

THE DRAVIDIAN LANGUAGES

BHADRIRAJU KRISHNAMURTI



PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE
The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Cambridge CB2 2RU, UK
40 West 20th Street, New York, NY 10011–4211, USA
477 Williamstown Road, Port Melbourne, VIC 3207, Australia
Ruiz de Alarcón 13, 28014 Madrid, Spain
Dock House, The Waterfront, Cape Town 8001, South Africa
<http://www.cambridge.org>

© Bhadriraju Krishnamurti 2003

This book is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without
the written permission of Cambridge University Press.

First published 2003

Printed in the United Kingdom at the University Press, Cambridge

Typeface Times New Roman 9/13 pt *System* L^AT_EX 2_ε [TB]

A catalogue record for this book is available from the British Library

ISBN 0 521 77111 0 hardback

CONTENTS

<i>List of illustrations</i>	page xi
<i>List of tables</i>	xii
<i>Preface</i>	xv
<i>Acknowledgements</i>	xviii
<i>Note on transliteration and symbols</i>	xx
<i>List of abbreviations</i>	xxiii
1 Introduction	
1.1 The name Dravidian	1
1.2 Dravidians: prehistory and culture	2
1.3 The Dravidian languages as a family	16
1.4 Names of languages, geographical distribution and demographic details	19
1.5 Typological features of the Dravidian languages	27
1.6 Dravidian studies, past and present	30
1.7 Dravidian and Indo-Aryan	35
1.8 Affinity between Dravidian and languages outside India	43
2 Phonology: descriptive	
2.1 Introduction	48
2.2 Vowels	49
2.3 Consonants	52
2.4 Suprasegmental features	58
2.5 Sandhi or morphophonemics	60
Appendix. Phonemic inventories of individual languages	61
3 The writing systems of the major literary languages	
3.1 Origins	78
3.2 Telugu–Kannaḍa script	78

3.3 Tamil and Malayālam scripts	82
3.4 Writing in non-literary languages	87
4 Phonology: historical and comparative	
4.1 The phonemes of Proto-Dravidian	90
4.2 Phonotactics	90
4.3 Proto-Dravidian morphophonemics	93
4.4 Historical phonology: vowels	98
4.5 Historical phonology: consonants	119
4.6 Conclusion	173
5 Word formation: roots, stems, formatives, derivational suffixes and nominal compounds	
5.1 Structure of roots and formatives	179
5.2 Variability of formative suffixes	181
5.3 Primary derivative suffixes as earlier inflectional suffixes: the hypothesis	182
5.4 Case studies	184
5.5 Earlier studies on stem formatives	195
5.6 Stem formatives in nouns	196
5.7 Phonological changes in Proto-Dravidian roots	197
5.8 Derivational suffixes	199
5.9 Compounds	200
6 Nominals: nouns, pronouns, numerals and time and place adverbs	
6.1 Introduction	205
6.2 Gender and number: identification and definition	205
6.3 Cases	217
6.4 Pronouns	243
6.5 Numerals	258
6.6 Quantifiers	266
6.7 Pronominalized nouns	267
6.8 Conclusion	269
Appendix: Paradigms of nominal declension	270
7 The verb	
7.1 Introduction	277
7.2 The verbal base	278

7.3 Intransitive, transitive and causative stems	279
7.4 Tense	291
7.5 Pronominal suffixes (gender–number–person markers)	307
7.6 Finite verbs in the past and non-past	312
7.7 Non-finite verbs: past-stem based	330
7.8 Non-finite verbs: non-past-stem based	338
7.9 Non-finite verbs: the infinitive	341
7.10 Negation in finite and non-finite verbs	348
7.11 Other simple finite verbs (affirmative and negative)	357
7.12 Durative or progressive (in present/past) in some languages of South Dravidian	362
7.13 Serial verbs	365
7.14 Compound verb stems	370
7.15 Complex predicates and auxiliaries	373
8 Adjectives, adverbs and clitics	
8.1 Introduction	388
8.2 Adjectives	388
8.3 Adverbs	406
8.4 Clitics	412
9 Syntax	
9.1 Introduction	420
9.2 Simple sentences	420
9.3 Complex sentences	440
9.4 Compound sentences (coordination)	454
9.5 Minor sentences	457
9.6 Sentence negation	459
9.7 Reflexivity and reciprocity	463
9.8 Anaphora	466
9.9 Conclusion	468
10 Lexicon	
10.1 Introduction	470
10.2 Indo-Aryan loanwords in South Dravidian I and II	470
10.3 Phonological principles governing loanwords from Indo-Aryan	474
10.4 Loanwords from Perso-Arabic sources	478
10.5 Loanwords from western languages: Portuguese and English	478
10.6 Neologisms	479

10.7 Structured semantic fields	483
10.8 Strategies of expressives	485
11 Conclusion: a summary and overview	
11.1 Introduction	489
11.2 Earlier attempts at subgrouping the Dravidian languages	489
11.3 The subgrouping adopted in this book	492
11.4 The antiquity of Proto-Dravidian and formation of South Dravidian I and II	501
11.5 Desiderata	502
<i>Bibliography</i>	504
<i>Index of reconstructions with glosses</i>	523
<i>General index</i>	535

ILLUSTRATIONS

Map

- 1.1 Geographical distribution of the Dravidian languages
in South Asia *page 18*

Figures

- 1.1 Genetic tree of South Asian populations including the
Dravidian-speaking ones 4
- 1.2 Family tree of the Dravidian languages 21
- 4.1 Structure of Proto-Dravidian roots and stems 92
- 4.2 The Pre-Tamil sub-branch of South Dravidian I 113
- 4.3 Reflexes of Proto-Dravidian intervocalic stops 145
- 7.1 Structure of Proto-Dravidian roots and stems (same as 4.1) 278
- 7.2 Functional classification of auxiliary verbs 374
- 11.1 Subgrouping of South Dravidian by Emeneau (1967b) 490
- 11.2a Proto-Dravidian with main branches (alternative 1) 493
- 11.2b Proto-Dravidian with main branches (alternative 2) 493
- 11.3 Shared innovations of South Dravidian I and II 497
- 11.4 South Dravidian I (with the isogloss of F2 overlapping
into Telugu) 498
- 11.5 South Dravidian II (with the isogloss of F26 overlapping into
Parji–Ollari–Gadaba of Central Dravidian) 499
- 11.6 Central Dravidian 500
- 11.7 North Dravidian 500

TABLES

1.1. A sample list of Dravidian borrowings into Middle Indo-Aryan	<i>page</i> 16
3.1a. Evolution of the Telugu–Kannaḍa script from the third century BC to the sixteenth century AD [a–d]	79
3.1b. Evolution of the Telugu–Kannaḍa script from the third century BC to the sixteenth century AD [dh–z]	80
3.2a. Primary vowels and consonants of Telugu	81
3.2b. Primary vowels and consonants of Kannaḍa	81
3.3a. Combination of primary consonants with secondary vowels in Telugu	83
3.3b. Combination of primary consonants with secondary vowels in Kannaḍa	84
3.4a. Combination of primary consonants with secondary vowels in Tamil	86
3.4b. Combination of primary consonants with secondary vowels in Malayāḷam	88
3.5. Combination of primary consonants with secondary consonants for Telugu, Kannaḍa and Malayāḷam	89
4.1. Proto-Dravidian vowels	91
4.2. Proto-Dravidian consonants	91
4.3. Distribution of Proto-Dravidian phonemes	120
4.4. Number of lexical items showing <i>c-/Ø-</i> alternation	124
4.5. Languages showing <i>c-/t-</i> alternation	125
4.6. Languages showing <i>c-/t-/Ø-</i> alternation	125
4.7a. Voicing index (VI) of word-initial stops in South Dravidian I and II for 119 entries	135
4.7b. Voicing index of word-initial stops in Central Dravidian for 119 entries	135

4.7c. Voicing index of word-initial stops in North Dravidian for 119 entries	136
4.7d. Voicing index of word-initial stops in the whole family	136
4.8. Correspondences of Proto-Dravidian *NP and *NPP in Tamil–Malayāḷam and Telugu–Kannaḍa	171
5.1. Canonical shapes and number of root morphs in Proto-Dravidian	180
6.1. Semantic and formal contrasts in the third-person demonstrative pronouns in different Dravidian languages	208
6.2. Gender and number in South Dravidian I	209
6.3. Gender and number in South Dravidian II minus Telugu and Central Dravidian	209
6.4. Gender and number in Telugu and North Dravidian	210
6.5a. First-person-singular pronouns in the nominative and oblique	244
6.5b. Alternative forms of the first person singular	245
6.5c. First-person-plural pronouns in the nominative and oblique	246
6.5d. Alternative forms of the first person plural (exclusive)	247
6.5e. The first-person-plural (inclusive) forms	247
6.6a. Second-person-singular pronouns in the nominative and oblique	249
6.6b. Second-person-plural forms	250
6.6c. Plural forms in South Dravidian II	251
6.6d. Tamil and Brahui bound plural stems	251
6.6e. Gondi plural stems (construed as singular)	252
6.7a. Reflexive pronoun singular	252
6.7b. Reflexive pronoun plural	253
7.1. Pronominal suffixes (gender–number–person markers) in finite verbs in South Dravidian I	308
7.2. Pronominal suffixes (gender–number–person markers) in finite verbs in South Dravidian II	310
7.3. Pronominal suffixes (gender–number–person markers) in finite verbs in Central Dravidian	311
7.4. Pronominal suffixes (gender–number–person markers) in finite verbs in North Dravidian	312
7.5. Past and non-past finite verbs in Koraga dialects	318
7.6. Tense markers in Gondi dialects (based on Rao 1987b: 233)	322
7.7. Past and non-past finite verbs in Koṇḍa	322
7.8. Past and non-past conjugations in Kui	323
7.9. Past and non-past finite verbs in Kuvi	323
7.10. Past and non-past finite verbs in Pengo	324

7.11. Past and non-past finite verbs in Maṇḍa	324
7.12. Past and non-past finite verbs in Kolami	325
7.13. Past and non-past finite verbs in Naiki	325
7.14. Past and non-past finite verbs in Parji	327
7.15. Past and non-past finite verbs in Ollari	327
7.16. Past and non-past finite verbs in Gadaba	328
7.17. Past and non-past finite verbs in Kurux	329
7.18. Past and non-past finite verbs in Malto	329
7.19a. Infinitive markers in South Dravidian I	346
7.19b. Infinitive markers in South Dravidian II	346
7.19c. Infinitive markers in Central Dravidian	347
7.19d. Infinitive markers in North Dravidian	348
7.20a. Historical derivation of Koṇḍa negative past	368
7.20b. Historical derivation of Pengo present perfect	368
11.1a. Subgrouping supported by phonological features	494
11.1b. Subgrouping supported by morphological features of nominals	495
11.1c. Subgrouping supported by morphological features of verbs	496
11.1d. Subgrouping supported by morphosyntactic features of adjectives, adverbs, clitics and syntax	496

Introduction

1.1 The name Dravidian

Robert Caldwell (1856, 3rd edn, repr. 1956: 3–6) was the first to use ‘Dravidian’ as a generic name of the major language family, next to Indo-Aryan (a branch of Indo-European), spoken in the Indian subcontinent. The new name was an adaptation of a Sanskrit term *draviḍa-* (adj *drāviḍa-*) which was traditionally used to designate the Tamil language and people, in some contexts, and in others, vaguely the south Indian peoples. Caldwell says:

The word I have chosen is ‘Dravidian’, from *Drāviḍa*, the adjectival form of *Draviḍa*. This term, it is true, has sometimes been used, and is still sometimes used, in almost as restricted a sense as that of Tamil itself, so that though on the whole it is the best term I can find, I admit it is not perfectly free from ambiguity. It is a term which has already been used more or less distinctively by Sanskrit philologists, as a generic appellation for the South Indian people and their languages, and it is the only single term they ever seem to have used in this manner. I have, therefore, no doubt of the propriety of adopting it. (1956: 4)

Caldwell refers to the use of *Drāviḍa-* as a language name by Kumārilabhaṭṭa’s *Tantravārttika* (seventh century AD) (1956: 4). Actually Kumāriḷa was citing some words from Tamil which were wrongly given Sanskritic resemblance and meanings by some contemporary scholars, e.g. Ta. *cōru* ‘rice’ (matched with Skt. *cora-* ‘thief’), *pāmpu* ‘snake’, adj *pāppu* (Skt. *pāpa-* ‘sin’), Ta. *atar* ‘way’ (Skt. *atara-* ‘uncrossable’), Ta. *māl* ‘woman’ (Skt. *mālā* ‘garland’), *vayiru* ‘stomach’ (Skt. *vaira-* ‘enemy’)¹ (Zvelebil 1990a: xxi–xxii). Caldwell further cites several sources from the scriptures such as the

¹ The actual passage cited by Zvelebil (1990a: xxii, fn. 21), based on Ganganatha Jha’s translation of the text:

tad yathā drāviḍa-bhāṣāyām eva tāvad vyanjanānta-bhāṣāpadeṣu svarānta-vibhakti-
strīpratyayādi-kalpanābhiḥ svabhāṣānurūpān arthān pratipadyamānāḥ dṛṣyante;
tad yathā ōḍanam cōr ityukte cōrapadavācyam kalpayanti; panthānam atara iti

Manusmṛti, Bharata's *Nāṭyaśāstra* and the *Mahābhārata* where Drāviḍa- is used as a people and Drāviḍī as a minor Prakrit belonging to the Paisācī 'demonic' group. Since Tamiz was the established word for the Tamil language by the time Caldwell coined the term Dravidian to represent the whole family, it met with universal approval. He was aware of it when he said, 'By the adoption of this term "Dravidian", the word "Tamilian" has been left free to signify that which is distinctively Tamil' (1956: 6). Dravidian has come to stay as the name of the whole family for nearly a century and a half.²

1.2 Dravidians: prehistory and culture

1.2.1 Prehistory

It is clear that 'Aryan' and 'Dravidian' are not racial terms. A distinguished authority on the statistical correlation between human genes and languages, Cavalli-Sforza (2000), refuting the existence of racial homogeneity, says:

In more recent times, the careful genetic study of hidden variation, unrelated to climate, has confirmed that homogenous races do not exist. It is not only true that racial purity does not exist in nature: it is entirely unachievable, and would not be desirable . . . To achieve even partial 'purity' (that

kalpayitvā āhuḥ, satyam dustaratvāt atara eva panthā iti; tathā pāpaśabdā pakārāntam sarpavacanā; a kārāntam kalpayitvā satyam pāpa eva asau iti vadanti. evam māl śabdā strīvacanā mālā iti kalpayitvā satyam iti āhuḥ; vairśabdā ca rēphāntam udaravacanā, vairīśabdā pratyāmnāyam vadanti; satyam sarvasya kṣudhitasya akārye pravartanāt udaram vairīkārye pravartate it . . .

(Thus, in the Drāviḍa language, certain words ending in consonants are found to be treated as vowel-ending with gender and case suffixes, and given meanings, as though they are of their own language (Sanskrit); when food is called *cor*, they turn it into *cora*..('thief'). When a 'path' is called *atar*, they turn it into *atara* and say, true, the 'path' is *atara* because it is *dustara* 'difficult to cross'. Thus, they add *a* to the word *pāp* ending in *p* and meaning 'a snake' and say, true, it is *pāpa* 'a sinful being'. They turn the word *māl* meaning 'a woman' into *mālā* 'garland' and say, it is so. They substitute the word *vairī* ('enemy') for the word *vair*, ending in *r* and meaning 'stomach', and say, yes, as a hungry man does wrong deeds, the stomach undertakes wrong/inimical (*vairī*) actions . . .)

The items cited were actually of Tamil, namely *cōru* 'rice', *atar* 'way', *pāppu* adj of *pāmpu* 'snake', *māl* 'woman' < *maka*; *vayiru* 'belly'. Since these did not occur as such in Kannaḍa or Telugu, Kumārilabhaṭṭa was referring to Tamil only in this passage by the name *drāviḍa*-.²

² Joseph (1989) gives extensive references to the use of the term *draviḍa*-, *dramila*- first as the name of a people, then of a country. Sinhala inscriptions of BCE cite *dameḍa*-, *damela*- denoting Tamil merchants. Early Buddhist and Jaina sources used *damiḷa*- to refer to a people in south India (presumably Tamil); *damilaraṭṭha*- was a southern non-Aryan country; *dramiḷa*-, *dramiḍa*- and *draviḍa*- were used as variants to designate a country in the south (*Bṛhatsamhita*-, *Kādambarī*, *Daśakumāracarita*-, fourth to seventh centuries CE) (1989: 134–8). It appears that *damiḷa*- was older than *draviḍa*-, which could be its Sanskritization. It is not certain if *tamiz* is derived from *damiḷa*- or the other way round.

is a genetic homogeneity that is never achieved in populations of higher animals) would require at least twenty generations of 'inbreeding' (e.g. by brother-sister or parent-children matings repeated many times) . . . we can be sure that such an entire inbreeding process has never been attempted in our history with a few minor and partial exceptions. (13)

There is some indirect evidence that modern human language reached its current state of development between 50,000 and 150,000 years ago Beginning perhaps 60,000 or 70,000 years ago, modern humans began to migrate from Africa, eventually reaching the farthest habitable corners of the globe such as Tierra del Fuego, Tasmania, the Coast of the Arctic Ocean, and finally Greenland. (60)

Calculations based on the amount of genetic variation observed today suggests that the population would have been about 50,000 in the Paleolithic period, just before expansion out of Africa. (92)

He finds that the genetic tree and the linguistic tree have many 'impressive similarities' (see Cavalli-Sforza 2000: figure 12, p. 144). The figure, in effect, supports the Nostratic Macro-family, which is not established on firm comparative evidence (Campbell 1998, 1999). Talking about the expansion of the speakers of the Dravidian languages, Cavalli-Sforza says:

The center of origin of Dravidian languages is likely to be somewhere in the western half of India. It could be also in the South Caspian (the first PC center), or in the northern Indian center indicated by the Fourth PC. This language family is found in northern India only in scattered pockets, and in one population (Brahui) in western Pakistan. (157)

He goes on to suggest a relationship between Dravidian and Elamite to the west and also the language of the Indus civilization (137), following the speculative discussions in the field. Still there is no archeological or linguistic evidence to show actually when the people who spoke the Dravidian languages entered India. But we know that they were already in northwest India by the time the Ṛgvedic Aryans entered India by the fifteenth century BCE.

In an earlier publication Cavalli-Sforza et al. (1994: 239) have given a genetic tree of twenty-eight South Asian populations including the Dravidian-speaking ones, which is reproduced below as figure 1.1 (their fig. 4.14.1). They say:

A subcluster is formed by three Dravidian-speaking groups (one northern and two central Dravidian groups, C1 and C2) and the Austro-Asiatic speakers, the Munda. The C1 Dravidian group includes the Chenchu-Reddi (25,000), the Konda (16,000), the Koya (210,000), the Gondi (1.5million),

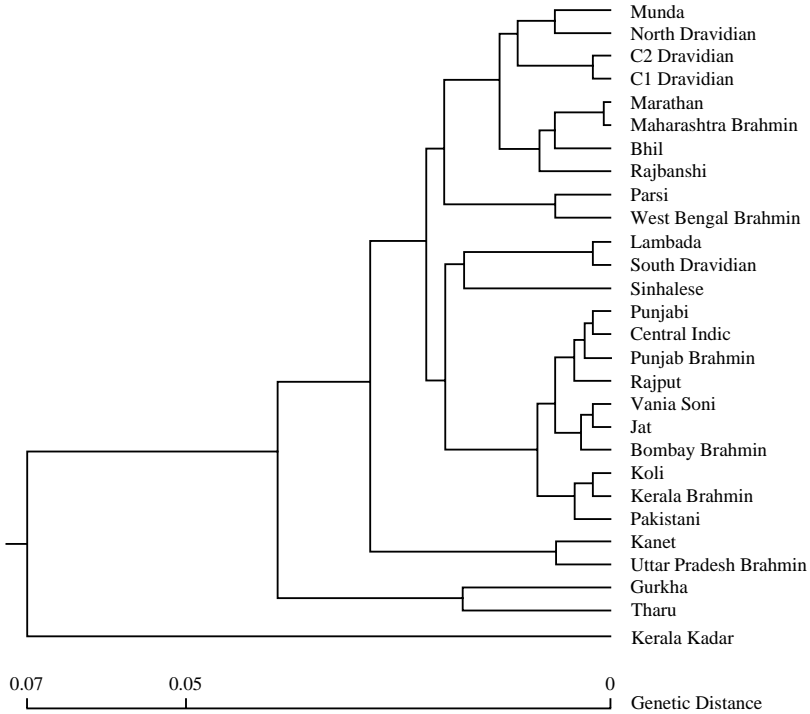


Figure 1.1 Genetic tree of South Asian populations including the Dravidian-speaking ones

and others, all found in many central and central-eastern states, though most data come from one or a few locations. The C2 Dravidian group includes the Kolami–Naiki (67,000), the Parji (44,000) and others; they are located centrally, a little more to the west. North Dravidian speakers are the Oraon (23 million), who overlap geographically with some of the above groups and are located in a more easterly and northerly direction. (239)

The second major cluster, B, contains a minor subcluster B1 formed by Sinhalese, Lambada, and South Dravidian speakers... The South Dravidian group includes a number of small tribes like Irula (5,300) in several southern states but especially Madras, the Izhava in Kerala, the Kurumba (8,000) in Madras, the Nayar in Kerala, the Toda (765), and the Kota (860 in 1971) in the Nilgiri Hills in Madras (Saha et al. 1976). (240)³

³ Based on earlier writings, Sjoberg (1990: 48) says, ‘the Dravidian-speaking peoples today are a mixture of several racial sub-types, though the Mediterranean Caucasoid component predominates. No doubt many of the subgroups who contributed to what we call Dravidian culture will

Several scholars have maintained, without definite proof, that Dravidians entered India from the northwest over two millennia before the Aryans arrived there around 1500 BCE. Rasmus Rask 'was the first to suggest that the Dravidian languages were probably "Scythian", broadly representing "barbarous tribes that inhabited the northern parts of Asia and Europe"' (Caldwell 1956: 61–2). There have been many studies genetically relating the Dravidian family with several languages outside India (see for a review of earlier literature, Krishnamurti 1969b: 326–9, 1985: 25), but none of these hypotheses has been proved beyond reasonable doubt (see section 1.8 below).

Revising his earlier claim (1972b) that Dravidians entered India from the northwest around 3500 BC, Zvelebil (1990a: 123) concludes: 'All this is still in the nature of speculation. A truly convincing hypothesis has not even been formulated yet.' Most of the proposals that the Proto-Dravidians entered the subcontinent from outside are based on the notion that Brahui was the result of the first split of Proto-Dravidian and that the Indus civilization was most likely to be Dravidian. There is not a shred of concrete evidence to credit Brahui with any archaic features of Proto-Dravidian. The most archaic features of Dravidian in phonology and morphology are still found in the southern languages, namely Early Tamil *āytam*, the phoneme *z*, the dental-alveolar-retroflex contrast in the stop series, lack of voice contrast among the stops, a verbal paradigm incorporating tense and transitivity etc. The Indus seals have not been deciphered as yet. For the time being, it is best to consider Dravidians to be the natives of the Indian subcontinent who were scattered throughout the country by the time the Aryans entered India around 1500 BCE.

1.2.1.1 Early traces of Dravidian words

Caldwell and other scholars have mentioned several words from Greek, Latin and Hebrew as being Dravidian in origin. The authenticity of many of these has been disputed. At least two items seem plausible: (1) Greek *oruza/oryza/orynda* 'rice' which must be compared with Proto-Dravidian **war-inci* > Ta. Ma. Te. *wari*, Pa. *verci(l)*, Gad. *varci(l)*, Gondi *wanji* 'rice, paddy' [DEDR 5265] and not with Ta. *arisi* (South Dravidian **ariki*) as proposed by Caldwell. Old Persian *virinza* and Skt. *vīhi-* 'rice' which have no Indo-European etymology pose a problem in dating the borrowing from Dravidian; (2) Greek *ziggiberis/zingiberis* 'ginger' from South Dravidian nominal compound **cinki-wēr* (PD **wēr* 'root') > Pali *singi, singivera*, Skt. *śṛṅgavera-*; Ta. Ma. *iñci* was derived from **cinki* by **c* [*>s >h >*] > Ø, and by changing *-k* to *-c* before a front vowel.⁴ A number of place names of south India cited by the Greek geographers

be forever unknown to us.' Basham (1979: 2) considers that 'the Dravidian languages were introduced by Palaeo-Mediterranean migrants who came to India in the Neolithic period, bringing with them the craft of agriculture'.

⁴ I am indebted to Professor Heinrich von Staden of the Institute for Advanced Study, Princeton, for providing me with dates for these words in early Greek texts: *oryza* 'rice' (earliest occurrence in

Pliny (first century AD) and Ptolemy (third century AD) end in *-our* or *-oura* which is a place name suffix *ūr* ‘town’ from PD **ūr*.

It is certain that Dravidians were located in northwestern India by the time the Aryans entered the country around the middle of the second millennium BC. Ṛgvedic Sanskrit, the earliest form of Sanskrit known (c.1500 BC), already had over a dozen lexical items borrowed from Dravidian, e.g. *ulūkhala-* ‘mortar’, *kuṇḍa* ‘pit’, *khāla-* ‘threshing floor’, *kāṇa-* ‘one-eyed’, *mayūra* ‘peacock’ etc. (Emeneau 1954; repr. 1980: 92–100). The introduction of retroflex consonants (those produced by the tongue-tip raised against the middle of the hard palate) from the Ṛgvedic times was also credited to the contact of Sanskrit speakers with those of the Dravidian languages. (For more on this theme, see section 1.7 below.)

A Russian Indologist, Nikita Gurov, claims that there were as many as eighty words of Dravidian origin in the *Ṛgveda*, ‘occurring in 146 hymns of the first, tenth and the other maṇḍalas’, e.g. *ṚV* 1.33.3 *vaila* (*sthāna-*) ‘open space’: PD **wayal* ‘open space, field’ [5258], *ṚV* 10.15 *kiyāmbu* ‘a water plant’: PD **keyampu* (<**kecampu*) ‘Arum colacasia, yam’ [2004], *ṚV* 1.144 *vriś* ‘finger’: PD **wirinc-* [5409], *ṚV* 1.71, 8.40 *vīlū* ‘stronghold’: PD **wīṭu* ‘house, abode, camp’ [5393], *sīrā* ‘plough’: PD **cēr*, *ṚV* 8.77 *kāṇukā*: PD **kāṇikkay* ‘gift’ [1443]; ‘T.Ya. Elizarenkova: *kāṇuka* is a word of indistinct meaning, most probably of non-Indo-European origin.’ Gurov also cites some proper names, *namuci*, *kīkaṭa*, *paramaganda*, as probably of Dravidian origin.⁵

1.2.2 Proto-Dravidian culture

The culture of the speakers of Proto-Dravidian is reconstructed on the basis of the comparative vocabulary drawn from *DEDR* (1984). Something similar to this has been done for the other language families (Mallory 1989: ch. 5). However, in the case of Dravidian, there are certain limitations to be taken into account:

1. Only four of the Dravidian languages have recorded history and literature starting from pre-CE to the eleventh century. The available dictionaries of the literary languages are extensive, running to over 100,000 lexical items in each case. The vocabulary of the non-literary languages is not commensurate. Now Tuḷu has a six-volume lexicon, but there is no comparable dictionary for Koḍagu, which is also semi-literary in the sense that Tuḷu is. *The Baḍaga–English Dictionary* of 1992 by Hockings and Pilot-Raichoor is fairly large. The remaining twenty or so non-literary languages spoken by ‘scheduled tribes’ do not have recorded lexicons/word lists of even one-twentieth of the above size. Therefore, most of the cognates turn up in the four literary languages, of which Tamil,

the fourth century BC), *orindes* ‘bread made of rice flour’ (earliest fifth century BC), *zingiberis(s)* ‘ginger’ (first century BC in *Dioscurides*). There is evidence of sea-trade between south Indian ports on the west coast and Rome and Greece in the pre-Christian era.

⁵ Based on a manuscript handout of a paper, ‘Non-Aryan elements in the early Sanskrit texts (Vedas and epics)’, submitted to the Orientalists’ Congress in Budapest, July 1997 (see Gurov 2000).

Malayālam and Kannaḍa belong to South Dravidian I and Telugu to South Dravidian II. The absence of cognates in the other subgroups cannot be taken to represent the absence of a concept or a term in Proto-Dravidian. The presence of a name (a cognate) in the minor languages and its exclusion in the major languages should lead to a significant observation that the cognate could be lost in the literary languages, but not vice versa.

2. Semantic changes within the recorded languages do not give us, in certain cases, a clue to identify the original meaning and the path of change. We need to apply certain historical and logical premises in arriving at the original meaning and there is a danger of some of these being speculative. For instance, certain items have pejorative meaning in South Dravidian I (sometimes includes Telugu), while the languages of South Dravidian II have a normal (non-pejorative) meaning: e.g. **mat-i(ntu)* ‘the young of an animal’ in South Dravidian I, but ‘a son, male child’ in South Dravidian II [4764]. Similarly, **pē(y)*pēñ* ‘devil’ in South Dravidian I, but ‘god’ in South Dravidian II [4438]. We do not know which of these is the Proto-Dravidian meaning. We can speculate that the pejorative meaning could be an innovation in the literary languages after the Sanskritization or Aryanization of south India. There are, however, cases of reversal of this order, e.g. Ta. *paṭal* ‘boy’, so also all others of South Dravidian I; in Central Dravidian and South Dravidian II languages, *pay-~peyy-V-* ‘a calf’ [**pac-V-* 3939].

3. While the presence of a cognate set is positive evidence for the existence of a concept, the absence of such a set does not necessarily indicate that a given concept had never existed among the proto-speakers. It could be due to loss or inadequacies of recording. In addition to one of the literary languages (South Dravidian I and South Dravidian II), if a cognate occurs in one of the other subgroups, i.e. Central Dravidian or North Dravidian, the set is taken to represent Proto-Dravidian. In some cases a proto-word is assumed on the basis of cognates in only two languages belonging to distant subgroups.

4. Where there are several groups of etyma involving a given meaning, I have taken that set in which the meaning in question is widely distributed among the languages of different subgroups. For some items two or more reconstructions are given which represent different subgroups. It is also possible that in some cases there were subtle differences in meaning not brought out in the English glosses available to us, e.g. curds, buttermilk; paddy, rice etc. in section 1.2.2.2.

Keeping these principles in view we reconstruct what the Proto-Dravidian speakers were like.⁶

1.2.2.1 Political organization

There were kings and chiefs (lit. the high one) [**eṭ-ay-anṭu* ‘lord, master, king, husband’ 527, **kōl/*kōn-tu* ‘king (also mountain)’ 2177, **wēnt-anṭu* ‘king, god’ 5529, 5530],⁷ who

⁶ If readers want to read the running text, they may skip the material in square brackets.

⁷ Some of the words have plausible sources, e.g. **ēṭ-* ‘to rise, be high’ [916], **kō* ‘mountain’ [2178, given as a homophonous form of the word meaning ‘king, emperor’ 2177, but it could as well be

ruled [*yāl, 5157]. They lived in palaces [*kōy-il 2177] and had forts and fortresses [*kōtt-ay 2207a], surrounded by deep moats [*akaz-tt-ay 11] filled with water. They received different kinds of taxes and tributes [*ar-i 216, *kapp-am 1218]. There were fights, wars or battles [*pōr, 4540] with armies arrayed [*aṇi 117] in battlefields [*mun-ay 5021, *kaḷ-an 1376]. They knew about victory or winning [? *gel-/*kel- 1972] and defeat or fleeing [*ōṭu v.i., ṭṭ-ṭam n. 1041, 2861]. Proto-Dravidians spoke of large territorial units called *nāṭu (>*nāṭu in South Dravidian II, 3638) for a province, district, kingdom, state [3638], while *ūr [752] was the common word for any habitation, village or town. A hamlet was known as *paḷḷ-i [4018]. [The highest official after the king was the minister *per-kaṭa [4411] ‘the one in a high place’ (a later innovation in Kannada and Telugu).]

1.2.2.2 Material culture and economy

People built houses to stay in [*wīṭu 5393,⁸ *il 494, man-ay 4776, ir-uwu 480]; most of these derive from the root meaning ‘to settle, stay, live’. Houses had different kinds of roofing, thatched grass [*pīr-i 4225, *pul 4300, *wēy ‘to thatch’ 5532], tiles [*peṇ-kk-4385] or terrace [*mēṭ-ay, *māt-V- 4796 a,b].

There were umbrellas [*koṭ-ay 1663] and sandals [*keruppu 1963] made of animal skin/hide [*tōl 3559] that people used. Among the domestic tools, the mortar [*ur-all-aḷ 651], pestle [*ul-akk-V- 672, *uram-kkal 651, from *ur- ‘to grind’ 665 and *kal ‘stone’ 1298], grinding stone, winnowing basket [*kētt- 2019] and sweeping broom [*cī-pp-/*cay-pp- 2599] existed. Different kinds of pots made of clay [*kā-nk- 1458, *kur-Vwi 1797, *caṭṭi ‘small’ pot’ 2306] or of metal [*kiṇṭ-V 1540, 1543, *kem-pu ‘copper vessel’ 2775] were used for cooking and storing. Cattle [*toṭ-V-] consisting of cows and buffaloes were kept in stalls [*to z-V-]. Milk [*pāl 4096] and its curdled [*pēṭ-/*peṭ-V- 4421] form curds, buttermilk [*caḷ-V- 2411, *moc-Vr4902, *per-uku 4421] were churned [*tar-V-] to make butter/white oil [*weṇ-ṇey < *weḷ-ney 5496b].

Cloth woven [*nec-/*ney- ‘to weave’ 3745] from spun [*oṭ-ukk- 1012] thread [*ēz-/*ēz-V- 506, *nūl 3728], drawn from dressed [*eHk- 765] cotton [*par-utti 3976] was used, but different types of garments by gender were not known.

Among the native occupations, agriculture [*uṭ-V- ‘to plough’ 688] was known from the beginning. There were different kinds of lands meant for dry and wet cultivation [*paṇ-V- ‘agriculture land’ 3891, *pun ‘dry land’ 4337 (literally ‘bad’, as opposed to *nan- ‘good’), *pol-am ‘field’ 4303, *kaṭ-Vt- 1355, *key-m ‘wet field’ 1958, *wāy/

the original meaning]; the last one seems to be related to *wēy ‘extensiveness, height, greatness’ [5404]. The meanings ‘emperor, king’ are based apparently on their later usage in the literary languages. The basic meaning seems to be the person who is the ‘highest, tallest and the most important’.

⁸ *DEDR* should have separated the set of forms *wī-V- ‘to lodge’ and its derivative ‘house’ from the homophonous root wīṭu ‘to leave’ and its derivatives.

way-V- 5258]. Cattle dung [**pēnt*-V (<**pēl*-nt-) 4441a, b] was used as manure. The word for a plough [**ñāñ-kVl*]⁹ was quite ancient. A yoked plough [**cēr* 2815] and a ploughed furrow [**cāl* 2471] had basic words. Some parts of the plough had basic terms like the shaft [**kōl* 2237], plough-share [**kāt*- 1505], and plough handle [**mēz-i* 5097]. Seedlings [**ñāt-u* 2919] were used for transplantation. Harvesting was by cutting [**koy* 2119] the crop. Threshing in an open space [**kaḷ-am* /**kaḷ-an* 1376] separated the grain from the grass. Grain was measured in terms of a unit called **puṭṭ-i* [4262], about 500 lbs, and stored in large earthen pots [*wān-ay* 4124, 5327].

Paddy [**kūl-i* 1906, **nel* 3743, **war-iñc*- 5265] and millets [**ār*/**ar-ak* 812, **koṭ*-V- 2165] of different kinds were grown. The cultivation of areca nut [**aṭ-ay-kkāy* 88, **pānkk*- 4048], black pepper [**miḷ-Vku* 4867], and cardamom [**ēl*-V 907] seem native to the Dravidians, at least in south India.

Milk [**pāl* 4096], curds [**per*-V-*ku*/-*ppu* 1376], butter [**weḷ*-*ney* 5496b], ghee, oil [**ney* 3746], rice [*war-inc* 5265] and meat [**iṭ*-*aycci* 529] were eaten. Boiling, roasting [**kāy* 1438, **wec*/-*wey*- 5517] and frying [**waṭ*-V- 5325] were the modes of cooking [**aṭ-u* 76, **want*- 5329] food on a fire-place [**col* 2857] with stones arranged on three sides. Toddy (country liquor from the toddy palm tree)[**īzam* 549, **kaḷ* 1374] and Mahua liquor (brewed from sweet mahua flowers) [**ir-upp-a*- *Bassia longifolia* 485] were the intoxicating beverages.

People carried loads [**mūṭṭ-ay* ‘bundle’ 5037] on the head with a head-pad [**cum*-V- 2677] or on the shoulder by a pole with ropes fastened to both ends with containers on each [*kā-waṭi* 1417].

Different tools were used for digging [**kun-tāl* ‘pick-axe’, **pār-ay* ‘crowbar’ 4093], cutting and chopping [**katti* ‘knife’ 1204]. People used bows [**wil* 5422] and arrows [**ampu* 17a] in fighting [**pōr*/**por-u*- 4540] or hunting [**wēṇ*-*ṭṭ-a*- 5527]. They had the sword [**wāl* 5376, **wāy-cc-i* 5399], axe [**maz*-V-/**maṭ*-V-*cc* 4749] and the club [**kut*-V 1850b]. There was no word for a cart and a wheel until much later.¹⁰ In the literary languages there is an ancient word **tēr* ‘chariot’ [3459] used on the battle-field or as a temple car.¹¹ Buying [**kol*/**koṇ*- 215], selling [**wil*- 5421] and barter [**māṭṭ*- 4834] were known. ‘Price’ is derived from ‘sell’ [**wilay* 5241].

⁹ Obviously a compound derived from *ñam* + *kōl* ‘our shaft’; *kōl* is used in the sense of a plough shaft in some of the languages. Its general meaning, however, is ‘stick, pole, staff’. In unaccented position the vowel has undergone variation as *-kāl*, *-kēl*, *-kil* (*-cil* with palatalization in Tamil), *-kal*, etc.

¹⁰ The widely used set in the literary languages is Ta. Ma. *vaṇṭi*, Ka. Te. *baṇḍi* ‘cart’, which is traced to Skt. *bhāṇḍa*- ‘goods, wares’, Pkt. *bhaṇḍī* (see *DEDR* Appendix, Supplement to *DBIA*, 50). A native-like word for wheel is Ta. *kāl*, Ka. Tu. *gāli*, Te. *gānu*, *gālu* [1483] is probably related to **kāl* ‘leg’ [1479].

¹¹ This word occurs in South Dravidian I and Telugu. In Kota *dēr* ‘god, possession of a diviner by god’, *tēr kām* ‘diviner’, To. *tōr oḍ*- ‘(shaman) is dancing and divining’, Tu. *tēri* ‘idol car, the car festival’. The origin of this word is not clear.

People used medicines [**mar-untu* 4719], presumably taken from tree [**mar-an* 4711a] products. The expression ‘mother’, denoting mother goddess, was used for the virus smallpox. The rash on skin through measles etc. [**taṭṭ-/*taṭ-V-* 3028] had a name. Not many words are available for different diseases. Some disorders had expressions such as blindness [**kur-uṭu* 1787], deafness [**kew-iṭu*, **kep-* 1977c], being lame [**coṭṭ-* 2838], cataract [**por-ay* ‘film’ 4295] and insanity [**picc-/*pic-V-* 4142].

Certain items of food can be reconstructed for the literary languages of the south, the pancake made of flour [**aṭṭu* 76, **app-am* 155, **iōc-ay* 3542]. The staple food was cooked rice, thick porridge [*kūz* 1911, ?**amp-ali* 174], or gruel [**kañc-i* 1104] and meat [**iṭ-aycci* 528, **ū/ūy* 728]. Proto-Dravidians sang [**pāṭ-u* 4065] and danced [**āṭ-u* 347].

They knew of iron [**cir-umpu* 2552], gold [**pon* 4570, **pac-Vṅt-* 3821] and silver [**weḷ-nt-* 5496] derived from the colour terms for ‘black’ [**cir-V-* 2552], ‘yellow’ [**pac-* 3821] (not **pon*), and ‘white’ [**weḷ* 5496].

1.2.2.3 Social organization

The Dravidian languages are rich in kinship organization. Separate labels exist for the elder and younger in ego’s generation; but for the ones (one or two generations) above and below, descriptive terms ‘small’ (younger) and ‘big’ (older) are used, e.g. **akka-* ‘elder sister’ [23], **tam-kay* [3015], **cēl-āḷ* ‘younger sister’ [2783], **aṅṅa-* ‘elder brother’ [131], **tamp-V-* ‘younger brother’ [3485]; **app-a-* [156a] **ayy-a-* [196]/*tan-tay* ~ **tan-ti* ‘father’ [3067; *tam* + *tay* vs. *tan* + *tī* (< ? -*tay*)], **amm-a-* [183]/**āy* [364]/**aww-a* [273]/ **taḷḷ-ay/-i* ‘mother’ [3136], **mak-aṅṅu* [4616]/ **koṅ-V-* [2149]/ *maṭ-in-tu* ‘son’ [4764];¹² **mak-aḷ* [4614] /**kūn-ttu*, *-ccu*, *-kku* [1873] ‘daughter’. The same words are used for father’s sister/mother’s brother’s wife/mother-in-law **atta-* [142], so also for their respective husbands **māma-* [4813] ‘father’s sister’s husband/mother’s brother/father-in-law’. This is because of the custom of their daughter/son being eligible for marriage by ego. If we go to another generation higher or lower we find both neutralization of categories and a wide variation of particular terms in usage; examples: mother’s father/father’s father are indicated by the same term **tāṭṭ-a-* [3160] or *pāṭṭ-ān* [4066], but their spouses were distinguished descriptively in different languages, Ta. Ma. *pāṭṭ-i* [4066] ‘grandmother’, Te. *amm-amma* ‘mother’s mother’, *nāyan (a)-amma* ‘father’s mother’. Corresponding to Ta. *mūṭṭ-app-aṅṅ* ‘father’s father’, *murṛ-avai* ‘grandmother’, Ma. *mutt-app-an* ‘grandfather’, *mūṭṭ-app-an* ‘father’s father’ (also ‘father’s elder brother’), *mūṭṭ-amma* ‘mother’s mother’ (also ‘elder sister of father or mother’)

¹² The root **maṭ-* underlies another set of kinship terms only found in South Dravidian II and borrowed from Telugu into Central Dravidian, e.g. Te. *maṛ-aⁿdi* [Mdn. Te. *maridi*] ‘spouse’s younger brother, younger sister’s husband, younger male cross-cousin’; the corresponding female kin is *maṛaⁿd-alu* ‘spouse’s younger sister, younger brother’s wife, younger female cross-cousin’. Cognates occur in Gondi, Kui and Kuvi [see 4762].

[4954], Telugu, Tuḷu and Koḍagu have independently developed expressions with *mut- ‘old’ added to words meaning ‘grandfather/grandmother’ to refer to kinship two generations higher (‘great-’): Te. *mut-tāta* ‘great grandfather’, *mutt-awwa* ‘great grandmother’, Tu. *mutt-ajje*, *mutt-ajji*, Koḍ. *mutt-ajjē*, *mut-tāy* id. [4954]. Even in the terms referring to one generation above, there is local specialization as well as variation in generation overlap. Thus it is not unusual to find a term meaning mother/father in one language means grandmother/grandfather in another language. Thus *tāta*, *appa*, *ayya* have overlapping meanings regionally. The words for husband and wife are synonymous with man/woman *āḷ [399], *kaṅṭ-a-, *maṅc-a- [4756], *māy-tt-/*mā-cc- [4791] ‘man’; *āḷ [400], *peṅ-(tt-) [4395] ‘woman’. The word for son-in-law and nephew were the same [*cāl-iy-anṭu 2410].¹³

Marriage [*mat-all-uw-ay, 4694 SD I, *peṅḍ-ili*, 4395a SD II, *wet-V- ‘to search, marry’, ND 5483] was an established institution. We do not know at what stage the tying of *tāli* ‘marriage necklace’ [3175] was introduced into the marriage ritual.

There are no reconstructible words for caste or caste names. Native terms can be identified for farming [*uz-a-tti 688], pot making [*koc-V- 1762], smithy [*kol 2133] and toddy tapping [*iṅ-a-waṅṭ- ‘toddy-tapper’ 549, from *iṅ-am ‘toddy’]. There is an item meaning a weaver [*cāl-Vy-anṭu 2475]. Several occupational terms came later as borrowings from Indo-Aryan, e.g. Te. *kamm-ari* ‘blacksmith’, *kumm-ari* ‘potter’.

Lying [*poc-V-, *poy-nkk- 4531] and theft [*kaḷ 1372] were known. There were expressions for service or work [*paṅ 3884] and slavery [*toz-V- 3523], but no clear words for the rich and the poor.

1.2.2.4 Religion

There were words for god [*pē (y), *pēṅ 4438, in SD II, but in SD I ‘devil’] and *kō/*kōnt- [2177] ‘king, god’. There were animal sacrifices to attain wishes [*wēḷ 5544]; this word has changed its meaning to ‘offerings made in fire’ after perhaps the Aryanization of South India. In Telugu *wēl-cu* is ‘to sacrifice in fire’ and *wēḷpu* ‘god’. The basic meaning of *wēḷ [ultimately from *weH-], see Krishnamurti 1997b: 150] was ‘to wish, desire’. There is a special verb to denote animal sacrifices, *aḷ-V-kk-* found in South Dravidian II and Brahui [297]. Pollution [*pul-V-4547] was observed on different occasions, menstruation [*muṭṭu 4934], birth [*pur-uṭu], death etc. Not much is known about the religious rituals of Proto-Dravidians. Scholars have speculated about them in terms of the current ritual practices.

¹³ Trautmann (1981: 229–37) has reconstructed a paradigm of Proto-Dravidian kinship organization, using four semantic contrasts, ‘sex, generation, relative age and crossness’. He has not illustrated the contrasts in terms of linguistic categories used in different subgroups; he claims to have used the method of reconstruction of historical linguistics.

1.2.2.5 *Flora and fauna*

Words for tropical trees can be traced to Proto-Dravidian. Big trees like the banyan [**āl*, 382], neem [**wē-mpu* 5531], palmyra [**tāz* 380, **pan-V-* 4037], tamarind [**cin-tta* 2529], pipal [**ar-ac-/-al* 202, **cuw-* 2697], mango [**mām-* 4782, **maṭ-kāy* 4772], jack fruit [**pal-ac-* ~ **pan-ac* 3987] and myrobalan [**nel-V-* 3755] were part of the immediate environment of people. The small trees included the coconut [**ten-kāy* 3408], the date palm [**cīnt(t)-* 2617] and the soap-nut [**cīk-kāy* 2607a].

Wild trees growing in forests included teak [**tēnkk-* 3452], *Belleric myrobalan* [**tānt-i* 3198], *Schleichera trijuga* [**puc-/*puy-* 4348], mastwood [**punn-ay* 4343], *Eugenia jambolana* [**ñānt-VI* 2917] and *Terminalia tomentosa* [**mar-Vt-* 4718], etc.

A number of vegetables, cereals and fruit were used: greens [**kucc-/*kuc-V-* 1760], tubers, roots [**kiṛ-Vnk* 1347], fruit/pod [**kāy* 1459], mushroom [**kūnt (t)-* 1893], onion [**ullī* 705], ginger [**cink-i* 429], yam, *Colacasia antiquorum* [**kic-ampu* 2004], brinjal [**waz-Vt-* 5301], fenugreek [**mentt-i* 5072], radish [**mūl-/*mull-V-* 5004], black gram [**uz-untu* 690], green gram [**pac-Vt/-VI* 3941], red gram or tuwar [**kar-Vnti* 1213], sesame [**nū(w)* 3720], plantain, banana [**wāz-a-* 5373, *ar-Vṇṭti* 205], wood-apple [**wel-V-* 5509] and sugar-cane [**kar-umpu* 1288, **ceṭ-Vkk-* 2795].

The following domestic animals were known: cat [**wer-uku* 5490, **pill-V* 4180], rat [**el-i* 833], dog [**naH-ay/-att/-kuṛi* 3650], pig [**pan-ti* 4039], donkey [**kaz-ut-ay* 1364], cow [**ā(m)-* 334], ox [**er-utu* 815, **ēṭu* 917], buffalo [**er-umV-* 816], sheep [**koṭ-i* 2165]/ram, goat [**yātu* 5152, **tak-ar* 3000, *mēnkk-V-* 5087] and also the young of these [**kaṭ-ac-* 1123]. There have been native words for horse [**kut-ir-ay* SD I, 1711a from **kut-i* ‘to jump’, Te. *gurr-am* 1711b, *māwu* 4780] but their etymologies are doubtful.

Proto-Dravidians knew of reptiles such as the snake [*pāmpu* 4085], cobra [**car-ac-* 2359], scorpion [**tēḷ* 3470], chameleon [**oṭ-Vkk-* 2977, *tonṭ-V-* 3501] and different types of lizards [**pall-i* 3994, **kaw-uḷi* ‘house lizard’ 1339; **ōn-tti* ‘bloodsucker lizard’ 1053]. There were mosquitoes [**nuṛ-V-l/-nk* 3715] and insects [**puṛ-u-* 4312] of different kinds.

The wild animals which lived in the hills [**kunt-am* 1864] and forests [**kā(n)-* 1418; *kāṭu* 1438] included the iguana [**uṭ-ump-* 592], mongoose [**mūnkk-ūc-* 4900], cheetah, panther [**kiṭ-u-tt/-mp-* 1599, 2589], tiger [**pul-i* 4307, **uz-uw-* 692], elephant [**yāṇay* 516], black bear [**eḷ-V-ñc-* 857], porcupine [**cey-t-/*coy-t-* 2776, 2852], wild buffalo [**kaṭ-V-* 1114], wolf [**tōz-V,* **tōz-nt-* 3548], jackal [**nari* (-*kkV*) 306], stag [**kaṭ-V-ncc/-ntt* 1114, **uz-u-pp-* 694], deer [**kur-V-c-* 1785, *mā-y* 4780], hare [**muc-VI* 4968], langur, black-faced monkey, baboon [**muy-cc-* 4910] and monkey [**kor-V-nk/-ntt-* 1769]. I could not find any word for lion¹⁴ or rhinoceros.

¹⁴ *DEDR* 5158: *yāli*, *āli* ‘a lion; a mythological lion-faced animal with elephantine proboscis and tusks’; Ma. *yāzi* ‘lion, panther’; *āli* ‘a fabulous animal’. This is a doubtful etymology, as there are no cognates in any other language and the figure of this is found only in temple sculpture.

The known birds included the chicken [**kōz-i* 2248, **kot-u* 2160 in SD II], peacock [**ñam-V-l* 2902], pigeon, dove [**put-Vc*- 4334, **kūm-/*kum-V*- 1930], ‘imperial pigeon’ [**pok-V!* 4454], parrot [**kiḷ-V*- 1584], crane [**korV-nk-/-nkk* 2125], eagle [**kaz-V-kul-tu* 1362], vulture [**par-Vntu* 3977], crow [**kā-kk-/-w-* 1425], sparrow [**piḷ-Vcc-* 4190, **kur-V-wi* 1793] and owl [**ānt-ay* SD I, 359]. A male of an animal or a bird was called **pō-ntt-V* [4586] and a female **peṇ-ṭt-V*- [4395a, b].

Aquatic animals (amphibians) included the frog [**kapp-a* 1224, **par-Vṇtu* ‘bull-frog’ 3955], crab [**ñañṭ-* 2901], different kinds of fish [**kay-V-* (*l/-kk-/mpp-*)1252, **mīn* 4885], prawn [**eṭ-V-y* 533], shark [**coṭ-ac-* 710], tortoise [**yām-ay*, **cām-p-* 5155] and crocodile, alligator [**mōc-/*moc-V!* 4952, **nek-V!* 3732]. There is no native word for goose or swan. A male of an animal or bird was **pōntt-* [4586] and a female **peṇ-ṭt-* [4395 a].

1.2.2.6 Climate and water sources

Words for sun [**pōz!/*poz-Vtu* 4559, **ñāc-Vtu* 2910], moon [**nel-a-ncl-ncc* 3754, **tin-kal* 3213 in SD I], stars [**cukk-V* 2646, **miHn* 4876], sky [**wān-am* 5381], clouds [**muy-il* 4892], wind [**wal-V-* 5312], rain [**maz-ay* 4753 SD I, **piṭ-u* 4199 SD II, ND, **tuw-V!* ‘to drizzle’ 3398], night [**cir-a-*, **cir-V-!/-nk-* ‘darkness’ 2552, **cīnkk-* 2604, **nāl!/*naḷ-V-* ‘night’ 3621] and day [**pak-al* ‘daylight’ 3805, **ñān-tu* ‘day’ 2920, **cir* ‘day’ 2553, only in CD] existed. There were words apparently denoting dew, fog, frost [**pan-i-* (*kil*) 4035, **may-nt* (*t-*) 4641] which were used with extended meanings. Clear distinction was not made among ‘snow’, ‘ice’ and ‘dew’. Only Kuṛux and Malto have words for snow, ice [**kīw-/*kiw-V-* 1618], but their etymology is not known. Being hot [**wec-/*wey-* 5517] and cold [**caḷ-/*caṇ-* 3045] had expressions. There are no basic expressions for seasons, except perhaps for monsoon, or the rainy season [**kār* ‘dark clouds’ 1278, **kōṭ-ay* ‘west wind, monsoon’ 2203 in SD I].

Water sources such as the sea [**kaṭ-al* 1118], river, stream [**yāṭu* 5159], canal [**kāl* 1480], tank [**keṭ-ay/-uwu* 1980], lake [**kuḷ-am/-Vñc* 1828] and well [**nūy* 3706] were known. There were ships [**kal-am* 1305] and boats [**amp-i* 177, **kapp-al* 119, **paṭ-Vku* 3838] for navigation. There were floats [**tepp-V-* 3414] presumably used for sport or for short distances. Tubular tunnels for drainage [**tūmpu* 3389] and covered sluices [**mat-Vku* 4688, **kal-Vnk-* 1309] to drain surplus water from tanks were built. Only the southern languages have a word for navigator or boatsman [**taṇṭ-al* 3049], but it is difficult to know its source.

1.2.2.7 Abstract concepts

The word for ‘mind’ was ‘the one inside, the pith’ [**uḷ!-am*, **neñ-cu*, see above] and ‘to think’ was a semantic extension of ‘to see, consider’ [several verbs: **kaHṇ-* ‘to see’ 1443, **cū-z-* ‘to see, deliberate’ 2735, **pār* ‘to perceive, see, know’ 4091, **tōn-tu* ‘to appear, strike to mind’ 3566] and ‘to count’ [**eṇ-* 793]. In Telugu, moreover, ‘to say to

oneself' [*anukon-*] is 'to think'. There are some basic forms like Ta. *ninai* 'to think' [*<nen-ay*, see *neñ-cu* above; 3683 SD I], *wak-ay* 'to consider, deliberate' [SD I, Te.] which are not semantically related to 'see' words. Kui and Brahui share a word which reconstructs to **ēl* 'mind, reason, knowledge' [912]. Another pair of forms, restricted to South Dravidian I and Telugu, is **kar-V-nt-* 'to intend, consider', *kar-V-ntt-* n. 'will, mind' [1283]. There are basic verbs meaning 'to know' [**at-V-* 314, SD I, II, ND] and 'to learn' [**kal-/*kat-* 1297, SD I, II, CD]. Understanding and knowledge are semantically related to 'becoming clear or white' [**tēr/ter-V-* 3419, **teḷ-V-* 3433, **weḷ* 5496]. Writing was 'scratching, drawing lines, painting' [**war-V-* 5263, **kī-t-* 1623] perhaps on palm leaves with a stylus; there were words for 'reading, reciting' [**ōtu* 1052, **cat-u-* 2327] and 'singing' [**pāt-* 4065]. Forgetting was 'being hidden, obscure' [**maṭ-V-* 4760]. There were basic expressions for fear, shame, beauty, strength etc.

There were basic numerals up to ten and one hundred; only Telugu has a native number word for 'thousand' *wēyi*, which *DEDR* relates to **wey-am* 'extensiveness, height' (cognates only in Ta. Ma. and Go. 5404). The number nine [**toṅ-/tol-* 3532] is also expressed as ten minus one. The numeral 'eight' and the verb 'to count' [**eṅ* 793] are homophonous. This has led some to say that Dravidians counted in terms of 'eight'. But the system is clearly decimal, $11 = 10 + 1$, $12 = 10 + 2$ etc., $21 = 2-10-1$, $22 = 2-10-2$. The preceding digit of a higher number signalled multiplication and the following one addition.

Time [**nēr-am* 'sun' 3774, **pōz-/poz-utu* 'time, sun' 4559] was referred to in terms of units of the day [**nāl* 'day' 3656, **nāṅ-t-* < ***nāl-nt-* SD II], month [**nel-V-* 3754] and year [**yāṅṅtu* 5153]; there were descriptive expressions for yesterday and the day-before-yesterday; similarly for tomorrow and the day-after-tomorrow. East and west have several reconstructible names, while north and south have one reconstruction each: east [**cīr-V-tt-* 'the low area' 2584, **kīz/*kiz-Vkku* 'the area below' in SD I], west [**mē-l* 'high place', *mēt-kku*, **mel-Vkku* 5086, **koṭ-Vkku* 1649; the last one looks more basic], south [**ten*, *teṭ-kku* 3449] and north [**waṭ-akku* 5218].

1.2.2.8 Miscellaneous

There were basic words for all visible parts of the (human) body such as head, hair, face, eye, eyelid, eyeball, mouth, tongue, tooth, nose, ear, neck, trunk, chest, breast, stomach, hand, hip, leg, finger, nail, thigh, foot etc. Some invisible parts were also named, like the lungs [**poṭ-V!* 4569, *tor-Vmp-* 3515], bone [**el-V-mp-* 839], liver [**taṭ-Vnk-* 3120], heart [**kuṅṅ-V* 1693, **ull-am* 'heart, mind' 698], brain [**mit-Vz* 5062, **neñc-V* 'brain, mind, heart, pith' 3736], bone-marrow [**mūl-V-* 5051], intestines [**wac-Vtu* 'belly, intestines, foetus', **kar-V!* 'intestines, bowels' 1274] and nerves [**ñar-Vmpu* 2903], possibly known and seen from killing animals for food and in sacrifices to gods.

The colour spectrum was divided into four: white [**weḷ* 5496], black [**kār/*kar-V-* 1278a], green-yellow [**pac-V-* 3821] and red [**kem-* 1931, **eṭ-V-* 865].

There were several words for speech acts, namely **aHn-* ‘to say’ [869], **pēc-/pēz-* ‘to talk, prattle’ [4430], **kēl-* ‘to ask, to hear’ [2017a], **kep-* ‘to tell, scold’ [1955], **col-* ‘to speak, relate’ [2855], **pāṅ/paṅ-V-* ‘to question, commission, inquire’, **pok-Vz* ‘to praise’ [4235], **noṭ-V-* ‘to say’ [3784], **moz-V-* ‘to say, speak (loudly)’ [4989]. It is difficult to sort out the minute differences in meaning or the precise contexts requiring the use of different terms.

Words for excrement or faeces [**pīy* 4210] and ‘breaking wind’ [**pī-t-/*pi-tt-* 4167] can be reconstructed for all subgroups.¹⁵

Names for precious stones include coral [**tuw-Vr* 3284, **paw-aṣ* 3998] and pearl [**mutt-* 4959].

1.2.2.9 Observations

The foregoing outline of Proto-Dravidian culture gives a glimpse of a highly civilized people, who lived in towns in tiled or terraced houses, with agriculture as the main occupation. They drew water from wells, tanks and lakes, and knew drainage. They also carried trade by boat in the sea. However, there is no indication of the original home of these people. At least, it is certain that they do not have terms for flora and fauna not found in the Indian subcontinent. It is significant that Proto-Dravidians have not ‘retained’ any expressions for snow and ice and they do not have a name for the lion, rhino and camel. In view of this situation it would be safe to consider the speakers of the Dravidian languages as native people of India. This does not rule out the possibility of Proto-Dravidians being the originators of the Harappa civilization. In the third millennium BCE they must have been scattered all over the subcontinent, even as far as Afghanistan in the northwest where they came in contact with the early Ṛgvedic Aryans. After some groups had moved to the periphery of the Indo-Gangetic plains with the expansion of Aryans, several other groups must have been assimilated into the Aryan society. The major structural changes in Middle or Modern Indic strongly suggest a Dravidian substratum for over three millennia.¹⁶

There have been Dravidian lexical items borrowed into Sanskrit and Prakrits during the Middle Indic period but most of these refer to concepts native to Dravidian: see table 1.1. The list shows that, during the long period of absorption and shift to Indo-Aryan

¹⁵ ‘Proto-Indo-Europeans . . . were far more obliging in passing on to us no less than two words for ‘breaking wind’. English dictionaries may occasionally shrink from including such vulgar terms as “fart” but the word gains status when set within the series: Sanskrit *pardate*, Greek *perdo*, Lithuanian *perdzu*, Russian *perdet*, Albanian *pjerdh* “to fart loudly” (distinguished from Proto-Indo-European **pezd-* “to break wind softly”)’ (Mallory 1989:126).

¹⁶ After completing this section I have read Southworth (1995) in which he has given a brief outline of Proto-Dravidian culture in three chronological layers. It was interesting reading, although I could not find evidence for his setting up three chronological stages in the evolution of Dravidian culture. I also do not find any reason to revise any part of this section in the light of the contents of that article.

Table 1.1. *A sample list of Dravidian borrowings into Middle Indo-Aryan*

Proto-Dravidian [DEDR]	Classical Skt./Middle-Indic	CDIAL
* <i>aḷ-amp-</i> ‘mushroom’ [300]	Pkt. <i>ālamba-</i> DNM	1365
* <i>kaz-Vt-</i> ‘paddy field’ [1355]	Skt. <i>karda-, kardama-</i> ‘mud’	2867–70
* <i>kap-V!</i> ‘cheek’ [1337]	Skt. <i>kapola-</i> ‘cheek’	2755
* <i>kuṭ-V!/*kuṭ-V</i> ‘eyeball’ [1680]	Skt. <i>gūḍa-</i> ‘globe’	4181
* <i>kaṭ-ac-</i> ‘young male animal’ [1123]	MIA * <i>kaḍḍa-</i> id.	2645
* <i>kay</i> ‘fish’ [1252]	Skt. <i>kaivarta-/*kevarta-</i> ¹⁷ ‘fisherman’	3469
* <i>kaw-V!i</i> ‘gecko’ [1338]	Skt. <i>gaulī-</i> ‘a house lizard’	4324
* <i>kunt-i</i> ‘crab’s eye, a plant’ [1865]	Skt. <i>gunjā-</i> id.	4176
* <i>kor-Vnk-/nkk-</i> ‘a stark, crane’ [2125]	Skt. <i>kaṅka-</i> id.	2595
SD II: * <i>paḍḍ-V</i> ‘female buffalo’ [3881]	Skt. <i>paḍḍika-</i> ‘female cow’ DNM <i>peḍḍa-</i> ‘buffalo’	8042
* <i>cink-i</i> ‘ginger’ [429]	Pkt. <i>singīṭ-</i> ‘ginger root’ Skt. <i>śṛṅga-vera-</i>	12588
* <i>uḷ-Vntu</i> ‘black gram’ [690]	Pkt. <i>uḷida-</i> id.	1693
* <i>kaṭ-ampu Anthocephalus cadamba</i> [1116]	Skt. <i>kādamba-</i> id.	2710
* <i>kā, *kā-n</i> ‘forest’ [1418]	Skt. <i>kānana-</i> id.	3028
* <i>kar-Vnk- Pongamia glabra</i> [1507]	Skt. <i>kāraṅja-</i> id.	2785
* <i>koṭ-aṅt-/aṅc-</i> ‘henna’, <i>Barleria</i> sp. [1849]	Skt. <i>kuraṅṅa(ka)-</i> id.	3322, 3326
* <i>kay-tay</i> ‘fragrant screw-pine’ [2026]	Skt. <i>ketaka-</i> id	3462
* <i>koz-V-</i> ‘young’ [2149]	Skt. <i>kuṅaka-, kuḍa-</i> ‘boy’	3527, 3245
* <i>at-a-ppay</i> ‘betel pouch’ [64]	Pkt. <i>haḍapp(h)a-</i>	1948
* <i>kañc-i</i> ‘rice water, gruel’ [1104]	Skt. <i>kāñji-</i> ‘gruel’	3016
* <i>kaḷ</i> ‘toddy, liquor’ [1372]	Skt. <i>kaḷyā-</i> ‘spirituous liquor’ Pkt. <i>kallā</i>	2950–1

by the Dravidian speaking tribes, only specialized lexical items from Dravidian were borrowed into Indo-Aryan, mainly items of need-based borrowing. However, the grammatical changes which had swept through Indo-Aryan were far-reaching, mainly because of transplanting the Dravidian structure onto Indo-Aryan (see section 1.7 below).

1.3 The Dravidian languages as a family

As early as 1816, Francis Whyte Ellis, an English civil servant, in his *Dissertation on the Telugu Language*,¹⁸ asserted that ‘the high and low Tamil; the Telugu, grammatical and vulgar; Carnataca or Cannadi, ancient and modern; Malayalma or Malayaḷam . . . and Tuluva’ are the members ‘constituting the family of languages which may be appropriately called the dialects of South India’; ‘Codagu’, he considered ‘a local dialect of the same derivation’. Speaking about Malto, he says, ‘the language of the Mountaineers of Rajmahal abounds in terms common to the Tamil and Telugu’. His purpose

¹⁷ The alternation *kai-/kē-* indicates Dravidian origin; *varta-/vaṭṭa-* is an Indo-Aryan stem.

¹⁸ Published as a ‘Note to the Introduction’ of A. D. Campbell’s *A Grammar of Teloogoo Language Commonly Called the Gentoo*, printed in Madras in 1816. This note was reprinted with an editorial note by N. Venkata Rao (1954–5).

was to show that Tamil, Telugu and Kannaḍa ‘form a distinct family of languages’, with which ‘the Sanscrit has, in later times, especially, intermixed, but with which it has no radical connection’. He presented considerable illustrative material, mainly lexical and some grammatical, from Telugu, Kannaḍa and Tamil in support of his hypothesis (Krishnamurti 1969b: 311–12). Ellis recognized the Dravidian languages as a family, thirty years after Sir William Jones had floated the concept of the language family in his famous lecture to the Asiatic Society of Bengal in Calcutta, on 2 February, 1786.

Zvelebil (1990a: xiv–vii) gives a detailed account of the first contact of Western missionaries with the Dravidian languages. In 1554 Fr. Anrique Anriquez (1520–1600), a Jewish Portuguese missionary of the Jesuit order, published the first book on Tamil in Roman script. First published in 1554, *Cartilha em Tamul e Portuguêz* was reprinted in 1970 by the Museu Nacional de Arqueologia e Ethnologia, Lisbon. Herbert Herring (1994) discusses, at length, the contribution of several German missionaries/scholars to Dravidian studies. Ziegenbalg (1682–1719), a Protestant German missionary, published the first Tamil grammar by a westerner, *Grammatica Damulica*, in Latin (1716) in Halle, Germany. Tamil was also called the Malabarian language. Karl Graul (1814–64) published an *Outline of Tamil Grammar* (1856) and brought out four philosophical treatises on Tamil. Graul translated Kuraḷ into German and Latin (1856).¹⁹

Robert Caldwell (1814–91) brought out the first edition of his *Comparative Grammar* in 1856, which marked the first, pioneering breakthrough in comparative Dravidian studies. Caldwell enumerated only twelve Dravidian languages²⁰ and, as the title of his work suggests, he mainly drew upon the literary languages of the south with greater attention paid to Tamil, which he had studied for over thirty-seven years by the time he brought out the second edition of the book in 1875. With inadequate sources and with the comparative method and reconstruction of the proto-language still in their infancy,²¹ Caldwell could not have done better. He succeeded in showing family likeness among the Dravidian languages in phonology and morphology and in disproving the Sanskrit origin of the Dravidian languages, a view strongly advocated by many Oriental as well as Western scholars both before and after him. He also attempted to show a possible affinity between Dravidian and the so-called ‘Scythian’ languages.²²

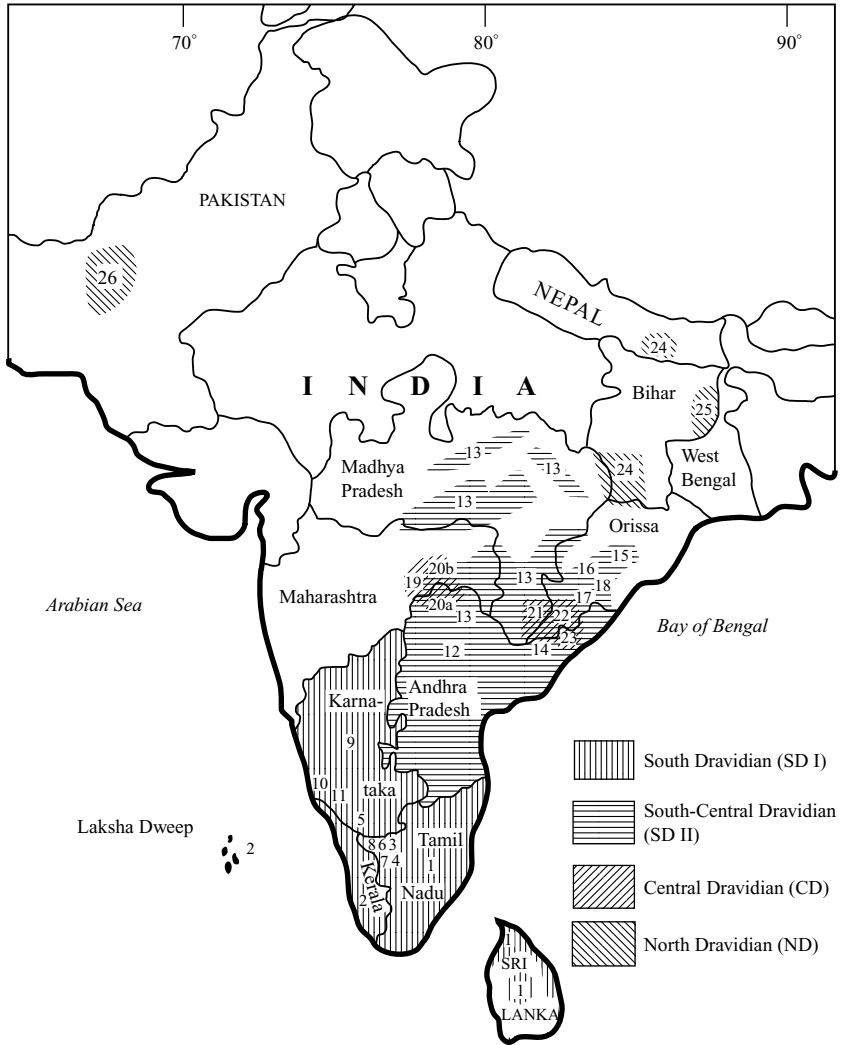
¹⁹ Bibliographical details of these early works can be found in the *Linguistic Survey of India*, vol. IV (1906; repr. 1967, 1973 Delhi: Motilal Banarsidass).

²⁰ Tamil, Malayālam, Telugu, Canarese (Kannaḍa), Tuḷu, Kudagu or Coorg (Koḍagu), Tuda (Toda), Kota, Goṇḍ (Gondi), Khond or Ku (Kui), Orāon (Kuṛux or Oraōⁿ), Rajmahāl (Malto). The modern spellings are given in parentheses. Caldwell adds a note on Brahui in the Appendix to the 2nd edition in 1875 (in the 3rd edition reprinted in 1956: 633–5).

²¹ He was a contemporary of August Schleicher (1821–68) of Germany who initiated the method of reconstructing the parent of the Indo-European languages.

²² ‘... a common designation of all those languages of Asia and Europe which do not belong to the Indo-European or Semitic families’ *LSI* 4. 282 (1906).

C. P. Brown (1798–1884), a British administrative officer in the Telugu-speaking area, spent the bulk of his income on preparing edited texts of classics and published a grammar of Telugu and *A Dictionary, Telugu and English* (the last in 1852). Rev. Winslow’s *Comprehensive Tamil and English Dictionary* was published in 1862. Rev. Hermann Gundert (1814–93) published a monumental *Malayālam–English Dictionary* (1872) and,



Map 1.1 Geographical distribution of the Dravidian languages in South Asia

Southern group (SD I)	South-Central group (SD II)
1. Tamil	12. Telugu
2. Malayāḷam	13. Gondi
3. Irūḷa	14. Koṇḍa
4. Kuṛumba	15. Kui
5. Koḍagu	16. Kuvi
6. Toda	17. Pengo
7. Kota	18. Maṇḍa
8. Baḍaga	
9. Kannaḍa	
10. Koraga	
11. Tuḷu	
Central group (CD)	
19. Kolami	
20a. Naikṛi	
20b. Naiki (Chanda)	
21. Paṛji	
22. Ollari	
23. (Koṇḍēkōr) Gadaba	
Northern group (ND)	
24. Kuṛux	
25. Malto	
26. Brahui	

Note: The major literary languages are indicated in bold face.

earlier, a grammar of the Malayāḷam language (1859). Ferdinand Kittel's (1832–1903) *Kannaḍa–English Dictionary* (1894) and Männer's *Tuḷu–English Dictionary* (1886) are still considered standard tools of reference for linguistic and literary studies in these languages. Grammatical sketches and vocabularies appeared on several minor Dravidian languages during the later half of the nineteenth century: Gondi (Driberg 1849), Kui (Letchmajee 1853), Kolami (Hislop 1866), Koḍagu (Cole 1867), Tuḷu (Brigel 1872) and Malto (Droese 1884). Toda was identified in 1837 (Bernhard Schmidt) and Brahui in 1838 (Leech). Some of these materials are not easily accessible to scholars and are also inadequate for a comparative study.

1.4 Names of languages, geographical distribution and demographic details

There are over twenty-six Dravidian languages known at present. They are classified into four genetic subgroups as follows (see map 1.1):

1. South Dravidian (SD I): Tamil, Malayāḷam, Irūḷa, Kuṛumba, Koḍagu, Toda, Kota, Baḍaga, Kannaḍa, Koraga, Tuḷu;
2. South-Central Dravidian (SD II): Telugu, Gondi (several dialects), Koṇḍa, Kui, Kuvi, Pengo, Maṇḍa;

3. Central Dravidian (CD): Kolami, Naikri, Naiki, Parji, Ollari, (Konḍekor) Gadaba;
4. North Dravidian (ND): Kuṛux, Malto, Brahui.

South Dravidian I and South Dravidian II must have arisen from a common source, which is called Proto-South Dravidian. The shared innovations include two sound changes: (a) PD **i *u* became **e *o* before a low vowel **a* (section 4.4.2), (b) PD **c* became (**s* and **h* as intermediate stages) zero in SD I; this change is now in progress in SD II (section 4.5.1.3). Morphological innovations include (c) the back-formation of **ñān* from Proto-Dravidian inclusive plural **ñām/ñam-* as the first person singular, beside PD **yān* ‘I’, (d) the development of paired intransitive and transitive stems with NP/NPP alternation in verbs (section 7.3.6), and (e) the use of the reflexes of **-ppi* as a causative marker (section 7.3.3). There are several innovations within each subgroup. The typical ones for South Dravidian I are: (a) loss of the final -CV of 3msg pronouns **awan* ‘that man’, **iwan* ‘this man’ (<**awan-tu*, **iwan-tu*), (b) the creation of 2fsg in *-a!* (section 6.2.3–4) and (c) the use of reflexive pronoun **iān* as emphatic marker beside **-ē* (section 8.4.2). The typical innovations of South Dravidian II are: (a) the generalization of **-tt* as past-tense marker, and (b) the creation of new oblique stems **nā-/mā-* and **nī-/mī-* for the first and second personal pronouns. The other subgroups are already the established ones in Dravidian. The details of subgrouping will be consolidated and reviewed in the last chapter.

See map 1.1 for the geographical distribution of these languages. A family tree diagram of the Dravidian languages is given as figure 1.2. Justification for setting up the subgroups will be seen in the succeeding chapters of this book.

General information about each of the Dravidian languages is provided in the following order: modern name (other names in extant literature); population figures (1991 Census where available); area where the language is spoken; in the case of literary languages, the earliest inscription discovered and the earliest literary work; miscellaneous information; main bibliographical sources for comparative study in the case of non-literary languages.

1.4.1 Major literary languages²³

There are four languages with long traditions of written literature, namely Tamil, Malayālam, Kannaḍa and Telugu. Tuḷu is said to have some literary texts of recent origin. Both Tuḷu and Koḍagu are spoken by civilized, literate communities, unlike

²³ There have been speculative etymologies for the names Tamiz, Malayālam and Telugu. I have not given much thought or space to these. Zvelebil says (1990a: xxi) that *tam-iz* was derived from *taku-* ‘to be fit, proper’ with *-k-* > *-w-* > *-m-*, but the *-k-* and *-w-* variants are nowhere attested. Koskinen (1996) relates *tamiz* to the lotus word *tāmarai*. Southworth (1998) suggests **tam-miz* > *tam-iz* ‘self-speak’, or ‘one’s own speech’ by deriving **miz-/muz-* as the underlying