo .../, K /soyo daqo soyo soyo .../ "the longer the more ..." if it is temporal, and by means of /soyo ... soyo .../ "the more ... the more ..." if it is non-temporal. For instance:

Ng /soyo suwe soyo abot/, K /soyo daqo soyo awrat/ "it gets heavier and heavier"
Ng /soyo apeq soyo laraq/, K /soyo sae soyo awes/ "the better the more expensive"

1.3. The superlative degree is marked by Ng /seq ... dewe/, K /enkaq ... piambaq/ "the most/-est", e.g.:

Ng /pitku seq murah dewe/, K /pit kulo enkaq mirah piambaq/ "my bike is the cheapest"
Ng /pite adiku seq laraq dewe/, K /pitipon adiku kulo enkaq awes piambaq/ "my younger sibling's bike is the most expensive"

1.4. The intensive degree presents very interesting features. It comprises grammatical elements which are in paradigmatic relation and can be hierarchically ordered in terms of their degree of intensity and labelled as follows: totally negative, de-emphatic, approximate, optimum, and emphatic.

1.4.1. The first subtype is overtly marked by means of Ng /ora ... blas/, K /mboten ... blas/ and Ng /ora ... babar pisan/, K /mboten ... babar pinãh/, both meaning "not at all".

Ng /ora panas blas/, K /mboten benter blas/ "not hot at all"
Ng /ora peqes babar pisan/, K /mboten peqes babar pinãh/ "not hot (spicy) at all"

1.4.2. The de-emphatic degree is shown by means of Ng /ora pati(o)/, K /mboten patos(o)/ "not quite, very":

Ng /ora pati(o) laraq/, K /mboten patos(o) awes/ "not very expensive"
Ng /ora pati(o) adoh/, K /mboten patos(o) tebeh/ "not very far"

1.4.3. The approximate degree is marked by Ng /rodo/, K /radi/ "rather, somewhat":

Ng /rodo suwe/, K /radi daqo/ "rather long (time)"
Ng /rodo laraq/, K /radi awes/ "rather expensive"
Ng /rodo tuwo/, K /radi sepol/ "rather old"
1.4.4. The optimum degree is expressed by means of Ng /'cukop - seđeqan ... -(n)e/, K /sekap(an) ... -(n)ipon/ "enough", for instance:

Ng /'cukop suwene/, K /sekap(an) daqunipon/ "long enough"
Ng /seđeqan dawane/, K /sekap(an) panjaqipon/ "long enough"

1.4.5. The emphatic degree is realized in a number of ways, the most common being the use of Ng /'baget/, K /saqet/ "very" after the words they modify. For instance:

Ng /'laraq baget/, K /awes saqet/ "very expensive"
Ng /'enaq baget/, K /eco saqet/ "very delicious"

The adjective may be totally reduplicated to denote emphasis:2

Ng /'laraq-laraq/, K /awes-awes/ "very expensive"
/legi-legi/ "very sweet"

The third method is that of lengthening vowel of the base-final syllable:

Ng /'adoh/, K /tebeh/ "far"
Ng /suwe/, K /daqu/ "long"

The fourth, which we call labialization, involves the use of /-w/-, infixed immediately after the base-initial consonant, and /qu/-, prefixed before bases beginning with vowels, except /u/ and /o/. For example:

Ng /'laraq/, K /awes/ "expensive"
Ng /'isaq/, K /liqsem/ "ashamed"
Ng /'aksh/, K /kaqah/ "many"
Ng /'enaq/, K /eco/ "delicious"

The fifth involves an upward shift of base-final non-high vowels as follows (see Chart A): back vowels become /u/ while non-back vowels become /i/. For instance:

Ng /suwe/ "long (time)"
Ng /'asen/ "salty"
Ng /'aksh/ "many"
Ng /sleq/ "ugly"
Ng /'padan/ "bright"
Ng /'laraq/ "expensive"
Chart A

Upward Shift of Non-High Vowels

<table>
<thead>
<tr>
<th>Original</th>
<th>Shifted</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ijo/ &quot;green&quot;</td>
<td>/iju/ &quot;dark green&quot;</td>
</tr>
<tr>
<td>/empoq/ &quot;tender&quot;</td>
<td>/empuq/ &quot;very tender&quot;</td>
</tr>
<tr>
<td>/ombo/ &quot;wide&quot;</td>
<td>/ombu/ &quot;very wide&quot;</td>
</tr>
<tr>
<td>/bakoh/ &quot;sturdy&quot;</td>
<td>/bakuq/ &quot;very sturdy&quot;</td>
</tr>
</tbody>
</table>

There are a number of variant forms, the most notable of which involve /o/ in base-final free syllable. Since in that position /o/ morphophonemically becomes /a/, the alternate shift of /o/ to /i/ may be viewed as occurring through an intermediate stage becoming */a/. Hence,

Ng /ombo/ "wide" \→ */omba/ \→ /ombi/ "very wide"
Ng /dowa/ "long" \→ */dowa/ \→ /dowi/ "very long"

Finally, there is a set of post-adjective modifiers in Javanese whose function is to intensify meaning. They are in complementary distribution in the sense that each cooccurs with one and only one adjective. For example:

/petaŋ/ "dark" \→ /petaŋ ndadsat/ "very dark"
/kotoŋ/ "empty" \→ /kotoŋ blon/ "completely empty"
/wudo/ "naked" \→ /wudo mblojat/ "stark naked"
/aŋep/ "cold" \→ /aŋep ājejep/ "very cold"
Ng /puteq/ "white" \→ /puteq memplaŋ/ "pure white"

The above mentioned devices may also be used simultaneously, depending on the degree of intensity a speaker wishes to convey. Interestingly enough, Ng /baŋet/, K /saŋet/ "very" are also subjected to labialization. For instance:

Ng /suwe/ "long (time)" \→ /suwi: bwaŋet/ "very long"
K /daqu/ "good" \→ /daqu: swaŋet/ "very good"

1.5. The excessive degree presents equally interesting features. It is morphologically shown by means of the circumfix /ke--en/, e.g.:
Ng /larag/ "expensive" → /kelaragen/ "too expensive"
/kandel/ "thick" → /kekandelen/ "too thick"
/ceq/ "shallow" → /keqeqen/ "too shallow"

If the base begins with a vowel, the first /e/ of the circumfix is elided.

Ng /abot/ → /kaboten/ "too heavy"
K /awat/ → /kawaten/ "too heavy"
Ng /enom/ "young" → /kenomen/ "too young"
K /enom/ "young" → /kenomen/ "too young"

If the base contains a close mid vowel in final checked syllable, an upward shift occurs as follows:

\[ V_{om} \rightarrow V_{h} - Con \]

where \( V_{om} \) = close mid vowel and \( V_{h} \) = corresponding high vowel.

Chart B

Upward Shift of Close Mid Vowels

\[
\begin{array}{c|c|c}
\hline
i & e & u
\hline
\end{array}
\]

Ng /cileq/ "small" → /keciligen/ "too small"
K /alet/ → /kaliten/ "too small"
Ng /duworn/ "tall" → /keduwreren/ "too tall"
K /qgel/ "tall" → /kigilen/ "too tall"
/kecot/ "sour" → /kekecuten/ "too sour"

If the base ends with a vowel, the base-final vowel and the second /e/ of the circumfix fuse and result in a downward shift as follows:

\[
\begin{align*}
&V_{h} \\
&V_{om} \\
&\rightarrow V_{om} \\
\end{align*}
\]

(1) \( V_{om} \rightarrow V_{h} - Con \)

(2) /e/ → /a/

where \( V_{om} \) = open mid vowel

/legi/ "sweet" → /kelegen/ "too sweet"
/wani/ "fragrant" → /kewagen/ "too fragrant"
/rane/ "noisy" → /keramen/ "too noisy"
Ng /suwe/ "long" → /kesuwen/ "too long"
Downward Shift of Non-Low Vowels

If the base contains a succession of identical mid vowels, both occurrences get changed, hence vowel harmony:

Ng /wane/ "hither" → /kemreken/ "too close to this place"
/logro/ "loose" → /kemlogron/ "too loose"
Ng /ombo/ "broad" → /kamban/ "too broad"

If the base contains a succession of identical mid vowels, both occurrences get changed, hence vowel harmony:

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Base-final /h/ is lost when followed by a monosyllabic suffix. The loss occurs after the upward shift of /e/ and /o/.

Ng /murah/ "cheap" → /kemuraen/ "too cheap"
K /mirah/ "cheap" → /kemiraen/ "too cheap"
Ng /aksh/ "many" → /kakamen/ "too many"
K /katah/ "many" → /kekataen/ "too many"
Ng /puteh/ "white" → /keputien/ "too white, bleak"
K /sepoh/ "old" → /kemepuen "too old"

Finally we witness the process of assimilation in which the initial consonant of the circumfix optionally becomes lax if the base begins with a lax stop. For instance:

/biru/ "blue" → /kabiuron/ "too blue"
K /daqu/ "long" → /ge'awron/ "too long"
Ng /dwor/ "tall" → /ge'awuren/ "too tall"
Ng /jero/ "deep" → /ge'arun/ "too deep"
/gareq/ "dry" → /gegarqen/ "too dry"

Total reduplication of adjective bases also denotes plurality and generality. For instance:

/ayu/ "pretty" → /ayu-ayu/ "all are pretty"
/legi/ "sweet" → /legi-legi/ "are generally sweet"

Except /e/

Except /e/

If followed by a disyllabic suffix, /h/ is retained:

K /kaṭah/ "many" → /kaṭahipon/ "its quantity"
Ng /murah/ "cheap" → /murahake/ "made cheaper"

This restriction is based on a similar process of affixation involving /ke--en/ which functions as a nominalizer, a locative marker, and a marker of accidental passive:

K /lepat/ "wrong" → /kelaṭapat/ "a mistake"
K /betah/ "to need" → /kebetaan/ "necessity"
/camat/ "sub-district chief" → /kecamatan/ "his office"
/lurah/ "village chief" → /kelurah/ "his office"
Ng /kuraq/ "less" → /kekuraqan/ "to suffer from lack of"
/wutah/ "to spill" → /kewutaan/ "is spilled on with"

If /h/ is preceded by a close mid vowel, the vowel must shift upward (see Chart B) before /h/ is dropped. The following ordered rules apply to both /ke--an/ and /ke--en/:

a. V̄cm → V̄om/¬#VC
b. V̄cm → V̄m/¬C#V
c. /h/ → Ø/V̄#V(C)#

where c = close, o = open, h = high, m = mid, # = morpheme boundary:

Ng /weqī/ "evening" → /kweqen/ "caught in the night"
Ng /sore/ "late afternoon" → /kesoren/ "too late in the afternoon"
Ng /liqeh/ "to sit" → * /kelengihan/ → /kelingian/ "is accidentally sat on"
NOTES
(continued)

Ng /luweh/ "more" $\rightarrow$ */keluwihen/ $\rightarrow$ /keluwien/ "excessive"
Ng /ruboh/ "to fall" $\rightarrow$ */kerubuhan/ $\rightarrow$ /kerubuan/ "hit by a falling object"

The rules should be ordered to prevent the affixed forms of /pati/ "death" and /pateh/ "prime minister" from becoming homophonous:

Ng /pati/ "death" $\rightarrow$ /kepatan/ "suffer from one's death"
/pateh/ "prime minister" $\rightarrow$ */kepatihan/ $\rightarrow$ /kepatian/ "his office"

The rules must also be non-cyclical to prevent the affixed forms of /luwe/ "hungry" and Ng /luweh/ "more" from becoming homophonous:

/luwe/ "hungry" $\rightarrow$ /keluwsn/ "is famished"
Ng /luweh/ "more" $\rightarrow$ */keluwihen/ $\rightarrow$ /keluwien/ "excessive"
THE PROBLEMS OF PROGRAMMING DEVANĀGARI SCRIPT ON PLATO IV AND A PROPOSAL FOR A REVISION HINDI KEYBOARD SYSTEM

Tej K. Bhatia
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One of the central aims of educationists is to provide highly individualized instruction on a universal basis. In order to achieve such an aim, they have looked towards technology. CAI (Computer Assisted Instruction) has made such an aim possible. Taking into account the cost of instruction (25 cents per student hour), the varieties of teaching strategies and the generative nature of the instruction offered by PLATO IV, it would not be incorrect to claim that it is the first major constructive step in the field of CAI.

In this paper, I will present a more detailed account of PLATO IV. The main thesis of this paper is divided into two headings, as it is evident from the title. The first section discusses the problems involved in the programming of Devanāgari script. The second section investigates the graphemic structure of DS and three proposals for a Hindi keyboard. At the end, a proposal for a revised Hindi keyboard has been presented.

PLATO, an abbreviation for Programmed Logic for Automated Teaching, is an economically and technically feasible large-scale computer-controlled teaching system. It is not just a laboratory curiosity, since it is being used to teach courses in at least twenty fields, including a number of foreign languages.

PLATO IV, the more advanced stage of PLATO III is currently in operation at the University of Illinois at Urbana-Champaign. PLATO IV student terminals consist of a keyset and a plasma display panel. The display panel is an 8 1/2" square glass panel containing a 512 x 512 matrix display with an inherent memory. Any dot can be selectively lighted. The panel is transparent, allowing the superimposition of optically projected images produced by a slide selector, which is also a part of the terminal. The features of the panel include a writing speed of 180 letters per second and drawing speed in excess of 600" per second.

The PLATO software system has the ability to interact with the students. It can ask them questions, correct their errors, force them to review the lesson, record and remember their responses. Furthermore, it has the ability to generate questions and to examine the responses to the generated questions.

1.0 Computer-Based Hindi Teaching (henceforth, CBHT) is currently being developed at the University of Illinois. Whenever the question of CBHT arises, we are faced with the question of Devanagari Script (henceforth, DS). Before I present a discussion on the problems of DS, a brief description of the characteristics of DS would be in order.

DS is the most scientific and phonetic script among the writing systems of the world. Generally speaking, it represents pronuncia-
tion correctly. The classification and the arrangement of the graphemes involve a scientific system. For instance, vowels and consonants are arranged separately. Among the vowel inventory, a short vowel is followed by a long vowel. The following planning has been employed in the inventory of consonants.

1. Along the horizontal axis, the consonants are arranged according to the manner of articulation in the following order: Unvoiced unaspirated, unvoiced aspirated, voiced unaspirated, voiced aspirated, and the homorganic nasal consonant.

2. Along the vertical axis, consonants are arranged according to the point of articulation. Thus, velar, palatal, retroflex, dental and bilabial consonants are presented along this axis.

3. At the end, semivowels, lateral, flap, etc., are listed.

One of the other characteristics of DS is that it is syllabic in nature. Thus, a grapheme represents a syllable.

Although DS is very scientific in nature, it has various shortcomings. I will focus my attention only on the major problems. When I started plotting DS on PLATO IV, I was faced with the following three major problems: First, the problem which arises as a result of both the idiosyncratic behavior of certain graphemes and the shortcomings of DS; second, [given a transcribed string (not phonetically transcribed, but as transcribed in Hindi pedagogical texts)], the problem of deriving a string written in DS; and third, problems caused by the limited number of PLATO key sets and charsets.

All the problems mentioned above are interdependent and cannot be separated from each other. I will now discuss these problems one by one. The following three problems belong to the first group: (1) The joining of vowels and consonants; (2) the non-syllabic shape of the written consonants; and (3) the treatment of various exceptions.

With respect to (1), in the DS writing systems, there are two graphemic representations of vowels. These two representations can be called (i) syllabic form and (ii) non-syllabic form. The syllabic form of a vowel refers to that representation of a vowel which occurs at the beginning of the word or when the preceding segment is a vowel. For example, उँ [a]. The non-syllabic form (henceforth matra form) occurs if the preceding segment is a consonant, as when the non-syllabic form of उँ [a] is represented by ज. The system of attaching non-syllabic forms with a preceding consonant is also extremely irregular. Some matras are written on the right of a consonant (such as the matras of इ, ओ, and ए). There are two matras which are written at the top of a consonant, i.e. ओ and ए. Also, the matra of ज precedes a consonant segment, although phonetically it follows the consonant. Finally, the matras of back vowels आ and उ are written underneath the consonant segment.

With respect to (2), the syllabic representation of a consonant segment which consists of one grapheme, such as र [k] represents the consonant and an inherent [a].

With respect to (3), there are further exceptions to the above
mentioned facts. Consider the case of र. The matras of य and य are attached in the middle rather than underneath.

The Hindi writing system is the root cause of the second problem, i.e. how a student's input string can be converted into a correct output string of DS on the student's screen. The following example will illustrate the problem more clearly. For example, a student types the word आया "came". Now how can the machine display the correct output in DS as श्राया on the student's screen rather than *आया? How should the machine decide that the first segment of आ corresponds to DS's श्रा and the second to य?

The following proposal may point to a solution to the above problem. Since DS is a syllabic script, the machine should be instructed to analyze words/syllables rather than segments. For example, if a student types a response किताब "book" the computer should not substitute the corresponding Devanagari segments immediately after the first key is pressed. On the contrary, it should wait until a student presses "space". The space will indicate to the computer that it should mark the end of the word. After that, the scanning operation should start, and the scanner should move from right to left and analyze the string. For instance, after the student presses "space", the computer will start the scanning process from "space", i.e., किताब.

The program will instruct the scanner to move from right to left. First, it will encounter the segment ब before the space and will substitute a corresponding Devanagari segment for that. In the second step, the computer will analyze the syllable ता and will substitute matra for आ, since the preceding segment is a consonant, and so on. Thus the problem can be solved by writing in a complicated program.

However, the above proposal has some serious shortcomings. The students cannot see anything when they press a key initially. For instance, in the above example, किताब, nothing will be displayed unless a student presses seven keys. Furthermore, the display will start in the opposite fashion. Thus, such a proposal is not only impractical, but it will also seriously damage the learning process.

In order to solve the above problems, another proposal can be examined. If the consonant key is pressed first and the vowel key follows it, then the vowel key should be equated with the matra key by the machine. Although this will involve the writing of a very complex program, it will solve the problem. Since the computer can make very fast decisions whether to use a syllabic form or a matra form, students will not be able to notice any time-lag in operation. In other words, it will, for all practical purposes, immediately display the desired vowel form.

The third solution which can also be seriously considered is very simple in nature. If the key-board of a Hindi typewriter is copied, and if the correspondence between the PLATO key set and the Hindi keyboard is established, then the problems mentioned above will
not arise. However, this proposal has a theoretical as well as a practical drawback.

Theoretically, in CAI, it is desirable to get as much work (non-learning) as possible from a machine rather than from a student. In other words, the operation of converting a transcribed string into DS should be performed by a machine rather than by a student.

Empirically, if students have to consult a chart which shows correspondences between Devanagari and the Roman keys, it will create difficulties for them. It would be much simpler if Devanagari keys were presented on PLATO's key set.

If we look into the problem seriously, however, we find the third proposal to be more practical, useful and preferable than the first two. In the teaching of any foreign language, the teaching of the script is its crucial aspect. Thus, in any CBHT, the teaching of DS is the first step. Therefore, in order to familiarize students with DS thoroughly, this proposal is the best. Furthermore, on the basis of our experience, the Hindi teaching staff at the University of Illinois and our advanced students prefer this proposal. Thus, theoretically speaking, it is no longer objectionable and furthermore, it will also partially teach students how to use a Hindi typewriter.

If the last proposal is accepted and one attempts to establish correspondences between the keyboard of a Hindi typewriter and PLATO's student key set, a third problem arises. The number of Hindi typewriter keys exceeds the number on PLATO's key set. Although some other device can be adopted and the typewriter keyboard accommodated, such a procedure would not be economical and fast.

2.0 A close inspection of the Government of India Revised Hindi keyboard will enable one to arrive at two generalizations regarding the graphemic structure of the non-syllabic consonants of DS (see Appendix I). First, the non-syllabic shape of those consonants which do not end in the vertical bar stroke (which I will call C1-type consonants) are derived by attaching halant mark (\ above the consonants. For example, the non-syllabic form of \, \ etc. are derived by this process. Second, the non-syllabic shape of consonants which end in the final stroke T (which I will call C2-type consonants, such as \, \, \ etc. is presented on the keyboard and the number of such consonants is sixteen.

The rationale behind the planning of the revised Government of India Hindi keyboard seems to be to account for all the idiosyncracies of DS as well as to maintain the traditional nature of the writing system. The traditional nature is violated only in those cases where it is impossible to maintain it. For example, the cluster \ in the words like \ cannot be written on a Hindi typewriter in a traditional manner, unless a special key is assigned for it (This applies to most of the C1-consonant type clusters). It is possible to derive this cluster if the syllabic \ is represented by two shapes such as \ and \, and that other
conditions are met simultaneously. For example, the grapheme \( \ddot{a} \) should occupy the space which is equivalent to the matra of \( \dddot{u} \) and \( u \) vowels. If this condition is not met, it is not possible to plot the grapheme, since it is impossible to go one line down to 'y' if a person is using the line above it, say, x. I think the above example is enough to demonstrate the complexity of the written representation of clusters of the Cl-type consonants on a Hindi typewriter. Thus, this situation compelled the planners of the Hindi typewriter to ignore the traditional writing system and to use the halant sign (\( \dddot{h} \)) to represent the non-syllabic shape of Cl-type clusters.

However, this process was not extended to the C2-type consonants although it has often been suggested to simplify the Hindi keyboard by extending this process to the Cl-type consonants, too. Such a proposal has not been accepted since it would have changed the traditional writing system radically.

The following other evidence can be presented to demonstrate the fact that the planners of the Hindi keyboard wanted to preserve the traditional nature of the writing system. For example: (a) all possible exceptional graphemic representations of [r] have been included; (b) the non-syllabic shape of ka (i.e., \( ka \)) has been presented, although it was possible to derive the non-syllabic shapes of these consonants (i.e., ka and ra) by the halant sign since they are Cl-type consonants; (c) Sanskrit graphemes such as \( \dddot{h} \) and \( \dddot{h} \) have been retained on the keyboard.

Thus, the attempt to maintain the traditional nature of the writing system led the planners of the Hindi typewriter to plot two shapes (the syllabic and the non-syllabic) of C2-type consonants. That is why the revised keyboard tries to embody both forms of most of the C2-type consonants. Furthermore, in the traditional writing system, the syllabic shapes of the consonants were always considered to be basic, since some of the graphemes don't have non-syllabic shapes, e.g., \( \dddot{h} \) and \( \dddot{h} \), etc. That is why, in the teaching of DS, the syllabic forms of the consonants are taught first. Consequently, the non-syllabic shapes of consonants were considered secondary. Also, this explains why the Kakasaheb Kalekar Committee did not incorporate the non-syllabic shapes of many C2-type consonants.

The shortcomings and demerits of the Government of India's revised keyboard are self-evident. The same is true of the Maharashtra Government's proposal (Appendix II). The latter studied the merits of various keyboards and employed frequency, orthography, speed and various other criteria in planning a DS keyboard. Although in their report they concluded that only the non-syllabic shape of the C2-type consonants should be retained, they suggested two types of matras: (a) conventional matras (which I will call Matra 1) for Cl-type consonants, and (b) a second type of matras (which I will call Matra 2) for C2-type consonants. The Maharashtra
government report does not consider other possible ways of implementing their proposal. For example, it does not explain the motivation of the second type of matras instead of + the conventional matras. Furthermore, their proposal has the following shortcomings.

(a) The matra signs can be confusing to a typist since they overlap with some conventional matras. For example, the Matra 2 signs of and are identical to the Matra 1 signs of and . Furthermore, a proposal which embodies two separate types of matra keys would be uneconomical.

(b) It has not been demonstrated that if the second type of matra signs are accepted blanks will not appear between the letters or the words. For example Matra 2 key for is not a dead key. It has not been demonstrated whether the graphemic representation of words such as and will be or the correct and . The spaces before and after the vertical bar stroke can be a serious shortcoming of this proposal.

(c) Another shortcoming is evident in the second type of matra of short . The suggested design will produce incorrect graphic output. For example, in the words such as , the matra sign will appear between and , i.e., as opposed to the correct written representation .

(d) Coined Matra 2 strokes which do not constitute part of traditional writing can be extremely confusing for a typist.

(e) A close examination of a frequency table of the alphabet and the layout of the keyboard discloses that high frequency graphemes such as , , and have been assigned almost the least propitious keys in the shift position. The report does not present any justification for this.

(f) The key has been incorporated in the Government of India's keyboard; however, it is excluded in the Maharashtra keyboard.

In short, the Maharashtra keyboard has a potential of capturing the graphemic structure of DS. As a result, it is free from the inadequacies of the Government of India's keyboard and is certainly much more efficient and faster in nature. However, this proposal is explanatorily inadequate. Their keyboard produces incorrect graphic output and violates the principle of frequency in the assignment of key position.

The third proposal (Appendix III) for the Hindi keyboard has been suggested by Narsinham and others. They have made a radical suggestion from the point of view of engineering. The use of the matra has been dropped in their proposal. Instead, the syllabic shape of consonants as well as vowels has been incorporated in their proposed keyboard. This proposal has several shortcomings. First, it is visually distorting and space-occupying. Linguistically speaking, it violates the principles of conventional writing systems and will not be digested by the people.

Second, in order to make the distinction between and , etc., the use of the halant sign is obligatory. In short, the above proposal is not at all feasible.
Relying on the frequency-count of the characters of DS and time unit assigned in the operation of every key given in the Maharashtra report I attempted to present a tentative keyboard (Appendix IV) for a Hindi typewriter. One of the important properties of this keyboard is that it derives C2-type consonants from non-syllabic shapes by the addition of a vertical stroke in a systematic and consistent way.

The design of my keyboard also satisfies various other criteria such as phonetic similarity, etc., suggested by the Maharashtra report. On this keyboard the vertical bar stroke and matras of vowels e, i, u, and ñ will be dead keys whereas the matras a, i, ñ, will be assigned half movement. Such a keyboard will have advantages over both the Government of India's proposal and the Maharashtra Government plan.

First, it will simplify the Hindi keyboard radically. The keys which are twelve in number can be removed from the Government of India's revised keyboard, since a, i, ñ, and T can be derived by the addition of one vertical bar stroke.

Second, to type the non-syllabic shape of C2-type consonants, it is no longer necessary to press the "shift" key in my proposed keyboard.

Third, new keys such as +, etc., which are absent from the Government of India's revised keyboard can be added in place of the twelve removed keys.

Fourth, many graphemes such as , , etc., can be brought closer to relatively propitious positions.

Fifth, the principle of phonetic similarity has not been taken into account in the Government of India's revised keyboard. The Maharashtra government report suggests grouping k-kh, g-gh, etc., together, since it would be a valuable aid to memorizing the keyboard. The Maharashtra keyboard establishes surprisingly adequate compatibility between phonetic similarity and frequency. My keyboard is similar to the Maharashtra keyboard in this respect.

Sixth, the keyboard specified by me will enable a Hindi typist to achieve greater speed.

Finally, the proposed keyboard will eliminate the inadequacies of the Government of India keyboard and will block the wrong graphic output generated by the Maharashtra keyboard.

Conclusion. The first reaction to the proposal of deriving C2-type consonants with a vertical bar stroke seems to be one of skepticism as to the potential speed in typing; however, relying upon statistical data presented in the Maharashtra report, it does not seem to lead to a reduction of speed for the following two reasons:

First, the vertical bar has been assigned the most propitious
position in the keyboard, since its frequency will be the highest of all.

Second, it is no longer necessary to press the shift key for every non-syllabic consonant which is two to three times more time consuming.

The proposed keyboard demonstrates further improvement by eliminating twelve keys from the Government of India's keyboard and ten keys from the Maharashtra keyboard. It also sets up a consistent method of deriving C2-type consonants whereas the other two keyboards are inconsistent in this regard. Furthermore, it also eliminates the several inadequacies of the Government of India and the Maharashtra Government keyboards. Although I have presented enough evidence in support of my keyboard, the conclusive decision should be left open to further investigation and experimentation by experts interested in the improvement of the Hindi keyboard.

NOTES

1 I would like to thank Dr. C. C. Cheng and Dr. Y. Kachru for their comments on the earlier version of this paper. Responsibility for all shortcomings is of course mine.

2 The Government of India constituted a committee under the chairmanship of Mr. Kakasaheb Kalelkar for the purpose of evolving a standard keyboard for Devanagari script. The Committee submitted its report in 1951 and the Government of India accepted its recommendations and announced its final keyboard for Devanagari script in May, 1962.

3 The keyboard (May, 1962) did not incorporate the non-syllabic shape of ण, ण, ध, ण, ण, ण, and ण.

4 The revised Government of India keyboard tries to derive some medium or low frequency graphemes such as kh, gh, N, dh, bh, sh and some Sanskrit graphemes with a vertical bar. The motivation does not seem to achieve speed and efficiency; otherwise this principle should be applied to medium frequency graphemes such as p, m, b, g, c, etc. The underlying reason behind this attempt seems to be to convert the English typewriter into a Devanagari typewriter. The syllabic as well as non-syllabic shapes of kh, gh, N, dh, bh, sh and some Sanskrit graphemes would have left no space for other most essential letters.

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0 full circle = dead sheet
½ circle = ½ movement on that case or shift

REvised KEY BOARD FOR THE STANDARD TYPEWRITER (HINDI - MARATHI) 1969
(46 KEYS)

APPENDIX I
अ आ इ ई उ ऊ ए ऐ ओ औ
क ख ग घ क
च छ ज झ ञ
ट ठ ड ढ ण
त थ द ध न
प फ ब भ म म
घ र ल व
श स ष ह
श ठ त
- आ : ई
* SPACE
KEYSET FOR HINDI
THE NATURE OF RURAL MARATHI: SOME HYPOTHESES

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University of Minnesota

About 80 percent of the population of Maharashtra lives in rural areas. The language of these rural Maharashtrians is different from Standard Marathi, which is spoken in and around the city of Poona and used as the medium of instruction at all levels of education throughout Maharashtra. Although differences may exist in the speech of villages of different linguistic regions of Maharashtra, there seem to be some characteristics common to all the rural dialects. Rural Marathi seems to constitute a separate and independent system with its own logic and grammar.

Furthermore, cursory observations reveal that students coming from rural areas are much slower in their educational progress than the students from urban areas where Standard Marathi is spoken. Nearly 50 percent of the rural students registered in elementary and middle schools drop out. One of the major reasons for this is the difficulty in making a switch from Rural to Standard Marathi, from unaccepted to accepted speech. Students and teachers are ignorant of each other's system and therefore of the rules needed to shift from one system to another. (The problem seems parallel to that of Black English versus Standard English.)

Yet there has been hardly any work done on Rural Marathi. The work by Tulpule (1942: 1963) dealt with the Marathi language during the period of Yadavas, whereas Gramopadhye concentrated his attention on the official Marathi language of the Peshavas. More recently, Ghatage (1963; 1965; 1966) studied Konkani of South Kanara, Kudali, and Kunabi of Mahad dialects of Marathi but provided virtually no systematic description of Rural Marathi. There is, therefore, a need to study the speech of a wider representation of the rural population of Maharashtra.

The purpose of this paper is to present some hypotheses that describe general characteristics of Rural Marathi. Since the hypotheses proposed here are based not on any survey data but on my personal observations and knowledge of Rural Marathi, they are tentative and subject to modifications. They should not be considered valid linguistic generalizations unless they are empirically verified. Nevertheless, an attempt has been made here to provide some linguistic evidence to indicate their substantial nature.

The hypotheses to be proposed about the nature of Rural Marathi are as follows:

I. Rural Marathi is linguistically simpler than Standard Marathi at all levels of grammar: phonology, morphology, and syntax. In other words, Rural Marathi has not only fewer grammatical rules than those found in Standard Marathi but also the rules of Rural Marathi are simpler--containing fewer features--than those of Standard Marathi.
For example: Rural Marathi does not contain the rules, Glide Formation and i Deletion, which are found in Standard Marathi. These rules for Standard Marathi can be written as follows:

Glide Formation: Before the vowel a, front and back vowels are changed to y and w, respectively.¹

Examples:

<table>
<thead>
<tr>
<th>Base Forms</th>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. dhu + a 'wash!' (pl.)’</td>
<td>dhwa</td>
<td>dhua</td>
</tr>
<tr>
<td>2. pi + a 'drink!' (pl.)’</td>
<td>pya</td>
<td>pia</td>
</tr>
<tr>
<td>3. de + a 'give!' (pl.)’</td>
<td>dya</td>
<td>dea</td>
</tr>
</tbody>
</table>

i Deletion: The vowel i is dropped after the palatalized affricates when also before the glides y and w.²

Examples:

<table>
<thead>
<tr>
<th>Base Forms</th>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ciyar 'four'</td>
<td>čiyar (Pal.)</td>
<td>čiyar (Pal.)</td>
</tr>
<tr>
<td></td>
<td>čiyar (i Del.)</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td>[čiyar]</td>
<td>[čiyar]</td>
</tr>
<tr>
<td>2. penciwis 'twenty-five'</td>
<td>penciwis (Pal.)</td>
<td>penciwis (Pal.)</td>
</tr>
<tr>
<td></td>
<td>penciwis (Nas. Assim.)</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td>[penciwis]</td>
<td>[penciwis]</td>
</tr>
</tbody>
</table>

The rules, although common to both Standard and Rural Marathi, seem to contain fewer features in the latter than in the former.

For example, the rule of Palatalization is found in Standard as well as in Rural Marathi. However, it is more general in the Rural speech. In Standard Marathi, its form is as follows:

Affricates and spirants (c, j, jh, and s) are palatalized before the front high vowel i and the glide y. Further, affricates are also palatalized before e.

\[
\begin{align*}
+cns & \rightarrow [-dif] / +++ \rightarrow [-cns] \\
+str & \rightarrow [-grv] / "cnt" \\
\end{align*}
\]

In Rural Marathi, both the affricates and spirants are palatalized before the front vowels i, e, and glide y. In terms of features, it is written as follows:

\[
\begin{align*}
+cns & \rightarrow [-dif] / +++ \rightarrow [-cns] \\
+str & \rightarrow [-grv] / "cnt" \\
\end{align*}
\]

The rule in Standard Marathi contains seven features, but in Rural Marathi, it contains only five. Thus the rule in Rural Marathi is simpler and consequently more general.
Examples:

<table>
<thead>
<tr>
<th>Base Forms</th>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. tyaci 'his'</td>
<td>tyacı</td>
<td>tyacı</td>
</tr>
<tr>
<td>2. raje 'kings'</td>
<td>raje</td>
<td>raje</td>
</tr>
<tr>
<td>3. majhi 'my (fem. sg.)'</td>
<td>majhi</td>
<td>majhi</td>
</tr>
<tr>
<td>4. majhe 'my (mas. pl.)'</td>
<td>majhe</td>
<td>majhe</td>
</tr>
<tr>
<td>5. kesi 'how (fem. sg.)'</td>
<td>kesi</td>
<td>kesi</td>
</tr>
<tr>
<td>6. kese 'how (mas. pl.)'</td>
<td>kese</td>
<td>kese</td>
</tr>
</tbody>
</table>

Also, Standard Marathi has the rule by which nasals and liquids are aspirated when immediately preceded by an aspirated consonant in a word; whereas in Rural Marathi, not only nasals and liquids but also the consonants are aspirated. The rules are as follows:

In Standard Marathi:

\[
\begin{align*}
\text{[ +cns } & \text{ [+tns] } / \text{ [-voc] } \text{ [+tns] } \text{ ----} \\
\text{[ +cns } & \text{ [+nas] } & \text{ --\rightarrow} & \text{ [+tns] } / \text{ [-voc] } \text{ [+tns] } \text{ ----} \\
\end{align*}
\]

In Rural Marathi:

\[
\begin{align*}
\text{[ +cns ] } & \text{ --\rightarrow} & \text{ [+tns] } / \text{ [-voc] } \text{ [+tns] } \text{ ----} \\
\end{align*}
\]

The rule in Rural Marathi contains two features less and therefore is simpler and more general.

Examples:

<table>
<thead>
<tr>
<th>Base Forms</th>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. sakhe + e 'sugar (obl.)'</td>
<td>sakhe (Vow. Del.)</td>
<td>sakhe (Vow. Del.)</td>
</tr>
<tr>
<td></td>
<td>[sakhrhe]</td>
<td>[sakhrhe]</td>
</tr>
<tr>
<td>2. tithila 'foremost'</td>
<td>[tithila]</td>
<td>[tithila]</td>
</tr>
<tr>
<td>3. begheto 'he sees'</td>
<td>begheto</td>
<td>beghtho</td>
</tr>
<tr>
<td></td>
<td>boko</td>
<td>boko</td>
</tr>
</tbody>
</table>

The distinctive feature matrix of Standard Marathi Phonology must specify the features of retroflex /ŋ/ in addition to the features of /n/. Rural Marathi speakers, however, fail to perceive and maintain the distinction between the two phonemes. Therefore, the phonemic inventory of Rural Marathi does not contain the phoneme /ŋ/.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>papi 'water'</td>
<td>pani</td>
</tr>
<tr>
<td>ap 'bring'</td>
<td>an</td>
</tr>
</tbody>
</table>

At the morphological level, that Rural Marathi tends to be simpler or more general, is evident from the following examples.
1. In Standard Marathi, the present tense first person singular masculine and feminine endings are respectively o and e. This distinction, however, has been neutralized in many Rural Marathi dialects. They keep either o or e.

   **Standard**          **Rural**
   mi jato 'I (mas.) go'  mi jato 'I (mas. fem.) go' OR
   mi jate 'I (fem.) go'  mi jate 'I (mas. fem.) go'

2. In Standard Marathi, the present tense conjugation of the auxiliary ah 'to be' is as follows:

   **Singular**  **Plural**
   1. ahe         ahot
   2. ahes        ahat
   3. ahe         ahet

   In Rural Marathi, however, only two forms--ahe for sg. and ahet for pl. of all persons--are kept. In some rural dialects, there exists only one form, ahe, for all the persons and numbers.

   At the syntactic level, we examine the Relative Clause construction. Consider the following variants of Restrictive Relative Clauses in Standard Marathi:

   "The man who works here is sick."
   (1) to maṇuṣ jō ithe kam kerto to ajari ahe.
   (2) to jo maṇuṣ ithe kam kerto to ajari ahe.
   (3) to jo ithe kam kerto to maṇuṣ ajari ahe.
   (4) jo maṇuṣ ithe kam kerto to ajari ahe.
   (5) jo ithe kam kerto to maṇuṣ ajari ahe.
   (6) ithe kam kerto to maṇuṣ ajari ahe.
   (7) to maṇuṣ ajari ahe jo ithe kam kerto to.
   (8) to ajari ahe jo maṇuṣ ithe kam kerto to.
   (9) to ajari ahe jo ithe kam kerto to maṇuṣ.
   (10) to ajari ahe ithe kam kerto to maṇuṣ.
   (11) to maṇuṣ ajari ahe ithe kam kerto to.

   To obtain all these variants, Standard Marathi must contain the following transformational rules: (1) Antecedent Copying, (2) wh-Attachment, (3) Noun-Deletion, (4) Pronominalization, (5) Extraposition, (6) to-Deletion, and (7) jo-Deletion.3

   Rural Marathi has the (4), (5), (7), and (8) variants. These variants can be obtained by the transformational rules: wh-Attachment, Noun-Deletion, and Extraposition. Thus Rural Marathi contains only three transformational rules as opposed to seven in Standard Marathi. It can, therefore, be concluded that Rural Marathi is simpler than Standard Marathi.

II. Rural Marathi is less subject to borrowings from (i) Sanskrit and (ii) English.

(i) Standard Marathi is so much sanskritized that its grammar must include either two sets of rules to account for tadbhava 'derived from Skt.'
and tatsama 'like Skt., i.e., borrowed from Skt.' words or only one set of rules but mark some rules +Skt. On the other hand, the grammar of Rural Marathi is mostly the grammar of tadbhava items and only a few words will have to be marked +Skt.

The speakers of Standard Marathi maintain, or try to maintain, the distinction between the long and short vowels. This distinction does not occur in Rural Marathi. For Example:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) sīla 'stone'</td>
<td>sīla</td>
</tr>
<tr>
<td>sīlē 'character'</td>
<td></td>
</tr>
<tr>
<td>(2) kule 'race'</td>
<td>kule</td>
</tr>
<tr>
<td>kūle 'army, shore'</td>
<td></td>
</tr>
</tbody>
</table>

Standard Marathi not only borrows many Skt. lexical items but also preserves them in their original shapes. But when Skt. words are borrowed by Rural Marathi, they are marathized. Their structure is changed to fit into the system of Rural Marathi. Skt. and Standard Marathi allow initial consonant clusters of two consonants. But the morpheme structure rule of Rural Marathi does not allow for such initial sequences. The rule that puts constraints on sequences of morpheme initial segments can be written in the following way.

A. \[
\begin{array}{c}
\text{[-cns]} \\
\text{[+voc]} \\
\end{array}
\] 

B. \[
\begin{array}{c}
\text{[+voc]} \\
\text{[-cns]} \\
\end{array}
\] 

By rule A, morpheme-initial CV, LV, and GV are possible. By rule B, initial VL, VG, and VC are possible, which means CC, CL, CG, and CCC are impossible in the initial position of Rural Marathi morpheme. For example:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. prakāśi 'light'</td>
<td>përkas</td>
</tr>
<tr>
<td>2. sneheleta 'a vine of love'</td>
<td>isneheleta</td>
</tr>
<tr>
<td>3. stuti 'praise'</td>
<td>istuti</td>
</tr>
</tbody>
</table>

Also, Rural Marathi does not allow medial consonant clusters of more than two consonants as shown in the following example.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>lekṣmi 'goddess of wealth'</td>
<td>lekṣumi or lekṣəmi</td>
</tr>
</tbody>
</table>

Some Skt. words borrowed by Standard Marathi have maintained the Skt. sandhi rules. Note the following examples.

(1) devaṅa 'death' → deve 'God' + aṅa 'call'
(2) pēremeśvər 'God' → pēreme 'supreme' + iṣər 'God'

First by the sandhi rule: e + a → a
Second by the sandhi rule: e + i → e
The influence of Skt. on the morphology of Standard Marathi is also noticeable. Verbs in the present tense of Skt., Standard Marathi, and Rural Marathi are conjugated by attaching the personal endings to the present tense verbs. The personal endings are as follows:

<table>
<thead>
<tr>
<th>Sanskrit</th>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>sg.</td>
<td>du.</td>
</tr>
<tr>
<td>1. mi</td>
<td>ves</td>
<td>ves</td>
</tr>
<tr>
<td>2. slo</td>
<td>thes</td>
<td>thes</td>
</tr>
<tr>
<td>3. ti</td>
<td>tes</td>
<td>(e)nti</td>
</tr>
</tbody>
</table>

The second person singular ending in Standard Marathi contains s, which marks the person. This may be due to the influence of Skt. second person singular ending si. The endings os and es in Standard Marathi must have developed from the underlying \*osi and \*esi, respectively.

Borrowings from English also are found at all levels of Standard Marathi. The proportion of borrowings, however, may differ from level to level. Most of the English borrowings are at the lexical level. The syntax and morphology of Standard Marathi are less affected. As compared to Rural Marathi, Standard Marathi is much more influenced by English. At the level of phonology, Standard Marathi has borrowed two English phonemes: ı and ď. For example:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. bat</td>
<td>'bat'</td>
</tr>
<tr>
<td>fæson</td>
<td>'fashion'</td>
</tr>
<tr>
<td>2. ofis</td>
<td>'office'</td>
</tr>
<tr>
<td>kofi</td>
<td>'coffee'</td>
</tr>
</tbody>
</table>

Also, Standard Marathi maintains the English morpheme structure rules which allow morpheme initial sequences of two consonants. Consider the following examples:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. skul</td>
<td>'school'</td>
</tr>
<tr>
<td>2. stešen</td>
<td>'station'</td>
</tr>
<tr>
<td>3. platform</td>
<td>'platform'</td>
</tr>
</tbody>
</table>

At the morphological level, Standard Marathi borrows English nouns and forms compound verbs from them. The following examples will illustrate this point.

- skiing kerпе 'to do skiing'
- seling jape 'to go sailing'
- fæson kerpe 'to dress up'

A few syntactic constructions in Standard Marathi seem to be the result of English borrowings. The most common relative construction in Standard Marathi is the one in which a relative pronoun precedes the antecedent. But the construction in which a relative pronoun follows the antecedent is also found in Standard Marathi. This construction must
have been formed on the basis of English relative construction. This construction, illustrated in the following example, is not found in Rural Marathi.

The man who works here is sick.

III. Rural Marathi is conservative and therefore closer to Old Marathi.

Since there is very little work done on Old Marathi, and since we cannot know the actual pronunciation of sounds in Old Marathi, it is very hard to compare its grammar with the grammar of Rural Marathi, and especially the two phonologies. However, indirect evidence may confirm the truth-value of our hypothesis.

In the sound system of Old Marathi, there is a confusion between $n$ and $m$. For example, *mane* 'mind' instead of *mane* according to Master (1964: 26). No systematic phonemic distinction has been maintained. The same thing appears to be true in Rural Marathi. In many Rural Marathi dialects, _men_ is pronounced as _mən_.

According to Master, _s_ rhymes with _m_ (1964: 31). For example: 

precash /jali/, and sersu /pravešu_. Many Rural Marathi speakers do not perceive the distinction between /s/ and /s/ and invariably replace /s/ with /s/. For example:

\[
\begin{align*}
\text{išvər} & \quad 'God' & \rightarrow& \quad \text{isvər} \\
\text{prəkaš} & \quad 'light' & \rightarrow& \quad \text{perkas}
\end{align*}
\]

The reflexive pronoun in Old Marathi is _apule_ 'own'. For example:

"jo apule mane nepe apene ci" (Master 1964: 89)

'who knows not his own worth'

Rural Marathi has kept the same reflexive pronoun, whereas Standard Marathi has replaced it with _svetahace_. Examples are:

\[
\begin{align*}
\text{Rural:} & \quad \text{mi apule kam kerto} & \quad 'I do my own work' \\
\text{Standard:} & \quad \text{mi svetahace kam kerto} & \quad 'I do my own work'
\end{align*}
\]

In the past passive construction, referred to as ergative construction by some linguists,\(^4\) the logical subject is in the instrumental or agentive case and the verb is transitive and agrees with the object. The agentive forms of the personal pronouns in Old Marathi are:

\[
\begin{array}{ll}
\text{sg.} & \text{pl.} \\
1. & \text{miya} & \text{amhi} \\
2. & \text{tuva} & \text{tumhi} \\
3. & \text{tyanə (m.)} & \text{tyani} \\
& \text{tine (f.)} & \text{}
\end{array}
\]

Examples:

"niya vəmdila vəguru ci 'I saluted my honored teacher'

tuvən kamu socaveŋ 'why must thou grieve'" (Master 1964: 83).
Rural Marathi uses the same forms of personal pronouns. Standard Marathi, however, has replaced *miya* and *tuva* with *mi* and *tu* respectively.

IV. Rural Marathi is less innovative and therefore contains fewer stylistic variations than Standard Marathi.

Because of their contact with Hindi, many Standard Marathi speakers are able to perceive the distinction between stops and fricatives—for example, *ph/f*, *j/z*, and *kh/kh*—even though fricatives normally do not exist in Marathi. Standard Marathi speakers are beginning to carry over these fricatives into their own language. For example:

- *sepherkend* 'an apple' ----> *seferkend*
- *khup* 'very much' ----> *khup*
- *jemin* 'land' ----> *zemín*

The present tense third person singular neuter ending in written Marathi is *e* but in spoken Marathi it is *a*. Because of the influence of its writing system, Standard Marathi has developed the variation between the two. That is to say, spoken Standard Marathi uses *e* or *a*. But Rural Marathi does not use *e*; it uses only *a*. For example:

Standard: *te mul kam kerte OR te mul kam kerto* 'that child works'
Rural: *te mul kam kerte* 'that child works'

Variations are also found at the syntactic level. Both Standard and Rural Marathi have the present imperfect construction of the type: *mi kam kerit ahe* 'I am working'. At one time, neither of them made the distinction between "I am working" and "I have been working". In both, *mi kam kerit ahe* was used to convey both the meanings. However, recently, Standard Marathi has introduced a construction of the type: *mi kam kerto ahe* to convey the second meaning.

As we have seen earlier, many variants of relative construction, which are present in Standard Marathi, are absent in Rural Marathi.

V. The difference between the speech levels—formal and informal—of Rural Marathi is minor. The two levels are closer to each other in Rural Marathi than they are in Standard Marathi.

Many women speakers of Standard Marathi use nasalization to characterize their speech as formal. Such a feature is not found in the dialect of rural women.

The pronouns, *tu* 'thou' and *tumhi* 'you' are found in the informal and formal speech levels of Rural Marathi, respectively. The formal speech level of Standard Marathi is marked by the use of the polite pronoun *apen* 'you'.

Some special syntactic constructions also characterize the formal speech level in Standard Marathi. The use of subjunctive and passive is typical.

For Example:

1. *apen te kam kārave* (Subjunctive)
   'You should do that work.'
2. *appakaṃgun te kam kele jāal* (Passive)
   'That work will be done by you.'
Rural Marathi replaces such constructions, which mark formality, with more common constructions. For example, it replaces subjunctive with imperative and passive voice with active voice as in:

(1) tumhi te kam kara ne (Imperative)
'You do that work.'

(2) tumhi te kam keral (Active)
'You will do that work.'

The hypotheses proposed above are related to each other. Some of them seem to be the results of others. For example, hypothesis I seems to be the result of II and IV. That is to say, Rural Marathi is simpler because it does not borrow from Skt. and English and does not innovate new constructions. On the other hand, III might be the reason for IV. Rural Marathi tried to maintain the structure of Old Marathi, and consequently new constructions did not arise. Whatever their relationship is, these hypotheses do characterize the general nature of Rural Marathi.

The questions now arise: Why is Rural Marathi simpler and closer to Old Marathi? Why does it have fewer variations? The reasons seem obvious. Most of the people from rural areas hardly come in contact with outside communities. Naturally, they make much less use of the language. They see no necessity for developing complex linguistic constructions. They take pride in their traditions and are slow to copy the habits, customs, and the speech of urban classes. Consequently, Rural Marathi does not change rapidly.

It is also apparent why Standard Marathi and not Rural Marathi is subject to borrowings from Skt. and English. Speakers of Standard Marathi are invariably educated. English and Skt. are regularly taught in higher secondary schools. Naturally, the students tend to borrow some lexical items from these languages. At the college level, English is used as the medium of instruction, especially in the Sciences, Engineering and Agriculture. It is easier to borrow scientific terms than to create new ones. As far as liberal arts are concerned, many Skt. terms are taken into Marathi instead of coining new ones. Since Rural Marathi is mostly the speech of persons at a low level of literacy, if any, it is not exposed to such borrowings.

Concluding Remarks:

Although only a few hypotheses that characterize the nature of Rural Marathi are proposed in this paper, it becomes clear that Rural Marathi constitutes a separate and independent system with its own logic and grammar. Therefore, it is extremely important and necessary to study with more vigour the internal structure--grammar and sound system--of Rural Marathi. The implications of such a study for the teaching of Marathi here in the United States as well as in Maharashtra are obvious. Standard Marathi is taught in American Universities. Those who study Marathi here and go to Maharashtra, especially to rural areas of Maharashtra, to conduct their research find themselves in trouble. They neither understand Rural Marathi nor they make themselves understood to the speakers of Rural Marathi. Consequently, their research work is hindered. It is, therefore, important for the teachers of Marathi to
have linguistic correlates of Rural Marathi so that they can make students aware of the differences that exist between Standard and Rural Marathi.

The teachers in Maharashtra should have some idea of the structure of Rural Marathi in order to help students from rural areas to overcome the difficulties they face in making a shift from Rural Marathi to Standard Marathi. It is expected that the knowledge of the structure of Rural Marathi on the part of teachers in Maharashtra will enhance considerably the educational achievements of students from rural areas.

NOTES

1 See Junghare (1970) for the rule in terms of feature descriptions and conditions on them.

2 See Junghare (1970) for the rule in terms of feature descriptions.

3 See Junghare (1974) for a detailed explanation of these transformational rules and the variants they obtain.

4 See, for example, Van Olphen (1970).

BIBLIOGRAPHY


HONORIFICS AND THE TEACHING OF HINDI

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University of Texas at Austin

Honorifics as a category in Hindi can refer to a variety of phenomena. All these phenomena are dependent on the relationship between the speaker and the person addressed. The primary expression of this relationship is reflected in the various forms used to express the second-person pronoun 'you' and the imperative verb forms. Another type of honorific relationship is reflected in the use of various formal nominals and verbals in honorific speech. These honorific forms are usually borrowings from Sanskrit and Persian. Finally, we find various levels of vocabulary in Hindi. From the etymological point of view, these levels are described as tattama, Sanskrit words borrowed directly into Hindi, tadbhava, Sanskrit cognates found in Hindi, videhi, borrowings from non-Indian languages, and desi, borrowings from other Indian languages and other words of obscure origin. These etymological levels may be correlated with honorific levels. Thus tattama vocabulary is used in formal speech, while tadbhava vocabulary is more common in familiar speech, as are desi words. The videhi group is composed of various subgroups which can best be classified according to the language from which the foreign word has been borrowed. Although some words were borrowed from languages such as Portuguese and Turkish, the two largest groups are the words borrowed from English and Persian. The English borrowings can be divided into two groups; the completely naturalized vocabulary is used in familiar speech -- it includes words such as pensil ('pencil'), kaar ('car'), fiiis ('fee'), fon ('phone') and many others. The use of non-naturalized English words and phrases characterizes the speech of many educated Westernized speakers. A similar dichotomy characterizes the borrowings from Persian; many Persian words are common in familiar colloquial speech: kitaab ('book'), kaagaz ('paper'), and others. Other Persian words are common only in the language of educated Muslim speakers known as 'High Urdu' (saaf urdu).

The most basic set of honorific levels can be associated with the second-person pronouns signifying 'you'. First of all, we can look at these pronouns purely from the syntactic point of view. The pronoun tuu with the lowest honorific status correlates with singular verb forms, singular adjectives, and singular nouns. It also has singular reference. The next honorific level, represented by the pronoun tum, is somewhat more complex. Verbs directly agreeing with tum are plural in form, but only masculine nouns and adjectives are pluralized when used predicatively with tum.

<table>
<thead>
<tr>
<th>tum</th>
<th>acche (pl.)</th>
<th>phalvaal (pl.)</th>
<th>ho (pl.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>you</td>
<td>good</td>
<td>fruitseller</td>
<td>are</td>
</tr>
</tbody>
</table>

In the above sentence, no plurality would have been marked for the predicate noun if it had been feminine. Moreover, third-person
pronouns referring to persons with the honorific level equivalent to tum are always singular. The highest honorific level is represented by the pronoun aap, which again shows plurality both in the verb and the predicate noun phrase, only if it is masculine. There are also many ways to mark nouns as having the honorific level of aap; the most common way is to postpose honorific terms like saahab or jii after nouns referring to persons, usually proper names. At this honorific level plural forms are found for nouns and pronouns in the third person.

Assuming a generative analysis, can 'honorific' be related to 'plural' with the semantic component serving to interpret the meaning of the sentence as either honorific or plural? Such an analysis would not be descriptively adequate, since honorific and plural are distinguishable even on the surface level. Not considering the vocative case here, every Hindi noun has four forms determined by the matrix +singular and +oblique, where 'oblique' refers to a case form used for objects of postpositions. Honorific is identical to plural only for masculine nouns and then only for -oblique instances. It seems clear that honorific must be added as a third category for nouns along with +singular and +oblique. A feature such as +status might be assigned with additional distinctions within the +status or -status categories to allow for additional honorific categories. In teaching Hindi, honorific should be considered distinct from the category of 'plural'; this distinction is especially salient where the first-person plural form ham 'we' is substituted for the singular mai 'I', not as a higher honorific level, but as a lower form.

Semantic interpretation represents a much greater problem with regard to the teaching of honorifics. The first problem is the lack of standardization in Hindi. In urban areas we often find a two-level honorific system using only aap and tum; this system is the one most universally taught in Hindi courses. In actual situations in India, the more common honorific system is probably the one using only tuu and tum, with aap being found marginally, as when outsiders come to the village. The basic Hindi honorific system may be given as follows:

<table>
<thead>
<tr>
<th>PRONOUNS</th>
<th>CORRESPONDING IMPERATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECOND PERSON</td>
<td>THIRD PERSON</td>
</tr>
<tr>
<td>lowest: tuu</td>
<td>vo,ye (vah,yah)</td>
</tr>
<tr>
<td>intermediate: tum</td>
<td>vo,ye (vah,yah)</td>
</tr>
<tr>
<td>highest: aap</td>
<td>ve,ye</td>
</tr>
<tr>
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(S = verb stem)

Given the fact that Hindi is not standardized, it is rather difficult to give an overall analysis of Hindi honorifics without referring to a specific dialect. We could use an aap-tum dialect or a tum-tuu dialect, or an aap-tum-tuu dialect. Do some dialects not distinguish all three levels, or is there merely a switch involved; the levels still exist but are no longer represented by three different pronouns.
The lowest honorific level, the intimate level, is not mentioned in most first-year Hindi textbooks. However, this level cannot be ignored in the same way that teachers of English may safely ignore the English second person pronoun 'thou'. Even if we disregard village speech, tuu is part and parcel of most Hindi speakers' vocabulary. Children use it with their friends, when talking to animals, and it is also used in addressing the deity. We may also mention the use of tuu as an alternative to higher honorifics when anger is involved. It is however safe to say that students will not be faced with situations which require the use of tuu and therefore it should be taught as an item for passive knowledge only. The next higher level, which may be called 'familiar' and uses the second-person pronoun tum, represents a more vital item of speech for the beginning student. In standard urban Hindi, the form tum is used for addressing people who even the American just arrived in India will have contact with: the tailor, the washerman, the shoemaker, the bearer in the hotel, and the rickshawdriver. If the student is to function appropriately he should therefore have a good active knowledge of this familiar level. In the language class, we must mix the familiar and the formal levels so that the student will be able to use both levels in the appropriate circumstances. The classroom situation should include many instances where the student addresses his fellow students, and the teacher must insist that he switch honorific levels depending on the person addressed: formal with the instructor and informal with other students. It should also be pointed out that a shoemaker, for instance, will not be unduly honored when a foreigner addresses him using a formal honorific level; he will merely come to the conclusion that the foreigner hasn't learned the language very well. For the student, the informal level will be somewhat more difficult than the formal level since a unique verb form (the tense marker ho) is used here in the most common present tenses, while the formal pronoun hai requires the same verb form (the tense marker hai) used for all other plural nouns and pronouns with the exception of informal tum. Students who have studied Western languages may relate tum to such familiar forms as German du and French and Spanish tu, all of which have only singular reference and are used with singular verb forms, while the Hindi familiar pronoun tum is always used with plural verb forms and may have plural reference. With the increasingly egalitarian society found in Europe, the formal/informal relationships in European languages are rapidly being reduced to indicators of degree of intimacy (except for adult/child relationships) so that the foreigner has little use for the familiar forms until he develops close relationships. The stratification of Indian society where the foreigner also forms a stratus makes the use of familiar forms much more vital there and necessary for the foreigner to employ correctly from the beginning. Honorific usage in Hindi is also made more complex by the fact that it is relevant not only when addressing another person but also when just talking about him in the third person.

The use of the most formal honorific level produces problems mainly because of the existence of several imperative forms and the use of the formal pronoun hai with third-person reference, especially when the person referred to is physically present at the time.
Beyond the basic honorific levels, there are many other politeness formulas. Hindi has borrowed a great number of expressions used in stylized Persian honorific speech. For example, we find the word *tasriif*, 'honorable self', which is 'brought', 'taken away', or 'put down', as substitutes for the non-honorific verbs 'come', 'go', 'sit', respectively. To take the example of a verb, one might use the neutral verb *kahnaa* 'speak', which is replaced by *formanaa* 'command' and *arz karnaa* 'petition' when honorific or modest reference is used. Honorific terms are used when referring to others of a certain status, while modest speech is used in referring to oneself when speaking to persons of higher status. Many honorific terms taken from Sanskrit sources, such as *subhaanam* 'honorable name', *kripaa patr* 'letter of kindness', and *sevak* 'servant', replace the terms taken from Persian. Another indicator of modest speech mentioned previously is the use of the first-person plural pronoun *ham* 'we' as a substitute for *mii* 'I', a usage which would not indicate modesty in most Western languages. The use of *ham* is syntactically anomalous, since women frequently use masculine verb forms with *ham*, a levelling which has been related to male dominance in Muslim culture.

Present linguistic models are not adequate for representing honorific levels in language. Syntactic representations and their semantic interpretations can be given; however, a model of the entire socio-cultural context is required if honorifics are to be fully incorporated within a linguistic model. Thus we can state in the lexicon that terms such as *zaahab* 'sir', *sriimaan* 'Mr.', and items including the honorific particle *jii* will be honorific and thus require honorific adjectives and verb forms. The honorific category can be established as being distinct from plural; for instance, the plural noun ending 71 never has honorific signification. However a discourse analysis with an empirical representation of cultural factors would be required to generate correct utterances when speakers interact.

A sentence such as *hindi bolo*. 'Speak Hindi!' (familiar) cannot be analyzed independently from the point of view of honorifics. The speaker of the sentence and the person spoken to must be incorporated into the analysis. The sentence given below is likely to be considered anomalous:

*baRe bhaaii ne devraanii se kahaa...*
'The older brother said to his younger brother's wife...'

However, the honorific factors which make this sentence anomalous are extra-linguistic—there is a ban on communication between the older brother and his younger brother's wife in the traditional Indian family.

In the classroom the learning of certain honorific relationships such as the rather complicated joint-family relationships in India are a basic part of learning the language. Caste relationships also affect honorific language but are difficult to explain since they vary so much from one area to another. These relationships remain fairly constant only when studying a long work in a geographical setting of limited scope as in Premchand's novel *Godaan*. 
The scope of 'honorifics' should be extended to include choice of style and vocabulary depending on the person spoken to; in Hindi the student's most difficult problem will probably not be the distinction between familiar tum and honorific aap, or even the use of honorific expressions such as tashriif laaana 'bring one's honorable self' for 'come'. His main problem will be stylistic in nature. Identical concepts can be expressed in many different ways in every language. Khokle described the predominant use of agentive constructions in Indic languages. However, non-agentive constructions also occur frequently, and, although the American student will tend to use +agentive constructions patterned after his native usage, he may also do the opposite and try to use the -agentive construction when it is not appropriate in Hindi. Thus the sentence 'The washerman wants his money' may be rendered in two ways in Hindi:

-agentive: dhobii ko apne paise cahiya.
+agentive: dhobii apne paise caahtaa hai.

The -agentive construction is more natural in Hindi and on the same pattern the student might also choose the -agentive for the sentence 'The washerman wants to go': dhobii ko jaanaa caahiya.
However, here the Hindi speaker no longer interprets jaanaa 'to go' as a noun and combines it in a verbal composite with caahiya to mean 'The washerman ought to go'. The original English sentence then must be rendered with an agentive sentence: dhobii jaanaa caahtaa hai.

Difficulties do arise when we attempt to explain sentence structure in terms of the structure of the society concerned. Often one form of expression has become more established in usage, probably much in the same way that, on the lexical level, one of two synonyms becomes more widely used. In the classroom it is certainly useful to remind students of certain general phenomena such as the use of the postposition ko (+agentive) with the term corresponding to the subject in the English sentence. Whether the frequency of these constructions can be effectively related to a native speaker's "world view" is subject to more research such as that pioneered by von Humboldt and Whorf. All languages, even in similar cultures such as those found in modern Europe, differ greatly in types of syntactic constructions favored by native speakers, and the native predilection for one construction over another cannot be easily related to non-linguistic factors.

Other problems of synonymy occur on the lexical level. The student of Hindi in India must not only choose the correct honorific level when addressing someone but must often choose between a term of Perso-Arabic origin or a native Indian term, which may also be a borrowing from Sanskrit or another Indian language. Thus whether one uses Perso-Arabic kitaab or Sanskrit pustak for 'book' depends on religion, level of education, and the formality of the occasion, but much less on regional variation. The problem of honorifics and style permeates the entire language; the student of Hindi must be aware of the structure of interpersonal relationships in India, a structure which has various manifestations depending on the domain: the family, the village caste system, or modern city life.
NOTES

1 An additional category of arddh-tatsama 'half tatsama' includes those words borrowed from Sanskrit which have combined with native elements.

2 Many of the words borrowed from Persian are of Avestic origin, but since, with few exceptions, these words were borrowed through Persian, the two categories should not be distinguished.

3 An extra-honorific level is included when the normally second-person pronoun aap is used for third-person reference. Except when the person referred to is present, this level is infrequently found, as when the prime-minister is referred to in newspapers.

4 In addressing the deity, tuh often does not represent an intimate level, but an archaic use of tuh, which is more representative of the use of this pronoun at an earlier state of the language.

5 See Coppola, 1973, for a discussion of this point. Several agreement patterns are given where differences between Hindi and Urdu patterns arise from the differences in the two societies. However, I have not been able to find any consistent patterns as described in this article where Urdu speakers and Hindi speakers may be differentiated according to the agreement patterns they use. For lexical differences the Hindi/Urdu dichotomy is quite indicative, but syntactic and morphological variation is more likely to be regional in nature.

6 Dardjowidjojo, 1973, discusses the inadequacy of the Chafe model for the analysis of honorifics. The linguist in using his model to describe and generate language would consider many aspects of the problem of honorifics as being 'extra-linguistic'.

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