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ABSTRACT

This report presents a general study of the structure of Dravidian languages, noting predominant and significant patterns and similarities among the languages in the areas of phonology, morphology, and syntax. There is also a discussion of the main differences of various subgroups or particular languages from the typical patterns. Background information on some of the languages is provided along with mention of where they are spoken and the number of speakers. The work is designed primarily as a teaching aid in courses and as background material for the study of any Dravidian language. References are provided; tables illustrate some of the grammatical features. (VM)

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THE STRUCTURE OF DRAVIDIAN LANGUAGES

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PREFACE

The present work is intended primarily as a teaching aid in courses on comparative Dravidian and as background material for the study of any Dravidian language. But it should also be of interest to scholars concerned with typological and linguistic area studies, particularly with reference to India. It may indirectly prove useful to linguists who are involved in the search for a "universal grammar," for the language structure delineated herein diverges widely from that of the Western languages that have so far engaged most of their attention.

This study utilizes a typological approach wherein I seek to delineate the predominant structural patterns in present-day Dravidian languages. Moreover, I pay heed to certain common, but less dominant, patterns. Deviant forms are noted also where these seem to be relevant for an understanding of modern Dravidian structure. It is obviously not possible to discuss all the idiosyncratic phenomena. And the number of illustrations has been limited so that the structural patterns will stand out more clearly.

It is important to recognize that this study is not cast within a traditional framework. Although the historical linguists have by all odds done the most to advance Dravidian language studies, and I build upon their contributions, there is, it seems to me, room for an approach which stresses the analysis of contemporary languages within a structural

framework. Such an orientation not only is more useful for language learning, but it throws new light upon India as a linguistic area. As for a description along transformational-generative lines, this would have proved unendingly cumbersome, perhaps impossible, to employ in a brief comparative analysis of this kind.

SUMMARY

The present work provides a general overview of the structure of the Dravidian family today, which includes 24 or more languages. In that it utilizes a typological rather than an historical-comparative approach, it is the first study of its kind for this particular language grouping. Primarily it is meant to be a teaching aid in courses on comparative Dravidian, but it should prove highly useful for students of any of the languages. It has, moreover, significant implications for aspects of present-day linguistic theory.

In addition to the introduction, which provides background information and states the study's objectives, there are chapters on phonology, morphology (a general overview), morphology (nominals), morphology (verbals), morphology (other word classes), and syntax. The conclusions point to some of the broader implications of the work.

One of the meaningful patterns that emerges is the fact that the greatest divergencies among the languages appear in the area of phonology. Similarities are more numerous in the realm of morphology, and they are especially striking in the area of syntax.

For source materials this study has relied upon data from the published works listed in the section called References, as well as to some degree on the author's own field notes on several of the Dravidian languages.

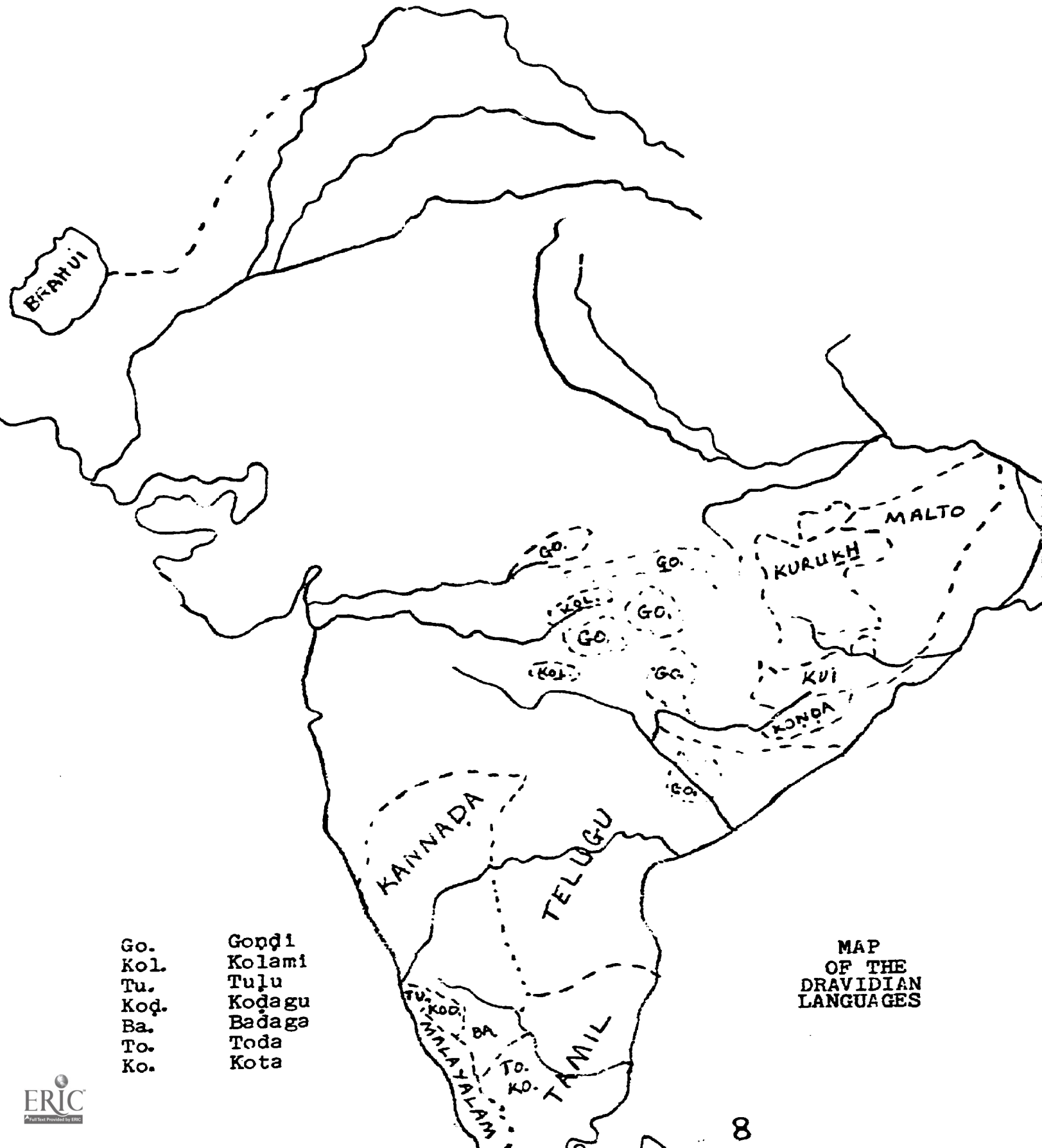
CHAPTER I INTRODUCTION

Background Data

The Dravidian languages, numbering 24 or more and spoken by approximately 120 million people, constitute one of the largest language families in the world, ranking fifth or sixth in terms of number of speakers. Except for Brahui, in West Pakistan, the languages of the Dravidian group occupy a more or less continuous area in eastern, central, and especially southern India, and the northern part of Ceylon (see Figure I).

Four of the languages, Telugu, Tamil, Kannada, and Malayalam, have their own scripts and literary traditions. Each is the official language of one of the South Indian states.¹ In addition, the Kodagu-speaking people of southwestern Mysore State use the Kannada language and script as their medium of literacy, and Tulu is occasionally written in a script based on that for Kannada. But neither of these languages has a developed literature. The other members of the Dravidian family--Toda, Kota, Kui, Kuvi (or Khond), Konḍa (or Kūbi), Goṇḍi, Kolami, Naiki, Ollari, Gadaba, Parji, Kurukh, Malto, Brahui; the recently classified languages, Irula (Diffloth 1968; Zvelebil 1968c), Koraga (Shanmugam Pillai 1968), Pengo, and Maṇḍa (for Pengo and Maṇḍa, see Burrow and Bhattacharya 1970); as

FIGURE I



Go.
Kol.
Tu.
Koq.
Ba.
To.
Ko.

Gonḍī
Kolami
Tulu
Kodagu
Badaga
Toda
Kota

MAP
OF THE
DRAVIDIAN
LANGUAGES

well as the important dialects Badaga (belonging to Kannada) and Koya (a Gondi speech) and the little-known entities (possibly dialects), Savara, Yerukala, and Dorli--have no orthographies of their own and are considered to be "tribal languages."

It is possible that future investigations will reveal additional Dravidian languages spoken by tribal groups in central India or the extreme southwestern portion of the peninsula. And the relationships among a number of the minor languages and dialects still need to be clarified. For example, Emeneau and Burrow consider Ollari to be a dialect of Gadaba; Krishnamurti, on the other hand, views them as separate languages. Moreover, the status and relationships of Savara, Yerukala, and Dorli have not been determined, and the position of Badaga--whether it is just a dialect of Kannada or actually a separate language--has not been firmly established.

Of the four literary languages Tamil is the best known and has the widest geographic extension. It also possesses the oldest and richest Dravidian literature, a literature that rivals the Sanskritic in certain respects. The earliest established written records in a Dravidian language (representing a Tamil-Prakrit hybrid speech) go back to the third century B.C., and the origins of the early Tamil literature can be traced to about that period.

The general distribution and size of the various Dravidian

language groups will now be discussed. The population figures are only very rough estimates reached by projecting from the 1961 Census data (see Table I) and a few other sources.

Tamil is spoken mainly in the State of Madras (or Tamilnad) by over 35 million people, and it is widely employed in Ceylon (two-and-a-half million speakers), in Burma, Malaysia, Indonesia, and Vietnam (about one million in all), in East and South Africa (about a quarter of a million), in British Guiana, and on the islands of Fiji, Mauritius, Réunion, Madagascar, Trinidad, and Martinique. Tamil speakers over the world perhaps number 40 million.

Malayalam, spoken in the State of Kerala by well over 20 million persons, has its origin in a western dialect of Middle Tamil. Written records date from the tenth century.

The earliest inscriptions in Kannada, the first language of perhaps more than 22 million inhabitants of Mysore State, date from about 450 A.D., and the oldest body of literature belongs to the ninth and tenth centuries.

Telugu is the leading language of Andhra Pradesh but is found also in Madras City, in Mysore, and in some countries of Southeast Asia. There are probably more than 50 million Telugu speakers in all at the present time. The earliest inscription in this language dates from 633 A.D., and the first body of literature goes back to the eleventh century.

The aforementioned "literary" languages display geo-

TABLE I

POPULATION FIGURES FOR SPEAKERS OF DRAVIDIAN LANGUAGES
IN INDIA (AND PAKISTAN), 1961*

<u>Language</u>	<u>Abbreviation</u>	<u>Number of Speakers in Millions</u>
Telugu	Te.	37.67
Tamil	Ta.	30.56
Kannada**	Ka.	17.42
Malayalam	Ma.	17.02
Gondi	Go.	1.50
Kurukh (Oraon)	Kur.	1.14***
Tulu	Tu.	.94
Kui	--	.51***
Kuvi (Khond)	--	.19***
Koya	--	.14
Brahui	Br.	.30
Malto	Malt.	.09***
Kodagu	Kod.	.08
Kolami	Kol.	.05
Parji	Pa.	.02***
Konda (Kūbi)	--	.013
Gadaba****	Ga.	.008***
Naiki	Nk.	.0015***
Pengo	Pe.	.0013
Kota	Ko.	.0009
Ollari	Oll.	.0008***
Toda	To.	.0008

* Taken mainly from the Census of India 1961. See Census of India 1965.

** Includes Badaga (Ba.).

*** See Krishnamurti 1969a, 309-10, especially footnote 1.

**** The Dravidian Gadabas, as opposed to the Munda Gadabas, call themselves Konḍekōr Gadaba (Krishnamurti 1969a, 309).

graphic and social dialect differences--for example, between the literary and the colloquial forms, between rural and urban patterns, between the formal and informal speech styles of educated persons, between Brahman and non-Brahman usages (this is especially marked in Tamil), and so on. (See e.g. Zvelebil 1969; Bright 1970b; Shanmugam Pillai 1960; Nayak 1967; Sjoberg 1962.)

Tulu speakers, numbering over a million, are found to the south of the Kannaḍa area, on the west coast of the peninsula. Nearby, in the Coorg region of western Mysore State, dwell perhaps 85,000 or more speakers of Kodagu. And in the mountainous regions where the Tamil, Malayalam, and Kannaḍa areas meet several small language groups are found: the Kota (perhaps 1,200 or so persons), the Toda (about a thousand), and the Badaga (around 60,000).

Northern Andhra Pradesh contains speakers of Kolami (probably over 60,000) and Naiki (perhaps more than 1,500). In Madhya Pradesh Parji is spoken by 25,000 or more persons, and Dorli has recently been discovered there. Scattered over the same state are many groups of Gonds (nearly two million people in all) who speak different dialects of Goṇḍi.

The State of Orissa is the home of the Khond tribes, who include probably more than 800,000 persons speaking Kui and Kuvi, two closely related languages. In addition there are a number of smaller language entities: Koṇḍa, with perhaps

16,000 speakers, Gadaba with probably over 10,000, and Savara, Koya, Pengo, and Maṇḍa.

More to the north, in Bihar, Orissa, and Madhya Pradesh, are speakers of Kurukh (Oraon), totaling perhaps over 800,000, and near the Bihar and West Bengal borders probably over 80,000 people use Malto.

As noted above, Brahui is the only Dravidian language found entirely outside the borders of present-day India. Three hundred thousand or more speakers of this language live in the Baluchistan area of West Pakistan. There are also reports of Brahuīs in southern Afghanistan.

The Dravidian-speaking people are a highly important cultural group in India. They are thought to have once inhabited much of northern India, and probably also the Indus Valley region, in present-day Pakistan (see Sjöberg 1971 for a summary of what is known about the origins of the Dravidians). Languages of the Dravidian family have apparently strongly influenced those of the Indo-Aryan group in phonology, grammar, and lexical items; in turn they have borrowed heavily from Sanskrit, Prakrit, and certain modern Indo-Aryan languages, most commonly in the area of vocabulary (and the accompanying phonemes). The members of the North Dravidian group, Brahui, Kurukh, and Malto, have also undergone fundamental changes in grammar as a result of extensive contacts with Indo-Aryan speakers and, in the case of Brahui, members of the Indo-Iranian grouping as well.

Objectives of the Study

The chief objective of this work is to present a general overview of the structure of Dravidian languages. To achieve this end, I have isolated the predominant similarities in the areas of phonology, morphology, and syntax. The general structure in hand, I then discuss the chief divergencies of various sub-groups or particular languages from the typical patterns.

This synthesis, highlighting the main patterns, and by no means an exhaustive one, was undertaken in order to provide students with a convenient overview of the present-day Dravidian family. A student of one Dravidian speech should, by examining the similarities (and differences) among the various languages set forth herein, find it easier to learn other languages in this family. And although this work is meant to serve primarily as a text, linguists should find it useful, for instance, for a comparison of Dravidian with other language groups such as the Indo-Aryan and Ural-Altalic.

The stress upon similarities has led me to ignore some of the differences. At the same time I have sought to delineate the most significant deviations from the general form. For instance, Brahui differs markedly from the other languages because of its isolated, peripheral position. Then too, Dravidianists have generally divided

the 24 or so languages--on linguistic as well as cultural and geographic grounds--into three different sub-groups--South, Central, and North. Table II lists the three main groupings which seem to have come into being in about 1,500 B.C. or earlier (Zvelebil 1965, 371; cf. Andronov 1964a).

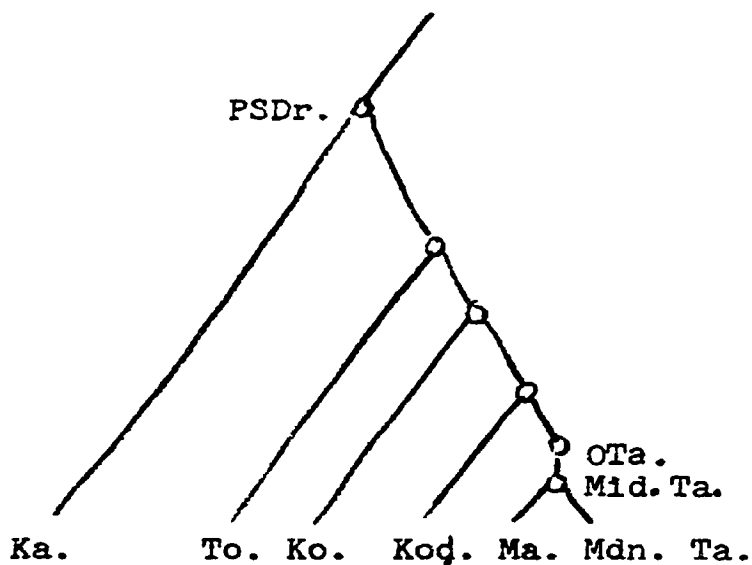
Although I take account of some of the important deviations from the general pattern, even with respect to particular languages, it is impossible in a study of this sort to discuss the wide variety of social and geographical differences within any of the languages (especially the "literary" ones).² Yet even these differences may be better understood, from one perspective, when seen in the light of the broader structural similarities that typify Dravidian as a whole.

It must be emphasized that the present description of Dravidian structure is not a comparative-historical study. Still, occasional allusions to the historical background are indispensable for interpreting the contemporary structural patterns, and, interestingly, the reverse is also true in many respects. Moreover, because of the need to provide some examples of phenomena from various of the languages, the description shades into comparative analysis. Nor does this work utilize transformational-generative methods, for such would have proved too cumbersome for a brief overview of an entire family of languages. Yet I have implicitly--e.g. when analyzing infinitives and

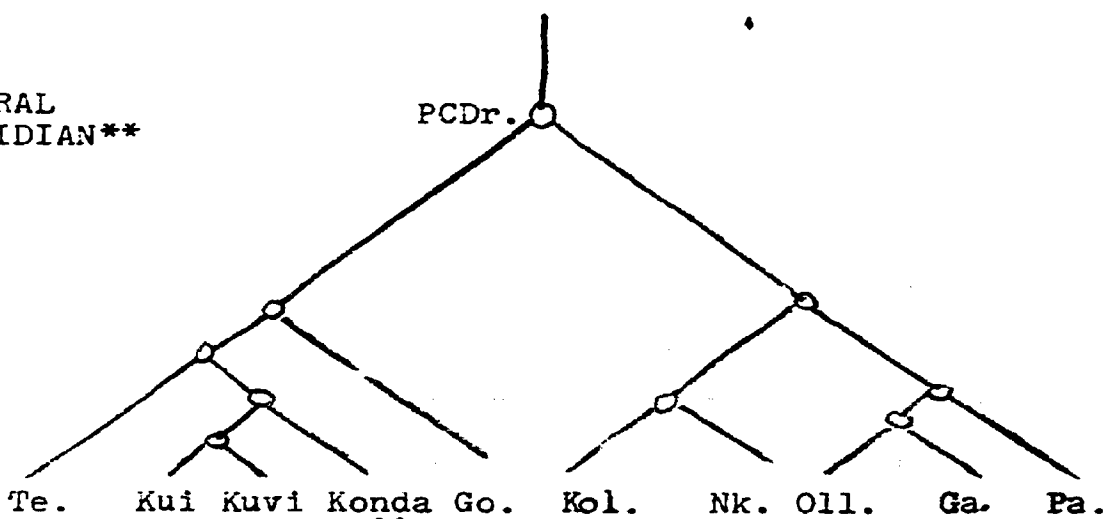
TABLE II

FAMILY-TREE DIAGRAMS OF THE MAIN BRANCHES OF DRAVIDIAN

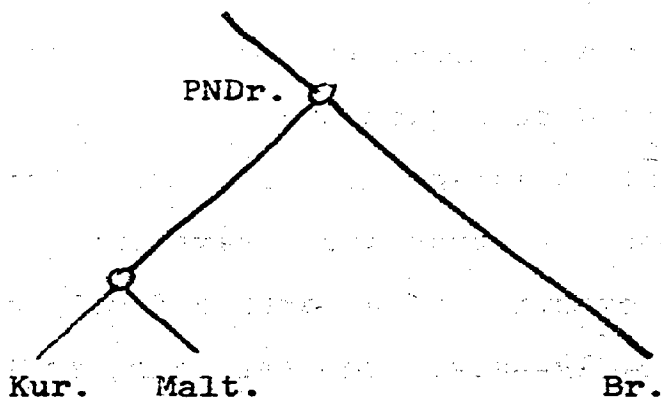
SOUTH
DRAVIDIAN*



CENTRAL
DRAVIDIAN**



NORTH
DRAVIDIAN



* Includes Tulu, the exact position of which is a matter of some dispute (Krishnamurti 1958b, 285; Subrahmanyam 1969b).

** Pengo and Maṇḍa seem to be closely related to Kui and Kuvi.



verbal adjectives--employed a modified transformational-generative perspective as a means of clarifying the structural patterns of Dravidian. Actually, what I have attempted is a synthesis of Dravidian structure that can lay the basis for a rigorous typology of this family.

As for sources, those I have actually cited are included in the References at the end of the study. In the Bibliography I list other leading works, especially on the four main literary languages, that I have consulted over the years. I have also relied upon field-work materials that I have collected from Dravidian speakers in India and in the United States. These persons were helpful in clarifying certain points of grammar that are not discussed in the published sources.

Relationship to Earlier Works

The present study, in seeking to provide an overview of the Dravidian family of languages, falls to some extent within the tradition of Robert Caldwell (1856, 1913), Jules Bloch (1946, 1954), P. S. Subrahmanya Sastri (1947), and M. S. Andronov (1965a). For the aforementioned authors were concerned with providing an overview of the Dravidian family as a whole in terms of phonology, morphology, and syntax. None of them actually achieved this goal. Caldwell and Subrahmanya Sastri were mainly concerned with the literary languages of the South. Bloch was able to utilize data from

the Central and North Dravidian languages, but his survey of the grammar has some serious limitations and his presentation makes the book very difficult to use. Andronov's description, still not translated from the Russian, though summarized in a brief article (1963), presents the widest coverage. Nevertheless, there are significant gaps in his analysis and his approach is that of an historical linguist.

The present study represents a significant departure from the above, all of which rely upon the comparative-historical approach. For it concentrates upon present-day structural patterns. Employing the techniques of modern structural linguistics in analyzing and arranging the data, I seek to provide an overall picture of the Dravidian language structure. Such can form the basis of a typological comparison of Dravidian with other language families. Although the typological approach has received little attention in American linguistics it has recently taken on importance as generative grammarians have concerned themselves with the search for a "universal" grammar. Moreover, a typological statement of Dravidian structure has considerable utility as a teaching device. For of the students who are interested in Dravidian languages a large proportion seem to be motivated more by a curiosity about the general characteristics of Dravidian, in a static sense, than by

historical developments within the family.

I am, therefore, focusing upon the synchronic rather than the diachronic patterns. The use of comparison is, of course, essential in a survey of this kind. But my approach is not the traditional comparative-historical one--although the best work in Dravidian has been within that perspective. Yet here and there I do refer to certain historical facts where necessary to clarify the existing patterns.

I shall now attempt to place my own work and that of the aforementioned authors in proper perspective as I briefly review the development of Dravidian linguistics.

Caldwell's Comparative Grammar of the Dravidian or South-Indian Family of Languages, first published in 1856 (revised in 1857), marks the true beginning of comparative Dravidian studies.³ Drawing upon data from 12 Dravidian languages, but relying mainly upon the literary languages of the South, Caldwell succeeded in demonstrating the genetic relationship among the Dravidian languages and in refuting the prevailing notion of the Sanskritic origin of Dravidian. In addition, he argued for genetic affiliation between Dravidian and the so-called "Scythian" languages (generally coterminous with the Ural-Altai grouping),⁴ and he pointed to the existence of Dravidian loanwords in Sanskrit.

Caldwell's statements about Dravidian, considering the

limited nature of his sources (12 out of about 24 Dravidian languages) and the poorly developed state of the comparative method at the time. hold up surprisingly well under the scrutiny of modern linguistics.

However, this epochal work stimulated little or no research during the following half-century or more--although the late nineteenth century did see a series of writings by Gundert (1869) and Kittel (1894) propounding the view that numerous Dravidian words are to found in Sanskrit.

Grierson's Linguistic Survey of India, IV: Muṇḍā and Dravidian Languages, published in 1906, uncovered a few more Dravidian languages and dialects and awakened a new interest in comparative Dravidian research. During the next few decades a number of definitive works appeared--K. V. Subbaiya's "A Primer of Dravidian Phonology" (1909) and "A Comparative Grammar of Dravidian Languages" (1910) (cited in Krishnamurti 1969a, 314), a variety of studies by L. V. Ramaswami Aiyar, Julien Vinson, P. Meile, Alfred Master (1938, 1946), E. H. Tuttle (1930), T. Burrow, and M. B. Emeneau. In 1946 Jules Bloch published his Structure grammaticale des langues dravidiennes (translated into English in 1954), in which he dealt with a number of "preliterate" languages--particularly Kui, Gondi, Kurukh, Malto, and Brahui--languages barely treated in Caldwell's grammar. Bloch was especially concerned with comparative morphology (see e.g. 1935).

S. K. Chatterji (1926) and Bloch (1925, 1934) found many Dravidian structural features in Indo-Aryan languages and posited a Dravidian substratum in Middle and New Indo-Aryan in order to account for this.⁵ Emeneau's "linguistic area" hypothesis (1954, 1956) treated the matter more fully and included all the language families of India (see Kuiper 1967).

Since the mid-thirties, Burrow and Emeneau have contributed numerous articles presenting a more advanced, systematic approach to the comparative and historical analysis of Dravidian. Burrow dealt with certain key problems in comparative phonology, such as the developments of proto-Dravidian (PDr.) *k, *c, *y, and *ʃ (1943, 1945a, 1947), the question of voiced stops in Dravidian (1937-39), and the alternations i/e and u/o in South Dravidian (1940). In addition he argued for the presence of numerous Dravidian loanwords in Vedic (including Rigvedic) and Classical Sanskrit (1945b, 1946, 1947-48, 1955). And, following Caldwell's work, he suggested affinities between Dravidian and Uralic, particularly in the etymologies of words for parts of the body (1944).

Emeneau first published his findings on Badaga (1939), Kota (1944-46), Kolami (1955), and Toda (1957), and later contributed studies on comparative Dravidian linguistics (e.g. 1945, 1953b, 1969a). His more recent research

has been concerned partly with tracing Brahui vowels to proto-Dravidian sources (1962a) and with noting the impact of Indo-Aryan and Indo-Iranian languages on this Dravidian speech.

Bh. Krishnamurti, in his Telugu Verbal Bases (1961), included a comparative phonology for Dravidian, with Telugu as the main focus. In the process he treated the question of voiced stops in Dravidian, the development of initial consonant clusters and initial ḡ, r, ṛ, and l through metathesis and vowel contraction in Telugu and other Central Dravidian languages, and patterns arising from the loss of vowels in unaccented syllables. In a series of earlier articles he dealt with a number of problems in Dravidian phonology (e.g. 1955, 1958a, 1958b).

Zvelebil also has written several brief surveys of comparative Dravidian phonology (1956, 1965, 1968a, 1968b). See also the important papers by Bright (1966, 1970a).

In the realm of morphology less progress has been made. However, Emeneau's paper, "The Dravidian Kinship Terms" (1953a), presents his discovery of a pattern of "inalienable possession," traceable to the proto-Dravidian stage, in certain kinship terms. Specifically, this relates to constructions wherein a pronominal base in the plural is used attributively to a following kinship stem. Emeneau also treated morphological problems in his publications, Brahui and Dravidian Comparative Grammar (1962a), "Brahui

Demonstrative Pronouns" (1962b), and "The South Dravidian Languages" (1967).

Krishnamurti's Telugu Verbal Bases (1961) deals to some extent with comparative Dravidian morphology. See also his article "Dravidian Personal Pronouns" (1968).

Other important research on morphology has been carried out, for example, by Zvelebil (1964, n.d.), Andronov (1961, 1968c), Glasov (1968), and P. S. Subrahmanyam (1965, 1969a).

In the area of etymological studies the salient work is Burrow and Emeneau's A Dravidian Etymological Dictionary (1961), with its Supplement (1968). This monumental effort, with its very wide coverage and inclusion of much hitherto unpublished data, ushered in a new era in comparative Dravidian linguistics.

During the past ten years or so considerable research has been carried out on a number of individual Dravidian languages. See, for example, Burrow and Bhattacharya (1961, 1962, 1970), Andronov (1962), Lisker (1963), Kamanujan (1963), Subrahmanyam (1968), Shankara Bhat (1967), Shanmugam Pillai (1968), Diffloth (1968), Vesper (1968), Bh. Krishnamurti (1969b), Tyler (1969), and Lincoln (1969).

Finally, several bibliographies of works on the Dravidian languages have appeared: Andronov (1964b), Israel (1966), and Montgomery (1968).

FOOTNOTES

¹These states, Andhra, Madras, Mysore, and Kerala, respectively, include within their boundaries speakers of the four main Dravidian languages, as well as to some extent smaller Dravidian linguistic entities and several Indo-Aryan language groups.

²The data I present on the four literary languages--Telugu, Tamil, Kannada, and Malayalam--are drawn primarily from modern standard colloquial speech, to the extent that such standards can be said to exist.

³However, apparently the first researcher to observe that the South Indian languages are related and belong to a separate, non-Aryan family was Francis Whyte Ellis in 1816 (Krishnamurti 1969a, 311-12).

⁴This view was ignored for almost a century and then revived, first by Schrader and then by Burrow. The last decade has seen a further resurgence of the theory. (See Schrader 1936; Burrow 1944; Bouda 1953, 1956; Meile 1949; Menges 1964, 1969; Tyler 1968; Andronov 1968b.)

⁵Compare the articles by Andronov (1964c, 1968a) arguing that, on typological grounds, the Indo-Aryan group should no longer be considered a branch of the Indo-European family.

CHAPTER II

PHONOLOGY

First we are concerned with listing the most widespread phonemes in Dravidian--those that exist in all or almost all the members of this family today. We find that these number about 12 consonants and 10 vowels (see Table III). One of the consonants, c, occurs somewhat less widely than the others. Not shown on the table are certain consonant phonemes, ɳ, g, ɖ (or ɽ) and d, which exist in a large number of the languages.

The overall picture that we obtain by listing the most widespread phonemes in the spoken varieties of the present-day Dravidian languages differs in certain significant respects from the historical linguist's hypothetical reconstructed system for the ancestral language, proto-Dravidian. Principally, the alveolar stop t, the retroflex fricative ɻ, and the palatal ɲ of proto-Dravidian are found to have a rather limited distribution in the modern languages.

Observe also that in Table III the stops (all voiceless) lack voiced counterparts. These do exist, however, in certain of the languages as positional variants (allophones) of the unvoiced phonemes. And, of course, a number of other phonemes are found in individual languages.

In most Dravidian languages, retroflex stops, the

TABLE III

THE MOST COMMON PHONEMES IN THE
DRAVIDIAN LANGUAGES TODAY

CONSONANTS

	Bilabial	Dental	Retroflex	Palatal	Velar
Stops	p	t	ʈ	(c)	k
Nasals	m	n			
Laterals		l	ɭ		
Resonant		r			
Semivowels	v(w)			y	

VOWELS

	Front		Back	
Close	i	ī	u	ū
Mid	e	ē	o	ō
Open		a	ā	

retroflex nasal ṇ, and the velar nasal ŋ (ŋ) rarely stand at the beginning of a word, and no stops occur word-finally.¹ Consonant clusters, with a few exceptions such as in loanwords, are restricted to geminates or to combinations of a nasal consonant (occasionally also v (w), y, or r) with a following stop, or of an alveolar or retroflex stop with another stop. Some exceptions are: To. toθx 'be squeezed flat', sixb 'point of a stick', kurbc 'Kurumba woman'; Ko. tirdṇ 'untrustworthy man'; Malt. pothqlatre 'soften'; Br. īrk 'sisters'.

The vowel system we have set up is identical with that for proto-Dravidian. Hiatus is rarely allowed between two vowels, being prevented by the insertion of euphonic consonants, typically y, v, n, occasionally ṭ or g--as in, for example, Te. penkuṭillu 'tiled house' (penku + illu), or Ka. halliyinda 'from the village' (halli + -inda)--or by loss of the first of the two vowels: Ka. allinda 'from there' (alli + -inda). Occasional exceptions occur: e.g. Kui ianju 'he, this man'; Kuvi āasi 'he, that man'; Kol. isiute 'this amount, small amount'; Pe. oa 'take!'.¹

Initial e and ē in the colloquial languages are typically pronounced as ye- and yē-, and initial o and ō often acquire the onglide w. Before initial i, ī and u, ū a slight onglide, y or w, respectively, may sometimes be heard.

A degree of vowel harmony exists in certain languages, affecting only non-root syllables (Bright 1966): e.g. Te. amma-ku 'to the mother', puli-ki 'to the tiger'; Pe. dūtak-ar 'old men', dūtik-ik 'old women'; Pa. cūr-ek-en 'let me see', cūr-ok-ov 'let them (neut.) see', cūr-ut-ur 'look at (it) (pl., polite)'.

Stress occurs automatically on the initial syllable of words and on syllables containing long vowels or ending in a consonant. Intonation is important on the sentence level in forming questions and expressing emphasis, doubt, and other feeling-states. Internal open juncture occurs between phonological words. Typically, phrase-final juncture is accompanied by a slight rise and fall in pitch, clause-final juncture by a mid-falling intonation contour, and sentence-final juncture by a low-rising pitch contour for yes-and-no questions, and a high-falling pattern for content questions and statements.

The four literary Dravidian languages--though Tamil much less so than the others--have borrowed numerous Sanskrit, Prakrit, Hindustani, and European lexical items (for the impact of Sanskrit, see, for example, Sjoberg and Sjoberg 1956; Bright 1970b). This has led, in the more formal speech styles, to considerable expansion of the stop series to include voiced stops (b, d, ḍ, j, g) and unvoiced and voiced aspirates (ph, bh, dh, ṭh, ḍh, ch, jh, kh, gh--very rarely ṭh). In addition, a set of sibilants and fricatives (s, ṣ, ś, h) has entered these languages. It must be remarked, however, that aspirated stops occur sporadically in native Dravidian words--note, for example, Te. tombadi 'nine' (lit.) > tombhai (colloq.). Moreover, the phonemes s, ṣ, ś, and h do occur in native Dravidian words in certain languages: Ma. śīla 'cloth'; Ka. halli 'village'.

Modern colloquial Tamil does not utilize voiced or aspirated stop phonemes in the pronunciation of foreign words containing such sounds. Thus its phonemic system accords closely with our general Dravidian type. However, voiced stops do occur as positional variants of the unvoiced stops, next to anasal or certain other consonants--e.g. inta [inda] 'this (thing)', ceytu [ceydu] 'having done, made'. (On the question of different analyses of voiced stops in Tamil in accordance with different styles, see Fairbanks 1957.) In intervocalic position the voiced stops are realized as fricatives--e.g. atu [aḍu] 'that (thing)' (Bloch 1916). At the beginning of words and in stop-stop sequences only unvoiced stops occur--e.g. kāl [ka:l] 'foot, leg', pakkam [pəkkəm] 'side', veṭkam [vɛṭkəm] 'shame'.

It might be noted also that Tamil has the phonemes t, n, and l (the last in some dialects only), and in colloquial speech a number of special vowel phonemes occur: æ, ɨ, ẽ, ã, õ, and ã̃.

The phonemic system of colloquial Malayalam closely resembles that for Tamil except that Malayalam has the extra phonemes t (r), n, ñ, ŋ, and ə (ũ), and it more often pronounces the initial voiced stops of loanwords as voiced.

The Kannada and Telugu systems differ from our general type in a manner different from that of Tamil and Malayalam. For Kannada and Telugu do have a number of voiced stops in native Dravidian words--e.g. Ka. duḍḍu 'money', gudḍi 'temple';

Te. bomma 'image', jarugu 'happen'.

Kannada and Telugu, as was indicated above, have acquired aspirated stops and sibilants from Sanskrit. Table IV presents a listing of the Telugu consonant phonemes of educated speech on the formal (more Sanskritized) and the informal (less Sanskritized) levels (see Sjoberg 1962).

On the phonetic level, Telugu has an important allophone [æ],² of the phoneme a, after palatal consonants (c, j, ś, y): Te. ceritramu [tʃæritramu] 'history', āśa [a:śæ] 'desire', yantram [yæntramu] 'machine', jantuwu [dʒæntuwu] 'animal'. Kannada utilizes a sound approaching æ in sequences c, j, or y + a: camca [tʃæmtʃa] 'spoon', jamīn(u) [dʒæmi:n(u)] 'shoe' (McCormack and Krishnamurthi 1966, 7).

Telugu and the northern Kannada dialects are alike in having dental affricates as allophones of the palatal stops c and j before non-front vowels (ū, ō, ā): Te. jabbu [dzæbbu] 'illness', cōṭu [tso:ṭu] 'place', cukka [tsʊkka] 'star'; Ka. cāku [tsa:ku] 'knife', jōla [dzo:la] 'jawar millet'. They may contrast phonemically with palatals in Sanskrit loanwords.

Kannada stands apart from Telugu, Tamil, and Malayalam in regularly displaying h where others use p, and in employing k before front vowels where the others have c. Te. pālu 'milk' : Ka. hālu; Ta. pōku 'go' : Ka. hōgu; Te. puli 'tiger' : Ka. huli.

The phonetic systems of certain non-literary languages

TABLE IV

COEXISTENT PHONEMIC SYSTEMS IN TELUGU (CONSONANTS)

Formal Spoken Telugu

	Apico-alveolar* and									
	Bilabial		Dental		Retroflex		Palatal		Velar	
Stops Voiceless	p	ph	t (th)	ts	ʈ	ʈh	c	ch	k	kh
Voiced	b	bh	d dh	dz	ɖ	ɖh	j	jh	g	gh
Spirants	f	s	z		ʂ		ʃ		h	
Nasals	m	n			ɳ					
Resonants	v(w)	l, r			ɭ		y			

Informal Spoken Telugu (Educated Speakers)

	Apico-alveolar* and									
	Bilabial		Dental		Retroflex		Palatal		Velar	
Stops Voiceless	p	t	ts	ʈ	ʈh	c			k	
Voiced	b	bh	d dh	dz	ɖ	ɖh	j		g	
Spirants	f	s	z		ʂ		ʃ		h	
Nasals	m	n			ɳ					
Resonants	v(w)	l, r			ɭ		y			

*Švarný and Zvelebil 1955.

of the Southern group, Kota, Koḍagu, and Tulu, differ from our description for Tamil (and therefore our general abstracted type) in that they utilize voiced stops, a number of sibilants (s, ṣ, and/or h), and additional nasals (ṅ and/or ṇ). In addition, Kota has the alveolar phonemes t and d, and the retroflex resonant r. Tulu utilizes the extra vowels æ and ĩ, and Koḍagu ē, ē̄, ĩ, ĩ̄ (Emeneau 1970).

Another unwritten South Dravidian language, Toda, has a highly unusual set of phonemes (Emeneau 1957). Besides labial, dental, alveolar, retroflex, palatal, and velar stops, with voiced and unvoiced members, there are the dental affricates ts and dz. In addition, a large number of sibilants and fricatives occur: f, θ, s, z, ṣ, z̄, ṣ̄, z̄̄, ṣ̄̄, z̄̄̄, ṣ̄̄̄, and x (some of these may be allophones), and the special resonant phonemes r, r̄, ṛ, and ṝ. Then there are m, n, ṇ, r, r̄, and y, with voiced and unvoiced allophones. Finally, Toda has, besides the usual five vowels, short and long, the central vowels ũ, ĩ, and ö, and the corresponding long phonemes ũ̄, ĩ̄, and ȫ.

The consonant system of Badaga, another South Dravidian language, does not differ greatly from that for colloquial Kannaḍa, but the vowels evince unusual patterns. According to Emeneau (1939), besides the contrast of length in the long and short vowels there are two grades of retroflexion, yielding 30 possible vowel phonemes: five short, five long,

five short half-retroflexed, five long half-retroflexed, five short retroflexed, five long retroflexed. For example, kĭt·e (ʻ = half retroflexed) 'I pulled out' : kĭ 'pull out!' : kĭ̄·e (retroflexed) 'down'.

Telugu occupies a somewhat intermediate position. Despite the fact that it shares some important features with the South Dravidian languages, it seems to go mainly with the Central Dravidian group, and it is especially close to Kui and Kuvi (Krishnamurti 1961, chap. IV). A number of stems in Telugu, Kui, and Kuvi are aphaeresized and metathesized forms of roots in other languages, especially the South Dravidian ones. Specifically, a number of South Dravidian roots containing a vowel in the initial syllable have cognates in Telugu, Kui, and Kuvi with the corresponding vowel shifted to the second syllable and blended with the vowel of the derivational suffix that is frequently added to roots to form bases. One result of this process is the occurrence in initial position of certain consonant phonemes--namely, q̄-, r-, r̄, and l. (Moreover, the vowel-blending process has led, in these languages, to e before a syllable in final a where South Dravidian has i or e, and o before a syllable in final a where South Dravidian has u or o.) Compare, for example, Te. vāru 'they (masc. and fem.)' : Ta. avaru; Te. lēdu 'it does not exist' : Ta. illa(du); Te. rōyu 'seek' : Ma. ōr- 'consider'; Te. trōcu 'push out' :

Ta. tura 'drive away'; Kui ṛīva 'weep' : Ka. aḷu; Kuvi dēru 'bamboo' : Ko. vedyr. Tulu, Goṇḍi, Koṇḍa, and some other Central Dravidian languages do have some voiced stops in word-initial position, but this seems to have been an independent development: e.g. Tu. ḍoṅka 'crookedness' : Ka. uḍugu 'shrink' ; T. ḍambadi 'agreement' : Ta. uṭampaṭi; Koṇḍa ṛeka 'wing' : Ka. ṛakkai.

Turning to the languages of the Central group, these utilize, in addition to the widely occurring Dravidian phonemes listed in Table III, a number of voiced stops, as well as s, ṇ, and ṛ (except that Kui lacks c, and Kuvi and Gadaba lack ṛ). In addition, Parji and Ollari have ʃ; Ollari, Gadaba, Kui, and Koṇḍa ṇ; Kui, Kuvi, and Koṇḍa a glottal stop (ʔ); Kui, Kuvi, Goṇḍi, Koṇḍa, Parji, Pengo, and Maṇḍa h (for Pengo and Maṇḍa see Subrahmanyam 1970, 747); Kolami and Naiki ʃ; Koṇḍa r, R (a voiceless alveolar trill--see Krishnamurti 1969b, 27, 187), and z. Goṇḍi and Gadaba also have [ts] and [dz] as allophones of the phonemes c and j.

The least known phonological systems are those of the three North Dravidian languages. However, these languages have, besides the usual Dravidian phonemes, b, d, s, and ṛ. Significantly, they lack ɻ. Kurukh also makes use of h, th, kh, kh (the last apparently only in loanwords), and ṇ; Malto has q, g (probably a laryngeal), th, and ṇ; Brahui

utilizes kh, gh, lh, and f. Brahui lacks short o and has few forms with short e (in this respect, as well as some others, it manifests a development in the direction of the neighboring Indo-Aryan and Iranian languages). In addition the three North Dravidian languages make use of aspirated stops and an aspirated r (both in loanwords from Indo-Aryan).

Finally, it might be remarked that kh (or x) before non-front vowels in Kurukh and Brahui corresponds to k in other Dravidian languages: e.g. Br. xal 'stone' : Ta. kal : Pa. kel; before front vowels it corresponds to c in Tamil, Malayalam, and Telugu and k in the other languages: e.g. Kur. xebdā 'ear' : Te. cevi : Tu. kebi : Kui kiru, kriu. The cognate in Malto is gethwu.

FOOTNOTES

¹For a detailed discussion of the enunciative vowel that is regularly added to stems ending in an obstruent, and, in the case of English and Hindi loanwords, to any consonant-final stem, see Bright 1970a.

²A lengthened form of this, ā̄, occurs as a marginal phoneme in Telugu: e.g. ammā̄nu 'I sold' (< ammi 'having sold' + -ānu 'I') : annānu 'I said'.

CHAPTER III

MORPHOLOGY: A GENERAL OVERVIEW

The Dravidian languages belong to the type wherein agglutination is predominant. Inflection is rare and relatively unimportant. When inflection occurs it usually involves a change from long to short vowel, or vice versa, in a small number of stems to which a suffix is appended. For example, Ta. kaṇ 'eye': kāṇ- 'see'; Te. caccu, cā-/cāv- 'die': cetta 'trash, refuse'; Te. tānu 'himself, herself': tanaku 'to himself, herself' (Krishnamurti 1955, 238).

Isolating patterns occur in a few of the modern languages: e.g. the Telugu negative contains both simplex and complex forms: cēyanu 'I (you, he, etc.) don't, won't do, make', cēya lēdu 'I (you, he, etc.) didn't do, make'.

Roots

The root morpheme in Dravidian is always initial in words, and all roots are monosyllabic. They may be open or closed, long or short (i.e. of the syllable-types (C) \bar{V} or (C¹) \bar{V} C²). Some examples are: Ta. pō- 'go', nal- 'good'; Ko. vār- 'come'.

Suffixes

Suffixation, so typical of agglutinative languages, is the only kind of affixation found in Dravidian. Prefixes occur in certain loanwords from Sanskrit; however, they are simply part of the entire word unit that has been borrowed. For exam-

ple, Te. anumānincu 'doubt (v.)' from Skt. anumāna 'doubt, suspicion'.

Suffixes are either derivational or inflectional. Derivational suffixes precede inflectional ones. Of the derivational suffixes the most important are the transitive/causative morphemes (see Chapter V).

Word Classes

The grammatical structure of Dravidian includes a number of different word types. There are seven classes of nominals: nouns, adjectives, numerals, demonstrative and interrogative "pronouns," personal pronouns, reflexive pronouns, and pronominalized nouns; five classes of non-finite verbals (forms that do not serve as verbal predicates of sentences): verbal adverbials (consisting of gerunds, or verbal participles, and gerundials), verbal adjectives, participial nouns, verbal nouns, infinitives; two classes of finite verbals (forms that do function as verbal predicates of sentences): simplex verb forms and complex verb forms; and six other word types: postpositions, adverbs, echo-words, onomatopoetic words, interjections, and particles.

All the above, except for echo-words and particles, are classes of morphologically "free" words. Adjectives and verbal adjectives, are, however, syntactically bound forms.

The succeeding chapters on morphology will consider these different word classes.

CHAPTER IV
MORPHOLOGY: NOMINALS

Nominals include nouns, adjectives, numerals, demonstrative and interrogative "pronouns," personal pronouns, reflexive pronouns, and pronominalized nouns. These subclasses will be considered in the order listed.

Nouns

Nouns in Dravidian typically are inflected for gender, number, and case.

Gender. Gender in the Dravidian noun is both lexical and grammatical. Depending on their lexical meaning, all nouns belong to two classes: those denoting human beings (nouns of the "higher" class), and those referring to animals, inanimate objects, and ideas (nouns of the "lower" class). Nouns of the "higher" class denoting males are of the masculine gender, those denoting females are of the feminine gender. The rest of the nouns belong to the neuter gender.

With few exceptions, the gender of nouns is grammatically expressed only in the concord between subject nouns and the corresponding gender forms of verbs or of pronominalized or participial nouns. In other words, the lack of different declensions in the noun (with the exception, in some languages,

of Sanskrit loanwords assigned to the masculine gender), as well as the absence of modifiers that agree in number with nouns, means that in the Dravidian languages it is the agreement of gender between subject noun and predicate phrase that enables us to set up a grammatical category of gender for the noun. For example, there is no distinction between the masculine and feminine genders in the epicene plural of Tamil or Telugu verbal forms: e.g. Te. vaccāru 'they (masc. and fem.) came'. By the same token, nouns referring to persons make no distinction of gender in the epicene plural. Thus, although e.g. Ta. pen 'woman' belongs to the feminine gender, penkaḷ 'women' is in the epicene plural.

Beyond the preceding, no other general statements can be made concerning gender in the Dravidian family as a whole today. There are in fact five different systems of classification by gender (see Table V).

In South Dravidian, with the exception of Malayalam and Toda, masculine, feminine, and neuter are distinguished in the singular, but in the plural there is only a persons : non-persons contrast.

In Telugu, Kolami, Parji, Naiki, Gadaba, Kurukh, and Malto, there is no distinction between feminine and neuter in the singular: Te. pilla vaccindi 'a girl came' and gurram vaccindi 'a horse came'. But whereas both feminine

TABLE V
GENDER TYPES IN THE DRAVIDIAN LANGUAGES

Type 1:

singular	masculine : feminine : neuter	Tamil, Kannada, Badaga, Kodagu, Kota, Tulu
plural	epicene : neuter	

Type 2:

singular	masculine : non-masculine	Telugu, Kolami, Parji, Naiki, Gadaba, Kurukh, Malto
plural	epicene : neuter	

Type 3:

singular	masculine : non-masculine	Pengo
plural	masculine : feminine : neuter	

Type 4:

singular	masculine : non-masculine	Gondi, Konda, Kui, Kuvi
plural	masculine : non-masculine	

Type 5:

Gender is not expressed		Malayalam, Toda, Brahui
-------------------------	--	----------------------------

and neuter stand in opposition to masculine in the singular. the feminine aligns with the masculine in the plural. The system is therefore a non-parallel one.

Pengo belongs in a class by itself. It patterns with other CDr. languages in the singular, but it is unique in the Dravidian family as a whole in marking three genders in the plural.

Gonḍi, Koṇḍa, Kui, and Kuvi have only two genders: masculine and non-masculine. Feminine and neuter fall together in both the singular and the plural.

Finally, in Malayalam, Toda, and Brahui gender distinctions are not expressed grammatically--except, in the case of Malayalam, in subject demonstrative "pronouns."

To summarize: The Dravidian languages fall into five main types according to how various parts of speech are classified grammatically by gender. These gender types, interestingly, do not correspond neatly with the South, Central, and North Dravidian dialect divisions that scholars seem to have delineated generally on the basis of phonological patterning.

There are slight traces of an animate:inanimate gender contrast in Telugu. Whereas nouns referring to persons and animals require a case suffix in the accusative, those referring to objects and ideas, especially where the word ends in -m(u), tend to be unmarked. This holds in colloquial Telugu even for nouns having special oblique stems--e.g. ā illu cūṣānu 'I saw that house'.

Number. There are two numbers in Dravidian: singular and plural. However, formal expression of the plural number is

not always obligatory. Nouns referring to persons in the plural are almost always pluralized, but nouns referring to plural entities belonging to neuter gender often are unmarked for the plural--such is the case in Kurukh and colloquial Kannada. This also holds true in a number of the languages where the noun is qualified by a numeral.

The most common morphemes in plural suffixes on the noun are -r (in nouns denoting human beings), -k, and -l̥ ~ -l. -k is often combined with -l̥ ~ -l, sometimes with -r.

Examples of forms with the suffix -r are Ta. avan 'he' : avar 'they'; Ka. hengasu 'woman' : hengasaru 'women'; Gadaba muttak 'old man' : muttakir 'old men'; Kur. kukkos 'boy' : kukkor 'boys', malni 'Malto woman' : malnir 'Malto women'. A composite suffix made up of -m and -r, referring to persons, is found in Malayalam: amma 'mother' : ammamār 'mothers'.

Those that take the suffix -k include Br. xal 'stone' : xalk 'stones'; Nk. pal 'tooth' : palku ~ palgu 'teeth'; Goṇḍi talā 'head' : talānk 'heads'; Koṇḍa mēmar 'husband, man' : mēmargu 'husbands, men'; Kui kōru 'buffalo' : kōrka 'buffaloes'; Koḍ. aṇṇu 'elder brother' : aṇṇaṅga 'elder brothers'. Examples of forms containing -l̥ ~ -l are Te. biḍḍa 'child' : biḍḍalu 'children'; Nk. kī 'hand' : kīl 'hands'; Ga. amb 'arrow' : ambul 'arrows'; Tu. tare 'head' : tareḷu 'heads'. Very common in the South Dravidian group

are suffixes composed of -k + -l ~ -l: Ma. vīṭu 'house' : vīṭukaḷ 'houses'; Ka. mane 'house' : manegaḷu 'houses'; Tu. pū 'flower' : pūkḷu 'flowers'; Te. mrānu 'tree' : mrānkulu 'trees'; Pa. mer 'tree' : merkul 'trees'; Ta. yānai 'elephant' : yānaikaḷ 'elephants'. This doubling of the plural morphemes sometimes occurs in the reverse order: Nk. kī 'hand' : kīlku 'hands' (Andronov 1965a, 51).

Neuter nouns in some languages take a plural suffix in -v: Kol. aliak 'buffalo' : aliakev 'buffaloes'; Pa. iya 'mother' : iyav 'mothers'.

Some rare suffixes combine t, c, or s with -l: Te. cēyi 'hand' : cētulu 'hands'; Pa. vār 'root' : vārtiḷ 'roots', gurrol 'horse' : gurrocil 'horses'; Oll. supar 'tamarind tree' : supartiḷ 'tamarind trees'.

Case. The declension of nouns in Dravidian involves the addition of case suffixes to the bare stem or to the stem in the nominative case. For example, Ka. mara- 'tree' : marakke 'to the tree (dat.)', nom. stem maravu 'tree': maravannu 'tree (acc.)'.

Rather common in the Dravidian declension is the frequent accretion of augments (-t-, -tt-, -n-, -in-, -an-, and others, Shanmugam 1969) to the stem which takes case suffixes--e.g. Ta. paṭam 'picture' : paṭattai (paṭa-tt-ai) 'picture (acc.)'; Ka. mara- 'tree' : marada (mara-d-a) 'of

the tree (gen.)'; Te. illu 'house' : iṅṅiki (iṅ-t-iki)
'to the house'.

With rare exceptions declension by case is regular in Dravidian--e.g. the case suffixes that are added to plural bases are identical with those affixed to singular bases. One exception is the Telugu oblique/genitive suffix: on singular bases it is -i, on plural bases -a.

In a few of the languages, for example Telugu, as indicated above, the genitive case suffix serves also as the oblique base which precedes all the other case suffixes. Te.
nūyi 'well (nom.)' : nūti 'of the well' : nūtini 'well (acc.)' :
nūtiki 'to the well'.

The number of cases varies with different languages, but generally they include the nominative (which may or may not be identical with the bare stem) and the following oblique cases: accusative, dative, genitive, and sometimes instrumental, locative, and ablative. (See Tables VI and VII)

Adjectives

Only a very few root adjectives exist in Dravidian.¹ The most important ones are the bound demonstratives and the question morpheme. In all the languages there are forms meaning 'that', usually a-; 'this', i-; and the question marker 'which?', mainly e- or o-. A few languages, for example, Kannada and Kolami, have a fourth member of the set, usually u- 'this (near the person addressed)'.

TABLE VI

CASE SUFFIXES IN SOME DRAVIDIAN LANGUAGES

	<u>Tamil</u>	<u>Kannada</u>	<u>Koḍagu</u>
Nom.	appan 'father'	mara-v-u 'tree'	poṭṭi 'box'
Acc.	appan-ai	mara-v-annu	poṭṭi-in-a
Dat.	appan-ukku	mara-kke	poṭṭi-keu
Instr.	appan-āi	mara-d-inda	poṭṭi-inji
Gen.	appan-in	mara-d-a	poṭṭi-r-a
Loc.	appan-il	mara-d-alli	poṭṭi-lu
	<u>Tulu</u>	<u>Telugu</u>	<u>Kui</u>
Nom.	kay 'hand'	ūru 'village'	ābaru 'fathers'
Acc.	kay-ni	ūr-i-ni	ābar-i-i
Dat.	kay-ki	ūr-i-ki	ābar-i-ki
Instr.	-----	-----	ābar-i-ke (associ- ative)
Gen.	kay-t-a	ūr-i	ābar-i
Loc.	kay-t-i	ūr-a*	-----

*Sjoberg 1969.

TABLE VII
CASE SUFFIXES IN SOME DRAVIDIAN LANGUAGES
(Continued)

	<u>Koṇḍa</u>	<u>Goṇḍi</u>	<u>Kolami</u>
Nom.	ayli 'girl'	kōndā 'ox'	ella 'house'
Acc.	ayli-di-ṅ	kōndā-t-ūn	ella-n
Dat.	ayli-di-ṅ	kōndā-t-ūn	ella-ṅ
Instr.	ayli-d-aṅḍ	kōndā-t-ē	ella-naḍ
Gen.	ayli-di	kōndā-t-ā	ella
Loc.	ayli-d-u	kōndā-t-ē	ella-ṭ
Abl.	-----	kōndā-t-āi	ella-tanaṭ

	<u>Kurukh</u>	<u>Malto</u>	<u>Brahui</u>
Nom.	mukkā 'woman'	maleh 'man'	<u>kharās</u> 'ox, bull'
Acc.	mukka-n	male-n	<u>kharās-e</u>
Dat.	mukkā-ge	male-k	<u>kharās-e</u>
Instr.	mukka-n-tī	male-t	<u>kharās-aṭ</u>
Gen.	mukkā-gahi	male-ki	<u>kharās-nā</u>
Loc.	mukkā-nū	male-no	<u>kharās-āi</u>

In addition, there are a few words, generally referring to qualities, that are classed as adjectives in Dravidian, for they occur only in attributive position. However, most of these seem to be derived forms. For instance, the root of Ta. nalla 'good' is nal-. Some examples are Ta. periya 'big'; Te. cinna 'small'; Ma. valiya 'strong'; Ka. doḍḍa 'big'; Koḍ. puḍiya 'new'. Andronov (1965a, 63) argues that, in Tamil at least, these adjectives (always in -a) developed from pronominalized nouns in the third person neuter plural: thus nalla 'good' has its origin in nalla 'good things'. But it is also possible that the final -a on these forms is a genitive case suffix on what is basically a noun root--thus nal- > nalla.

The vast majority of adjectives in Dravidian are nouns in the genitive case. The conjunction of two nouns within a phrase leads to subordination of the first as modifier of the second. The modifier may or may not be marked for the genitive: Te. iṅṅi pēru 'family name' (illu 'house' + pēru 'name'); Ka. talenōvu 'headache' (tale 'head' + nōvu 'pain'); Pa. tolen cind 'brother's son' (toled 'brother' + cind 'son'); Koṅḍa mī koṅesi 'your daughter-in-law' (mīr(u) 'you (pl.)' + koṅesi 'daughter-in-law').

Some adjectives are bare stems rather than nominatives or nouns in the genitive: Ka. mara-peṭṭige 'wooden box' (from mara- 'tree' + peṭṭige 'box'); cf. maravu (nom.),

marada (gen.). Also Ta. periya 'big' : pēr-utavi
'big help', peru-vilai 'high price', perun-kāḍu 'forest
(large woods)'.

The foregoing are morphologically bound forms, whereas most adjectives are morphologically free though syntactically bound.

Numerals

Numerals, like ordinary nouns, are declined for case, but unlike nouns they are not declined for number. Special gender forms are used for the first few numbers, generally from 'one' to 'five'. Some examples from Kannāḍa: ondu (neut.) : obba (masc. and fem.); eraḍu (neut.) : ibbaru (masc. and fem.); mūru (neut.) : mūvaru (masc. and fem.); nāḷku (neut.) : nāḷvaru (masc. and fem.); ayḍu (neut.) : ayvaru (masc. and fem.). In Parji they are: okur(i) (masc.) : okal(i) (fem.) : okut, okti (neut.); irul (masc.) : iral (fem.) : irḍu(k) (neut.); mūvir (masc.) : muyal (fem.) : mūdu(k) (neut.); nelvir (masc.) : nelal (fem.) : nālu(k) (neut.); cēvir (masc.) : ceyal (fem.) : cēḍu(k) (neut.) (Burrow and Bhattacharya 1953, 35).

In most of the languages the numerals, which are a special type of noun, can also be used attributively, as adjectives: E.g. Te. iddaru vaccaṛu 'two persons came' : iddaru manuṣulu 'two persons'. The number 'one' in some languages--e.g.

Tamil, Telugu, Parji--has substantive and attributive forms which are distinct: Ta. ontu 'one' (noun) : oru, ōr 'one' (adj.); Te. okaṭi 'one' (noun) : oka, oṅṭi (adj.). In Tamil the numbers 'two' through 'eight' also have special attributive forms. In Parji shortened forms of the first five numerals are used attributively.

The numbers 'eleven' through 'nineteen' are made by adding the lower numbers to the numeral 'ten': e.g. Ta. patinontu 'eleven' (pattu 'ten' + ontu 'one'); Te. panneṇḍu 'twelve' (padi 'ten' + reṇḍu 'two'). The numbers 'twenty' to 'ninety' are created by combining the attributive forms of the numerals 'two' through 'nine' with the number 'ten': Ta. irupatu 'twenty' (iru 'two' + pattu 'ten'); colloq. Te. mupphay 'thirty' (mūḍu 'three' + padi 'ten'); Ma. ampatu 'fifty' (añju 'five' + pattu 'ten').

The numerals 'one hundred' through 'nine hundred' and 'one thousand' through 'ten thousand' are made by combining the neuter attributive forms of the numbers 'one' through 'nine' or 'ten' with a following word meaning 'one hundred' or 'one thousand'. For example, Ta. eṇṇūtu 'eight hundred' (eṇ- 'eight' + nūtu 'one hundred'); Ka. eraḍusāvira 'two thousand' (eraḍu 'two' + sāvira 'one thousand').

Ordinal numerals are created by the addition of a special suffix to the neuter form of cardinal numbers (except 'one' in most languages): Te. moḍati 'first' (cf. oka, okaṭi 'one'),

reṇḍava (colloq. reṇḍō) 'second' (reṇḍu + -ava ~ -ō); Ta. mūntām 'third' (mūntu 'three' + -ām); Tu. irvattonjane 'twenty-first' (irvattonji 'twenty-one' + -ane).

Distributive numerals are made by prefixing to each cardinal number the first phoneme or syllable of that number or by reduplication of the cardinal number: Ta. pappattu 'ten each' (pattu 'ten' + pa- + doubling of the initial syllable of the base in order to preserve the voicelessness of the initial stop); Te. okkokka 'one by one' (ok(k)a 'one'); Ka. hathattu 'ten each' (hattu 'ten'); Ma. mummūnnu 'three each' (mūnnu 'three'); Kui ronḍa ronḍa 'one each (acc.)', as in gule mīḍakaniki ronḍa ronḍa sītenju 'he gave the children one each' (literally, 'all children-to one one gave-he'). A few languages have special distributive suffixes: e.g. in Parji this is -ec: nālukec 'four each'.

Fractional numerals involve special words for halves, quarters, and eighths. Ta. mukkāl 'three-quarters' (kāl 'one-quarter'), iraṇṭēkāl 'two and a quarter' (iraṇṭu 'two'); Ma. arakkāl 'one-eighth' (āru 'eight').

Demonstrative and Interrogative "Pronouns"

This class of so-called "pronouns" is made up of what actually are derived nouns (in the third person only) formed by appending personal suffixes to demonstrative and interrogative adjective roots (discussed above under adjectives). These personal suffixes are allomorphs of

the third-person endings attached to verbs. For example, Ka. avanu 'he, that man' (a- 'that' + -anu (masc. sg.)), ivanu 'he, this man' (i- 'this' + -anu), uvan 'he, that man (near you)' (u- 'that (near the person addressed)' + -anu), evanu 'who? which man?' (e- 'which?' + -anu); Te. ataḍu, atanu 'he, that man', itaḍu, itanu 'he, this man', āme 'she, that woman', īme 'she, this woman', ēmi 'which thing? what?', adi 'it, that thing; she, that female person (very low status)', idi 'it, this thing; she, this female person (very low status)', ēdi 'which thing?', avi 'they (neut.), those things', ivi 'they (neut.), these things', ēvi 'which things?', vāḍu 'he, that male person (low status)', vīḍu 'he, this male person (low status)', evaḍu 'who? which male person (low status)?', vāru 'they, those persons (masc., fem.)', vīru 'they, these persons (masc., fem.)', evaru 'who? which persons (masc., fem.)?'; Go. ad 'it, that thing; she, that woman', id 'it, this thing; she, this woman', baḍ 'which thing? who? which woman?'

Demonstrative and interrogative "pronouns" tend to carry plural suffixes that are distinct from the usual ones attached to nouns: e.g. Pa. ad 'it, that thing; she, that woman', av 'they, those things; they, those women'; Ta. itu 'it, this thing', ivai 'they, these things'.

Typical of this word class are special oblique bases before case suffixes: e.g. Koya ōṅḍu 'he, that man (nom.)', ōṅ (obl./gen.), ōnin (acc.), ōnk (dat.), vīṅḍu 'he, this man (nom.)', vīṅ (obl./gen.), vīnin (acc.), vīnk (dat.): Te. adi 'it, that thing; she, that female person (very

low status) (nom.)', dāni (obl./gen.), dānni (acc.), dāniki (dat.); Kui ianju 'he, this man (nom.)', iani (obl./gen.), ianii (acc.), ianiki (dat.), ianike (assoc.), iani (abl.).

Personal Pronouns

These are true pronouns. Here only the first and second person are distinguished, although in almost all the languages a distinction between exclusive and inclusive first-person plural also is made. (Some exceptions are Kannada, Gadaba, and Brahui). The exclusive 'we' excludes the addressee; the inclusive includes him. Personal pronouns show no distinctions of gender. They have special oblique bases and take case suffixes as do nouns.

First person singular: Ta. nān 'I : en- (obl.);

Ma. ñān : en- (obl.); To. ōn : en- (obl.); Ka. nānu : nan- (obl.); Koṇḍa nān : nā- (obl.); Br. ī : kan- (obl.).

First person plural: Ma. nām 'we (incl.)' : nam- (obl.), ñāññaḷ 'we (excl.)' : eññaḷ-, ñāññaḷ- (obl.)'; Koḍ. naṅga (incl.) (also obl.), eṅga- (excl.) (also obl.); Go. aplō (incl.) : aplōt- (obl.), ammaṭ (excl.) : mā- (obl.); Kuvī māro (incl.) : mā- (obl.), māmbu (excl.) : mā- (obl.); Malt. nām (incl.) : nam- (obl.), ēm (excl.) : em- (obl.).

Second person singular: Ka. nīnu, nī 'you (sg.)' : nin- (obl.); Te. nīvu (colloq. nuvvu) : nin- ~ nī- (obl.); Ga. īn : in- (obl.); Go. immā : nī- (obl.); Kur. nīn : niṅg-

(obl.); Br. nī : n(ē)- (obl.).

Second person plural: Ta. nīm, nīr : num- (obl.); To. nim (also obl.); Ka. nīvu, nīngaḷ : nim- (obl.); Te. mīru : mim-~mī- (obl.); Go. immaṭ : mī- (obl.); Kui īru : mī- (obl.); Br. num (also obl.).

Pronouns in the oblique/genitive may be nominalized: e.g. Te. nā-di 'my thing, mine'; Pa. an-ot 'mine'.

Reflexive Pronouns

These pattern with the true personal pronouns in certain respects and might be considered in some of the languages to be basically third-person pronouns corresponding to the first and second persons of ordinary pronouns. They are, however, occasionally used to indicate first or second person. Ta. tān 'himself, herself, itself' : tām, tānkaḷ 'themselves'; Te. tānu : tāmu, tāru; Kui tānu : tāru (masc. pl.) : tāi (fem. and neut. pl.).

These forms have oblique stems that are generally analogous to those of ordinary pronouns. To. tōn : tan- (obl.); Kui tānu : tāran- (obl.); Ta. tām 'themselves' : tam- (obl.); Ka. tām : tam- (obl.), tāvu : tav- (obl.); Kui tambū : tam- (obl.); Kol. tām : tam- (obl.); Malt. tám, támi : tam- (obl.).

The reflexive pronouns take case suffixes similar to those on nouns and pronouns: Kui tānu 'himself, herself', tāra (obl./gen.), tāraṇi (acc.), tāraṅgi (dat.), tārake, tāraṅge

(assoc.), tāṛa (abl.).

Pronominalized Nouns

A number of languages of the Central and North Dravidian groups make use of pronominalized nouns; these are not, however, typical of the family today.² Pronominalized nouns are those that carry personal suffixes indicating first or second person, as well as gender and number. (Ordinary nouns, of course, are inherently third-person forms.) In addition, pronominalized nouns can acquire case suffixes.

The personal endings, which are allomorphs of those that appear on verb stems, are usually appended to the main base, or nominative case, of the noun. For example, Go. ammaṭ vartālōr-ām 'we are guests' (i.e. 'we guests-we'); Kui āmu kūingan-amu 'we are Khonds (i.e. Kui)'; Kur. ēn kūṛux-an 'I (masc.) am a Kurukh'. In Koṇḍa they may be suffixed to an adjective: peri-k-ap 'we (excl.) are big' (Krishnamurti 1969b).

FOOTNOTES

¹Scholars have long argued over whether adjectives actually form a separate word class, for almost all can be traced to noun roots. However, viewing the problem synchronically, we see that there are a few nouns that can occur only in the modifier slot (before nouns) and never elsewhere without the addition of nominalizing suffixes. Thus, there would seem to be at least a few true adjectives.

²Pronominalized nouns for all the persons existed in Old Tamil. These could be declined for case and also frequently appeared as predicates.

CHAPTER V
MORPHOLOGY: VERBALS

This chapter considers a number of word categories that can best be classed together as verbals--i.e. words formed from verb roots. They can be divided into two main subgroups: non-finite verb forms and finite verb forms. The first includes forms that rarely serve as verbal predicates of sentences and, except in the case of participial nouns, do not carry personal endings. These are: verbal adverbials (including gerunds--i.e. verbal participles--and gerundials), verbal adjectives (adjectival participles), participial nouns, verbal nouns, and infinitives. Finite verb forms, which can appear only in the predicate slot and typically carry personal suffixes, consist of simplex verb forms and complex verb forms (periphrastic constructions). In many instances finite verbs are constructed upon non-finite forms--most commonly the verbal adverbs and verbal adjectives.

Our analysis of the finite verb system admittedly diverges in certain significant respects from the descriptions of other Dravidianists. But it must be recalled that the present study emphasizes structural patterning rather than semantic categories and is concerned with the present-day overall picture rather than with historical developments.

The Dravidian verb base consists of a root with or without derivational suffixes. One kind of suffix common, for

example, in Telugu leads to no change in meaning: thus, nēr- 'learn' (root) > nērcu (base). Another, the transitive/causative formant, does involve a change in meaning: Te. nēr- 'learn' : nērcu 'teach (cause to learn)'. In some instances, a transitive/causative base can be transformed into a second causative: Te. nērcu 'teach (cause to learn)' > nērcincu 'cause someone to teach'. There are also sets of verbs formed from an original intransitive base. Here a given morpheme serves as both a transitive and a causative formant. E.g. Te. kālu 'burn (intr.)' : kālcu 'burn (tr.)' (also, 'cause something to be burnt') : kālpincu 'cause someone to burn something'.

Another kind of derivational suffix changes nouns (especially borrowed nouns) into verbs: e.g. Ka. tayār 'readiness' : tayārisu 'make ready'.

Non-finite Verbals

These include certain word classes--participial nouns and verbal nouns--that can function as nominals. However, because they are ultimately formed from verb bases they are treated within this chapter on verbals.

Verbal Adverbials. Verbal adverbials consist of gerunds (verbal participles) and gerundials (constructions that can fill the position and function of gerunds).

1. Gerunds. Gerunds are made by appending a suffix of tense (time of action or state) or of aspect (kind of action or state) to the uninflected verb stem. Typically the

Dravidian languages have two gerunds in the affirmative and one in the negative. In the sense that one affirmative gerund refers to prior action or state and another to simultaneous action or state (vis-à-vis the finite verb at the end of the sentence) we can speak of a tense contrast. But we can also discern an "aspectual" contrast: perfective vs. imperfective, or completive vs. incompletive. We shall therefore refer to tense/aspect in the gerunds and in all forms derived from them (Sjoberg, forthcoming). In a number of languages there is a two-way tense/aspect contrast in the positive gerund: Kui lāk-ai (past/perfective) 'having sacrificed' : lāk-a (non-past/imperfective) 'sacrificing'; Te. amm-i 'having sold' : amm-u-tū 'selling'; Ka. māḍ-i 'having done, made' : māḍ-uttā, māḍ-uttu 'doing, making', kare-du 'having called' : kare-y-uttā, kare-y-uttu 'calling'. These languages, however, have only one negative participle: e.g. Te. amm-āka 'without selling, not having sold, not selling'; Go. veh-vāk 'not having told, not telling'.

A number of Dravidian languages have only an affirmative: negative contrast in the gerund: for example, Ta. cey-tu 'doing, making; having done, having made' : cey-y-āmal, cey-y-ātu (sometimes cey-y-ā) 'not doing, making; not having done, having made'. (The foregoing are constructions of the negative formant -ā- + the gerund suffix -tu (originally a nominal suffix) or -ā- + the nominal suffix -mal.)

Gerunds appear at the head of dependent clauses (and, in periphrastic or compound verbal constructions, in com-

ination with one or more auxiliary verbs). The addition of a gerund to a sentence subordinates it to a following sentence and creates a dependent clause (see the chapter on syntax). Such constructions are very common in the Dravidian languages.

The past/perfective gerund morphemes in some of the languages--e.g. Tamil, Malayalam, and Kannada--have two shapes, depending on the preceding base: -t- or -i. Thus, Ta., Ma. pō-y-i 'having gone, going', cey-tu 'having done, made; doing, making'; Ka. hāḍ-i 'having sung', tin-du 'having eaten'. In Telugu -i denotes past/perfective and -t- non-past/imperfective, pointing to an earlier semantic split: cepp-i 'having said', cepp-u-tū (colloq. cep-tū) 'saying'. Most of the other Central Dravidian languages use -i, or variant forms of -i, for the past/perfective: Go. vār-si 'having sung'. tac-ci (*tar-ci) 'having brought', tin-ji 'having eaten'; Pa. ver-i 'having come'; Ga. pat-i 'having caught'. The -t form also appears in some of the CDr. languages: Kol. en-t 'having said', sī-t 'having given'; Ko. id-t 'having said'.

In addition there are some rather anomalous past/perfective forms in certain languages: e.g. Kui kō-a 'having reaped', jā-sa 'having begged'; Malt. baj-ko 'having struck'.

A few languages have, besides the past/perfective, non-past/imperfective gerunds: Ko. tad-r 'giving'; Kol.

tin-a 'eating'; Koḍ. kēṭ-ṭ-aṇḍu 'asking'; Go. kāc-cēr 'digging', tin-jēr 'eating'; Koṇḍa veRpu 'saying, speaking'.

2. Gerundials. The gerundials are a large class of derived words which are not simple gerunds but which function as gerunds. Unlike gerunds they occur only as heads of dependent clauses, never in periphrastic or compound verbal constructions. Gerundials are made from a variety of word classes and include several main subtypes:

a. Conditionals. These frequently are formed from past/perfective gerunds by the addition of a special suffix. The form of the suffix varies considerably among the languages. Ta. cey-t-āl 'if one does, did' (root + past/pfv. + conditional suffix, which here is identical with the instrumental case marker); Te. amm-i-tē 'if one sells, sold' (possibly OTe. past stem *ammiti- + emphatic particle -ē); Ka. kare-d-are 'if one calls, called'. Other suffixes include Oll. -koren ~ -goren; Koḍ. -engi ~ -engū.

In Tamil a conditional can also be made by appending -il to the verb base: cey-y-il 'if one does, did, makes, made'.

In Goṇḍi past/perfective conditionals are created by suffixing -ēkē to the past/perfective marker--e.g. vā-t-ēkē 'if, when one came'; non-past/imperfective conditionals append the same suffix to the non-past/imperfective stem--vā-n-ēkē 'while coming, if one comes'. Negative conditionals are constructed by the addition of the same ending to the

negative morpheme: vā-y-v-ēkē 'if one does, did not come'. A similar situation is encountered in Koṇḍa. (In some other languages negative conditionals are formed by means of periphrastic constructions, with the auxiliary verb carrying the conditional suffix: e.g. Te. mīru tinaka pō-tē 'unless you (pl.) eat, ate'.)

b. Future gerundials. Some of these, especially in Tamil and Malayalam, seem to be made by appending nominal suffixes to a base in the future tense: Ma. kāṅ-uv-ān, kāṅ-m-ān 'about to see', kuṭi-pp-ān 'about to drink'. These languages also utilize forms in -ākkū, which apparently includes the dative suffix: Ta. cey-v-ākkū 'about to do. make'.

In a few languages future gerundials are made from less clearly understood suffixes (although some are reminiscent of verbal adjective or infinitive formants): e.g. Kol. tin-ak 'about to eat'; Nk. ser-eka 'having to go (on foot)'; Br. bin-ōī 'having to hear, listen (to)'.

c. Concessives. In Telugu these are made by appending to perfective verbal adjectives a length marker, as in cēsina 'although one does, did' (from cēs-i-n-a 'who, which does, did, makes, made' + /:/, symbolized by $\bar{\quad}$). In Goṇḍi the concessive morpheme -tēr (or -gir) is suffixed to conditional bases in the past/perfective or the negative: vā-t-ēkē-tēr 'even though one comes, came', vā-y-v-ēkē-tēr 'even though one does, did not come'. In Pengo the morpheme is pa: vātis 'if one comes' > vātis pa 'even though one comes'.

d. Other gerundials. The rest of the gerundials form a rather large class. The patterns in Telugu (Montgomery 1963, chap. VI) hold for many of the languages; here gerundials are made from past gerund + conditional suffix + postposition: nuvvu vastē tappa 'unless you come' (vas-tē < vacc-i-tē); from infinitive, by the addition of length to the final vowel: uṇḍā 'if it is'; from infinitive + -gā (adverbial formant) + emphatic particle: āme kon-a-gā-n-ē 'as soon as she buys'; from infinitive + inflected noun: āme rā + andulaku 'because, so that she comes'; from gerund + -āka: vellāka 'after going'; from verbal adjective + one of a variety of nominal or postpositional forms: nāvutunn-aṭṭu 'as if laughing', ataḍu ceppin-appuḍu 'as soon as he said', unn-appaṭiki 'although it is', cēsē-ṭ-anduku 'in order to do, make (it)', atanu vaccē-mundu 'before he comes, came', cēsina-dāka 'until he did, made (it)' tinē-koddi 'while, as I eat', vaccina-taruvāta 'after coming'; from nominalized verbal adjective + postposition: nēnu aḍigina-dāni-kaṇṭe 'instead of what I asked'; from verbal noun + postposition: vellāḍan-tō-ṭ-ē 'soon after going' (verbal noun + postposition + euphonic + emphatic particle); from finite verb + adverbial suffix -gā: vaccāru-gā 'while they were coming'; from finite verb + negative adjective of the verb avu, agu 'become': tinnānu gāni 'although I ate; I ate, but...'; from finite verb + -ēni: rān-ēni 'if one doesn't come'; from finite verb + kābaṭṭi: vaccādu kābaṭṭi 'because he came'.

Examples from other languages: Go. veh-t-ā-barōbar 'as soon as he told'; Ka. avan ban-d-kūḍle 'as soon as he arrives'; Ta. avan van-t-a-t-um 'as soon as he came' (Andronov 1965b, 49); Maīt. sikara balo 'without having learned'.

Negative gerundials are formed from negative gerunds by the addition of an auxiliary verb, generally in the conditional: e.g. Te. tinaka pōtē 'unless you eat'; rān-aṭṭ-aytē 'as if one is not coming'.

Verbal Adjectives. These are usually made by adding a special suffix to a gerund. Verbal adjectives precede nouns and qualify them, and, as indicated above, they are one of the chief elements in gerundials.

Some languages have four verbal adjectives, corresponding to the three tenses: past, future, and present, as well as to the negative. Ta. cey-t-a (past), cey-y-um (fut.), cey-kiṭ-a ~ cey-kiṇṭ-a (p. es.), cey-y-ā(-ta) (neg.). The present is a compound or periphrastic construction consisting possibly of an earlier non-past/imperfective gerund *ceyku + the past/perfective of an auxiliary verb (*it- ~ *int-) + the adjectival formant -a (Andronov 1961). The development in Tamil of a special form for the present tense led to a realignment of the earlier tense/aspect system (which had a past/perfective : non-past/imperfective contrast) into a true tense system. The former non-past/imperfective, which implied the

habitual present and the future tense, now is restricted to future meaning, and the new present tense form expresses both habitual (or non-limited) and momentary (or limited) present.

A two-way tense/aspect contrast in the affirmative is more common in Dravidian: Ka. māḍ-id-a 'who, which did, made' :

māḍ-uv-a 'who, which does, makes, will do, make'; Kui lāk-it-i 'who sacrificed' : lāk-in-i 'who sacrifices, will sacrifice'.

As to the negative adjective, some languages have one, others two: e.g. Ka. māḍ-ad-a 'who, which doesn't, didn't, won't do, make'; Kui lāk-ṛa-n-i 'who sacrifices, will sacrifice', lāk-ṛa-t-i 'who did not sacrifice' (Winfield 1928, 69).

Telugu presents a special situation: in addition to a past/perfective : non-past/imperfective contrast in the verbal adjective, it has a compound adjective form made up of the non-past/imperfective gerund -t- + unna, the past/perfective adjective of the auxiliary verb -un(d) 'exist, be in a place'. Thus there is a three-way contrast: cēs-i-n-a 'who, which did, made' : cēs-ē 'who, which does, makes, will do, make' : cēs-t-unna (OTe. *cēy-u-c-unḍ-i-n-a) 'who, which is, was doing, making'.

The last-named form, the so-called progressive or durative, contrasts aspectually with the perfective adjective: amma 'who sold' : ammunna 'who is, was selling'. But observe that it overlaps with the third kind of adjective, ammē, in that both are imperfective constructions. Here there is a different kind of aspectual contrast: ammē 'who sells (habitually), will sell' (non-limited or indefinite) : ammunna 'who

is, was selling' (limited or definite). (The future notion in ammē can be considered an extension of the habitual meaning.) We can thus speak of two overlapping aspectual systems in Telugu and perhaps some other Central Dravidian languages.

Telugu also has a negative adjective--amm-a-n-i 'who does, did, will not sell'. There are two kinds of negative 'be' forms, however--one made on the verb root un(ḍ)- 'exist, be in a place', as in unḍ-a-n-i, the other formed on the verb root il- 'not to exist, not to be in a place' (perhaps an archaic verb root with positive meaning): viz. lē-n-i (<*il-l-a-n-i).¹ The two negative forms show an aspectual contrast--unḍani 'which is not (habitually), will not be' (non-limited) : lēni 'which is not, was not (at a certain time)' (limited).²

The most common adjective formant on verbal stems is -a: Ma. ceyunn-a 'who, which does, makes, is doing, making'; Ka. māḍ-uv-a 'who, which does, makes, will do, make'; Koḍ. kej-j-a 'who, which did, made', key-uv-a 'who, which does, makes, will do, make'. The suffix also exists in Kolami: tin-a 'who, which eats', tind-a 'who, which ate'; in Koya tung-t-a 'who, which did, made'; as well as in some other languages.

The suffix -ā is found in a few languages: e.g. Kur. esk-ā 'which broke'. The suffix -an may be related to this: Pa. cok-r-an 'who, which climbs', ven-d-an 'who, which hears'; Ga. sī-d-an 'who, which gives'.

A number of languages make use of a verbal adjective marker in -i: e.g. Koṇḍa sā-t-i 'who, which died', uṅ-i 'who, which eats', nes-ṛ-i 'who does not know'; Tu. maḷ-t-i 'who, which did, made'.

Some variant suffixes are -u: Tu. maḷ-p-u 'who, which does, makes'; Koḍ. māḍ-un-u 'who, which did, made'; Malt. ban-d-u 'who, which pulled'; -ē, as in Telugu cūs-ē 'who, which looks at, will look at'; and -ok in Brahui: bin-ok 'who, which hears, listens to' (Bray 1909, 128).

Negative adjectives most often utilize a vowel formant: Koya tunḡ-ov-a 'who, which did not do, make'; Te. amm-a-n-i 'who does, did, will not sell'; Ta. naṭ-av-ā, naṭ-av-āta 'who, which does, did not walk'; Kol. tōt-e 'who, which is not, will not be'.

Participial Nouns. These are made from verbal adjectives by the addition of personal suffixes. In the modern languages participial nouns survive only in the third person. They can substitute for ordinary nouns in either the subject or the object position,³ and, like nouns, they can take case suffixes and stand before postpositions. Typically, participial nouns are derived from any of the verbal adjectives-- e.g. Ta. ceytavaḷ 'she who did' (from ceyta 'who did' + -avaḷ 'she'); Ka. kareyuvudu 'that which calls' (from kareyuva 'which calls' + -udu 'it, that thing'); Te. ammēvādu 'he who sells, will sell' (from ammē 'who sells, will sell')

+ vādu 'he, that man'); Pa. cīranenug 'to the one who gives' (from cīran 'who, which gives' + -ed (masc. suffix) + -gu (dat.)).

Negative participial nouns also exist: Ka. māḍ-ad-avaru 'who, which doesn't, didn't, won't do, make' (from māḍ-ade 'not doing, not having done' + avaru 'those persons, that person (honorific)'); Ta. naṭa-v-āt-avai(kal) 'the ones that don't, didn't, won't walk' (from naṭa-v-āta 'not walking, not having walked' + avai(kal) 'those animals, things').

Verbal Nouns. These nominal forms derived from verbal bases play a very prominent role in the Dravidian languages. Moreover, the lack of any distinction between active and passive mood in verb bases imparts a rather unique flavor to certain constructions containing verbal nouns.

Considerable variation appears among the languages in the shape of verbal noun formants: e.g. Ta. ceyy-al, cey-tal, cey-kai 'the doing, making'; Ma. para-y-uka 'the speaking', meta-y-al 'the weaving'; Pa. koy-rano 'the harvesting'; Go. veh-vāl 'the telling', kars-mār 'the playing'; Malt. kud-e 'the doing' (note also kud-po 'the having-to-do' (Droese 1884, 60-61)); Kur. es-nā 'the breaking'; Br. bin-ing 'the hearing, listening to'.

In a few languages the negative of the verbal noun is made by appending a noun-forming suffix to a negative gerund-- e.g. Ta. ceyy-ā-mai 'the not-doing, not-making' (from ceyy-ā

'not doing, making; not having done, made'). In others the negative can be expressed by combining the positive verbal noun with the auxiliary verb 'not to exist': e.g. Te. ceyy-aḍam lēdu 'the not-doing, not-making' (from ceyy-aḍam 'the doing, making' + lēdu 'it doesn't, didn't, won't exist'). This construction is also used in Telugu to express the negative of the definite imperfective (see further on under Finite Verbals: Simplex Verb Forms) in all persons, genders, and numbers: e.g. ceyy-aḍam lēdu 'I, you, he, etc. am not, aren't, isn't, wasn't, weren't doing, making'. Moreover, in this language a negative verbal noun construction can be made by combining the negative gerund (verbal adverb) of lē- 'not to exist' (here also 'not to be able'), with a verbal noun derived from an auxiliary verb base: lēka pōvaḍam 'the not-being-able'.

Verbal nouns can acquire ordinary case suffixes. In Tamil and in Brahui (Bray 1909, 117) they may be declined in the various cases of the noun (and in Kurukh they can also be pluralized and take case suffixes appropriate to plural stems). In some other languages they are limited mainly to the nominative and the dative: e.g. Te. ceyyaḍāni-ki 'for the doing, making; in order to do, make' (here the verbal noun stem is in the oblique); Ka. māḍal-ikke 'for the doing, making; in order to do, make'; Kol. sīuḍ 'the giving' (also, 'the thing given'), sīuḍl 'the things given'.

Occasionally a verbal noun can be used in a parallel con-

struction with an ordinary noun: Go. veh-vāi māynāl 'the man who tells' (from veh-vāi 'the telling, the person who tells' + māynāl 'man') (also veh-vāl-īr māynāl-īr 'the men who tell') (Subrahmanyam 1968, 71).

Verbal nouns nevertheless retain their verbal character in that they can govern the same cases as ordinary finite verbs and, like the latter, can be determined by adverbs and gerunds (e.g., in Telugu, lēka pōvaḍam, as noted above). And, in rare instances, say in Tulu, they may be differentiated for tense/aspect: maḷ-pu-ni 'the doing' : maḷ-ti-ni 'the having done'.

This word class should not be confused with nouns derived from verb bases which function strictly as ordinary nouns: e.g. Ma. nērmma 'lightness' (from nēr- 'become thin or light'); Ka. bālume, bāluve 'life' (from bālu- 'live') (Acharya 1967, 207).

Infinitives. Infinitives are found throughout the Dravidian family. Often they are similar in shape to verbal nouns, from which class they may have developed.

Infinitives are made by suffixing a special marker to the verb base. Most often this is -a. Ta. kāṇ-a 'to see'; Ka. bar-a 'to come'; To. kūḍ-a 'to gather'; Te. amm-a 'to sell'; Kui tāk-a 'to walk'; Koya uṇḍ-a 'to drink'.

Forms in -ka (or -kka) and -ā are also common: Ta. kēṭ-ka 'to listen', iru-kka 'to exist'; Go. vāy-ā 'to come'.

(The -nā suffix in Goṇḍi and Kurukh is a form borrowed from Hindi: Go. handā-nā 'to go'; Kur. bar-nā 'to come').

Tulu employs a quite different ending that is probably unrelated to those above: pō-v-arē 'to go' (Shankara Bhat 1967, 68). The Goṇḍi suffixes in -āle, ālesk (tind-āle, tind-ālesk 'to eat') are still more problematical. They may be forms borrowed from Marathi (Andronov 1965a, 88).

In the Central group of languages, and also in Kodagu, the infinitive is formed mainly by adding the dative case suffix, or forms resembling it, directly to the verb base or sometimes to a verbal noun. Pa. ven-uñ 'to hear'; Kol. tin-en 'to eat'; Ga. var-iñ 'to come'; Koṇḍa si-deṅ 'to give'; Koḍ. māḍuvaku 'to do (possibly from the verbal noun māḍuval + -ku) (Andronov 1965a, 88).

Apparently in all the languages, except for Kodagu and Kolami, the infinitive can appear as the subject of a sentence; here its meaning approaches that of a noun: Nk. tin-en un-en 'eating and drinking'. But its main function is gerund-like, in that it serves to modify verbs. The basically adverbial role of infinitives is dramatized by the fact that in a number of Dravidian languages, the chief adverbial formant is the infinitive of the verb 'become': e.g. Te. kā 'to become' : nimma-gā 'softly'.

Finite Verbals

Finite verb forms, as indicated above, serve as verbal

predicates of sentences. They occupy only a sentence-final position. In all the modern Dravidian languages, except for Malayalam,⁴ personal suffixes--morphemes of person, gender, and number--stand directly after the tense or "aspect" marker. The presence of person-gender-number markers means that the subject of the sentence, if it is a personal or demonstrative pronoun, often need not appear. When it does, emphasis of the subject tends to be implied.

Personal endings on the verb are also called pronominal suffixes, a term that is indicative of their origin; they are often simply modified forms of the subject pronouns. Compare the subject pronoun and the personal ending on the verb in the following sentences: Ta. atu ceyt-atu 'it, they (neut.) did, made'; Ka. avaḷu māḍuv-aḷu 'she does, will do, makes, will make'; Go. vūr vehān-ūr 'he will tell'; Pe. indek hilit-ik 'there are no women' (literally, 'which (or any) women don't exist'), inakar hilat-ar 'there are no men' (Burrow and Bhattacharya 1970, 56, 75).

In most of the modern languages finite verbs are combinations of a verbal adjective (usually in the past or perfective) and a pronominal suffix. Thus Ta. ceyt-ēn 'I did, made' is derived from ceyta 'who, which did, made' + -ēn 'I'. Similarly, ceyt-ōm 'we did, made' is a shortened form of ceyta-v-ām 'we who did, made'. (And ceyv-ān 'he will do, make' presumably developed from an older habitual present and future adjective *ceyva). Note also Ka. māḍide(nu) 'I did, made', from māḍida +

-enu; Go. vāt-It 'you (pl.) came', from vātā + -It.

In some languages finite verbs are derived from verbal adverbs (gerunds). Modern Telugu could be said to create its simplex forms in this manner: ammānu (ammi + -ānu) 'I sold' : ammutānu (ammutū + -ānu) 'I sell, will sell' : ammutunnānu (ammutū + unnānu) 'I am, was selling'. Note also the Kannaḍa progressive (definite aspect): taruttēne (taruttā + -ēne < *ahēne) 'I am, was bringing'.

In a number of languages personal endings are attached to neither participles (verbal adjectives) nor gerunds (verbal adverbs). Tu. kaṭyaḷ 'she tied' : kaṭ(t) 'having tied': kaṭi 'who tied' (Shankara Bhat 1967, 57, 67); Go. guhcī 'having seized' : guhtān 'I seized'. Also, in a few languages (e.g. Brahuī) there is no clear connection between personal suffixes on the verb and personal (or other) pronouns. E.g. ōfk jang-a karēra 'they were fighting', ī-a kāva 'I'll go' (Emeneau 1962a, 57).

It is not uncommon to find the third person unmarked or the third person plural identical in form with the singular. This is especially true in the case of neuter gender. E.g. Ta. ceyyum 'it will do, make; they (neut.) will do, make'. Or the neuter present may be used with neuter plural meaning--e.g. in Kannaḍa this is the case with the verb 'exist' : ide 'it, they exist'.

Simplex Verb Forms. All the Dravidian languages

utilize at least two tense/aspect forms: past/perfective and non-past/imperfective. The following languages have only these two in the simplex verb: Kannada, Telugu, Koṇḍa, Gadaba, Ollari (and, interestingly, Old Tamil). Modern Tamil and Malayalam, on the other hand, show a three-way tense system with a present tense form that arose through the compounding of two verbs. E.g. Ta. cey-t-ēn 'I did' : cey-v-ēn 'I will do' : cey-kiṭ-ēn ~ cey-kiṇṭ-ēn (*cey-ku 'doing' + *-iṭ ~ *-iṇṭ- 'I was') 'I am doing, I do (habitually)'. There is also a negative: cey-∅-ēn 'I don't, didn't, won't do'.)

Kannada, Telugu, and Koṇḍa also make frequent use of a third construction--one developed by compounding. Here also, no tense distinction is involved. Rather, as indicated in the section on verbal adjectives, this third form is an imperfective that expresses limited or definite aspect as opposed to non-limited or indefinite aspect. It also contrasts, of course, with the perfective. Ka. māḍ-id-e(nu) 'I did' : māḍ-uv-enu 'I do (hab.), will do' : māḍ-utt-ēne (< māḍ-uttā 'doing' + *ahēne 'I will become') 'I am doing, was doing'; Te. cēs-ānu (apparently from cēs-i + -ānu) 'I did' : cēs-t-ānu 'I do (hab.), will do' : cēs-t-unnānu (from cēs-tū unn-ānu) 'I am doing, was doing'; Koṇḍa ki-t-a 'I did' : ki-n-a 'I do (hab.), will do' : ki-zi-n-a (ki-zi 'having done' + -n- 'non-past morpheme') 'I am doing, was doing' (Krishnamurti 1969b, 283-88, 296).

Some Dravidian languages have a variety of simplex forms: Tulu, Toda, Kota, Pengo, Parji, Kolami, Naiki, Brahui, Kurukh, and others. Go. tittōn 'I ate' : tikā 'I will eat' : tintōn 'I am eating' : tindūn 'I was eating'; Malt. bandeken 'I pulled' : bandin 'I am pulling' : banden 'I will pull' (Droese 1884, 45).

As noted previously, many affirmative finite constructions seem ultimately to be derived from non-finites-- principally gerunds and verbal adjectives. This is not the case, however, with the negatives. The same negative morpheme may appear in both non-finite and finite forms, but the latter are not constructed on the former. Cf. Ta. pār-ā-tu 'not having seen' (verbal adverb) : pār-ā-t-a 'which doesn't, didn't see' (verbal adjective) : pār-Ø-ēn 'I don't, didn't, won't see' (finite verb); Te. tin-āk-a 'not eating, without eating' : tin-a-n-i 'which doesn't, didn't, won't eat' : tin-a-nu 'I don't, won't eat' (tin-a-mu 'we don't, won't eat') : tina lēdu 'I, you, he, etc. didn't eat' : tinṭam lēdu 'I, you, he, etc. am not, aren't, isn't, wasn't, weren't eating'; Tu. kaṭ-antē 'without tying' : kaṭ-anti 'which doesn't, didn't, won't tie' : kaṭṭ-ur-i 'I don't, won't tie' : kaṭ-id-ir-i 'I didn't tie' (periphrastic form made with auxiliary verb 'exist').

In Tamil, Malayalam, Kannada, Telugu, and some other languages, the negative is also made, especially in the

more colloquial styles, by combining a participial noun or an infinitive with the third-person neuter singular of the verb 'not to exist'. Ta. illai 'no; doesn't exist' : pār-kkiṭat(u) illai 'I, you, he, etc. don't, doesn't see, am not, aren't, isn't seeing' : pār-ttat(u) illai 'I, you, he, etc. didn't see' : pār-ppat(u) illai 'I, you, he, etc. won't see'; Te. rā lēdu 'I, you, he, etc. don't, doesn't, didn't, won't come'.

So far we have considered only the indicative mood. A few other moods are expressed via simplex verb forms--e.g. the imperative appears in all the languages. Usually the stem without inflectional suffixes serves as the abrupt (or singular) imperative: e.g. Ta. cey 'do!'; To. pui 'hit!'; Koḍ. māḍu 'do! make!'; Te. tinu 'eat!'; Pa. cūr 'look at (it)!'; Br. bin 'listen!'.

In some languages this form has suffixes whose origin is unclear: Tu. maḷpula 'do!'; Kui tākamu 'go!'; Kur. es?a 'break!'; Malt. darya 'catch!'; Br. sale 'stop!'; Ta. ceymō 'do!'; Koṇḍa le?e 'get up!'.

The plural and/or polite form of the imperative is created by adding a special suffix to the verb base. This varies according to the different languages. Ta. ceyyum 'do!'; Ma. parakka 'tell!'; Ka. māḍiri 'do!'; Koḍ. māḍi 'do!'; Te. tinanḍi 'eat!'; Pa. cūrur 'look at (it)!'; Go. tint, tinnir 'eat!'; Kui tākaṭu 'go!'; Br. tikhbo

'lay, put, place!'.
7

There are negative imperatives also, called prohibitives:
e.g. Ta. varāte 'don't come (sg., abrupt)!', collātiŋka(l)
'don't tell (pl., polite)!'; To. podoti 'don't come (sg., pl.)!';
Te. tinaku 'don't eat (sg., abrupt)!', tinakumu 'don't eat (pl.,
polite)!'; Go. vādamā 'don't come (sg.)!', vādamāti 'don't
come (pl.)!'; Pa. cūremen 'don't look at (it) (sg.)!', cūromor
'don't look at (it) (pl.)!'; Br. bafabo 'don't come (pl.)!'.
8

In a few languages the forms of the imperative mood, which
refer to second person, are supplemented by special construc-
tions for first and third persons: e.g. Pa. cūreken 'let me
look at (it)!', cūram 'let us (excl.) look at (it)!', cūrar 'let
us (incl.) look at (it)!', cūreked, cūroko 'let him, her, it
look at (it)!', cūreker, cūrokov 'let them look at (it)!'.
9

Kui even has a full paradigm of forms in the negative, as well
as the affirmative. Thus, tākakanu 'let me walk!' : tāk?akanu
'let me not walk!', tākakamu 'let us (excl.) walk!' : tāk?akamu
'let us (excl.) not walk!', tākakasu 'let us (incl.) walk!' :
tāk?akasu 'let us (incl.) not walk!', tākakati 'walk (sg.)!' :
tāk?akati 'don't walk (sg.)!', tākakateru 'walk (pl.)!' :
tāk?akateru 'don't walk (pl.)!', tākakanju 'let him walk!' :
tāk?akanju 'let him not walk!', tākakari 'let her, it walk!' :
tāk?akari 'let her, it not walk!', tākakarū 'let them (masc.)
walk!' : tāk?akarū 'let them (masc.) not walk!', tākakai 'let
them (non-masc.) walk!' : tāk?akai 'let them (non-masc.) not
walk!'.
10

However, paradigms of this sort are lacking in the majority of the languages. Instead the corresponding meanings are expressed through a variety of forms, including finite verbs in the third person neuter singular, verbal nouns, and infinitives: e.g. Ka. māḍōṇa 'let us (incl.) do, make', māḍali 'let him, her, it, them do, make', māḍuvudu 'let him, her, it, them do, make'; Ta. pārka 'let him, her, it, them look at (it)'; Ma. varaṭṭē 'let (someone) come'; Te. ammudām 'let's (incl.) sell'; Tu. korka 'let's give'.

Earlier it was remarked that the conditional mood is generally expressed by appending a special marker to non-finite constructions (see the section on gerundials). Some dialects of Goṇḍi, however, make use of unusual forms with personal suffixes--thus, tinnēn-ā 'if I ate', tinnēn-I 'if you ate', etc. In Naiki, on the other hand, a conditional morpheme stands after finite verbs: siy-at-i-te 'if you (sg.) give', si-t-an-te 'if I gave'.

Malto utilizes certain finite verb forms indicating the subjunctive mood: ēn bandlen 'that I pulled', n'ṛn bandle 'that you pulled', etc.

Other moods, such as the optative (benedictive or abusive) and the permissive tend to be expressed by non-finite constructions. For example, in certain languages an infinitive appearing as the predicate of a sentence serves as an optative: Ma. vālka 'may (someone) live!'; Te. kūla 'may (someone or something)

fall!'. Generally a very limited number of verb bases are inflected in this mood. Examples of the permissive are To. tingu '(one) may eat'; Koḍ. bakku '(one) may come'. keyyu '(one) may do'.

Complex Verb Forms. These periphrastic constructions, common in all the languages, are made by combining a gerund, verbal noun, infinitive, other some other non-finite form with a finite form of the verbs 'exist', 'not to exist', or occasionally some other auxiliary or combination of auxiliaries. The so-called "progressives" or "duratives" are almost always periphrastic constructions. Also a number of different moods are expressed through this means. Some examples of complex verbal constructions are: ceyt-irukkiṭen 'I have done', ceyt-iruntēn 'I had done'; Ma. ceyy-ēṇṭā '(one) should not do, make'; Ko. un-kōlā '(one) should not drink'; Ka. mād-irtīni 'I have done, made'; Te. amma lēdu 'I, you, he, etc. didn't sell', ammaḍam lēdu 'I, you, he, etc. am, are, is, was, were not selling', ceyya galanu 'I can do, make', ceyya lēmu 'we can't do, make', navva vaddu 'don't laugh!, (one) shouldn't laugh', tini vēsādu 'he ate (it) up'; Koṇḍa sita poktan 'he gave (it) away'; Pe. huṅga vātan 'I came to see'; Pa. cena kanug 'in order not to go'; Go. ūḍōnāna 'I am seeing' (ūḍōr 'seeing' + minnāna 'I am'), uṇḍaṭam ille 'I, you, he, etc. am, are, is not drinking', vād-ād-illāna 'I could not come'; Br. tikkingaṭi ut 'I am placing'.

FOOTNOTES

¹A few languages make use of a second negative verb root, 'not to be so-and-so'. Unlike the verb root meaning 'not to exist, be in a place', which functions as an ordinary predicate, this verb serves as a link between two noun phrases in so-called "equational" sentences; it differs also from ordinary verbs in that it does not acquire adverbial modifiers. The root takes the form mal- in Kurukh and Malto, all- in Brahui (and it was al- in Old Tamil). E.g. Kur. īr kurxar mal(1)yar 'these (persons) are not Oraons'. Third-person neuter singular forms only of al(1)- are employed today in South Dravidian languages-- e.g. Tamil, Malayalam, Kota, Kodagu, and Kannada--to express the negative link verb in all persons, genders, and numbers.

²The Telugu and Kannada finite forms of the verb 'exist' display only an indefinite : definite aspectual contrast, not a perfective : imperfective one. Te. uṅṅānu 'I am (habitually), will be' : unnānu 'I am (right now), was'; Ka. irtīni 'I am (habitually), will be' : idd(h)ēne 'I am (right now), was'. In both languages the definite form is constructed upon the past/perfective gerund: Te. uṅṅi (uṅṅi-n-ānu > unnānu); Ka. iddu (iddu + *ahēne 'I will become' > idd(h)ēne). In Telugu the same kind of indefinite : definite contrast appears in the negative. Here, however, the indefinite is created by attaching the negative marker -a- to the positive verb base, whereas the definite is made by adding this morpheme to the special negative

verb root *il- (which appears in Telugu only in a metathesized form that has also undergone vowel blending). Contrast uṇḍanu (uṇḍ-a-nu) 'I am not (habitually), won't be', uṇḍavu 'you (sg.) are not (habitually), won't be', etc. with lēnu (< *il-l-a-nu) 'I am not (right now), wasn't (at a certain time)', lēvu 'you (sg.) are not (right now), weren't (at a certain time)', etc.

³Participial nouns also occasionally appear as predicates-- viz. in equational sentences.

⁴Personal terminations did, however, exist in earlier stages of Malayalam (Sekhar 1953, 104ff.). Today in spoken Malayalam the past/perfective verbal adverb is pronounced differently from the form that serves as a finite verb. Cf. kaṇṭa (kaṇṭū) 'having seen' (also, 'seeing') : kaṇṭu 'I, you, he, etc. saw'.

CHAPTER VI
MORPHOLOGY: OTHER WORD CLASSES

Postpositions

Postpositions are a special class of nouns formed from substantive or verbal bases. They do not take a plural suffix, and they acquire only certain case suffixes--most commonly the dative. The name, "postposition," derives from the fact that they appear to be postposed to other words--mainly nouns, pronouns, and participial nouns--much as case suffixes are. Almost all are, or can be historically reconstructed as, independent words, not suffixes. Moreover, the word immediately preceding a postposition must be in the oblique, for it functions as an adjective or modifier to the following postposition, which is a noun. According to the rule operating in noun (or pronoun)-noun sequences, the first of the two nominals must be in the oblique.

Postpositions also occur after verbal adjectives and verbal nouns; the resulting phrases we have termed gerundials (see the section on gerundials in Chapter V).

In some instances postpositions have taken on the role of case suffixes and have been considered as such by grammarians. Thus the Tamil -ōtu 'with' (the so-called "comitative" case suffix) is really a noun that is cognate with, for example, Ka. oḍam 'union, combination'. Likewise,

Te. -tō 'with' is probably an old locative form, tōḍa, of the noun tōḍu 'companion, associate'. So too, Te. -lō 'in, on' is probably a shortened form of the locative lōna, from the noun lōnu 'the inside (part)'. Thus the phrase iṅṅi-lō 'in the house' apparently consists of the oblique stem of illu 'house' + the locative of lōnu (Sjoberg 1969). In line with this reasoning, iṅṅi-lōnikki is made up of iṅṅi + lōn-i (oblique of lō(nu)) + -ki (dat.)—thus 'into the house'.

Some examples of postpositional phrases in other languages are: Ta. mēcai mēl ('table-of upper part') 'on the table'; Ka. mareya suttalu 'around the house', nanna hinde 'behind me'; Go. marāt aggā 'on the tree', nā thōṟō 'with me'; Te. dāni kōsam 'for it'; Pa. merto ka 'onto the tree'; munḍa token 'in, into the tank' (Burrow and Bhattacharya 1953, 31); Koṇḍa mā vale 'with us', sālam loṟi 'in a cave', guram musku 'on the horse' (Krishnamurti 1969b, 261, 340).

Adverbs

There are no root adverbs in Dravidian. All are derived forms, constructed from nouns, adjectives, gerunds, etc.

The Tamil series iṅku 'here', aṅku 'there', and eṅku 'where?' consists of the dative case morpheme appended to what is probably a noun derived from demonstrative and

interrogative adjective roots: *iṁ 'something near', *aṁ 'something far', *eṁ 'what? which thing?' (Andronov 1965a, 67).

A very large number of adverbs are combinations of these adjective roots and special bound forms of nouns. Ta. intu 'today (this-day)', Iga 'now (this-time)', ippaṭi 'thus, in this way'; Ma. annu 'on that day', eviṭe 'where (which-place)?'; Kod. akka 'at that time, then'; Ka. illi 'here (this-place)'; Malt. ino 'here'; Ko. elag 'how (which-way)?'.

Many adverbs are nouns, either inflected or uninflected. Ta. mutal-il 'at first' (loc.); naṭuvē 'in the middle' (< naṭu 'middle' + -v- (euphonic) + -ē (emphatic particle)); Ka. dūra 'far' (lit. 'distance'); Kur. kiyyā 'lower part'; Ka. ninne-ge 'yesterday' (dat.); Koṇḍa dinamu 'daily' (lit. 'day'); Br. keragh 'bottom'; Malt. ulond 'the day before yesterday'.

A number of adverbs are made by attaching to a noun or ordinary adjective some form of the verb 'become'. Te. andangā 'beautifully' is made up of andam(u) 'beauty' + kā (infinitive of avu, agu 'become'). In Kannada the adverb-forming suffix -ane is an obsolete gerund of āgu 'become': thus, for example, bēg-ane 'quickly'.

The infinitives of other verbs are the source of some adverbs. Ta. urakka 'loudly' (< ura 'become strong'); Ka. kūdale 'immediately' (< kūḍu 'gather together').

Gerunds (both affirmative and negative) can function as adverbs. For example, Te. mikkili 'very' is a verbal adverb 'having increased, exceeded', as in gōḍalu mikkili paḍipōyināy 'the walls are very much ruined'. Note also māṭṭāḍāka 'silent'

(verbal adverb 'not having spoken'), as in māṭlāḍāka uṇḍu
'be silent!'.

Echo-words

Echo-words in Dravidian represent a special type of rhythmical reduplication of certain basic words, which may be drawn from a variety of classes. The base word is repeated, except that its first syllable is changed to some other, most often ki/gi- or some phonological variant of this (Emeneau 1938). The changed form, or echo-word, has no meaning of its own and is rarely used without the base word. However, the total construction conveys certain emotional nuances. Ta. mēcai kīcai 'some table(s) or other' (mēcai 'table'); Ka. makkaḷu gikkaḷu 'various children' (makkaḷu 'children'), kudire gidire 'some horses'; Te. tīn gīn 'eat, if you wish'; Kol. masur gisur 'various people'; To. mēṇ xīṇ 'some tree or other'.

Echo-words undergo changes throughout the noun paradigm: they can take suffixes of case and number. Some even acquire suffixes appropriate to verbal forms, depending on the kind of word that they echo. Moreover, they can be separated from the base word by other words: e.g. Ta. īnkē kucci-y-um illai, kicci-y-um illai 'there is neither kindling nor pole here' (Andronov 1965a, 96).

Echo-words, of course, differ fundamentally from other words in that they lack a root, unless they could be said

to have one general root of the form kī-/gī- or its variants. As indicated by the examples above, occasionally echo-words are formed by means of syllables other than kī-/gī-: e.g. Ta. koñcam nañcam 'a little'; Ka. vyāpara sāvara 'various kinds of commerce'; Kol. kūṭel mūṭel 'some cows or other, various cows'; bāla sūla 'boys, youngsters'; Br. hīt mīt 'gossip'. And in rare cases echo-words precede their counterpart words: e.g. akku aḷukk-illai 'there is no dirt at all'.

Onomatopoetic words

This class includes strictly onomatopoetic words (imitative words) and symbolic words. The former imitate natural sounds and animal voices; the latter seek to express visual, tactile, and other sense impressions (Emeneau 1969b). For example, Ta. kirīccu conveys an impression of creaking or twittering, Ka. jillu expresses a sharp sensation caused by touching something cold, Ka. gijagiḷa expresses the state of being very crowded, and Kui jilijulu denotes a flaring up.

Imitative words also serve as adverbial modifiers of verbs, more rarely as attributes of nouns: Te. gaḍagaḍa tinu 'eat hastily' (gaḍagaḍa expresses the notion of rapidity or excitement); Ta. tiṭṭir-p-panam 'easy money' (tiṭṭir indicates a state of suddenness) (Andronov 1965a, 95).

Frequently onomatopoetic words occur in association with verbs having the meaning 'speak', 'become', etc. Thus

Ta. tiṭṭir entu 'all of a sudden' (lit. 'having said tiṭṭir');
Kui jilijulu āva 'twinkle, sparkle, gleam' (lit. 'become
jilijulu'); Ka. guṇuguṭṭu (kuṭṭu 'make sounds') 'growl'.
Some take an adverbial suffix: Ka. bhōr-ane 'roaringly (as of
waves)'.
Interjections

Interjections are a special class of free words that are
uninflected. They include single and derived forms. Ta.
itō 'look!', pāvam 'what a pity!'; Ka. idō 'look here!',
bhalā 'fine!', cī 'ugh!'; Te. ayyō 'what a pity!', ōhō
'oh! really!', ammā 'dear me!'; Koṇḍa kote 'I see! my
goodness!', ōho re 'hey, look!'.

Particles

Particles are bound forms (enclitics) that are appended
to phrases and sentences. Most Dravidian languages make
considerable use of one meaning 'and, also': Ta. -um; Ka.
-ū, -ē; Kur. -m; Br. -um; Te. -(u)nnu, -ē; Go. -nē; Kui -ve.
E.g. Te. mīru-nnu tammuḍu-nnu 'you and your younger
brother'; Ta. nān-um nī-y-um avan-um 'I and you and he';
Ka. obban-e 'only one man'; Kui mī āba-ve Inu-ve ānu-ve
'your father, you (sg.), and I', etc.

Another common group of enclitics in South Dravidian
and Telugu includes three interrogative-emphatic particles,
ā, ē, ō (with variants in the corresponding short vowels).
ā is used to express relatively neutral questions, ē and ō

questions for which affirmative and negative replies, respectively, are anticipated: e.g. Te. mīru nannu pilicār-ā 'did you call me?'; Ta. nīy- ceytāy 'you're the one who did it, aren't you?'; Ka. nīnu hōgutti-y-ō 'are you really going?'.
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Particles can be appended to different kinds of phrases and even to several phrases within a sentence. Te. vidyārthulā profesarlā 'are they students or teachers?'; Ka. avaḷu bandaḷā 'has she come (or not)?' : avaḷā bandaḷu 'has she (or someone else) come?'; Koṇḍa būmi ne 'the earth itself', niyi lōku manar a sile na 'do you have any folks or not?' (Krishnamurti 1969b, 327-28); Ka. elliō 'somewhere' (cf. elli 'where'); Te. -lē 'of course, never mind'.

CHAPTER VII

SYNTAX

Syntax in the Dravidian languages involves many features that are typical of languages of the agglutinative type. This results mainly from the fact that the basic principle of Dravidian syntax is that the determining word precedes the determined. This rule is rarely violated in the case of attributes. It is less strictly observed in other parts of the sentence. The predicate (an obligatory form in normal sentences) usually stands in final position, the subject precedes the predicate, indirect and direct objects--in that order--are placed between them, and modifiers usually directly precede the expressions they determine. The exception to the modifier rule is that adverbial constructions of time and place occur at or very close to the beginning of the sentence, with adverbs of time preceding those of place. Sentence markers, such as the interrogative and emphatic particles, follow the predicate. Deviations from this order of sentence elements may occur in the case of emphasis and in poetry and highly colloquial speech.

Compound and complex sentences are not characteristic of Dravidian syntax. Instead, gerunds (verbal adverbs), verbal adjectives, infinitives, and verbal and participial nouns serve to transform simple sentences into more complex

constructions (still containing a single predicate) that are the semantic equivalents of compound and complex sentences of other language types.

The subject of a sentence can be expressed by a variety of nominal forms--nouns, numerals, demonstrative and interrogative "pronouns," personal and reflexive pronouns, pronominalized nouns--as well as by participial and verbal nouns in the nominative case.

The predicate most often consists of a verb phrase that agrees with the subject phrase in person, number, and gender. The role of predicate may, however, be filled by any of the aforementioned nominal forms. In this instance an "equational" sentence results--one that involves the linkage of two nominal phrases that are coordinate in terms of person, number, and gender. For example, Pa. id nātot 'what is this?' ('this-thing which-thing?'); Te. atanu cinnavāḍu 'he's a small man' ('he small-man'), ā pustakam nādi 'that book is mine' (or, in the context of the past, 'that book was mine'). In some instances the predicate may be an adverbial phrase that does not agree with the subject phrase in number: e.g. Te. mī illu ekkada 'where are your houses?' ('your houses which-place?'); Ka. avanu yāru 'who is he?' ('he which-persons?'--here the plural of the interrogative pronoun is used for politeness).

Only a very few Dravidian languages use a link verb in equational sentences: Ma. avan eviṭe āṇa 'where is he?'

('he where is') (but also avan eviṭe 'where is he?'),
ā ketṭiṭam palayat āṇe 'that building is old' ('that build-
ing old-thing is') (Asher 1968); Kur. ās landi alas taldas
'he is a lazy man' ('he lazy man is'), īd sanni ra?i 'this
is small', ās tejgar angi ?us ra?das 'he is a good student'
(Vesper 1968); Pa. in pidir nātōt āy 'what is your name?'
(but compare id nātōt 'what is this?').

In the case of Malayalam, and probably Parji, the link
verb is actually a form of a common Dravidian verb 'become'.
In other languages, however, constructions with the link verb
'become' contrast in meaning with those that lack a verb: e.g.
Te. āyana mantri 'he is a (governmental) minister' : āyana
mantri avtāḍu 'he will become a minister'.

The appearance of any other verb requires the addition
of an adverbial suffix (usually itself some form of the verb
'become') to the second noun phrase. For example, Te. āme
andam 'she is (the embodiment of) beauty' : āme andangā undi
'she is beautiful' ('she beautifully exists'); Ta. avan kucavan
'he is a potter' : avan kucavan-ay iruntān 'he was a carpenter'
('he as-a-carpenter existed').

Complex sentences have at least one subordinate clause
in addition to the main clause. The former always precede the
latter. The addition of a gerund or a gerundial to an independ-
ent clause transforms it into a subordinating clause. As a spe-
cial case of this, the past/perfective gerund of the verb 'say'
typically follows a quoted sentence, making it subordinate to the

main clause: e.g. Te. nēnu vastā(nu) ani. ceppēdu 'he said he would come' (lit. 'I'll come having-said, said-he').

Compound sentences include two or more independent clauses that may or may not be linked by coordinating conjunctions (mainly particles). E.g. Ta. nēramākitu, pōvōm, vā 'let's go. it's late!'; Koṇḍa nīnu vātīd e niso dinamku ātad 'you came here and how many days it has been (since)!' (e 'and'), (avi) zāva ne vaRte no kaṇḍa ne vaRte no 'the women may have cooked either porridge or meat' (...no...no 'either...or') (Krishna-murti 1969b, 320-21).

The following are some common syntactic patterns that can be said to be characteristic of the Dravidian family as a whole:

Where the subject of the sentence is in the dative case and the predicate is some form of the verbs 'exist' or 'not to exist', possession is indicated. Tu. āyagā ēlē jēvu bārul-itto 'he had seven daughters' (lit. 'he-to seven female children existed'); Pa. an ka gurrol cila 'I have no horse' (lit. 'I to horse doesn't exist').

The juxtaposition of two nominal phrases leads to several results, depending upon the classes of words involved. Most often the first noun (or pronoun) becomes subordinated to the second noun: e.g. Pa. pū kulung 'stalk of a flower' ('flower-of stalk'); Koṇḍa taṇṇisi pāta 'younger sister's clothes'; Te. iṇṇi pēru 'family name' ('house-of name'); Pe. mā nāz 'our village' ('we-of village').

Two nouns or pronouns in apposition, especially when separated by phrase juncture, may indicate simple coordination:

e.g. Te. rāmuḍu, candruḍu vaccāru 'Rama and Krishna have come'.
 In other instances, compound-like constructions result: e.g.
 Ka. āṭa pāṭalu 'sports and songs' (i.e. 'games'); Kur.
mukkā-mēt 'woman and man' (i.e. 'couple').

Other coordinate noun-noun constructions involve nouns of quantity as the second member: Ta. at-ellām 'all of that' ('that-thing all (whole-thing)'), pustakam iranṭilum 'in both the books' ('book two-things'); Te. ḍabb-antā 'all the money' ('money all (whole-thing)'), manuṣulu andarū 'all the people' ('people all-persons').

Comparison is expressed periphrastically in the Dravidian languages: the noun with which something or someone is compared acquires a postposition meaning 'from' or 'than' or, in some languages, a case suffix such as the dative. Te. mī inṭi-kaṇṭē mā illu peddadi 'my house is bigger than yours' ('your (pl.) house-from our house big-thing'); Ka. nanna kudurege ninna kudure doḍḍadu 'your horse is larger than mine'.

The superlative is expressed via comparison with the notion of 'all things'. For example, Te. anni illalō mā illu peddadi 'my house is the biggest (of all)' ('all houses-among our house big-thing').

Finally, it should be mentioned that because of the absence of voice distinctions in Dravidian, participles and participial nouns are devoid of voice characteristics; as a result, the same form can be translated into other languages

as active or as passive. Cf. Ta. paiyan paṭitta pāṭam 'the lesson read by the boy' ('(by the) boy which-was-read lesson') : pāṭattai-p paṭitta paiyan 'the boy who read the lesson' ('lesson who-read boy'). In the first sentence the grammatical subject of the action (the lesson) occurs in the nominative case; in the second it is in the accusative case. Participles of intransitive verbs follow the same pattern: Te. mīru veḷḷē grāmam 'the village to which you (pl.) (will) go, the village which is (habitually), will be visited by you' (but, literally, 'you going village') (Andronov 1965a, 83-84). Parji deviates from this pattern in that there the grammatical subject of the verb that appears as a verbal adjective (or relative participle) is not always in the nominative--as it is in Ta. paiyan paṭitta 'by-the-boy read'--but normally in the genitive: Pa. gaḍ-in cīran mēl 'the liquor given by the herdsman' ('herdsman-of which-was-given liquor') (Burrow and Bhattacharya 1953, 60).

CHAPTER VIII

CONCLUSIONS

The foregoing is, to my knowledge, the first systematic attempt to analyze and describe the Dravidian family of languages from a typological point of view--one that stresses the present-day rather than the historical scene. Earlier surveys, such as those by Bloch and Andronov, have been rather heavily influenced by the historical data. In the present work these materials have served as necessary background information, but the emphasis has clearly been upon contemporary patterns.

I have sought to isolate the predominant as well as other significant patterns within the Dravidian family, drawing upon data from all the languages that have been adequately described. This is not to say that the present survey is complete in any sense. Other scholars may well challenge aspects of the study or will add refinements as additional data on the Dravidian family come to light. Nevertheless, this work should serve as a convenient starting-point for more intensive research on the overall Dravidian linguistic structure.

Although this survey study is designed primarily for practical use, I am hopeful that it may also be of some theoretical interest for linguists in general. There are several major problem areas that need to be explored:

First, we urgently require a detailed typological des-

cription of the Indo-Aryan language group. If such were available and the patterns compared with those for Dravidian, further clarifications could be made with respect to India as a linguistic area. It may well be that Indo-Aryan and Dravidian share more features than have thus far been recognized.

Second, the Dravidian group needs to be compared typologically with other language families, especially the Ural-Altaiic. Genetic ties between Dravidian and the latter have been posited, but a typological comparison would do much to clarify the similarities and differences between these two agglutinative families in a structural sense.

The third area is of a more theoretical nature. I am convinced, on the basis of my typological analysis of Dravidian, that questions need to be raised concerning aspects of the historical reconstructions that have been carried out. Although the greatest contribution to Dravidian studies has been made by historical linguists, I am more sceptical of some of their basic assumptions than I was when I first undertook this project. For example, simply because the oldest proven Dravidian records are in a form of Old Tamil, it has been assumed that the language of these documents is representative of early Dravidian as a whole. Obviously this assumption is based upon cultural rather than linguistic evidence. For one thing, it may be that

certain North or Central Dravidian groups are actually more representative of older Dravidian than Tamil is. Certainly, nothing in the comparative analysis of contemporary Dravidian languages suggests that Tamil occupies a special status.

Moreover, this language, restricted as it has been since the earliest records to the southernmost region, has held a geographically marginal position. And unlike the situation with Indo-European, where the data are relatively abundant and cross-checking of records is possible, historical linguists working with Dravidian have had to make considerable "leaps of faith."

If this reasoning is correct, questions could be raised about the validity of some of the historical reconstructions that historical linguists have made for Dravidian. Consequently, the use of these historical reconstructions in interpreting contemporary patterns can lead to unwarranted conclusions. This is one of the factors justifying my use of the synchronic approach herein.

But it is not only with respect to historical linguistics that typologists can make a contribution. I have for some time entertained doubts about certain universal statements of generative grammarians. In recent years they have been using English as the chief basis for their generalizations, and, like the Latin grammarians of old, they are tending to impose these categories upon languages of quite different

genetic groupings or types. In the case of Dravidian the problem is a singularly important one. One universal statement of certain generative grammarians is that in all languages the predicate of every normal sentence must include a verb phrase. But this does not hold for most Dravidian languages and for a number of other linguistic groupings as well.

In light of the aforementioned considerations the present work will, I hope, prove to have both practical and theoretical utility.

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